Land Pooling and Land Management

Through
Development Plan & Town Planning Scheme

Ahmedabad Urban Development Authority

September 2014
Introduction

First Tier Planning Process - Development Plan

Second Tier Planning Process - Town Planning Scheme (Self Financing Mechanism)

Town Planning Scheme Procedure - Physical Planning

Town Planning Scheme Procedure - Fiscal Planning

Town Planning Scheme: An Efficient and Effective Tool To Implement Development Plan

Land Management

Findings
Introduction
Urbanization in Gujarat

- Third Most urbanized State with 37.35% of Urban Population as against 27.78% of India.
- 167 Urban Local Bodies
- Ahmedabad is 7th largest Urban Agglomeration in India.
- Third Fastest Growing Cities in the World
Ahmedabad in a Regional Context

- Sanand SIR
- Changodar SIR.
- Gandhinagar.
- 5 Growth Centers.
History of Town Planning

- The Bombay Town Planning Act 1915: Provision of Town Planning Scheme
- Gujarat Town Planning & Urban Development Act, 1976 Provision of Planning the Urban Development Area/Authority.
Challenges to Urban Planning

- Implementation of Development Plan / Master Plan
- Implementation of Regional, City and Neighborhood Level Physical and Social Infrastructure
- Land Bank for Urban Poor
- Resource Generation and Mobilization in terms of Physical / Land
- Resource Generation and Mobilization in terms of Fiscal / Finance
- Improving and Maintaining Environmental Sustainability
- Minimize Litigations
- Mass acceptability of citizens
- Democratic approach to Urban Plan Proposals
Urban Planning Process

- 2 tier Planning

- First Tier Development Plan? (Macro Level)

- Second Tier Town Planning Schemes? (Micro Level)
Planning Process

GTP & UD Act 1976

Development Plan

Town Planning Scheme

Stage I - Draft Scheme

Stage II - Preliminary Scheme

Stage III - Final Scheme
First Tier Planning Process

Development Plan
Development Plan Procedure

- Data collection and Survey
- Studies and analysis
- Policy Formation
- Draft Development Plan preparation (3 years)
- Two or more times of Public Participation
- Submission of Development Plan for Sanction
- Sanction of Development Plan by State Government
- Implementation of Development Plan
Sanctioned Development Plans

Ahmedabad Municipal Corporation Development Plan 1965

Ahmedabad Urban Development Authority Development Plan 1987

Ahmedabad Urban Development Authority Development Plan 2002
Second Revised Draft Development Plan 2021

AUDA Area 1866sqkm
Proposed Zoning 2021
Contents of Development Plan

- Volume 1: Existing Conditions, Studies and Analysis
- Volume 2: Planning Proposals and Recommendations
- Volume 3: General Development Regulation
Vision

Ahmedabad that is a *livable, environmentally sustainable and efficient city* for all its citizens; a city with *robust social and physical infrastructure* and a *distinct identity*; a *globally preferred investment destination*.
Planning for Projected Population 2021

Projected Population for 2021 - 88 lacs
Principles Adopted

- Integration of land use and Transport Plan
- Differential FSI- delinking FSI and zones for transit corridor and heritage conservation needs- in clear demarcated areas
- Promotion rather than regulation- Shell defining and allowing increased freedom of design and planning
- Increasing efficiency in Land Utilization
- Promote Affordable Housing
- Focus on Safety for Citizens
- Improving Accountability in Housing Sector
- Conservation of Green Areas
Differential Planning Proposals

- Walled city- to conserve Heritage
- Central Business District- to create distinct identity of the city
- Transit Corridor and High Density Zone- Land-use Transport Integration
- R-AH Zone- to promote Affordable Housing
- Prime Agriculture Zone- to conserve Double Cropped Land
- Logistics and Knowledge Zones- for Special requirements
AUD Area ? 1866 sqkm
Carved out from 4 Districts 9 Talukas
Development Plan 2021
METHODOLOGY
Methodology of Development Plan

I. Data Collection
   - Review of Past DP
   - Public Consultation
   - Base Map Preparation

II. Analysis of the Data Collected
   - Land Use Zoning
   - Development Control Regulations
   - Inferences of the Public Consultations
   - Collection of Cadastral, City Survey Maps and Satellite Images

III. Calculating of Future Demand
   - Future Land Requirements
   - Vision Aims and Objectives
   - Integration and Error removal

IV. Projects for Implementation
   - Proposed Land Use Plan
   - DCR for Proposed Land Use
   - Sectoral Mission Statements from Objectives
   - Final Base Map

Submission of the Draft Development Plan to Govt.
Development Plan Preparation Process

Commencement of DP Preparation
Data Collection
GIS Compatible Base Map
Stake holder’s Consultations
Drafting of Approaches and Principles
Drafting of Development Plan
Seeking Public Approval
Finalization of Draft Development Plan
Sanctioning of Development Plan
DATA COLLECTION
Land Use Survey

List of Land use Codes as per Scientific Methodology (Total 45 Categories) Prepared as per UDPFI and NUIS Guidelines
Existing Land Use Map 2009

Survey Guidelines for categorization: NUIS and UDPFI
## Existing Land Use Table 2009

<table>
<thead>
<tr>
<th>Type</th>
<th>Sq. Km.</th>
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</thead>
<tbody>
<tr>
<td>Residential</td>
<td>137.79</td>
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<tr>
<td>Commercial</td>
<td>9.75</td>
</tr>
<tr>
<td>Industrial</td>
<td>43.83</td>
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<tr>
<td>Public &amp; semi Public</td>
<td>34.41</td>
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<tr>
<td>Recreational</td>
<td>7.06</td>
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<td>Special Area</td>
<td>7.86</td>
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<tr>
<td>Mixed</td>
<td>38.58</td>
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<tr>
<td>Airport</td>
<td>4.03</td>
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<td>Cantonment</td>
<td>4.69</td>
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<tr>
<td>Open Space</td>
<td>6.75</td>
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<tr>
<td>Sewage Farm</td>
<td>2.80</td>
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<tr>
<td>Walled City</td>
<td>4.53</td>
</tr>
<tr>
<td>Talav</td>
<td>32.93</td>
</tr>
<tr>
<td>Agriculture / Vacant</td>
<td>1531.03</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1866</strong></td>
</tr>
</tbody>
</table>
Data Collection: Inter Departmental Data

For Norms and Standards
NUIS, UDPFI, CPHEEO, Planning Commission, NBCC, IS Codes, ITPI

Departments of State Govt.
BISAG, GIDB, State RTO, R &B Dept, Health Dept., IndExtB, GIDC, GWSSB, SSNL, GSDMA, CEPT, Statistical Bureau, GPCB, Institute of Engineers, GCCI, Irrigation Dept.

Departments of Central Govt.
Census of India, Survey of India, ISRO, Central Ground Water Board, UDD GOI, NRSA, Dept of Railway, DFC, AAI, NHAI
Topographic Data

River

Source: Topo Sheets (BISAG)
Topographic Data

Lakes and Water Bodies

Source: Topo Sheets (BISAG)
Soil Classification

Source: NBSS, LUP, (BISAG), Verification by ISRO
Topographic Data

Natural Drainage Pattern

Source: (BISAG)
Topographic Data

Canals

Source: (BISAG)
Data Collection ? Government Land

Government Land

Govt Land(Ha.)
Agri.? 2699
Gauchar? 4417
Padtar? 1230
Panjrapol? 876
Total? 9223

Source: District Collectors (Ahmedabad, Mehsana, Gandhinagar, Kheda)
Inter Departmental Data

Roads

Source: (BISAG), R&B, NHAI
Inter Departmental Data

BRTS

Data Compilation

Legend

- BRTS

Road
- Expressway
- National Highway
- Ring Road
- State Highway
- Major District Road

Source: AMC
Inter Departmental Data

Source: GIDB

Legend:
- MRTS
- BRTS

Road
- Expressway
- National Highway
- State Highway
- Ring Road
- Major District Road

Source: GIDB
Inter Departmental Data

Source: Indian Railways
Inter Departmental Data

Airport and Cantonment

Source: Airport Authority of India
Inter Departmental Data

Source: Dedicated Freight Corridor Corporation
Integrated Mobility

The Integrated Mobility Region is a part of the Metropolitan Region

Source: UMTC
Land Cover

Data from Satellite image showing the cropping pattern in relation to the Built-up.

Source: NBSS, LUP, (BISAG)
Land Supply
Determining Developable Land

Identify developable and non-developable areas

Non-developable areas include:

a. Areas preserved under legislative guidelines
   - areas governed by Court Interventions,
   - Ecologically Sensitive areas
   - Areas protected by legislative acts etc.

b. Area under non-negotiable features:
   - transportation network,
   - gamtal areas etc

c. Areas identified as non-desirable for development:
   - Hazard prone areas,
   - areas with prime agricultural land etc.
Determining Land Supply

Determining Urbanizable Land

Scientific Guidelines

Legislative Guidelines

Non Negotiable Features

Road Network
Rail Network
BRTS
Metro
Village Gamtal Expansion

Non Desirable Features

Double Cropping Pattern
Flood Hazard Zone

Developable Land

Thol Bird Sanctuary
Natural drain, Canal, Water Body
River
Airport
Vadsar Airfield, Cantonment
Jail
ASI Monument
ONGC Line and Well
High Tension Line
Hazardous Waste Disposal
# Existing Land Availability Pattern

<table>
<thead>
<tr>
<th>Area Type</th>
<th>Area in sq km</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Total Area in AUDA (A)</td>
<td>1866</td>
<td></td>
</tr>
<tr>
<td><strong>B</strong> Land Not for Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area under Non-Negotiable features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Built up</td>
<td>343.8</td>
<td>18.42</td>
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<tr>
<td>Road &amp; Railway</td>
<td>98.8</td>
<td>5.29</td>
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<tr>
<td>Village Gamtals</td>
<td>19.1</td>
<td>1.02</td>
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<tr>
<td>Area under Legislative guidelines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airport</td>
<td>4.0</td>
<td>0.21</td>
</tr>
<tr>
<td>Cantonment</td>
<td>4.7</td>
<td>0.25</td>
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<tr>
<td>Vadsar Airforce</td>
<td>0.8</td>
<td>0.04</td>
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<tr>
<td>Lake</td>
<td>32.9</td>
<td>1.76</td>
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<tr>
<td>River</td>
<td>10.5</td>
<td>0.56</td>
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<td>Canal</td>
<td>8.4</td>
<td>0.45</td>
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<tr>
<td>Area under Non-Desirable for development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment Plant</td>
<td>7.5</td>
<td>0.40</td>
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<tr>
<td>Flood Hazard Area</td>
<td>7.7</td>
<td>0.41</td>
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<tr>
<td>Double Cropped Area</td>
<td>681.4</td>
<td>36.51</td>
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<tr>
<td><strong>C</strong> Area Available for Planning &amp; Development (A-B)</td>
<td>647.0</td>
<td>34.66</td>
</tr>
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</table>
Second Tier Planning Process

Town Planning Scheme (Self Financing Mechanism)
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>T.P.S. Finalization Stages</th>
<th>G.T. P. &amp; U.D. Act, 1976 under Section</th>
<th>Power to Prepare Town Planning Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Draft Town Planning Scheme</td>
<td>40 TO 48</td>
<td>Authority / Corporation/Govt.</td>
</tr>
<tr>
<td>2</td>
<td>Preliminary Scheme</td>
<td>50 TO 53</td>
<td>Town Planning Officer</td>
</tr>
<tr>
<td>3</td>
<td>Final Scheme</td>
<td>50 TO 53</td>
<td>Town Planning Officer</td>
</tr>
<tr>
<td>4</td>
<td>Board Of Appeal</td>
<td>54 TO 59</td>
<td>-</td>
</tr>
<tr>
<td>Sr. No.</td>
<td>Stages of Town Planning Scheme</td>
<td>G.T. P. &amp; U.D. Act, 1976 under Section</td>
<td>Power to implement Town Planning Scheme</td>
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<tr>
<td>--------</td>
<td>-----------------------------------------------------</td>
<td>---------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Sanction Of Draft Town Planning Schemes</td>
<td>U/S 48(1)</td>
<td>Roads, Sewerage, Lighting &amp; Water Supply</td>
</tr>
<tr>
<td>2</td>
<td>Sanction Of Preliminary Schemes</td>
<td>U/S 65</td>
<td>Power To Enforce physical component of Scheme</td>
</tr>
<tr>
<td>3</td>
<td>Sanction Of Final Schemes</td>
<td>U/S 65</td>
<td>Power To Enforce Financial component of Scheme</td>
</tr>
</tbody>
</table>
The Concept ? Town Planning Scheme

Land Developed by:

- Appropriating portion of the land from the original land
- Providing regular shaped plots with proper access
Town Planning Scheme (Criteria & Contents)

Town Planning Scheme may be prepared for any land which is
- in the course of development
- likely to be used for residential or commercial or industrial or for building purposes
- already built upon

Contents of Town Planning Scheme
- laying out or relaying out of land
- lay-out of new streets or roads, bridges and underpass
- reservation of land for roads, open spaces, gardens, recreation grounds, schools, markets, green-belts, dairies, transport facilities, public purposes of all kinds
- Laying of Water Supply, Drainage and Lighting
- preservation of historical or national interest or natural beauty, and of buildings actually used for religious purposes ;
- Provision upto the the extent of
  - 10 % for Socially and Economically Weaker Section
  - 15 % for Roads
  - 5 % for parks, playgrounds, garden and open space.
  - 5 % for social infrastructure such as schools, dispensary, fire brigade, public utility place
  - 15 % for sale by appropriate Authority for residential, commercial or industrial use
Town Planning Scheme Procedure

Draft Town Planning Scheme
- Two times Public Participation
- Submission of Draft Town Planning Scheme

Sanction of Draft Town Planning Scheme by State Govt.
- Appointment of Town Planning Officer
- Split the Scheme into Preliminary and Final Scheme

Preliminary Scheme (Contains Physical Planning)
- Personal Hearing to every individual land owners / affected persons
- Final Decisions by the Town Planning Officers in terms of Physical Planning
- Submission of the Preliminary Scheme to the State Govt.

Final Scheme (Contains Fiscal Planning)
- Personal Hearing to every individual land owners / affected persons
- Final Decisions by the Town Planning Officers in terms of Fiscal Planning
- Submission of the Preliminary Scheme to the State Govt.

Implementation of Town Planning Scheme (3 Stages)

3 Amendments in Act for rapid implementation of the Town Planning Scheme
Town Planning Scheme Procedure

- Physical Planning
Original Plot Earmarking

Each survey no. is given a separate original plot no. (OP no.)

Value of the OP is assessed on the basis of recent sales transactions
Superimposing DP Road Network

Roads proposed in the Sanctioned DP are overlayed.

Town Planning Scheme-23
Preparation of Neighbourhood level Road Network

Town Planning Scheme Roads proposed in accordance with the adjoining Town Planning Scheme Road Network.
Demarcation of Public Purpose Plots

Town Planning Scheme-23
Reconstitution of Final Plots.

Town Planning Scheme-23
Mosaic of 7 Town Planning Schemes

TPS-23
Town Planning Scheme Procedure
- Fiscal Planning
Original Plot Value

Original Plot Value has been derived from last 5 years Sales records from the Date of Declaration of Intention.

Town Planning Scheme-23
Semi Final Plot Value

Semi Final Value is a value of Final Plot allotted on respective Original Plot.

Town Planning Scheme-23
Final Plot Value

Final Value incremental value (Imaginary value of serviced plot)

Town Planning Scheme-23
### Prescribed F Form for Financial Calculations

**Village: Motera**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the Owner</th>
<th>Tenure</th>
<th>Revenue Survey No.</th>
<th>Revenue</th>
<th>Area in Sq. Mts.</th>
<th>Value in Rupees</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No. 1</td>
<td>250</td>
<td>Without reference to value of structures</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No. 2</td>
<td>300</td>
<td>Inclusive of structures</td>
</tr>
</tbody>
</table>

**FORM F**

**DRAFT TOWN PLANNING SCHEME NO. 67, (HANSOL-1, AHMEDABAD)**

**REDISTRIBUTION AND VALUATION STATEMENT**

**THE GUJARAT TOWN PLANNING AND URBAN DEVELOPMENT ACT, 1976**

<table>
<thead>
<tr>
<th>No.</th>
<th>Area in Sq. Mts.</th>
<th>Final Plot Value in Rupees</th>
<th>Compensation (+)</th>
<th>Increment (Section 78)</th>
<th>Contribution (Section 79)</th>
<th>Net Demand from (+) or (-) Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Undeveloped</td>
<td>Developed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without reference to value of structures</td>
<td>Inclusive of structures</td>
<td>Without reference to value of structures</td>
<td>Inclusive of structures</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9(a)</td>
<td>9(b)</td>
<td>10(a)</td>
<td>10(b)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-722700</td>
<td>3513950</td>
<td>806875</td>
<td></td>
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**Remarks**

<table>
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<tr>
<th>Remarks</th>
<th>1004278</th>
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<tr>
<td></td>
<td>Description</td>
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<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Expenditure under Clause 40(3)(b), (c), (d),(f),(g) and (h)</td>
</tr>
<tr>
<td>2</td>
<td>Other expenditure</td>
</tr>
<tr>
<td>3</td>
<td>Expenses shown in the redistribution and Valuation Statement</td>
</tr>
<tr>
<td>4</td>
<td>Cost of publication section 41(2) and 42(1) or (2) rule 13 to 18</td>
</tr>
<tr>
<td>5</td>
<td>Compensation u/s 49(2) Legal expenses u/s 77(2)(e) section 82</td>
</tr>
<tr>
<td>6</td>
<td>Cost of demarcation salaries of T.P.O and Board of appeal and others u/s 61(2)</td>
</tr>
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</table>

**Total Expenditure** 680856827

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>7</td>
<td>Total of increments (col 12 of form f)</td>
<td>1271777581</td>
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<tr>
<td>8</td>
<td>Proportion of increment to be contributed by each holder (section 79)</td>
<td>635888790</td>
</tr>
</tbody>
</table>

**Total contribution u/s 79** 635888790

**Net Cost to Authority a-b** 44968037
Agricultural Raw Land to (Image of 2001)
Urbanized Developed Land (Image of 2011)
Town Planning Scheme:
An Efficient and Effective Tool To Implement Development Plan
Implementation of Development Plan Through Town Planning Scheme
### Implementation of DP Through TP Scheme

<table>
<thead>
<tr>
<th>ZONE</th>
<th>Zoned Area</th>
<th>Zoned area Implemented Through TPS</th>
<th>Zoned area to be Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (R1+R2+R3)</td>
<td>262.81</td>
<td>240.48 (91.50%)</td>
<td>22.33 (8.50%)</td>
</tr>
<tr>
<td>Commercial</td>
<td>11.02</td>
<td>6.98 (63.33%)</td>
<td>4.04 (36.37%)</td>
</tr>
<tr>
<td>Industrial</td>
<td>42.26</td>
<td>33.22 (78.60%)</td>
<td>9.04 (21.40%)</td>
</tr>
<tr>
<td>Educational &amp; Public Utility</td>
<td>3.67</td>
<td>3.29 (89.65%)</td>
<td>0.38 (10.35%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>319.76</td>
<td>283.97 (88.80%)</td>
<td>35.79 (11.20%)</td>
</tr>
</tbody>
</table>

(Area in sq.km.)
Sanctioned Development Plan - Dehgam (Growth Center)
Implementation of Development Plan through Town Planning Scheme - Dehgam (Growth Center)
Land Management
Infrastructure through Town Planning Scheme

Regional Level Infrastructure
- 76 km. long and 60 mts. wide Sardar Patel Ring Road

City Level Infrastructure Land for
- Socially and Economically Weaker Section People
- Water Supply
- Sewerage
- Recreational
- Social Infrastructure etc.
- City Level Road Network

Neighbourhood Level Infrastructure
- Water Supply Network
- Sewerage Network
- Neighbourhood level Recreational
- Neighbourhood level Road Network
- Neighbourhood level Lighting
- Land for Civic Center and Neighbour Center (for Public Utility Services)
- Land for Educational Purposes
Regional Level Infrastructure through Town Planning Schemes

76 km long Ring Road was developed through the 46 Town Planning Schemes
Sardar Patel Ring Road
### City Infrastructure through TPS (EWSH)

<table>
<thead>
<tr>
<th>Land availed by Appropriate Authority</th>
<th>AUDA incl. AMC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>238 T.P.S. 23987 Ha.</td>
</tr>
<tr>
<td>Area Ha. % Age</td>
<td></td>
</tr>
<tr>
<td>Socially and Economically Weaker Section</td>
<td>1017.38</td>
</tr>
</tbody>
</table>

- **20 lacs** (approx.) Slum Population
- **37249 Units** Constructed accommodating about **1.8 lac** population
- Provision to construct **2.40 lac** units accommodating about **12 lac** population (**69 %**)
- Rest to accommodated under Slum Policy, Town Ship Policy, Land available through Closed Textile Mills and Slum Networking Program
City Infrastructure through TPS (EWSH)

Uniform and balanced distribution
City Infrastructure through TPS (EWS Housing)
<table>
<thead>
<tr>
<th>Category</th>
<th>Existing AUDA incl. AMC</th>
<th></th>
<th>Proposed AUDA incl. AMC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Plots</td>
<td>Area. Ha</td>
<td>No. of Plots</td>
<td>Area. Ha</td>
</tr>
<tr>
<td>Neighbourhood</td>
<td>121</td>
<td>22.32</td>
<td>54</td>
<td>11.31</td>
</tr>
<tr>
<td>Community</td>
<td>71</td>
<td>62.19</td>
<td>62</td>
<td>65.10</td>
</tr>
<tr>
<td>City</td>
<td>27</td>
<td>187.64</td>
<td>72</td>
<td>357.66</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>219</strong></td>
<td><strong>272.15</strong></td>
<td><strong>97</strong></td>
<td><strong>434.05</strong></td>
</tr>
</tbody>
</table>
Development of Gardens and Lakes through TPS

Uniform and balanced distribution
Development of Gardens and Lakes through TPS

Bodakdev Lake, Ahmedabad

Vastrapur Lake and Garden, Ahmedabad

Chandlodia Lake, Ahmedabad

Motera Lake and Garden, Ahmedabad
City Infrastructure through Town Planning Scheme
Sports Complex
Land Availed for Schools and Playground

Uniform and balanced distribution
## Land availed by AUDA excl. AMC Through TP Scheme

<table>
<thead>
<tr>
<th>Sr.no.</th>
<th>Land Allotted to Appropriate Authority</th>
<th>Total Area in Sq.Kms.</th>
<th>% Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Road</td>
<td>31.40</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Schools</td>
<td>13.6</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>E.W.S.H</td>
<td>7.13</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Salable Plots</td>
<td>17.06</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>N.C./ P.U.</td>
<td>6.59</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Gardens, Open Space, Playgrounds</td>
<td>6.88</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Private F.P Area</td>
<td>146.16</td>
<td>67.48</td>
</tr>
</tbody>
</table>

**Total land availed by Authority**: 70.45

**Total Area of T.P.S. in Sq.km.**: 225.91 Sq.km.
Land availed by AUDA excl. AMC Through TP Scheme

Area Distribution

- Private Plots: 67%
- Roads: 15%
- Saleable Plots: 8%
- NC/PU: 3%
- EWSH: 3%
- Gardens, Open Spaces, Playgrounds: 3%
- Schools: 1%
## Development Plan Proposals Achieved through Town Planning Schemes (Excl. AMC)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Infrastructure Component</th>
<th>Estimate of proposed work under RDP-2011</th>
<th>Actual Work done/under process</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Length in Km. / Area in Sq. Mtr./Numbers</td>
<td>Length in Km./ Area in Sq. Mtr./Numbers</td>
</tr>
<tr>
<td>1</td>
<td>Roads</td>
<td>(1471.9 Km)</td>
<td>985</td>
</tr>
<tr>
<td>2</td>
<td>Bridges, Fly - overs, Under passes etc.</td>
<td>13 Num.</td>
<td>17 No.</td>
</tr>
<tr>
<td>3</td>
<td>Street Lighting (D.P. Level + T.P.S. Level)</td>
<td>1476.5 Km.</td>
<td>211.846 Km.</td>
</tr>
<tr>
<td>4</td>
<td>Water supply network</td>
<td>144.81</td>
<td>81.27</td>
</tr>
<tr>
<td>5</td>
<td>Sewerage network</td>
<td>144.81 Sq. Km.</td>
<td>81.27 Sq. Km.</td>
</tr>
<tr>
<td>6</td>
<td>Storm Water Drainage</td>
<td>144.81 Sq. Km.</td>
<td>44.00 Sq. Km.</td>
</tr>
<tr>
<td>7</td>
<td>Open Spaces/ Garden</td>
<td>725 Hct.</td>
<td>57.95 Hct.</td>
</tr>
<tr>
<td></td>
<td><strong>Total [A]</strong></td>
<td><strong>2434.36</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Projects Implemented (Not Proposed in Development Plan) (Excl. AMC)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Infrastructure Component (Not included in cost of DP)</th>
<th>Estimate of proposed work under RDP-2011</th>
<th>Actual Work done/under process</th>
<th>Lenth in Km./ Area in Sq. Mtr./ Numbers</th>
<th>% (Physical)</th>
<th>Total Exp. Rs. In Cr.</th>
<th>% (Financial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water Treatment Plant</td>
<td>-</td>
<td></td>
<td>275 MLD</td>
<td>-</td>
<td>106</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Sewerage treatment plant</td>
<td>-</td>
<td></td>
<td>240 MLD</td>
<td>-</td>
<td>106.92</td>
<td>JnNURM</td>
</tr>
<tr>
<td>3</td>
<td>Sewerage treatment plant and terminal station</td>
<td>-</td>
<td></td>
<td>70 MLD</td>
<td>-</td>
<td>36.81</td>
<td>JnNURM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>-</td>
<td>143.73</td>
<td>78.57</td>
</tr>
<tr>
<td>4</td>
<td>Solid waste management</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td>6.47</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Tree Plantation</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td>1.46</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Percolation well</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td>1.25</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>E.W.S.Housing</td>
<td>-</td>
<td></td>
<td>18273 Nos.</td>
<td>-</td>
<td>288.92</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Fire Station/Sports Complex/Toilate Block/Smasan etc.</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td>6.13</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TOTAL [B]</td>
<td>-</td>
<td></td>
<td></td>
<td>-</td>
<td>1834.43</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>TOTAL[A] + [B]</td>
<td>2434.36</td>
<td>-</td>
<td></td>
<td>1834.43</td>
<td>75.52</td>
<td></td>
</tr>
</tbody>
</table>
Findings
Outcomes?

- Development follows Planning
- Rational Approach towards Planning and Implementation
- Win - Win Situation for Land Owners, Government and Beneficiaries
- Self Financing Mechanism
- Effective tool for Implementation of Development Plan / Master Plan in Stipulated Time Frame
- Uniform and balanced distribution of Physical and Social Infrastructure
- Proven and accepted Mechanism through almost 100 years - 4 generations
- Flexible Mechanism for Planning and Resource Mobilization
- Increases the build ability of the Plots
- All Plots having Accessibility and Services
- Hierarchical Road Networks within City and better linkages with Region
- Improved Environment (for air quality from 4th to 43rd polluting city in India)
- Preservation of Heritage and elements of Nature Beauty
Benefits of Town Planning Scheme Mechanism

Issues of Bulk Land Acquisition
- Autocratic and irrational process
- Owners/farmers thrown off their land, results in loss of income and means of livelihood
- Compensation is very low compared to market prize
- Promote unplanned informal sector
- Public agencies play the role of a land developer (Monopoly)

Benefits of Town Planning Schemes
- Democratic and Rational process
- Owners/farmers are benefitted with service plots which results in better livelihood
- Promotes planned development.
- Equal opportunity to everyone to play the role of a land developer
Thanks