100 SMART CITIES
BY 2024
Presentation Outline

• Context
• Comprehensive Four Pillars of Smart City
• Selection and Conditions Precedent
• Strategy & Approach
• Proposed Funding
• Way forward & Timelines
Urban India

• 80% of 2030 Urban India still to be built
• A new Chicago needs to be built every year

2014
• 31% population
• 63% of GDP

2030
40% population
75% of GDP
Mission intends to make National Priorities a Reality

• Leverage Innovation & Technology – EGov, Digital India
• Swachh Bharat – Zero Emission
• Involve Citizens in Policy as well as Execution
• Employment Generation – Make in India
• Improve Quality of Life
How is it different?

• Comprehensive Development
  • Area approach rather than the earlier Project approach

• Leveraging Government Funds to attract Investments

• Competition to Select Cities from shortlisted 100
  • Based on Commitment to National Priorities (EGov, Swachh Bharat, Make in India)
Comprehensive Development: Four pillars of a Smart City

Institutional infrastructure

Physical infrastructure

Social infrastructure

Economic infrastructure

Sustainability

Disaster Management & Resilience

Skills

Investments

Citizen Engagement
**Smart Solutions – Basic Infrastructure**

**E-Governance and Citizen Services**
1. Public Information, Grievance Redressal
2. Electronic Service Delivery
3. Citizen Engagement
4. Citizens - City’s Eyes and Ears
5. Video Crime Monitoring

**Waste Management**
6. Waste to Energy & fuel
7. Waste to Compost
8. Every Drop to be Treated
9. Treatment of C&D Waste

**Water Management**
10. Smart meters & management
11. Leakage Identification, Preventive Maint.
12. Water Quality Monitoring

**Energy Management**
13. Smart Meters & Management
14. Renewable Sources of Energy
15. Energy Efficient & Green Buildings

**Urban Mobility**
16. Smart Parking
17. Intelligent Traffic Management
18. Integrated Multi-Modal Transport

**Others**
19. Tele-Medicine
20. Incubation/Trade Facilitation Centers
21. Skill Development Centers

**Different Cities – Different Smart Solutions Leveraging Local Innovations**
Shortlisting of Cities
(Indicative list)

1. Economic Criterion
   • Cities accounting for 54% of Incremental GDP till 2025* 69

2. Geographic Inclusivity
   • All State Capitals (not included above) 12
   • Tourist/ Religious – Heritage (not included above) 8
   • Hill and Coastal Areas (not included above) 4
   • Mid-sized Cities (not included above) 7

100

*Source: McKinsey Global Institute, “Understanding India’s economic geography,” October 2014
Conditions Precedent

1. Municipal Reforms
   - Double Entry Accounting System
   - Minimum 50% collection of Taxes and User Charges
   - Creation of Municipal Cadre

2. E-Governance
   - Electronic Delivery of Public Services
   - All Information in Public Domain


4. Master Plan based on Spatial Mapping/GIS
Strategy & Approach

1. Pan-City Development
   - Citizen Engagement and Reference Framework
   - Capacity Building
   - E-Governance
   - Zero Emission
   - City Development Plan based on Spatial/ GIS Mapping, ICT, Environmental Sustainability

2. Exemplary Development through “City Challenge”
   - Retrofitting - 500+ acres
   - Redevelopment - 50+ acres
   - Green-Field Development - 250+ acres

3. Pan-City 2-3 Major Infrastructural Projects
Retrofitting development

**Where?**
- Existing Developed Area
- Minimum 500 acres in size

**What?**
- Zero Emissions- Solid & Liquid Discharge
- Quality Electricity & Water Supply: Smart Metering
- High-Speed, High-Bandwidth Connectivity
- CCTV Surveillance of all public areas
- LED lighting, Intelligent Traffic & Parking Management
- Pavements, Cycle Tracks, Roads

**How?**
- Implementation in 3 years
- SPV (ULB, State, Centre)
- Selection through Competition – “City Challenge”
Redevelopment

**Where?**
- Existing Urban Sprawl (including Railway, Bus Stations etc.)
- Minimum 50 acres in size

**What?**
- In addition to all retrofitting components
  - Higher FAR and Lower Ground Coverage
  - Green and Energy-Efficient Buildings
  - Wide Roads; Recreational, Open Spaces

**Condition-alities**
- Mixed Land Use & Higher FAR
  - Max. 50% ground coverage
  - Max. 40% Commercial, Min. 10% Institutional, Min. 10% for Parking
- MoU with States, ULB, Developers

**How?**
- Implementation in 5 years
- SPV (Public/Private Developer)
- Equity Participation by GoI, States, ULBs
- Selection through Competition – “City Challenge”
Green-Field Townships

Where?
- Vacant Land
- Minimum 250 acres each Township

What?
In addition to all Redevelopment components
- Quality infrastructure for Education, Health and Recreation
- Multimodal Transport
- Trade Facilitation, Incubation, Skill Development Centres

Condition-alities
In addition to all redevelopment conditions
- High Speed Rail/Road Connectivity
- MoU: States, ULB, Developers

How?
- Implementation in 5 years
- SPV (Public/Private developer)
- Equity Participation by GoI, States, ULBs
- Selection through Competition – “City Challenge”
Proposed “City Challenge” Matrix

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<td>E-Governance</td>
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Proposed “City Challenge” Process

• Online applications by States/ULBs/Developers
  • Highlighting Initiatives, innovations and Impact

• Evaluation and Selection by Committee of International and Indian Experts

• Allocation of Funds by Empowered Committee (GoI, States, ULBs)
Proposed Funding (per city)

PHASE 1 (3 years time horizon)

- Retrofitting Development (of 500 Acres) Rs.150 Cr
- Capacity Building, Citizen Engagement, PMU, CDP Rs. 50 Cr
- E-governance & Online Public Services Rs. 50 Cr

PHASE 2 (5-10 years time horizon)

- Equity Participation in Redevelopment Rs.100 Cr*
- Equity Participation in Green-Field Townships Rs.100 Cr*
- 2-3 Major Infrastructure Projects Rs. 550 Cr

Rs. 1,000 Cr

*Proposed to be pulled out after 5 years @predetermined return or market value, whichever is higher
Way Forward & Timelines

• Identification of Cities 31/01/2015
• Issuance of Policy 28/02/2015
• Implementation – Fast Forward 3 years
  • Retrofitting
  • Redevelopment 5 years
  • Green-field 5-10 years
• Citizen Reference Framework 30/06/2015
• City Development Plan (with Environmental Vetting) 30/09/2015
• Implementation – Full Blown 5-10 years
Thank you
Institutional Infrastructure

• Minimum Government, Maximum Governance
  o EGovernance – 24X7 Online Public Service Delivery
  o Ease of Doing Business

• Citizen Engagement

• Safety, Security, Enforcement

• Transparency & Accountability

• Disaster Management & Resilience
Physical Infrastructure

• Zero Emission: Solid & Liquid Waste
• 24x7 Power Supply
• Assured & Metered Water Supply
• High-Speed Broadband Connectivity
• Multimodal Public Transport
Social Infrastructure

• Inclusive Development: Affordable Housing, Night Shelters etc.

• Quality Education in all Neighbourhoods

• Healthcare in all Neighbourhoods: Tele-medicine

• Entertainment & Recreational Facilities

• Cultural, Sports and Fitness Centres
Economic Infrastructure

• Skill Development Centres
• Incubation Centres
• Trade Facilitation & Logistics Centres
• SME Clusters
• Institutional Finance/Banking
• Working Women Hostels and Crèches
## MoU – Salient Features

### Allocation of Risks & Obligations

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MoU – Salient Features

Allocation of Risks & Obligations

**All Policy Risks – State/ULB**
- Time-bound CLU
- Timely Clearances
- Timely Rail/Road Connectivity

**All Business Risks – Developer**
- Development as per schedule
- Standards/Norms for Quality
69 cities -54% of GDP Addition

- **Andhra Pradesh (2)** – Visakhapatnam, Vijaywada
- **Bihar (1)** – Patna
- **Chattisgarh (2)** – Raipur, Durg
- **Gujarat (4)** - Ahmedabad, Surat, Vadodara, Rajkot
- **Haryana (2)** – Gurgaon, Faridabad
- **Jharkhand (3)** - Jamshedpur, Dhanbad, Ranchi
- **Karnataka (3)** - Bangalore, Mysore, Hubli-Dharwad
- **Kerala (7)** – Kochi, Kozhikode, Malappuram, Thrissur, Kannur, Thiruvananthapuram, Kollam
- **Madhya Pradesh (4)** – Indore, Bhopal, Jabalpur, Gwalior
- **Maharashtra (8)** – Mumbai, Pune, Nagpur, Nasik, Vasai, Aurangabad, Solapur, Bhiwandi
- **Orissa (1)** - Bhubaneshwar
- **Punjab (3)** - Ludhiana, Amritsar, Jalandhar
- **Rajasthan (4)** – Jaipur, Kota, Jodhpur, Bikaner
- **Tamil Nadu (5)** – Chennai, Coimbatore, Madurai, Tiruchirapalli, Salem
- **Telangana (1)** – Hyderabad
- **Uttar Pradesh (13)** – Lucknow, Varanasi, Ghaziabad, Kanpur, Agra, Meerut, Allahabad, Moradabad, Bareilly, Aligarh, Noida, Gorakhpur, Saharanpur
- **West Bengal (2)** – Kolkata, Asansol
- **Others** - Delhi, Goa, Chandigarh, Pondicherry
12 State Capitals

- Agartala
- Aizawl
- Dehradun
- Dispur
- Gangtok
- Imphal
- Itanagar
- Jammu, Srinagar
- Kohima
- Shimla
- Shillong
8 Tourist/Religious Heritage Cities

• Amaravati
• Ajmer
• Badami
• Dwarka
• Gaya
• Mathura
• Puri
• Warangal