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

2014

31% population

• 63% of GDP

2030

40% population

75% of GDP

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

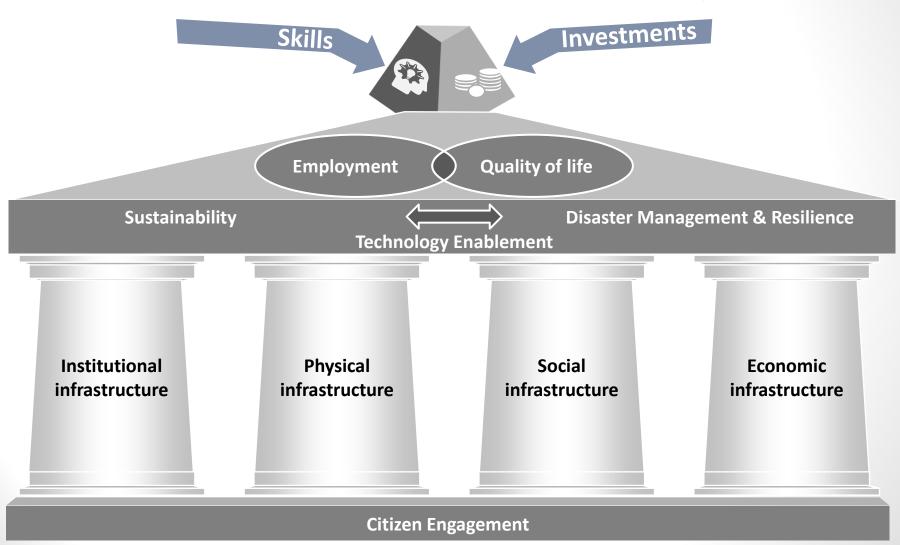
Mission intends to make National Priorities a Reality

- 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?

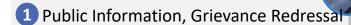
- Comprehensive Development
 - Area approach rather than the earlier Project approach
- Leveraging Government Funds to attract Investments
- Competition to Select Cities from shortlisted 100
 - Based on Commitment to National Priorities (EGov, Swachh Bharat, Make in India)

Comprehensive Development: Four pillars of a Smart City



Smart Solutions - Basic Infrastructure

E-Governance and Citizen Services



- 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
- Treatment of C&D Waste

Water Management

- 10 Smart meters & management
- 111 Leakage Identification, Preventive Maint.
- 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

Shortlisting of Cities

(Indicative list)

1. Economic Criterion

	100	
 Mid-sized Cities (not included above) 	7	
 Hill and Coastal Areas (not included above) 	4	
 Tourist/ Religious – Heritage (not included above) 	8	
 All State Capitals (not included above) 	12	
2. Geographic Inclusivity		
 Cities accounting for 54% of Incremental GDP till 2025* 	69	

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

3. Zero Emissions: Solid & Liquid Waste

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

Conditionalities

- 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 Gol, 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

Conditionalities 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 Gol, States, ULBs
- Selection through Competition "City Challenge"

Proposed "City Challenge" Matrix

	Commitment to National Priorities		
	E-Governance	Swachh Bharat	Make in India
Retrofitting Development			
Redevelopment			
Greenfield Development			

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
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 Capacity Building, Citizen Engagement, PMU, CDP Rs. 50 (•	Capacity Building	, Citizen Engageme	ent, PMU, CDP	Rs. 50 Cr
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 E-governance & Online Public Services 	Rs. 50 Cr
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PHASE 2 (5-10 years time horizon)

•	Equity Participation in	Redevelopment	Rs.100 Cr*
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- 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	
Retrofitting	3 years
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
 - EGovernance 24X7 Online Public Service Delivery
 - 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

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



MoU - Salient Features

Allocation of Risks & Obligations

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All Business Risks - Developer

- Development as per schedule
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24

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