



Building world class livable and smarter cities

January 2015

Some of the most livable cities across that world have incorporated the various smart elements to improve the quality of life for its citizens

Boston – Education

Single card that provides a seamless **access to education resources**

Barcelona - Transportation

Bus network redesigned into orthogonal network with buses linked through sensor network enabling **Real time transport monitoring**

Amsterdam- Energy & Utilities

Smart meters and Smart grids are used to **decrease the energy consumption**. Possible to switch off appliances remotely based on data output from smart meters.

Singapore – Data & Technology

Citywide **broadband network** Free wireless broadband programme for access at all public places

New York - Governance

311 Citizen Centre and 911 emergency number promote two-way **conversation between government and citizens**

Spain - Healthcare

Regionally integrated system that collects **patient data** so that whenever they access health care centers within their region

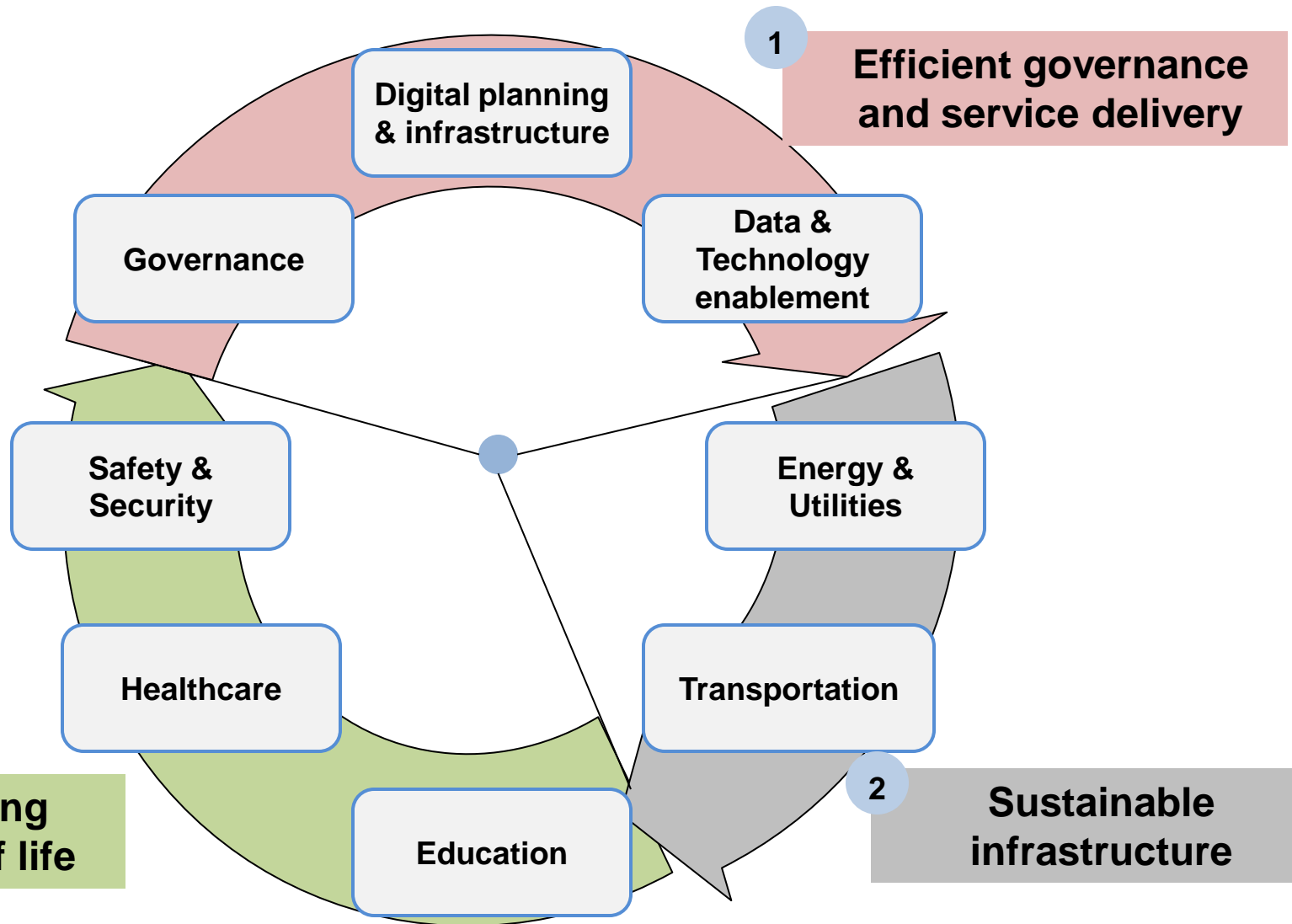
Rio de Janeiro – Security

'State of the art situation room' to monitor and control security on ground and **mitigate natural disasters**

Cape town - Data planning and infrastructure

Smart initiative planning along with strategic planning process to ensure all **smart enablers are in line with urban planning**

Smart Cities need to become smarter in multiple domains across governance, sustainability and improving overall quality of life of its citizens



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**Improving
quality of life**

Palava – Amongst India’s first truly integrated livable and smart city has been under development for last 5 years

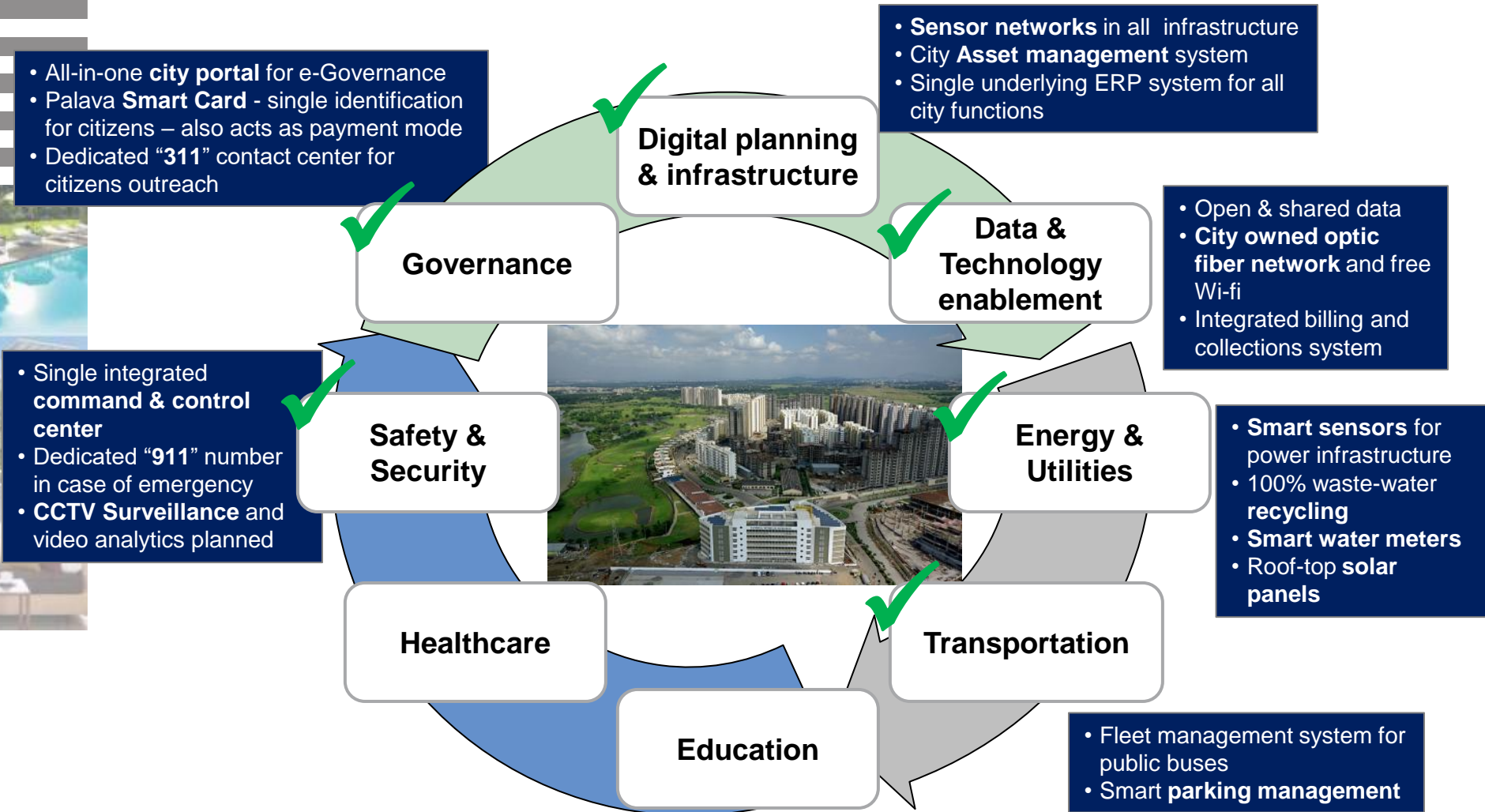


4,500+ acre privately developed & managed integrated city, Palava envisions to be the “City of Opportunity” and a role model of city management & high quality of city services for all citizens.



	By 2015	By 2025
Land developed	250 acres	1200+ acres
Population	0.1 Million	0.5 Million
Homes	20,000	100,000
Jobs ¹	5,000	350,000
Investment ²	Rs. 6000 Cr	Rs 28,000 Cr

Palava is already exemplifying the smart city opportunity with numerous initiatives being rolled out



Palava Today: Already on its way to becoming the most livable city in India



ICSE School



9 Hole Golf Course





PALAVA

India's most livable city.

Palava by 2025: Achieve its vision of becoming a Top 50 Most Livable Cities in the World

Aerial view of the city



Sports complex



Central parks

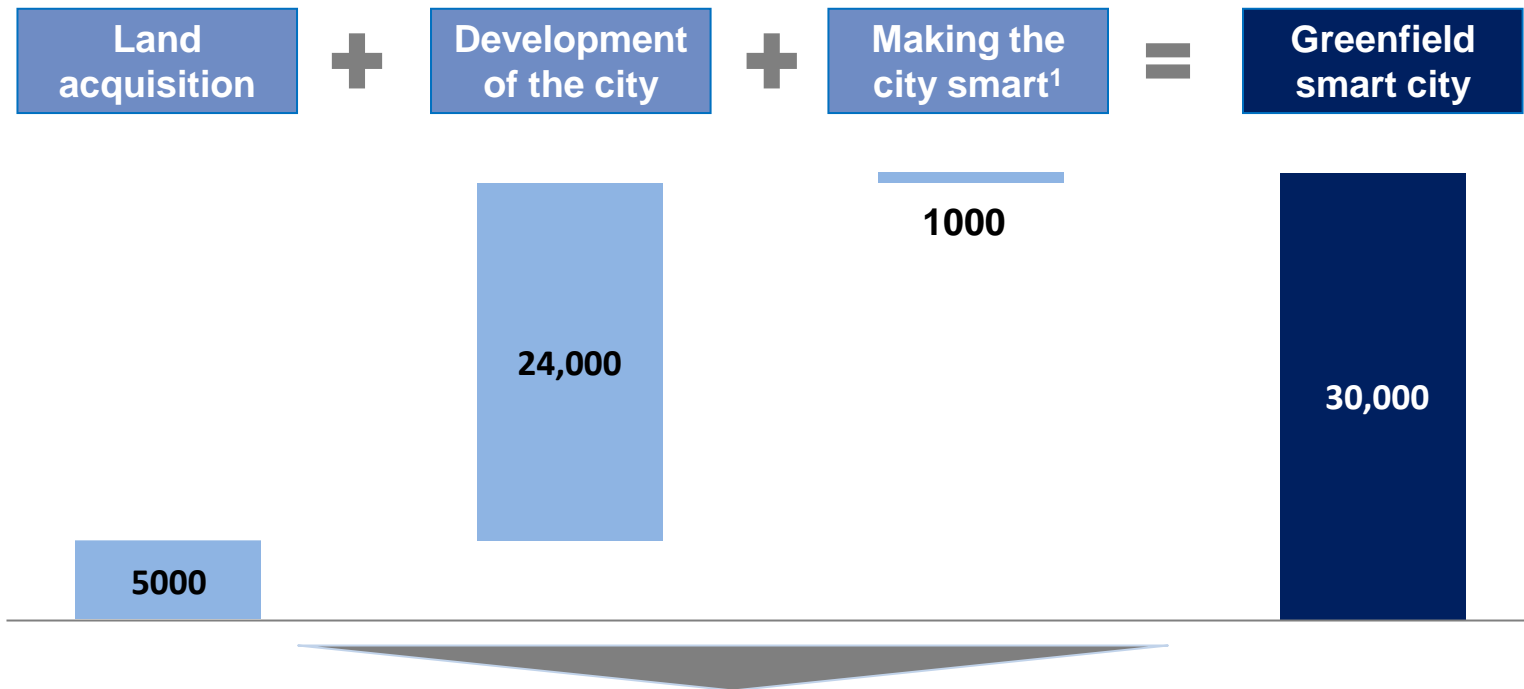


Neighborhood living



Our Palava experience indicates a mid-sized Greenfield smart city will requires Rs ~30,000 Cr over 15 years

High Level Estimates



- While Rs 7060 Cr.² has been provided for smart city development in 2014, the overall requirement for 100 cities is much higher & will need participation from private players
- Financial systems will need to gear up to provide **INR 3,000-5,000 Cr** funding **per city per year** as long term (10+ year) loans
- Will need to generate additional funding from foreign entities



Thank you.