The Aurangabad Industrial City (AURIC)
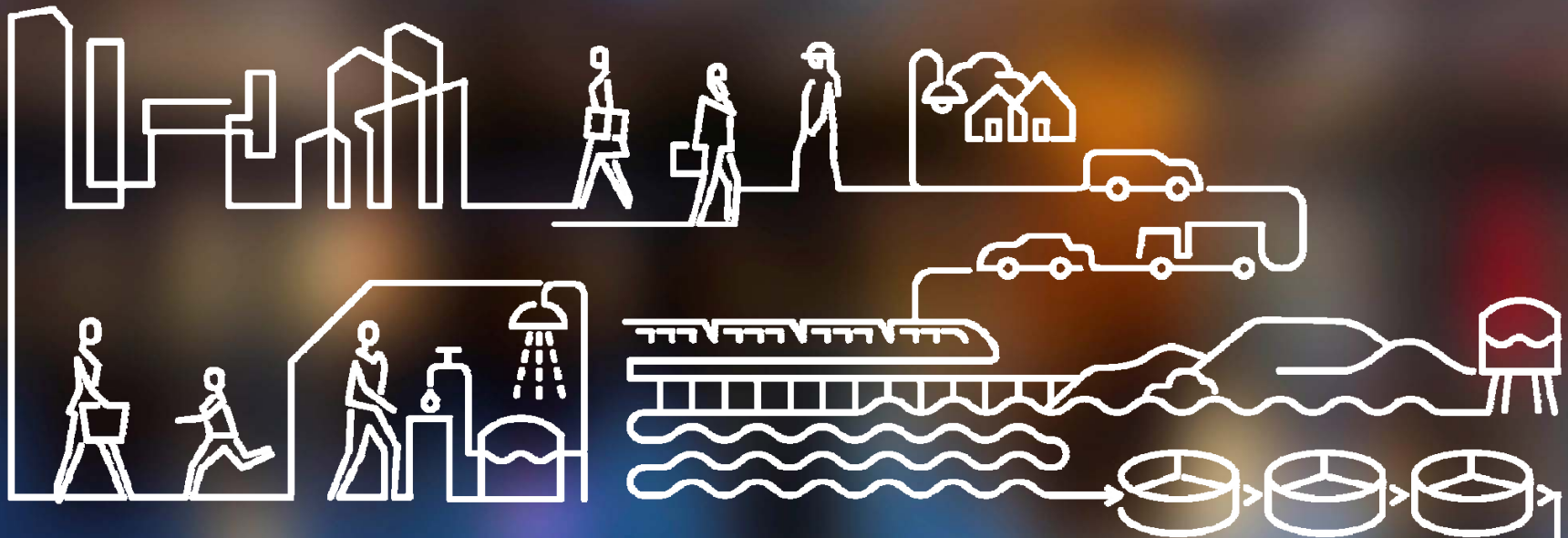
One of India's first smart and sustainable cities

Boston Smart Utilities
BRA Meeting
May 25, 2016

ch2m.

Shendra-Bidkin Smart City, India
New greenfield, smart city that supports India's urbanization strategy

CH2M - Cisco Partnership

- One of the first smart industrial cities along Delhi-Mumbai Corridor
- Largest infrastructure program in India
- 150,000 jobs
- 300,000 residents

ch2m:

Implementation Begins at Shendra

Phase 1
- Master Planning
- Design Management
- Construction Management
- Technology Management
- Commissioning

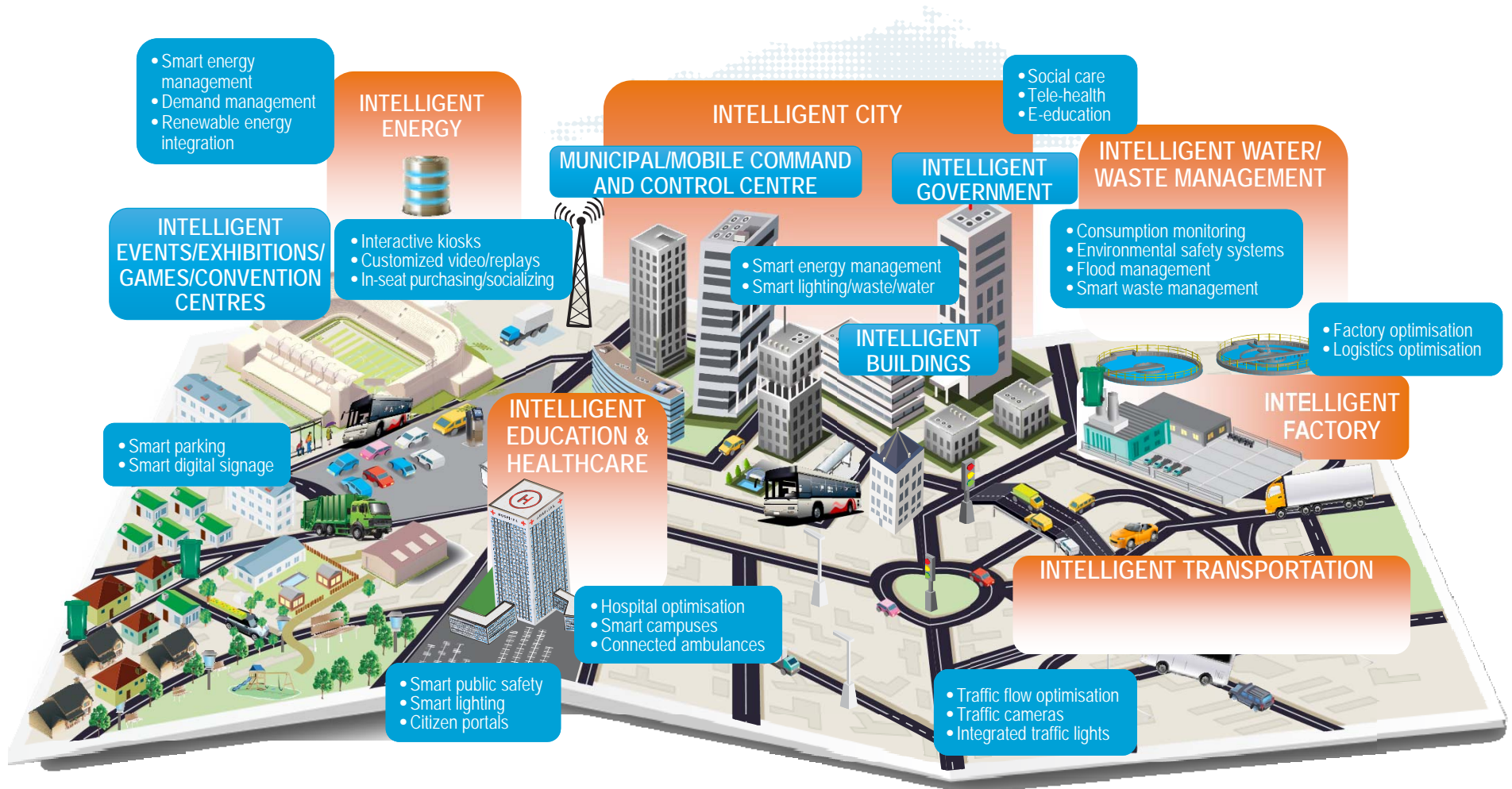# Key Concepts for Infrastructure Design and Management

Infrastructure

- All utilities located underground with separate ducts for growth

- Zero discharge city for water. Recycled water used for conservation.

- Separate 220 KV substation for Shendra and Bidkin

- Utilities and transportation systems monitored from a Central Command Center

Management

- AITL- A City in itself- City Management Contract
  - Reduction in manpower with better cost effective ways
  - International Standard for City Governance & Operations.
  - Quick response & Customer satisfaction

Integrated Land Use and Information Technology Planning

- Smart energy management
- Demand management
- Renewable energy integration

INTELLIGENT ENERGY

- Interactive kiosks
- Customized video/replays
- In-seat purchasing/socializing

INTELLIGENT EVENTS/EXHIBITIONS/ GAMES/CONVENTION CENTRES

- Smart parking
- Smart digital signage

INTELLIGENT EDUCATION & HEALTHCARE

- Hospital optimisation
- Smart campuses
- Connected ambulances

- Smart public safety
- Smart lighting
- Citizen portals

INTELLIGENT CITY

MUNICIPAL/MOBILE COMMAND AND CONTROL CENTRE

- Social care
- Tele-health
- E-education

INTELLIGENT GOVERNMENT

- Smart energy management
- Smart lighting/waste/water

INTELLIGENT BUILDINGS

INTELLIGENT WATER/ WASTE MANAGEMENT

- Consumption monitoring
- Environmental safety systems
- Flood management
- Smart waste management

- Factory optimisation
- Logistics optimisation

INTELLIGENT FACTORY

INTELLIGENT TRANSPORTATION

- Traffic flow optimisation
- Traffic cameras
- Integrated traffic lights

Infrastructure & Communications Technology

1 Parking

Give citizens live parking availability information to reduce circling & congestion.

2 Traffic

Monitor & manage traffic incidents to reduce congestion and improve livability

3 Safety and Security

Automatically detect security incidents, shorten response time, and analyze data to reduce crime.

Infrastructure & Communications Technology

4 **Location Services**

Provide view of people flow data to aid planning & leverage location data for contextual content and advertising.

5 **Street Lighting**

Manage street lighting to reduce energy & maintenance cost.

→ Common Information Layer

→ Shared infrastructure Layer

AURIC
Expertise in all areas of
urban development and **regeneration**

Urban planning and design

Smart technology integration

Infrastructure design-build

Delivery management

City operations services

ch2m: