



WRI INDIA

EMBARQ
India

THE 10 INGREDIENTS OF A SMART CITY





#1 BETTER LAND MANAGEMENT

Better land management is needed for Smart Cities through retrofitting development, redevelopment and green-field development. Developers should not build isolated gated communities but integrate them into cities and public transport.



Designing safe, accessible and inclusive sector design in green-field scenario for 16,000 residents at Naya Raipur, Chhattisgarh

Designing high density and shared uses around transit corridor

Preserving cultural and environmental heritage

Creating affordable and varied housing and equitable business opportunities

Designing active streets with walkable blocks

#2 TRANSIT-ORIENTED DEVELOPMENT

#3 SMART MOBILITY

We need to ensure that people can move around their city comfortably, safely and on time. This means less dependence on cars, and benefiting the majority of road users such as pedestrians, cyclists, and commuters on trains and buses



Scaling up Bus Rapid Transport (BRT) systems in India



With over a 180 operational kms serving over 3,00,000 people per day, the last decade witnessed a significant growth in the number of Bus Rapid Transit corridors from 0 to 24.

An EMBARQ study shows that BRTs improve quality of life in cities. They save travel time, reduce greenhouse gas (GHG) and local air pollutant emissions, improve traffic safety, and increase physical activity.

Enlivening
street edges

Indigenous
character

Integrating
environmental
friendly measures



Rajeev Malagi / EMBARQ India



Rajeev Malagi / EMBARQ India

Making users a part of
the design process

Streets as safe
congregating spaces

#4 PUBLIC SPACES

Quality public spaces not only enhance public life and social interaction but also provide a safe environment for pedestrians and cyclists. All individuals must have the right to access public spaces in an ideal smart city.

Studying inclusion in public transport



HER OPINION



88%

Women harassed while using public transport



40%

Women being harassed on a regular basis



HIS PERCEPTION



100%

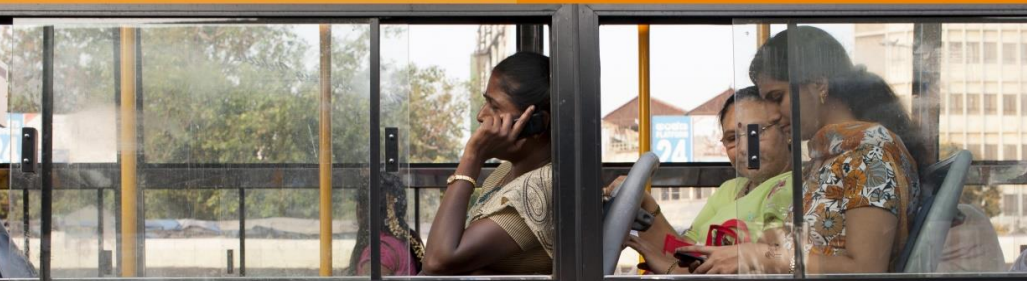
Drivers and conductors thought that women were not harassed



30%

Drivers and conductors believe that women were equally responsible for harassment committed against them

Women's safety in Public Transport- Pilot Project in Bhopal



Benoit Collin / EMBARQ

#5 SAFETY AND SECURITY

This means designing safer cities for children and women, improving accessibility, building safer bus systems, speed management and making cities less car-centric and more people-centric.



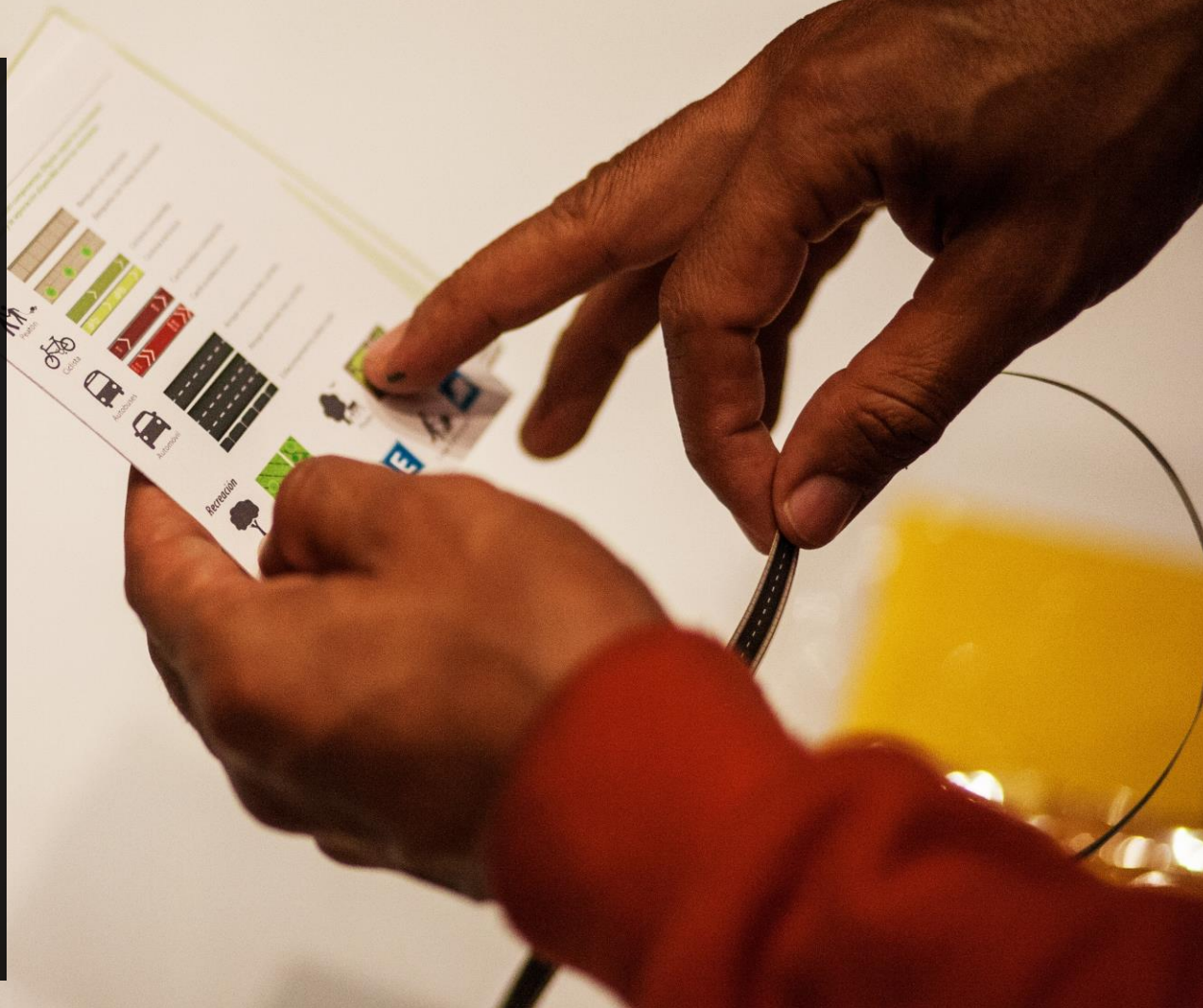
#6 STREETS FOR ALL

The growing open streets movement is establishing the right to equal space in the city. It gives people the opportunity to access roads as public rather than private spaces. A smart city should provide walking and cycling tracks throughout all neighbourhoods.



#7 OPEN DATA

Open data has the potential to spark innovation, encourage public-private collaboration and make moving in cities more comfortable, cost effective and convenient for all. Data technology can support the finance and political will



#8 GOOD DESIGN

Universal accessibility, secure connections, attractive spaces, quality sidewalks, attractive public spaces and green infrastructure will make a smart city more sustainable for the future generations.

atcag
bicycle sharing systems



*Supporting innovative ideas to transform
businesses*



**RICKSHAW
RISING**

By influencing the eco-system of entrepreneurship, including investors, incubators, policy-makers and others, three auto-rickshaw entrepreneurs have been helped to improve their businesses.

#9

INNOVATION

With the growth of cities and problems of congestion and emissions, we need to promote entrepreneurs who can address mobility challenges and provide solutions to everyday problems in the city, instead of expecting the state to do everything.





#10 REDUCED CARBON FOOTPRINT

Cities should reduce their carbon footprints and cut down on large-scale emissions by adopting standards, tools, data, platforms and analysis that provide the foundation for effective, extensive climate action