



Planning for Ensuring walkability in the city

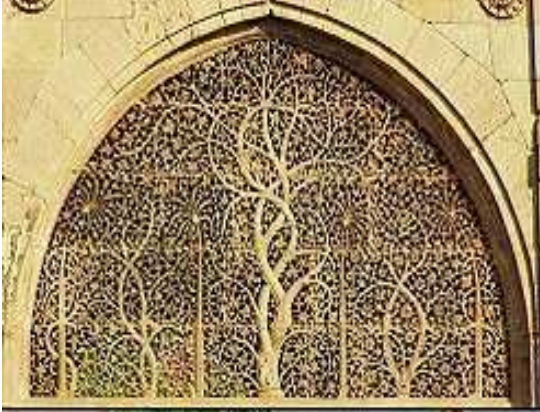
Dr. Guruprasad Mohapatra, IAS
Municipal Commissioner,
Ahmedabad Municipal Corporation,
Ahmedabad, India



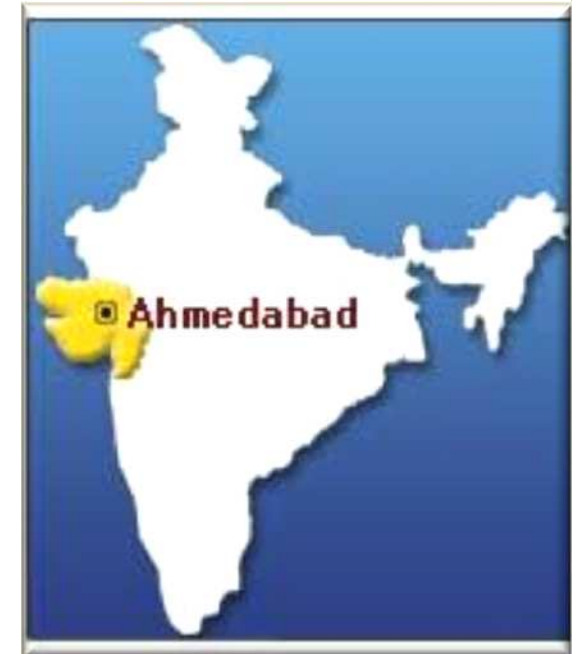
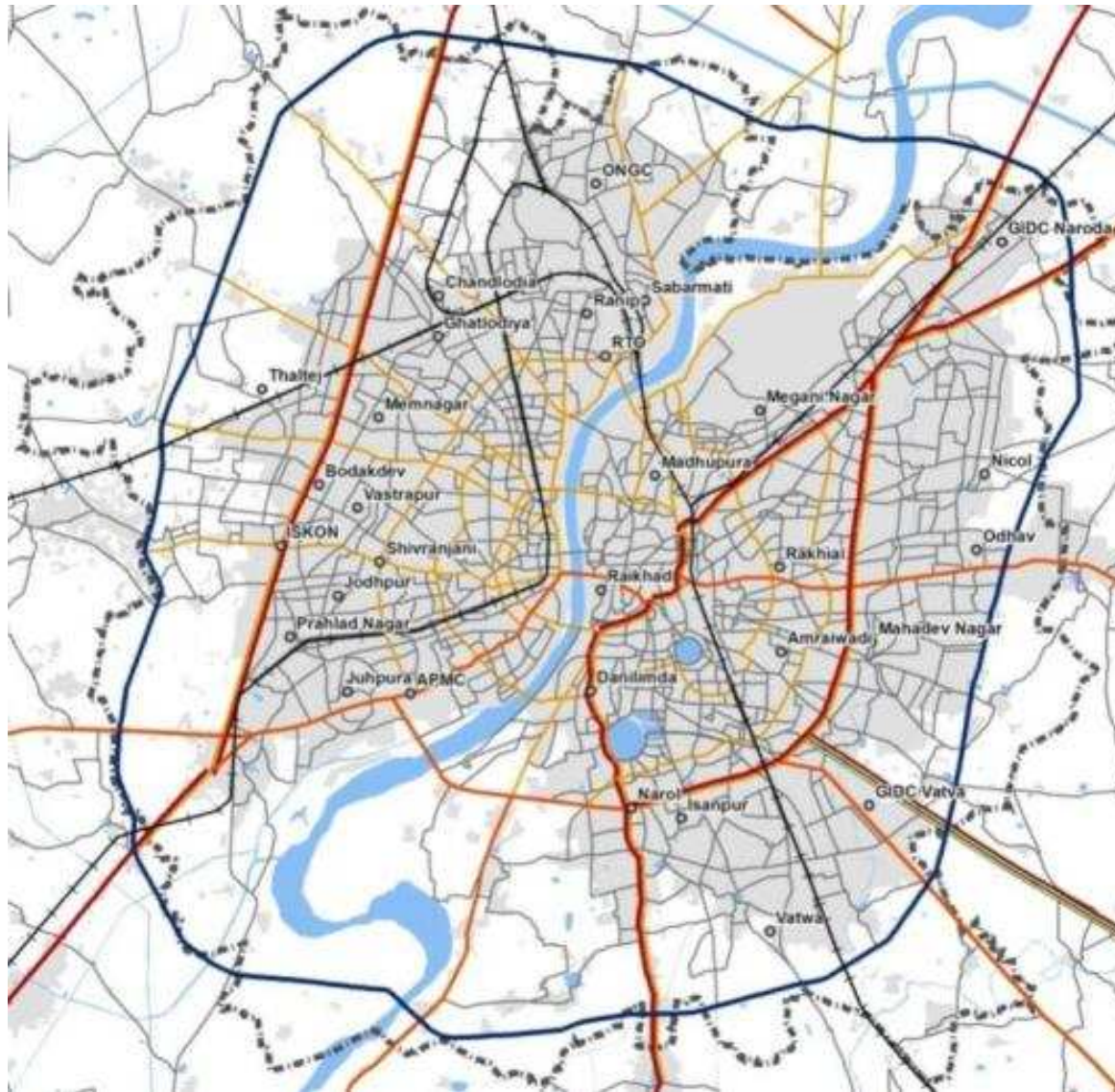
Technical Support:
Centre of Excellence in Urban Transport (CoE), CEPT University,
Ahmedabad

Introducing Ahmedabad

- Founded 600 years back, today Ahmedabad is 7th largest city of India and the largest city in Gujarat,
- On 12 March 1930, Mahatma Gandhi began 'Dandi March' (390 Kms long, Salt-Tax Protest March) from Sabarmati Ashram, situated in the city.
- Population of over 6 million and 26.61% decadal growth rate.
- Density: 11,948 /sq.km
- Literacy Rate : 89.60 %
- 25,55,000 vehicles, growing at the rate of 1,00,000 per year
- Public Transport share: 11.4% (2011)
- An engine of industrial and financial growth of the state.
- 3rd fastest growing city as per the Forbes magazine 2010.



Ahmedabad : Map



Legend

- Landmark
- NH
- SH
- S.P. Ring Road
- Express Highway
- Arterial
- Other Roads
- Railway
- AMC Boundary
- Builtup
- Waterbody

Ensuring walkability in the city

@ Macro level

- Compact city
- Connectivity and Complete road network
- Mixed land use

@ Micro level

- Continuous footpath
- Connectivity to/from public transport services
- Connectivity to/from public spaces and public amenities



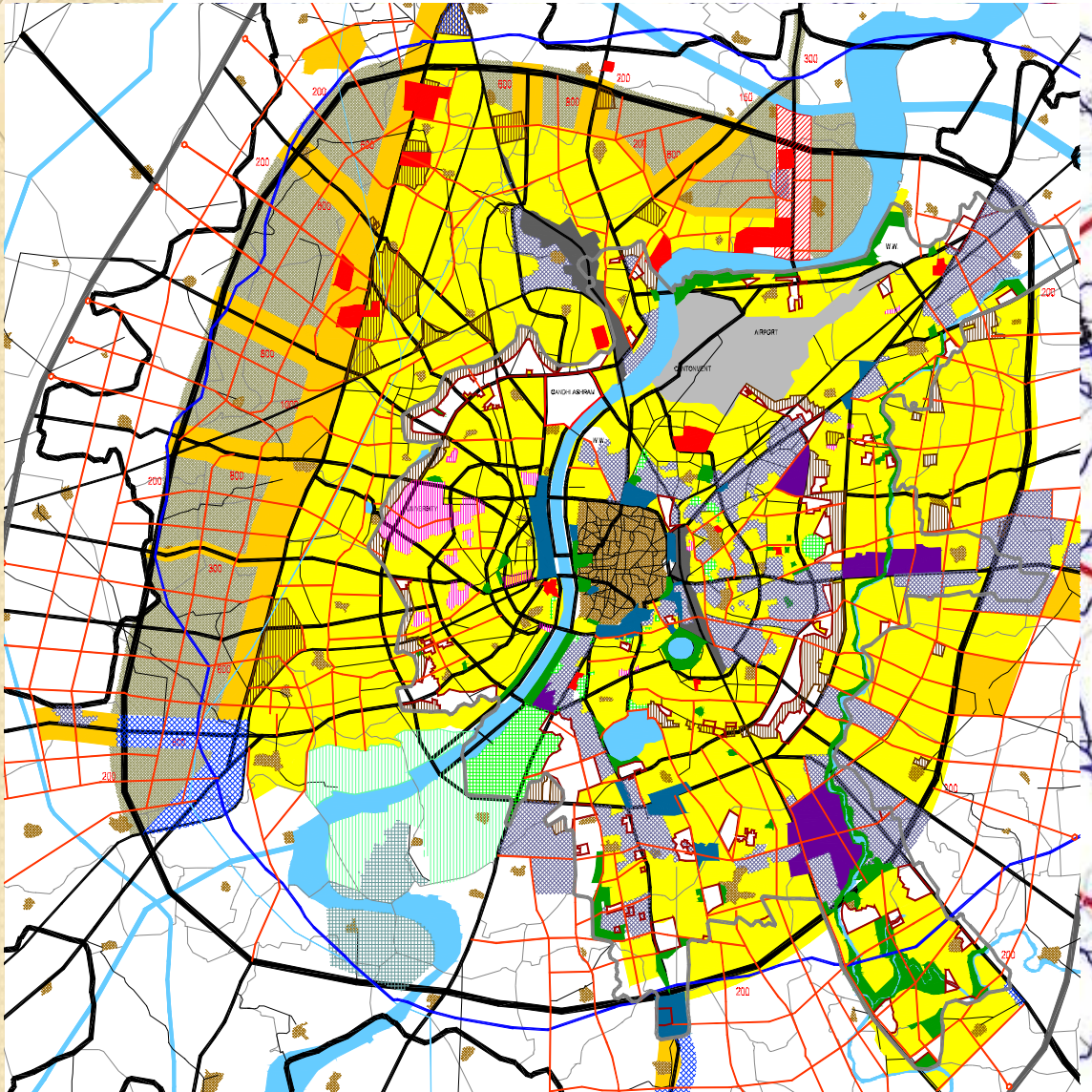
Macro level initiatives for Walkability

Keeping city compact

- Complete road network
- Mixed Land use
- Availability of service land through TP schemes

SHORT TRIP LENGTHS

Introducing Ahmedabad



- Complete road network
- Clear and consistent pattern
- Mixed land use
- TP scheme mechanism
- Trip length ?
5.8 km

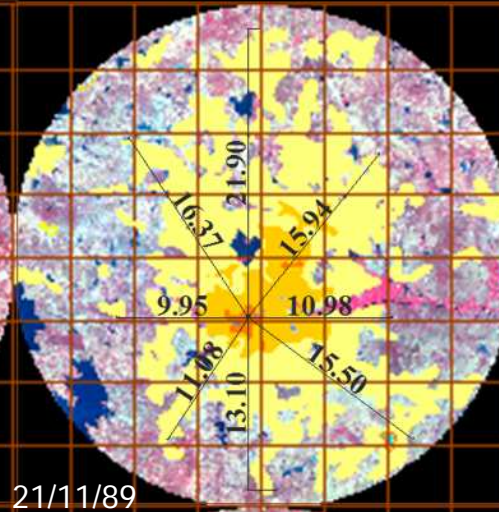
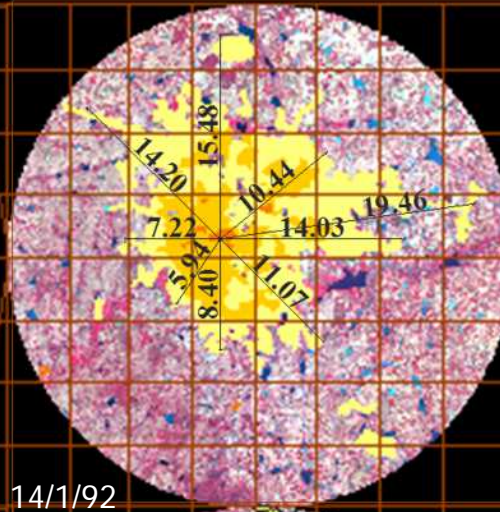
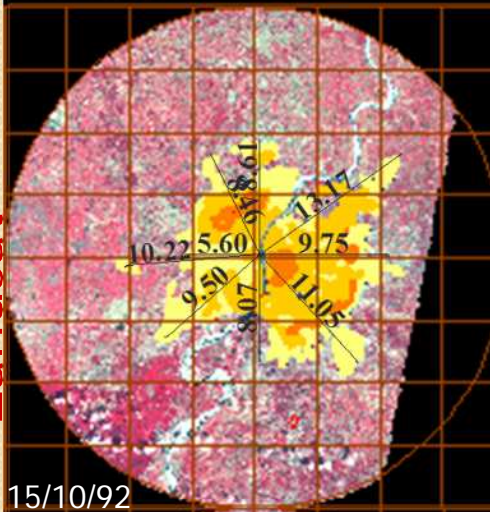
Ahmedabad

Bangalore

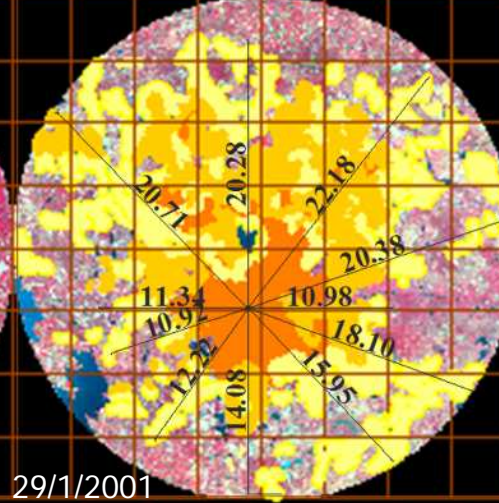
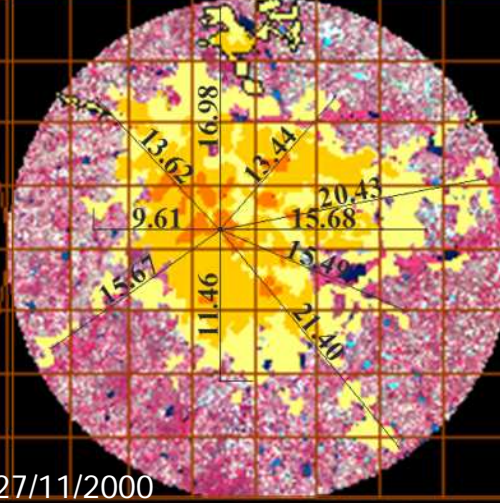
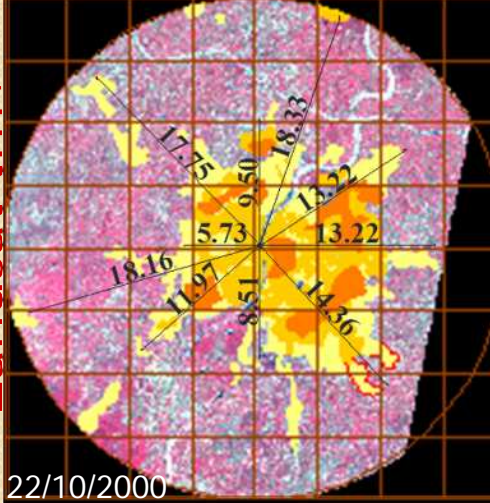
Hyderabad

CITY STRUCTURE

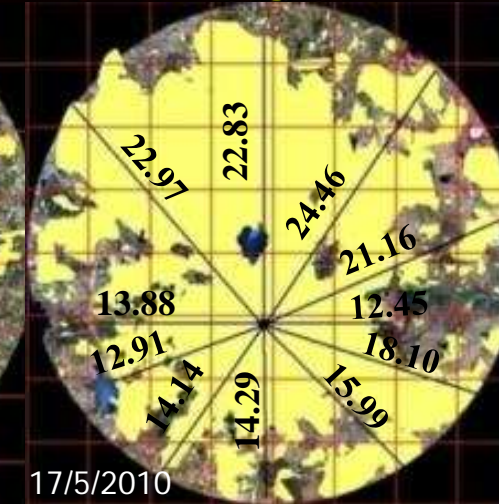
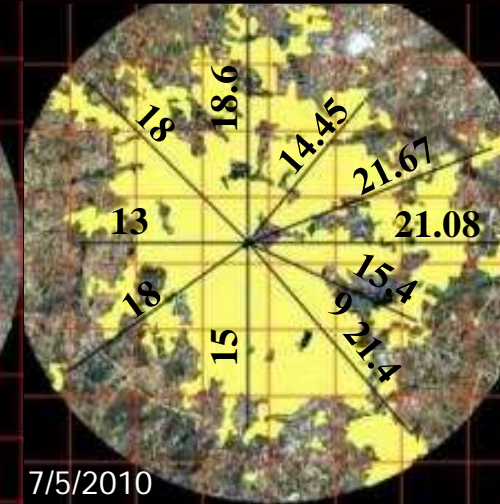
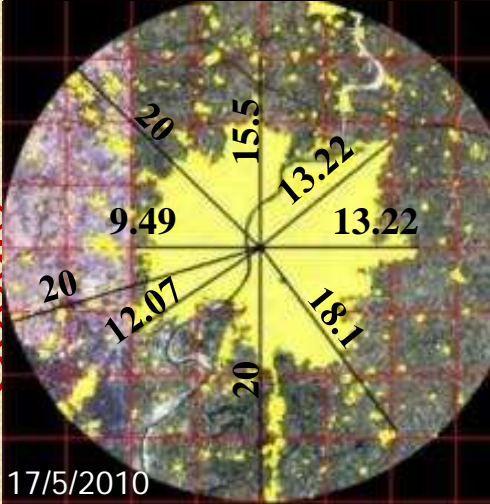
Landsat



Landsat tm+



Google

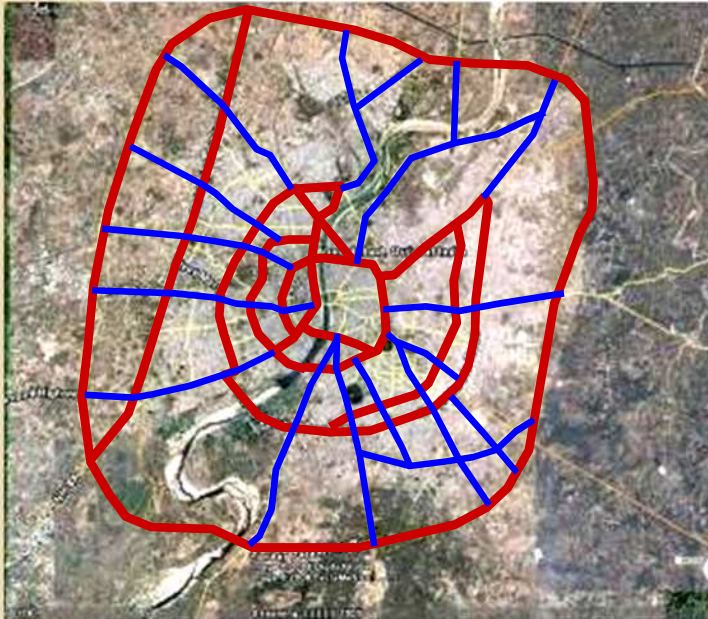


Census 2001
 Ahmedabad (4.5 Mn)
 Bangalore (5.6 Mn)
 Hyderabad (5.5 Mn)

Source: Desai Sowmya, Urban Spatial Structures & Land management Mechanisms

Source of Satellite images: www.glcf.com and Google Earth

Road Network Structure



Ahmedabad



Bangalore



Hyderabad

Road Structure of
the Urban
Agglomeration

-  radials
-  rings



Micro level initiatives for Walkability

BRTS in Ahmedabad



- 66.7 km implemented & operational
- 22.1 km – under implementation
- 115 Bus stations
- Operational
- 1.2 lakh (0.12 Mn) daily ridership
- 26.8km Planned

Ahmedabad Bus Rapid Transit System

- 20% shift from 2-wheeler users
- 66% access through walking
- 20 % reduction in fatalities along BRT corridor

BRT Bus shelter access



High quality pedestrian infrastructure provided along BRT corridor

BRT Bus shelter access



High quality pedestrian infrastructure provided along BRT corridor

Access to public space - Kankaria



Public space access



SEATERS PLACED ALONG PEDESTRIAN CORRIDORS



PEDESTRIANISED ZONE ALONG WITH BRT LANE



BUS STATION LOCATED AT PUSPAKUNJ – A PUBLIC SPACE



INAUGURATION INTEGRATED WITH KANKARIA CARNIVAL

Further initiatives

Along with pedestrian facilities along BRT corridors, access to BRT stations is equally critical

66% people walk!

Introducing Local Area Access Plan

- Identifying PT Access Streets in Ahmedabad
- Planning for accessibility and safety
- Provision of 'safe access' to local destinations
- Development of world class pedestrian Facilities
- Local Street Design Standards (For PT Streets, For PT Access Streets)
- Mandatory, Optional and Situational design parameters
- Phase-wise development plan (Selection criteria)
- Enforcement plan & policy

LAAP network identification methodology



A total of **168** kms has been identified as a part of LAAP network

Legend

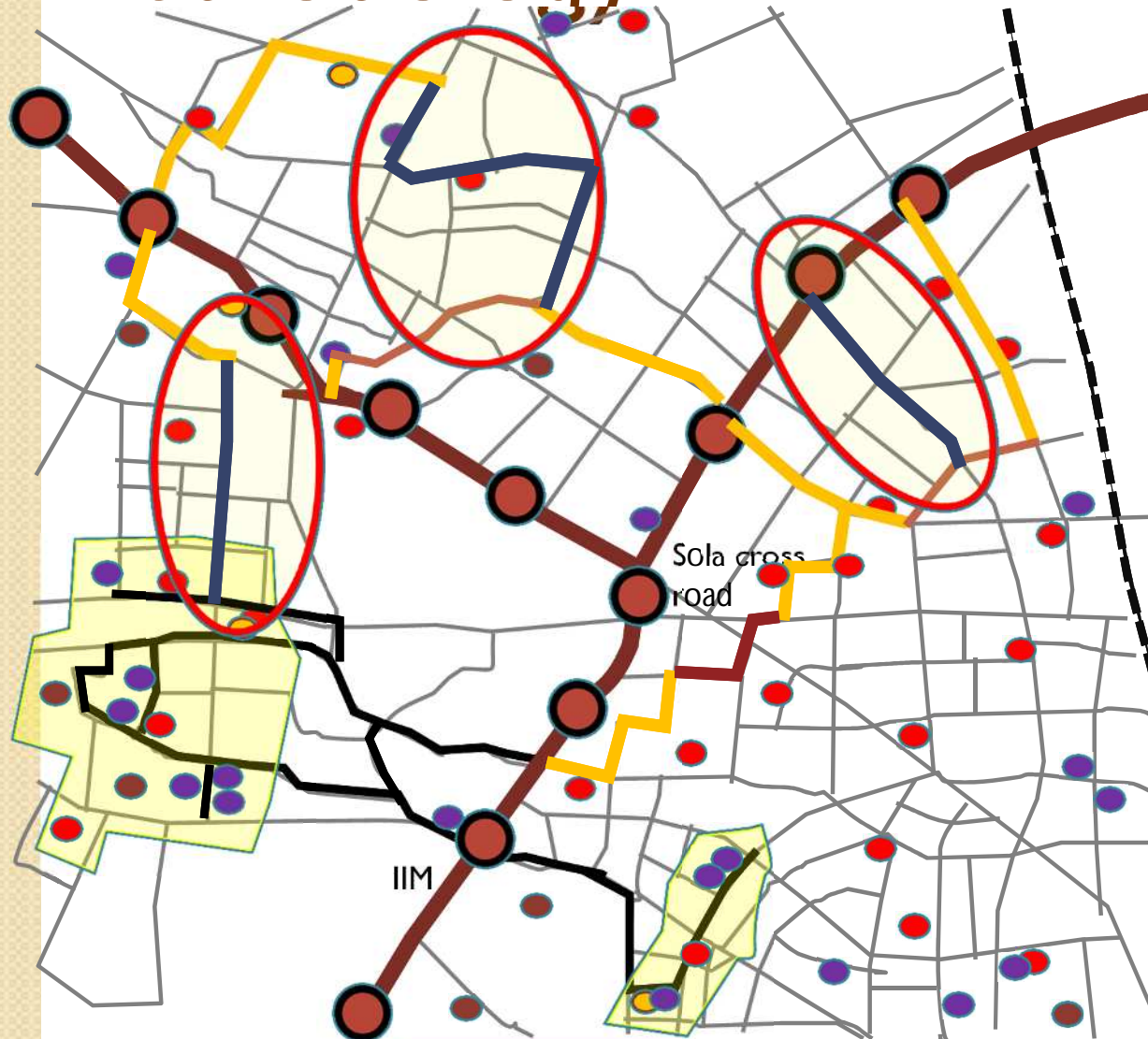
Road Network

- National Highway
- State Highway
- Ring Road
- Arterial
- Other Roads
- Ward Boundary
- Waterbody
- AMC Boundary

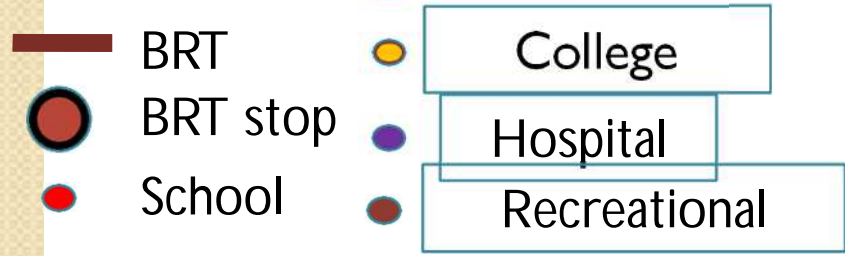
BRTS

- Phase 1
- Phase 2
- BRTS Stops
- Schools
- Colleges
- Hospitals
- Recreational Places
- LAAP Network

Methodology



- Overlapping Layers
- Identifying Clusters
- Connecting clusters to nearest BRT
- Connecting amenities
- Creating Loops
- Identifying missing Links between singular loops and Clusters
- Completing Pedestrian networks



LAAP network

	Schools	Colleges	Hospitals	Recreation Spaces	Total Road Network
Ahmedabad	6913	110	303	99	6913
BRT (1Km)	459	76	205	75	1361
Laap	160	22	119	18	168

- Laap forms **12%** of total road network lying in 1 km radius of BRT
- The **12%** road network connects
 - **34.8%** Schools
 - **28.9%** colleges
 - **58%** hospitals
 - **24%** recreational spaces

Policy development

- Traffic regulation to provide priority to pedestrian
- Footpaths and cycle track to be stated as 'No tolerance zone' for encroachments
- Design standards to be followed during street design
- Inclusion of NMT and Pedestrian plan as part of traffic Master plan
- Enforcement of traffic regulations
- Street Vending Policy to be Enforced / Strengthened
- Parking to be regulated as per Parking Policy

Conclusion

Questions?

Thank you...

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