TRAFFIC AND CLIMATE
DEVELOPERS’ PERSPECTIVE

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@ New Delhi, India
on 25 July 2013
कृपया यहाँ पर ज्ञान तबादे यहाँ पर सभी ज्ञानी हैं
Nimitt Karia  
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Partner and Director  
development2020, India

Education
Exec. MBA, 2002  
MSc Construction Economics & Management, 1999  
Degree in Construction Technology, 1998  
Diploma in Entrepreneurship Development, 1998

Memberships
Royal Institute of Chartered Surveyors, India  
Chartered Institute of Building, UK  
Chartered Institute of Management, UK

Teaching and advisory role
University College London  
Middlesex University, London  
CEPT University  
Centre for Green Mobility  
Cadweb UK
Project Location
Residential & Commercial

Projects

Ahmedabad Education Society Sports Complex, Ahmedabad - Sports Facility
Institute of Information & Communication Tech., Ahmedabad University - 2.50 lac sq ft (Nursing wing)
Zydus School for Excellence II, Ahmedabad - 1.50 lac sq ft of primary to higher secondary school building
Care Institute of Medical Sciences, Ahmedabad - 2.00 lac sq ft, 150 bed multi-specialty hospital
Aonge Agriculture Business Management University, Navsari - 30,000 sq ft, 2-3ầm hight administration building
Girnagar Tirth Hospital, Faitana - 35,500 sq ft, Design of 50 bed Gastro intestinal Hospital
Kesarsuri Gyamirth - A Hi-Tech Education Campus, Valsad - 1.50 acres/ft, Ayurvedic University & Hospital
Gujarat Cancer Soc. Medical College, Ahmedabad - 17.00 lac sq ft, 750 bed Hospital & Medical College (Phase II)
Career Point School, Jodhpur - 1.50 lac sq ft, Primary to higher secondary school & Hostel building

Institutional
Four Points Sheraton, Agra – 1.50 lac sq ft, 155 keys, 5 Star Hotel

Alila Fort Bishangarh, Jaipur – xxx lac sq ft, 52 keys, Heritage Boutique Hotel

Radisson Blu at Aspee Environ, Mumbai – 7.00 lac sq ft, 258 keys, 5 Star Hotel

Jaipur Exhibition Hall & Convention Centre – 3.24 lac sq ft, Mix used development with Hotel & Banquets

The Courtyard by Marriott, Jodhpur – 1.40 lac sq ft, xx keys, 5 Star Hotel

Gulmohar Greens Golf & Country Club, Ahmedabad – 1.50 lac sq ft, 28 suites, Boutique Hotel

Crowne Plaza at Shanath V, Ahmedabad – 7.00 lac sq ft, 200 keys, 5 Star hotel (pre-construction)

Crowne Plaza Resort, Udaipur – 2.60 lac sq ft, 220 keys, Five Star Resort (pre-construction)

Kensville Golf & Country Club, Ahmedabad – 750 acres of Golf Club, Boutique Hotel and township

Suramya VII Clubhouse, Ahmedabad – 1.07 lac sq ft, Clubhouse design

Hospitality
THE POPULATION SPIKE

Millions of People (6.000 million = 6 billion)

- Global population now increases as much every 3 days as it did in a whole century for most of the thousand centuries we've been on Earth.
- The US Congress withdraws American financial support for international family planning—taking away an essential tool of population stabilization.
- "Population momentum" builds. As the base gets larger, stabilization becomes more difficult. A low fertility rate with the large base population of the late twentieth century produces more increase than a high rate did decades earlier, when the base was smaller.
- Life expectancies increase in most countries, including countries where birth rates remain high.
- Thomas Malthus writes *An Essay on the Principle of Population*, warning that population can expand geometrically, but food supply cannot.
- With the Age of Exploration, more of the world is colonized; human dominance of the environment now covers the globe.
- After about 90 millennia of hunting and gathering, the advent of farming and herding allows for accumulation of food surpluses and the capacities of communities to support more people. Population growth begins to gain momentum.

THE CARBON DIOXIDE SPIKE

Concentration of CO₂ Gas in the Atmosphere (Parts Per Million, Volume)

- Attempts to seriously stem emissions are sabotaged by the Global Climate Coalition. Loopholes in the Kyoto climate treaty allow most industries to continue increasing emissions more or less at will.
- Despite warnings about global warming, world coal use reaches new record highs. Over four consecutive years in the late 1990s, the world Bank, while professing deep concern about global environment, finances 20 major new coal-fired power plants between 1990 and 1997.
- Climate scientists issue first IPCC report warning of urgent need to reduce emissions.
- In the 1950s, most people consider air conditioning a luxury (shade trees, fans, slow pacing, and physiological acclimatization help make heat tolerable); by 1990s, a majority of Americans consider air conditioning a "necessity"—and use of fossil fuels to produce power for it soars.
- The first cars appear; their numbers pass 500 million by 1998, each car producing over 2 tons of CO₂ per year.
- The Industrial Revolution begins. The prime source of work energy shifts from food and firewood used only as it is grown, to fossil fuels using 100 centuries of plant growth each year.
AHMEDABAD, GUJARAT

Area - 464km$^2$ - 7th largest
Population – 6.4m – 5th
Transit Stop Hierarchy Based on Centrality - 2011

Legend
- Level 1
- Level 2
- Level 3
- Level 4
- Level 5
- Level 6
- BRTs Route
- Rods
- Waterbody
- AMCLimit

From Dissertation Work of Amila Jayasinghe, Guided by Talat Munshi, 2009-2011. "An application of 'Centrality Measures' to identify the relationship between Network Centrality & the Transit Demand at Public Transit Stops; A Case of Ahmedabad City, India"
What Will Have The Greatest Impact? – A Public Survey for Retail

- **LONG TERM**
  - Transport Improvements
  - Streetscape
  - Pedestrian Circulation
  - International Marketing to Occupiers
  - Promoting Major Developments

- **MEDIUM TERM**
  - Marketing & Promotion
  - Extended Opening Hours
  - Store/Fascia Design

- **SHORT TERM**
  - Wayfinding
  - Safe/Clean
  - Events/Street Trading
  - Facilities
  - Events/Street Trading

**COST**

**RETURN**
Ahmedabad - development

- No CBD – so no peak hour unidirectional traffic
- No larger land parcels in city centre – amalgamation – higher FSI for larger plots an incentive for amalgamation
- No incentive for redevelopment in city centre – Hyderabad model – no FSI caps
- Higher density – recover cost of infrastructure – Section 106 agreement (UK)
- Development Control Regs – use better Urban design standards for land use – paper potting?! allow more number of basements, higher density, etc
Ahmedabad - development

- BRTS
  - Car users?
  - Last mile?
  - Combination, metro, others…

- Parking
  - Cars – aspirations – trends are a proof
  - Street parking enforcement – private players
  - Parking cost – 1 to 4lakh, selling not allowed by SC
  - Any additional parking beyond minimum is counted towards FSI in Singapore, London.
- Ahmedabad is currently in a transit phase towards public transport. Once complete, the BRT network will amount to more than 120 km. The BMTC metro project will further aid in the public transport infrastructure.

- Connectivity at the doorstep for users needs to be greatly improved to foster public transport use.

- Assessment of existing infrastructure within the city is extremely important before putting in BRT or other public transport.

- When public transport is in place, infrastructure in the city should be simultaneously upgraded to accommodate the increased demand.
The way we apply innovation at our buildings, is the same kind of thinking we need to apply to the urban design work and approach to building hyperdensity in the city.

If we are to rise to the challenges of our times, we need a zoning code, policies and more importantly the mindsets that are responsive to more variables than the ones at play when our current codes were first written or when our ways of living were adopted...

Gone are the days for two prone, three prone approaches - its time for realistic and multi-prone action.