



PEDALLING THROUGH PARTNERSHIPS

Role of *Private* and *Third-Sector* in promoting **Active Travel** Strategies in Delhi

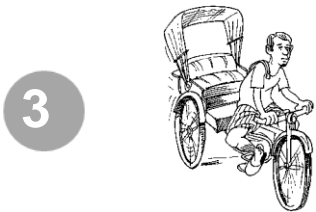
Objectives



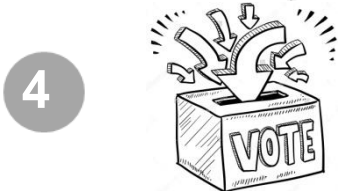
AIR POLLUTION
MOBILITY PATTERNS



CASE STUDIES FROM
WORLD CITIES



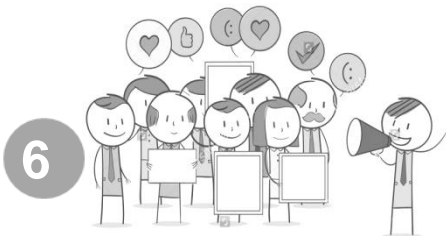
CYCLING PROMOTION INITIATIVES AND THE
ROLE OF ORGANISATIONS



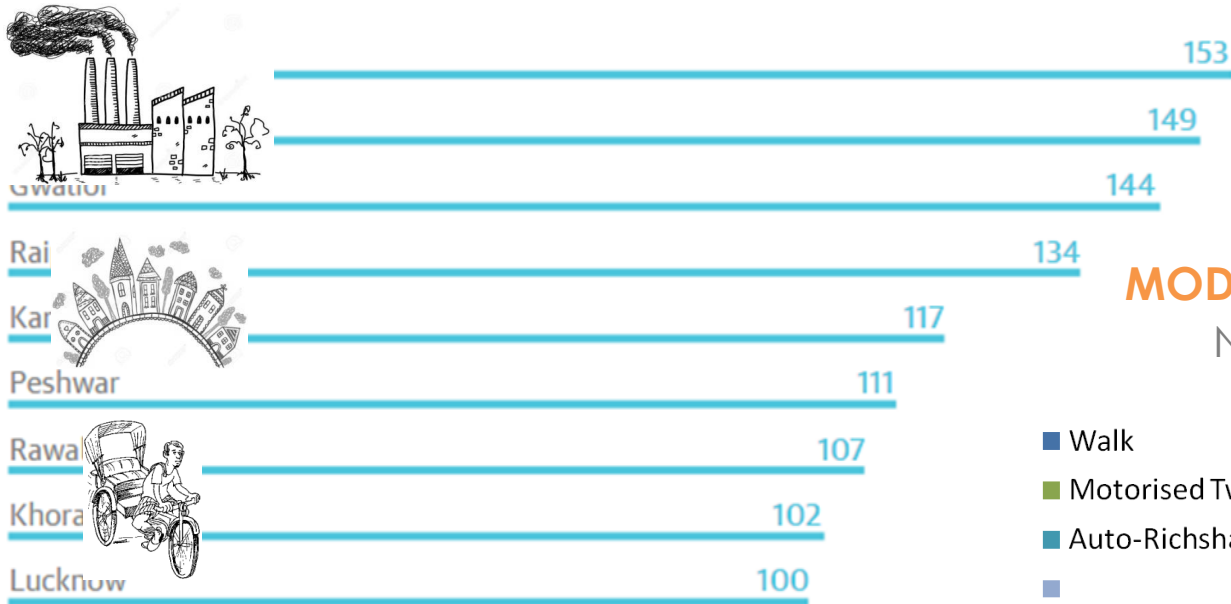
AUTHORITATIVE STRUCTURES AND POLICY
REVIEW



RESIDENT RECEPTIVITY TO NMT
PROMOTION STRATEGIES



PRACTITIONER VIEWS ON CYCLING AND
NMT POLICIES

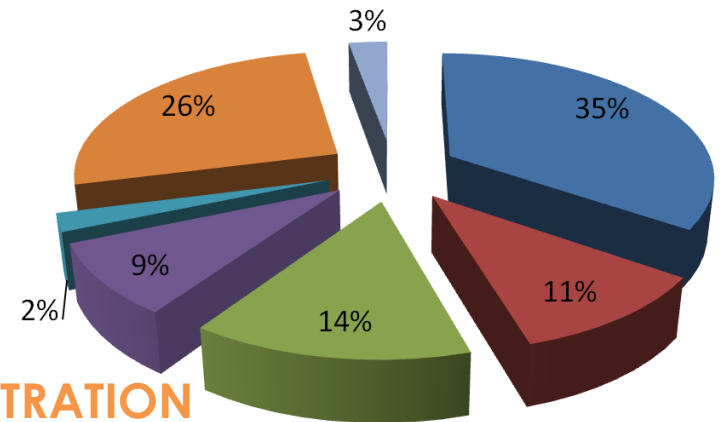


MODAL SHARE FOR DELHI

Number of Trips Made

(Source : IUT, 2007)

- Walk
- Cycle
- Motorised Two-Wheeler
- Cars / Taxis
- Auto-Richshaws
- Bus

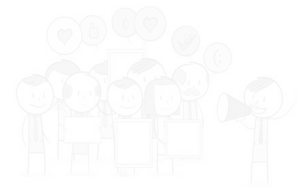
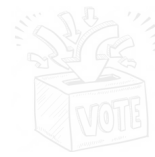


AIR QUALITY BY PM 2.5 CONCENTRATION

"World's Most Polluted Cities"

(Source : Guardian Graphic, WHO, June 2015)





BEIJIN

- Construction, upgrading of new and existing bike lanes.
- Removal of road-side car parks in narrow roads to build dedicated bike lanes
- Cycling Tours to promote cycling- *Tour of Beijing*



32%



Cycling Rate

21%

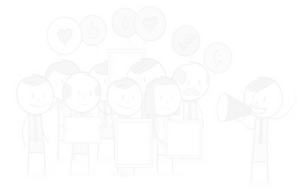
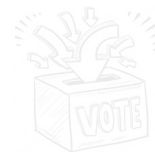


Walking Rate

10

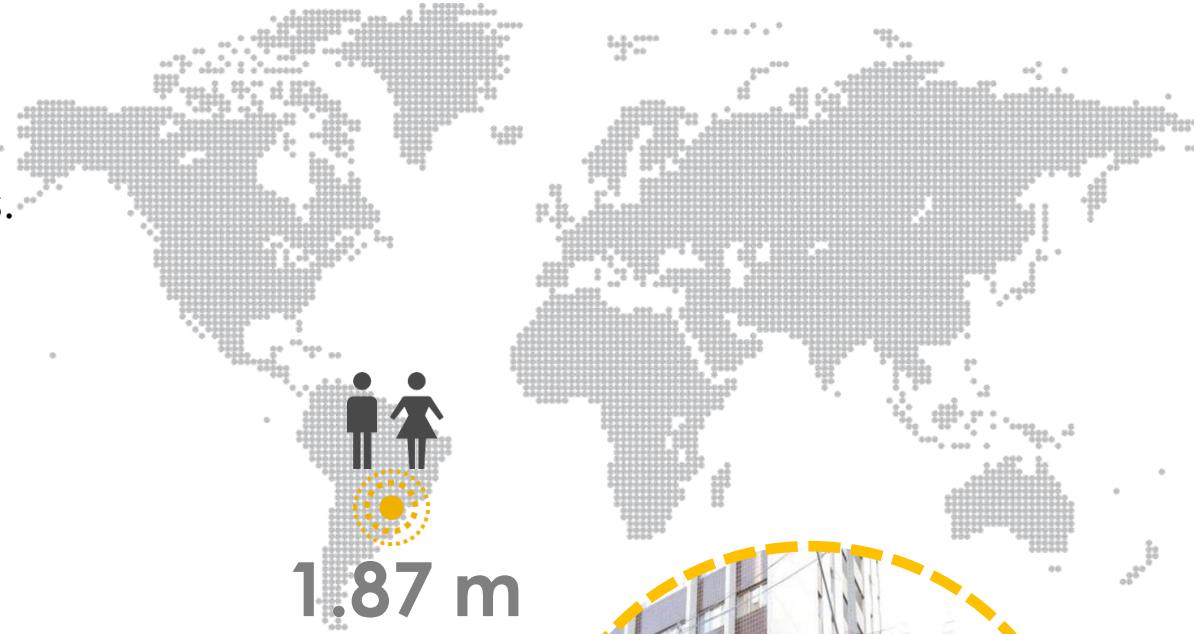
Years of Investment in Active Travel





CURITI BA

- Integrated Transport and Land-Use planning in 1960s.
- BRTs
- Public Health Awareness events like *CuritibActiva*.



5%



Cycling Rate

21%

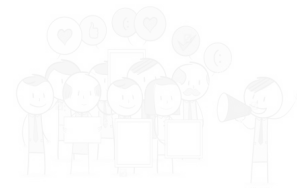
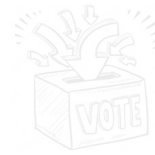


Walking Rate

20-25

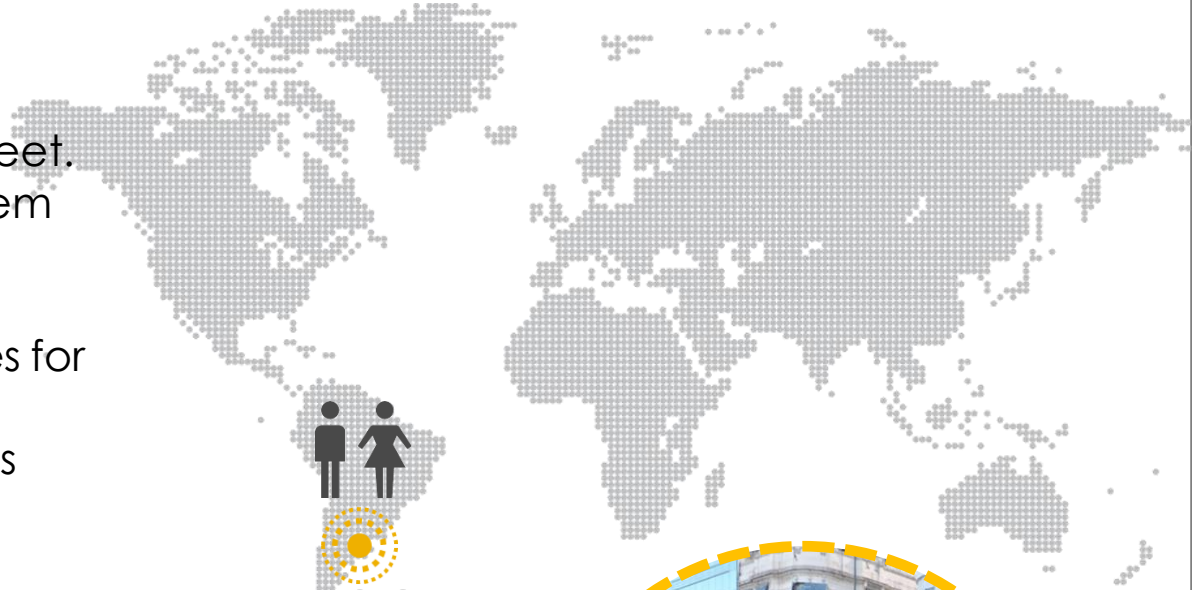
Years of Investment in Active Travel





BUENOS AIRES

- Metrobús – extensive bus fleet.
- Ecobici – Shared bikes system and dedicated bike lanes.
- Cycle Tourism.
- Tie ups with pvt. Companies for bike-to-work incentives.
- Soft Loan Schemes for bikes



15.02 m



3.5%



Cycling Rate

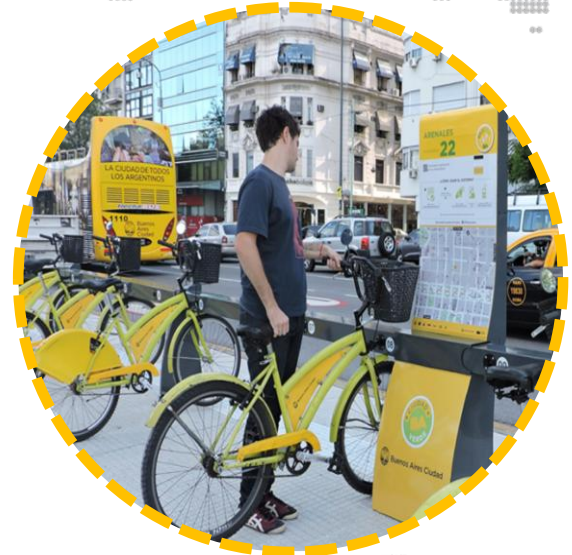
36%

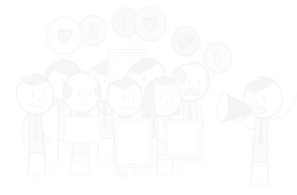
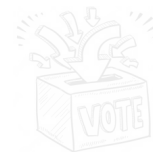


Walking Rate

4

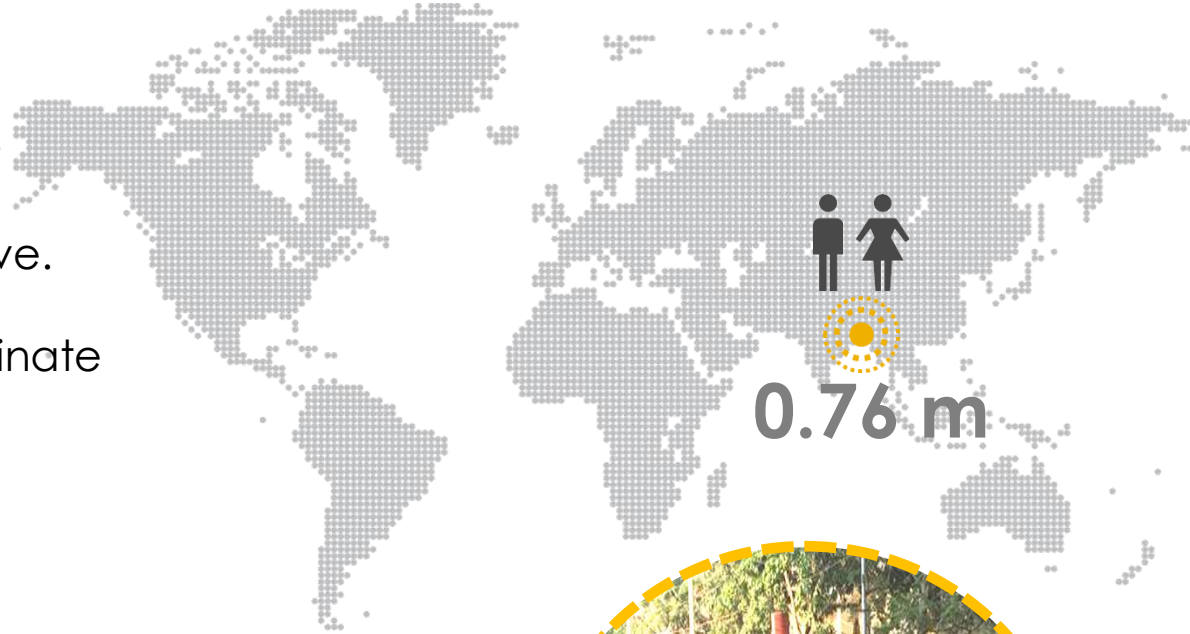
Years of Investment in Active Travel





RAJSHAHI

- Construction of dedicated bike lanes
- Massive tree plantation drive.
- Cleaning-up of brick kilns.
- *Zero Soil Programme* – Eliminate dust through streetscaping



N.A.



Cycling Rate

2

Years of Investment in Active Travel

36%



Walking Rate



Previous **Impactful** Initiatives

RAAHGIRI DAY



- Car-free Sunday, conceptualised on Bogota's *Cyclovia*.
- Started in Gurgaon in 2013, later adopted in Connaught Place Delhi in 2014.

INITIATOR / ORGANISER



- EMBARQ India (NGO)
- Pedalyatri (Cycling Club)
- I AM Gurgaon (NGO)
- Heritage School (High School)
- Duplays Gurgaon (Sports Club)

INVESTOR



- Raahgiri Foundation (Trust)
- Sponsors (Private Companies)

FACILITATOR



- New Delhi Municipal Corporation (NDMC)
- Delhi Police

Previous **Impactful** Initiatives

BICYCLE PARTNERSHIP PROGRAMME



- Aim to promote pro-poor cycling in developing countries.
- Capacity building and assisting Civil Society Organisations (CSOs)

INITIATOR / ORGANISER



- I-CE
- TRIPP / iTrans
- Parisar (NGO)
- Centre for Active Travel (NGO)
- Institute for Democracy & Sustainability (NGO)
- Green City Cycle Club Nanded (Cycling Club)

INVESTOR (I-CE Fund)



- Dutch Ministry of Cooperative Development
- CAI-Asia Centre
- Dutch Consultancies towards CSR

FACILITATOR

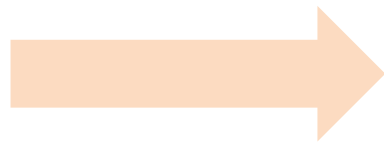


- Pune City Council
- Nanded City Council



Previous **Impactful** Initiatives

**Government
(Public-Sector)**



Research,
Proposals (Eg.
BRT, BPP, etc.)



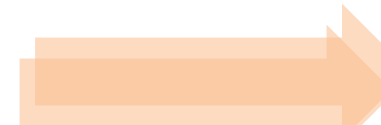
**Sustainable
Transport**



**NGOs, CSOs
(Third-Sector)**



Research,
Campaigns
Proposals
(Eg. Raahgiri)



**Sustainable
Transport**



**Startups &
Companies
(Private-Sector)**



Cycle Tours
Fitness Clubs
Campaigns



**Sustainable
Transport**

SECTOR	ORGANISATIONS		ACCOUNTABILITY (Centre / State/ Municipal Authority / Independent / Collaboration)	ROLE IN URBAN TRANSPORT
GOVERNMENTAL ORGANISATIONS (Public Sector)	Planning Commission Of India		CENTRE	5 Year Plans
	MoUD	Ministry of Urban Development	CENTRE	National Policies, Conferences & Seminars, Approve Projects, Funding
	JNNURM	Jawaharlal Nehru National Urban Renewal Mission		Investment in Transport Infrastructure, Development of Mobility Plans
	UMTA(Proposed)	Unified Metropolitan Transportation Authority		Coordinate between public bodies, expedite processes, funding for transport projects
	PWD	Public Works Department	STATE	Road Infrastructure
	TRIPP (IIT-D)	Transport Research and Injury Prevention Programme (Indian Institute of Technology- Delhi)	STATE	Research, collection & analysis of Data
	iTrans Innovative Transport Solutions			Transport Design Solutions
	DDA	Delhi Development Authority	CENTRE	Design/Funding of all Development Projects
	UTTIPEC	Unified Traffic and Transportation Infrastructure (Planning & Engineering) Centre		Policies, Norms, Guidelines
	NBCC	National Buildings Construction Corporation Limited	CENTRE	Public Sector Construction Company
	DMRC	Delhi Metro Rail Corporation	CENTRE-STATE	Design and Execution of Delhi Metro
	DIMTS	Delhi Integrated Multi-Modal Transit System	STATE	Bus Rapid Transport (BRT) Projects
	DTC	Delhi Transport Corporation	STATE	Public Buses
	IUT	Institute of Urban Transport	CENTRE	Coordinate between experts, conduct workshops, conferences etc.
	KMC (Proposed)	Knowledge Management Centre		Data Management
	DIMTS	Delhi Integrated Multi-Modal Transit System	STATE	Planning, Construction and Management
	NON GOVERNMENTAL ORGANISATIONS (Third-Sector)	ITDP	Institute for Transportation and Development Policy	INDEPENDENT
CGM		Centre for Green Mobility	INDEPENDENT	Policies, Design Consultation
TERI		The Energy and Resources Institute	INDEPENDENT	Policies, Technical Data, Research
CSE		Centre for Science and Environment	INDEPENDENT	Policies, Technical Data, Campaigning, Awareness
CPR		Centre for Policy Research	INDEPENDENT	Policies, Conferences, Workshops
FICCI		Federation of Indian Chambers of Commerce & Industry)	INDEPENDENT	Policies, Conferences, Debates
WRI		World Resources Institute	INDEPENDENT	Policies, NMT Promotion, Awareness Rides, Campaigning
EMBARQ India				
SUTP		Sustainable Urban Transport Project	GIZ, BMZ	Policies, Research, Capacity Building
ICLEI		International Council for Local Environment Initiatives	COLLABORATION	Target Agendas, Conferences, Policies
SLoCaT Partnership		Partnership on Sustainable Low Carbon Transport	COLLABORATION (Under UN)	Target Agendas, Conferences, Policies
UITP		International Association of Public Transport	COLLABORATION	Research, Projects & Reports, Capacity Building, Training
INTACH		Indian National Trust for Art and Cultural Heritage	INDEPENDENT	Heritage Bike Tours
RWAs		Residents Welfare Associations	INDEPENDENT	Community Events, Meetings
CYCLING CLUBS		PedalYatri, Spinlife India, Delhi Cycling Club, Delhi Randonneurs, BumsOnTheSaddle, PedalUpStudio, Noida Cycling Club, Cyclechala, East Delhi Riders, etc.	INDEPENDENT	Fitness Tours, Bike Rallies, Urban Cycling Promotion Campaigns, Cycle Races, etc.
PRIVATE SECTOR	BIKE COMPANIES - ATLAS, HERO, BSA BIKES, ETC.		INDEPENDENT	Sales, promotion & advertisement of bikes
	Corporate Firms & Multi-National Companies (MNCs)			Encourage Bike-to-work through Corporate Social Responsibility (CSR)
	BIKE TOUR COMPANIES - DelhiByCycle, MHE Adventures, New Delhi Bicycle Tour			Tourism Promotion

Authoritative Structure- FEDERAL

GOVERNANCE

GOI

MoUD, DDA, DP

STATE

GNCTD PWD

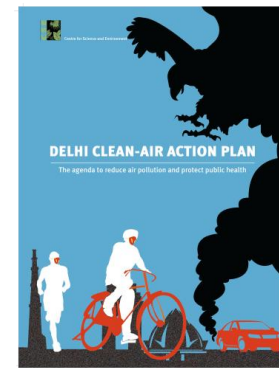
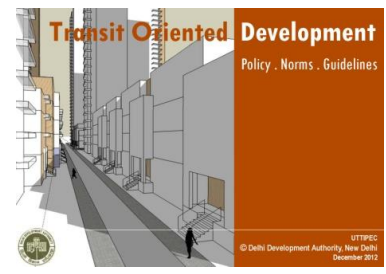
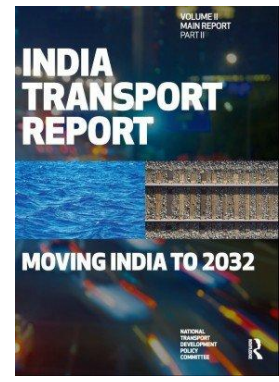
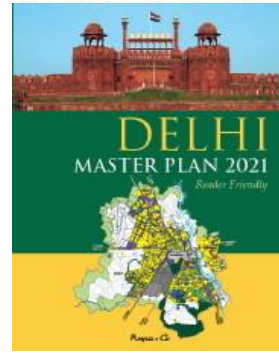
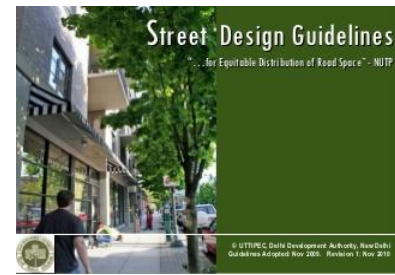
MUNICIPAL AUTHORITY

NDMC, MCD (N, S & E), and DCB

Independent

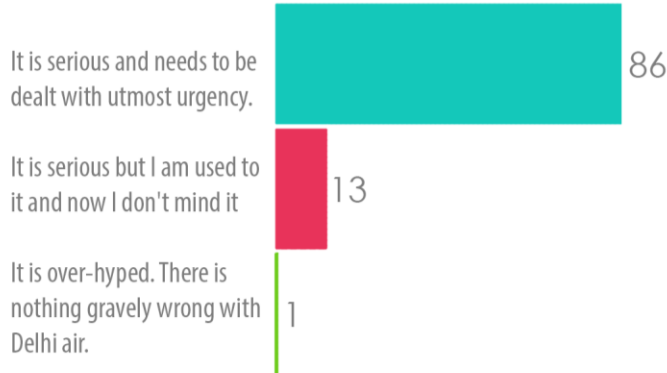
Policy Overview

- National policies recommend PPP model.
- Third-sector involvement in technical data collection needs to be utilised in collaborative planning.
- **Policy Research** or **Implementation** be passed onto third-sector for efficiency & non-duplication of the same kind of data.
- Third sector can also ensure CSR requirements are fulfilled efficiently by Pvt. sector

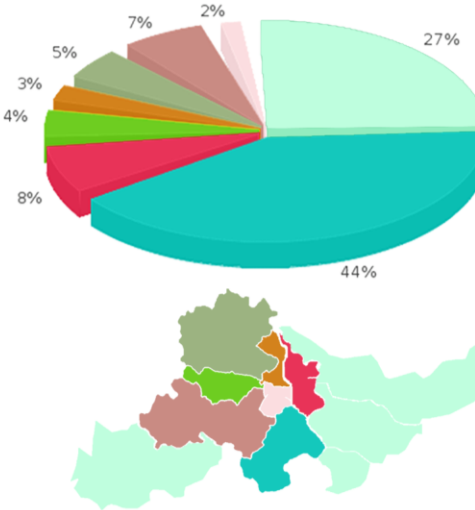


Impact Assessment through Online Survey

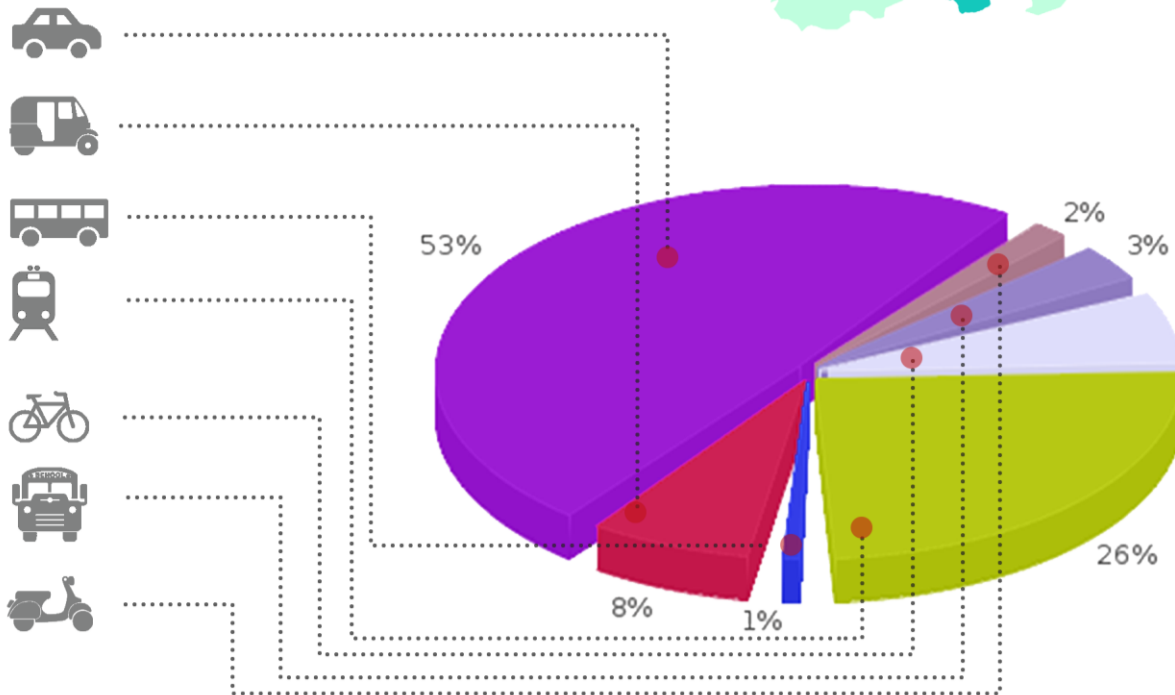
WHAT DO DELHIITES THINK ABOUT DELHI'S POLLUTION ?



RESIDENTS' LOCATION IN DELHI



HOW ARE DELHIITES COMMUTING?



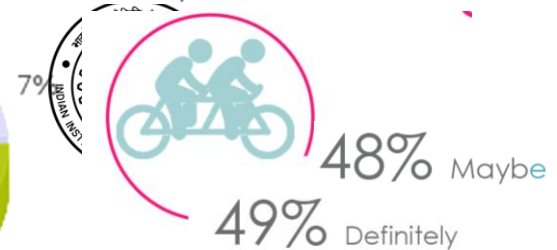
...a Big YES!



More Public Money on Cycling Infrastructure?



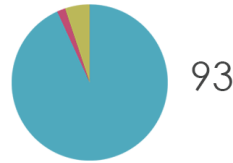
Incentive from School / Company for commuting by bikes?



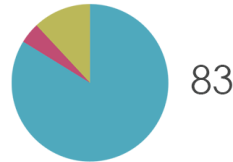
More promotion programmes on Active Travel & Community Well-Being?

PERCEPTION OF BIKES ARE OVERWHELMINGLY POSITIVE

Bicycles are a cheaper, convenient, lightweight and healthier mode of transport.



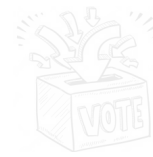
They are trendy and a cool way to stay fit.



If it works elsewhere, it will definitely work in India.



Agree Disagree Can't Say



80%

Agree that bikes have the potential become efficient paratransit systems



79%

Said they would most certainly bike to work if roads were safer



Strongly Agree / Agree / Maybe

SHOULD BIKES BE INTEGRATED WITH METRO?

Limitations

- Small Sample Size – 117
- Limited Geographical Scope
- Caters only to an English & Computer-literate population

OPINION ON PUBLIC MONEY INVESTMENT IN NMT INFRASTRUCTURE

Definitely Yes Yes Maybe No Definitely No



Practitioner Views on NMT Planning



Environmental Policy Expert



Urban Designer Policy-Researcher



Entrepreneur Cycle-Enthusiast



Product Designer Cycle-Enthusiast



Urban Designer Educator



CEO- Advisory NGO Urban Designer



Transport Planner Cycle Enthusiast

C Lack of Consultation in the Public Sector

C Need for Institutional Restructuring of Agencies with clearly defined roles

C Re-orientation of Priorities in Politics

I Involvement of Pvt. Sector in NMT Infrastructure

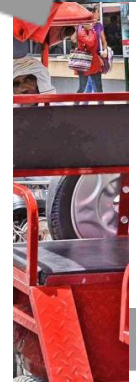
I Funding

C Climatic Factor

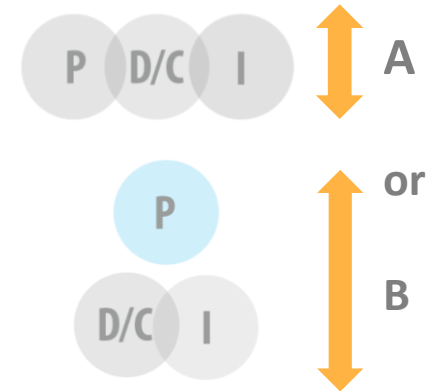
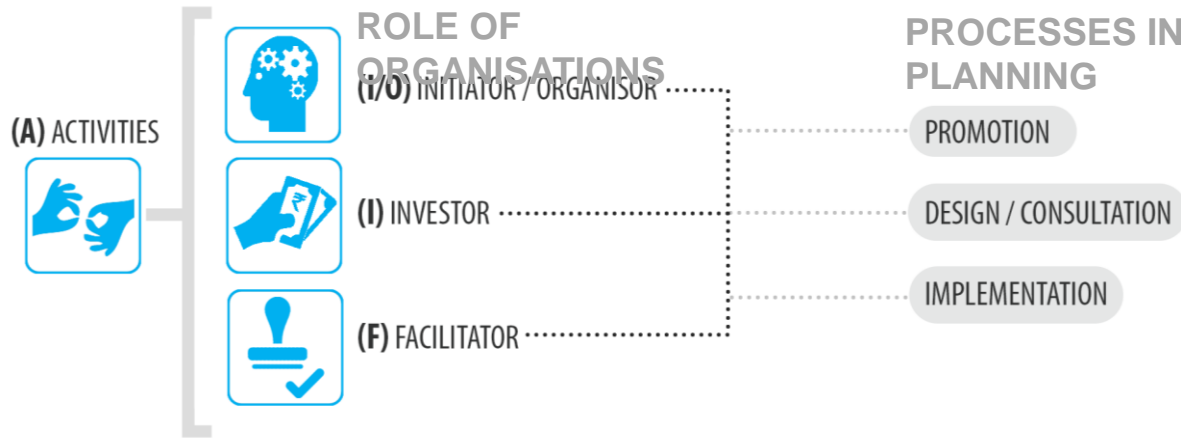
C Role of Design

P Role of Tourism

P Gap between Utility and Leisure Cycling



Relationship between Role of Organisations & Design Process



Possible Approach in Collaborative Planning in NMT Promotion

PROMOTION (Bottom-up Process)				CONSULTATION / DESIGN (Top-Down Process)				IMPLEMENTATION (PPP / BOT Models)				
I / O	A	I	F	I / O	A	I	F	I / O	A	I	F	
EMBARQ, CSE, Cycling Clubs, Cycle Tour Companies	Raahgiri Day	Bike Companies	Delhi Police & ULBs (NDMC & MCD)	IUT / KMC -	Data Mangmt. Panel	MoUD		ULBs (NDMC / MCD)	Dedicated Bike Lanes	ULBs + Private Companies	GOI / GNCTD	
	Awareness Rides			TRIPP	Technical Data Collection			DTC	Bike Share Schemes	DTC+Pvt.		
	Campaigning			TERI				MNCs	Company Incentives	MNCs (CSR)		
	Charettes on possible bike routes	NGO Funds	RWAs	UTTIPEC -	Policy / Design Mangmnt. Panel	GOI / GNCTD		DMRC	Bike-carrying facilities in Public Transport	GOI - GNCTD		
	Workshops			CPR	Policy research							
	Tourism Promotion			ITDP								
		Tourism Promotion	GNCTD & Ministry of Tourism (GOI)	Bike Tour Companies	CGM	Design Consultation	DDA / PWD	Delhi Traffic Police	Preferential treatment for cyclists at crossings	GNCTD	Delhi Police	
					iTrans				Delhi Traffic Police			Bike Safety & Training Programmes
					Public Competitions							

Discussion

Questions that need to be addressed ...

on

Can more public investments be allocated to **Promotion** and **Awareness** rather than infrastructure development alone?

How can policy ensure involvement of the private sector in providing **Incentives** to employees for cycling to work?

How can **Road Safety** for cyclists be ensured in proposed bike-share schemes, since installation of dedicated bike-tracks will involve massive investment?

What **Design Considerations** can be taken into account to combat **Climatic Discomfort**, apart from the measures already mentioned in the NUTP?

Conclusions

Efforts of private and third-sector organisations can be integrated with public sector, as has been noted in successful initiatives like *BPP, Raahgiri Day* and *CGM's work with the government*.

Practitioner Interviews helped *analyse nuances in planning processes* which are otherwise not communicated through literature review or desktop research alone.

The Survey, although limited in its outreach, was a good starting point to *project adoptable strategies*.

The paper acknowledges *limitations of reliance on bicycles only*, due to long travel distances and climatic discomfort. However, cycling has a great potential in integration with the efficient metro-rail system and the existing fleet of buses which is *already being explored in the bike-share policies*.

Acknowledgements

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Mr. Jack Leenars, *DelhiByCycle*

Mr. Ryan Christopher Sequeira, *Sushant School of Art & Architecture*

Mr. Michael Maria Joseph Mookenthu, *Institute of Urban Transport*

