

The logo for the Transportation Research and Injury Prevention Program (TRIPP) is located on the left side of the slide. It consists of a vertical blue bar with the word "TRIPP" written in white, bold, capital letters. Above the bar, there is a stylized graphic of a road or path leading upwards, and a small circle at the top left corner.

Safety ,Security, Urban Design and planning: Is it gender sensitive?

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Sustainable Transport

Safe travel for all road users is a prerequisite for ensuring sustainable and inclusive cities.


- safety as a public health issue,
- mode choice of ‘sustainable modes’,
- health related to active transport



World wide men have higher risk of getting involved in traffic crashes than women(WHO, 2004, 2011).This is primarily attributed to lower presence of women on the road as compared to men, and differential risk taking behavior observed in men and women.

Safety and security of transport systems may have an impact on not only the choice of destination and mode used but the decision to travel itself!

'suppressed mobility/accessibility'



Travel patterns of men and women differ across geographical locations, city size and income groups. In general women travel shorter distances, are more dependent on non motorized modes of transport and public transport .

‘lack of mobility vs sustainability concerns’

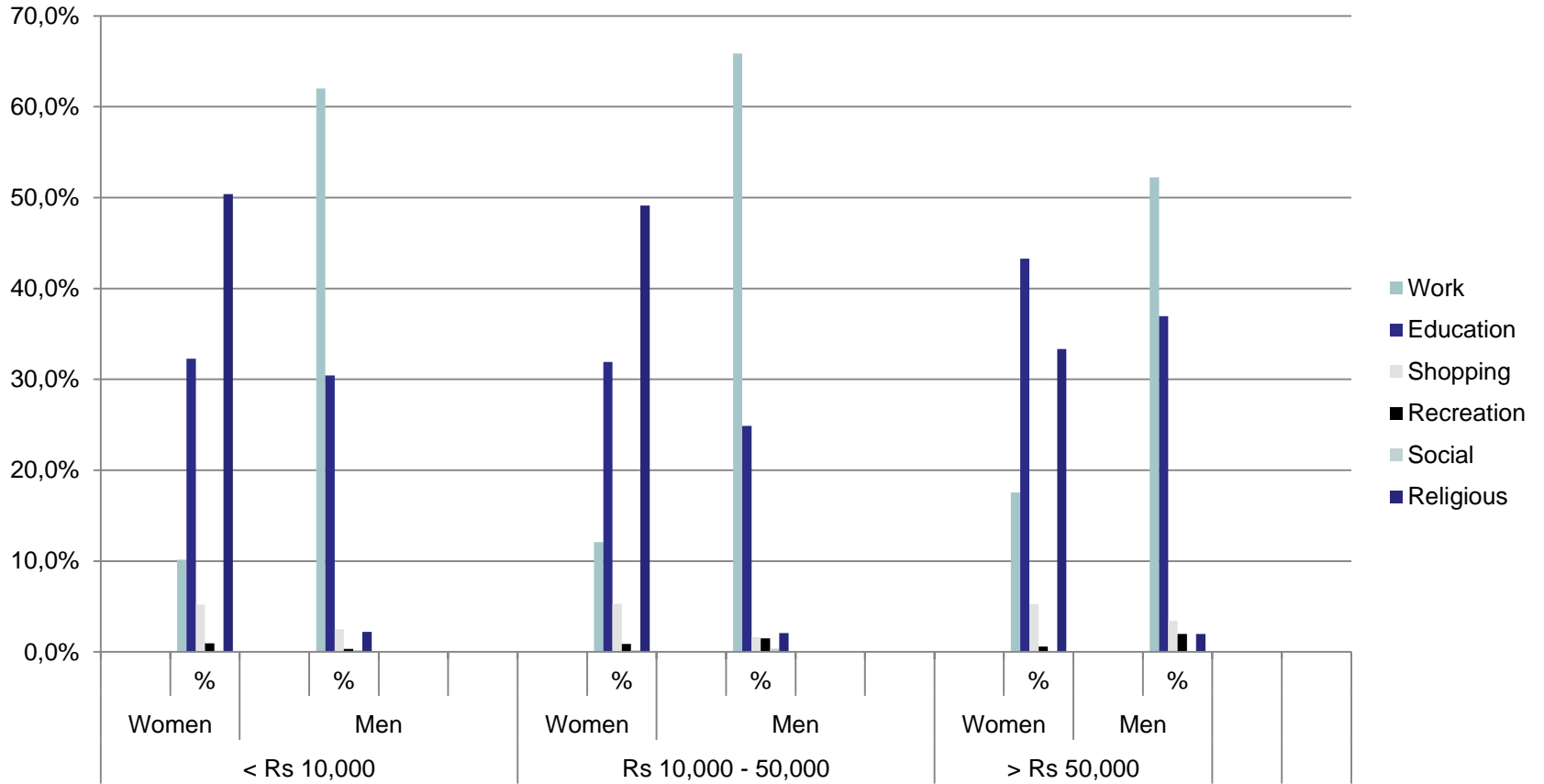
‘choice users vs captive users’

Similar trip time, mode and distance different

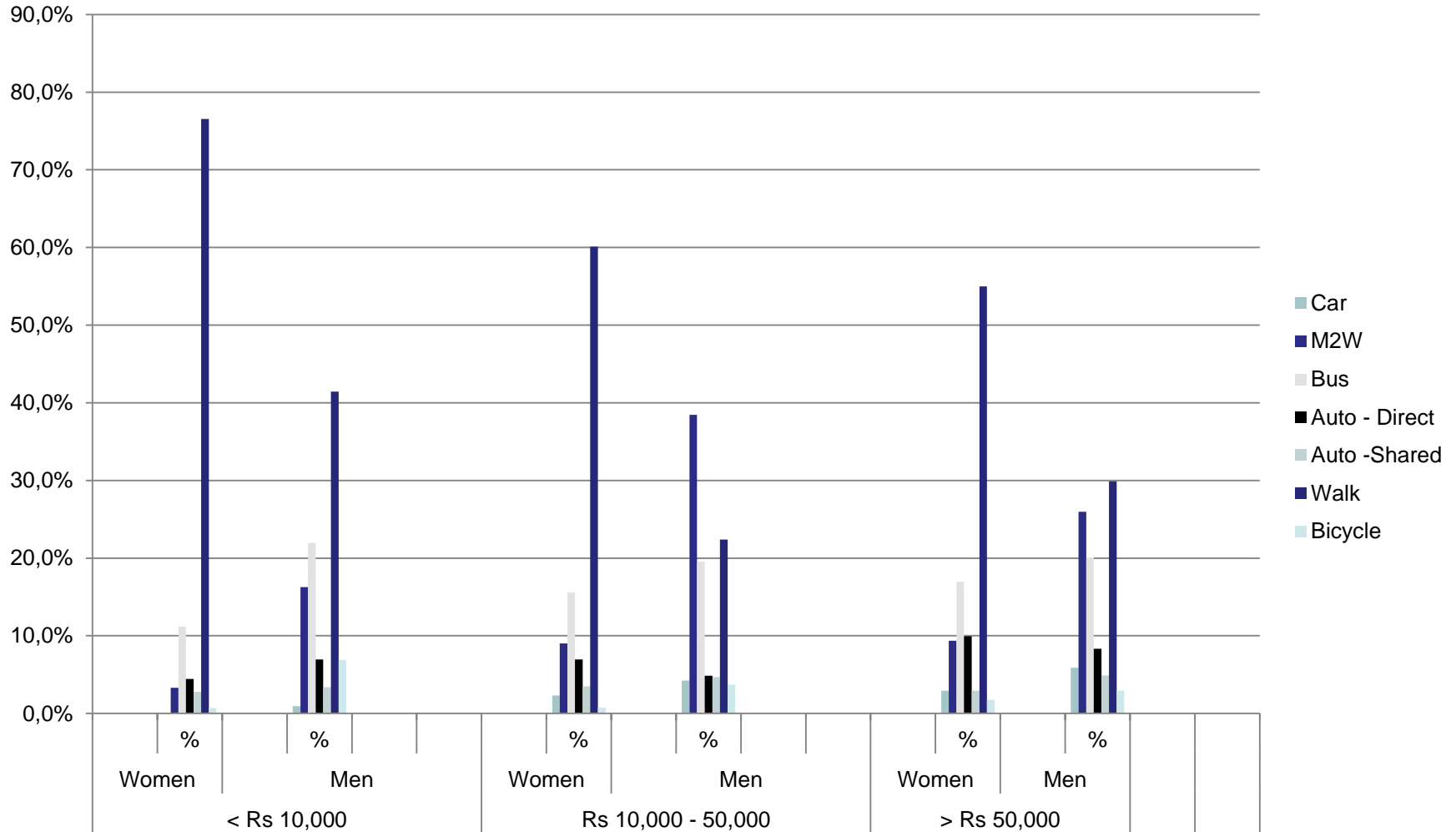
Table 4: Trip Time of of Women and men in Vishakhapattanam(ITRANS, 2012)

Time (mins.)	Women		Men		Total	
	Nos.	%	Nos.	%	Nos.	%
<10	1767	46.3%	1146	25.1%	2913	34.7%
10-20	1180	30.9%	1488	32.5%	2668	31.8%
20-30	404	10.6%	874	19.1%	1278	15.2%
30-50	306	8.0%	595	13.0%	901	10.7%
50-70	103	2.7%	289	6.3%	392	4.7%
>70	54	1.4%	182	4.0%	236	2.8%
Total	3814		4574		8388	

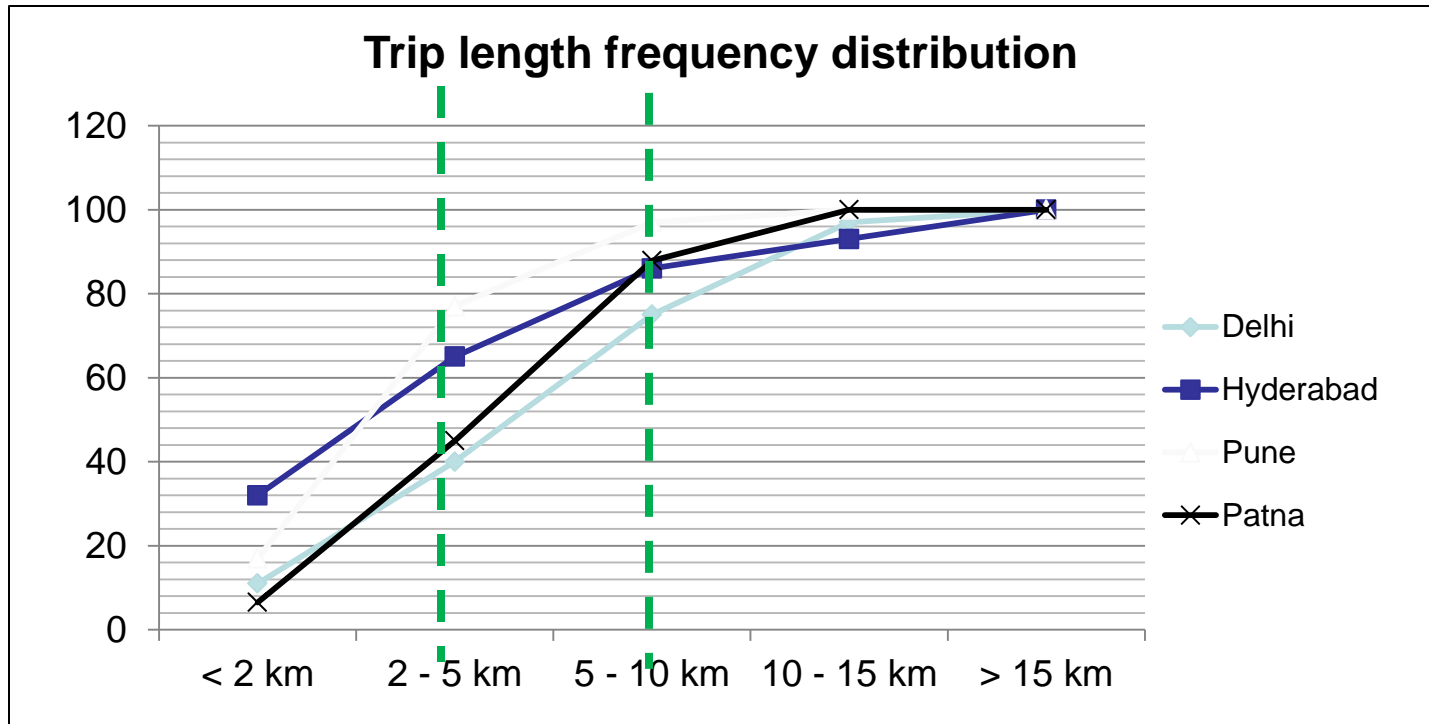
Trip purpose of men and women by income



Mode of travel of men and women by income



Trip length frequency distribution



Cities	Trips shorter than 5 km	Trips shorter than 10 km
Delhi	40%	70%
Hyderabad	65%	88%
Pune	77%	95%
Patna	45%	90%

Sustainable cities & transport

- Interaction at three levels:
 - ❑ Land use planning (formal vs informal)
 - ❑ Transport infrastructure (captive users vs potential users)
 - ❑ Urban design (captive users vs potential users)

Urban poor in Delhi

~90% people are employed in unorganised sector(2002)

48% unorganised sector is dependent on “own business”- vendors etc.

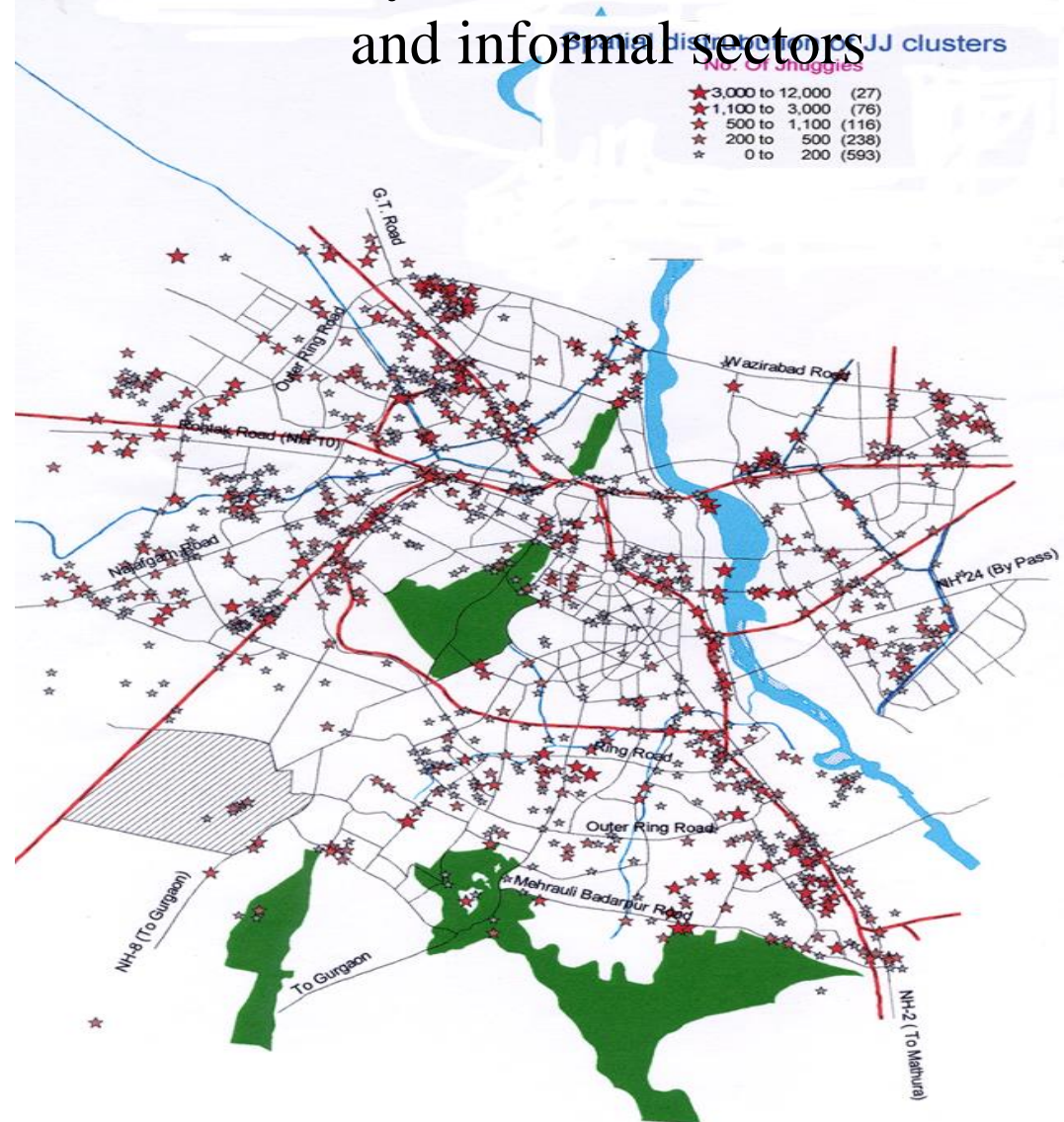
50% women have daily wage jobs

Women are either domestic workers, self employed, or street vendors.

52% women walk to work

Women have longer work days than men

→ Symbiosis between formal and informal sectors



Distribution of Jhuggi Jhopri Clusters in Delhi

Large number of people relocated for metro and other development projects

Converting walking trips to motorised trips- buses, RTVs, LCVs

Long cycling trips



Time poverty of women increases

Opportunity for “self employed” business reduces

Landuse-Transport integration for sustainable cities

- Integrating diverse socio economic households in master plan
- Street designs and transport system to ensure current and potential walking and bicycling trips
- Lessons- indicators and methods from self organising cities.

Sustainable Transport challenges

*Development and modernity is associated with technology
(fuel, automobile, metro rail)*

*External financing favours large construction projects (metro
vs buses)*

*Zero emission modes, walking and cycling have no “market
value” i.e. financing through land development or loans
not possible, hence no takers!*

*Successful public transport projects are those which do not
affect the cars adversely not just benefiting the bus
commuters!*