



# Organizing the Role of the Intermediate Public Transport Sector: Focus on Auto rickshaw services.

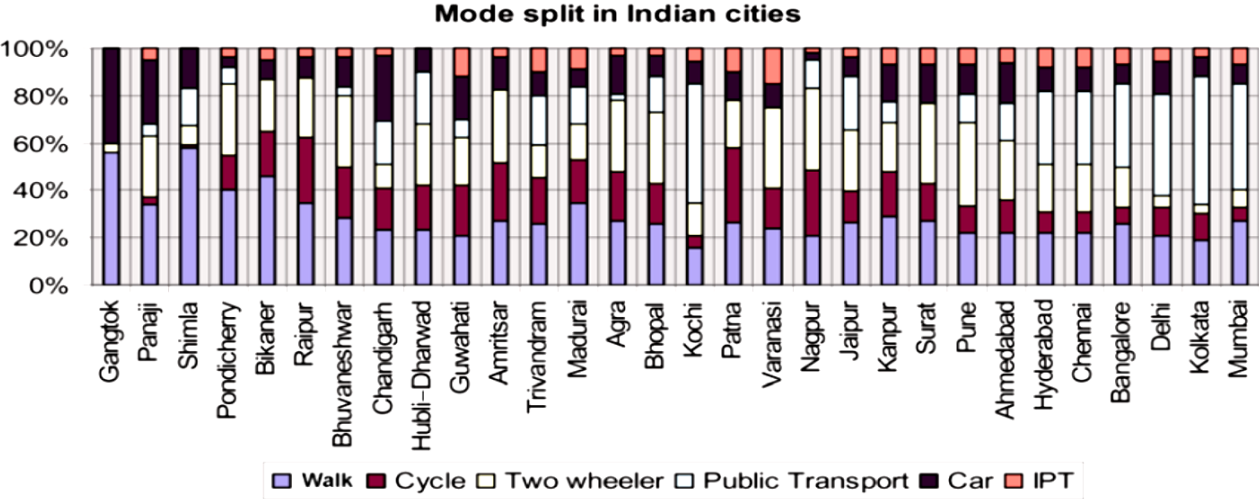
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# Urban transport scenario in Indian cities:

Urban travel mode in Indian cities is a predominant composition of walking, cycling and public transport including Intermediate Public Transport. (i.e taxis, auto rickshaws etc.)



Travel Mode	share range in cities
Walk	20% - 40%
Cycle	10% - 15%
2 w	8%-20%
PT	0% -50%
Car	10% - 40%
IPT	5% - 15%

Source : MoUD, 2010

The variation is function of (1) city size and (2) per capita income.

### Definition of Intermediate Public Transport:

Fill the gap between private transport & formal public transport modes in cities.

#### 1. Taxi services / Autorickshaw Services

- flexible,
- demand-based,
- door to door services

#### 2. Informal public transport - (bus-like) services provided by shuttle autorickshaws

- shared fixed-route services
- intermediate stops for boarding and alighting

*Source : Fouracre and Maunder, 1979 and Cervero, 2010*

### **Benefits of IPT :**

1. Mobility and Connectivity
2. Source of Employment
3. Complementarity role
4. Efficient, Low- cost Service
5. Market Responsive

*Source : Cervero, 2000 and Tiwari, 2006*

## Issues and Concerns:

Minimum regulations for certifications by transport authorities.

Operations left to private operators

Safety & regulatory violations, Serious emissions.

Fare policy by authorities not honored by operators

Road infrastructure facilities not in compliance to the IPT modes.

### Recent Policy initiatives - JnNURM (2005) & NUTP (2006)

- **Introduction of mass transit systems** – Immense progress in cities today.
- **IPT modes, inevitable part of any Indian City** - not given any due acknowledgement, so far.
- **Integrated urban transport policy approach** - not been formulated yet.
- **planning & development of road infrastructure, regulation for vehicles, licensing procedures and operations-** of IPT undertakings continue in isolation.
- **Urban transport planning and policy response focus** - limiting IPT, very little is done to incorporate IPT as part of inclusive PT system.  
Eg. Practices like Permit raj, Suggestions Banning of Autorickshaws etc.

## Significance of IPT In Our Cities.

Understanding the role that IPT plays,

**IPT is a part of given any city, irrespective to size and class of city.**

City type	IPT function
Big cities	<ul style="list-style-type: none"><li>▪ PT in place</li><li>▪ IPT serves as competition</li><li>▪ Acts as feeder</li></ul>
Medium sized cities	<ul style="list-style-type: none"><li>▪ Plays large role in absence of or insufficient PT system</li></ul>
Small sized cities	<ul style="list-style-type: none"><li>▪ Sole responsible mode for Public transport needs</li></ul>

## Research Focus:



Auto rickshaws are the most common IPT mode in Indian cities,

The research focuses on :

*“Reorganizing And Estimating The Potential Of The Auto Rickshaw Services Of The IPT Modes As A Part Of Integrated Transport System Using Policy Intervention As A Tool.”*

## City Selection Criteria's

Intermediate Public Transport is an inevitable part of a city's transportation system in presence / absence of a public transportation system

However the function it plays in the city may vary

Hence to understand the role the Intermediate Public Transport plays , for the research purpose , 3 cities of Gujarat are selected on the basis of :

A city where the Public transportation is in place



### AHMEDABAD CITY

Population –55,70,585\*

Public Transportation systems such as :

1. AMTS ( since 1947, 1022 buses on 194 routes)
2. BRTS ( initiated 2009)
3. Metro rail under construction

A city where the Public transportation is skeletal in nature



### SURAT CITY

Population – 44,62,002\*

Public Transportation systems such as :

1. City bus service by SMC ( since 2008, 80 buses on 42 routes)
2. BRTS under construction

A city where the Public transportation is not at all present

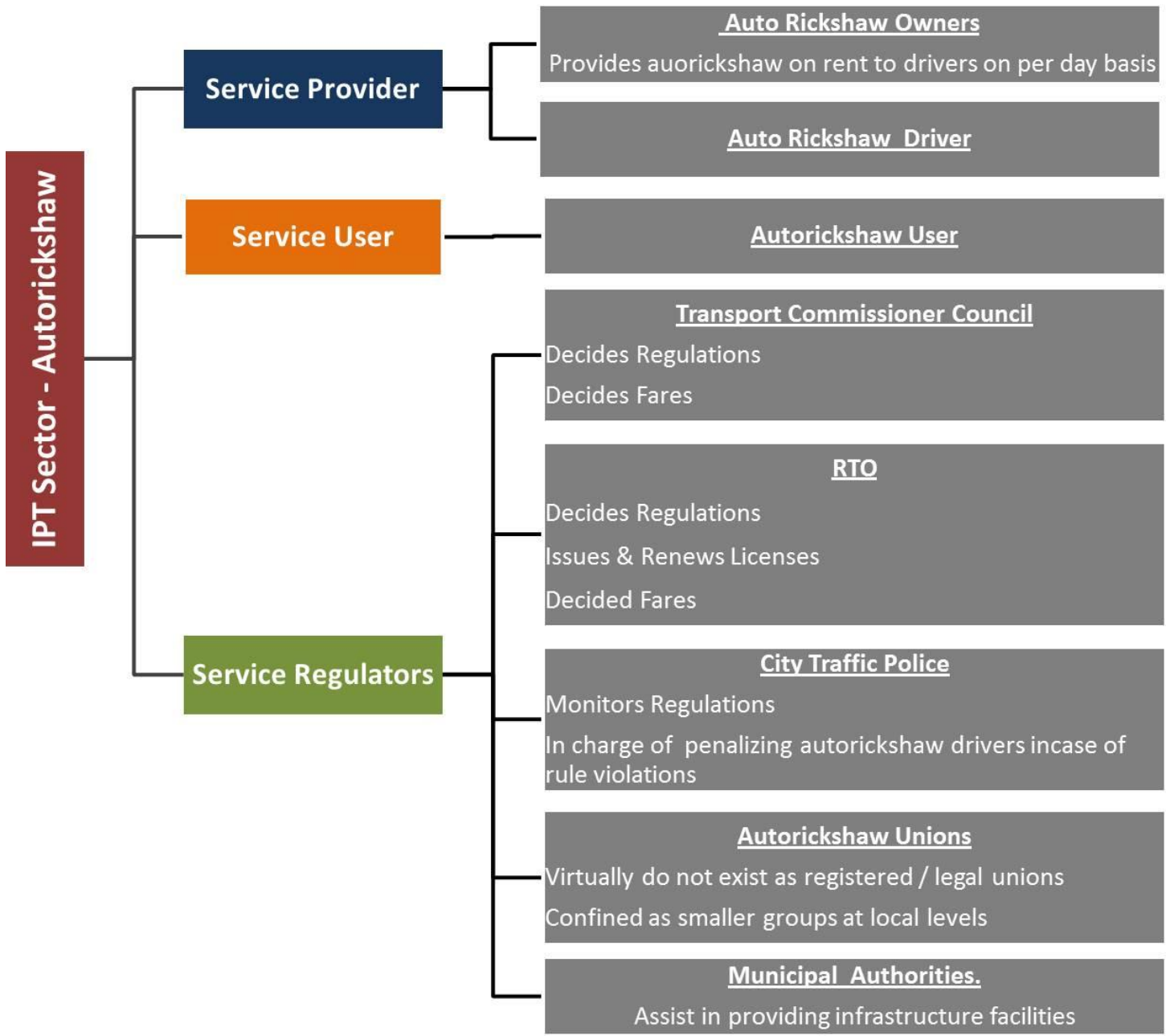


### NADIAD CITY

Population – 2,18,150\*

No public transportation system present.

# Stake holder involvement





### Ahmedabad autorickshaw service

3 seater – meter based , door to door service

3 & 6 seater – shuttle service, on predecided fare on fixed route.

### Nadiad and Surat autorickshaw service

3 seater

shuttle service, on predecided fare on fixed route. private service; though fare not decided on meter.

## SAMPLE SURVEYS

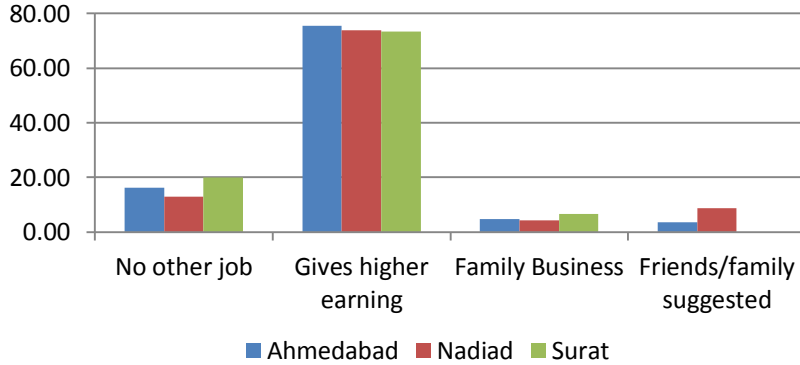
	AHMEDABAD	NADIAD	SURAT
Total no. of registered Vehicles- (RTO office , 2005 - Nov 2011)	9,67,904	1,52,928	6,62,429
No. of registered Auto rickshaws – (RTO office, 2000- Nov. 2011)	69,540 (7.18%)	15,494 (10.13%)	29,211 (4.4%)
Sample Size			
% of the total registered auto rickshaws	0.1 %	0.3 %	0.2%
No. of surveyed autorickshaws	86	46	60
No. of Passengers surveyed	100	50	80

### Survey location Selection. :

- Major city locations segregated zone wise ,selected for driver & user survey where presence of autorickshaws & its movement are prominent.

# SURVEY FINDINGS

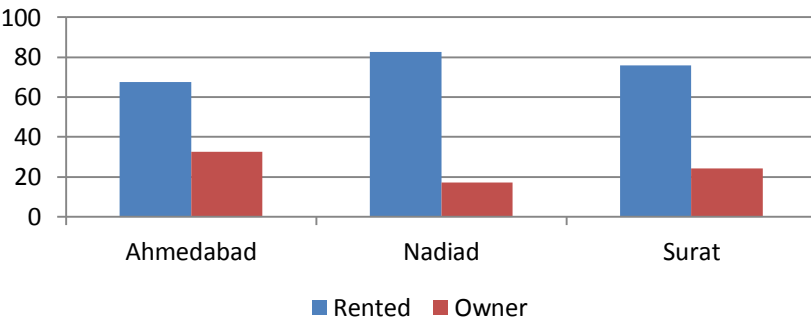
Reason for becoming an Auto Driver



## Authorickshaw driving is a lucrative option.

- In all the three cities approx. 75% drivers find Autorickshaw driving as more higher paying option compared to other jobs.

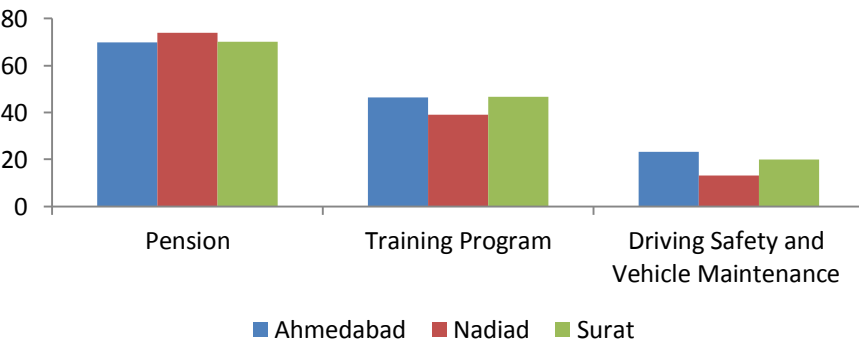
Rickshaw owners/ rented drivers



## Owning a Rickshaw is a Costly Affair.

- Majority of Auto drivers are Rented drivers (60-80%)
- Reason being difficulty in loan availability, too much documentation required, and higher interests charged by private loan lenders.

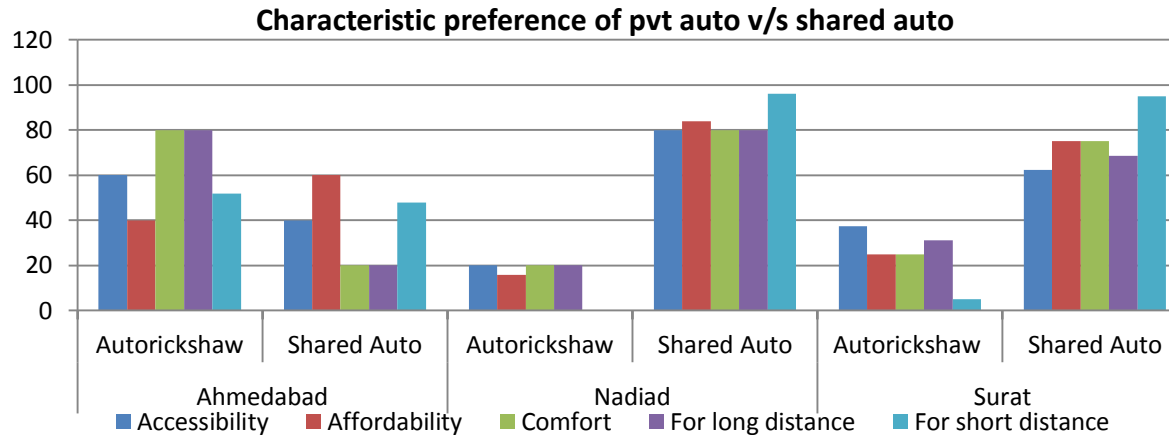
other suggestions



## Other findings-driver survey.

- 100% drivers engage an agent to get a license – reason being lack of complete documents and a time consuming process
- Lack of appropriate positioning of auto stands
- 75% of auto drivers lack a feeling of future security.
- Demand a Pension scheme
- drivers feel need of basic training programmes, driving safety(45%) and vehicle maintenance awareness programmes.(25%)

# SURVEY FINDINGS



**Shuttle service Affordable as well as Convenient for all.**

- Ahmedabad - only city which has private auto running through meter system.
- In Surat and Nadiad - shuttle auto system is a preferred mode .
- Shared auto is more affordable, accessible for short distances compared to other modes
- Nearly, 75% users find autorickshaw more accessible, convenient, affordable, and comfortable.

# USER SURVEY FINDINGS

## Choice of mode – Preference over PT modes

- Easy **availability**
- More **comfortable**,
- Door to door service, with **easy connectivity**
- **Cheap rates** for shuttle service.

## Perception

**Negative image** driver perceived often find the **driver rude** and,

- **Not honest**, meter card/ revised meter card unavailability in case of Ahmedabad.
- Fare haggling issues
- In **absence of fare system**, **actual rates are not known to the passengers** and some times **end up paying more** for private autos in Surat and Nadiad
- Consider **Shuttle service a safer option** than private auto service in Surat and Nadiad.

## Suggestion

- **Feel the requirement of formal training to be given to drivers in terms of driving skills as they find them to be rash drivers.**
- Strong emphasis over a **complaint authority to be set up.**

## Functioning of IPT System - Comparing the three cities.

### Ahmedabad

- IPT – both main & feeder mode.
- Informality limited to certain areas
- More defined role.
- Though formalized, its unorganized
- Informal chakkdas bound to stay.
- Reorganization & formalization scope

### Nadiad

- Autorickshaws have developed to function as PT
- Performs dual role of both IPT and PT
- Shared system is illegal, however the system is practiced and demanded
- IPT a better solution to meet demands of PT in such cities.

### Surat

- Serves as gap filler
- Performs dual role of both IPT and PT
- Wide demand based system, lucrative profession, stiff competition by both IPT and PT
- Corruption widely spread
- City requires IPT in absence of PT
- Development of complementary service

## “ Spaces of Overlap “ :

- IPT works well with “ enabling infrastructure”
- Organizes vehicles , Improves passenger way-finding.
- **Physical Spaces - intermodal exchanges occur – Form Spaces of Overlap.**
- Common Issue in all three cities:
- Encroachment and Congestion creation on major junction and arterials –
  - i. to attract passengers ,
  - ii. Context of antagonistic govt. policies makes them create their own infrastructure.
- **Shuttle service is bound to stay.**
- Formalized on low frequency PT routes.
- Reduces load on mass transit modes for passengers opting for shorter distances.
- Available to user at higher frequencies.
- Can increase ridership by integrating to mass transits .

# Strategies For Organizing, Formalizing And Enhancing The Autorickshaw Services.

## Ahmedabad :

- **Designated improvised spaces** – reduce sense of chaos and confusion.
- **Integrated travel card system**
- **Improved parking infrastructure** in accordance to user demand at important transfer points
- **Shared autorickshaws – to be made formal** to ply on interior areas.

## Nadiad :

- Drivers work on a mutual understanding for stands – only **issue arising is competition.**
- Authorities can come forward
  - i. Adopt a **regulatory approach**
  - ii. Autorickshaws play the responsibility of **providing city transport**
  - iii. **Drivers can be registered**
  - iv. **Dedicated stands** – in accordance to demand and vehicle registration

## Surat:

- Authorities should –
  - i. **Formalize** the system
  - ii. **Drivers to be registered** to reduce the competition
  - iii. **Designated stands/ areas** to collect passengers
  - iv. Stops to be designed / provided in **accordance to the number of vehicles registered**

# Strategies For Organizing, Formalizing And Enhancing The Autorickshaw Services.

## “CREATION OF TRANSPORT FACILITATORS:”

- Transport Facilitators – smooth flow and safety for users and drivers
- Creation of Infrastructure by government acts as incentive for IPT providers.

## SIGNAGES –

- Easier for passengers to **recognize and access transportation**
- **Reduces commotion and encroachment** at interchange and access stops

## PARKING RAILS –

- **To address encroachments created by the autorickshaws on major junctions.**

## RECOGNITION –

- **Accountable to responsibility** provided by the government.
- **Recognition & provision of benefits like** pensions, insurance, health & education facilities.

## “DRIVER COOPERTIVES:”

- **Set up of a local level body in city transport authorities -**
  - i. precise training needs
  - ii. improving & creating awareness on traffic rules & laws + labour legislations

## Forming :

- **Autorickshaw Fleet Companies – like G- Auto and driver co-operatives.**
- **Uniforms + Identity Cards**
- **Advertisement**



## Policy Recommendations.

Sector	Policy Initiatives	Institutional Involvement
Infrastructure	Policy guidance on <b>provision of autorickshaw stands</b> in cities, including <b>selection of types of locations and appropriate infrastructure design characteristics.</b>	<ul style="list-style-type: none"> <li>▪ <b>Central Level institution/ authority</b></li> <li>▪ <b>Creation of IPT cell at Central Level</b></li> <li>▪ <b>Consequently at State level</b></li> <li>▪ <b>Local Level – Municipal Authorities</b></li> </ul>
	Policy guidance on <b>definition and coordination of roles of various stakeholders in infrastructure provision, including the RTO, Traffic Police, and the Municipal Corporation.</b>	
	Policy guidance on <b>infrastructure such as servicing centers for four stroke vehicles.</b>	
	Policy guidance on <b>roadway improvements such as possibility segregated lanes and speed controls to avoid conflicts between autorickshaws and faster moving motor vehicles.</b>	<b>State level policy enhancements for autorickshaw sector</b>
Training	Inclusion of <b>mandatory training sessions to be passed to procure license.</b>	<ul style="list-style-type: none"> <li>• <b>Central Level</b></li> <li>• <b>State level authority to improve IPT service in the cities.</b></li> </ul>
	Policy guidance in <b>improving the authority responsibilities and for provision of IPT cell in Local Transport Authorities</b>	

# Policy Recommendations.

Sector	Policy Initiatives	Institutional Involvement
<b>Fares</b>	An analytical framework to <b>improve transparency and decision making in setting and revising fares in the autorickshaw sector in cities, based on inputs including capital costs, fuel prices, and cost of living indices;</b>	<ul style="list-style-type: none"> <li>▪ Central level policy measure on fare setting system and stakeholders to be involved</li> <li>▪ To be formulated at state level transport authorities</li> <li>▪ City Transport Authorities</li> </ul>
	Policy guidance on <b>setting fares so that autorickshaw services do not compete with public transport, for long distance trips;</b>	
	Electromagnetic meter fare system to be developed and adopted to ensure correct rates, and to keep a check on overcrowding of autorickshaws.	
	Policy guidance on the key stakeholders <b>that should participate in setting and revising fares, including the RTAs, Municipal Corporation, driver unions, citizens and civil society.</b>	
<b>Permits (For cities where practiced)</b>	A policy framework for <b>improved transparency and decision making in implementing the right permit policy for cities, based on considerations including city size, demographics/socio-economics, transport supply characteristics, and rate of growth of population and transport demand.</b>	<ul style="list-style-type: none"> <li>▪ Central level policy guidance from the central level institution / authority.</li> <li>▪ Local Transport Authorities</li> </ul>
	Formalization of share autos.	<ul style="list-style-type: none"> <li>▪ Local Level Authorities</li> </ul>
	Enabling <b>environment for the entry of fleet companies</b> through appropriate legislative changes and permit policies.	<ul style="list-style-type: none"> <li>▪ Local Level Authorities</li> </ul>
<b>Technology</b>	Guidance on vehicle design improvements to address safety and public health issues and environmental concerns for autorickshaw drivers and passengers.	<ul style="list-style-type: none"> <li>▪ Central Level Policy guidance</li> <li>▪ NGO's, Local Transport Autho.</li> </ul>

Source – Primary Survey Analysis and referred from WRI, Sustainable Urban Transportation Policy brief

## **CONCLUSION – Autorickshaws as IPT mode in Indian Cities.**

### **➤ Future of transportation in cities.**

Cities are growing, increasing needs for transportation

### **➤ Responds to growth and changing demands more rapidly**

**➤ Harnessing the capacity of IPT providers to self organize and offer low-cost services, IPT will continue to fill gaps where other services just are not extended .**

**➤ Local governments would be well complemented by managing a blend of formal and IPT modes**

**➤ Ability to manage independent and public providers in a coordinated way can offer city governments potential capacity to increase mobility – diversifying options for passengers at low costs**

**➤ Tends to complete a missing link in the integrated formal transportation system.**

**➤ IPT needs to be supported, encouraged to be organized and formalized towards attaining a balance with the demands – achieving a sustainable system in urban transportation**

*“Problems cannot be solved with the same mindset we created them”  
- Albert Einstein*

THANK YOU ..