



## **Intermodality and Partnerships to make public transport more attractive**

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6<sup>th</sup> EST Forum, Delhi



# Today

- 1 What is intermodality and what trips are intermodal
- 2 How our trips today differ from those of yesterday
- 3 Examples from around the world
- 4 Conclusions and policy suggestions



# Independent Transport Research, Consultancy & Testing

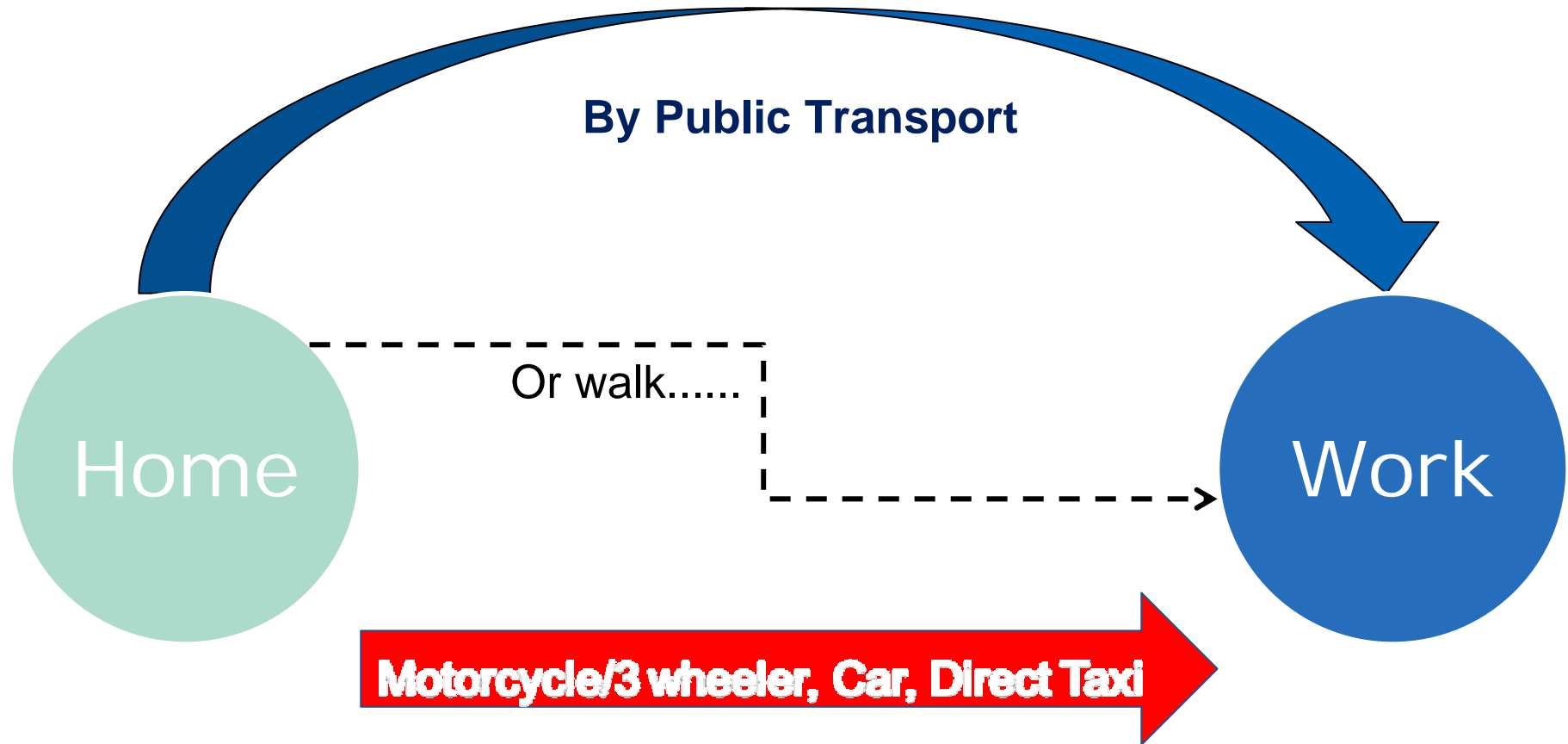
**Creating** the future of transport



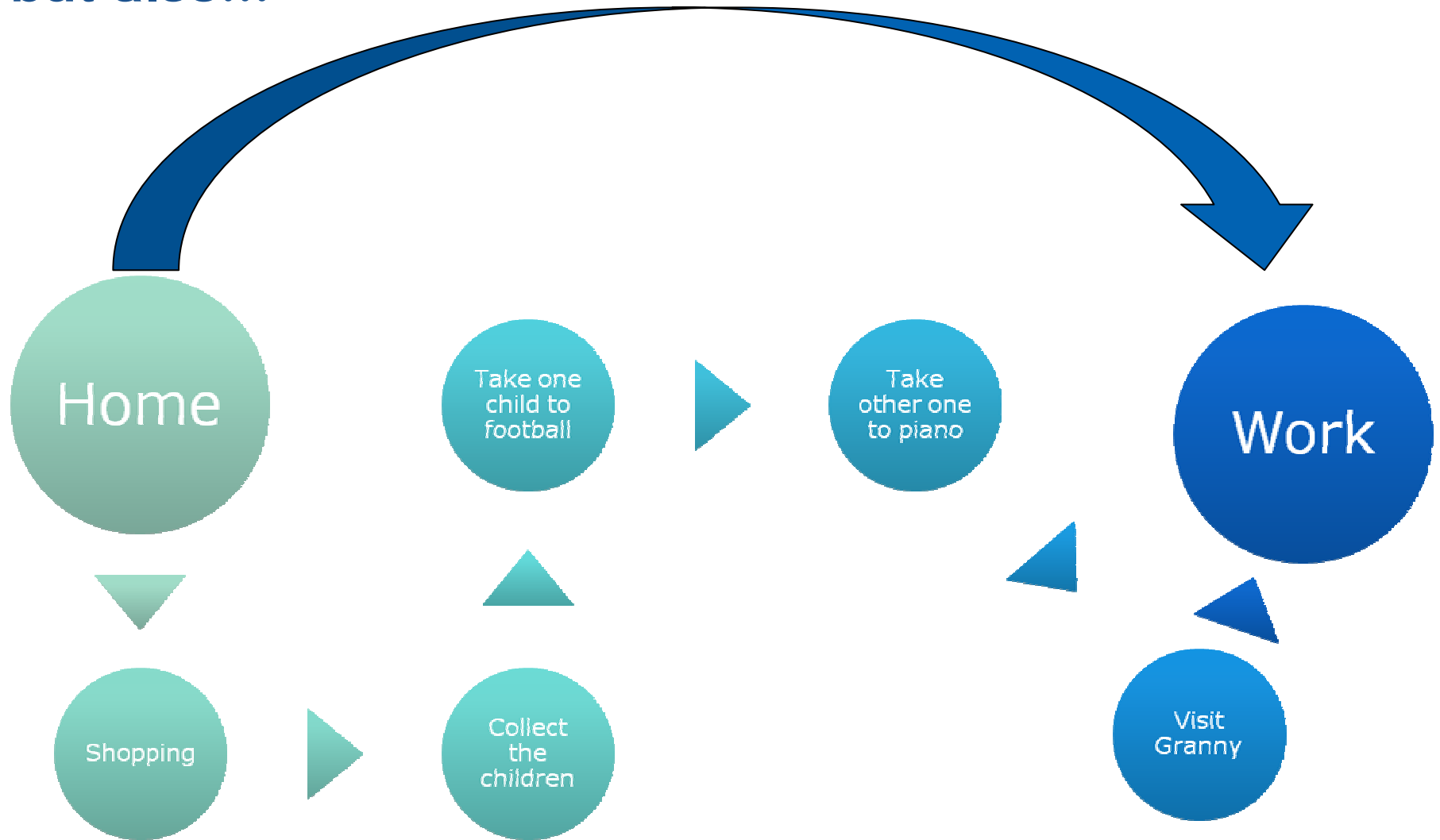
Every trip starts with the most useful mode of transport...



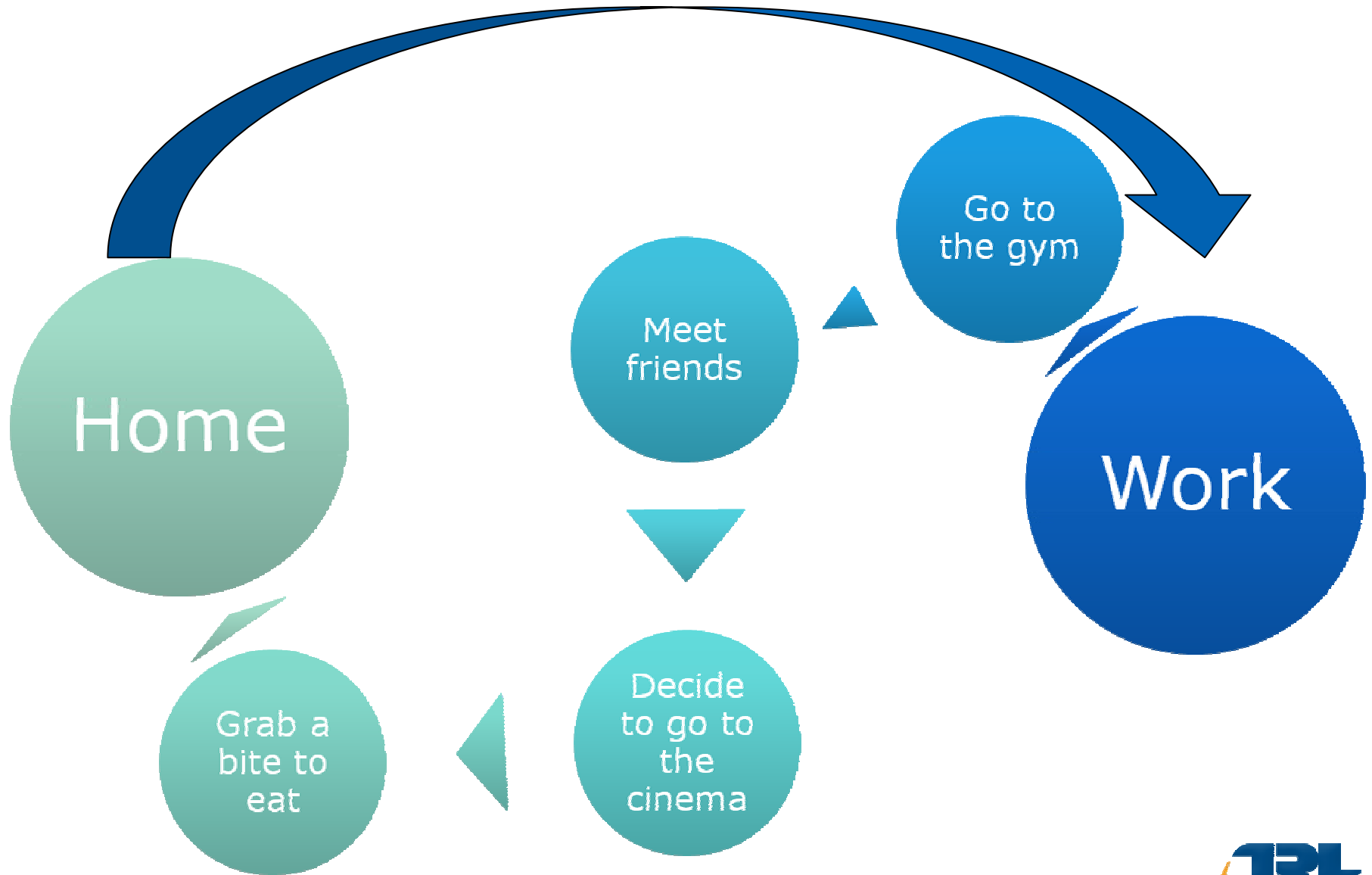
## The 'famous' Origin and Destination formula



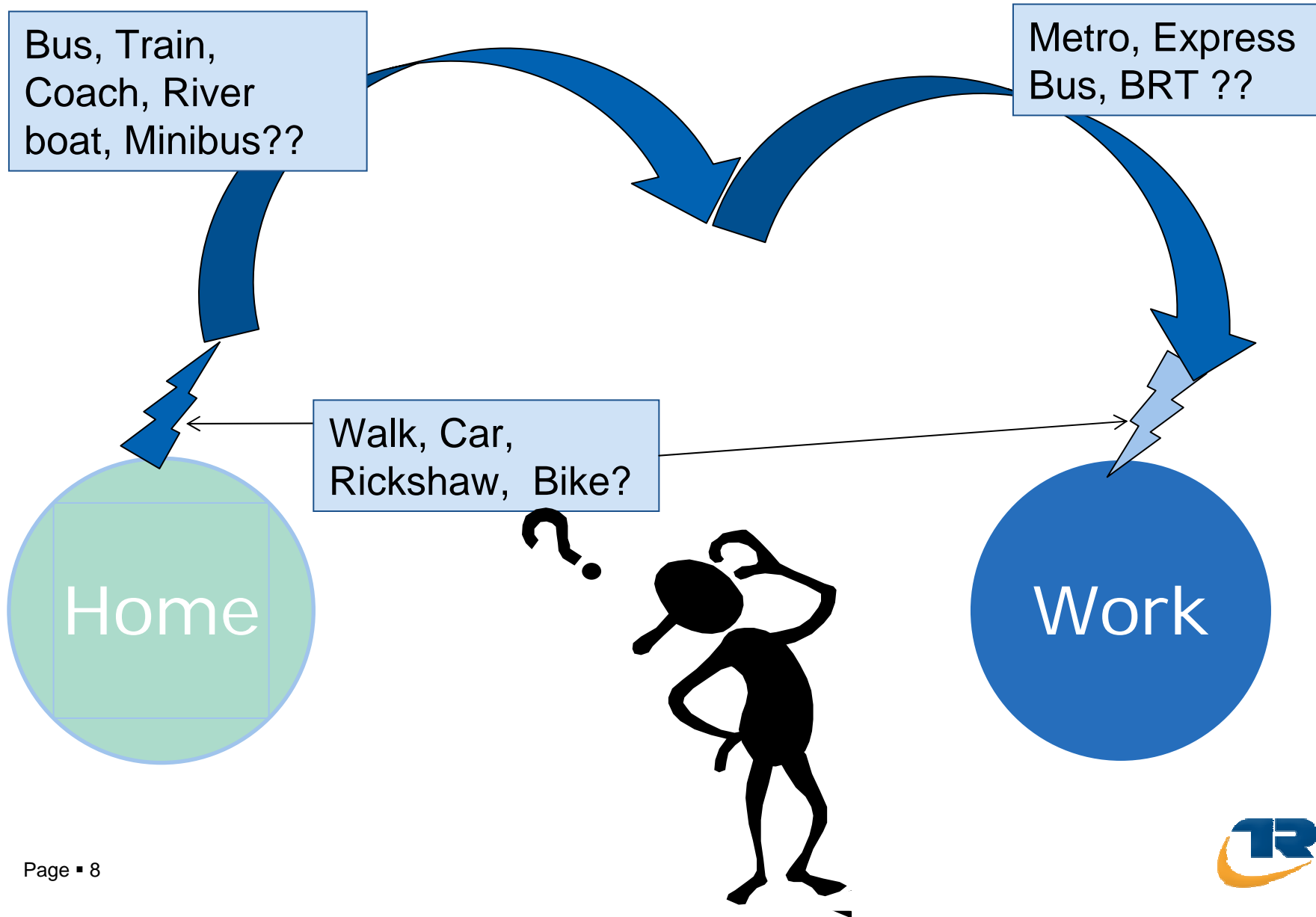
One member of the household may take a direct route but also...



Or on your way home.....

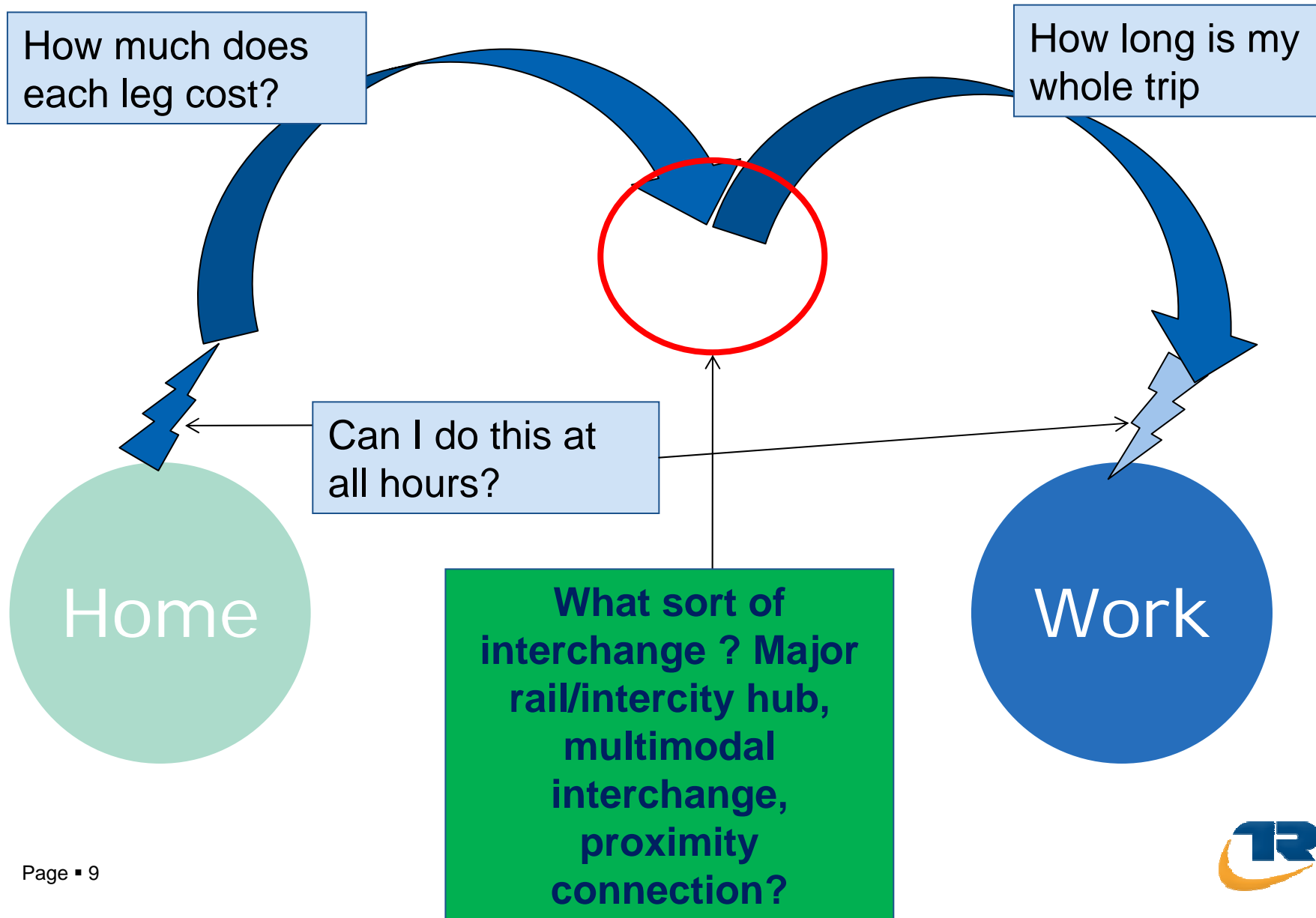


# The changing face of all trips .....

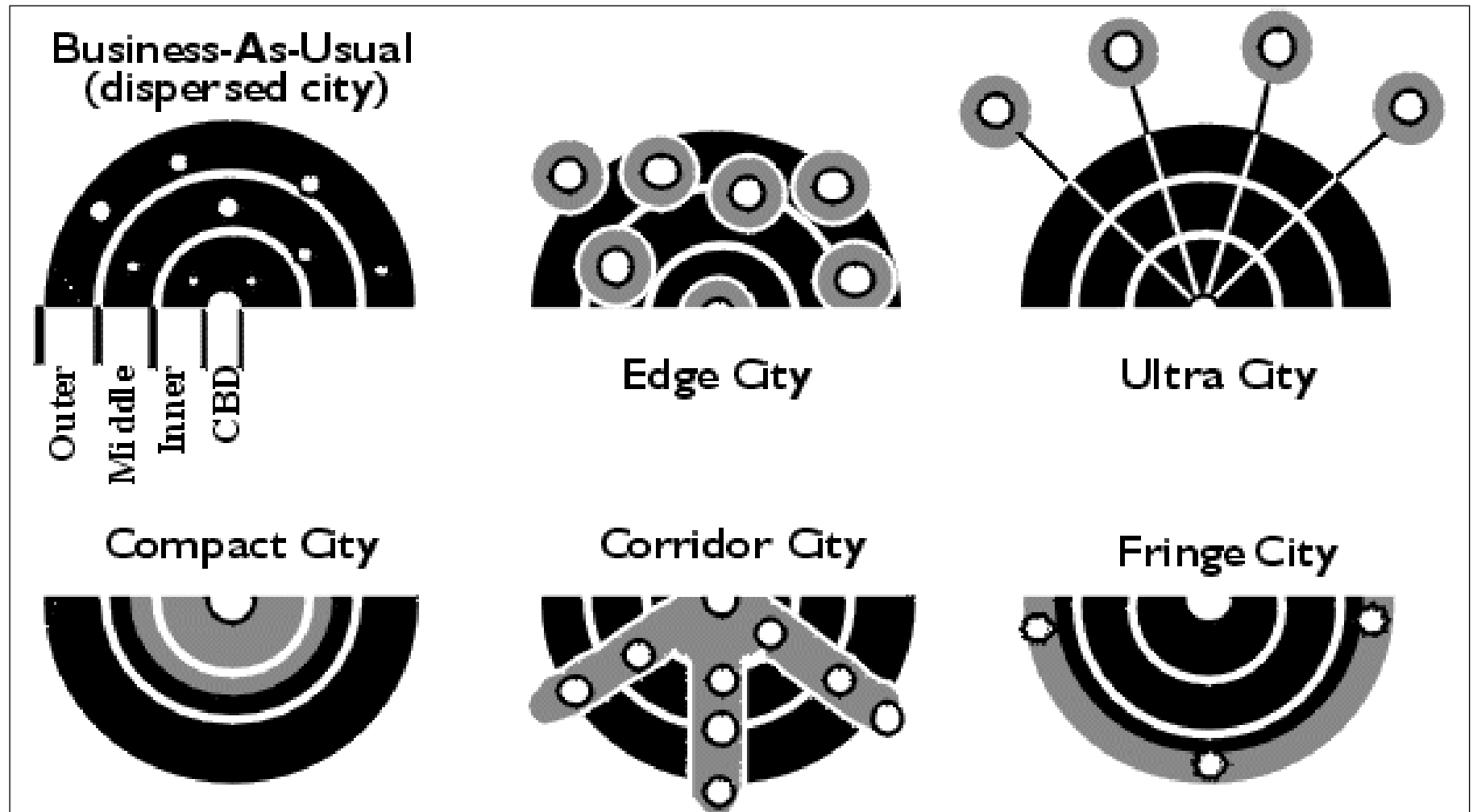




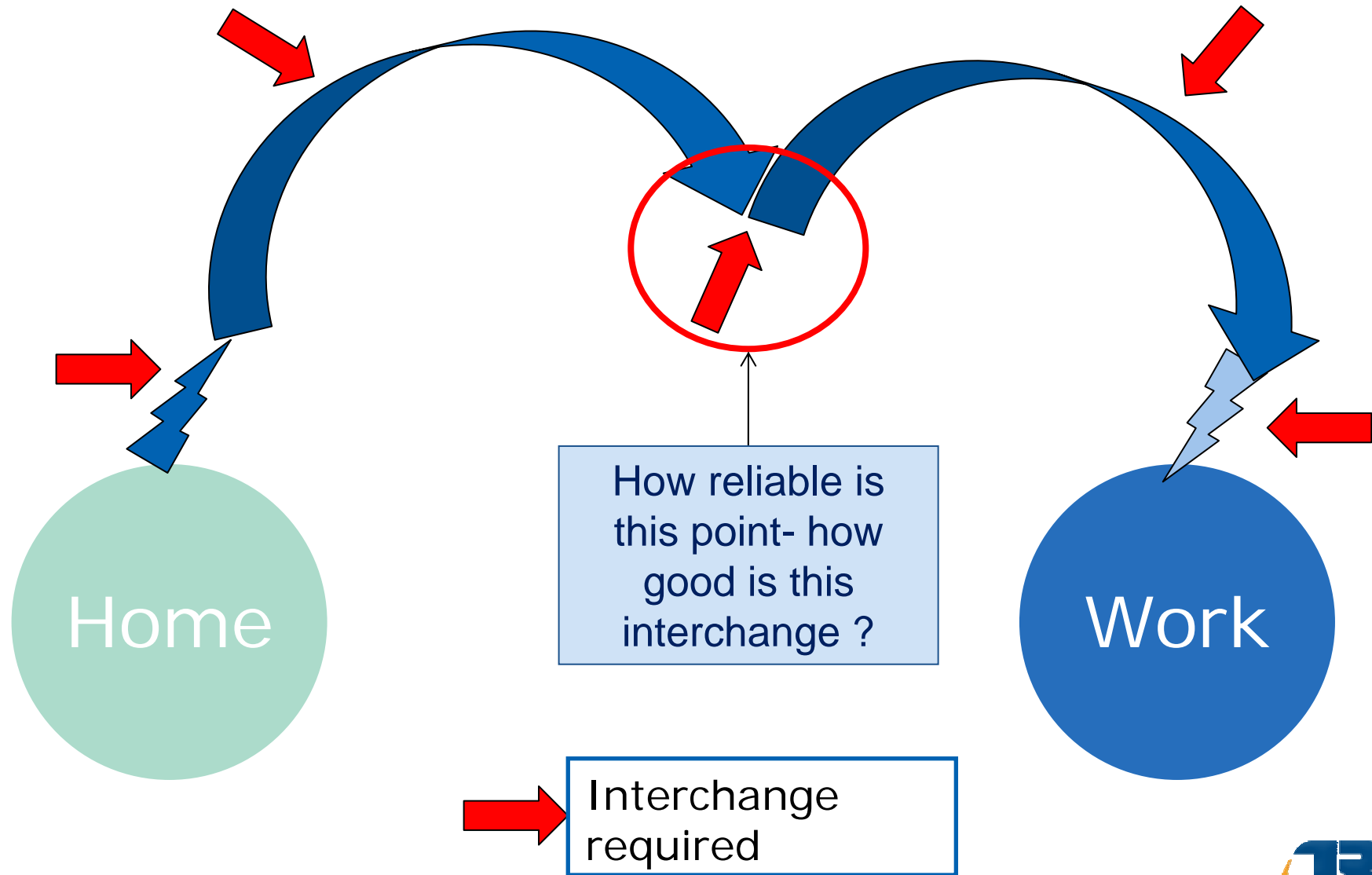
## Stress points of the changing face of all trips .....



## Our trip choice is strongly influenced by urban form



# The reality – with often 50%+ trips being trip chained



## The majority of trips today are quite complex



- **Information** before and during the journey;
- **Interchange** between different public transport services and between public transport and other modes;
- **Making Connections easy** between different public transport services and other modes
- **Integrated Ticketing** for whole journeys.

# Information - Seoul, Korea – integrated modes and ticketing, differentiated bus services, dynamic passenger information at bus stops pedestrian access



## Well designed interchanges between different public transport services and between public transport and other modes



BHLS Nantes, France

# Integrated Ticketing - PT use doubled with a flat rate (not zonal) ticket making it simple e.g. Nice, France



## Huge growth

- BHLS across the Cote d'Azur
- New Tramway in Nice
- Flat 1 euro fare - simple and less than parking
- + 100% ridership
- Public art and high quality infrastructure but regular buses
- New information and easier wayfinding
- Parking paying and centralised
- Electric car sharing
- .....

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**NATIONAL TICKETING**



## IT - using today's technologies to help guide choices



Integrated ticketing to pay for whole trip

- Denmark has a nation PT ticket

Make information available, in real time and easy to access

Improve connections and perception of waiting time being useful time

## Demand responsive and Car Sharing



### Occasional need of a car

- New and growing concept based on internet
- Zip, Cambio, Greenwheels, Mobility
- Shanghai pilot
- 'Club' for occasional use – half a day, even 2 hours
- Combined /sister /brother companies created owned by PT operators OR PPPs
- Challenge to find the right locations for sharing stations
- One car shared takes 7-9 others off the road
- Demand responsive - Flex ride

# Bike Sharing Schemes



## The 'last' mile

- Lyon, Paris, London, Barcelona, Brussels, Montreal.
- BUT also - **Hangzhou, Mexico, Tehran** etc
- First half hour free
- Combined tickets with public transport, or internet club
- Combined /sister /brother companies created owned by PT operators OR PPPs
- Needs good infrastructure and well used for short trips
- Challenge to find the right locations for sharing stations

# Increase in cycling around London congestion charge zone + 2.5 million trips made on 5 000 shared bikes in 1<sup>st</sup> six months

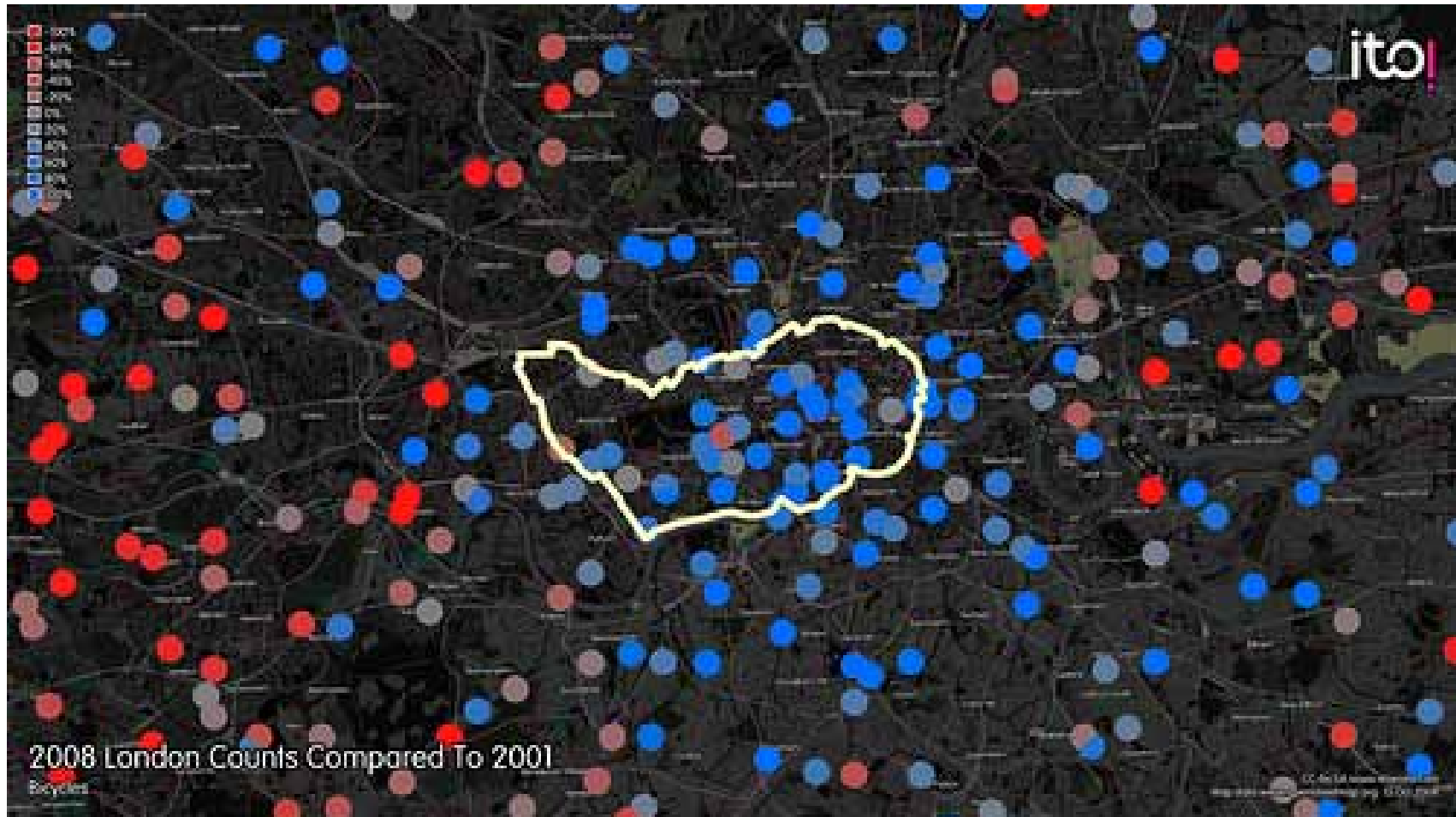


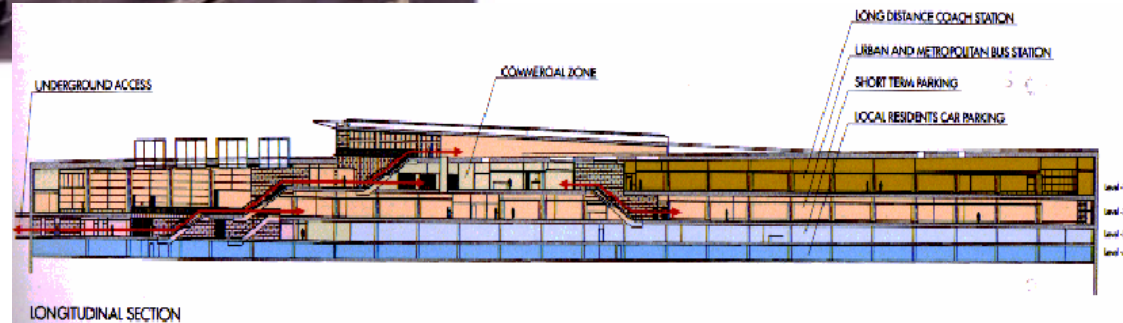
Image: ITO labs

- Blue dots = increase in cycling
- Red dots = decrease in cycling

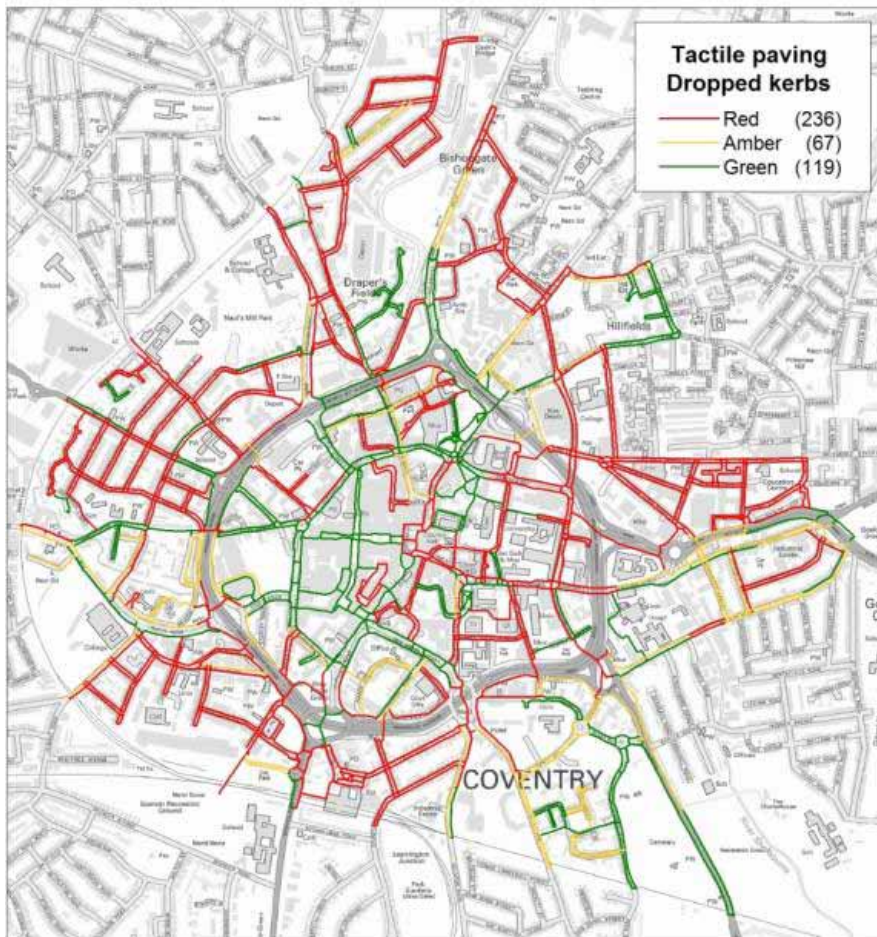
# Sustainable Financing and successfully working with the private sector PPP – e.g. Madrid



**Successful major multimodal interchange in central Madrid working with property developers**



# 'Walkability' increases the property values



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- Pedestrian-friendliness levels directly link to house and rent prices
- Walkability measured using a Pedestrian Audit tool PERS (TRL)
- Each PERS point increase correlates to a 5% increase in property value

# Comparative dis/advantages of minibus, (motorcycle) taxis, informal transport cf to mass rapid/formal public transport



- Access and +/- door to door
- Organized reactivity to users demand
- Informal feeding and distribution service
- Speed
- Cost/Fare
- Security and training

# Affordability and intermodality a key issue for the poor

## An example from South Africa - Johannesburg

### Without transfer :

- One minibus taxi all the way 53.5% trips @ 3.5 R
- One bus all the way : 8.14% @ 4 R +
- One train all the way : 8,27% @ 2.23 R

### With intramodal transfer :

- Taxi + taxi : nearly 20% of PT trips @ > 6 R
- Bus + bus : (statistically insignificant) @ 6.5 R
- Train + train : 1% of PT trips @ 2.8 R

### With intermodal transfer :

- Train + taxi : 5% PT trips @ 4.4 and 5 R

For trips up to 30 kms, **minibus taxi** are the cheapest mode of transport for users (Rea Vaya exempt).

( Source: City of Johannesburg, Integrated Transport Plan, 2004)



## Risk of 'bypassing' what is 'agreed' e.g Dakar, Senegal



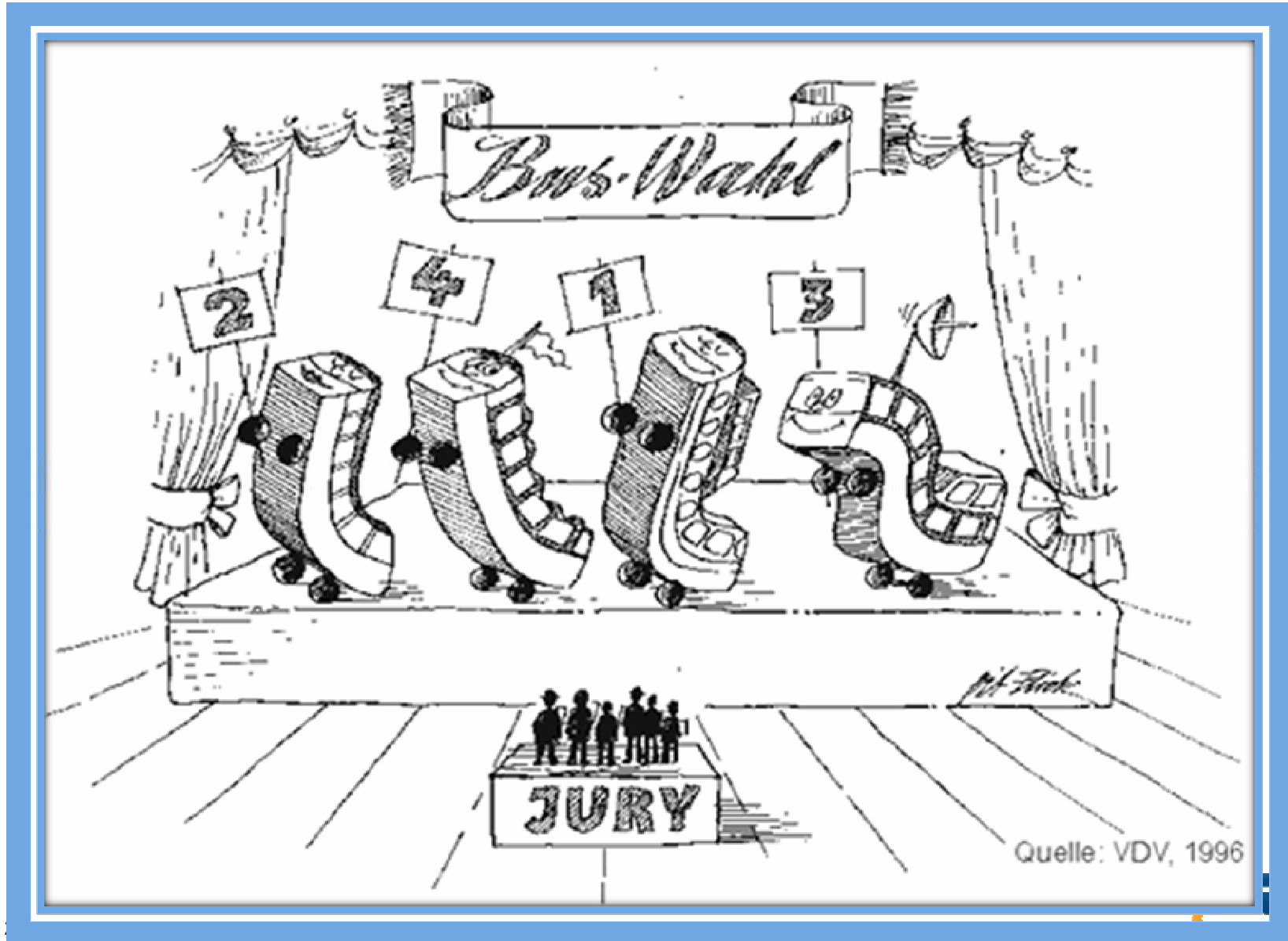
-Agreed published fares are bypassed by practices of cutting the lines into sub-lines ("sectionnement"), in peak periods and obliging people to for each leg because the operators can make more money

-For instance a typical trip from Dakar to Pikine the fare of which is officially 110 Fcfa costs often 200 Fcfa with a trip segmented in three travels in three different vehicles or **nearly double**

Source:(Lombard, 2005).



But it is not a Beauty Contest..



## Challenge to focus on connectivity not time savings



- Many transport systems do not deliver as planned because some basic considerations were forgotten...and then it becomes too late
- Some connections are not possible because of lack of integration across operators
- Lack of timetable coordination
- Careful management of built interchanges





# Thank you

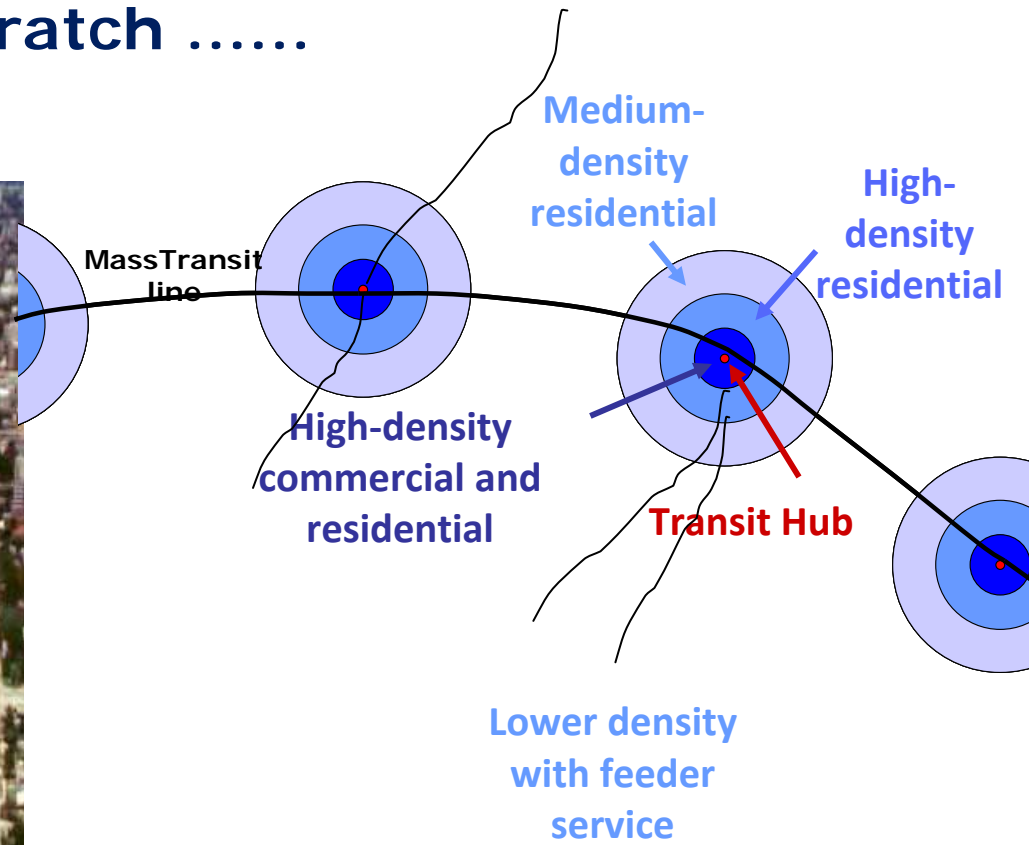
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# Easier if building from scratch .....



BRT corridor



Curitiba, Brazil



## Making the bike rack a design feature ...and riding a bike 'cool'



Is the  
information  
clear?



**LOCAL**