ABRIDGED VERSION OF: TRANSPORT SECTOR PAPER - DEVELOPMENT OF AN URBAN COMPONENT OF THE SECOND ECONOMY STRATEGY

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our future through science

Terms of reference

- A well argued position on transport approaches at local level that will enhance the access of the poor to income generating opportunity.
- A well argued position on the financing options available and the proposed way forward on financing/subsiding transportation costs.
- A well argued position on the potential impact of transit oriented land use development in South Africa and how this might be achieved (or not).
- A set of key state interventions that should be implemented in the transport sector in order to enhance economic opportunities for the urban poor.
- A well argued position on governance/responsibilities for the transport sector.
- The paper is to be limited to the synthesis of readily available data and information.

Analytical framework

Three generic interventions in the urban transport markets

- **Densification of transport corridors** (Strengthening of transport corridors, Promotion of mixed land use within the corridors , Public spending should be focused within these transport corridors, Public spending should facilitate access to housing by poorer households)

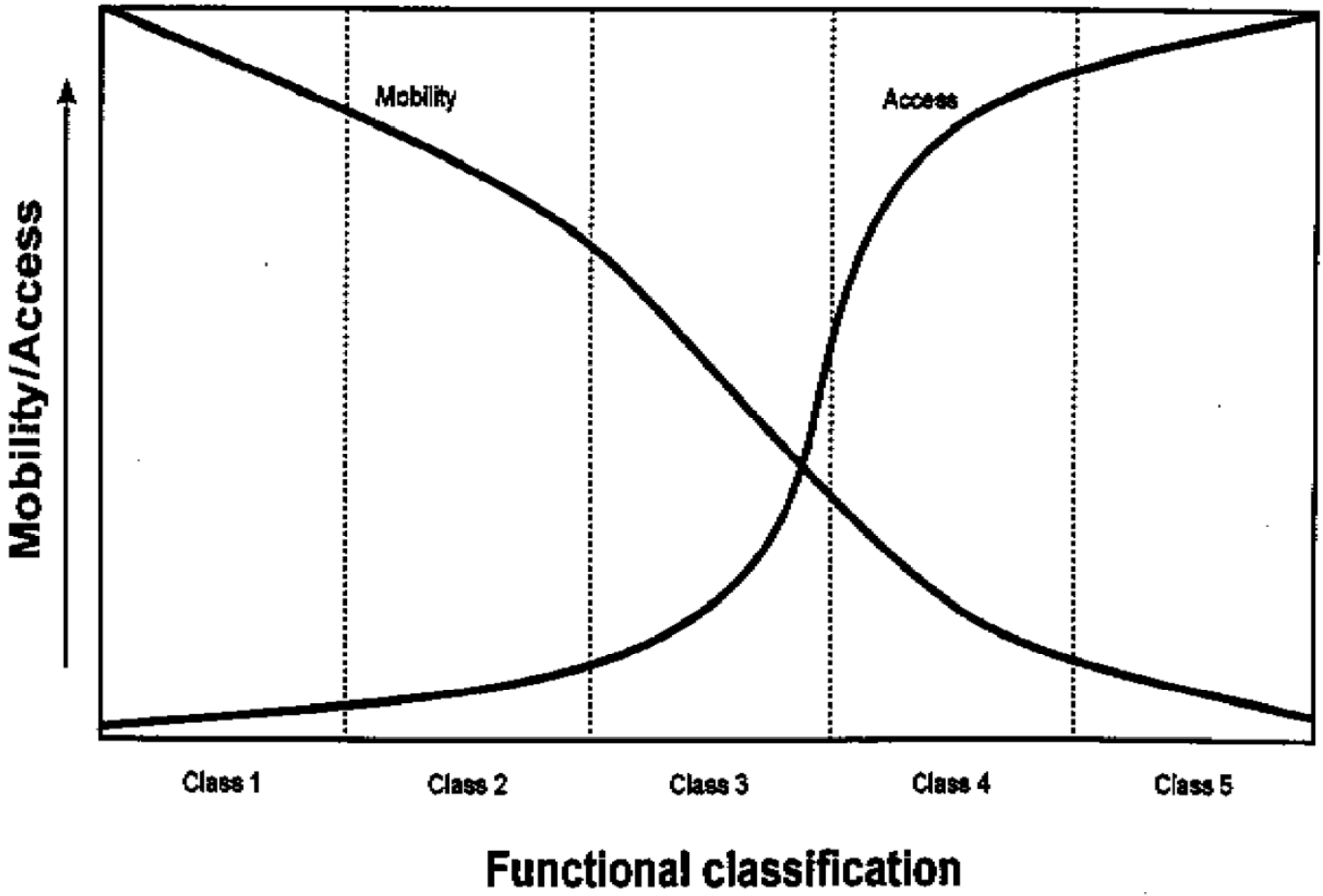
AND

- **Optimisation of modal economics and the service mix** (the best mode of transport for the right purpose, corridor classification, target service designs through market segmentation)

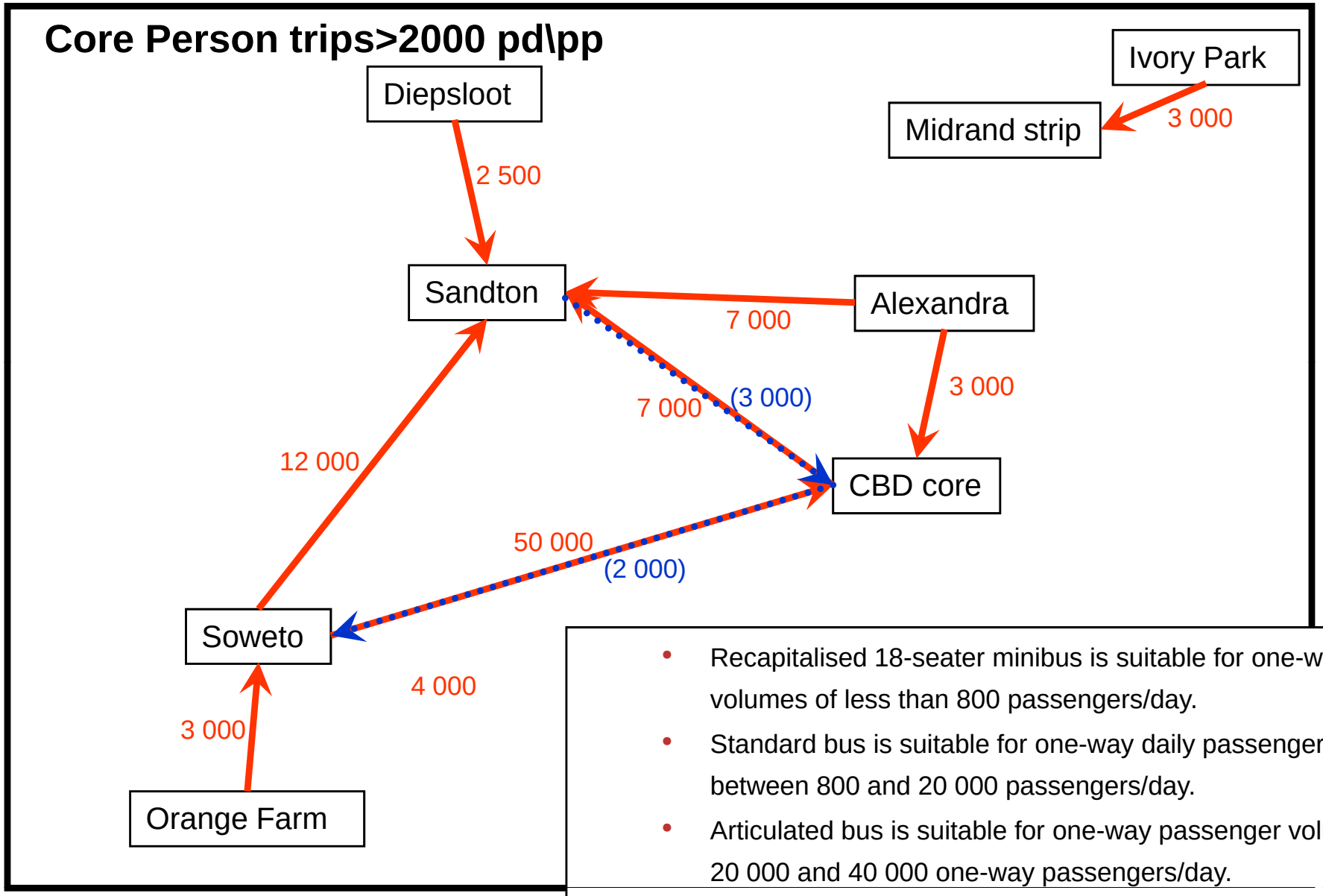
AND

- **Improving firm-level performance** (Improve transport law enforcement, formalise the minibus taxi industry, competition through tendered subsidy contracts)

Densification of transport corridors: design legacy

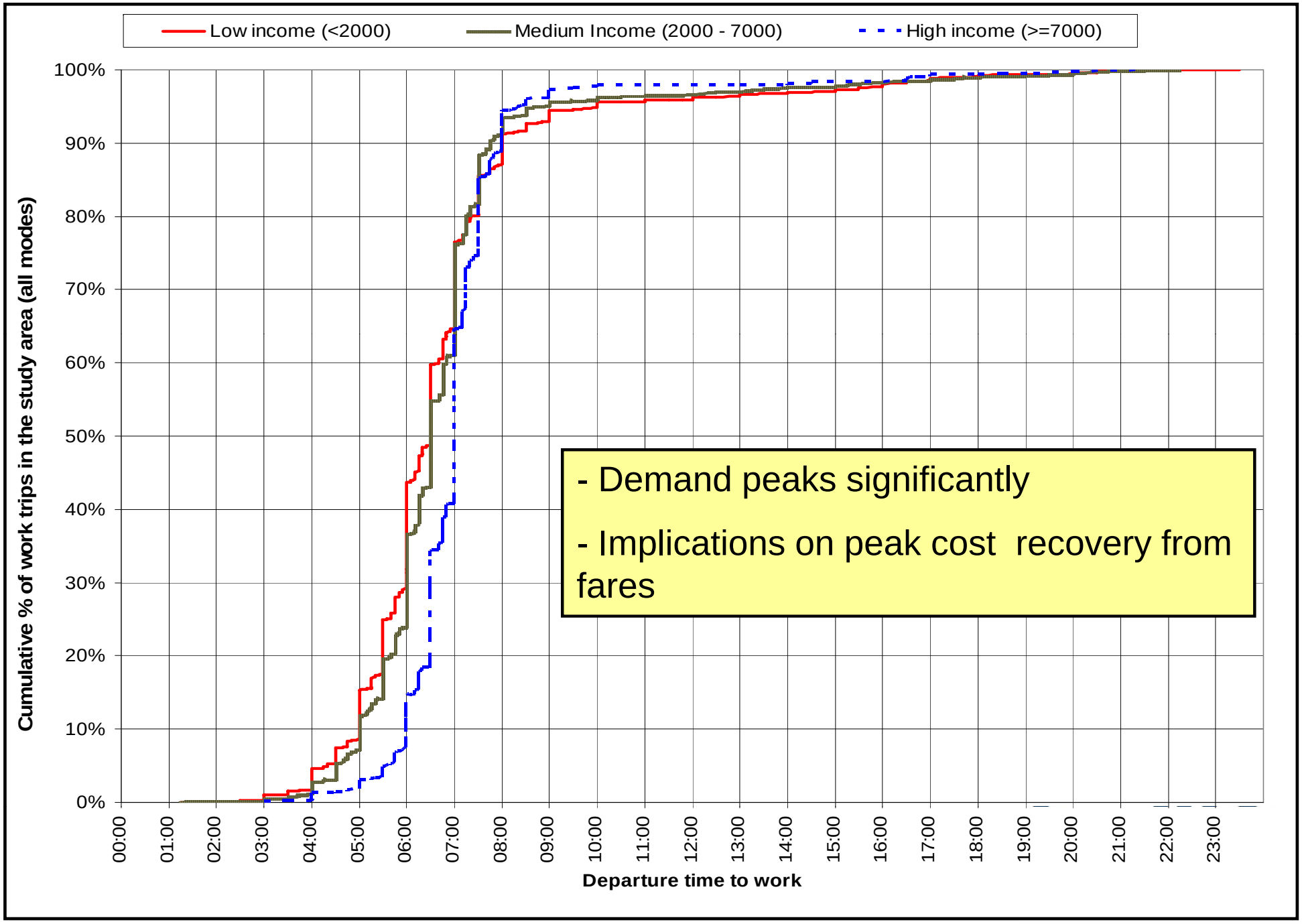


Densification of transport corridors: one-directional peak

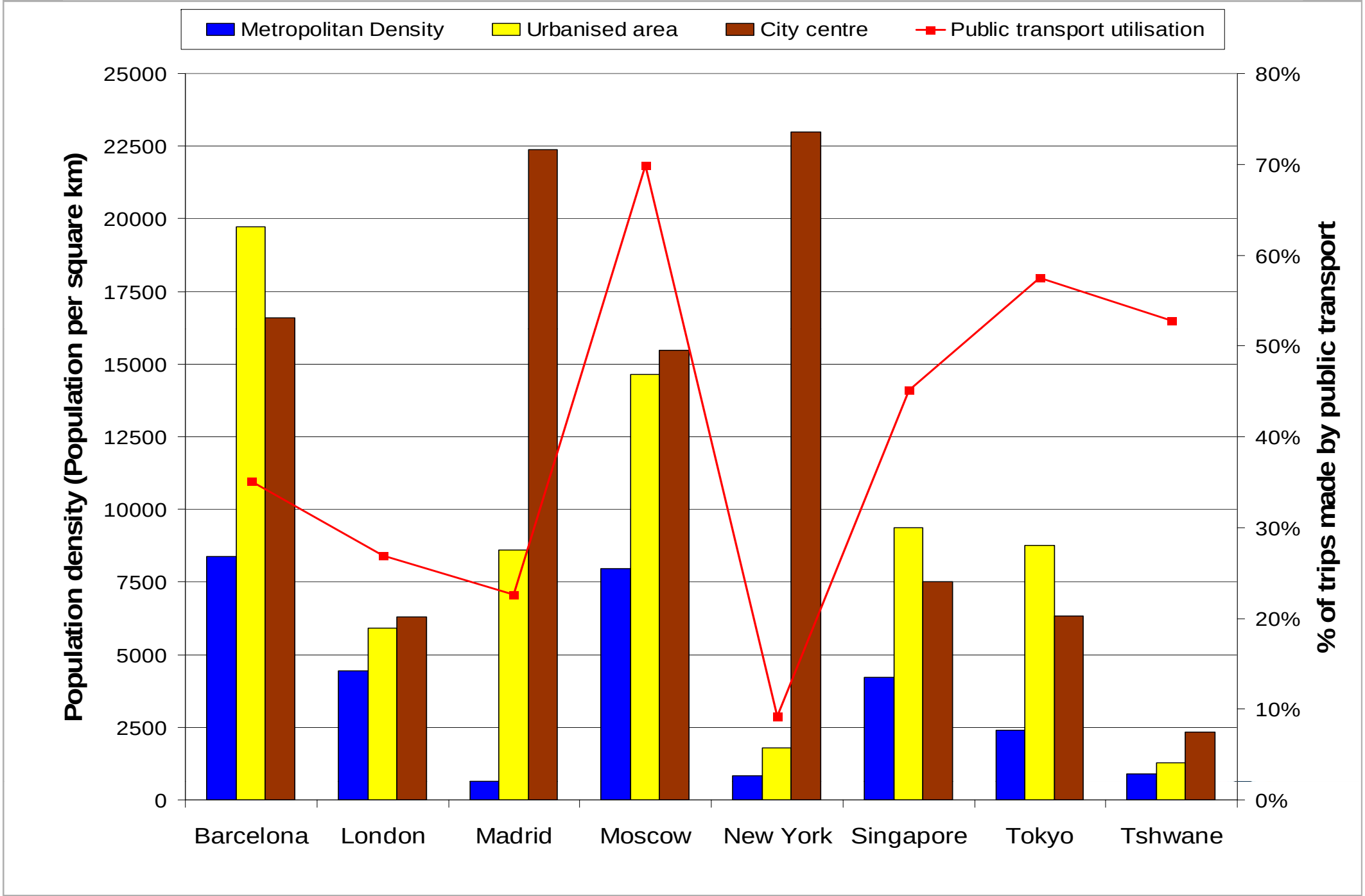


- Recapitalised 18-seater minibus is suitable for one-way passenger volumes of less than 800 passengers/day.
- Standard bus is suitable for one-way daily passenger volumes of between 800 and 20 000 passengers/day.
- Articulated bus is suitable for one-way passenger volumes between 20 000 and 40 000 one-way passengers/day.
- Train is suitable for passenger volumes above 40 000 one-way passengers/day.

Densification of transport corridors: dep. time distribution



Densification of transport corridors: density and public transport

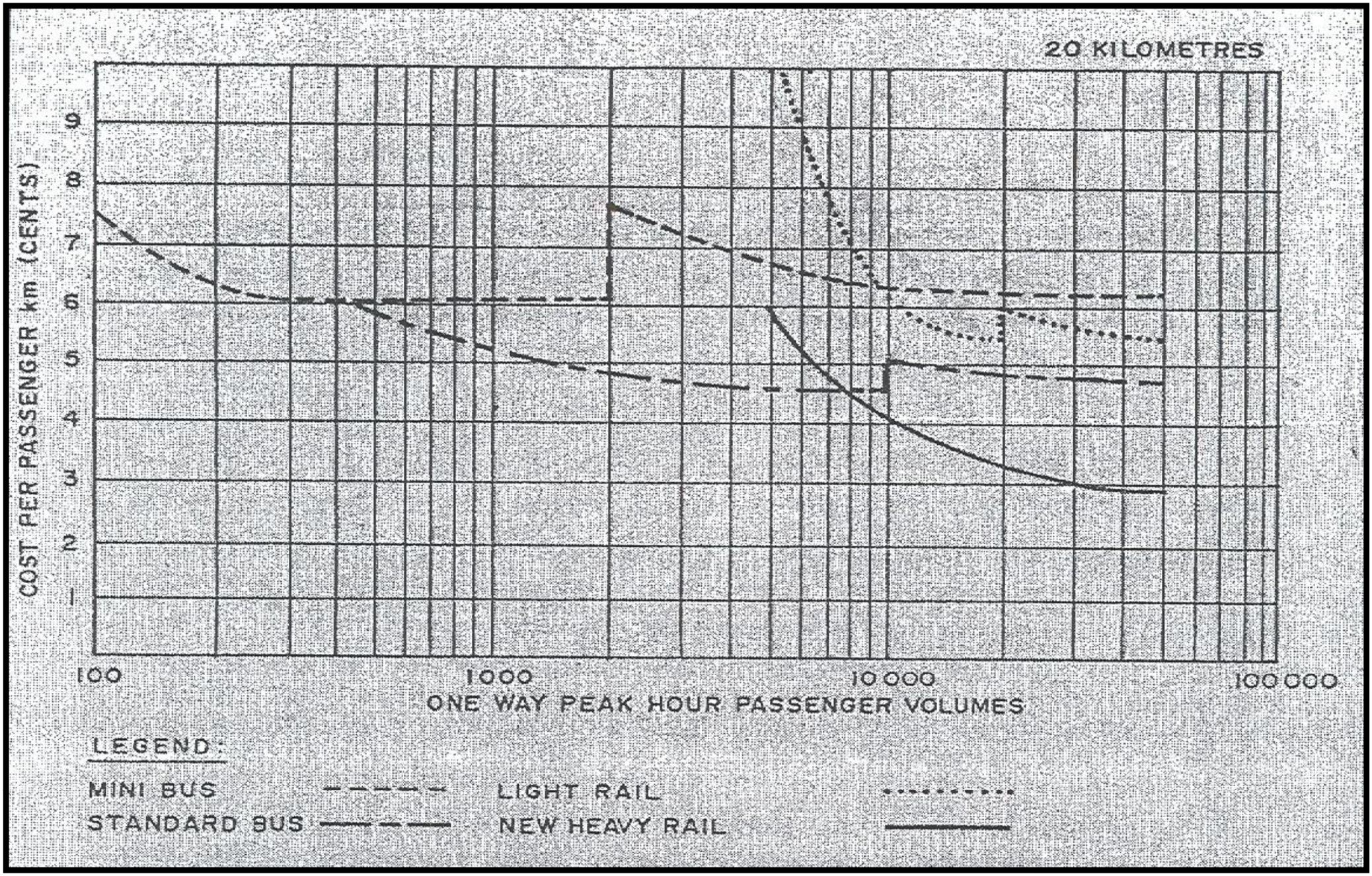


Optimise modal economics: household transport expenditure

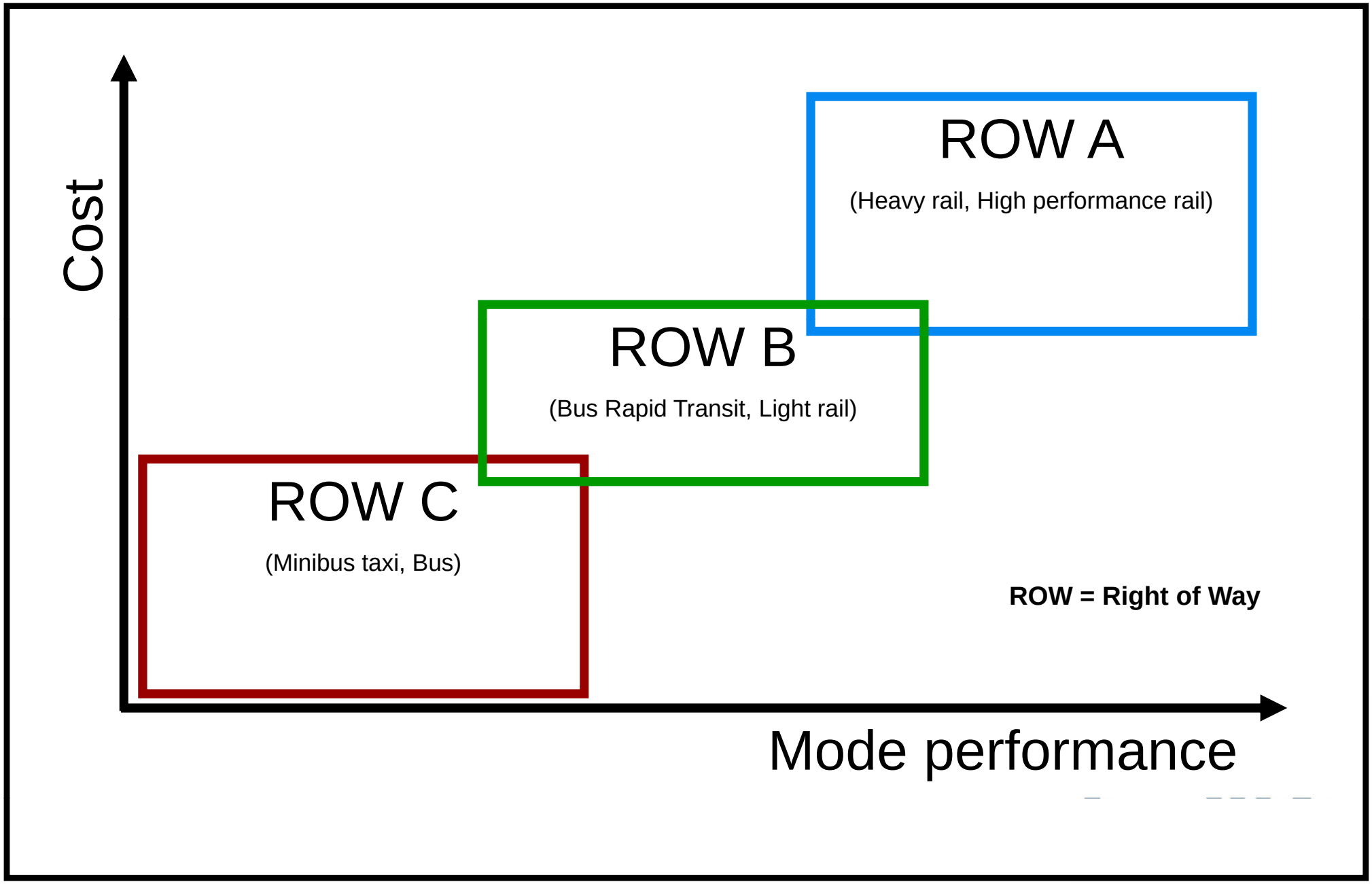
	IES 1995		IES 2000		IES 2005/2006	
	Income quintile 1	Income quintile 5	Income quintile 1	Income quintile 5	Income quintile 1	Income quintile 5
	%	%	%	%	%	%
Food and non-alcoholic beverages	51,0	20,6	41,0	19,4	36,9	9,6
Alcoholic beverages and tobacco	3,0	2,2	2,0	2,2	1,5	1,0
Clothing and footwear	8,9	5,4	5,6	4,1	9,4	4,0
Housing, water, electricity, gas and other fuels	15,6	12,0	13,1	13,2	11,8	12,5
Furnishings, household equipment and maintenance of the house	7,7	10,6	8,2	9,6	8,1	7,6
Health	0,5	1,6	1,2	1,6	1,7	2,0
Transport	4,0	18,3	7,7	17,0	10,6	28,3
Communication	0,8	4,6	2,2	4,1	3,0	4,3
Recreation and culture	1,0	4,9	3,1	5,7	2,6	6,3
Education	1,1	2,0	2,4	3,0	2,2	2,6
Restaurants and hotels	0,7	3,0	2,4	4,4	1,5	2,7
Miscellaneous goods and services	5,7	14,9	11,0	15,9	10,5	19,2
Total consumption expenditure	100,0	100,0	100,0	100,0	100,0	100,0

Source: 2005/2006 StatsSA Household Income and expenditure survey

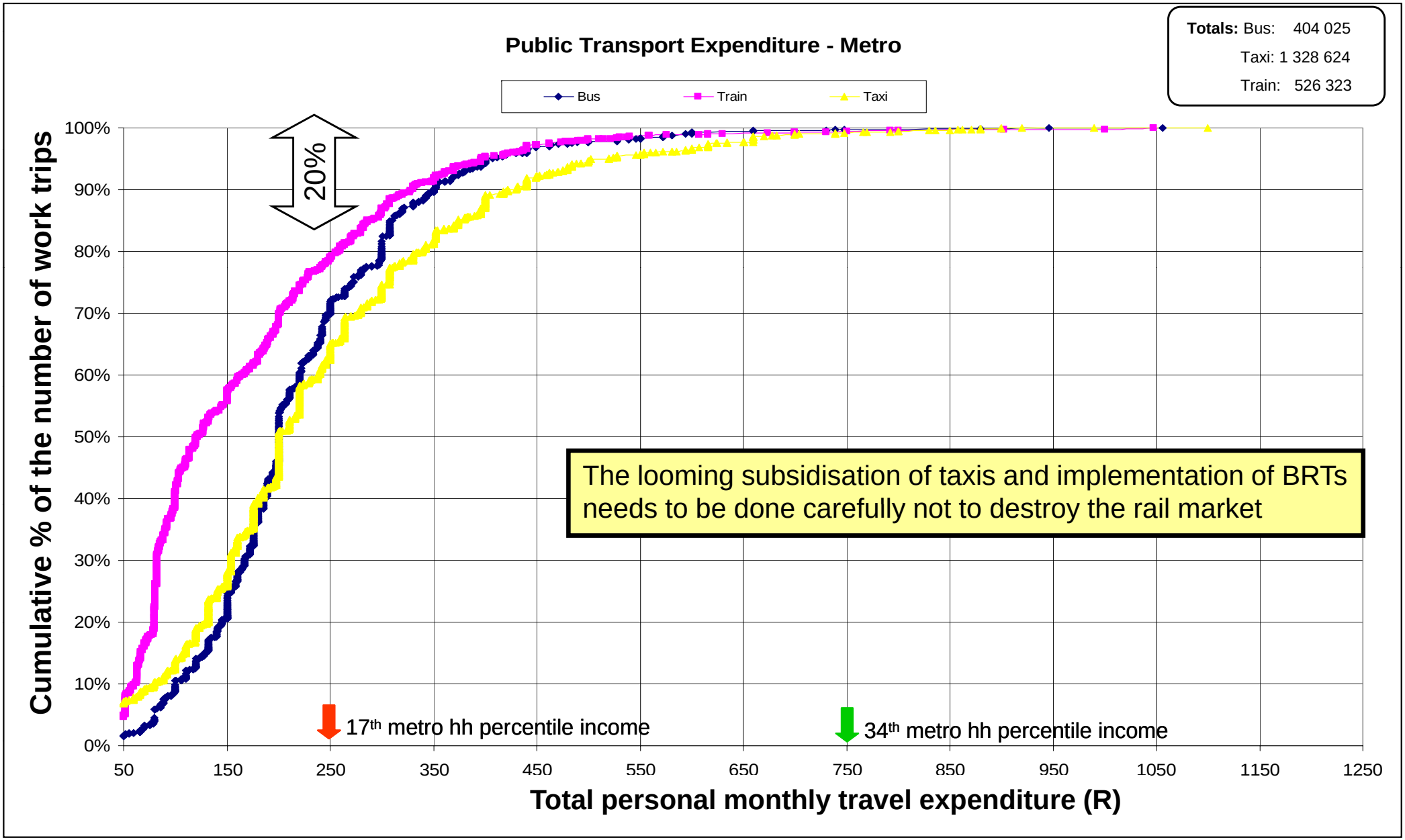
Optimise modal economics: choice of mode choice



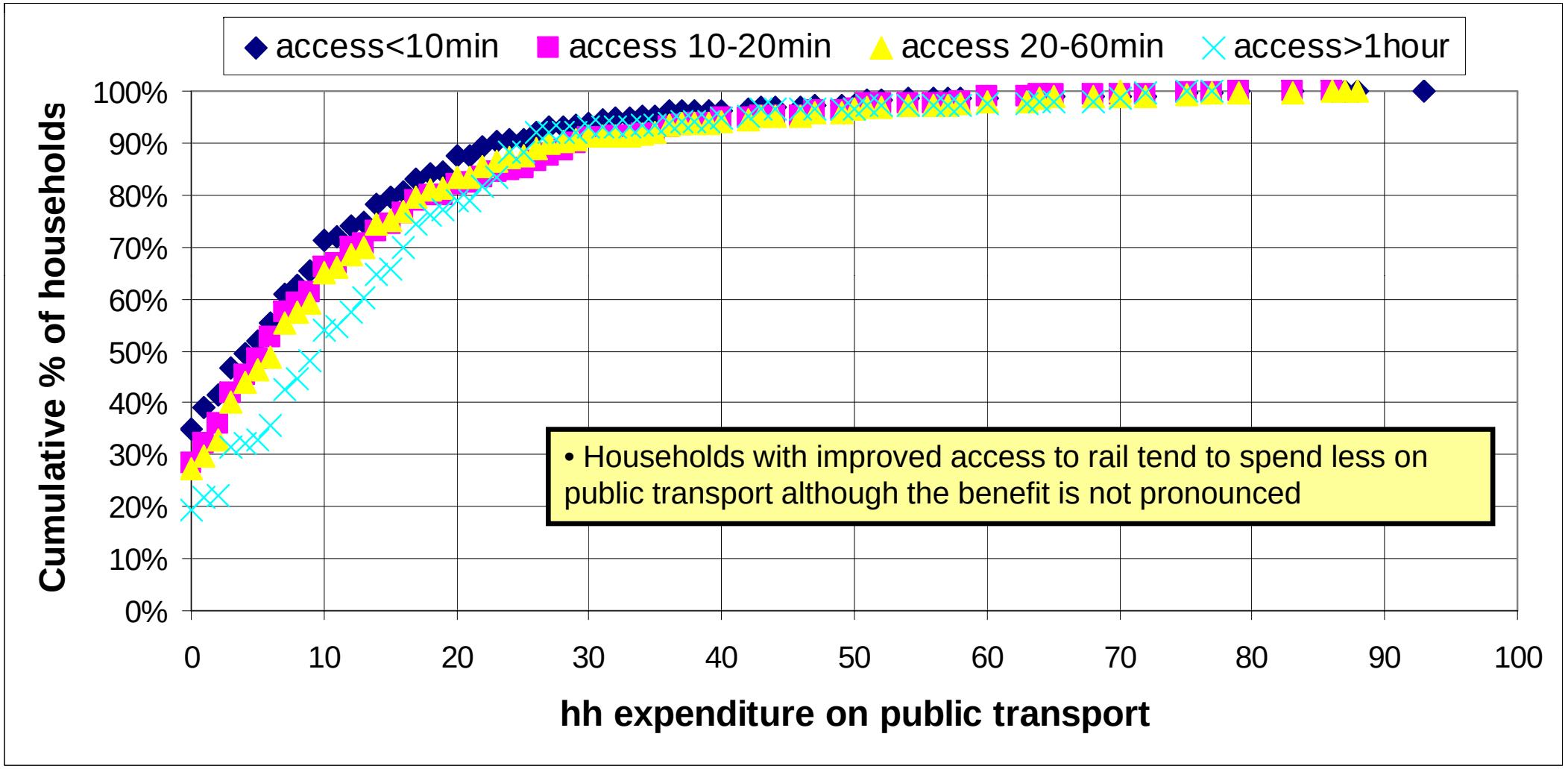
Optimise modal economics: mode categories



Optimise modal economics: expenditure per mode



Optimise modal economics: rail and access

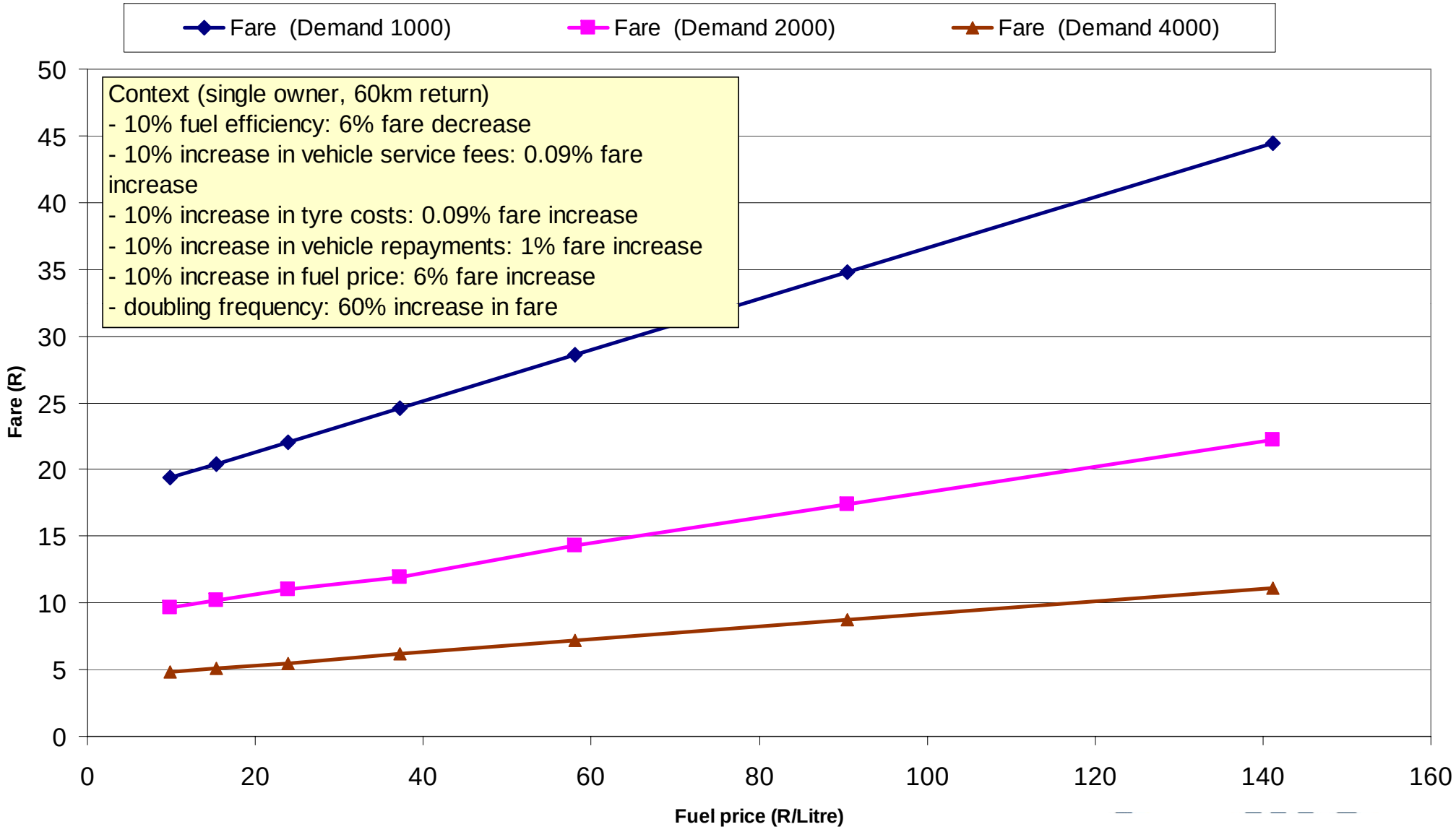


Optimise modal economics: modal integration benefits

Mode 1	Mode 2	Mode 3	Mode 4	Total	% of trips for which train is 1st or 2nd mode
Train	-	-	-	235 117	65%
Minibus taxi	Train	-	-	106 999	82%
Train	Minibus Taxi	-	-	66 478	18%
Train	Train	-	-	37 945	11%
Bus	Train	-	-	19 151	87%
Minibus taxi	Train	Minibus Taxi	-	16 654	13%
Total work trips				4 663 974	

The taxi-rail relationship needs to be harnessed.

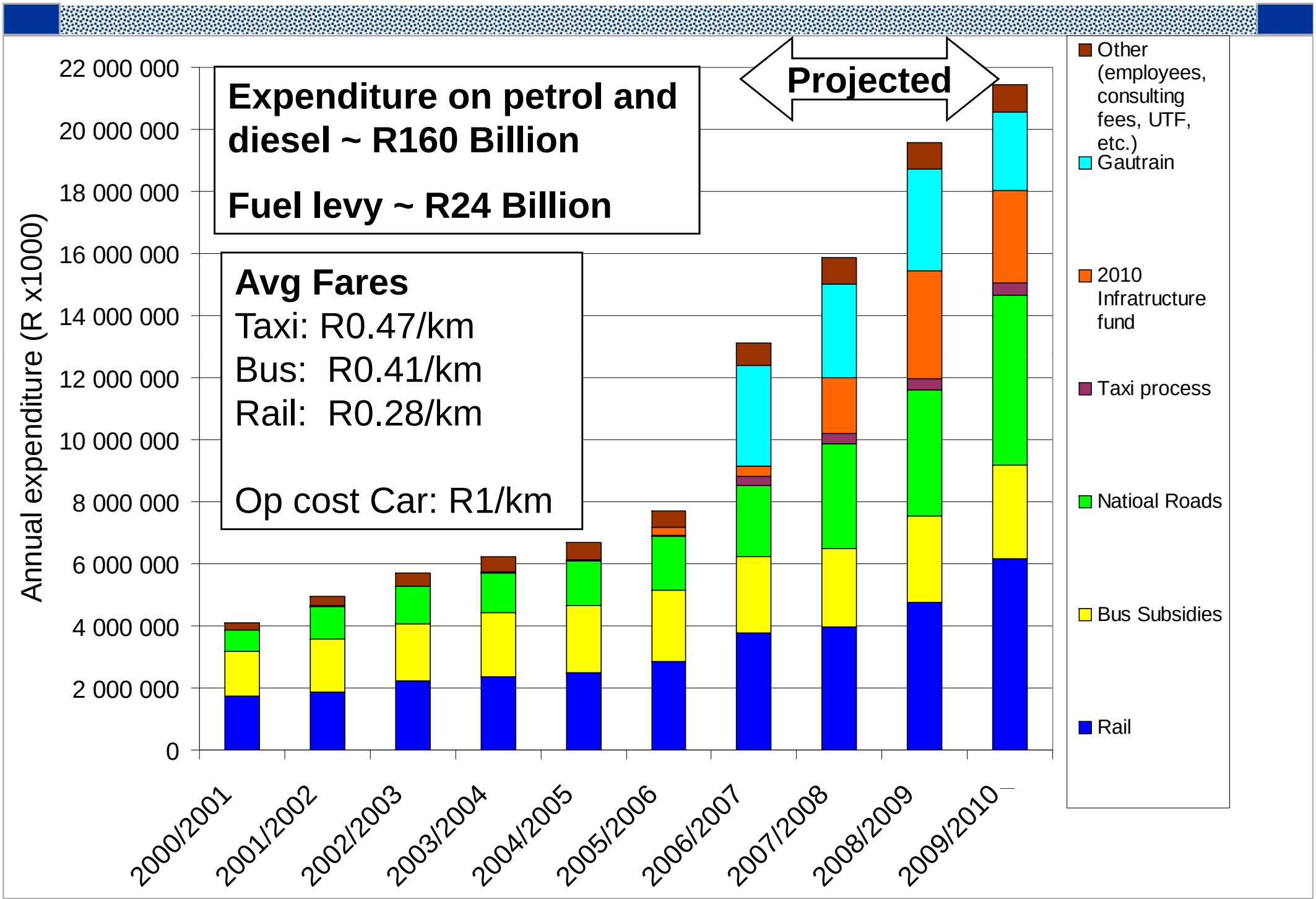
Optimise modal economics: operational costs



Optimise modal economics: subsidy around the world

City	Operating cost recovery (bus)			Operating cost recovery (metro/rail)			Comments
	Fares (%)	Subsidy (%)	Other (%)	Fares (%)	Subsidy (%)	Other (%)	
Barcelona	**42.2**	**56.7**	**1.1**	**54.5**	**43**	**2.5**	Rail: Metro
London	**71**	**29**	**0**	**103**	**0**	**0**	Rail: London underground
Madrid	**63**	**35**	**2**	**55**	**41.7**	**3.3**	Rail: Metro de Madrid
Moscow	Not available						
New York	**47.2**	**18.9**	**33.9**	**65.6**	**18.9**	**15.5**	Rail: City subway
Singapore	**96**	**0**	**4**	**Not provided**			Bus: Singapore bus service,
Tokyo	**83.5**	**3.8**	**12.7**	**79.3**	**8**	**12.7**	Rail: Metro
Tshwane	**67.3**	**31.8**	**0.9**	**39**	**61**	**0**	Bus: Pretoria City bus, Rail: Metrorail

Optimise modal economics: national expenditure



Densification of transport corridors: Shorter term recommendations

- A multipurpose definition of a corridor should be formulated. The development objectives of high density corridor should be clearly articulated beyond the area of transport.

- For transport purposes, corridors should be defined in terms of a combination increased access to public transport as well as higher mobility of public transport. In benefit of the second economy, the practice of defining corridors in terms of freeways should be stopped. Where such corridors are defined increased public investments should be dedicated to improvement of public transport access and mobility.

- Minibus taxis should be formally incorporated as a mode of choice in corridor designs. However, infrastructure design should take into account possible future high capacity modes that may be implemented within the corridors.

- Design standards of these corridors should take into account the special travel needs of disabled people.

Densification of corridors: Longer term recommendations

- Increased densities alone are not a sustainable public transport solution. Other social interventions aimed at improving the welfare of the second economy will have more sustainable long term impact.

- In order to achieve high densities comparable to some larger cities in the world, developments outside defined corridors should be disallowed. A half hearted approach will maintain the status quo.

Optimise modal economics: Shorter term recommendations

- Formulate a South African street design architecture guidelines that will promote effective and safe use of streets by different users, especially non-motorised transport users. Currently the design of South African roads is biased towards car use.

- Promote the use of non- motorised transport, especially by the youth. This should be supported by a roll-out cycling programmes in the urban areas, as well as proving appropriate non-motorised transport networks around schools.

Optimise modal economics: Longer term recommendations

- Increasing subsidies (alone) is not always the best option. Transport operations should first be optimised in order to improve operational efficiency. This is actually the historical modus operandi that taxis used i.e. they did not maintain their fleet properly, they lowered the salaries of the drivers or maintained them at low levels and had low overheads as a result of no administrative staff, but as a result, the service quality was somewhat lowered.

- Part of programmes such as taxi recapitalisation should be to ensure that operations are better designed in order to be efficient. Currently taxi recapitalisation programme is focused on vehicle replacements.

- Transport subsidies do not always target the right beneficiaries. The use of better targeting schemes, for example, card-based technologies can improve user targeting.

Firm level performance: Shorter term recommendations

- Adoption of better transport service contracting regimes i.e. performance based contracts in management of both subsidised and unsubsidised contracts.

- Given the long distance nature of trips of the urban poor, there is an urgent need for improved communication (incentivised) between the neighbouring authorities when formulating transport plans.

- Employers need to evaluate the accessibility of their premises by pubic transport in consultation with their workers. This should be fed back to authorities for backlog estimation. This will in turn improve the currently ineffective Operating Licensing Strategies.

- Employment contracts to incorporate transport access clauses, especially for vulnerable users such as night shift workers.

Firm-level performance: Longer term recommendations

- Improve community access to internet. This will reduce some of the need to travel, especially for routine travel to access social services. This calls for increased government service to be provided online or over the phone. Furthermore, improved literacy and computer literacy in poorer communities should receive serious attention.

- Intelligent Transport Systems (i.e. utilisation of Information and Communications Technologies in transport operations) should be implemented in a manner that improves the efficiency and effectiveness of transport subsidy targeting as well as the minimisation of corruption.

- Establishment of targeted transport management training institutions across all the transport-related disciplines should improve capacity in Government, transport operator institutions and the private sector.
- Make social facilities and government buildings multi purpose in nature to reduce the need to travel long distances and energy costs.

- Empower ward based municipal councillors in matters related to effective transport service delivery.

END. THANK YOU.

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