# **BRTuk Annual Conference**

# UK Bus Rapid Transit System a Common Standard?

Monday 30<sup>th</sup> November 2015

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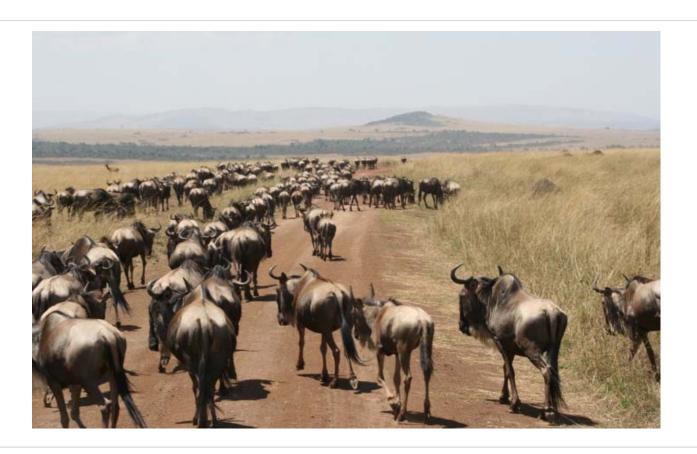
















#### Bus Rapid Transit in the UK

- BRTuk is an organisation which is dedicated to promoting the benefits of BRT and provides information on how BRT can help deliver economic growth.
- BRTuk has overarching objective to provide a wider dissemination of information and knowledge base about BRT throughout the UK.
- ▶ BRTuk is currently developming a 'Education and Research' component of the organisation, with the purpose to enhance and educate BRT in the UK through commissioning of research.





- As part of the ongoing commitment to education and research BRTuk commissioned The Transportation Consultancy (TTC) to undertake a piece of research to develop a common standard of BRT for the UK.
- The aim of the research is to develop a common standard for UK BRT schemes to;
  - Provide for a more uniform delivery and method for quantifying the benefits of the UK systems.
  - Comparable analysis of performance and patronage information in the UK
  - Better guidance to inform future UK BRT schemes on how to be successful and inform Government
  - Better placed to secure funding for BRT schemes.





### Background on Bus Rapid Transit (BRT)

- ▲ Compared to traditional Mass Rapid Transit, BRT costs 30 - 60% less than light rail transit system.
- Flexibility to meet growing needs of population and expanding geography of cities.
- Catalyst for economic regeneration
- Quadrupling of kilometres of BRT systems over the last ten years
- Growth strongest in developing parts of the world.







#### ▲ Growth in BRT Schemes

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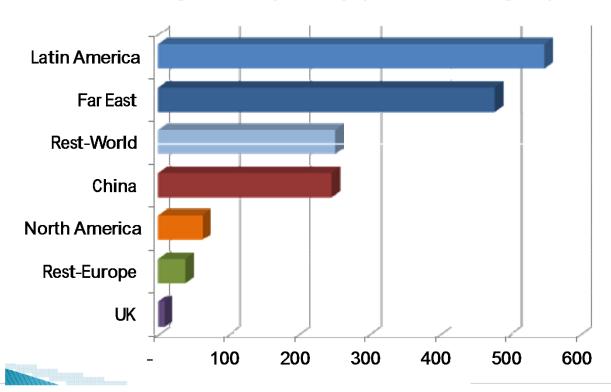
- ▲ Growth in BRT Schemes
  - Cambridgeshire KGB







#### Passengers / City / Day (000s, averaged)







#### ▲ Current UK BRT Schemes in operation

- Runcorn
- Leeds & Bradford
- Kent
- Crawley
- Hampshire
- Swansea
- Cambridgeshire
- Tyne and Wear
- East London
- Luton and Dunstable









#### ITPD BRT Standard

- BRT systems are classified globally by the standards set out by the ITDP.
- The standards are a common definition to ensure BRT systems deliver world class passenger experiences, significant economic benefits and positive environmental impacts.
- The BRT standards have been created as a <u>way of protecting the BRT brand and offering recognition to high quality BRT systems around</u> the world.
- Examination of the standards and scoring revealed that revealed that UK can not achieve greater than a 'Bronze' standard.
- As a result the ITDP standards are not appropriate for the UK BRT systems.





# UK BRT a Common Standard? ITDP - Standards and Scorecard



Category	Sub Category	Scoring
BRT Basics	Busway Alignment	0 -7
	Dedication right of way	0-7
	Off-board fare collection	0-7
	Intersection treatments	0-6
	Platform-level boarding	0-6
Service Planning	Multiple routes	0-4
	Peak frequency	0-3
	Off-peak frequency	0-2
	Express, limited, and local	0-3
	services	
	Control centre	0-3
	Located In top ten corridors	0-2
	Demand Profile	0-3
	Hours of operations	0-2
	Multi-corridor network	0-2
	Passing lanes at stations	0-4
	Minimizing bus emissions	0-3
Infrastructure	Stations set back from	0-3
	intersections	1
	Center stations	0-2
	Pavement quality	0-2
	Distances between stations	0-2
	Safe and comfortable stations	0-3
Station Design and Station-	Number of doors on bus	0-3
bus Interface	Docking bays and sub-stops	0-1
	Sliding doors in BRT stations	0-1
Quality of Service &	Branding	0-3
Passenger Information Systems	Passenger information	0-2
-,	Universal access	0-3
	Integration with other public	0-3
Integration and Access	transport	1
	Pedestrian access	0-3
	Secure bicycle parking	0-2
	Bicycle lanes	0-2
	Bicycle-sharing integration	0-1





# **UK BRT a Common Standard?** ITDP - From this







# UK BRT a Common Standard? To this ......

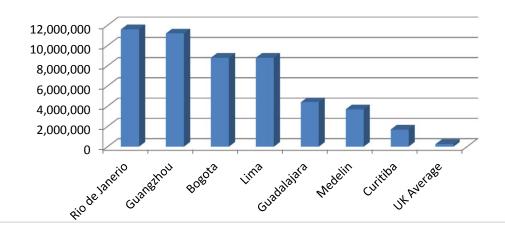






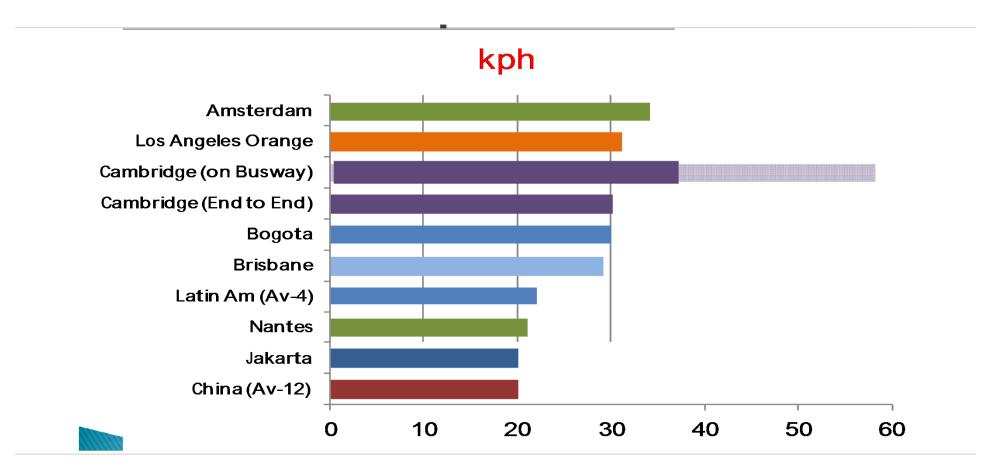
#### ■ Why ITPD BRT Standard Isn't Applicable for UK Schemes

- Significant difference in demographics between cities which achieve 'gold' standard and BRT UK systems.
- The ITPD standards are geared towards developing countries.
  Population













#### New UK BRT Standard

- To create a BRT UK standard we adjusted the ITPD standards and removed the following elements from the scoring;
  - Passing lanes at stations
  - Centre stations
  - Distance between stations
  - Number of doors on bus
  - Docking bays and sub-stops
  - Sliding doors in BRT stations.

Category	Sub Category	Scoring
	Busway Alignment	0 -7
	Dedication right of way	0-7
BRT Basics	Off-board fare collection	0-7
	Intersection treatments	0-6
	Platform-level boarding	0-6
Service Planning	Multiple routes	0-4
	Peak frequency	0-3
	Off-peak frequency	0-2
	Express, limited, and local	0-3
	services	
	Control centre	0-3
	Located In top ten corridors	0-2
	Demand Profile	0-3
	Hours of operations	0-2
	Multi-corridor network	0-2
	Passing lanes at stations	0-4
	Minimizing bus emissions	0-3
Infrastructure	Stations set backfrom	0-3
	intersections	V02-2-22
	Center stations	0-2
	Pavement quality	0-2
	Distances between stations	0-2
	Safe and comfortable stations	0-3
Station Design and Station- bus Interface	Number of doors on bus	0-3
	Docking bays and sub-stops	0-1
	Sliding doors in BRT stations	0-1
Quality of Service &	Branding	0-3
Passenger Information Systems	Passenger information	0-2
	Universal access	0-3
	Integration with other public	0-3
Integration and Access	transport	000000
	Pedestrian access	0-3
•	Secure bicycle parking	0-2
	Bicycle lanes	0-2
	Bicycle-sharing integration	0-1





#### New UK BRT Standard

	ITPD	Proposed UK	
Gold	85 – 100	65 - 80	
Silver	70 – 84	54 - 65	
Bronze	55 - 69	40 - 53	
BRT Basic	Basic BRT refers to a core subset of elements that is deemed essential		
	to the definition of BRT. This minimum qualification is a precondition		
	to receiving a gold, silver of bronze ranking, yet a corridor may only		
	qualify as Basic BRT.		





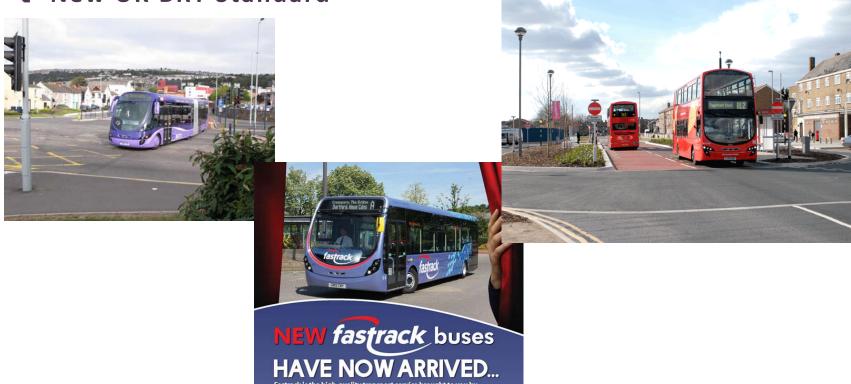
#### **▲** UK BRT Systems Scoring as part of New UK Standards

- Using the new UK standard, BRT schemes have been scored using the new standards;
  - Cambridgeshir/CGB = Gold Standard
  - Hampshire/Eclipse = Silver Standard
  - Crawley/Fastway = Silver Standard





#### New UK BRT Standard







#### Conclusions

- An agreed list of current BRT Schemes
- Identified elements of the characteristics for successful BRT UK BRT Schemes
- Development of a Draft BRTuk Standard
- Standard reacts sensibly to application on selected schemes
- Additional criteria for further consideration





#### Summary

- Provide a uniform delivery platform for BRT Systems
- Ability to quantify benefits of existing BRT Systems in the UK
- Compare performances
- Protect and Enhance BRTuk Brand
- Enable Government to understand and provide policy on BRT Systems
- Ability to place local authorities in a position to secure greater funding





#### Next Steps

- Setting up of a "BRTuk Technical Group"
- Agree and approve classification and scoring mechanism
- Agree and collate data requirements for all UK BRT Systems
- Undertake performance assessment and inform future BRT Schemes







# Thank You !!!!!!!













#### Presentation Contents

- BRT in the UK
- What is BRT
- UK BRT Schemes
- Classification of BRT
- Comparisons
- Reframing standards for UK
- Further Research
- Conclusions











