

Air/Rail 2012

# Ultra at Heathrow: Delivering World Beating Customer Service

Presentation by Adam Ruddle, Key Account Manager, Ultra Global PRT



# Summary

- Heathrow pod: completed first full year of operation, great performance & feedback to date.
- Demonstrates benefits and addresses issues not unique to Heathrow airport.
- Significant opportunities in a wide range of applications, including airports, cities (feeder/distributor) & campuses.



## Airport Transport

- As passengers, we always want a seamless service
- Our airline clients expect well run, well priced services
- Our shareholders want ROI
- It's what we aspire to and what the Heathrow pod delivers



# Heathrow: Europe's busiest airport



Like every airport Heathrow has challenges:

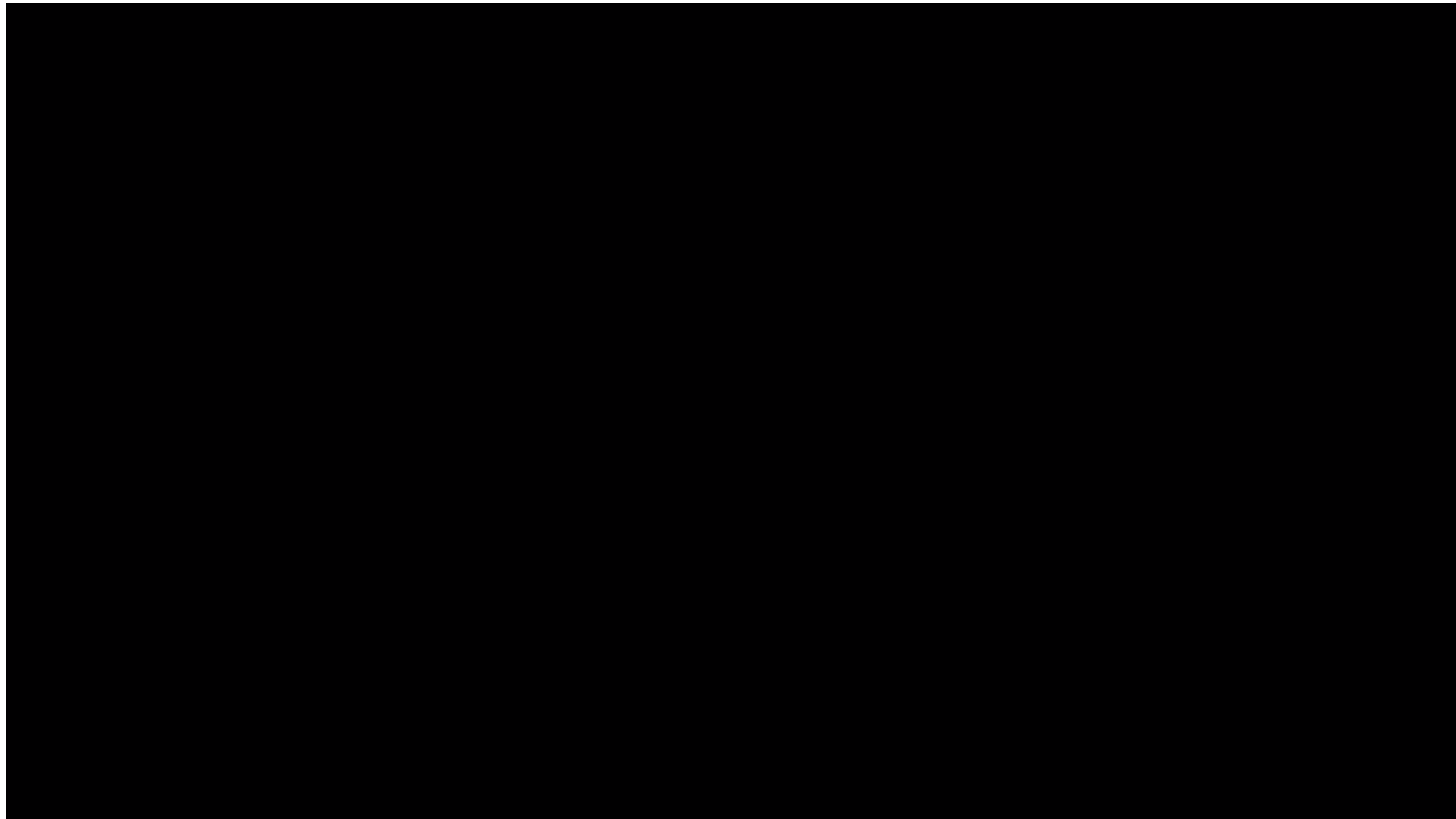
- Environmental responsibility
- Local Area Congestion
- Space restrictions
- Capacity restrictions
- Passenger service targets
- Multi modal connectivity







# The Heathrow pod solution



[Click to start video](#)



The pod offering: –  
Passenger Perspective



- P Personal:** 4 person (and luggage) electric powered vehicle, so nobody has to share
- R Rapid:** Travels directly to your destination at 40km/hr, so no more delays
- T Timely:** Available on demand, when you want it, so no more waiting for the bus to come

## What do our passengers think?

- “Landed and used the very cool Heathrow pod – they’re even better to use – quicker, easier and greener than the buses to/from the car park”
- “I love these things. Best airport transfer devices ever”
- “Awesome sci-fi system”
- “Pass on my thanks to the team who designed this and also very importantly, the person(s) at BAA who approved this bold leap. It’s absolutely commendable to take charge and move forwards with a new transport system”







# Passenger Feedback

- **Quality of Service Monitor (QSM) updated**

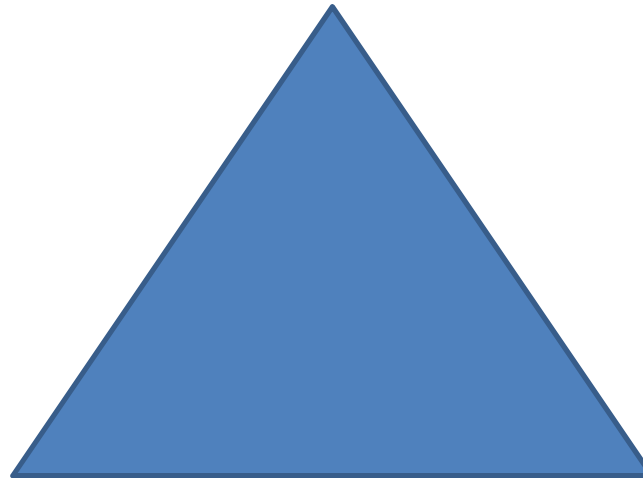
Category	Bus	PRT	
	2010	2011(Q3)	2011(Q4)
Ease of Getting to the Terminal	3.8	4.6	4.6
Overall Transfer Experience	3.9	4.5	4.6
Frequency of Transfer	3.5	4.6	4.7
Car Park Overall	3.8	4.2	4.2

- Over 60% of customers gave 5/5
- The best service on the airport – nothing scores higher as an individual score than 4.7
- Passengers are choosing to use the car park because of the pod

# Triangle of Benefit



Customer Satisfaction



Market Penetration / Usage

Price Premium / Tariff

# Reliability and Dependability

System	Availability
Heathrow Pod	99.1% (2011/2012)
Heathrow Express	98.0% (2010/2011)
London Underground (LUL)	95.6% (2010/2011)
Docklands Light Rail (DLR)	97.4% (2010/2011)
Tramlink	98.6% (2010/2011)
Overground	94.8% (2010/2011)

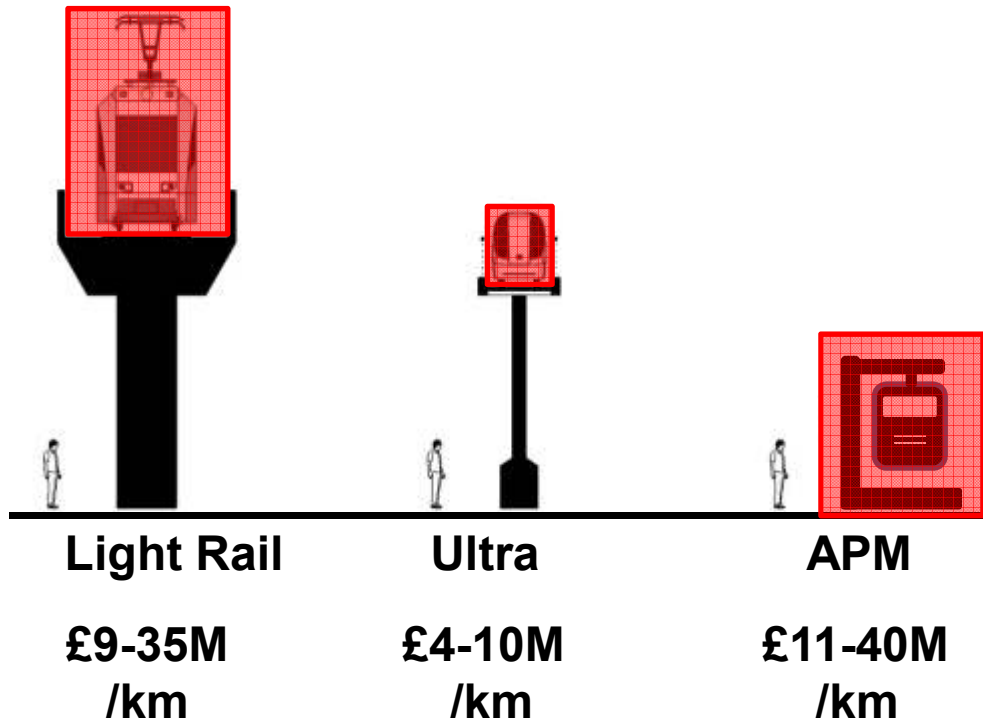
Average waiting time for a vehicle to arrive is only **10-15 seconds**, with 80% of passengers having no wait at all.

Less than 1 in 1,250 journeys have a delay.

Figures from Transport for London



# Low cost, Low space, High capacity



PRT takes up far less space than other forms of transit.

PRT has the potential to carry as many people as a 50 seat bus every 75 seconds

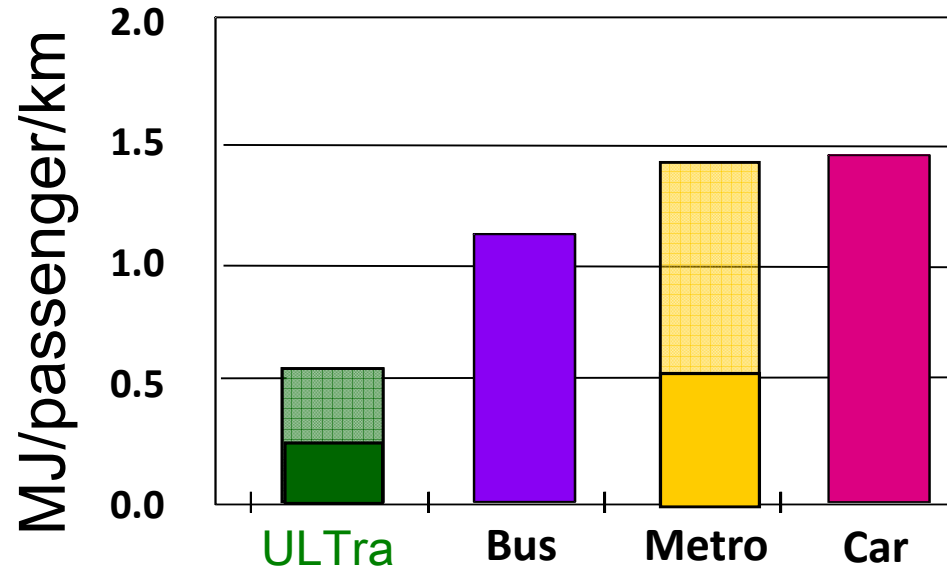
The lighter infrastructure means that PRT capital costs are much lower than for other systems.

## But...3-5 times cheaper than APM/Rail



- Light rail system at Toronto International Airport link cost nearly **£38m per km**
  - An Ultra system would have cost £9-10m per km (based on 2010 figures).
- The Birmingham AirRailLink cost over **£14m per km** to refurbish recently
  - To build a PRT from scratch for the same route would have cost under £10m per km and offered passengers their own door-to-door pod service.
- The light rail line in Montpellier cost **21.8m Euros per km**
  - A PRT system would have cost between 5.6m and 9m Euros per km (EDICT 2004 figures)
- The Oakland Airport Connector, in San Francisco, California, a transport system that's been proposed since the 1970's, and due to begin building soon, has been costed at **£32m per km**
  - Estimated cost of £6-8m per km if built as a PRT system.

# Energy Efficiency



UK Data. :

- Average passenger loads
- Bus and Car represent urban use
- Well to wheel (darker shading direct electricity use only)

**70% carbon benefit over car**  
**50% carbon benefit over train/bus**

- Very light-weight electric vehicles
- Only move when there is user demand
- Avoid 'stop & go' waste
- **No on-site emissions**
- **Low external noise**

## Onwards and upwards for Ultra

- Reliability demonstrated – learning curve surmounted
- Exploring applications around the world with potential partners
- Ultra PRT's India partner: Ultra Fairwood
  - Developed unsolicited proposal for Amritsar North India tourist centre.
  - 240 Vehicles, 7 Stations, >50,000 passengers / day
  - Foundation Stone Laid



## Summary

- Heathrow pod: open since April 2011, great performance & feedback to date.
- Demonstrates benefits and addresses issues not unique to Heathrow airport.
- Significant opportunities in a wide range of applications, including airports, cities (feeder/distributor) & campuses.
- Thank you...any questions?

