

Opportunities  
Concepts  
Movement  
Pedestrian  
Environment

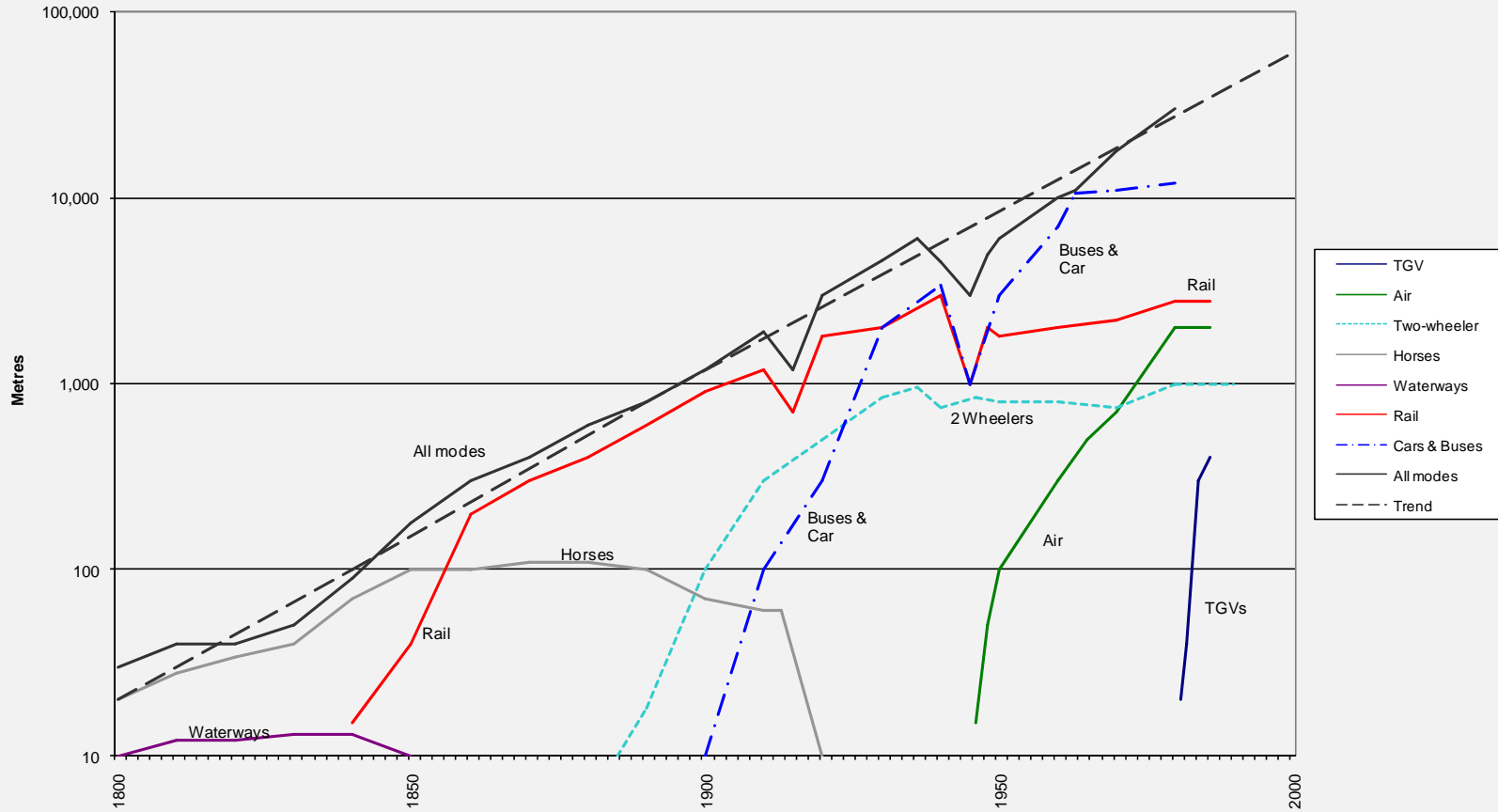
# Engineering and New Technologies

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Associate Director

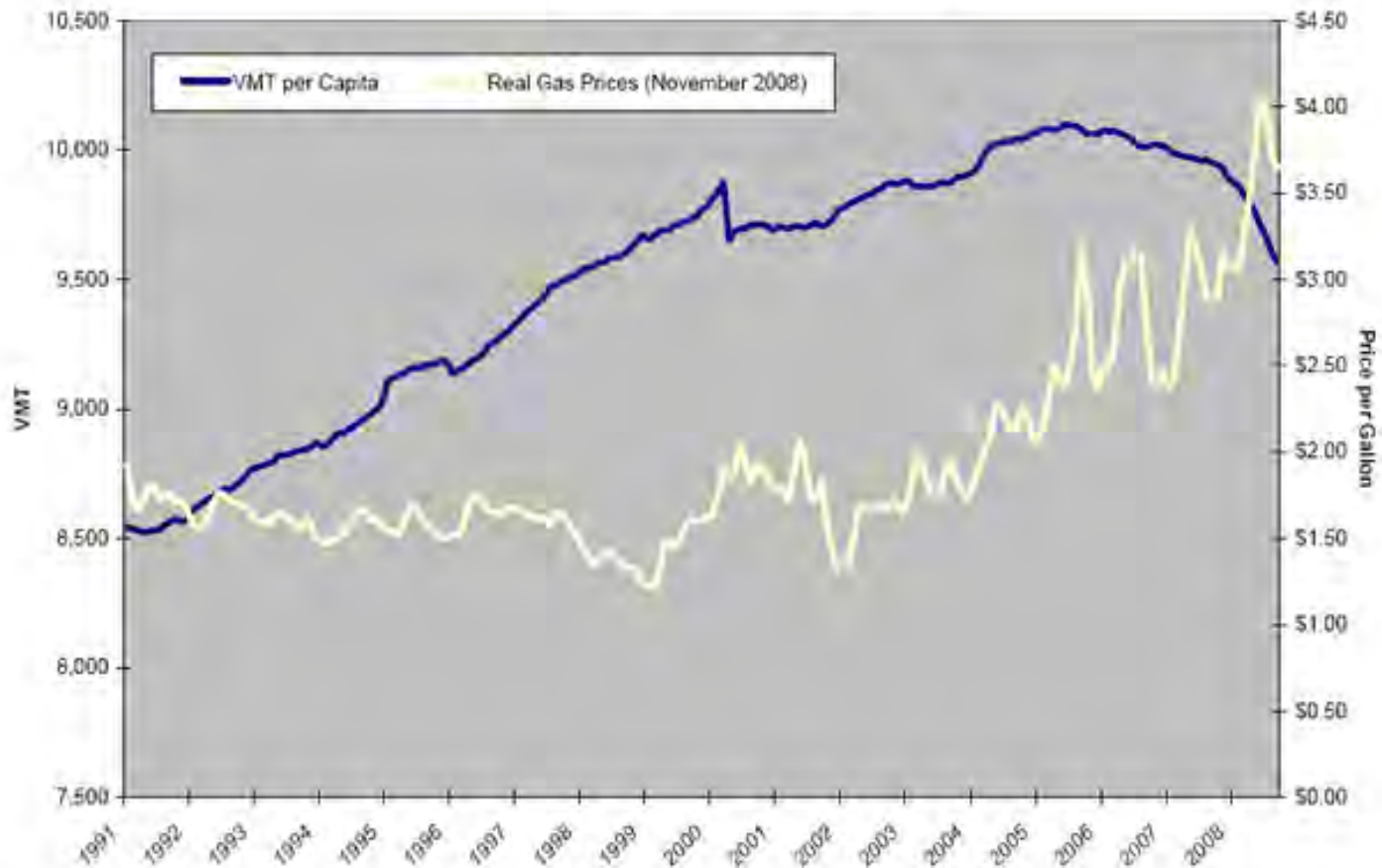
Colin Buchanan and Partners  
London

14<sup>th</sup> May 2009

Growth of Mobility in France. Distance Travelled per Day per Capita (Grubler, 1990)



### U.S. Vehicle Miles Traveled Per Capita, Annualized and Real Gasoline Pump Prices January 1991–September 2008



Source: Traffic Volume Trends and Energy Information Administration

# The conventional solutions

Rail based Park and Ride



Bus based Park and Ride



Park and Cycle





# The issues

## Rail based Park and Ride

- Large conurbations
- Limited routes
- Long waits between services
- Costly to user

## Bus based Park and Ride



## Park and Cycle



# The issues

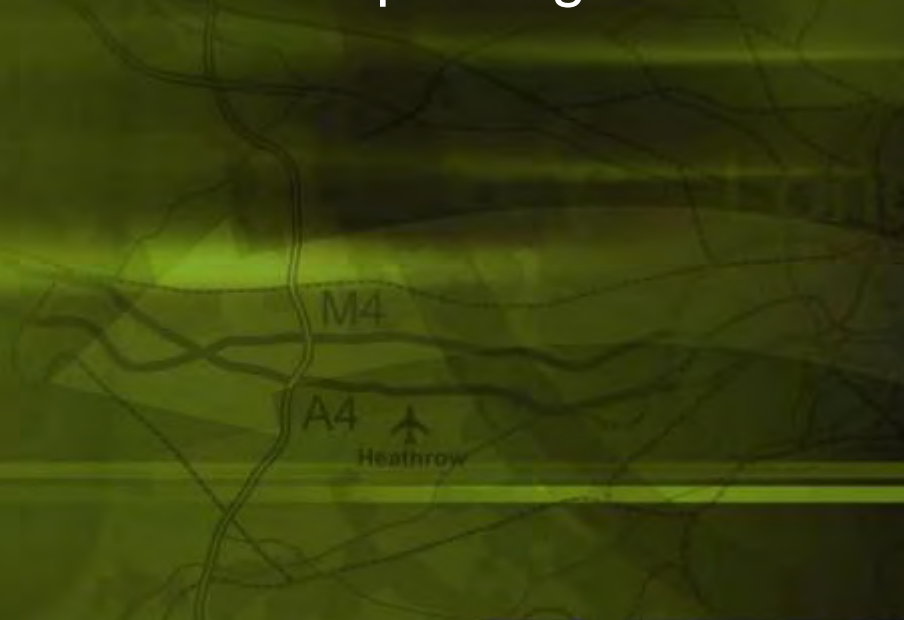
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## Bus based Park and Ride

- Fixed destination
- 10 – 15 minute wait between buses
- Needs to be cheaper than central car parking

## Park and Cycle



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## Park and Cycle

- Requires users to be physically able
- Fair weather use only
- Cycle parking needed at town centre





# An alternative?

- PRT based Park and Ride
- PRT – Personal Rapid Transit





# The issues

## PRT based Park and Ride

- Track based system



Elevated Track

At-grade Track

# The issues

## PRT based Park and Ride

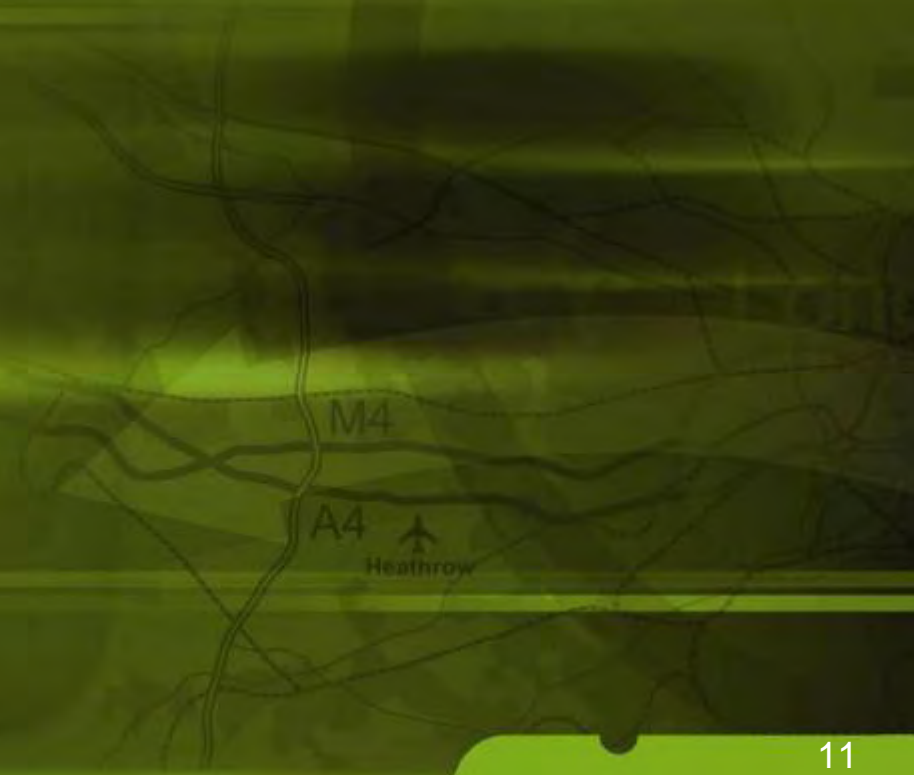
- Track based system



# The benefits

## PRT based Park and Ride

- Small electric powered vehicles
- Quiet
- No drivers
- Continuous service, minimal waiting, service upon arrival
- Small PRT stations
- Service is straight from origin to destination
- Multiple destinations possible

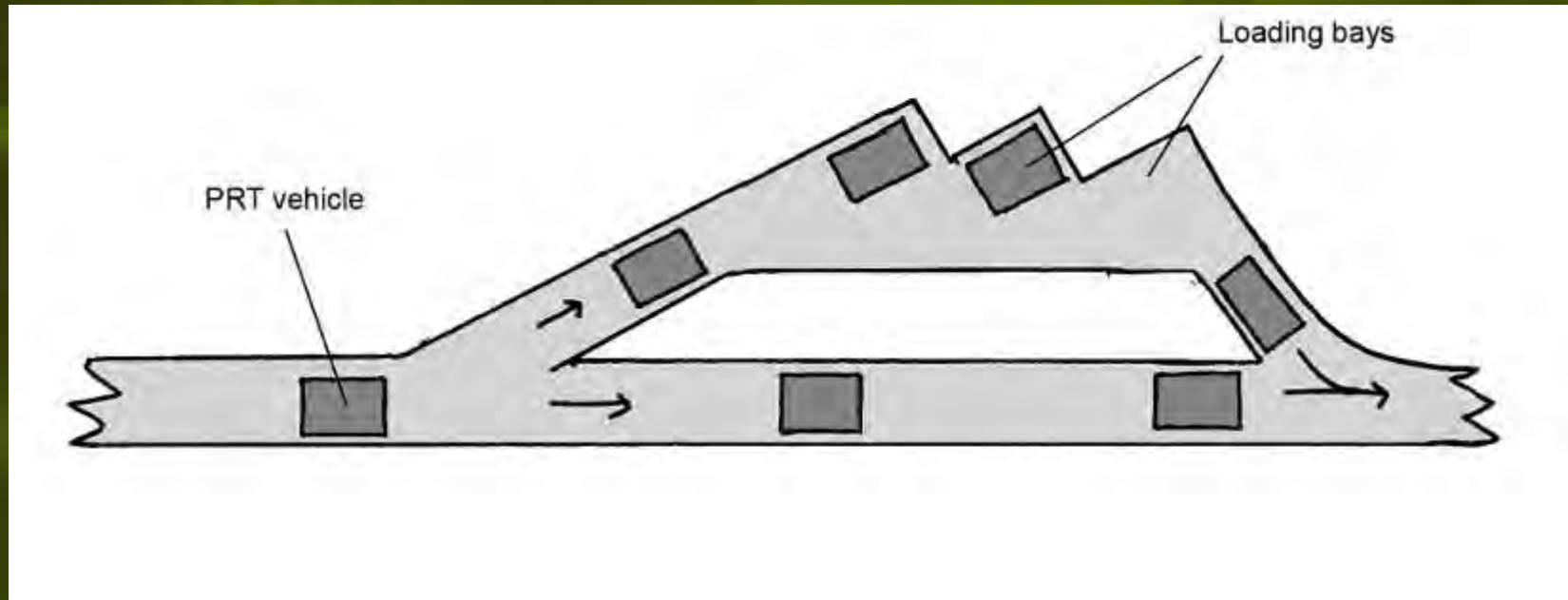




# Stations

PRT based Park and Ride

Indicative PRT station layout (not to scale)



Heathrow

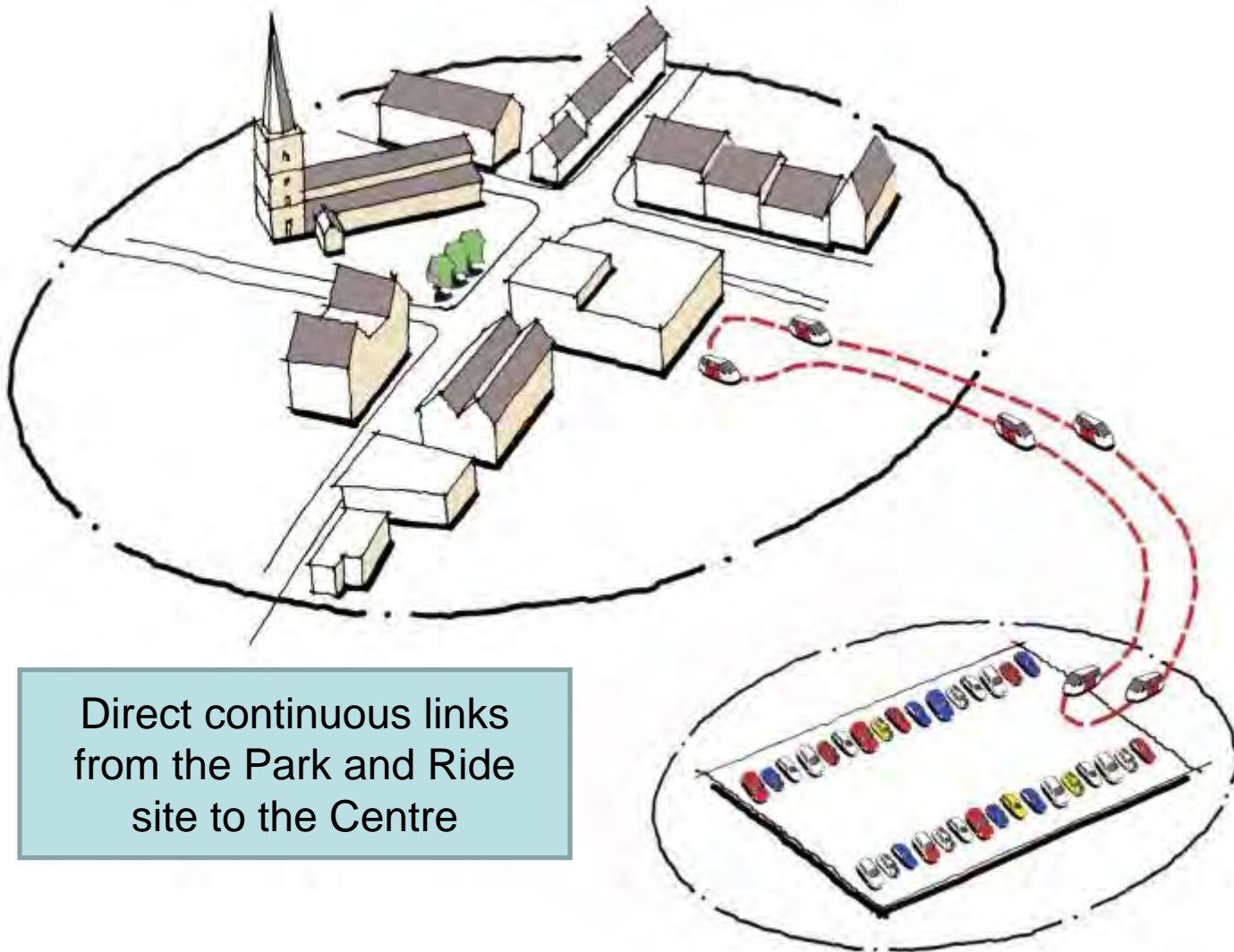
# Stations

PRT based Park and Ride

Typical station view



# Serving the Town Centre



Direct continuous links  
from the Park and Ride  
site to the Centre



# Suitable for Historic Towns?

## Example: Daventry

- Historic market centre surrounded by much modern housing and light industrial development.
- Public transport could be greatly improved and this will reduce future traffic.
- PRT can achieve a far greater improvement than buses
- PRT can probably achieve this commercially: buses will require subsidy
- PRT can also contribute to the planning objectives of Daventry



# Suitable for Historic Towns?

## **Transport: Daventry ambition for transport system gets personal**

**Surveyor - 30/04/2009**

“Daventry in Northamptonshire plans to be the first UK council to install an urban ‘personal rapid transport’ (PRT) system – by 2014.”

“The effect could lift public transport use from its present 4% to some 33% – critical to achieving modal shift as the town’s population doubles under the Government’s Sustainable Communities Plan.”

“Other possible locations include Corby, Kettering and historic towns, such as Bath. Bus operators are interested in PRT networks as potential feeder services for their routes – and, because being driverless, they are cheap to run. “

And this is without Park and Ride.....



# Daventry proposal





# The Way Forward

All that is needed is for the decision makers to have the vision.



Opportunities

Concepts

Movement

Pedestrian

Environment

Thank you for listening

