

# The Effectiveness and Sustainability of Park & Ride

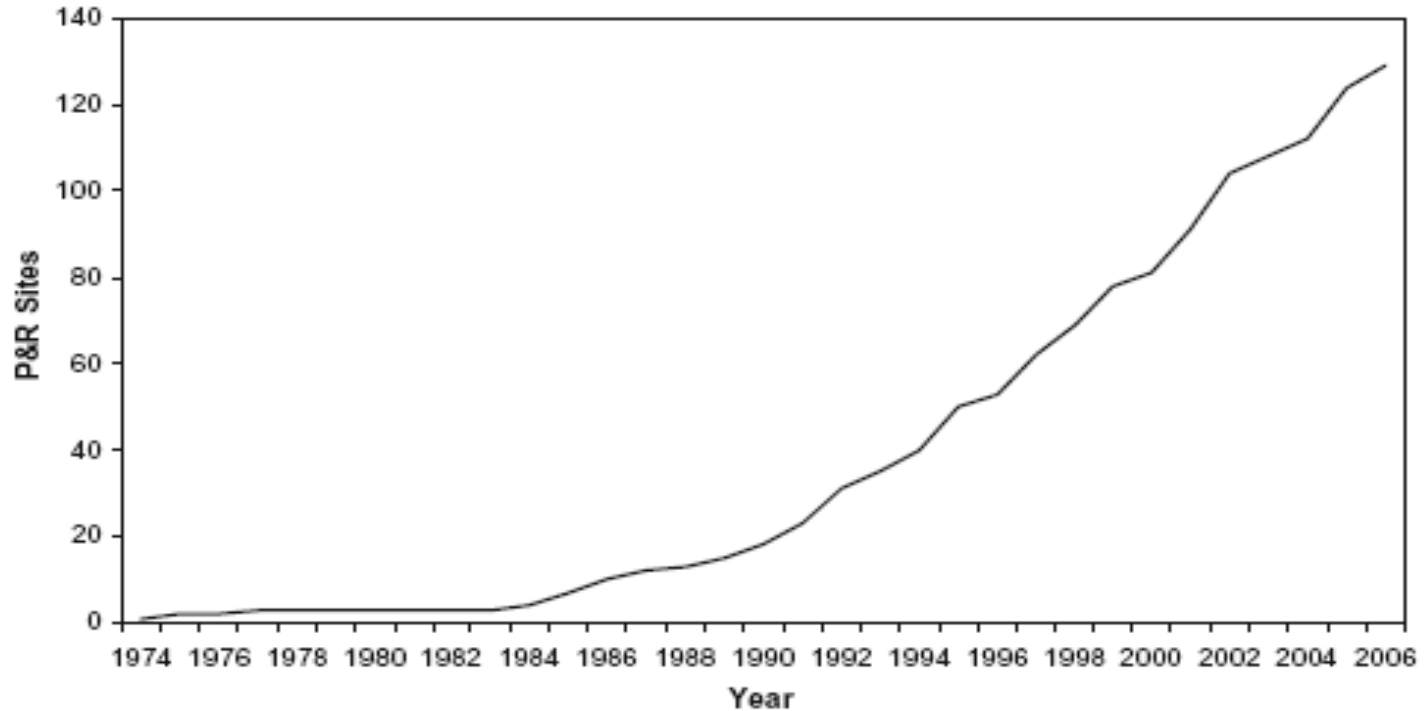
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## Introduction

- Build on work from last year
- New Research
- Examine Role of P&R as sustainable strategy
- Intention – Is there a need for new P&R guidance?
- Views of RPS not HTF

# Introduction

## Number of Park and Ride Sites 1974-2006



Source: Meek et al. (2009, Figure 1)

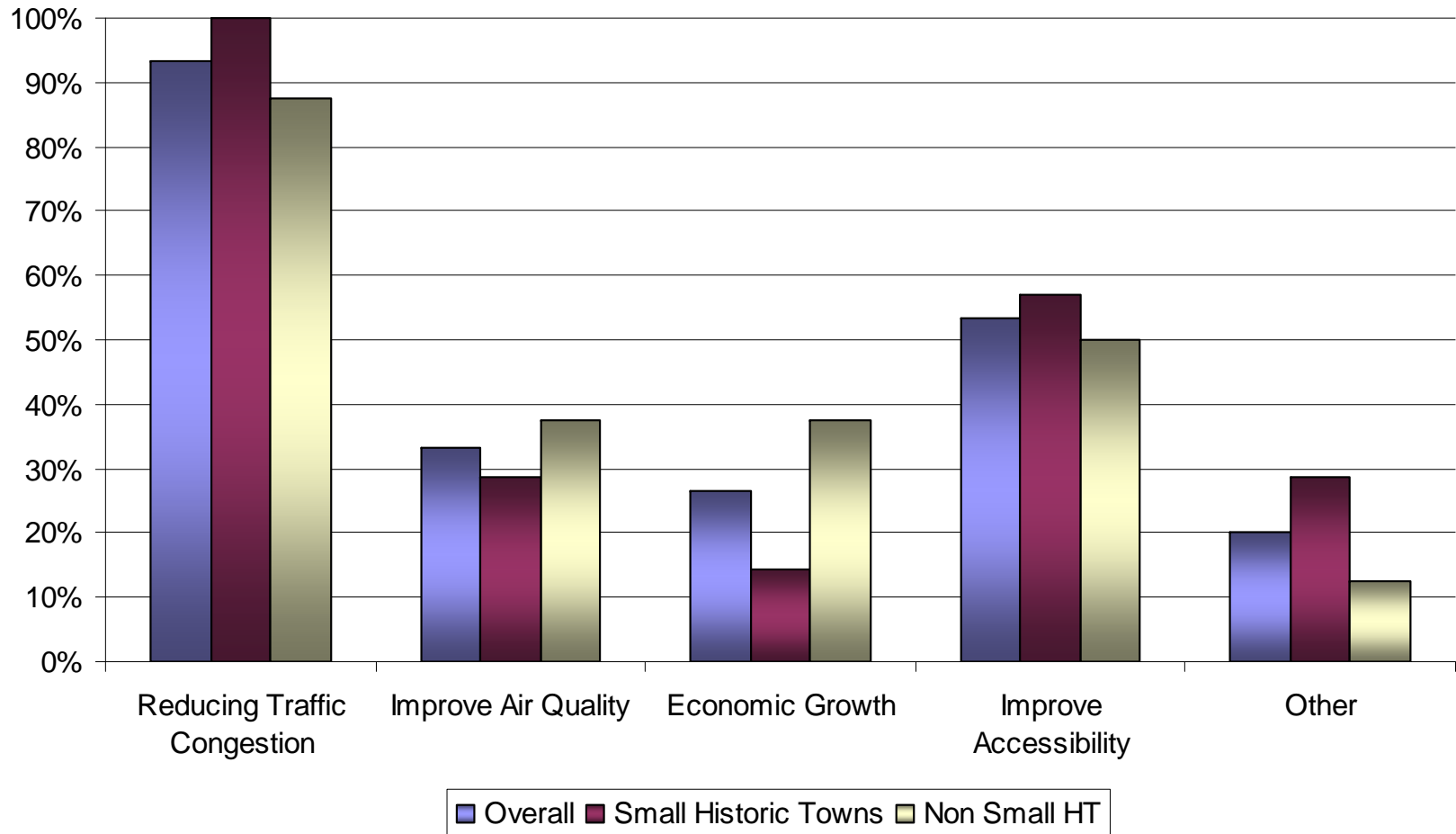
## Survey Results

- Surveys to 31 Local Authorities (LA) with P&R
- 15 LA's responded - 48% response rate
- **93% of LA's considered P&R to be a 'success'**

## Survey – Small Historic Towns

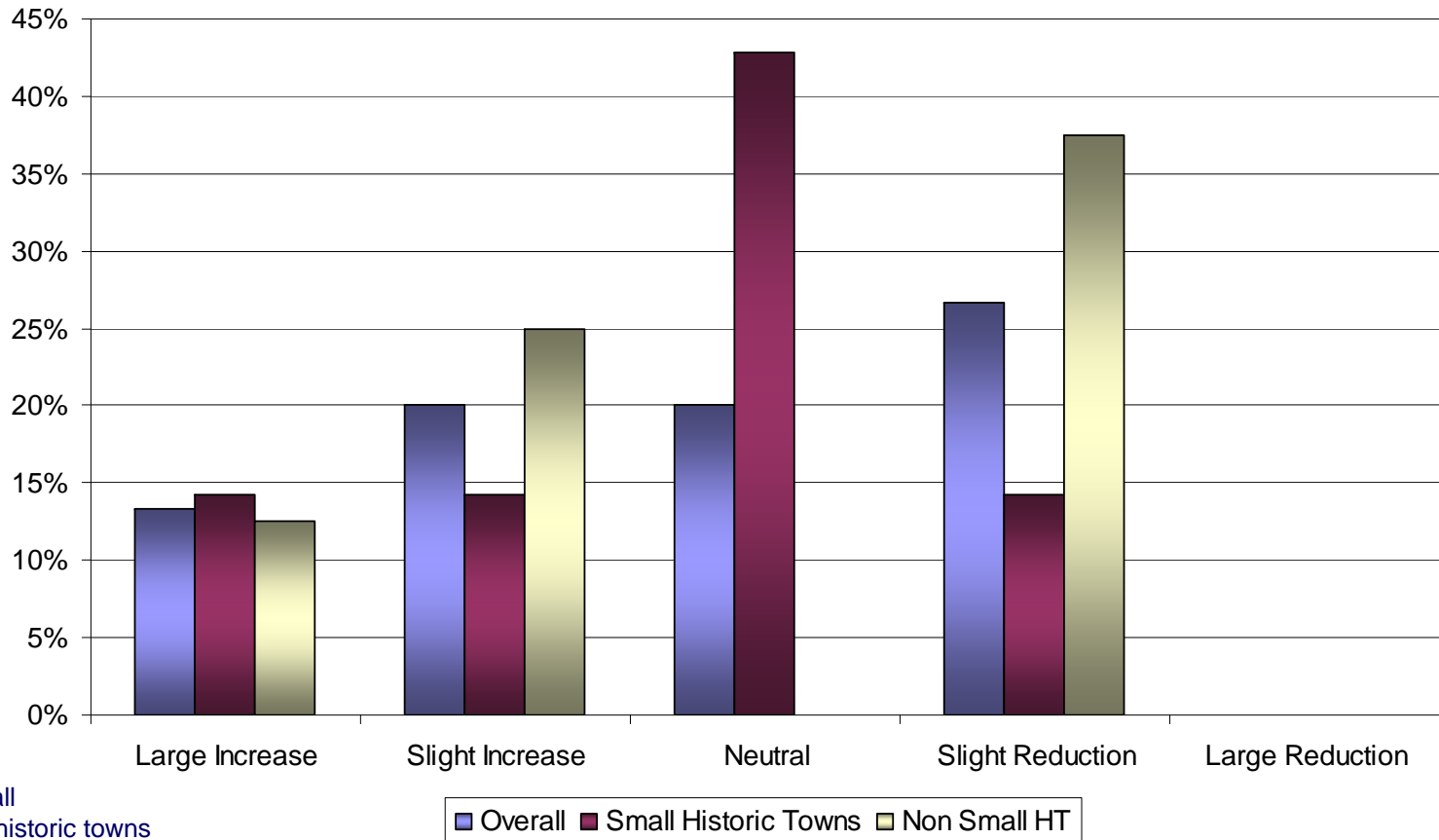
- 7 LA's responsible for P&R sites in 'Small' Historic Towns:
  - Popn. = 65,000 or less
  - Historic Towns as agreed with HTF
- **88% considered P&R to be a 'success'**

## Survey Results - Why P&R?



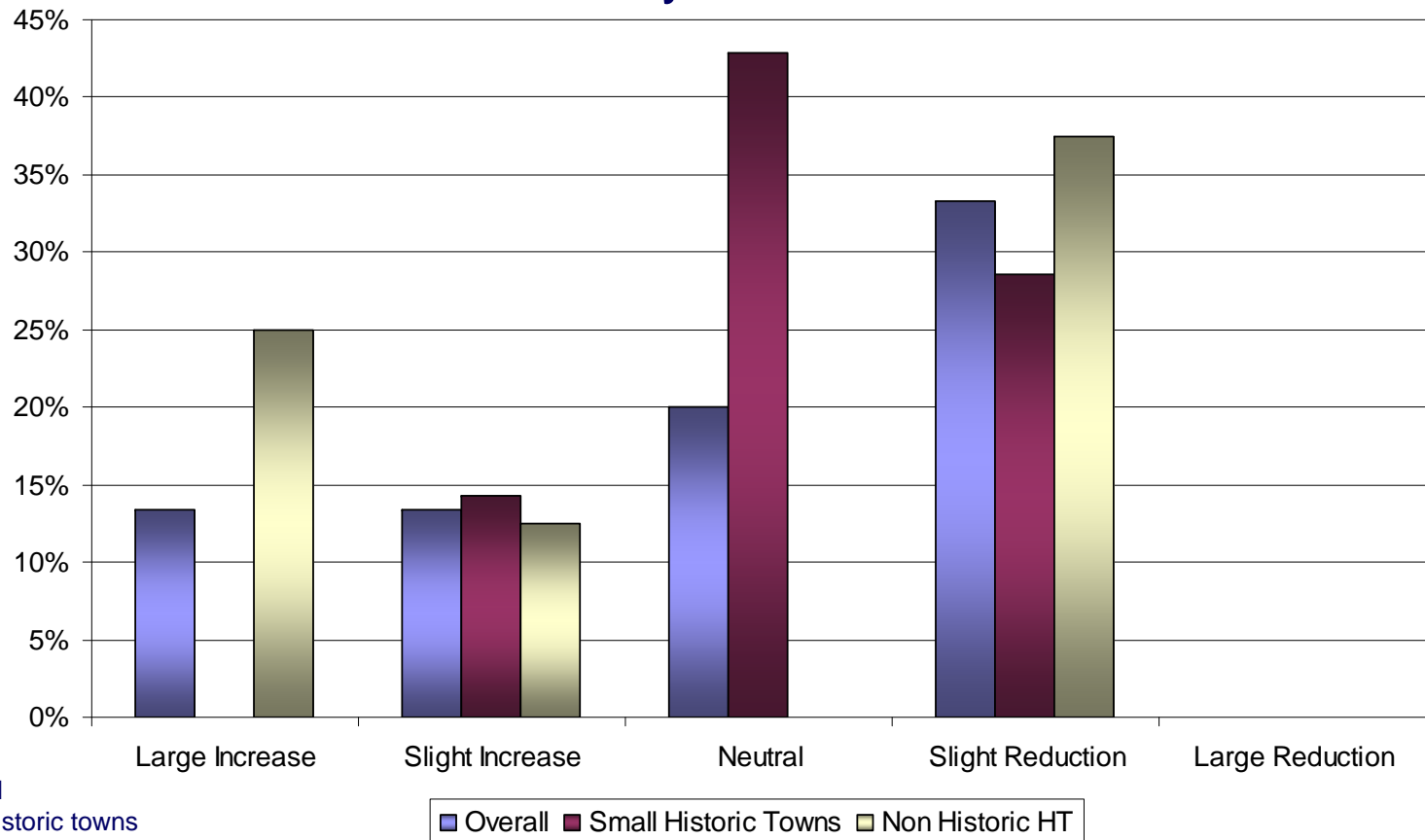
# Survey Results - Traffic Flows

## Peak Periods



# Survey Results - Traffic Flows

## Daily Period



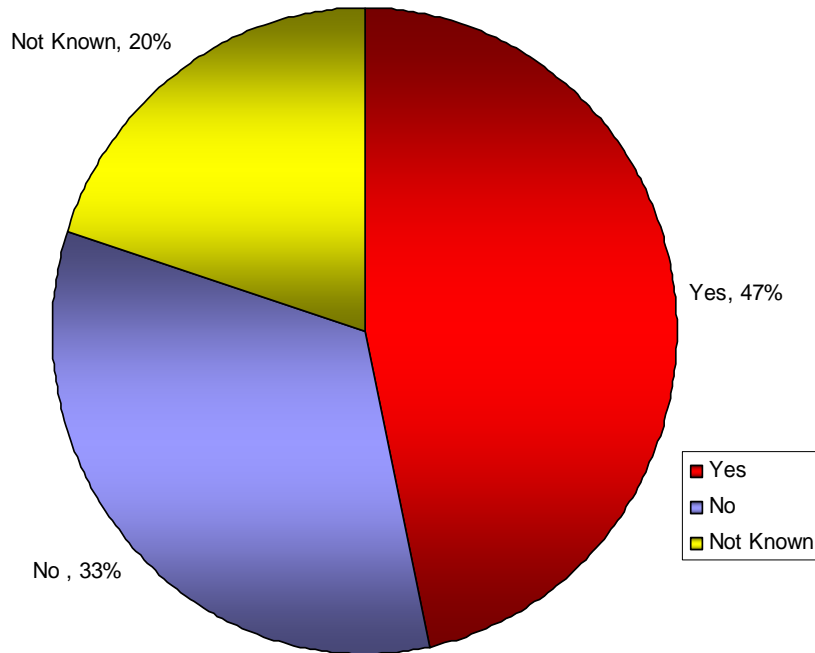


## Survey Results - Congestion

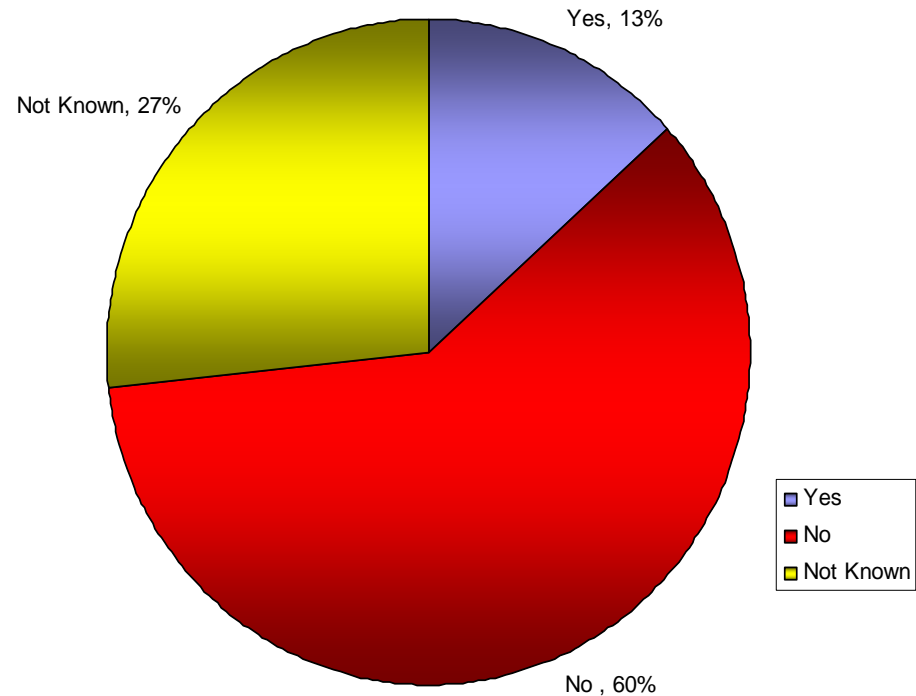
- 29% of LA's have experienced congestion around their P&R
- 87% of LA's have not reduced town centre parking provision in conjunction with the implementation of P&R

## Survey Results - Economy

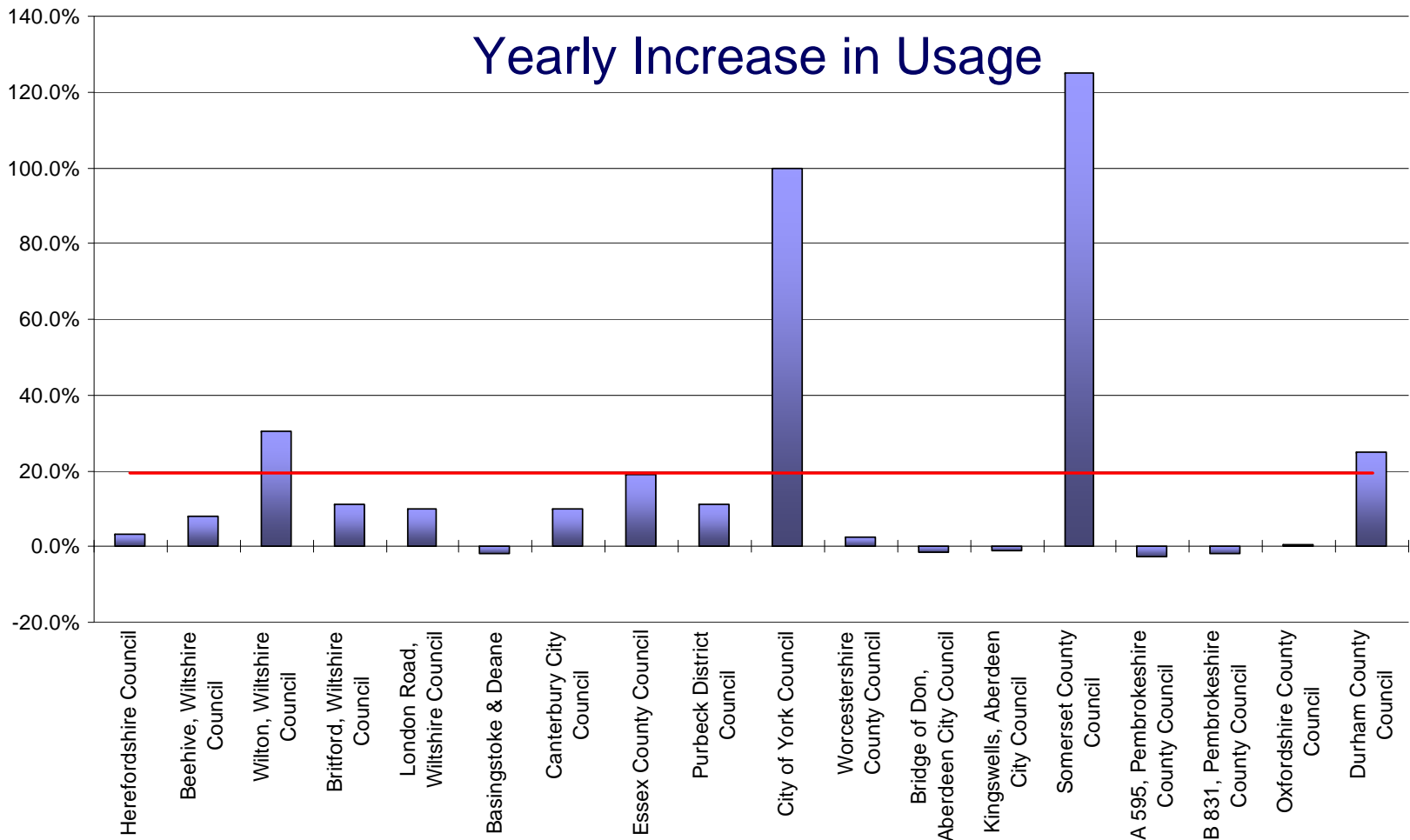
Have local Businesses cited benefits from P&R?



Have Local Businesses cited P&R as a reason to locate there?



# Survey Results - Economy



## Survey Results - Economy

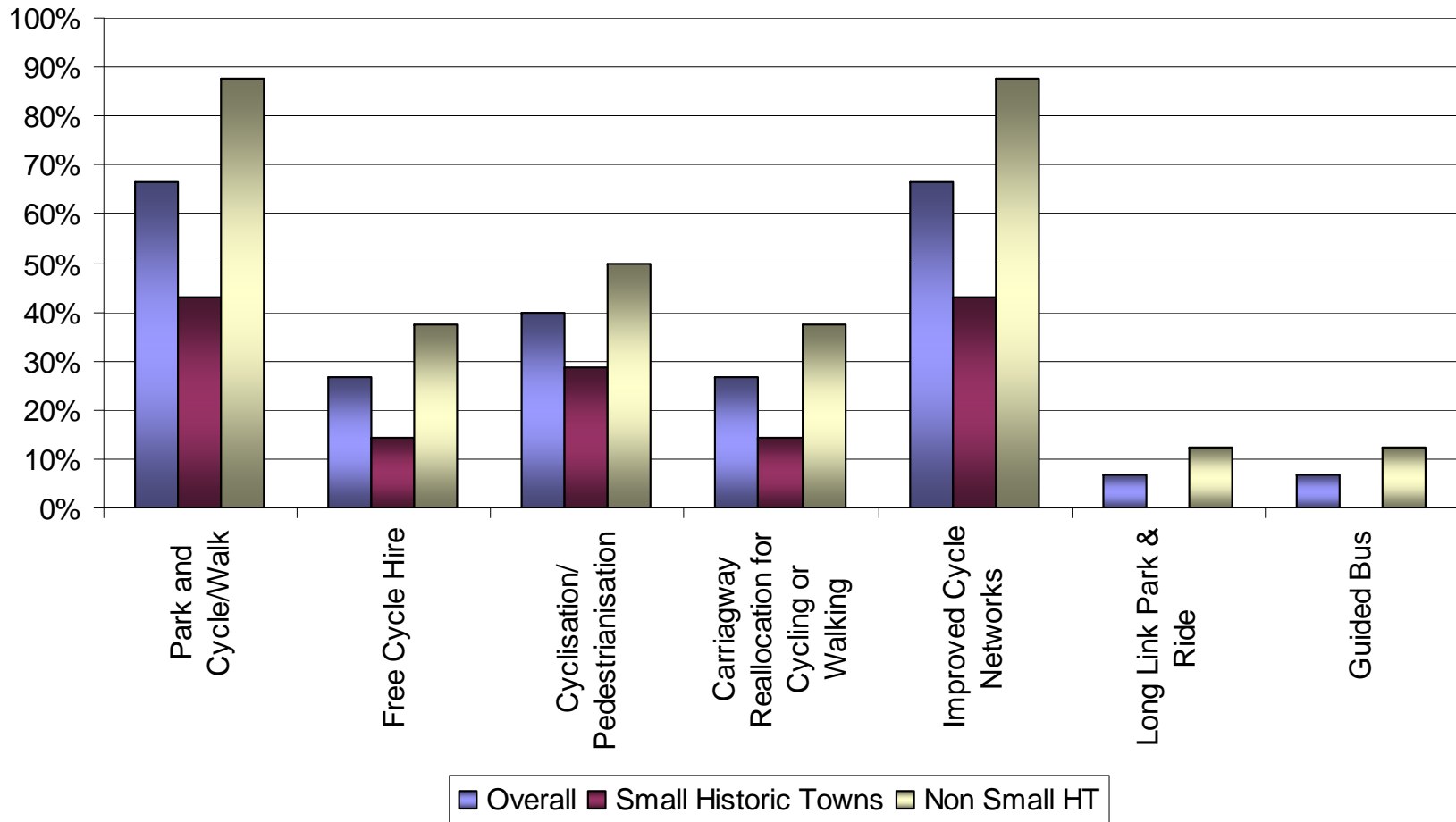
- 56% of LA's subsidise P&R
- Average Cost to Users ~ c£2
- 93% of P&Rs charge for bus use
- Overall average of 19% year on year increase in P&R users
- Around 90% of businesses are satisfied or very satisfied with the P&R

## Survey Results – Comments

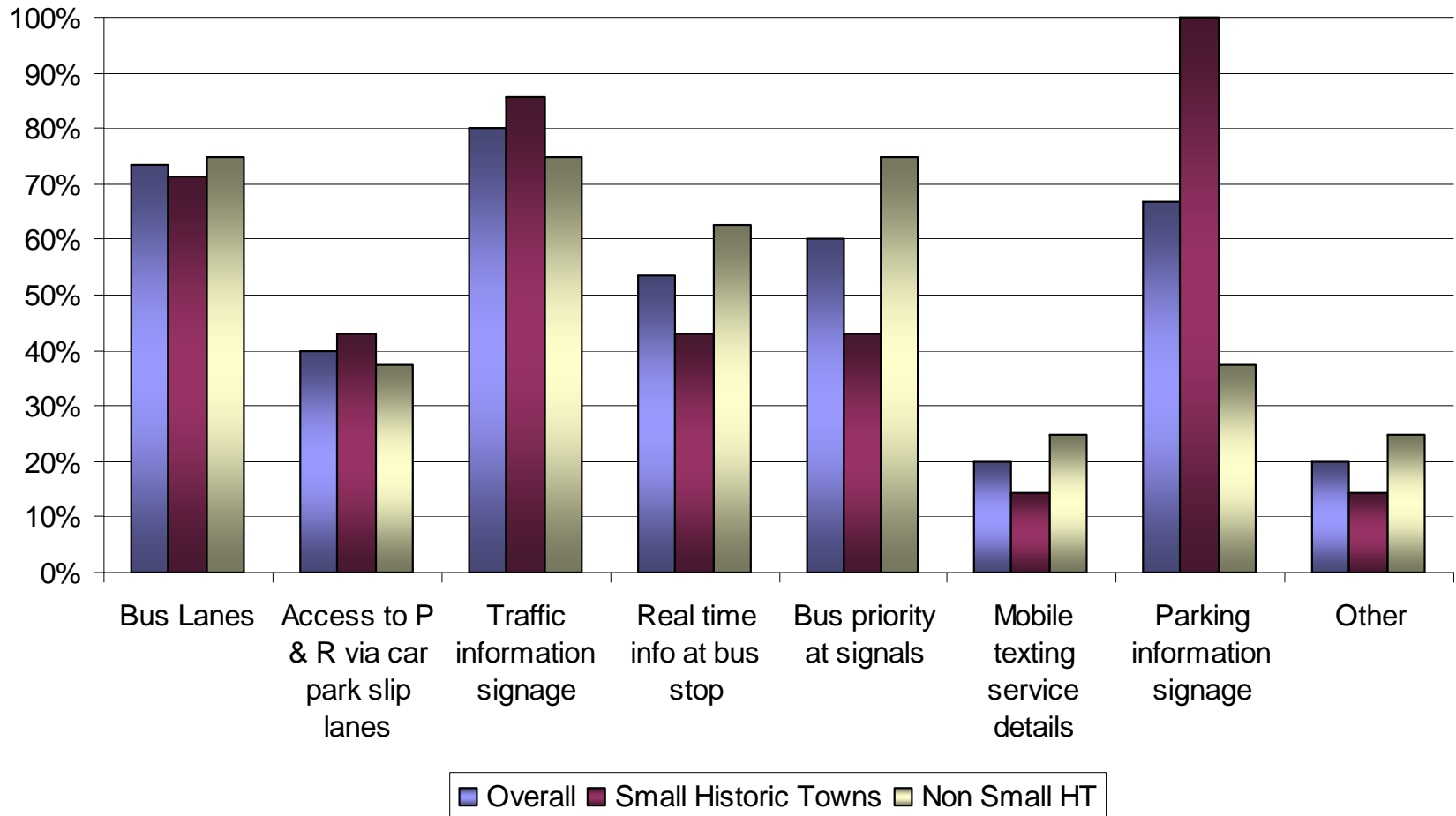
### Main Positive comments from users

- Cost
- Reliability of service
- Standard of Waiting Facilities
- Parking Availability

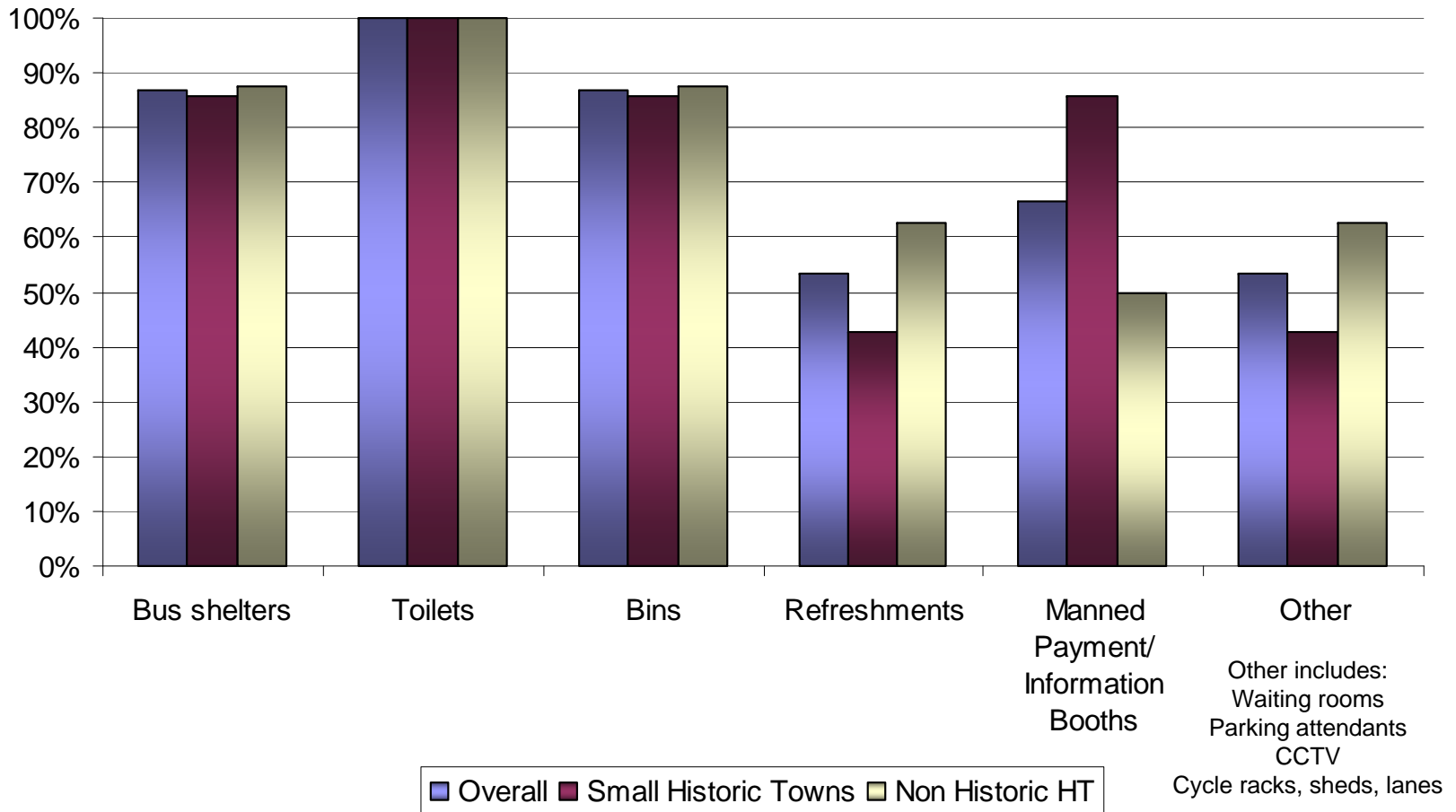
# Survey Results - Alternatives



# Survey Results - Infrastructure



# Survey Results - Facilities at P&R





## Survey Results - Summary

- **94% of LA's considered that P&R was a 'success'**
- However – 93% of P&Rs implemented to improve congestion and;
  - Around Two-thirds had no change or increased traffic flows
  - A third had increased congestion around the P&R sites
  - 80% of LA's did not reduce parking within the town centre
    - 1 additional LA increased parking tariffs
- **Yet... 75% plan to expand their current P&R sites and 81% plan to add additional P&R sites**

## Small Historic Towns - Summary

- **86% considered P&R to be a 'success'**
- **However – 100% of P&Rs implemented to improve congestion;**
  - Around 71% had no change or increased traffic flows
  - 29% saw an increase in congestion around P&R sites
- **Lower % of Considered Alternative Schemes**
- **Yet... 86% plan to expand their current P&R sites or add additional P&R sites (more than others despite worse impacts on congestion)**

## Possible Alternatives

- Cycling Cities
  - Reallocation of Road Space,
  - Improved Cycle Networks,
  - Priority for Cycling over Cars
- Link and Ride
- Park and Cycle
- Public Transport Improvements
  - PT Priority
  - Technology
- Electric Cars and Renewable Energy

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# Cycling Cities



Groningen railway station cycle parking

# Groningen

## 40% of all trips are made via cycle

- Had above national average car ownership;
- Implemented integrated transport strategy favouring pedestrians and cyclists;
- Met with fierce opposition from shopkeepers and business people;
- Groningen has not suffered economically;
- Heavy cycle flows have priority over car traffic;
- Separate signals for cyclists;
- Cyclists are shown a green signal twice per traffic signal cycle;
- Cycle routes have similar travel times to cars;

## Cycle Signals and Lanes in Groningen



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# Groningen

Railway Station Cycle Parking



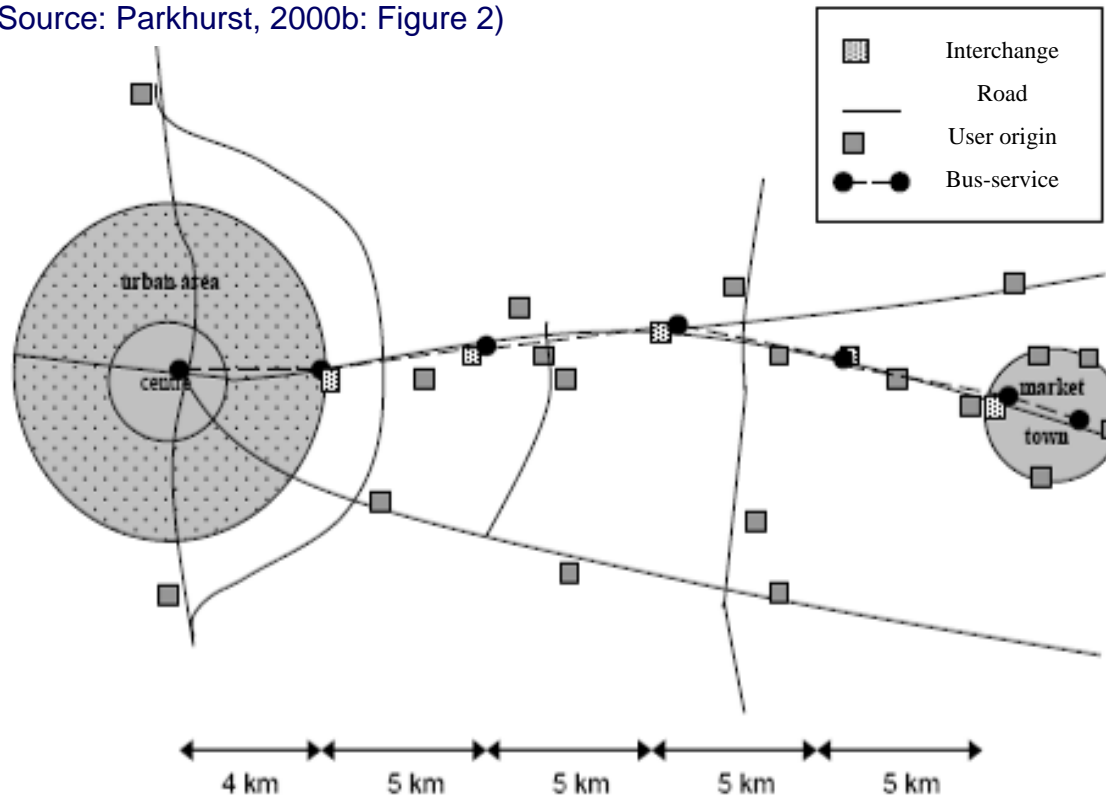
Cycling around Groningen



# Link and Ride

## *Link and Ride Interchange Strategy*

(Source: Parkhurst, 2000b: Figure 2)



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# Park and Cycle

Cambridge

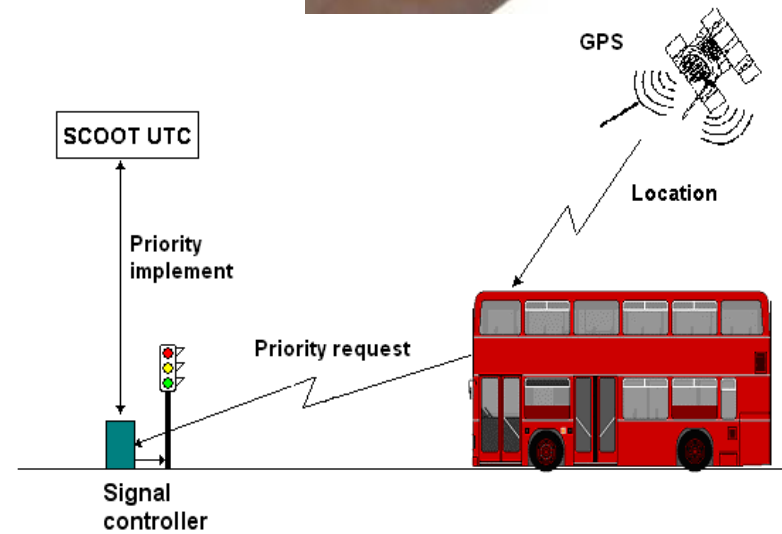
Winchester P&R Cycle Compound





# RPS

## Public Transport



Source: Hounsell et al. (2005)

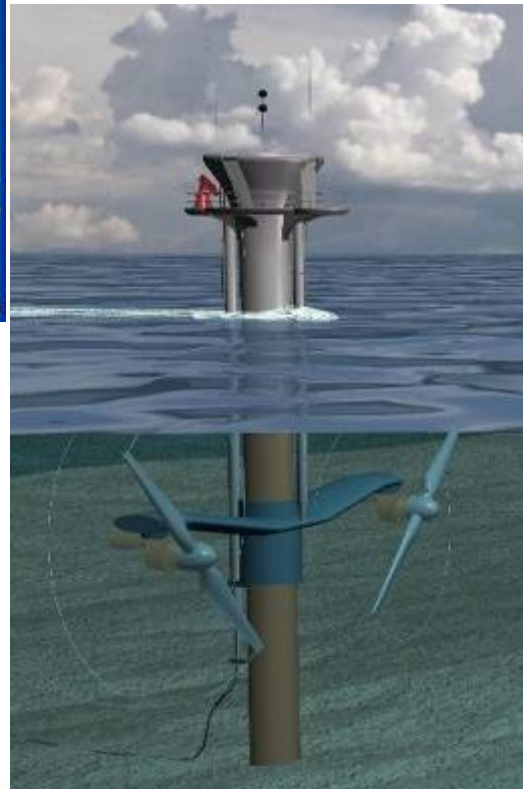
A digital bus stop sign with a black background and yellow text. It displays 'Next Bus : 5 mins' and '(Just time to buy a carton of milk)'. Below the sign is a green banner with the text 'yourtime realtime bus information, coming soon to gloucestershire' and the website 'www.acis.uk.com' and phone number '01452 425610'. There are also logos for 'Bus Stop' and 'yourtime'.

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## Electric Cars and Renewable Energy

Peak Oil

Alternative Energy Sources



## P&R Literature Review

- Studies show both an increase and decrease in car kms from diversions;
- Generates net new trips and at best has a negligible impact on car use and congestion;
- 10% to 40% of users switch from 'conventional' Public Transport –
  - Average around 30%
- Positive economic impact –
  - Increasing the attractiveness of urban centres
  - Increasing trip frequencies (which can also lead to increased traffic);
- Negative impact on social exclusion for those without the use of the car
- Alternative schemes have the potential for congestion, environment, social exclusion, society, economic and health benefits.

# Winchester P&R Study



## Where P&R has not Worked - Stratford-upon-Avon

- Town Management Partnership Paper
  - P&R is 'broken' and under utilised
  - P&R lost about £293,000 in 2006/07 (£407 per parking space)
- Reasons for Failure:
  - District Council website 'sends out the wrong message for visitors'
  - Signage is inadequate
  - Little cash incentive to use P&R
  - Current P&R closes at 1930
  - Inadequate Marketing – users unaware of season tickets

## Where P&R has not Worked - Stratford-upon-Avon

- Suggested Solutions:
  - The Town needs additional P&R!
  - Amending SDC web page
  - Improved Signage
  - Raising Parking Costs in Town
  - Season Tickets only at P&R
  - Extending P&R opening hours
  - Aggressive Marketing to commuters

# Conclusions

- What do we mean by 'success'
- P&R on reduced scale
- Greater emphasis on alternative solutions
  - Politically Unpopular
  - Integrated Transport Strategies
  - More 'radical' thinking –solutions to really reduce car use
  - Successful in Long Term, change in attitudes and behaviour and new users
  - Success demonstrated in other cities
  - Retain accessibility levels
- Global vs Local Issue (economic vs environmental)
- Has P&R had its day?

## Whats Next?

- More Detailed Feasibility Study of Alternatives
- Incorporating Additional Material from HTF Delegates
- Develop Ideas in HTF in the afternoon Workshop
  - Identify Gaps in HTF guidance and find out what delegates would like to do
- Revised HTF P&R guidance (web-based)