

# Central London Congestion Charging Scheme

Has it Achieved its Objectives?



**Derek Turner**

Principal, Derek Turner Consulting

# The scheme has been very successful



Congestion  
charging...

**“C is for calm: commuters stay away as London brings in congestion charge”**

60,000 fewer car movements  
per day enter the charging zone

Around 110,000 people a day pay the  
congestion charge

“The people who said it  
would never work were  
wrong”

– *Alistair Darling,  
Secretary of State for  
Transport*



“This is the best idea since  
the Underground. Like that  
was, charging is a bold  
vision that could help us  
rethink transport.”

*Transport 2000*

# Agenda

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## Introduction to Derek Turner Consulting

Objectives of the Scheme

Background and Issues

The Scheme

How the Scheme operates

Overview of scheme performance

Traffic conditions

Public transport

Lessons learnt and Insights

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## Derek Turner brings years of traffic management expertise

- Former Managing Director for street management
- Introduced congestion charging in London

“I brought Derek Turner in to deliver congestion charging and my confidence in him has been rewarded. He is one of the finest public servants I have ever worked with.” *Ken Livingstone, Mayor of London (May 2003)*

- Derek Turner Consulting (DTC) is a strategic consultancy specialising in:
  - road user charging schemes
  - transport policy
  - strategic project and organisational management
- DTC has formed operational alliances to provide greater scope of delivery

## Objectives of the scheme

- Reduce Central London traffic levels by 10-15%
- Cut road transport delays by 15-25%
- Increase speeds by 10-15% inside zone
- Improve conditions outside zone
- Improve bus operations
- Produce net revenue of £130m p.a.
- Achieve a modal shift

Objectives

## London was in severe need of a charging scheme

- “ ...**transport has become the number one concern** for businesses in London...” *London Chamber of Commerce and Industry (1999)*
- 90% Greater London residents said “**there is too much traffic in London**” *ROCOL Group 1999*
- 80% of motorists found congestion in London as “**very serious**” *Lex Report (1999)*
- Central London **average traffic speeds of 16km/h** during the working day

## There were many possible methods of charging road users

- Cordon entry permit
  - Payment on passing through toll plaza
- Area License
  - Paper licenses for visual inspection, option of database
  - Virtual license with enforcement by digital camera
  - Electronic Road Pricing systems
- Workplace Parking Levy

## Issues affecting scheme introduction

- Legal powers granted in 1999/2000 to introduce a scheme
- Road Charging Options for London (ROCOL) report published 2000
- *Political issues:*
  - Congestion charging key issue of first mayoral elections (2000)
  - Scheme required delivery within timescale of Mayor's first term
- *Delivery Issues*
  - Project team assembly
  - Integration of in-house and management consultancy teams
  - Procurement for a £230m project:
  - World's largest road user charging operation

### Background & Issues



## The central London congestion charge scheme is comprised of...

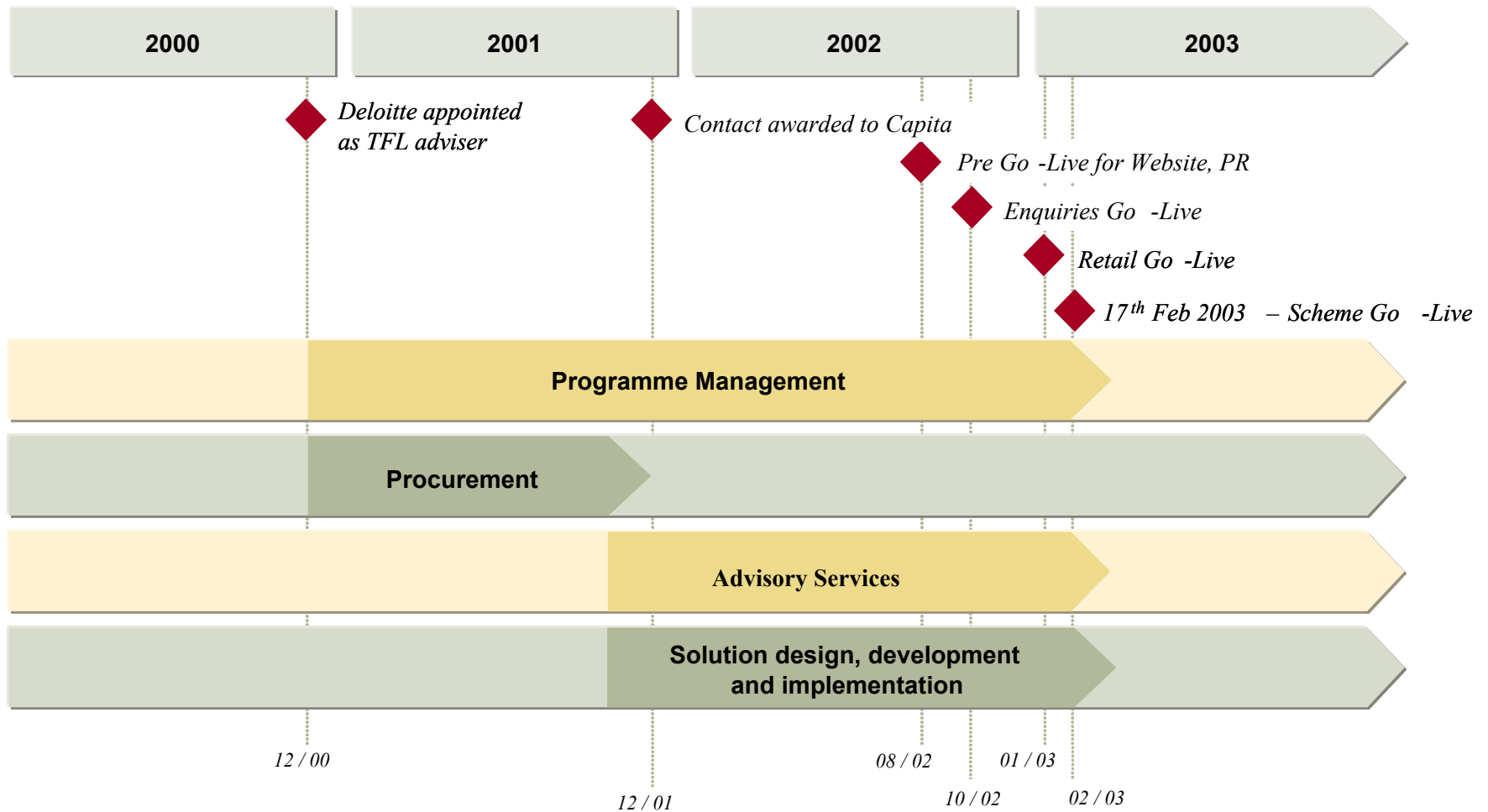
- Virtual area license with complementary database
- Enforcement using Automatic Number Plate Recognition (ANPR)
- Cameras located on boundary of zone and within charging area

### The advantages to this are:

- “Intermediate technology” scheme allowed rapid implementation
- Cameras enabled greater scope for enforcement
- Ability to discriminate by vehicle type
- Payment easier – can be made on day of travel
- Possibility of future development into tag and beacon system

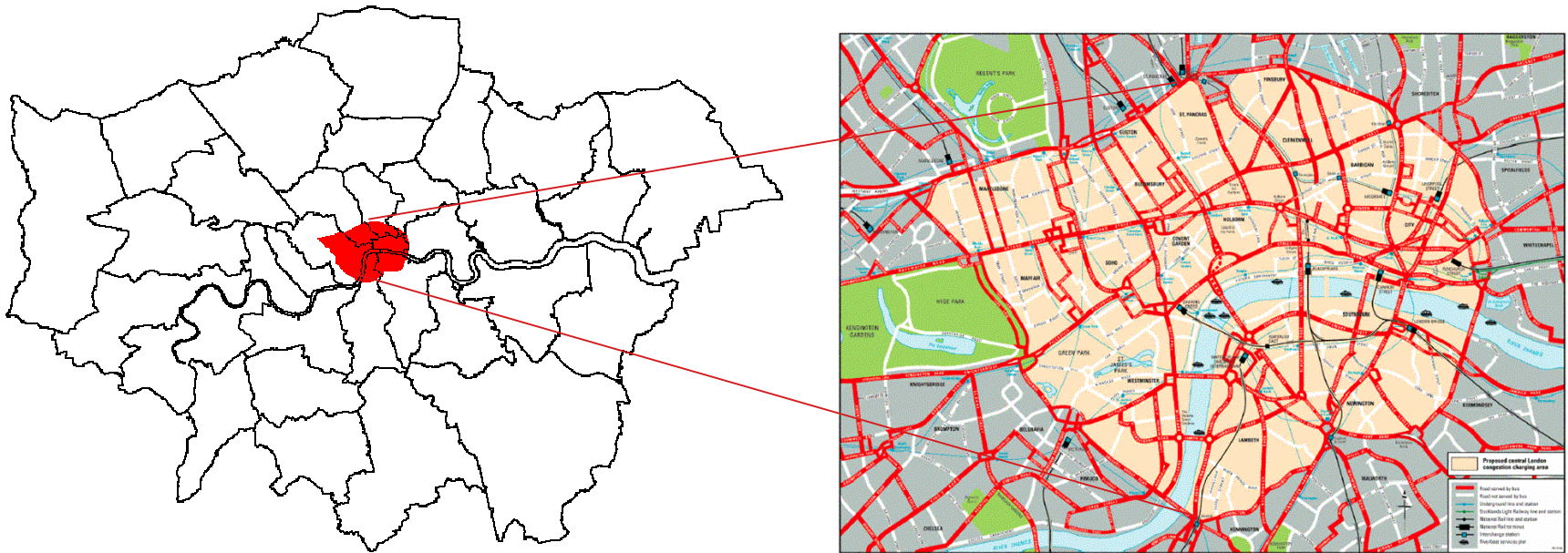
The Scheme

# Timescale for implementation was 2 years



## The Scheme

The congestion charging zone is small part of London as a whole..

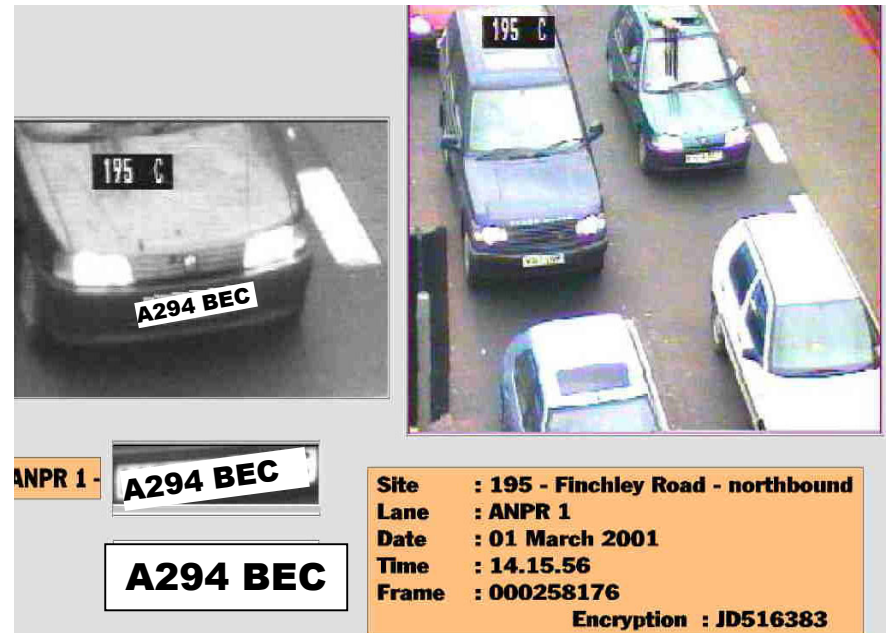
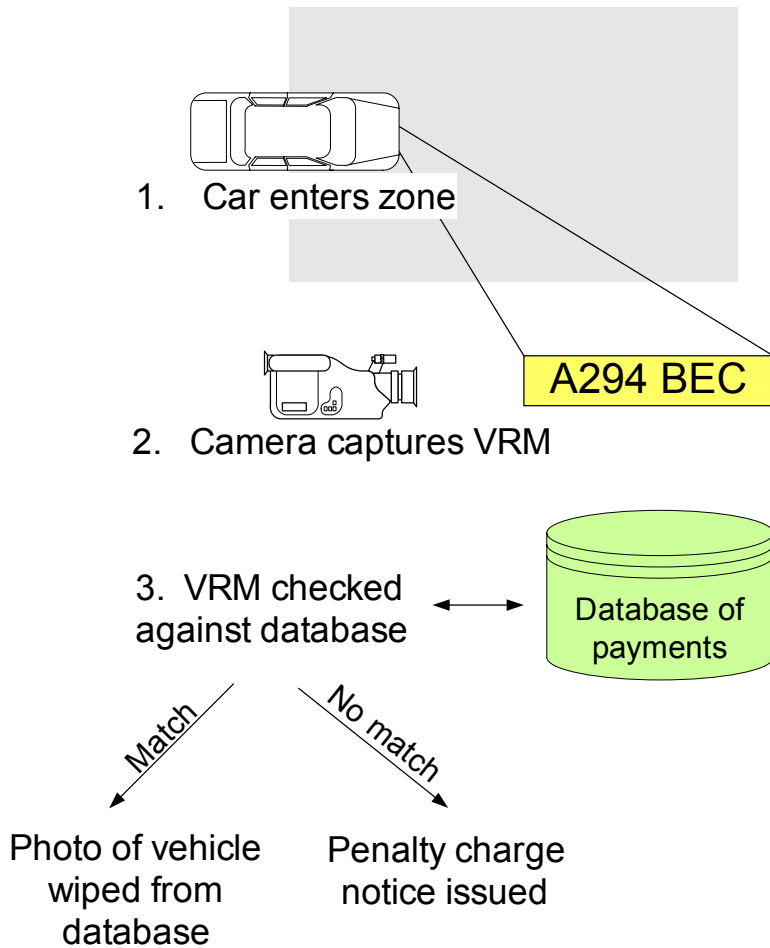


but covers a 21km<sup>2</sup> charging zone with around 200,000 vehicles a day on some of London's most congested streets.

## The Scheme

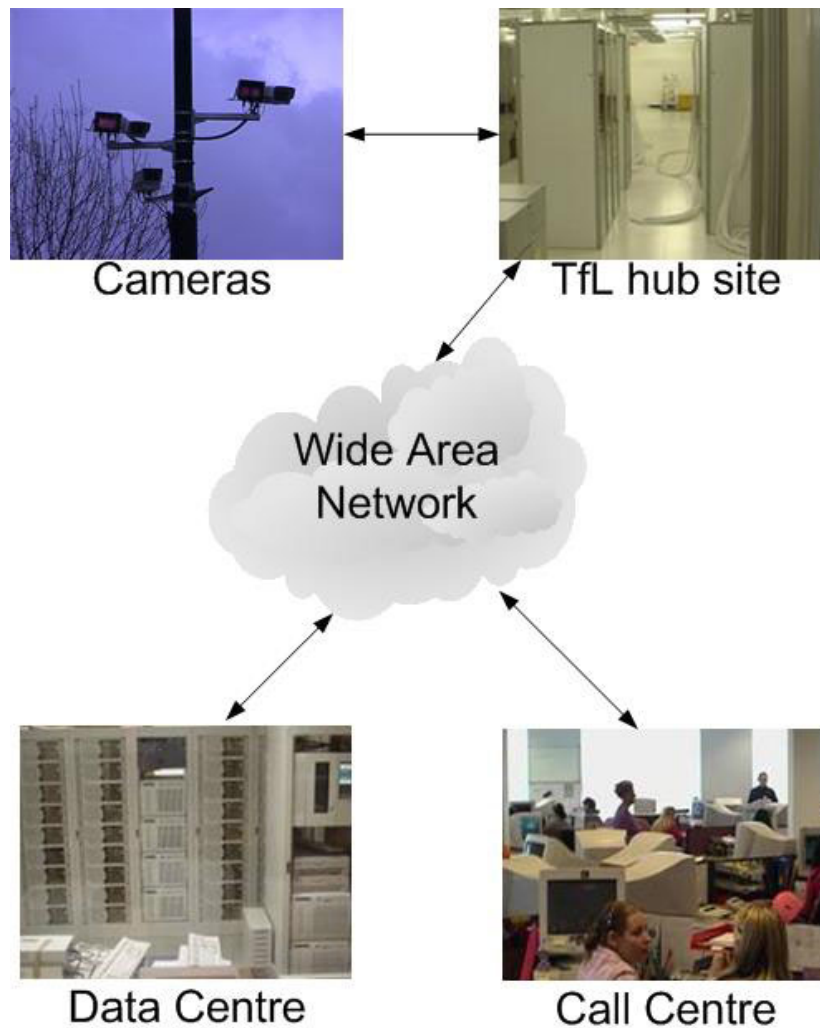
# The zone is monitored by digital cameras..

...automatic number plate recognition technology enables information regarding capture and keeper to be identified.



How it operates

...and is supported by a comprehensive communications network



How it operates

## A simple charge structure, a variety of payment options..

### *Who is charged?*

- £5 per day
- By vehicle registration mark
- Payment made daily, weekly, monthly or annually
- Weekdays, 7am - 6.30pm
- Those vehicles not exempt
- Payment in advance or until 12am of day zone entered
- Charge doubles after 10pm

### *How to pay*

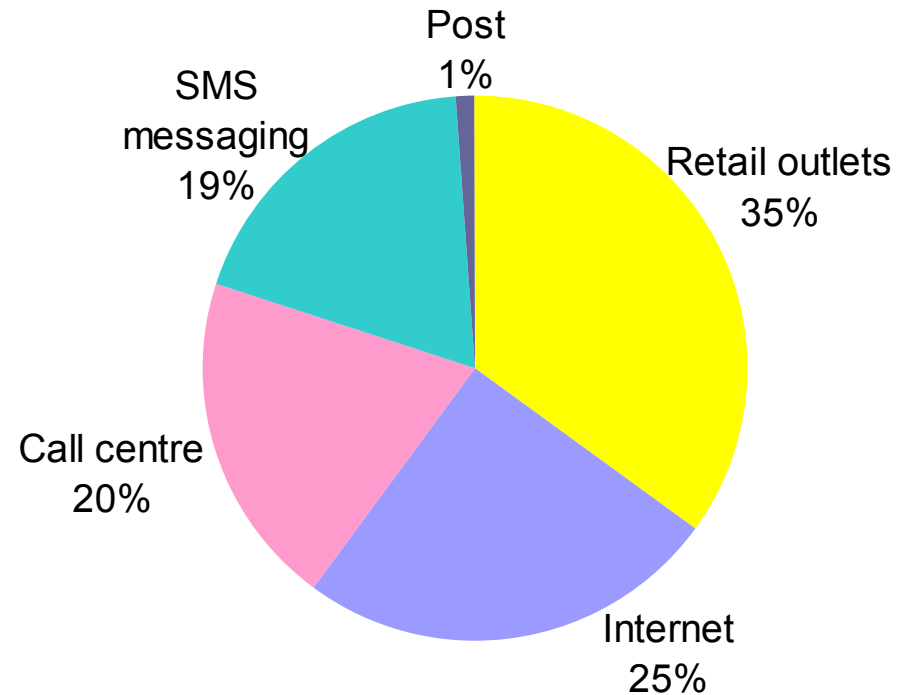
- [www.cclondon.com](http://www.cclondon.com)
- SMS text messaging
- 200 PayPoint outlets in zone
- 9000 PayPoints nationwide
- Free standing machines in car parks in zone
- Post
- Phone

How it operates

# A major public information campaign resulted in trouble free use

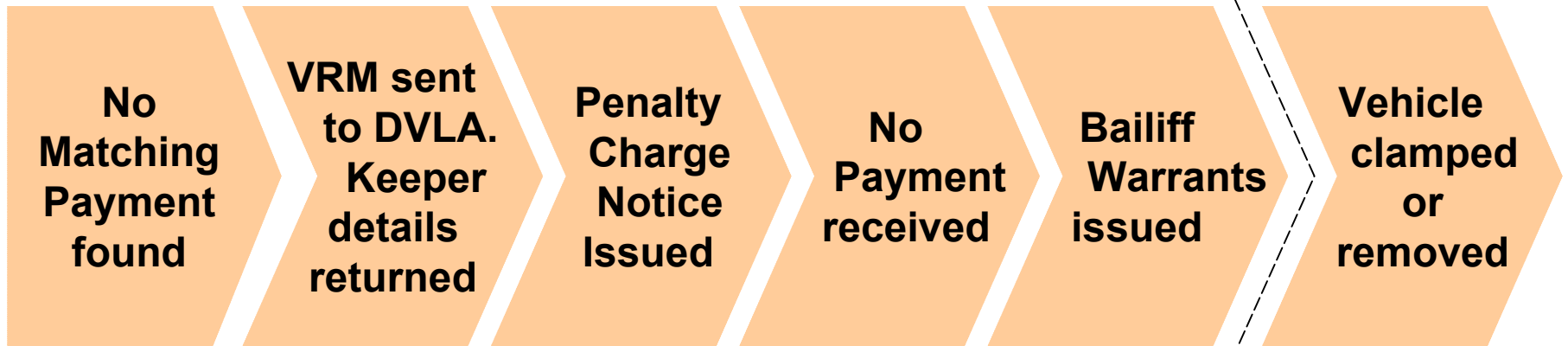
- Leaflets to 3 million households
- Over 35,000 packs to businesses operating fleets of 25 or more vehicles
- Call centre (0845 900 1234)
- Advertising on TV, radio, newspapers
- [www.cclondon.com](http://www.cclondon.com)
- Face to face activity in boroughs
- Emails to businesses in and around London

## Split of payment channels Feb - Aug 2003



How it operates

## Strict enforcement...



- £80 penalty charge is reduced if paid within 14 days
- Representations received in response to PCNs may result from incorrect input of vehicle registration detail

Persistent Evaders

How it operates



## ...and a thorough monitoring strategy

- Scheme supported by comprehensive Impacts Monitoring Strategy
- Provides feedback on detailed operation and effects of the scheme
- Results published each year
- 5-year programme
- Covers impacts on: Traffic & Transport, Business, Economy, Social Groups and Environment

How it operates

...enabled a successful launch and on-going performance

## **This is the world's largest congestion charging scheme:**

- Congestion has decreased by 30%
- Average weekday speeds in and around the zone increased by 10%-20%
- Public transport is coping well
- Buses are benefiting from reduced congestion
- Payment systems working satisfactorily
- PCNs issued at an average of 3% of payments received
- Public remains supportive of scheme

***“We always thought we had to live with congestion in our city centres. London has shown this is no longer true.”***

*- Susan Kramer (board member for Transport for London and previous Liberal Democrat mayoral candidate)*

**Performance Overview**

## Vehicle data capture allowed new traffic management procedures

- Working with London boroughs
- Successful accommodation of traffic diverting to the boundary route around the congestion zone
- Managing “knock-on effects” such as:
  - traffic calming
  - parking management
- Improved enforcement of parking and loading restrictions
- Improved co-ordination of street works

# Substantial advantages for London's transport can be seen

Time spent stationary or  
<10km/h

25%

Traffic delays

30%

Journey times to, from and  
across charging zone

14%

Excess bus waiting times on  
routes serving charging zone

33%

...as well as

- reduction in road accidents within zone
- expected net revenue for 2003/04 of £68million

Performance Overview

## ...as well as good public reaction

- The scheme processes large volumes of payments on a daily basis

Payments per day	108,000
Fleets	12,000

- Driver responses to the scheme have settled
- Enquiries or payments at call centres have fallen from an average of 167,000 per week to 70,000
- Payment rates for PCNs (Penalty Charge Notices) have steadily increased
- Representations received in response to PCNs has decreased from 62% to 16% since early weeks of scheme

### Performance Overview

## ...and a generation of net economic benefits

<b>Costs</b>	<b>£ million</b>	<b>Annual Benefits</b>	<b>£ million</b>
– TfL admin & other	5	– Time saving	155
– Scheme operation	90	– Reliability benefits	20
– Additional bus costs	20	– Vehicle fuel & operating savings	10
– Chargepayer compliance	15	– Accident saving	15
		– Disbenefit to former car-users	-20
<b>Total</b>	<b>130</b>	<b>Total</b>	<b>180</b>

These benefits are exclusive of the forecast net revenues of the scheme:

- £ 68 million in 2003/04
- £ 80 – 100 million per year thereafter

Performance Overview

## Prior to go-live, public support for the scheme was significant...

56% think congestion charging will cut traffic in central London\*

Two thirds of Londoners believe congestion charging will deliver some benefits\*

One third will use their car less in central London\*

Opinion poll\$ shows support for charging:  
46% for charging  
43% against charging

93% of respondents want action on congestion

\* RAC "Making the most of Britain's Roads Report 2003  
\$ Evening Standard 2002

**Performance Overview**

... though many local and national organisations were sceptical

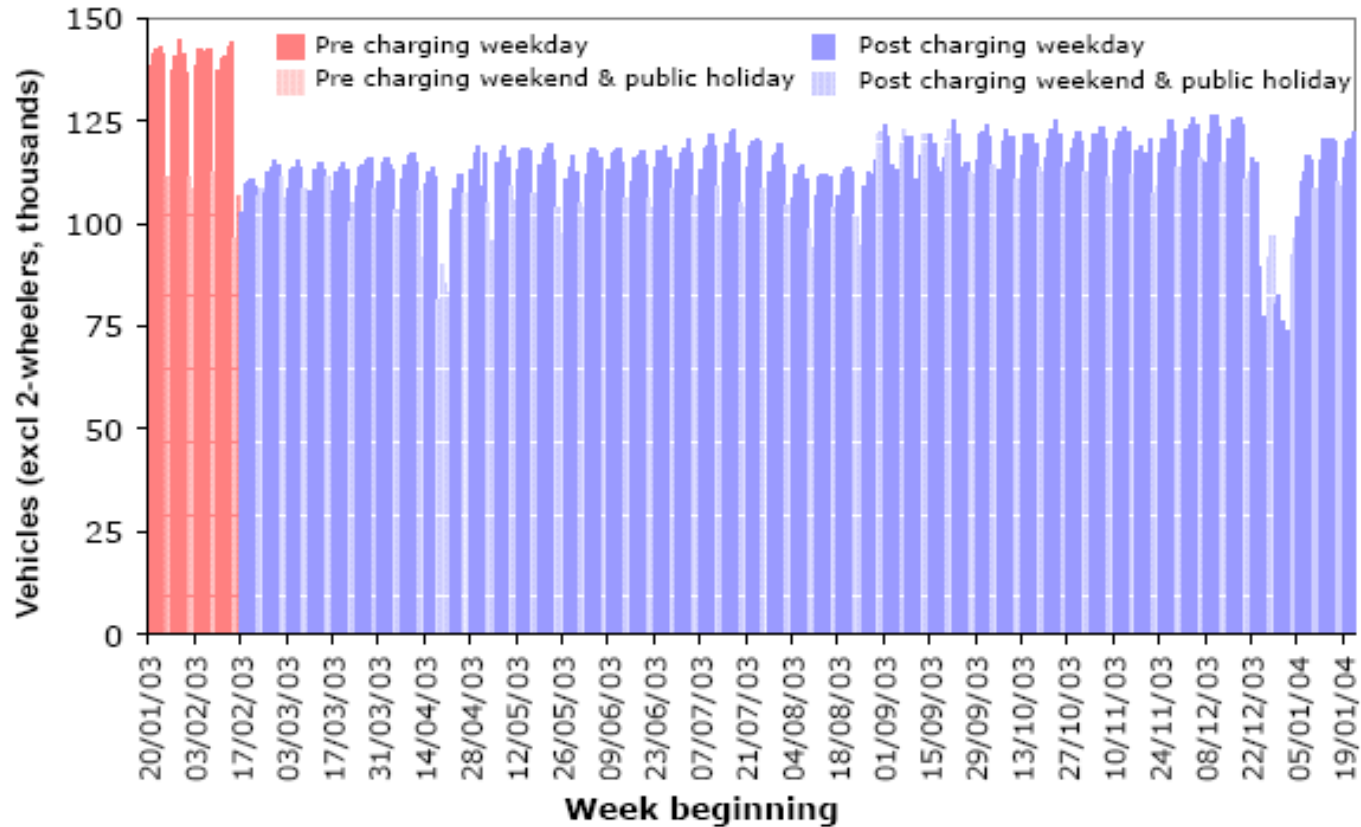
- “It will be many years before the plans will come into effect - if at all.”
  - *Evening Standard*
- “It’s going too far too fast.”
  - *The Automobile Association*
- “Something needs to be done but we are not convinced this is the answer”
  - *Westminster City Council*

Performance Overview



# Reduction in inbound traffic flow is significant and enduring

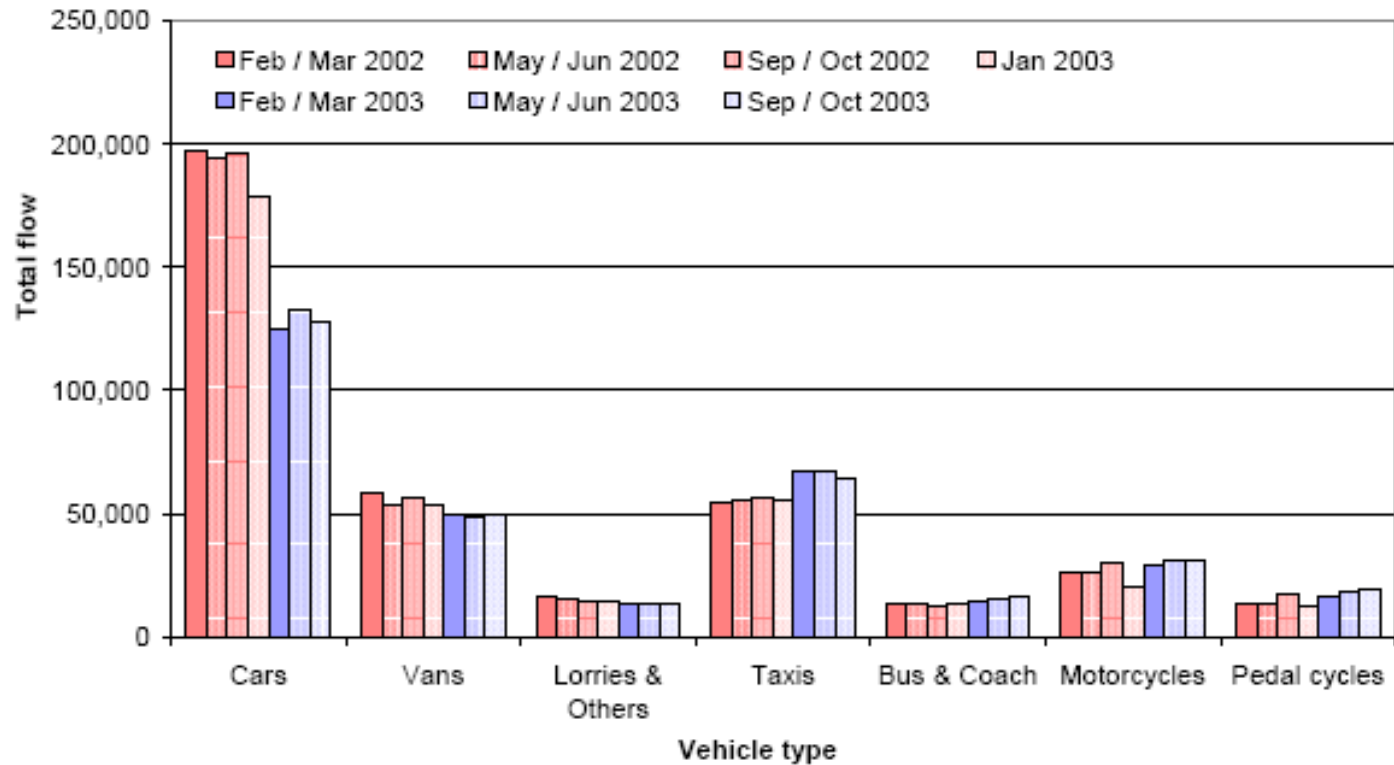
Traffic entering the charging zone during charging hours on a representative selection of major entry points



Traffic Conditions

...with the most evident reduction observed on cars

## Total traffic entering the charging zone during charging hours



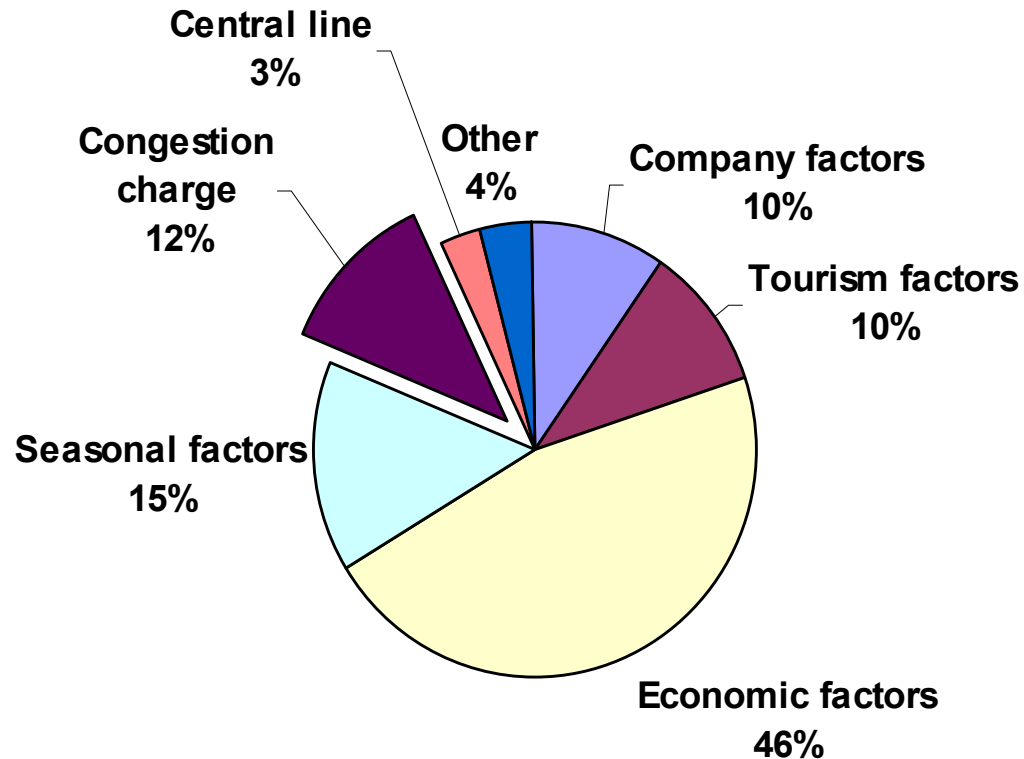
Traffic Conditions

## Impact on retail business performance

- ▶ It is far too early to draw any firm conclusion
- ▶ There does appear to be a slowdown in central London's retail and leisure activity during the first half of 2003 compared to the previous year, indicating a reduction in sales in and immediately around the charging area of 2%
- ▶ However, business owners and managers in the area perceive Congestion Charing to account only for 12% of the influences they reported
- ▶ More reliable longer term trend analysis is being undertaken

Public Transport

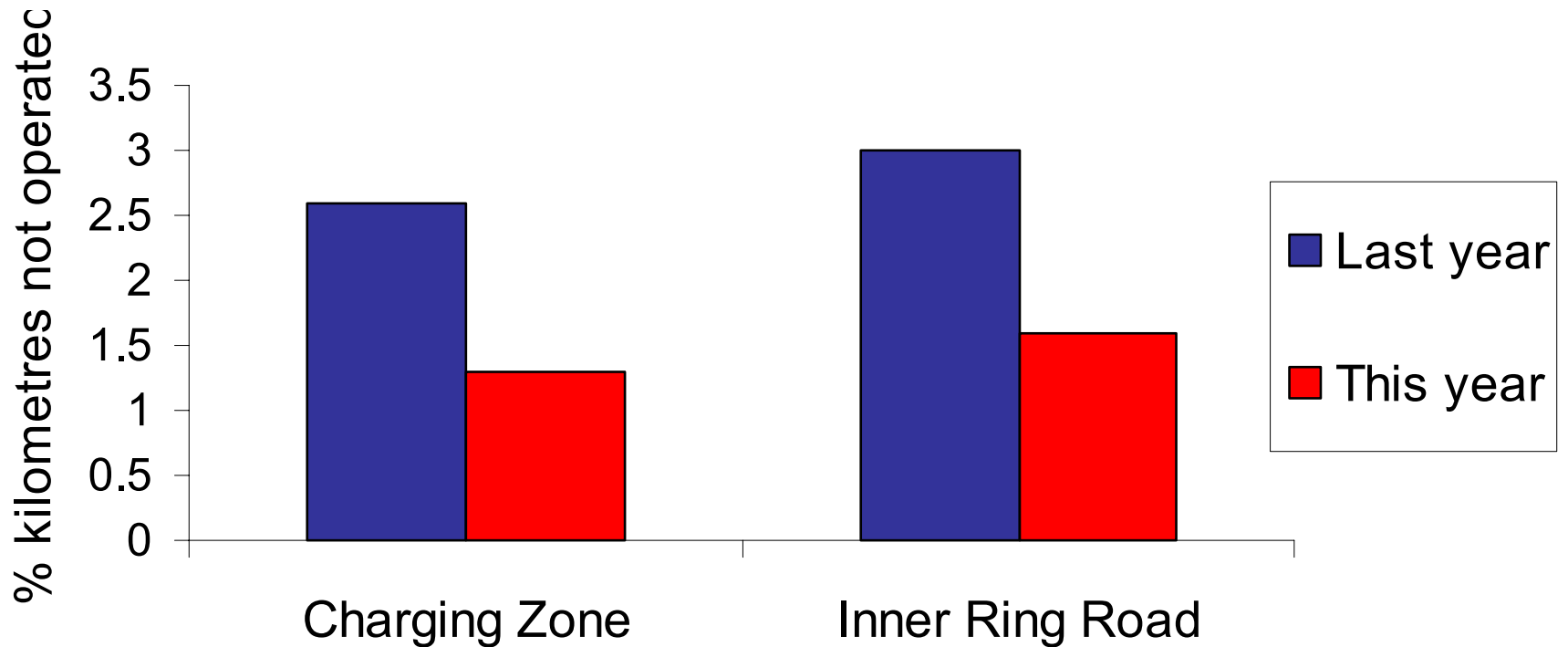
# Impact on retail business performance



Public Transport

# Delays due to traffic disruption have almost halved

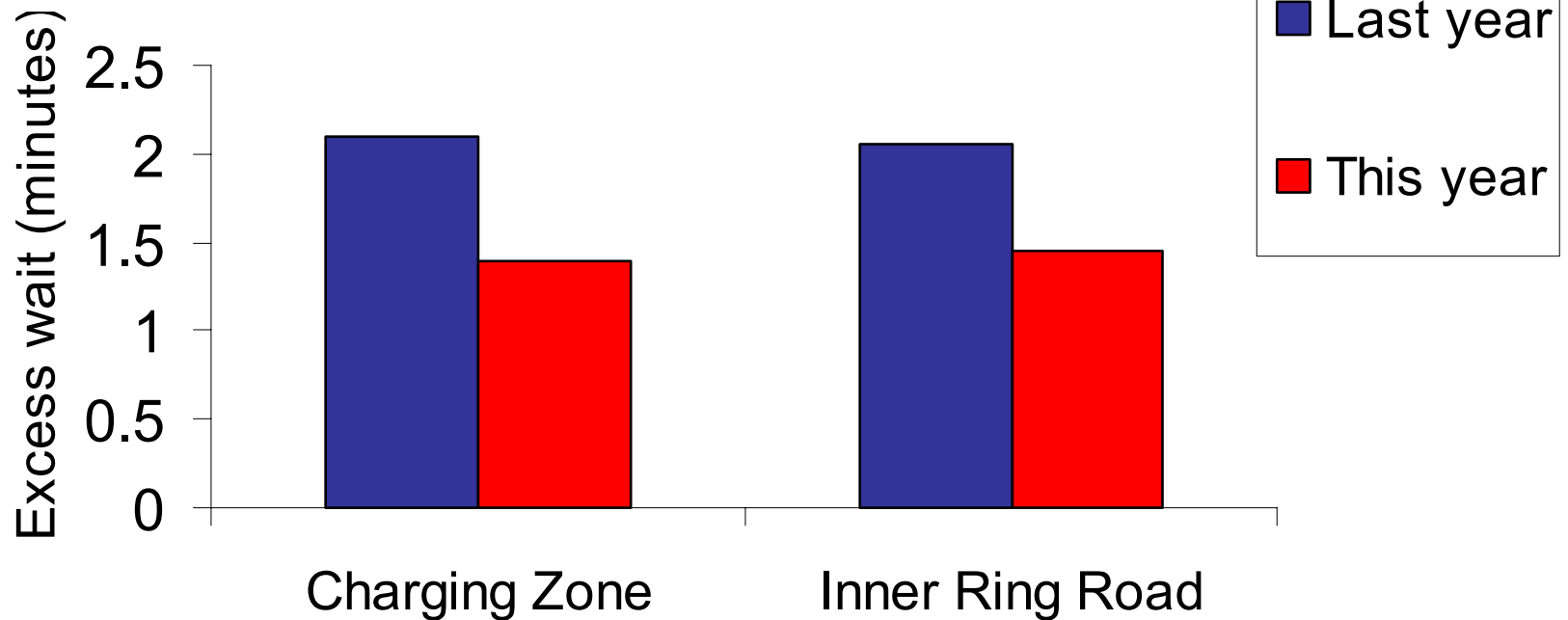
## % scheduled kilometres not operated due to traffic delays Mon - Fri



Public Transport

Bus reliability has increased by over 25%

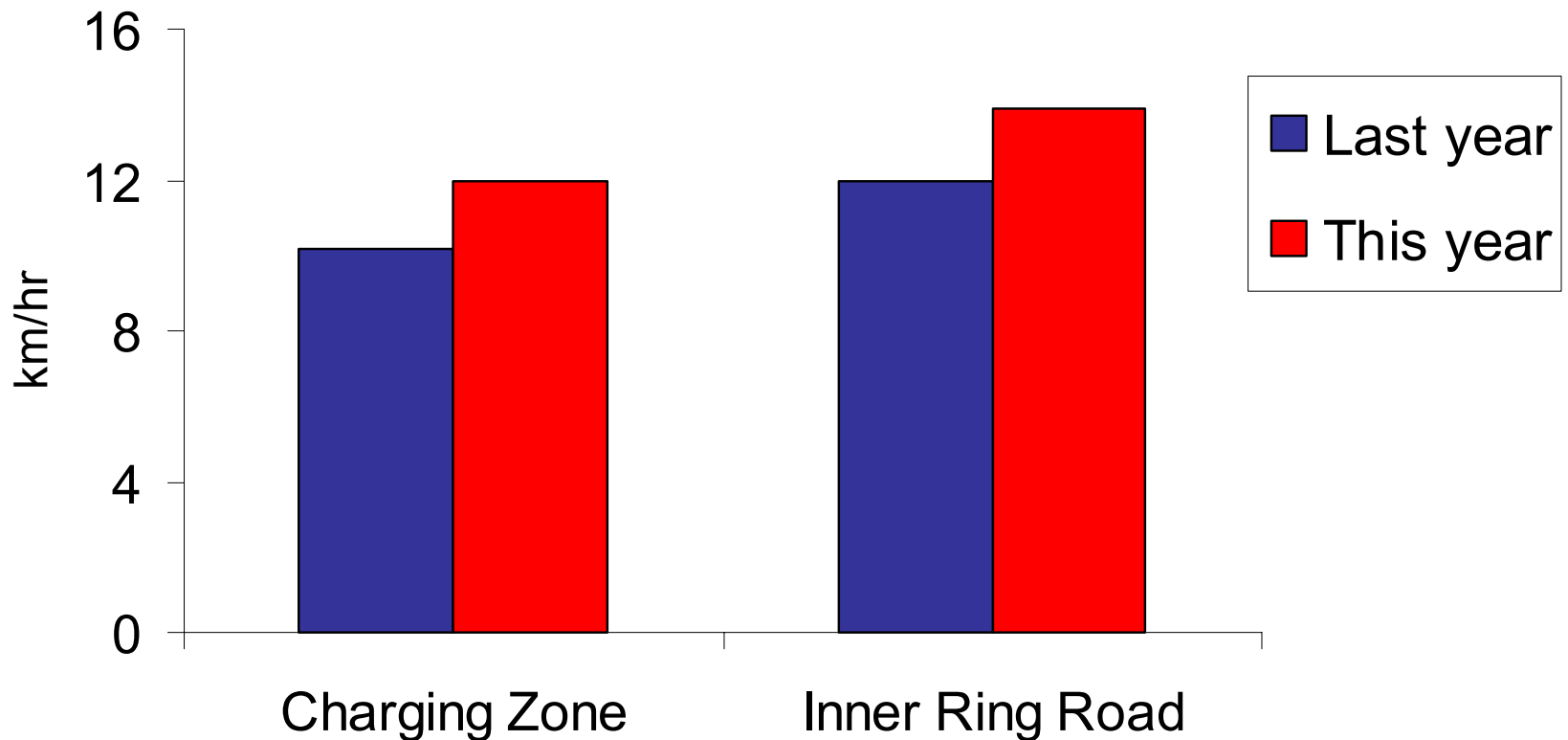
## Bus service reliability Mon - Fri 0730 - 1830



Public Transport

Peak hour bus speeds have increased by almost 20%

## Bus Speeds Mon - Fri AM peak



Public Transport

## Lessons Learnt

- Political commitment mandatory
- Strong project management required
- Integrated team and partnership essential
- Clear procurement strategy is a must
- Presenting congestion charging as part of an overall transport strategy
- Importance of public information campaign

Lessons and Insights



# Conclusion

*Enthusiasm and “can do” attitude  
can deliver an “impossible” project*

Lessons and Insights