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Ankerbold

Evaluation Results for Intelligent Transport Systems

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Outline

- **Criteria for evaluating ITS projects**
 - European projects and CONVERGE VQ
 - The case for UK Traffic Control Centres
- **Examples of evaluation results for:**
 - Traveller information systems
 - Urban traffic management systems
 - Highway traffic management
- **Conclusions**

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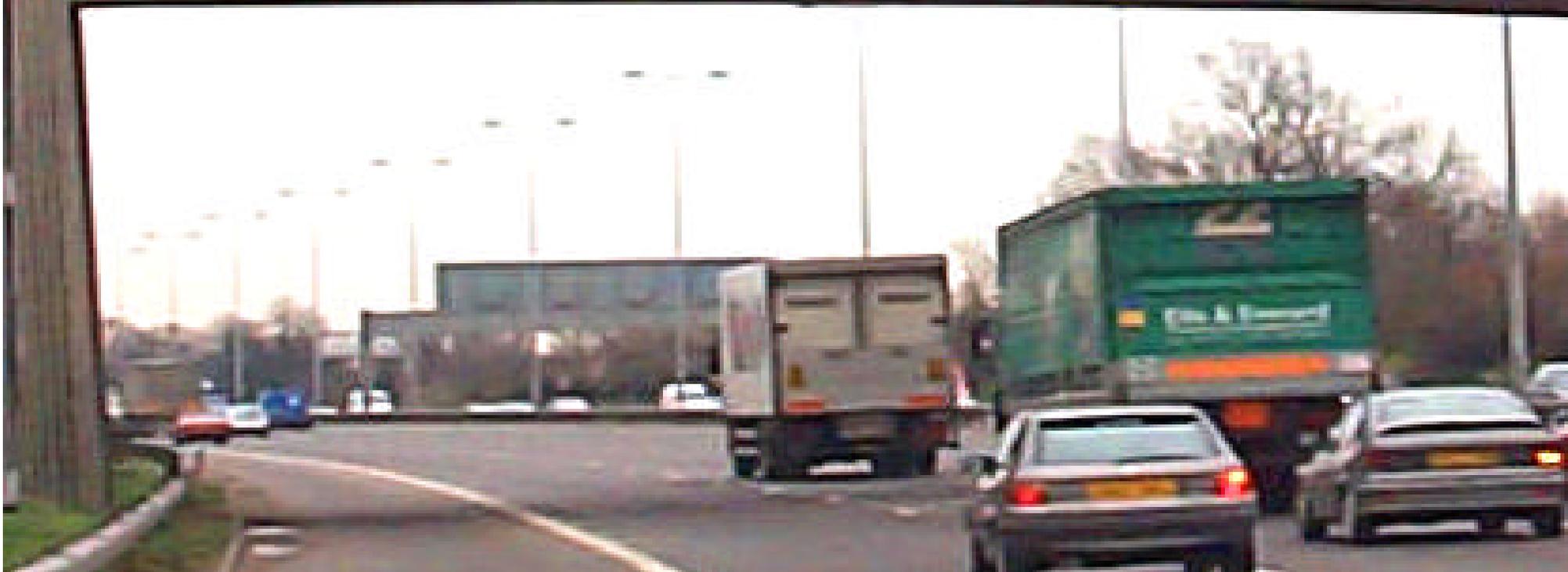
Chertsey
Woking

Gatwick
Guildford

QUEUE
AHEAD

60

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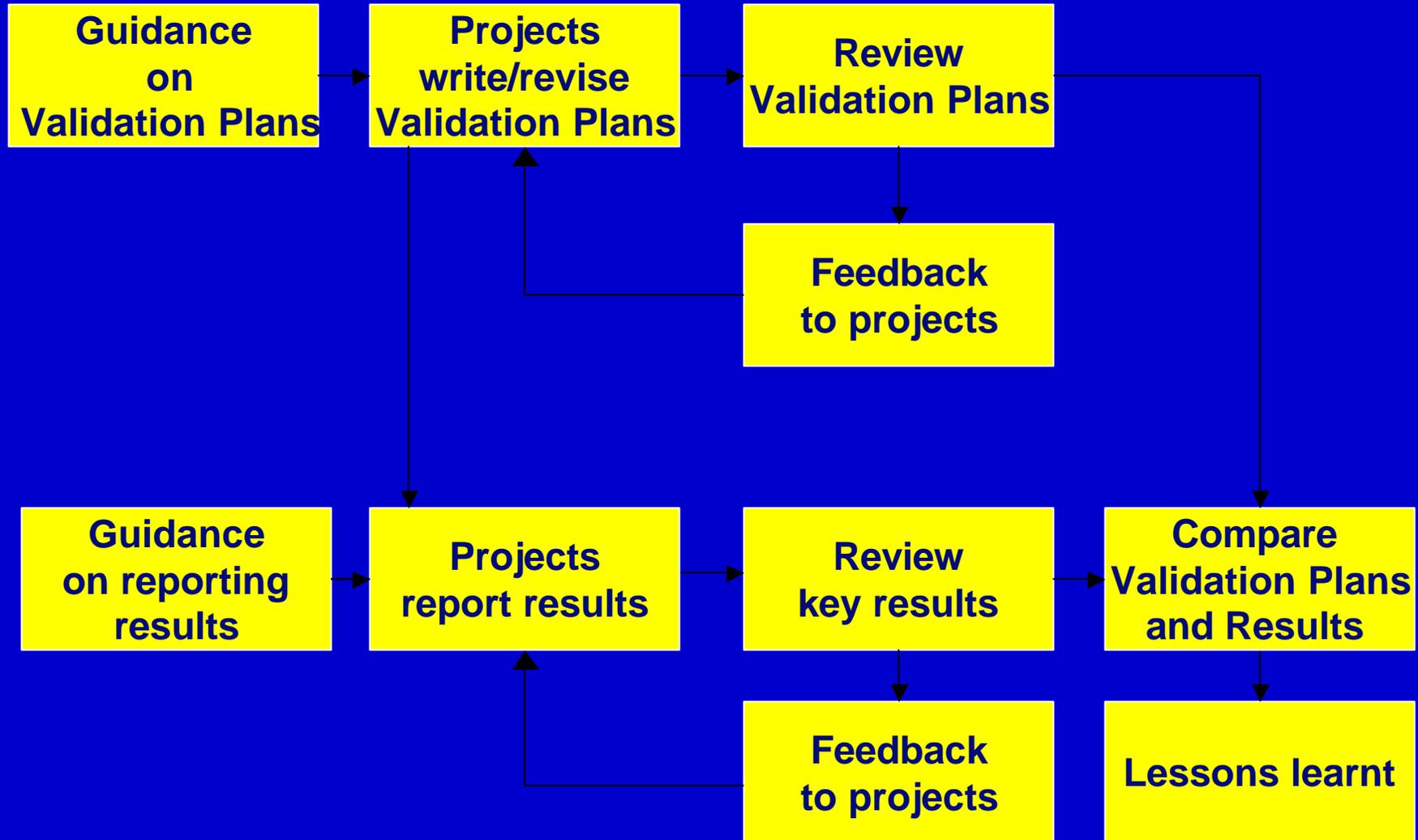
Categories of Assessment: CONVERGE-VQ

- **Technical assessment**
- **User acceptance assessment**
- **Impact assessment**
- **Socio-economic evaluation**
- **Financial assessment**

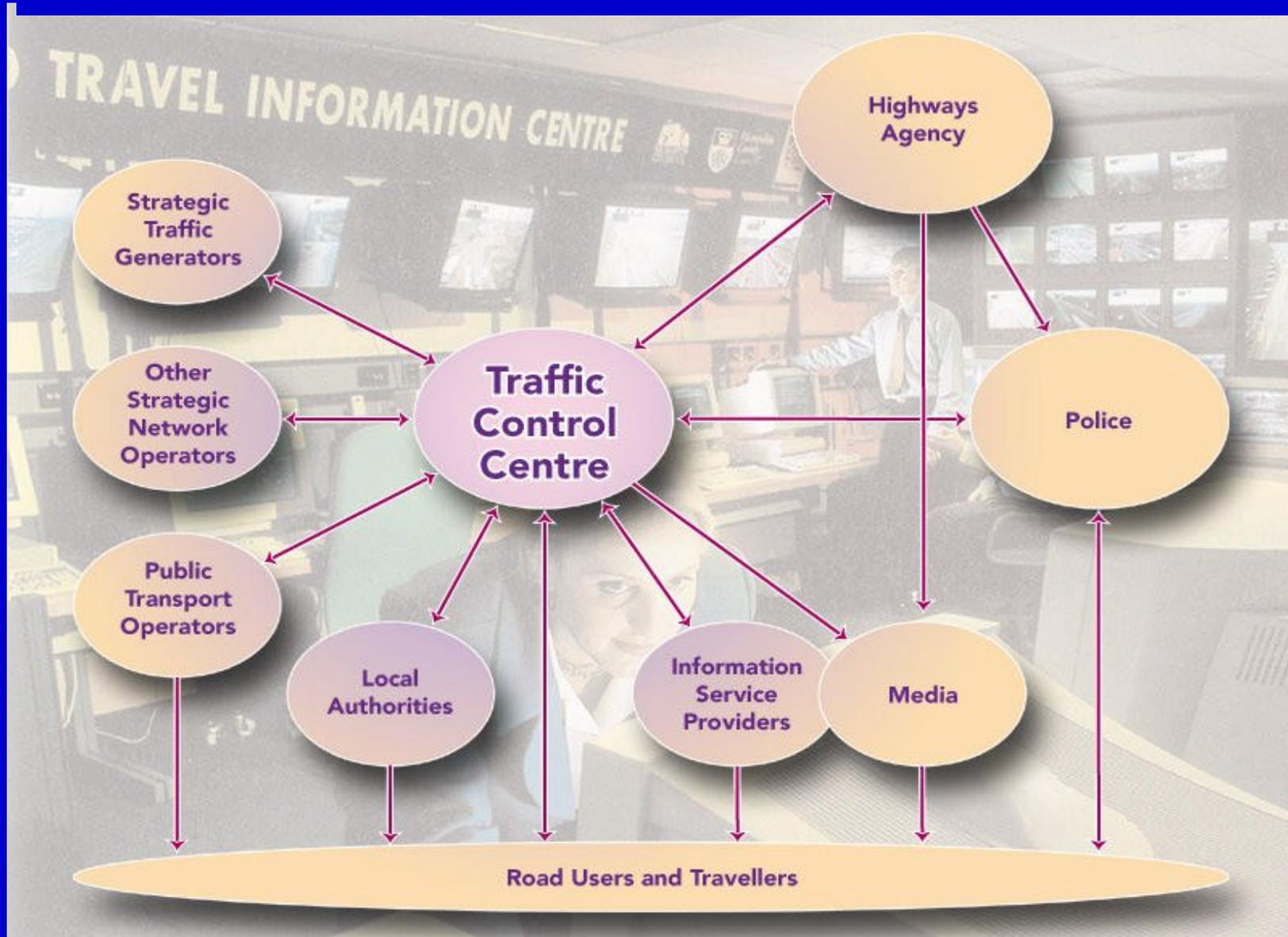
And

- **Market assessment**

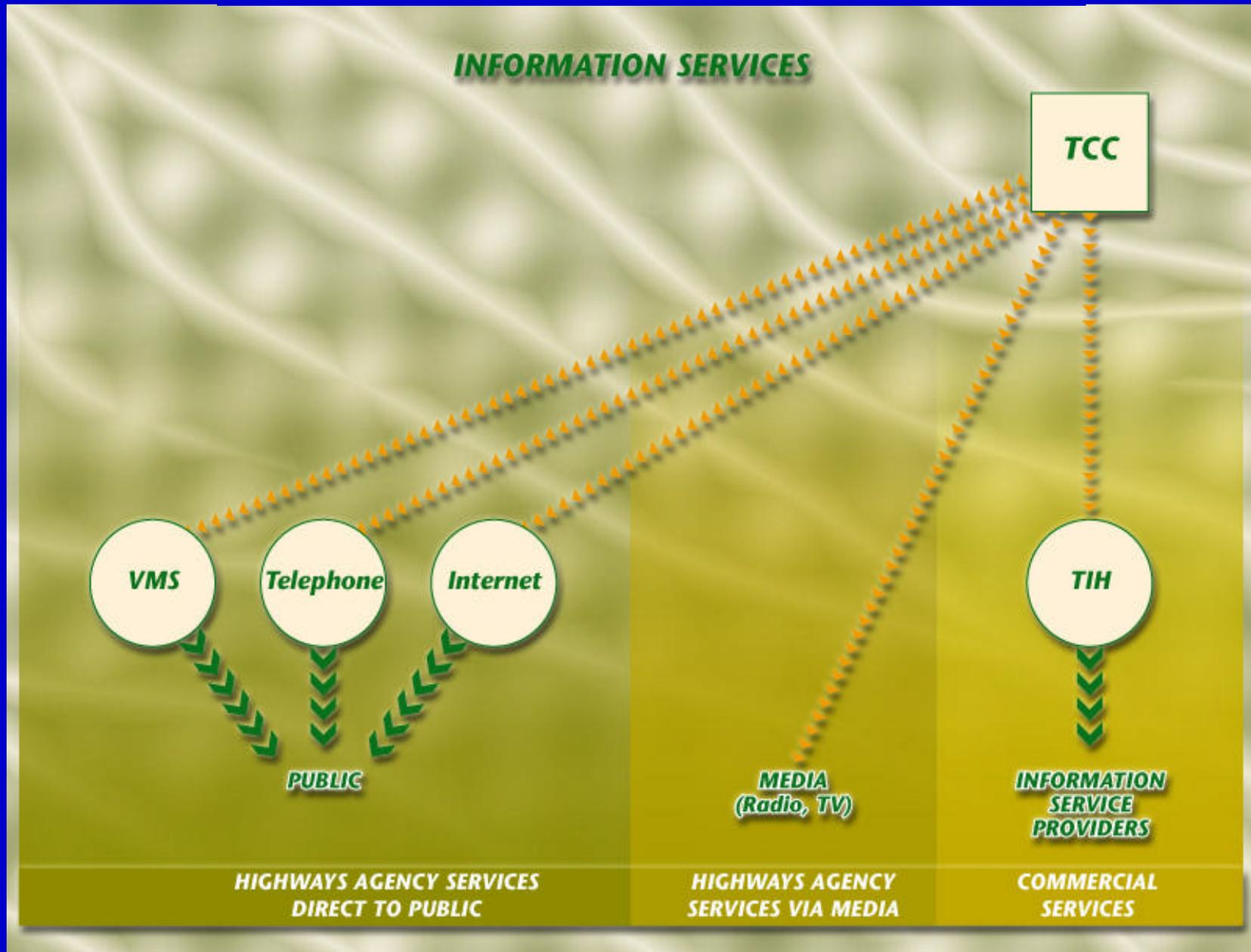
The CONVERGE-VQ approach



Stakeholders in TCC information service



Types of information from TCC



The economic case for UK Traffic Control Centres

- **Traditional cost-benefit approach to assessment**
- **'Defensible and conservative' estimate of benefits that could be readily quantified**
- **Based on extrapolating evidence from a variety of sources**

- **Operational risk to be shared between public and private sectors**
- **Contract for service delivery will require evaluation of impacts for performance measurement**

Traveller information systems

- **Midlands Driver Information System**
 - payback period 27 months
- **National Driver Information System in Scotland**
 - 9 incidents saved £150,000 in 1994
- **London bus passenger information**
 - 1% increase in patronage



**National Driver Information System,
Scotland**

Urban traffic management systems

- **SCOOT Urban Traffic Control**
 - Journey times reduced by around 30%
- **Access Control Edinburgh**
 - 3% less traffic
 - Speed reduced 2-3 mph
 - 34% less accidents
- **Public Transport Priority London**
 - Bus delays down 22% - 33%
 - Journey times down 7% - 8%



Bus Priority with SCOOT

Highway traffic management systems

- **Speed Control (M25)**
 - 5% increase in peak flow
 - 25% - 28% less accidents
- **Ramp metering**
 - Birmingham: 44% first year rate of return
 - Glasgow and Birmingham: 3-4% increase in traffic throughput on main line



Ramp metering

Conclusions

- **Systematic evaluation is important in investment decisions – use 6 categories of assessment**
- **Evaluation of UK ITS schemes:**
 - **positive local benefits**
 - **qualified by disbenefits elsewhere**
 - **focus on scheme objectives, not disbenefits**
- **Complementary applications increase benefits**
- **Need more research on user responses**
- **Evaluation methods must include intangible costs**

How to obtain your copy of the paper

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