

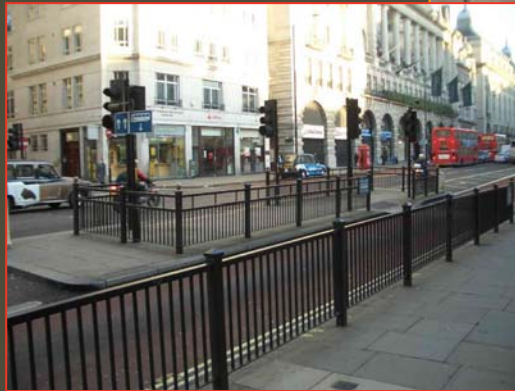
# Traffic Management and the Street Scene

## The Road to Good Practice

John Emslie | 25 July 2006



# What's the Problem?



# The Road to Good Practice

## **Address concern over:**

- effects of TM on our streets
- TM paraphernalia - excessive signs, signals and other of local schemes

## **Illustrate** how traffic management measures:

- can detract from the street scene
- can be successfully be integrated into street environments
- can blend with aims of liveability, vitality, viability and character of town & city centres, neighbourhoods and rural areas

Demonstrate **scheme design** & **visualisation** techniques

Conduct **on-street trials** of local TM schemes

Produce **Good Practice Guide**

# Process

Examine Delivery Issues

Review Guidance

Evaluate Design Examples

Examine Visualisation Techniques

Conduct Design Trials

Prepare Good Practice Guidance



# Issues: Design, Delivery and Maintenance

# Issues - Project Brief

## Specification

- Brief needed (!)
- Clarify roles
- Reference to relevant policy and procedures

## Street Scene as a Consideration

- TM briefs rarely identify SS considerations
- Transport led one-off projects

## Institutional/Structural

- Single department briefs too narrow

# Issues -Timescales, Funding

## Delivery Pressure

- Political aspirations - rapid programmes
- Emphasis on project delivery - not SS

## Funding Streams

- To be clear and flexible - too restrictive for SS use
- Funding too low to support quality SS

# Issues - The Design Process (1)

## Skills and Capabilities

- In-house – breadth, resources
- Consultant design capability
- Lack of clear process for identifying SS needs

## Design Team and Inputs

- Multi-skilled co-operative team
- Client and consultant team continuity
- Involvement of residents/stakeholders in design process



# Issues - The Design Process (2)

## Road Safety

- Safety audits and adherence to regulations
  - differentiate between
    - absolute requirements
    - best practice, and
    - other recommendations
- Road safety impacts - over emphasised?

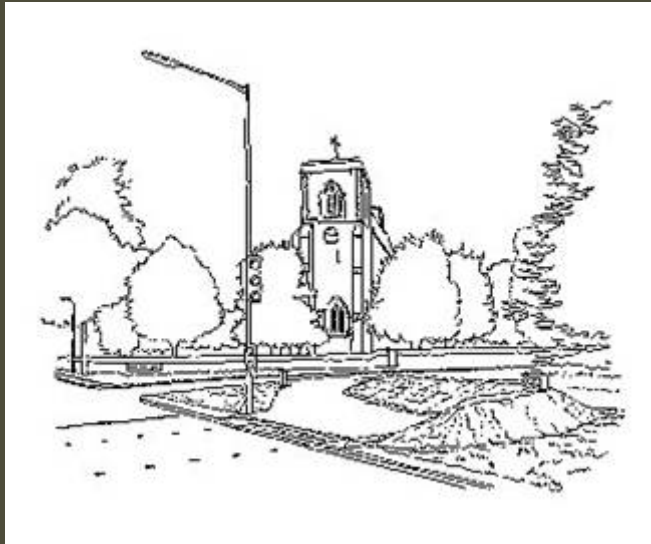
## Political Interface

- Consider carefully with elected members

## Design Visualisation

- Visualisation techniques beneficial for SS projects

# Scheme Visualisation



# Issues - Implementation

## Skills

- Skills shortage for specialised work
- Contractors & implementation

## Client-Contractor Relationship

- Strong partnership beneficial

## Quality Control

- Client to retain the final control over the quality of the work

## Supervision

- Careful site supervision

# Issues - Review and Monitoring

## Performance Monitoring and Learning

- Record successes and failures
- Review and record decisions and changes
- Improve monitoring of consultants and contractors
- Production of as-built records for H&S and long term maintenance

# Issues – Maintenance and Funding

## Maintenance and Materials

- Early agreement on materials
- Develop palette - minimise supply problems of special items
- Include special materials in Street Works Register

## Funding

- Consider maintenance funding at an early stage
- Provide for maintenance in whole life costing



# Issues - Training & Education

## Perspective

- Training systems profession led, i.e. safety audit training for engineers
- Link to design and engineering based courses

## Coverage

- Client side training at all levels
  - from Officers to Councillors, term consultants and contractors

## Recognition

- Mentoring and recognition of experience and CPD to ensure skills developed and valued

# Issues - Findings

- Awareness
- Brief
- Funding restrictive
- Collaborative working
- Quality
- Skills shortages
- Continuity
- Maintenance issues
- Review and monitoring
- Training
- Priority



# Guidance review

# Street Design Guidance Documents

Home Zone Design Guidelines (IHIE)

Streetscape Guidance (TfL)

Paving the Way (CABE, ODPM)

Better Streets, Better places (ODPM)

Home Zones - Challenging the future of our streets (DfT)

Places, Streets & Movement (DETR)

Designing Streets for People (UDA)

Streets for All, South East – (English Heritage)

# Street Design Guidance – Review 1

## Home Zone Design Guidelines

- Sympathetic to SS design needs

## Other helpful guides

- 'Streetscape Guidance' (TfL)
- 'Home Zones – Challenging the future of our Streets' (DfT)
- 'Paving the Way' (CABE)

But - little consideration given by street design guidance to

- Project timescales
- Funding
- Graphic visualisations of scheme proposals
- Training needs for skilled project teams

# Other Street Works Documents

Design Manual for Roads and Bridges (Highways Agency)

TSRGD 2002 (DfT)

Traffic Advisory Leaflet – Bus Priority (DfT)

Traffic Advisory Leaflet – Toucan Crossing Development (DfT)

Local Transport Note – Policy, Planning and Design for Walking and Cycling (DfT)

National Cycle Network – Guidelines and Practical Details (Sustrans)

Traffic Signs Manual – Chapter 4, Warning Signs (DfT)

Traffic Signs Manual – Chapter 5, Road Markings (DfT)

The Highways (Traffic Calming) Regulations (DfT)

Lighting for Traffic Calming Features (Institution of Lighting Engineers)

Pedestrian Restraint Systems in Metal - British Standards 7818: 1995 (BSI)

The Safety Audit of Highways (Institution of Highways and Transportation)

DB32 – Residential Roads and Footpaths (Dept Env/Dept Transport, 1992)

# Other Street Works Documents - Review

## The Traffic Advisory Leaflets

- Mostly TM perspective

## DMRB, DB32 and Traffic Signs, Regulations, and General Directions

- Limited relevance to SS design principles
- Emphasis on vehicular traffic and not on other street users

## Traffic Signs Manual, Lighting for Traffic Calming, Pedestrian Restraint Systems in Metal, and the Highways Traffic Calming Regulations:

- Little relevance to SS mostly Traffic Management

# Local Authority Prepared Guidance



# Local Authority Design Guidance - Review

## LA street scene manuals

- comprehensive consideration of SS design

## Emphasis on SS

- Importance palette of materials sympathetic to local surroundings

## Deficiency of information

- Project timescales
- Skills
- Use of visualisation techniques
- Funding
- Training



# Scheme evaluation

# SCHEME EVALUATION

Why do it?

- Understand good design characteristics
- Measure VFM
- Develop design checklist

# Evaluation Framework – Impact Issues (1)

## Impact issues: **Street furniture**

### **Positives**

Design that compliments adjacent street scene characteristics  
Integrated street furniture design  
Design of individual items add to quality of the scene

### **Negatives**

Unnecessary traffic regulatory signs  
Unnecessary traffic non regulatory signs  
Poorly located/fixed traffic signs  
Unnecessarily obtrusive surface equipment  
Unnecessarily obtrusive cameras  
Unnecessary guard rails  
Uncoordinated bus shelters/bus stop signs  
Uncoordinated ticket machines  
Unnecessary duplication of traffic signals and push buttons  
Unnecessary duplication of Traffic signal posts  
General contribution of street furniture to street scene

# Evaluation Framework – Impact Issues (2)

## Impact issues: **Ground Surfaces**

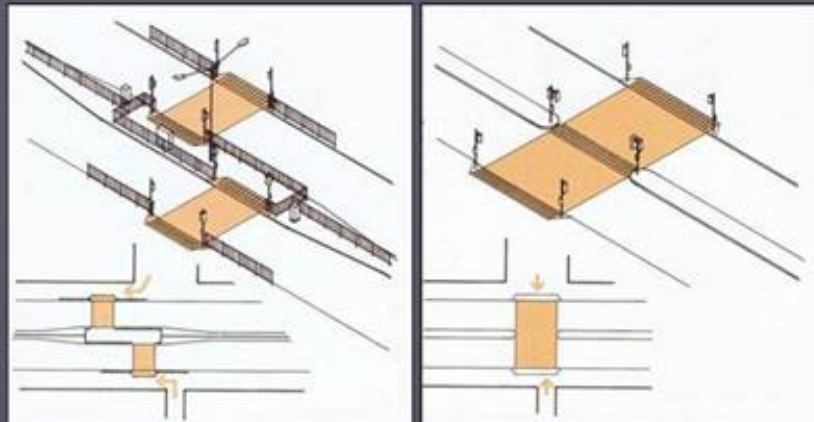
### **Positives**

Design that compliments adjacent street scene characteristics  
Integrated paving layouts, including tactile paving  
Materials suitable for purpose

### **Negatives**

Ill-considered paving materials  
Broken slabs  
Uncoordinated/poorly laid out paving slabs  
Poor workmanship  
Poorly laid out tactile paving  
Unnecessary changes in kerb alignment (i.e. arbitrary build-outs)  
Poorly laid out dropped kerbs  
Unnecessary road markings  
Poorly executed road markings  
Unnecessary road colours  
General contribution of ground surfaces to street scene

# Good Practice



Before

After

Simplified straight across crossing,  
Strand 1995, wider, no guard rails

The Strand – Carting Lane



# Good Practice



Maid Marion Way, Nottingham

Kensington High Street



# Good Practice



Crossley Street, Halifax

High Street, Shrewsbury



# Good Practice



Before

After



# Room for Improvement? (1)



Headrow, Leeds

Pusey Street, Oxford



## Room for Improvement? (2)



Piccadilly, London

## Room for Improvement? (3)



Liverpool

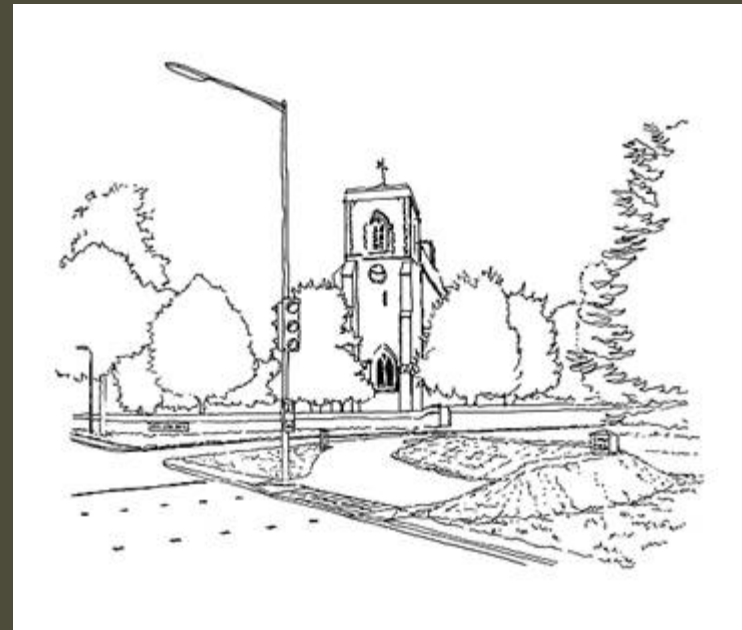
## Room for Improvement? (4)





# Visualisation examples

# Visualisation



# Visualisation Examples (1)



Before



After

# Visualisation Process

1



2



3



## Visualisation Examples (2)



1



2

## Visualisation Examples (3)



1



2

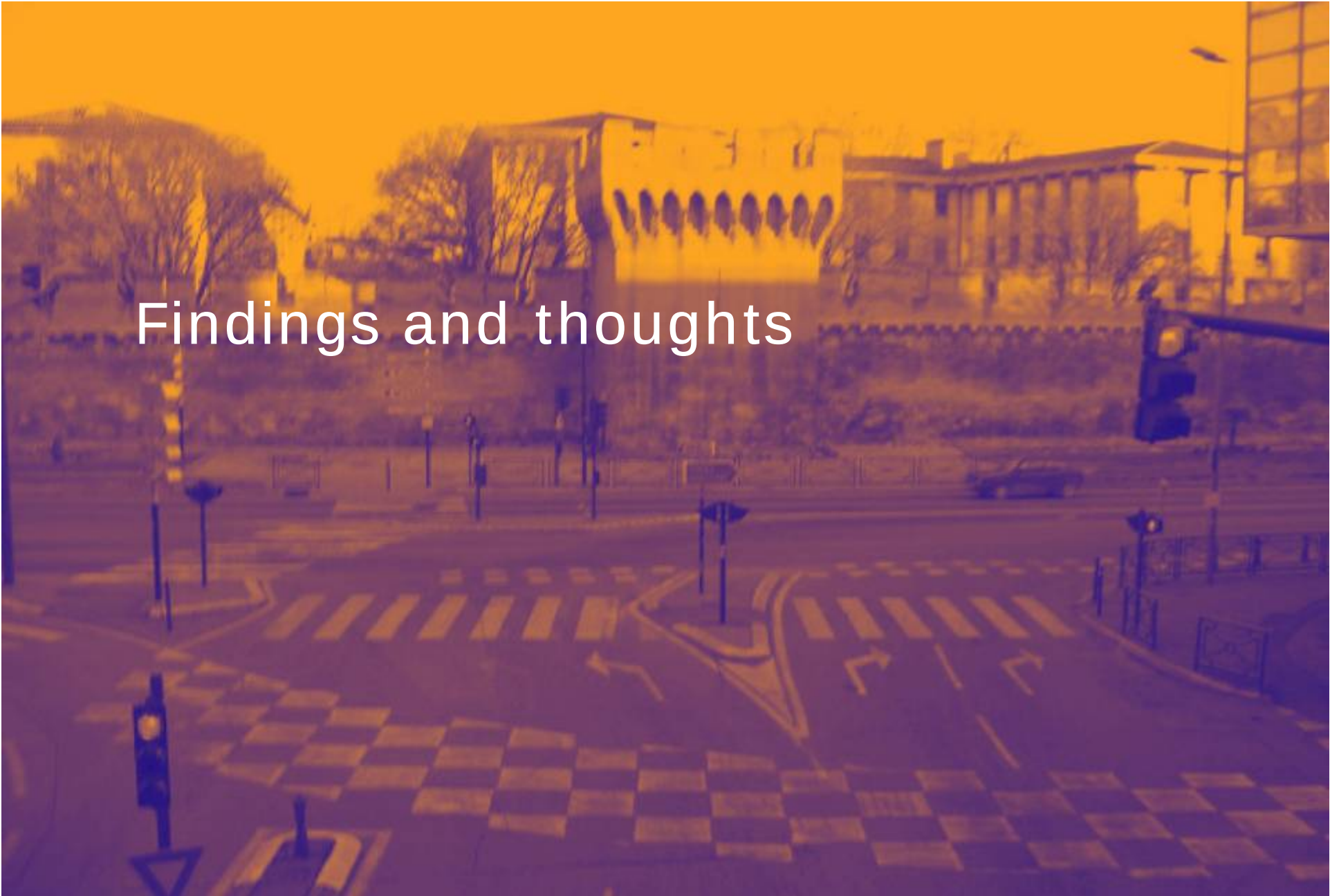
# Visualisation Examples (4)



1



2



# Findings and thoughts

# Food for Thought 1

Good results can be achieved working within Regulations

- Need to understand and interpret Regulations
- Start with blank sheet – minimalism principle
- ‘Self-explaining’ roads
- Examine behaviour – design space around it

Continuity and consistency – key issues

- Design integrity
  - ‘Design Champion’
  - Passing the Baton
- Collaborative working
- Quality
- Skills

# Food for Thought 2

Design compromise

- Accept it – but raise the bar of expectation

Who leads the team?

- Engineer? Planner? Facilitator?

Training

- Are engineers the best tutors?

Visualisation

- What works in 2D.....
- Think and design in 3D too

Need for 'one stop' Guidance document



THANK YOU