LCWIPs - What are they all about then?
“The UK has some very good policies on sustainable transport…but also some very poor outcomes”

Tim Pharoah
3.32 In order to help local bodies that are interested in increasing cycling and walking in their local areas, we have published guidance on the preparation of Local Cycling and Walking Infrastructure Plans.

The guidance will enable local bodies to take a more strategic approach to improving conditions for cycling and walking in order to support increases in travel on foot and by cycling…
National Planning Policy Framework (NPPF) - 2018

9. Promoting sustainable transport

104. Planning policies should: …

d) provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans);
Support for LCWIPs

- DfT have funded technical support to 43 local authorities to produce first-round LCWIPs
- Living Streets part of Strategic Support Team, PJA in Technical Support Team
- None in London! But nothing to prevent authorities in London producing them
- And/or using the tools and techniques
Planning for Cycling
Rob Gallagher and John Parkin

Planning for Walking
Kit Mitchell and Terence Bendixson

March 2015
The potential for cycling and walking

England data (2013)

- 67% of trips less than 5 miles
- 55% made by car
- 33% on foot - but declining
- Only 2% by cycle
Walking and Cycling – The Similarities

- Many **similarities** between walking and cycling
  - Health benefits
  - Reduce congestion
  - No air or noise pollution
  - Low cost
  - Similar barriers – motor traffic, poor/missing routes
  - Both cater for a **range** of users
  - Similar basic needs
Pedestrians and Cyclists both need routes that are

**Coherent:** connect and take you where you want to go

**Direct:** without undue deviation or delay;

**Safe:** that are and feel safe;

**Comfortable:** are easy to use with minimum physical and mental effort; and

**Attractive:** in pleasant surroundings
Walking and Cycling - The differences

- Different speeds – 3 mph vs 12 mph (plus!)
- Different take up – eg 25% of trips vs 2% of trips
- Different infrastructure provision – comprehensive vs sparse
- Different distances – 1 mile vs 4 miles (plus!)
- Different demographics
Gender and walking

Walking by gender and age

% who had walked (at least 10 minutes continuous) for any purpose in the last 4 weeks

Age

16-24 25-34 35-44 45-54 55-64 65+

Males 92 89 89 88 86 74

Females 93 92 90 89 86 74

86% 87%
Gender and cycling

Cycling by gender and age

% who had cycled (any length or purpose) in the last 4 weeks

Age

16-24 25-34 35-44 45-54 55-64 65+

27 23 27 22 15 8

13 11 14 11 7 3

All ages average:

Males: 20%
Females: 10%

Statistical Release 29 April 2014
What are Local Cycling and Walking Infrastructure Plans?

A Local Cycling and Walking Infrastructure Plan (LCWIP) is a long-term approach to developing comprehensive local cycling and walking networks.

LCWIPs will assist Local Authorities (LAs) to:

- Identify cycling and walking infrastructure improvements in the short, medium and long term
- Embed cycling and walking in local planning and transport policies and strategies
- Make the case for future funding for walking and cycling infrastructure
Local Cycling and Walking Infrastructure Plans - Key Outputs

The key outputs of LCWIPs are:

- A network plan for walking and cycling with routes and core zones for further development
- A prioritised programme of infrastructure improvements for future investment
- A report which sets out the analysis carried out and supports the identified improvements

LCWIPs are scalable to suit the size and complexity of the local area.
Six stages in the LCWIP process

Stage 1: Determining Scope
Geographical extent, governance and timescales

Stage 2: Information Gathering
Identify existing patterns and potential new journeys

Stage 3: Network Planning for Cycling
Identify flows, review conditions and identify barriers

Stage 4: Network Planning for Walking
Identify flows, audit routes and determine improvements needed

Stage 5: Prioritising Improvements
Develop a phased plan for future investment

Stage 6: Integration and Application
Integrate outputs into current policies and strategies
## Stage 1: Determining the Scope

<table>
<thead>
<tr>
<th>Establish the geographical extent</th>
<th>Identify the best delivery model</th>
<th>Arrangements for governance</th>
<th>Agreeing timescales</th>
</tr>
</thead>
</table>
| This requires a consideration for: | Cross-boundary liaison may be required. Various delivery models – single tier, two tier authorities | Effective governance needed. A project board is suggested | LCWIPs set out a long term plan, suggested implementation:  
  - Short (<3 years)  
  - Medium (<5 years)  
  - Long (>5 years)  
Timescales could be aligned other planning documents, eg Local Transport Plan. |
Stage 2: Gathering Information

**Reviewing local policies and strategies**

**Collating information**

Collect and analyse:
- Current walk/cycle networks
- Travel patterns
- Perception of existing facilities
- Air quality, collisions, proposed developments etc etc.
Stage 3: Network Planning for Cycling

Identifying and clustering trip origin and destination points

Use GIS to map origin and destination points across the study area.
Trip generators in close proximity can be clustered to simplify this.

Establishing desire lines for cycle movement

Map direct desire lines between trip generators to identify main corridors.
This can be done using the Propensity to Cycle Tool (PCT) and local knowledge.

Plan network and improvements needed

Tools for assessing potential routes/improvements:
- Cycling Level of Service (CLoS)
- Route Selection Tool (RST)
- Current design guidance – London Cycling Design Standards
- And soon – revised DfT LTN on Cycle Infrastructure

At the end of this stage a **Cycling Network Plan** and **Programme of Cycling Infrastructure Improvements** should be produced.
The Bristol Cycling Network

A comprehensive network of high quality, continuous and direct routes is essential to make cycling for everyone feel easy, safe and convenient. The Bristol Cycling Manifesto maps out 200 miles of Cycling Freeways and Quietways connecting every area, enhanced by local links.

Freeways: direct and continuous routes on main roads with extensive segregation
- F1 The Portway
- F2 Whiteladies/Westbury Road A4018
- F3 Gloucester Road A38
- F4 Fishponds/Stapleton Road A432
- F5 Two Mile Hill A420
- F6 Bath Road A4
- F7 Wells Road A37
- F8 Bishopsworth/Hartcliffe A38
- F9 Coronation Road A370
- F10 Inner Loop Orbital
- F11 Inner Middle Orbital
- F12 Outer Middle Orbital
- F13 Northern Loop Orbital
- F14 Outer Ring Orbital

Quietways: pleasant and well signed traffic-free or low-traffic routes
- Q1 Westbury Quietway
- Q2 Concorde Quietway
- Q3 Frome Quietway
- Q4 Bristol Bath Railway Path
- Q5 Wesley Quietway
- Q6 Whitelchurch Quietway
- Q7 Malago Quietway
- Q8 Festival Quietway
- Q9 Pill Quietway
- Q10 Promenade Quietway
- Q11 North Fringe Quietway
- Q12 Yate Quietway
- Q13 Knowle Quietway
- Q14 St Anne's Quietway
- Q15 Purdown Quietway
- Q16 Trym Quietway

Bristol City Centre
DfT funded freely-available, Propensity to Cycle Tool (PCT)

Useful for

- Mapping of trip origin and destination points
- Identifying desire lines
- Allocating trips to specific routes
- Defining potential demand for cycling under different scenarios
- Assisting with scheme prioritisation
But what about walking?
Trends [NTS]

In 2017:

- **Trips**: 4% since 2002
- **Stages**: 5% since 2002
- **Distance**: no change since 2002
Percentage of journeys on foot 1972/73, 1994/96 and 2010 (National Travel Survey; DfT, annual)

- Pedestrian modal share percent
- Trip length miles

1972/73: ○
1994/96: ●
2002: □
2012: ▲
Mixed use and walkable destinations have a bigger impact on walking than the quality of the pedestrian environment itself.

Beautiful sidewalks with nowhere to go don’t really cut it.

Barbara McCann, US DoT
Towards an Urban Renaissance - 1999
Stage 4: Network Planning for Walking

Identifying and clustering trip origin and destination points
GIS mapping of origin and destination points of potential walk trips

Establishing linear walking routes and core walking zones
Core Walking Zones (CWZs) - areas with trip attractors in close proximity, or areas with a high density of destinations.

Auditing routes and identifying barriers
Identification of significant barriers and need for improvement
A Walking Route Audit Tool (WRAT) has been developed to assist with auditing, targeting the five core design outcomes for pedestrian infrastructure.

At the end of this stage a Walking Network Plan and Programme of Walking Infrastructure Improvements should be produced
Walking Route Audit Tool

<table>
<thead>
<tr>
<th>Audit Categories</th>
<th>2 (Green)</th>
<th>1 (Amber)</th>
<th>0 (Red)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ATTRACTIVENESS - maintenance</td>
<td>Footways well maintained, with no significant issues noted.</td>
<td>Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).</td>
<td>Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.</td>
<td></td>
</tr>
<tr>
<td>2. ATTRACTIVENESS - fear of crime</td>
<td>No evidence of vandalism with appropriate natural surveillance.</td>
<td>Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).</td>
<td>Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).</td>
<td></td>
</tr>
<tr>
<td>3. ATTRACTIVENESS - traffic noise and pollution</td>
<td>Traffic noise and pollution do not affect the attractiveness</td>
<td>Levels of traffic noise and/or pollution could be improved</td>
<td>Severe traffic pollution and/or severe traffic noise</td>
<td></td>
</tr>
<tr>
<td>4. ATTRACTIVENESS - other</td>
<td>Examples of ‘other’ attractiveness issues include:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Evidence that lighting is not present, or is deficient;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Temporary features affecting the attractiveness of routes (e.g. refuse sacks).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Excessive use of guardrail or bollards</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Score 0-2 as appropriate

- 20 criteria scored 0, 1, 2 – max 40 points
- Based on Core Design outcomes plus Accessibility
- Originally developed for Wales Active Travel Design Guidance
- Can be used to identify deficiencies and need for improvements
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>5. COMFORT - condition</td>
<td>Footways level and in good condition, with no trip hazards.</td>
<td>Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.</td>
<td>- subsided or fretted pavement, or - significant uneven patching or trenching. Large number of footway crossovers resulting in uneven surface.</td>
<td></td>
</tr>
<tr>
<td>6. COMFORT - footway width</td>
<td>Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.</td>
<td>Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.</td>
<td>Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.</td>
<td></td>
</tr>
<tr>
<td>7. COMFORT - width on staggered crossings/ pedestrian islands/refuges</td>
<td>Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.</td>
<td>Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.</td>
<td>Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.</td>
<td></td>
</tr>
<tr>
<td>8. COMFORT - footway parking</td>
<td>No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.</td>
<td>Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.</td>
<td>Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.</td>
<td></td>
</tr>
</tbody>
</table>
## Stage 5: Prioritising Improvements

### Timescales

Suggested timescales for improvements:
- Short term (<3 years)
- Medium term (<5 years)
- Long term (>5 years)

### Criteria

- Forecast increases in walking and cycling
- Greatest return on investment
- Policy drivers, e.g., deprivation, child obesity etc.

### Appraisal

- Indicative Cost-Benefit Analysis on priority schemes.
  - The Department's Investing in Cycling and Walking report
  - WebTAG unit A5-1 (DfT)

At the end of this stage a **prioritised list of cycling and walking infrastructure improvements** should be produced.
Stage 6: Integration and Application

Completing the LCWIP

Draft LCWIP contains
- network plans for walking and cycling
- prioritised programme of infrastructure improvements

Embedding the LCWIP

LCWIPs need to be integrated within local policies to be successful.

Reviewing the LCWIP

LCWIPs should be reviewed and updated approximately every 4-5 years to reflect progress.

At the end of this stage the **Local Cycling and Walking Infrastructure Plan** should be produced.
But…it’s only infrastructure

Infrastructure
   I can walk

Promotion
   I want to walk

Urbanism
   I need to walk
What’s the upshot?

- Evidence-based methodology, leading to infrastructure improvements that will enable more walking and cycling.
- Aligns walking to the (more powerful?) cycling agenda.
- LCWIPs have strong DfT support and (hopefully) gain in value and importance.
- So far, less important in London but opportunity for London Living Streets to lobby for use of these techniques.
- Building on Living Streets’ involvement in the process.
- But…Infrastructure in itself may not increase walking.
Thanks

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