

**UWE
Bristol**

University
of the
West of
England



Centre for Sustainable
Planning & Environments

**UWE
Bristol**

Collaborating Centre for
Healthy Urban Environments

Building Liveable
Neighbourhoods
in Bristol

Festival of the
Future City

#futurecity19

18th October 2018

Building liveable neighbourhoods

Liveable streets

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Mark Drane

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more equal

73.1 years

66.5 years

55.3 years

bristol, healthy life expectancy
women at birth
bristol city inequality 18.2 years

Image: maps.stamen.com
Data: ONS

SAVE OUR
CHILDREN
FROM
CLIMATE
CHAOS

more sustainable



healthier

why do streets make people sick?

five ideas for a liveable neighbourhood

A photograph of a person walking across a crosswalk in a park-like setting. The crosswalk is made of light-colored rectangular tiles and is marked with yellow double lines. A yellow bollard with a red and white reflective band stands on the left side of the crosswalk. The background features lush green trees and a clear sky. The overall scene is bright and open, suggesting a well-maintained and accessible public space.

#1

get it right at all
scales

#2

healthy food
environment

#3

work with
natural systems

#4

active travel,
physical activity,
play

#5

creating with the
community

get it right at every scale



Image: Student Work, UNC Charlotte



Image: Steve Melia



access to healthy food





Perygl
Gwifrau byw
uwchben

Danger
Overhead
live wires

work with
natural systems



work with
natural systems

encourage physical activity



encourage physical activity



created with people





South Riverside Filtered Permeab...

To reclaim the streets for local people and take advantage of the fact that many of South Riverside's street

[more](#)














726 views

All changes saved in Drive

 Add layer  Share  Preview

☒ Filtered Permeability

Individual styles

-  Despenser Pl/Fitzhamon Em...
-  Despenser Pl/Plantagenet St
-  Despenser St/Plantagenet St
-  Brook St/Plantagenet St - Pri...
-  Green St
-  Clare St/Despenser Gdns
-  Clare St/Despenser Pl
-  Cowbridge Rd E/Rawden Pl
-  Lewis St/Mandeville Pl
-  Cowbridge Rd E/N Morgan St
-  Cowbridge Rd E/Ann St
-  Wyndham St - Priority
-  Craddock St

what could I do?

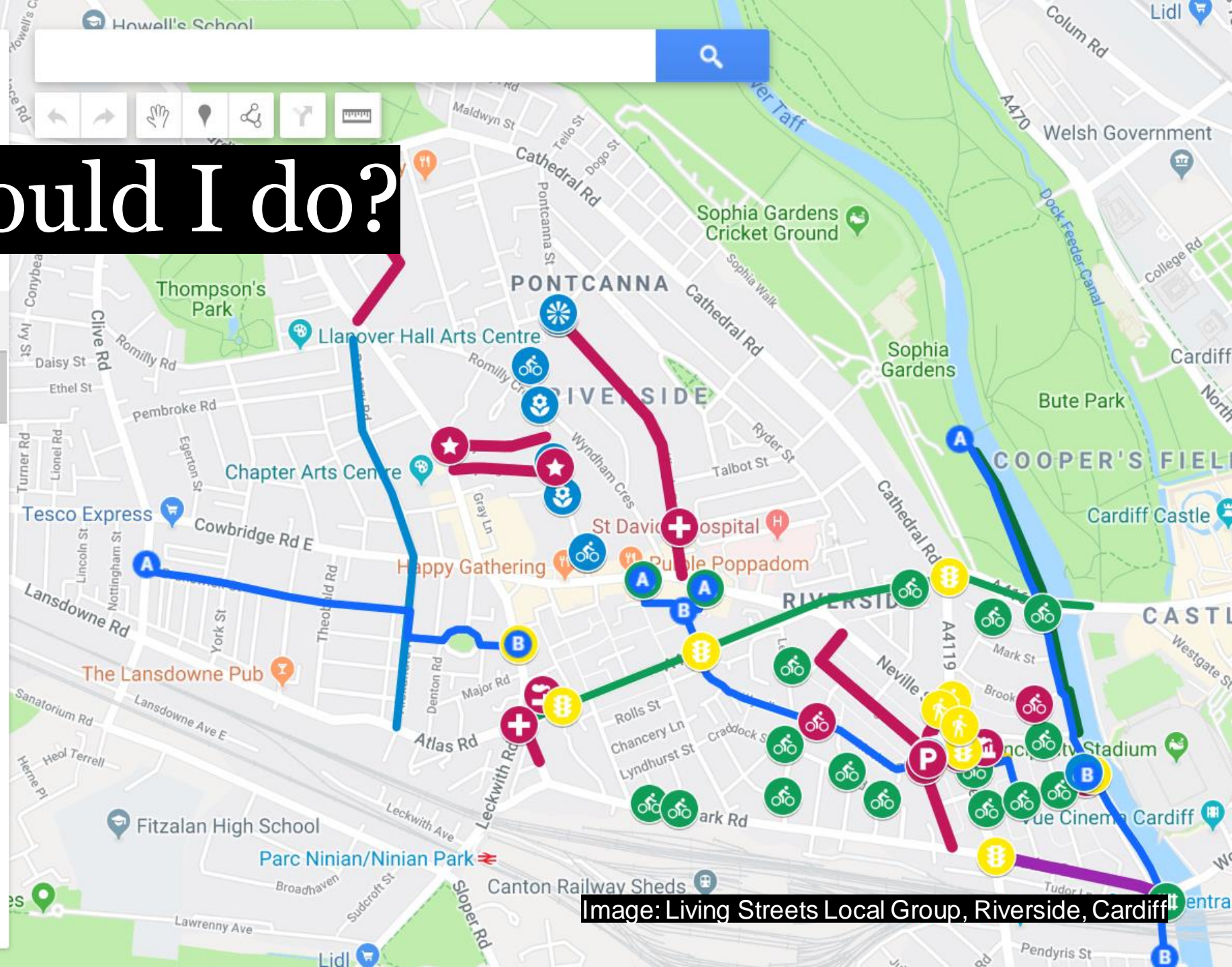


Image: Living Streets Local Group, Riverside, Cardiff

what could I do?

draw
your
dream
street.

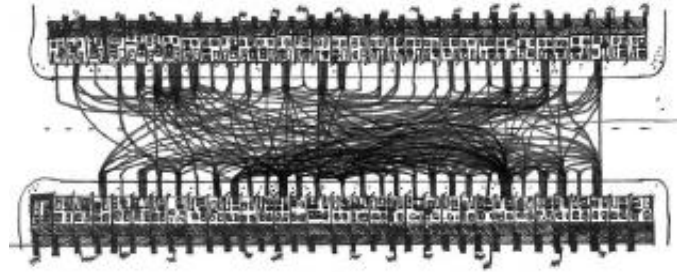


Traffic Removal for Liveable Neighbourhoods

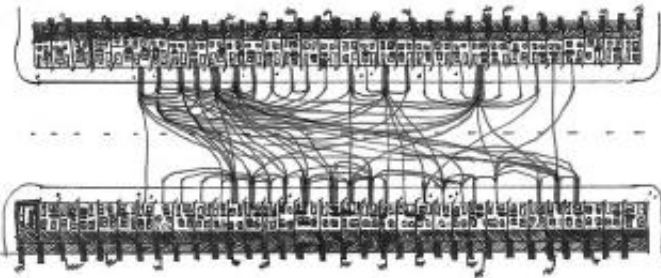
Dr Steve Melia

Senior Lecturer in Transport and Planning

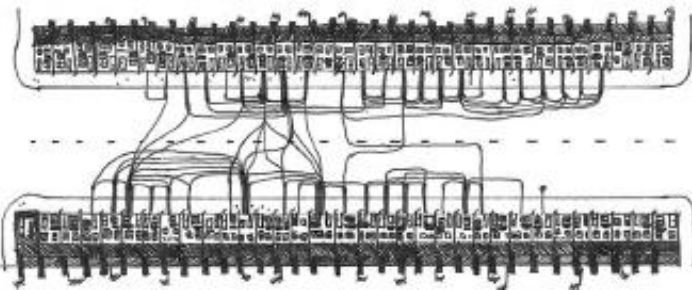
Traffic and Community Interaction



Low Traffic



Medium Traffic



High Traffic



From Hart & Parkhurst (2011)

European Carfree Developments

URBAN

TRANSPORT

WITHOUT
THE
HOT AIR

VOLUME 1

SUSTAINABLE
SOLUTIONS
FOR UK CITIES

STEVE MELIA



See: Melia (2015)

“Traffic Removal” – 3 Types

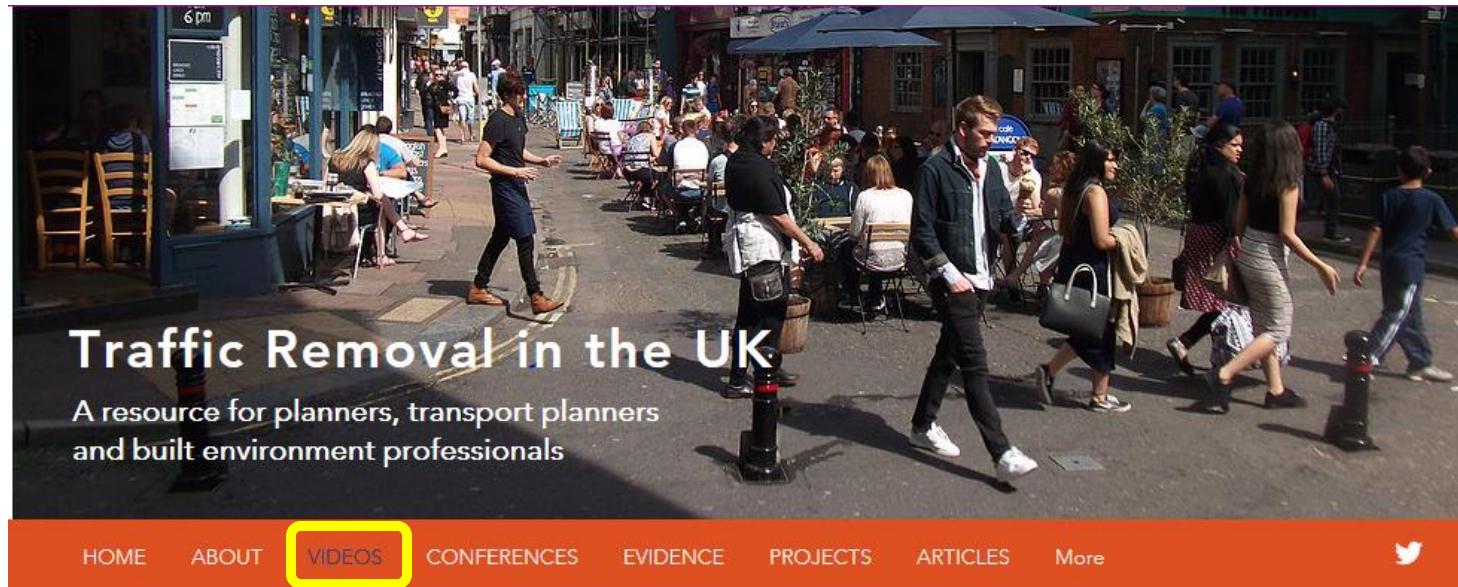


1. Pedestrianisation
(usually shared with cyclists)

2. Filtered permeability (separating modes to give some an advantage over others)



3. Reductions in road capacity, or re-routing to remove through-traffic



Traffic Removal and the Renaissance of Leicester

How Leicester reclaimed its city centre from the road-building excesses of the 1960s and 70s.



The reclaiming of Queen Square, Bristol.

Cambridge: Traffic Removal Through Filtering

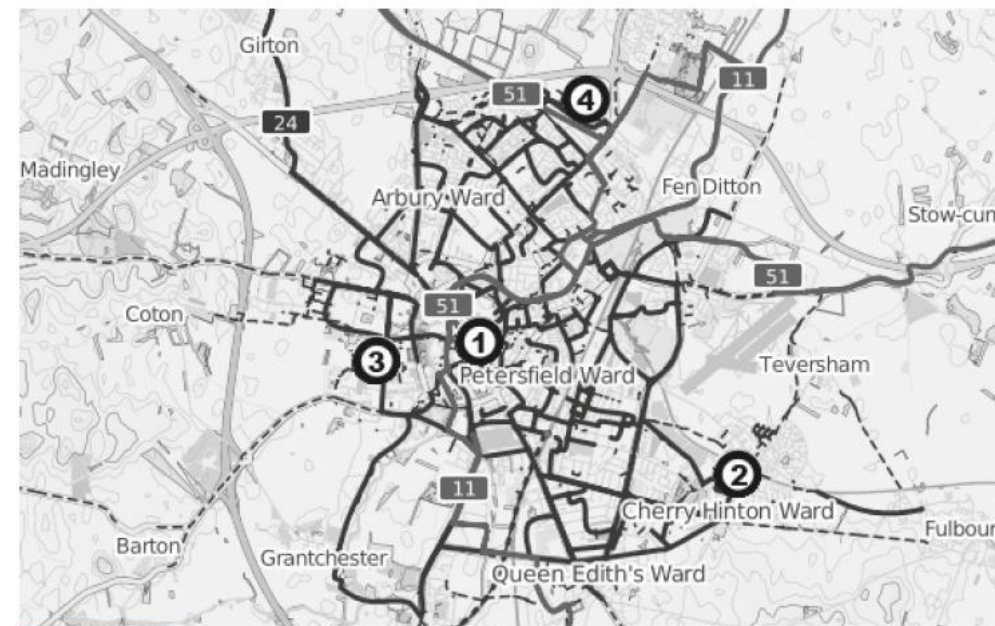
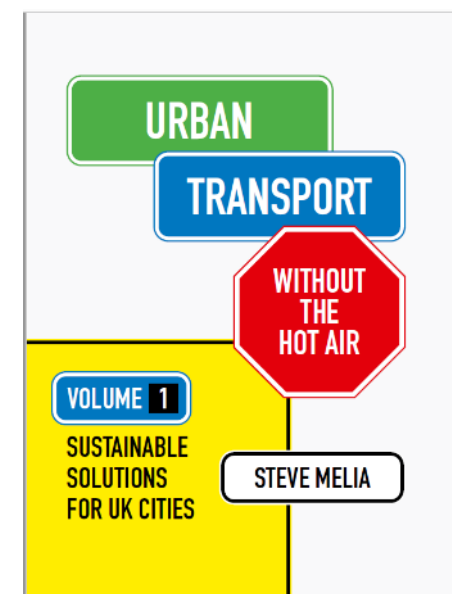
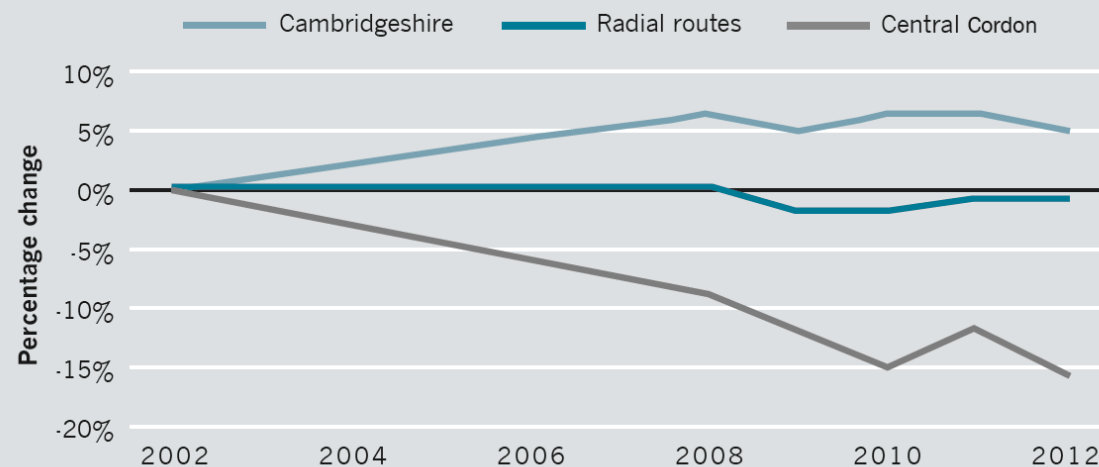


Figure 15.15 Cambridge cycle routes (© Openstreetmap contributors)

Figure 15.11 Percentage change in traffic in Cambridge 2002-2012³⁹⁷



“Disappearing Traffic”

When roads are closed some traffic is displaced,
some ‘disappears’

- Based on 63 cases from 10 countries
- 51 cases – traffic went down
- Why?... We are still unsure.

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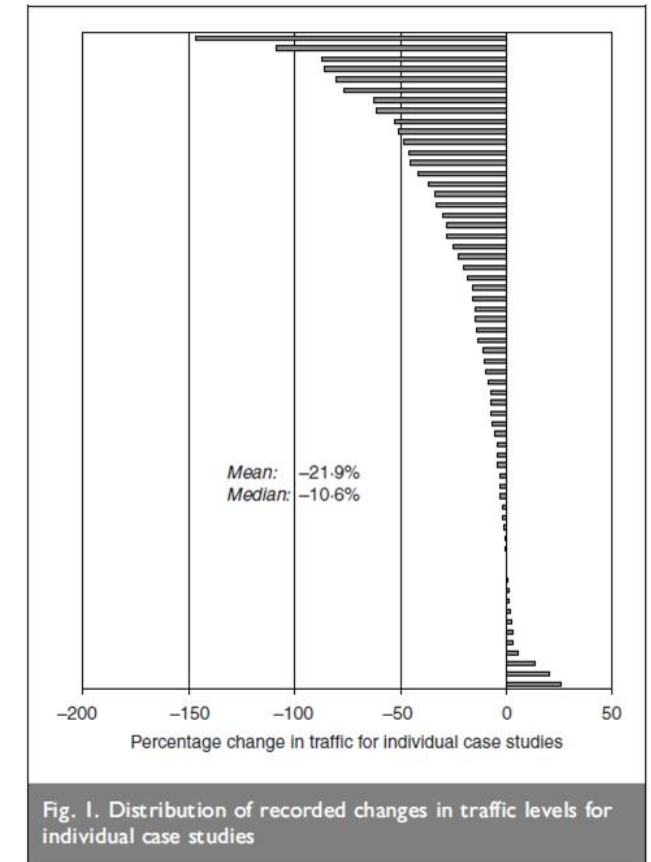
Stephen Atkins
Visiting Professor,
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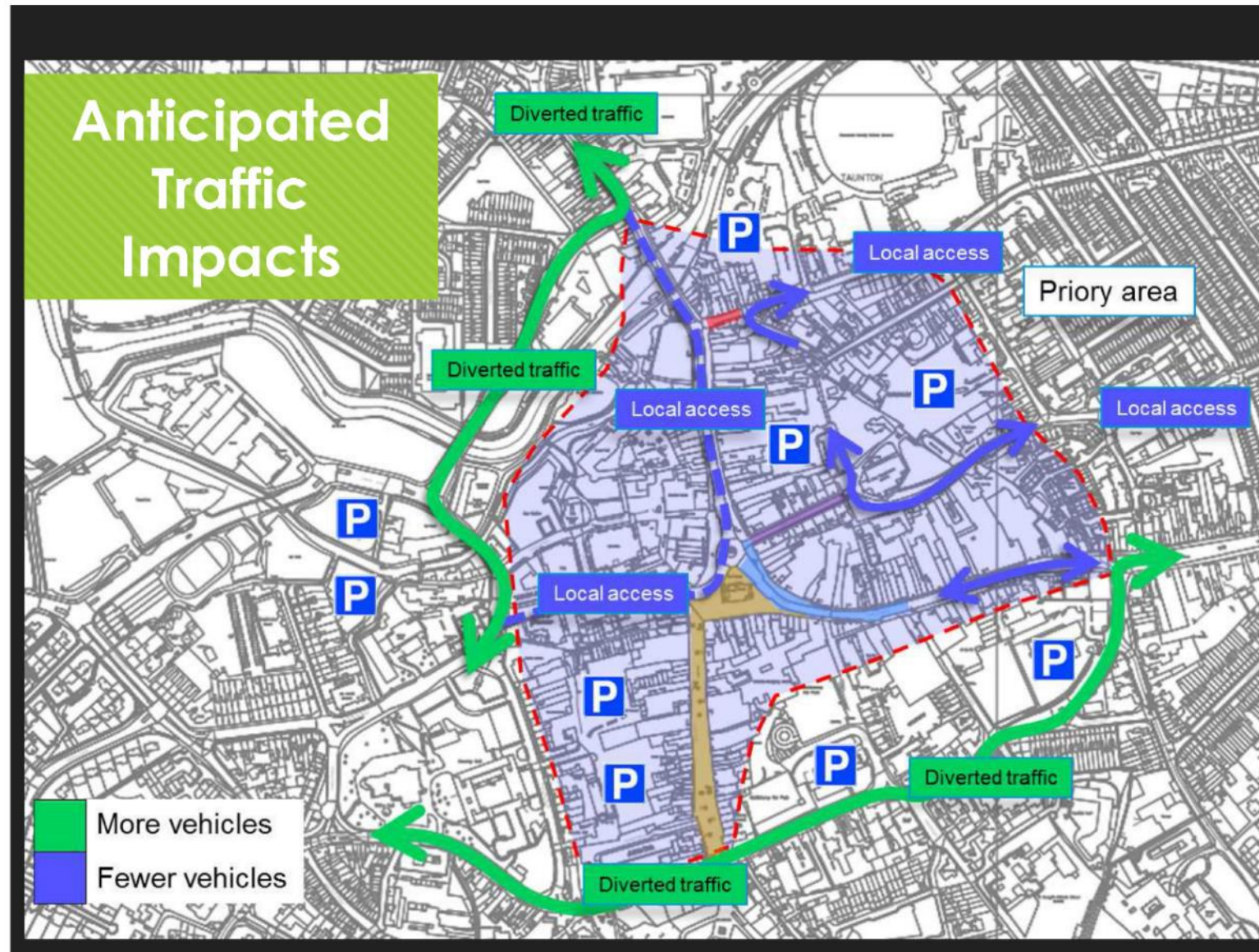
Phil Goodwin
Professor of Transport Policy
and Director of the ESRC
Transport Studies Unit,
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Disappearing traffic? The story so far

S. Cairns, S. Atkins and P. Goodwin



Study of Pedestrianisation in Taunton



Traffic removal provokes widespread opposition

- European cities no different from British cities in that respect.

(See Melia, 2015, Melia and Shergold, 2016)

Hundreds protest as roads close for 'Mini-Holland' cycle-friendly scheme

MARK CHAMBERLAIN | about a year ago | 445 views



Click to follow The Evening Standard



Demonstration: opponents of Walham Forest's policy gather outside the town hall, Nigel Howes/

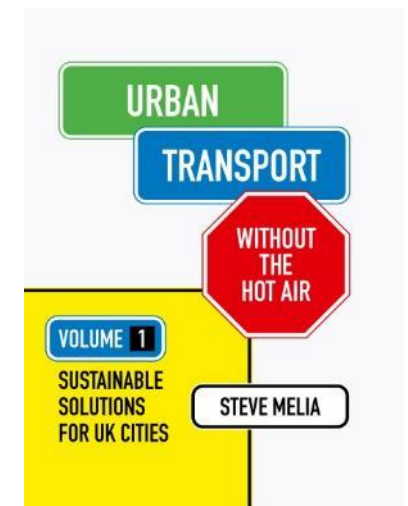
Hundreds of people joined a protest against London's first cycle-friendly "Mini-Holland" scheme, claiming the road closures it entails are causing gridlock and "suffocating" business.



Avec



Non à la fermeture des voies sur berge rive droite !



Key to Long-term Success: The 'Wow Factor'



Before

Groningen



Before

Lyon



After



After

References

- Cairns, S., Atkins, S. and Goodwin, P. (2002) Disappearing traffic? The story so far. Municipal Engineer. 151 (1), pp. 13-22.
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- Melia, S. (2008) Neighbourhoods Should be Made Permeable for Walking and Cycling But Not for Cars. Local Transport Today. January 23rd .
- Melia, S. and Shergold, I. (2016) Pedestrianisation and politics - a case study . Proceedings of the Institute of Civil Engineers - Transport. ISSN 0965-092X [In Press] Available from: <http://eprints.uwe.ac.uk/31369>

And many more on: www.trafficremoval.uk

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Greening neighbourhoods

Danni Sinnett

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Multifunctional greening



Augustenborg, Malmö



6 km canals,
swales

10 retention ponds,
wetlands, green spaces

2,100 m²
green roofs
9,000 m²
roof garden

Multiple benefits

90%

Stormwater managed
by SuDS

80%

Reduction of
stormwater runoff

70%

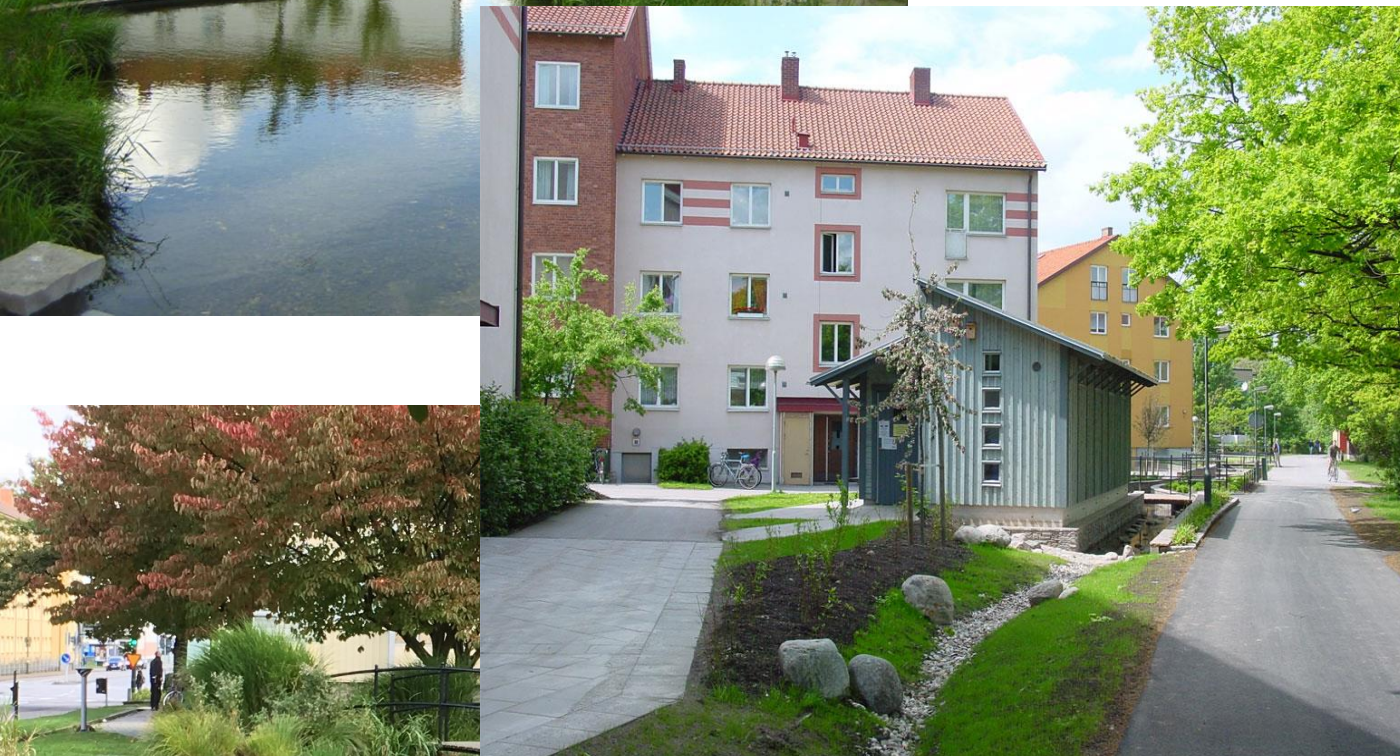
Reduction in flooded
surfaces

50%

Increase in
biodiversity

50%

Reduction in
turnover of tenancies





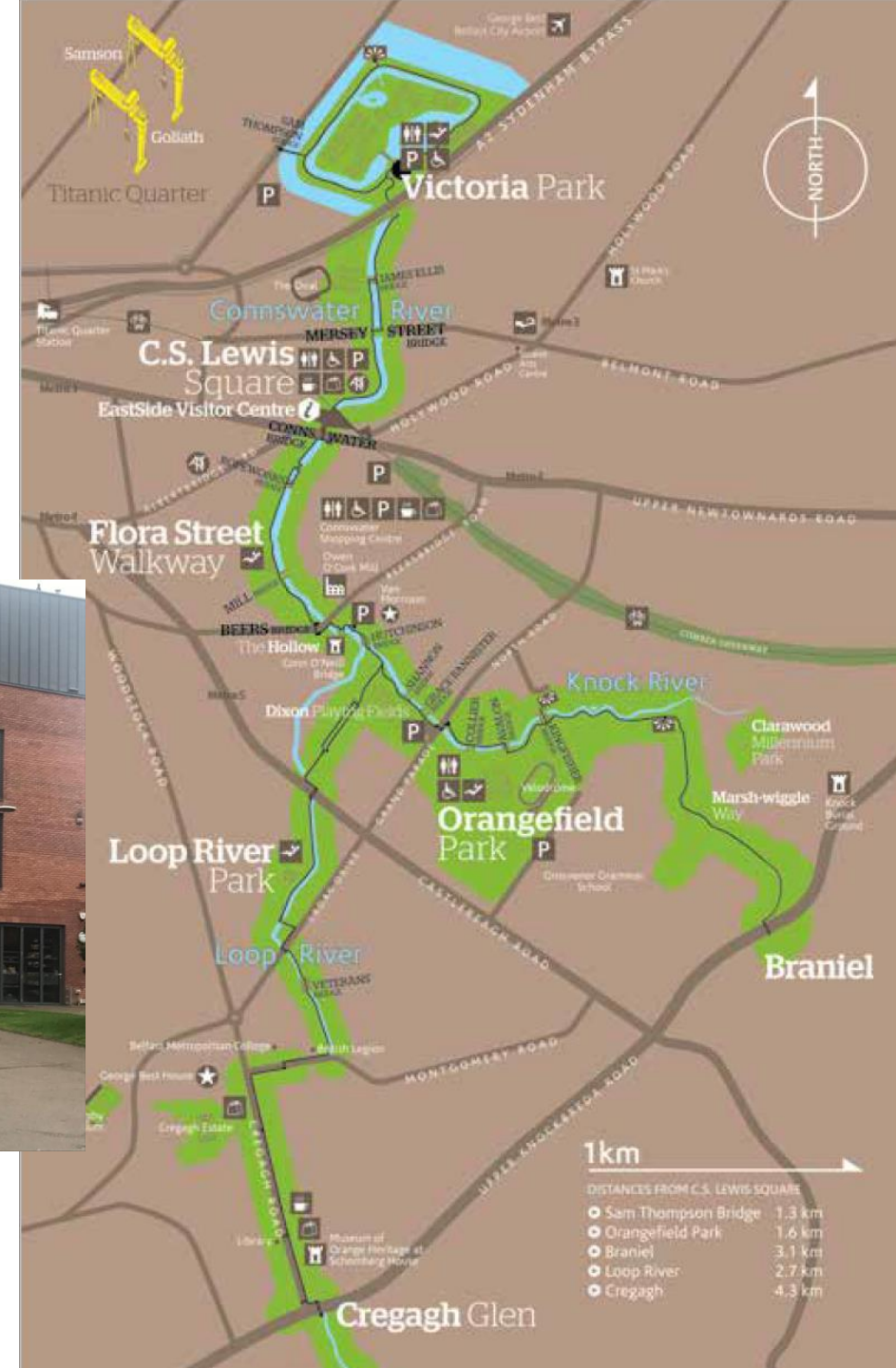
Credit: Katie Williams

Cooling

- $\approx 2^{\circ}\text{C}$ reduction in ambient temperature
- Up to 8°C reduction under trees

Connswater Greenway, Belfast

- 9 km linear park connecting Connswater, Knock and Loop Rivers
- New bridges
- Heritage and walking trails



Outcomes



1,700
52%



Properties protected
from flooding

Increase in cyclists,
pedestrians, anglers

Ecological status in
rivers

Perceptions of litter,
incivilities and safety
from crime

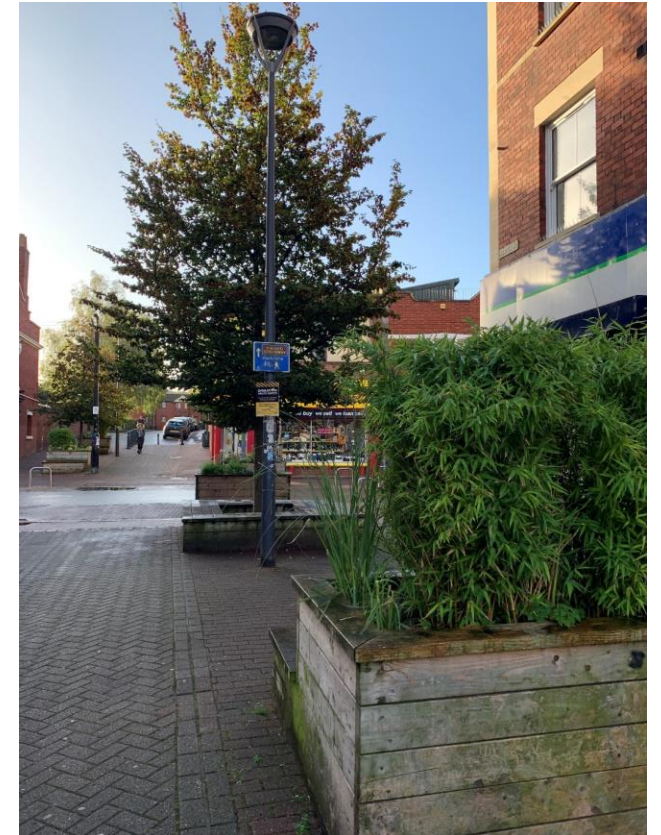
Making connections



Reviving lost spaces



Little and often



Opportunities and challenges

"You educated me – I didn't know it's for the water. I just thought it's pretty, and it looks nice for the neighbourhood"

"We would hope that ... Council Tax pays for that. We would not expect to pay on top of that, and people would not expect to be doing voluntary stuff on top of that."



We
can
do
better
than
this



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ELSEVIER

Review article

Environmental, health, wellbeing, social and equity effects of urban green space interventions: A meta-narrative evidence synthesis

R.F. Hunter^{a,*}, C. Cleland^b, A. Cleary^b, M. Droomers^c, B.W. Wheeler^d, D. Sinnett^e, M.J. Nieuwenhuijsen^{f,g,h}, M. Braubachⁱ

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ⁱ WHO Regional Office for Europe, European Centre for Environment and Health, Bonn, Germany

[Hunter et al., in press](#)

[WHO Review](#)

[WHO Brief](#)

World Health Organization
Regional Office for Europe

EUROPEAN ENVIRONMENT AND HEALTH PROCESS

Urban Green Space Interventions and Health

A review of impacts and effectiveness

World Health Organization
Regional Office for Europe

Urban green spaces: a brief for action

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Thank you Any questions?

