

Presentation to the GGDA Consultative Forum
21st September 2023

“Getting to the healthy city”

The benefits of Traffic Reduction and incremental change



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Getting to the Healthy City

“But where will all the traffic go?”

- Reprising the science behind traffic reduction
- Recent evidence ... from Ireland and around the world
- The latest Dublin city traffic proposals

The potential for incremental change and creating a healthier city

Dublin InQuirer

Opinion

So Where Will All the City-Centre Traffic Go?



David O'Connor

David O'Connor lectures at DIT and co-runs the MSc in Transport and Mobility, a new multi-disciplinary programme in transport planning. Follow him on: [www.twitter.com/doccer](https://twitter.com/doccer)



<https://dublininquirer.com/2017/05/17/david-so-where-will-all-the-city-centre-traffic-go>

Explaining Traffic Reduction [March 2019 talk]

“Where will all the traffic go?”

- Traffic reduction, or “traffic evaporation”, as it is increasingly referred to, is a recognised effect of good *traffic demand management* schemes. And the point of it is that, when executed well in cities with good policies, the traffic doesn’t divert on to nearby streets, it reduces overall.

“It evaporates, right?”

- Actually it does. Not very scientific sounding, or even helpful, many might think. But there is a sound basis for this counter-intuitive idea and lots of evidence to support it too.
- This is based on hard evidence and the experience of other cities. And there is a reason for it.
- The question is: how to explain this?



A. Freiburg's Cathedral Square was used as a car park in the 1960s (above left). During the mid-1970s cars were banned. It is now a lively pedestrian zone with an open air market (above right).



B. Klarastrasse was a street designed for cars, in the 1960s (above left). Since traffic calming in the late 1980s, car traffic has dropped and it is now a safe and quiet neighborhood street (above right).



C. The Wiwili Bridge in Freiburg ca. 1970 (left): Both lanes were reserved for motor vehicles. The former tram line crossing this bridge was removed in the 1960s. In the 1990s the bridge was closed for cars and is now used exclusively by bicycles (right).

Photos provided by the City of Freiburg and Karl-Heinz Raach, Freiburg



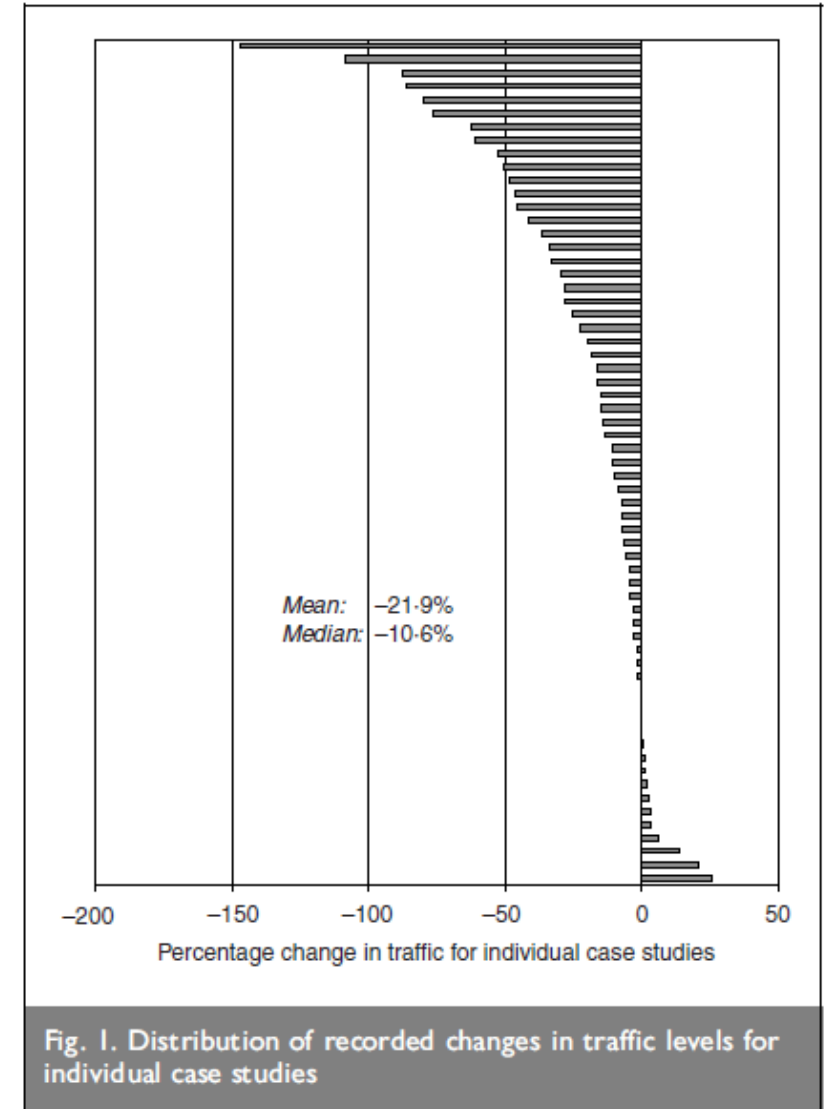
Evidence for Traffic Reduction

Dissapearing Traffic? The Story so far: Evidence on the Effects of Road Capacity Reduction on Traffic Levels, 2002

A seminal UK-based study looked at 70+ international schemes where road space had been taken away from cars and put to other use

- When roadspace for cars is reallocated, traffic problems are usually far less serious than predicted
- More surprisingly, traffic levels on adjacent streets usually stays about the same and in many cases even reduces.
- The studies found that people react to change in much more complex ways and the potential for behaviour change is significantly higher than generally assumed

“Two characteristic comments from local transport planners are: ‘*it’ll be all right by Friday*’, and the ubiquitous ‘*the traffic has disappeared and we simply don’t know where it has gone to*’.”

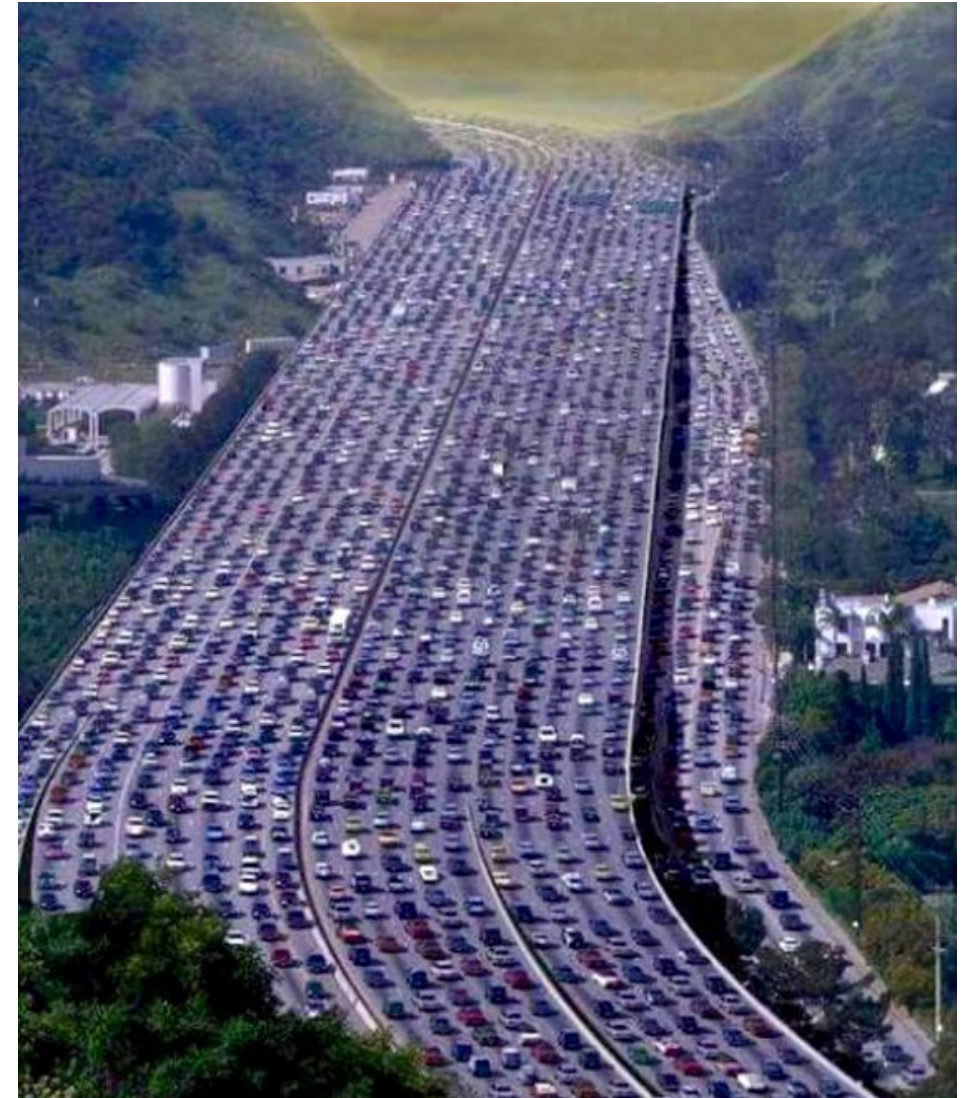


Induced Demand and its Opposite

Induced demand (also “latent” or “hidden” demand)

- Central to the idea of traffic reduction is Induced Demand, essentially its opposite
- As capacity is increased to meet a demand, people change their behaviour to further increase demand (switching route, mode or travel time)
- Also new trips are created as people chose to undertake more trips and longer trips
- This is why “Traffic behaves more like a gas than a liquid when its space is restricted” (Jeff Kennworthy, World Transport Policy & Practice 18, no 4, 2012)

Evidence from forward-thinking cities shows that converse also applies ... traffic can be reduced through good design and effective management



Explaining Traffic Reduction

Cairns et al (2002) – Key advice: -

A: **Good design and implementation** (inter-disciplinarity is key to this)

- Get schemes right at the beginning, and ensure that all the details are implemented correctly

B: **Monitor and evaluate** (to be agile)

- Monitor and evaluate, so that (i) facts are readily available as soon as possible and (ii) misinformation can be countered

C: Communications, communications, communications (**sell the good story**)

- Use the press and public consultation work to emphasise that there are likely to be initial problems but also so that behaviour change can be initiated in advance of a scheme

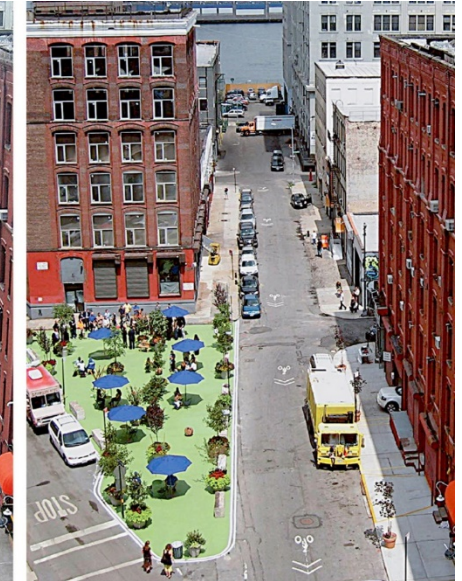
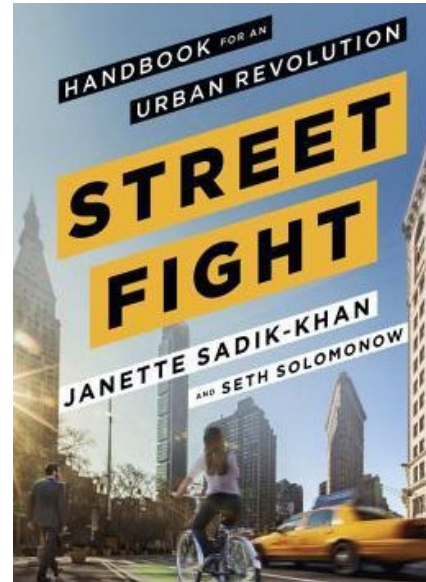
D: Have a strategy but **incremental is best**

- Implement controversial schemes in stages, try to influence any potential side-effects so that they are positive rather than negative, and ensure that the benefits from each stage are obvious

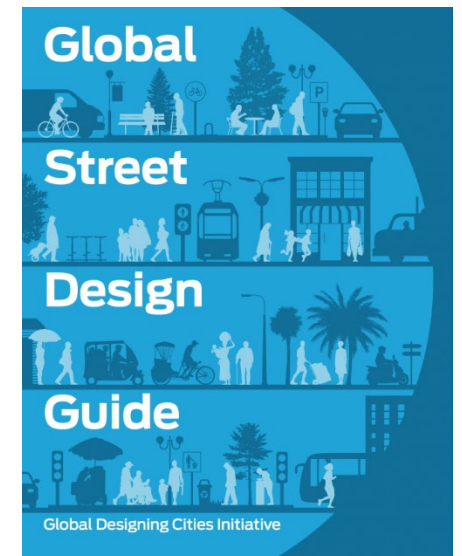
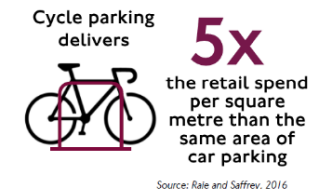
Evidence for Traffic Reduction

Evidence from around the World

- NYC Traffic Commissioner, Janette Sadik-Khan, used a strong evidence base and strenuous public engagement to justify incremental gains for walkability and the public realm [Sadik-Khan & Solomonow, 2016]
- Healthy Streets for London and Mayor Sadiq Khan's "mini-Holland" schemes have regenerated communities in decline [TfL Economic Benefits of Active Travel hub]
- The Global Designing Streets Initiative has prepared a Global Street Design Guide to support practitioners to redefine the role of streets in cities around the world, offering technical details to inform street design that prioritizes pedestrians, cyclists, and transit riders. [www.globaldesigningcities.org]



HIGHER SPENDS



Blackrock and Coastal Mobility Route research



What do businesses say?



increase in public space
available in Blackrock
Main Street



would like the changes to Blackrock
Main Street made permanent
(including those with suggestions for further design improvements)

*“I think people are sitting
outside in Blackrock
because people have
always wanted to sit
somewhere and be where
other people are. That’s
been a big lesson.”*

(NTA Representative)



improvement in the overall
‘health’ of Blackrock Main
Street increasing from 53%
to 74%*

*using the TIL Healthy Streets Toolkit

How are people getting about?

*“ Covid has...thrown
a spanner in the works,
but has given everything
a rocket aswell’*

(Cllr Kivlehan,
DLR County Council)



times more cyclists along
the Coastal Mobility Route
since its introduction.



reduction in number of
detected car trips on
Blackrock Main Street



more bicycles than cars on
Blackrock Main Street

What TU Dublin found overall:

- Signs of the commencement of a **significant cultural shift** with a sensitivity to the **interlinked role** of urban design, urban regeneration, livability, and sustainable mobility.
- An approach to **stakeholder engagement that is atypical for an Irish context** – one that focused on speed and action, but also direct on-the-ground engagement and a willingness to proactively communicate *and* listen.
- An active and fairly cohesive business community along with a proactive Local Authority



DLR COVID-19 Mobility Review full report available at:

<https://www.tudublin.ie/explore/schools-and-disciplines/environment/environment-planning/news/tu-dublin-assessment-finds-blackrock-main-street-works-effective.html>

Blackrock and Coastal Mobility Route research



Key recommendations: -

- Develop a **permanent public realm regeneration plan for Blackrock Main St**
- **Link the cycle & public realm network** (creating a **network effect**)
- **Monitoring & evaluation** of similar projects in the future
- **Experimental, temporary or pilot projects to be encouraged** for certain projects
- **Couple placemaking and regeneration objectives with transport objectives.**

“How ‘open streets’ are transforming public space in French cities”

Corroborative research by Pablo Carreras, Codra Conseil presented to Walk21 Ireland, September 2022: -

Examination of recent “open streets” in France (Lyon, Lille, Nancy and Senlis)

Comparable findings and additional TU Dublin research emerging across Belgian (Ghent Pedestrian Circulation Plan), Norwegian (Oslo’s Car Free Urban Life Program) and Spanish (Pontevedra traffic-calmed city) cities.



Pedestrianisation of Rue Gambetta, Nancy implemented as part of a wider mobility plan including public transport priority

Dublin's latest Transport Plan

Some key observations

The city centre needs a re-boot

Potential for incremental change (Zurich has been implementing a similar programme since 2012)

The public transport network won't function without it

Good focus on place and movement

Evidence of success from Capel Street ...

... BUT the business community has to be brought along

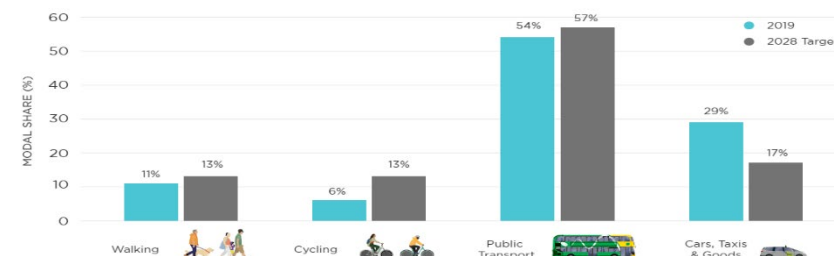
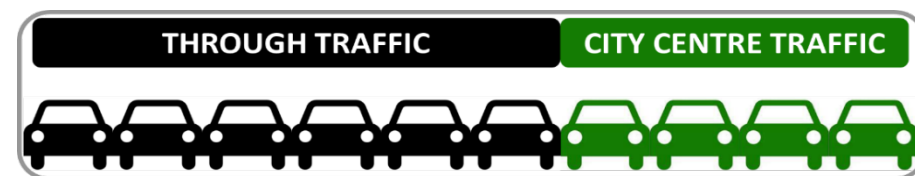


Figure 21 – 2028 Development Plan Target Outcome



Dublin's latest Transport Plan

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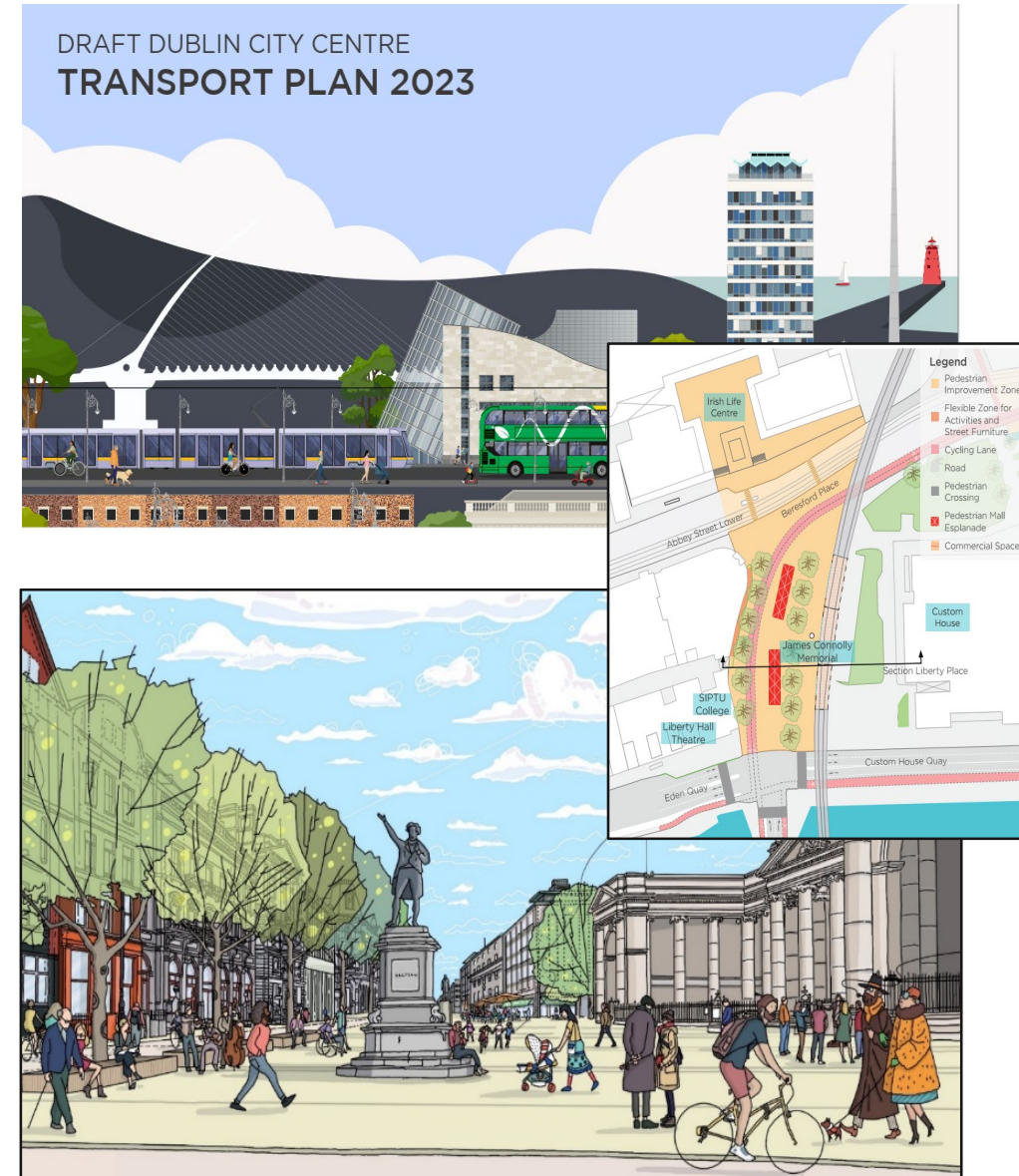
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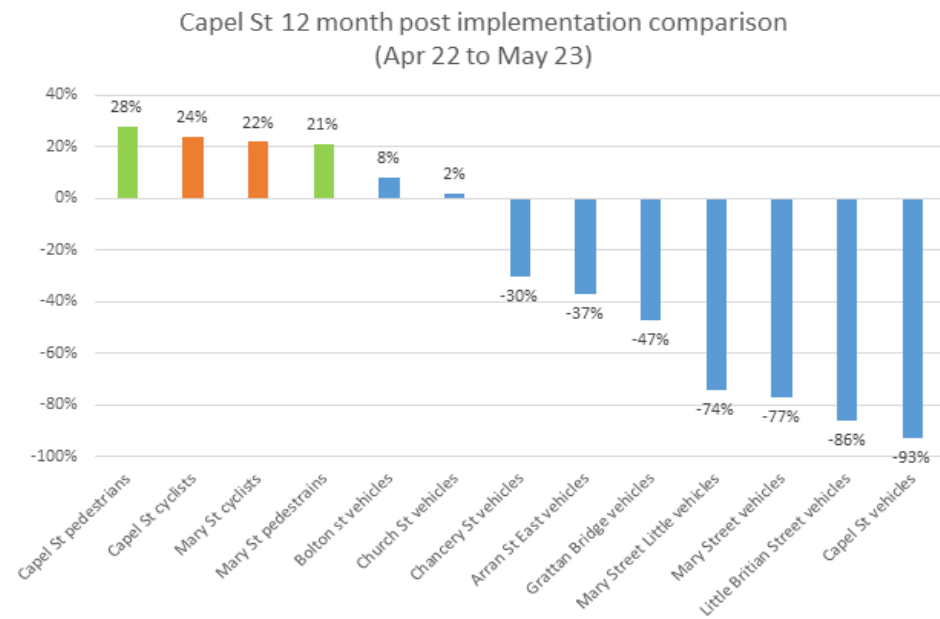
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Thank you ... any questions?



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