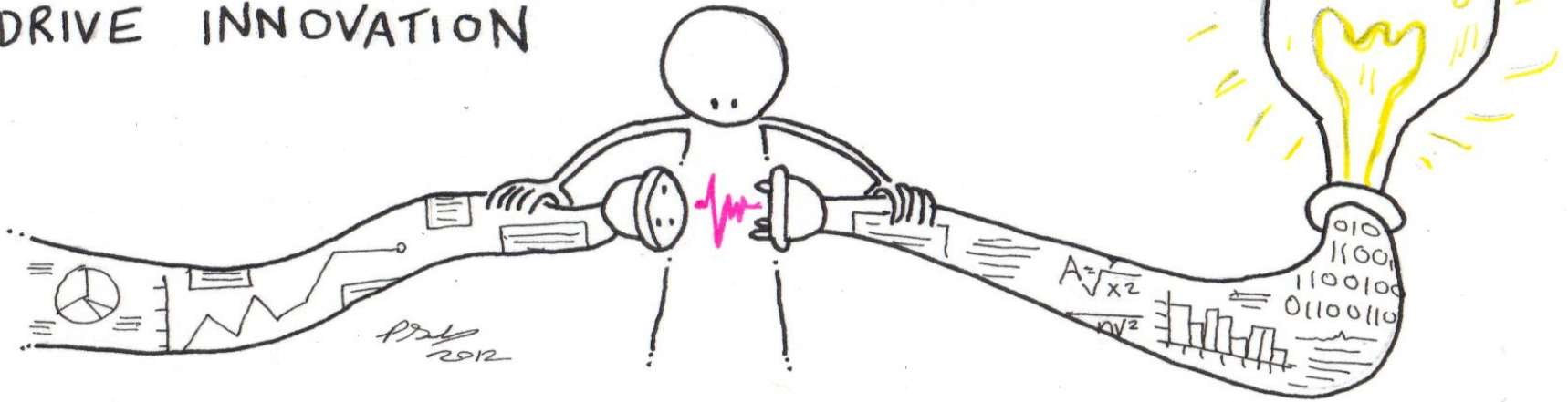


DUBLINKED

USING DATA TO
DRIVE INNOVATION

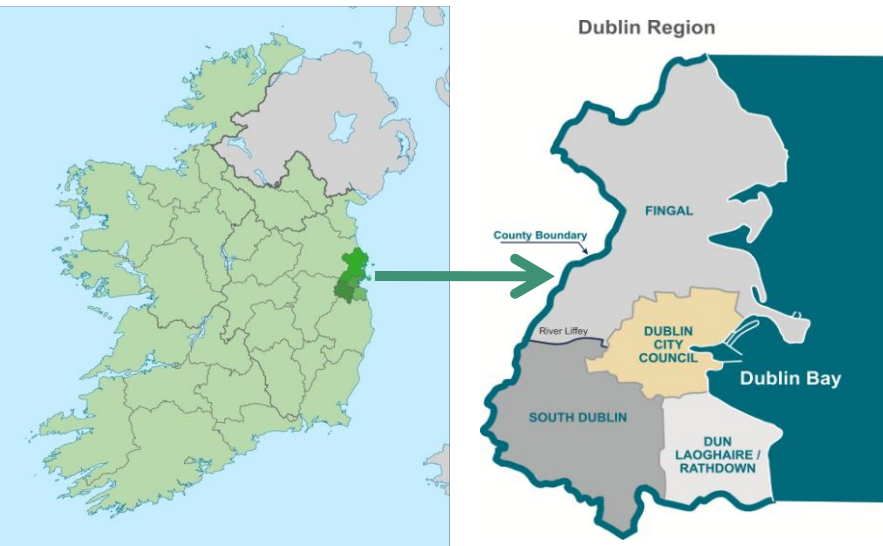


Data informing Smart Cycle Solutions

March 23rd 2016 Enterprise Ireland

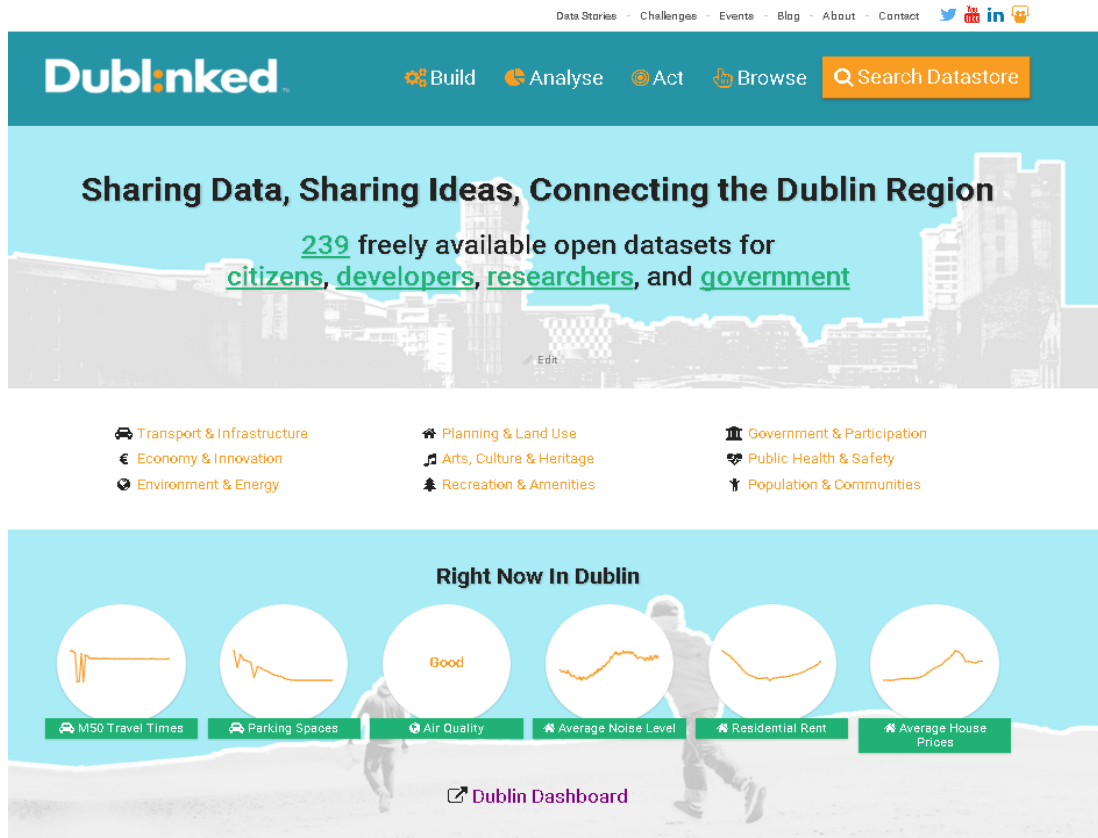
Dublin Region: hub for technology & data innovation

Our vision is to drive innovation and collaboration in the development of new urban solutions, using open data and with the Dublin City Region as a test bed.



- 1.3 million population
- Growing reputation as a global technology hub
- World class research clusters
- Emerging start-up and open data community

Dublinked Open Data Platform – Our Goals



1. To stimulate **economic growth** and **innovation**
2. To drive public sector **cost efficiencies** and improve **services**
3. To promote **transparency** and **participation** in local government

Build It!

Access more than **238** datasets to make apps and solutions to regional challenges

🕒 Real Time Data & APIs

Access live data on...

- public transport • travel times
 - dublinbikes • car parking
 - environmental monitoring
- fix your street • planning apps
 - commencement notices
 - community facilities

[See all APIs](#)

👤 Meet the Maker

Meet Jason Roe of Predict Insight

Jason tells us how he used Dublinked open data to build his ParkYa app, which helps cities make their parking information more accessible.



Browse Datasets by Category

- Transport & Infrastructure
- Economy & Innovation
- Environment & Energy
- Planning & Land Use
- Arts, Culture & Heritage
- Recreation & Amenities
- Government & Participation
- Public Health & Safety
- Population & Communities

Sharing data stories

<http://dublinked.ie/data-stories/>

New applications that unlock social and economic value

Share your stuff

Showcase your apps, data viz, products, services on Dublinked.

[Here's how](#) →



Fix Your Street

Crowdsourced data incorporating mobile for citizens to report non-emergency problems like litter, graffiti, broken lights or road defects.

[Read on](#) →



Is Dublin Busy?

Find out the best time to come into Dublin town to do your shopping, park your car, or grab a dublinbike. [Read on](#) →



Local Authority Finances.com

Find out how local authorities spend their budgets. Compare local authorities with each other, with the national average, and download the source data. [Read on](#) →



Dublin Dashboard

Access a wide range of datasets about the city and a suite of visualisation and analysis tools.

[Read on](#) →



Fingal Open Data

Dominic Byrne explains how Fingal Open Data is helping people gain an insight into local government, understand local issues and propose new ideas. [Read on](#) →



ParkYa

ParkYa mobile parking app uses Dublinked open data to help cities make their parking information more accessible to the public.

[Read on](#) →

Connect people with ideas to people with problems



Events Planning, Technical, Spatial, Visualisation, Open Innovation, Public Sector, Public Transport, Linked Data, Tourism, Data Analytics, Smart Dublin.....

Platforms for engagement

DublinDashboard
City Intelligence



Dublin Overview



How's Dublin Doing?



Dublin RealTime



Dublin Mapped



Dublin Planning



Dublin Near To Me

1. [Dublinked](#) portal invites reuse of local gov open data for new applications and services
2. [Dublin Dashboard](#) provides interactive visualisations of real time and time series open data
3. [Smart Dublin](#) engages with technology providers, researchers and citizens for smart solutions to identified needs

► DUBLIN'S CHALLENGES

HELP US TRANSFORM THE WAY DUBLIN SOLVES CHALLENGES



SMART MOBILITY

- How can Dublin better manage pedestrian, cycle and vehicular flows and reduce congestion?
- How to encourage more people to walk or get on their bikes?
- How can we better understand how people move around the city region?



ENVIRONMENT

- How to improve the safety and cleanliness of our streets and open spaces?
- How can we Dublin better understand, predict and respond to flooding?
- Reduce energy use and build long term sustainability and resilience to climate change.



SMART GOVERNMENT

- How to access more timely and accurate information to better manage our city?
- How can Dublin open up more public information and build an open data culture and encourage information sharing in the public sector?
- How do we deliver relevant information to citizens in real time?



SMART PEOPLE

- How can local government use technology to engage better with Dubliners?
- How can people get more people involved in improving their city and services?
- How to bridging the digital divide.



SMART ECONOMY

- How can we use smart technologies to improve city liveability and competitiveness?
- Innovating in procurement, taking a challenge based approach to procurement to deliver better quality outcomes for the city.
- Positioning Dublin as the place to pilot and scale new smart city technology opportunities



SMART LIVING

- Can collaborative technologies help bring communities together?
- How to create an accessible city for both young and old
- Helping old people live independently for longer

Procurement by Challenge - SBIR



SMART
DUBLIN

CYCLE CHALLENGE

DUBLIN WANTS MORE CYCLISTS!
Up to €100,000 seed fund
to pilot new cycle ideas.

Got a smart technology or data driven solution to grow cycling?

Dub:inked™

Supporting data-driven innovation in the Dublin Region

IT COULD BE SAFETY



SMARTER INFRASTRUCTURE



OR SECURITY



Whatever your idea, we want to hear from you.
APPLY FOR FUNDING BY 3RD MAY 2016.

Access to expertise and infrastructure for test sites



Sensors *real time*

- Traffic, footfall & cycle counters
- air and noise pollution
- river levels

Street assets

- parking meters
- traffic lights
- street lights
- real time bus signs
- cycle infrastructure

Telecommunications

Fibre, Wifi, CCTV, Traffic cameras

Understanding cycle demand – sources of data

- CKAN portal
- Open Licence (CC-BY)
- Data discovery

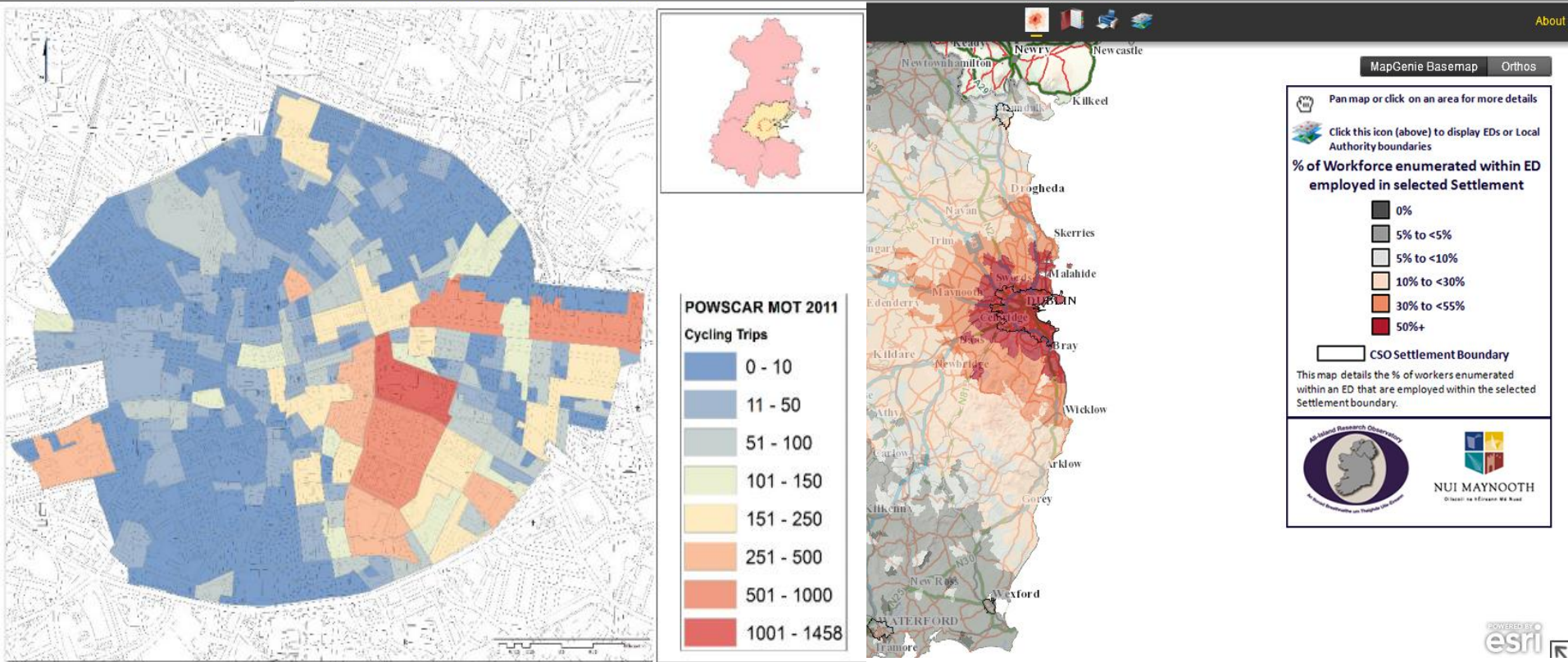
‘Data quality is universally awful. The good news is its awful everywhere’

Richard Stirling, Data.gov.uk

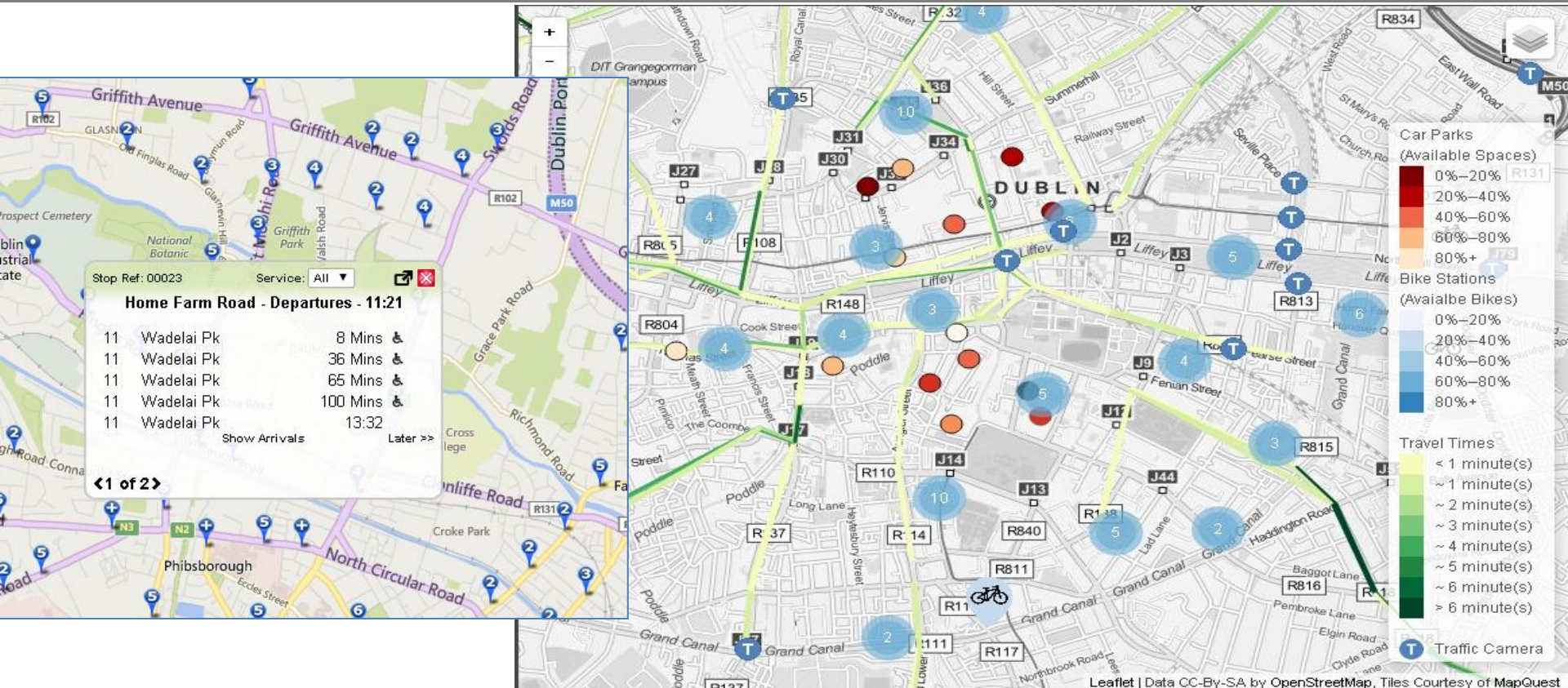
There are a number of sources of data that may inform your cycle solutions. You can search for [cycle data on Dublinlinked](#), also visit www.nationaltransport.ie and www.dublincitycycling.ie for more information.

- **Cycle flows:**
 - [Modes of travel](#), CSO POWSCAR
 - Real time: [dublinbikes](#), [cycle counters](#)
 - Annual traffic counts ([canal cordon](#)), [pedestrian footfall](#), see ‘Getting into Dublin’
 - [NTA surveys](#)
 - Crowdsourced: [strava](#) heatmap
- **Infrastructure:**
 - [Roads and streets](#)
 - [Cycle network](#)
 - [Cycle parking locations](#)
- **Safety and security:**
 - [Road collisions](#) (Road Safety Authority)
 - Crowdsourced: Dublin Inquirer [Bicycle Collision Tracker](#)
 - [No of cycle thefts](#), see [Cycle Campaign infographic](#)

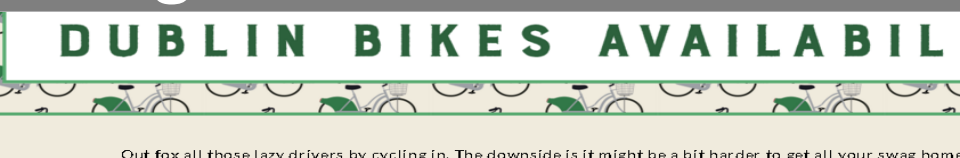
Modes of travel– CSO POWSCAR (AIRO)



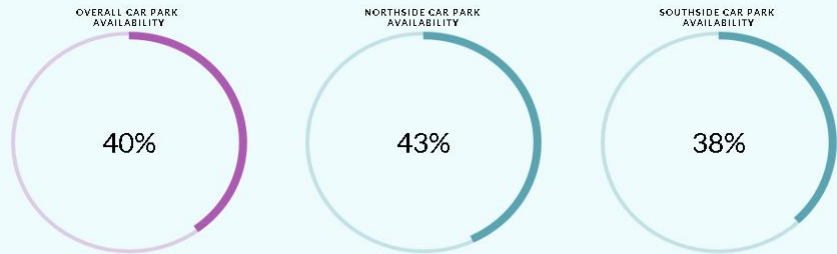
Real time traffic and travel maps (Dashboard)



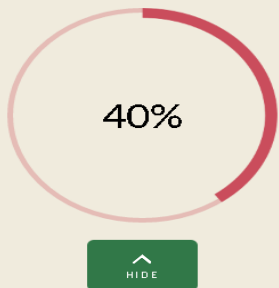
Real time multistory car parking and dublinbikes



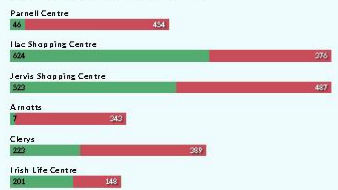
Foil those pesky clompers by ensuring that there is a nice spacious, legit spot waiting for you before you head in.



Out fox all those lazy drivers by cycling in. The downside is it might be a bit harder to get all your swag home.



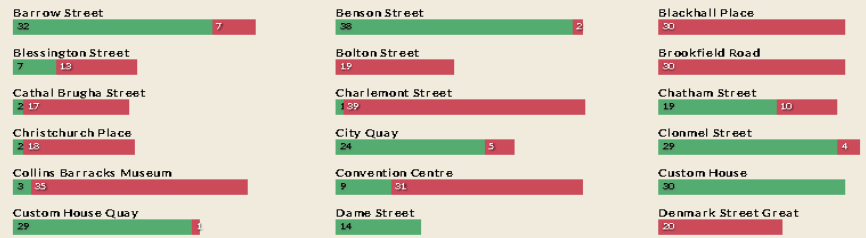
Northside Car Park Availability



Southside Car Park Availability



BIKES AVAILABILITY PER STATION



Traffic cameras and M50 journey times



M50 JOURNEY TIMES

The average free-flow journey times for the M50 are 23 minutes Southbound, and 24 minutes Northbound.

If you are planning on nipping into town using the good old M50, the current journey times are:

NORTHBOUND

25

MINS

SOUTHBOUND

25

MINS

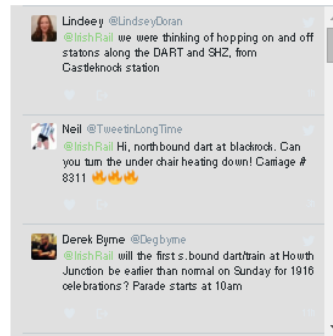
LUAS



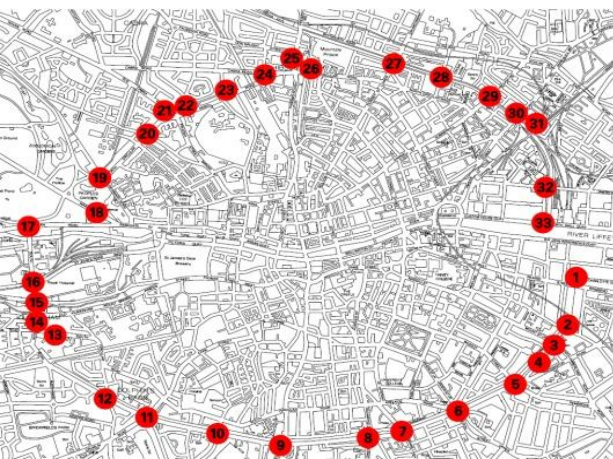
BUS



DART



Canal cordon counts – traffic, pedestrian, cycle

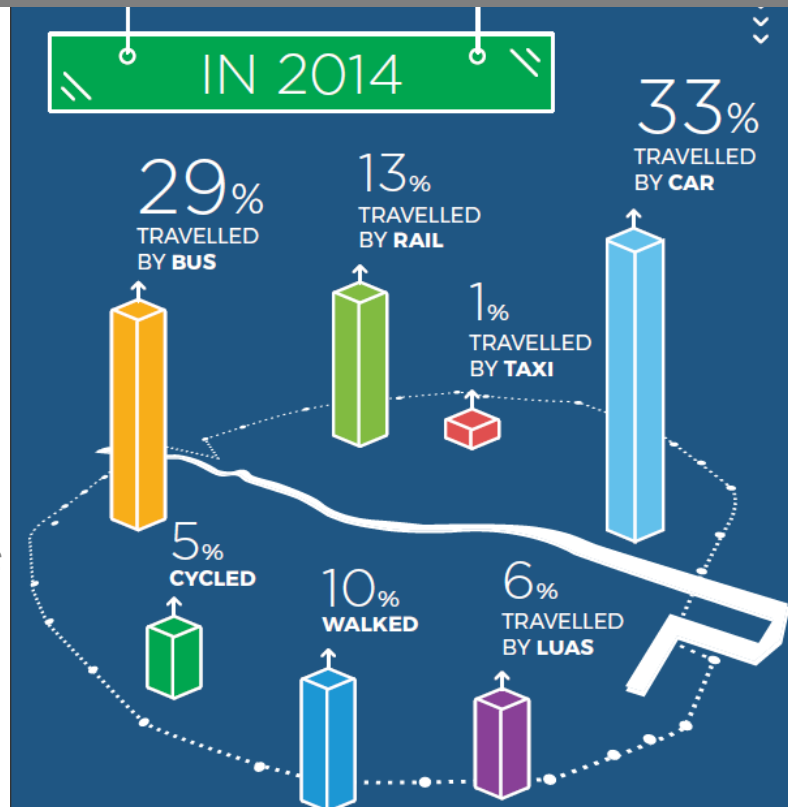


Canal Cordon
33 location- Nov
60 locations – May
2007 - 2015

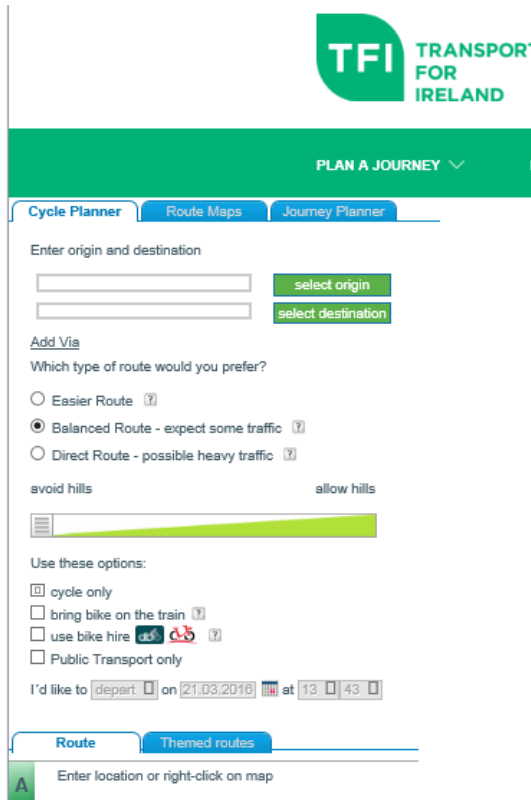
Footfall counters:
-BIDS 13 retail streets
2007-14
-DCC 4 counters

Table 3.1 Cycle Counter locations in DLR		
	Counter Location	Date of operation
1	N11 Stillorgan Road Totem (1-way) Replaced on December 10, 2015	January 13, 2011
2	N11 Montrose (2-way cycle track)	January 25, 2012
3	The Metals, Glenageary Dart Station – (2-way cyclists)	November 24, 2010
4	Rock Road Bus lane (1-way)	January 25, 2012
5	Rock Road Inside park near the Dart (2-way)	January 24, 2012
6	Clonskeagh Road Totem – (2-way)	May 3, 2012
7	Rock Road Totem (1-way) Replaced on October 14, 2015	March 7, 2012

NTA Cycle counters
-DLR 7 counters
-Battery issues with
counters



NTA Cycle Route Planner – difficulty at junctions



The screenshot shows the TFI Transport for Ireland website's 'Cycle Planner' section. At the top is the TFI logo and a green 'PLAN A JOURNEY' button. Below are tabs for 'Cycle Planner', 'Route Maps', and 'Journey Planner'. The 'Cycle Planner' tab is active, showing a form to 'Enter origin and destination' with input fields and 'select origin'/'select destination' buttons. Below this is an 'Add Via' section with a question 'Which type of route would you prefer?' and three radio button options: 'Easier Route', 'Balanced Route - expect some traffic' (which is selected), and 'Direct Route - possible heavy traffic'. There are also checkboxes for 'avoid hills' and 'allow hills' with a corresponding slider. At the bottom, there are checkboxes for 'cycle only', 'bring bike on the train', 'use bike hire', and 'Public Transport only'. A date and time selector at the bottom indicates a departure on 21.03.2016 at 13:43.



Cycle Journey Planner

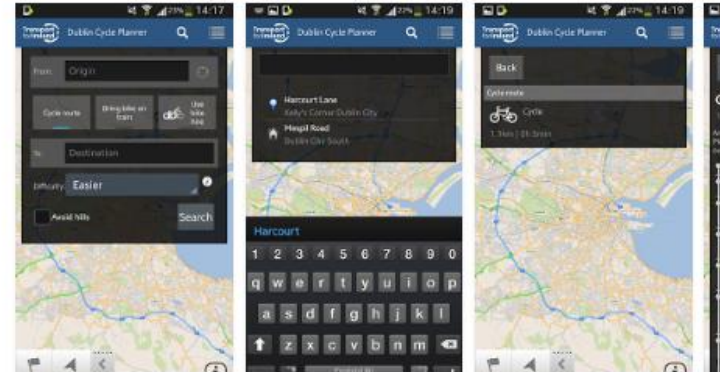
National Transport Authority Travel & Local

★★★★☆ 36

PEGI 3

Add to Wishlist

Install

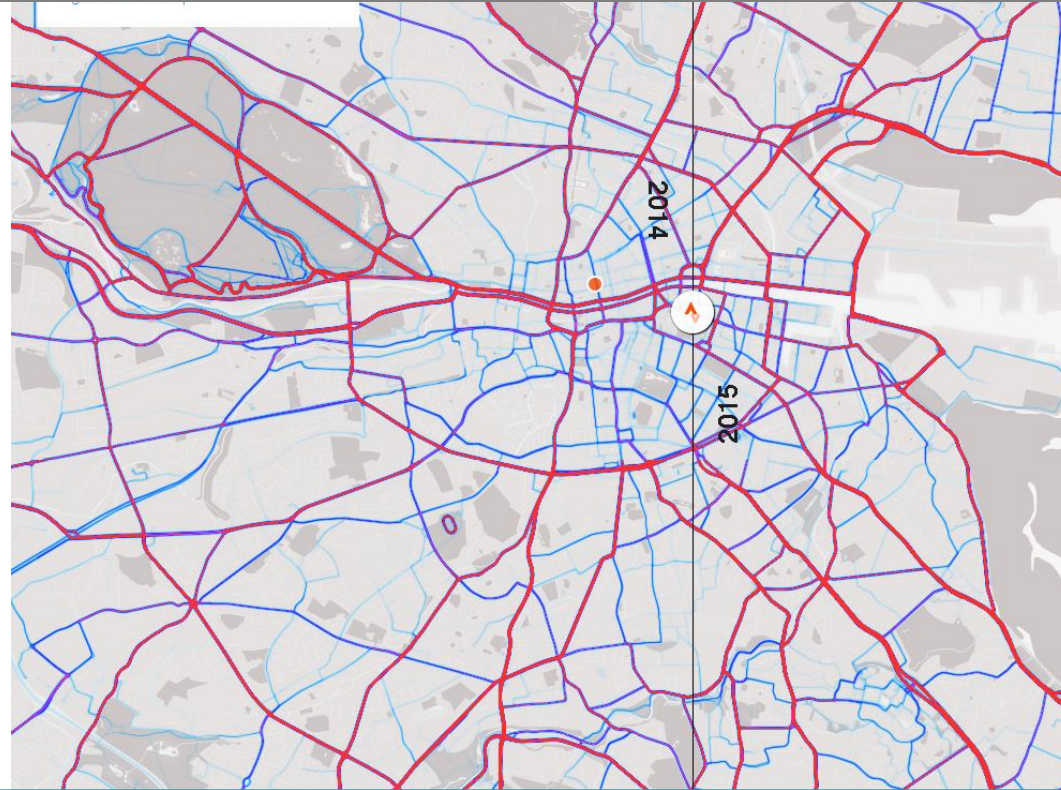
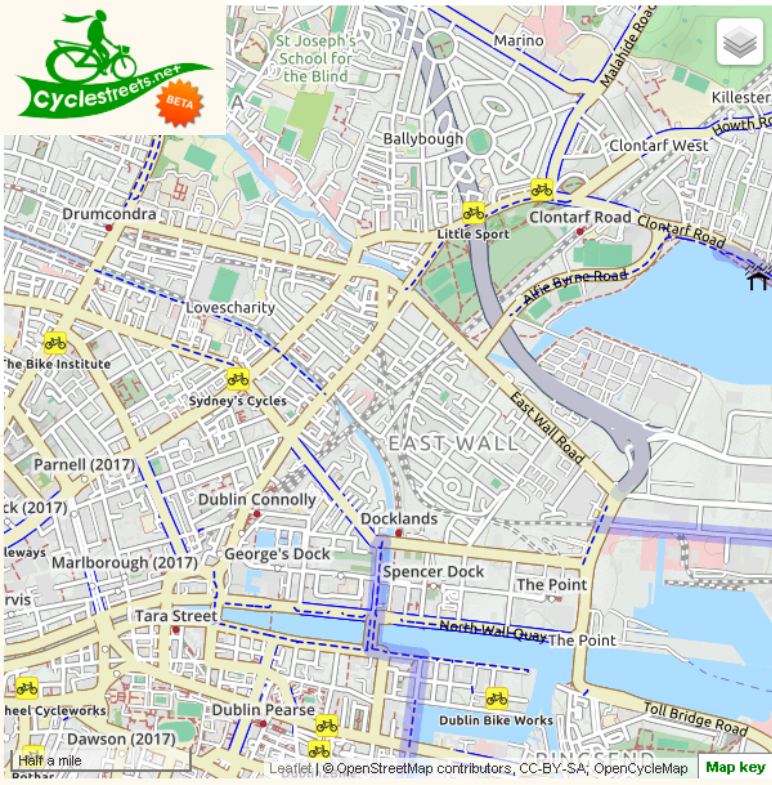


The Cycle Planner App from the National Transport Authority is a sophisticated route planner for cycle trips in the Dublin, Cork, Galway, Limerick & Waterford metropolitan areas.

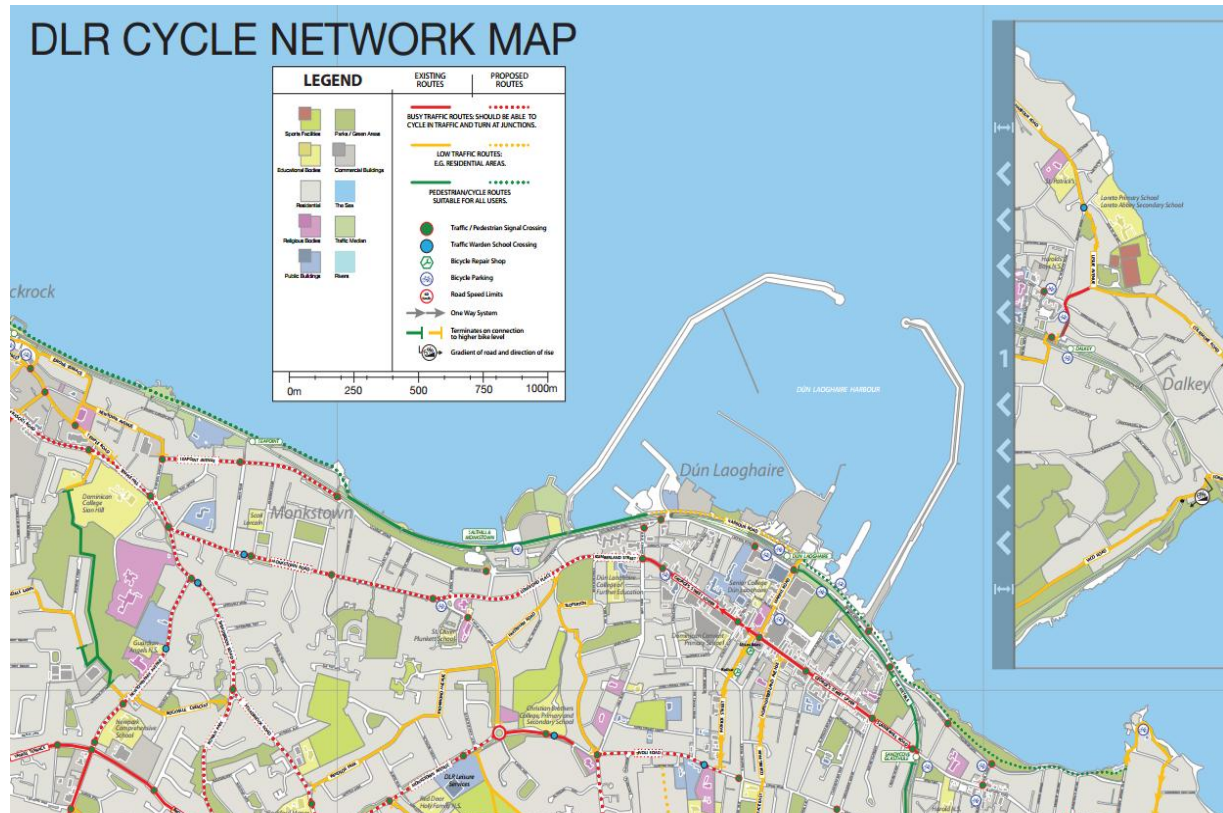
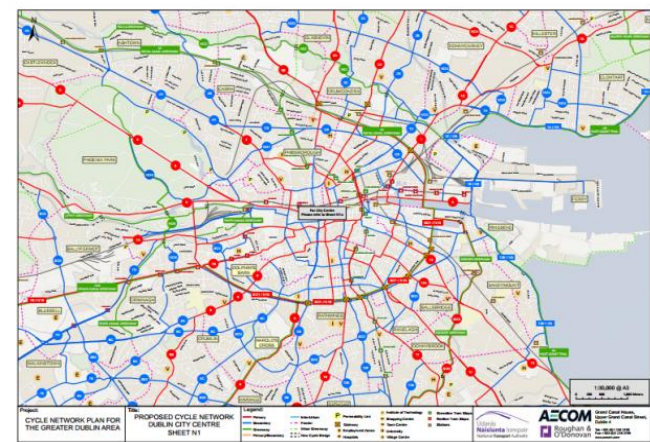
The app provides door-to-door route plans with options that will suit all levels of cycling capability.

http://www.journeyplanner.transportforireland.ie/cp/XSLT_TRIP_REQUEST2?language=en

Crowdsourcing cycle behaviour - show “desire lines”



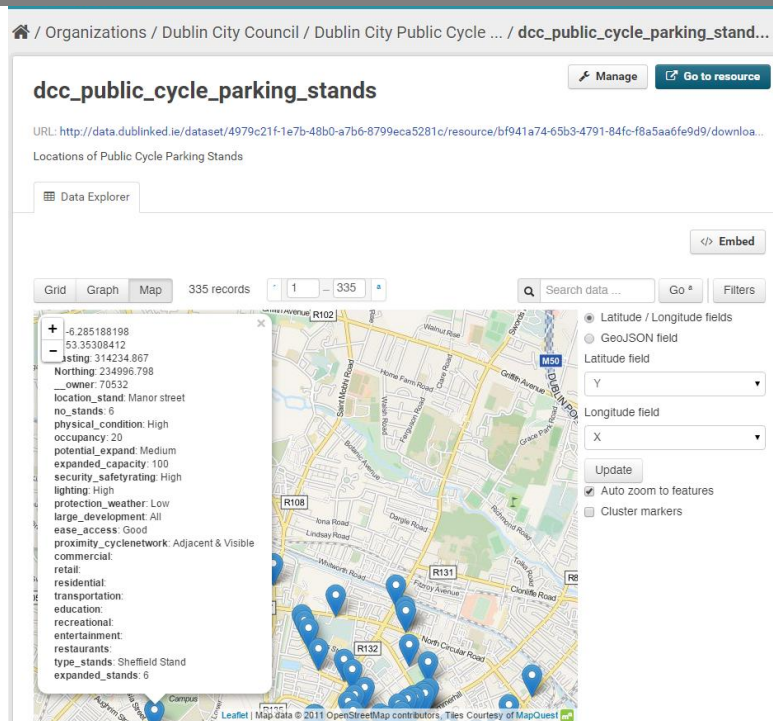
Cycle network, roads and streets, 'green routes'



Cycle parking locations



Figure 8.6: Drury Street Conceptual Design



<http://www.dublincity.ie/sites/default/files/content/YourCouncil/StrategicPolicyCommitteeandCorporatePolicyGroup/Transport/12,%20Dublin%20City%20Centre%20Cycle%20Parking%20Strategy%20RevE.pdf>

Bicycle security – Dublin cycling campaign



http://www.dublincycling.ie/sites/dublincycling.com/files/bike_theft_survey_results_feb_2015.pdf

Dublincycling.ie

Safety – bicycle collisions



Worst junctions (cycling campaign):

- Grattan bridge
- Talbot Memorial bridge
- Ormond Quay @Jervis St
- Victoria Quay @ Guinness
- Samuel Beckett bridge
- Customs House
- Church Street
- North King Street
- O'Connell St North
- D'Olier Street
- Tara /Townsend St
- Kevin St/Bridge St
- Christchurch

<http://www.dublincycling.ie/site/s/dublincycling.com/files/dublin-city10worstjunctions.pdf>

Dublin Inquirer [Bicycle Collision Tracker](#)

Seeking technology and data driven proposals that...

- Better use existing cycling data to inform solution
- Produce new data to better understand the issues
- Address Cycling Safety (both actual accidents and perception of safety)
- Address bike Security (cycle parking, bicycle theft)

Call out for technology and data driven proposals

Competition Launch	8 th March 2016 via eTenders
Briefing Event	23 rd March 2016 10 -12
Deadline for queries	14th April 2016
Deadline for applications	26 th April 2016 at 12am
Award of Contracts	June 2016