

Irish Cycling Campaign Factsheet: 30km/h speed limits in urban areas



Lower speed limits, like 30 km/h, are more comfortable for everyone: pedestrians, cyclists and motorists; calmed roads are proven to be safer for **all** road users.

Ireland

Dublin 30 km/h scheme: Voted in for trial period on March 1st, 2010. Area is 2.16 km². Total permanent residents in the zone 21,000. Workers and students 134,000 (excluding tourists, shoppers, business visitors, etc). During the period 1998-2009, inclusive, 20 pedestrians and 5 cyclists lost their lives within the zone¹. The extra time it takes to travel from Capel Street to Beresford Place due to the lower speed limit is 43 seconds – most of which would have been spent at traffic lights anyway.

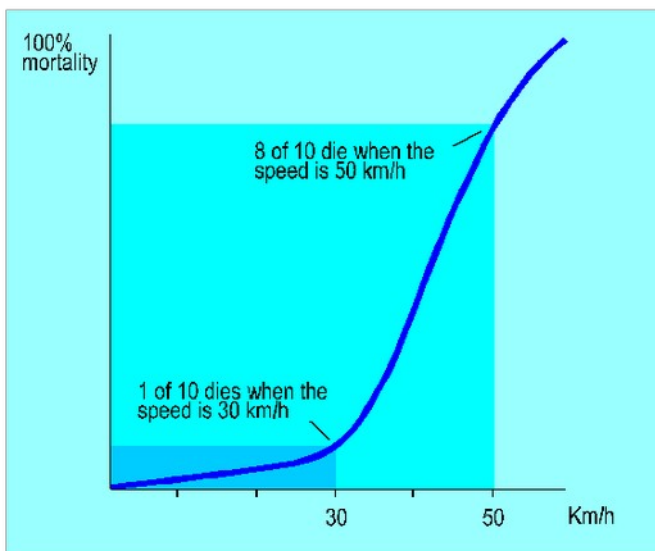
On 29 March 2011 the council reduced the area slightly (Winetavern Street and Liffey Quays from Church Street to Capel Street). 30 km/h schemes exist elsewhere in the Council area in both residential and school neighbourhoods.

Other counties where 30km/h zones are used: Cork city centre; Cork County (residential); Clare County (ferry terminal); Dún Laoghaire-Rathdown County (urban, residential, some schools) Kilkenny County (urban) etc.

National Cycling Policy Framework (NCPF) - in Objective 15.2- 'We will consider the adoption of the standard Northern European hierarchy of speed limits with 30kph as the standard limit in core urban areas and with reduced limits applied on residential streets and at large junctions used by vulnerable road users'.²

Greater Dublin Area Draft Transport Strategy 2011-2030 - 2030 vision (National Transport Authority policy document) contains aspiration to roll-out 'Lower speed limits in centres, residential areas and in built up areas', and specifically 30km/h areas to 'residential roads, and in the vicinity of schools'

Speed and fatality incidence among vulnerable road users



Effect (fatalities) of speed at impact on pedestrians and cyclists - Vagverket - Swedish Road Safety Agency (2003)

By keeping vehicle speeds at 30km/h only 10% of pedestrian or cyclists will die due to the impact. In the morning commuter peak in Dublin (2006), average car speed was 12.4km/h³.

Accident statistics for Dublin City area for the period 1998 – 2007 show that 47% of fatalities and 24% of seriously injured persons were pedestrians.

During 2003-2007 there were 8 road traffic collision (RTC) fatalities, all pedestrians, in the city centre zone and with 224 pedestrians and 77 cyclists injured, respectively.

In September, 2011, Dublin was reported to have the safest roads of any capital city in Europe by the Road Safety Authority (RSA). Garda Chief Superintendent Aidan Reid, head of the Dublin Metropolitan Region traffic corps, said the 30km/h enforcement zone was a success. Mr Noel Brett (CEO of RSA) said the reduction was for several reasons, including greater enforcement by the Garda Traffic Corps, the ban on 5-axle HGV trucks in the city centre and a huge increase in the volume of cyclists (Dublin Bikes and generally), which tended to slow down motorists⁴.

¹ Fact Sheet, Dublin City Council Transportation and Traffic Strategic Policy Committee (12 February 2010)

² www.smartertravel.ie

³ Road Users Monitoring Report (2007). Dublin Transportation Office (March 2008)

⁴ Dublin roads now safest in Europe, claims authority', Irish Times (30 September 2011)

Precedents in other countries

2,150 such zones (20 mph) present in England⁵; widespread use in Scotland. European cities include: London (400 zones⁶); Munich; Utrecht; Stuttgart; Barcelona; Graz; Freiburg; Ghent. Many of these are in residential areas ('home zones') or school zones, rather than urban areas like central Dublin.

On London streets, 20mph (32km/h) limits have cut road injuries (measured as killed & seriously injured) by **41.9%**, and were particularly useful in saving young children from death and injury. Pedestrian injuries were reduced by a little under a third and cycling casualties by 16.9%⁷.

Fatal	€2,018,126	<i>Costs to Irish state and society of road collisions (per casualty: note, each collision may have multiple casualties)⁸</i> The estimated cost of all road collisions recorded by, An Garda Síochána was €974 million in 2009 ⁹ .
Serious injury	€226,757	
Slight injury	€17,486	

Engineering and Enforcement

Effective enforcement is an area of debate. Engineering measures like traffic signs, speed-humps, chicanes, build-outs etc. are all offered by UK Department for Transport guidance¹⁰ as valid methods. London Assembly recommends a mixed approach, with attention to enforcement by police.

In 2008, Ireland issued a mere 40 speeding tickets per 1,000 inhabitants; the Netherlands issued 558¹¹. By 2011, the Irish figure had increased to approximately 57 speeding tickets per 1,000 inhabitants. Are we more speed limit-compliant than the Dutch? We think not. Enforcement means those that are not persuaded to slow down by engineering methods are encouraged to slow down.

Effects on congestion

The capacity of urban roads is regulated by the junctions, and on urban roads 'the capacity of a junction tends to be higher when vehicles approach it at a low speed than at a higher one.'¹²

Time savings at junctions gained through lower speeds in Vaxjo, Sweden, led to shorter journey times¹³.

Where 30km/h zones have been introduced in Germany, drivers spend 15% less time sitting stationary in their vehicles¹⁴.

30km/h limits have the beneficial effect of reducing the need for traffic to accelerate between stops, saving fuel, vehicle wear and production of brake particles/dust.

Fuel efficiency & the environment

Where 30km/h zones were introduced in Germany, car drivers on average had to change gear 12% less often, used their brakes 14% less often and required 12% less petrol¹⁵.

A large proportion of the noise emitted by motor vehicles is generated through acceleration¹⁶. Slower speeds mean quieter streets. Citizens can stop and chat comfortably with each other rather than struggle to hear and be heard above traffic noises.

⁵ Review of 20 mph Zone and Limit Implementation in England DfT 2009

⁶ 'Braking Point' 20 mph speed limits in London; London Assembly Transport Committee (April 2009)

⁷ Grundy et al.,(2009). British Medical Journal, Vol. 339, 1-6

⁸ 2002 per-casualty values at market prices. 'Parameter Values for Use in Cost-Benefit Analysis of Transport Projects', Goodbody Economic Consultants in Association with Atkins (September 2004)

⁹ Road Collision Facts 2009 (RSA 2010)

¹⁰ UK Department for Transport Advisory 11/94

¹¹ The European Transport Safety Council (ETSC) 16th Road Safety Performance Index

¹² Speed Control and Transport Policy, Stephen Plowden & Mayer Hillman (1996)

¹³ *ibid.*

¹⁴ An Illustrated Guide to Traffic Calming, Dr Carmen Hass-Klau (1990)

¹⁵ *ibid.*

¹⁶ Framework for Assessing the Effects of Speed, Veli-Pekka Kallberg & Sami Toivanen (December 1997)