



**MINISTERIAL ADVISORY GROUP  
FOR ARCHITECTURE AND THE BUILT  
ENVIRONMENT FOR NORTHERN IRELAND**

**DRD CONSULTATION "BELFAST ON THE MOVE"  
MAG RESPONSE  
29 NOVEMBER 2010**



## **The Ministerial Advisory Group for Architecture and the Built Environment for Northern Ireland (The MAG)**

### **Statement in response to DRD Publication "Belfast on the Move"**

29 November 2010

#### **Summary**

The MAG welcomes the opportunity to comment and notes that the principal function of streets should not be merely to facilitate the movement of traffic. Instead, streets should primarily create great places for people to enjoy and also offer good opportunities for moving about the city centre and the wider area. Cities and towns which have a legacy of single function roads schemes from the second half of the twentieth century have found that they have become unattractive and unwelcoming places. Best practice now recognises that a more pleasant, safer and less congested city centre can be achieved by encouraging slower moving traffic with active controls and separation being replaced by a better designed overall environment. Best practice guidance also confirms that this can only be achieved by a multi-disciplinary, place based and continuous approach to maintenance, management and design of the total environment of the city centre and not by individual professions or considerations of movement aspects of city making in isolation.

Better designed street environments create flexible, permeable layouts that consistently perform better than over-designed roads which channel potentially fast moving traffic into inflexible routes that do not allow traffic to disperse and can therefore be easily blocked by a single incident, with city wide disruption.

The entire city centre can be civilised by a structured combination of

- a 20 mph speed limit,
- design techniques to reduce drivers' perceived safe speed to 20 mph,
- eliminating or greatly reducing traffic signals which will be rendered unnecessary by better designed places,
- increased on-street parking (parts of which can have restricted use as loading bays before 10.00am and after 6.00pm),
- widened pedestrian areas (with lower kerbs) which can also accommodate cyclists,

- narrowed motor vehicle carriageways and
- raised areas to emphasise pedestrian priority (instead of dropped kerbs which emphasise road traffic priority)

Steady, slower moving traffic saves fuel and reduces pollution. It is significantly more efficient than the stop-start driving required by traffic light controlled junctions. Research has shown that steady, slower moving traffic in a permeable street layout encourages better, safer driving with lower rates of accidents, reduced congestion and greater flexibility to cope with changes, including both managed special events and unexpected incidents.

Flexibility of the city centre is reduced by over-design with fussy detailing creating cluttered streetscapes leading to trip hazards and accidents. Over-design is always a poor substitute for good design. Good design simplifies the city centre in an elegant, comprehensible and adaptable way.

Roads Service proposal to reroute through traffic and increase Belfast's one way routes will not solve the problem of congestion and may add to it by restricting the normal capacity of the grid based system to allow traffic to disperse and move freely about the city centre in a slow moving and safe but efficient manner. This is a better alternative than to require traffic to be concentrated into potentially fast moving channels which, if blocked for any reason, become suddenly stopped and do not allow traffic to disperse naturally. Such restricted routes produce congestion and traffic chaos.

The combination of ring-roading city centres and creating one-way traffic flows creates environmental conditions which are no longer acceptable. Recent best practice has shown how to change priorities in streets from "movement first" to "place first". Successful schemes are endorsed by the general public as well as by transportation and environmental professionals and researchers.

The MAG calls on the DRD to work closely with it and DCAL and the many other agencies involved to produce a team-based city centre management and design methodology in which all can participate on a continuing basis.

### 1. **Welcome to the Consultation**

The MAG welcomes the consultation process and looks forward to long term involvement with DRD and other associated agencies, groups and individuals in place-making in the city and the region.

### 2. **Road Schemes in Belfast**

Many road schemes in Belfast were designed for a "single function" – to move people in vehicles swiftly through and around the city, sometimes (but not always) protecting other traffic, pedestrians and cyclists by various kinds of separation, barriers and controls. Large acreages of the city centre and the surrounding area were devoted to roads schemes with wide sweeping junctions to ease traffic flow, locally increasing vehicle speeds at a cost of congestion in related areas and disadvantaging other city users. One current scheme, for example, involves over 30 acres of land in the city centre area.

### 3. **Historical Perspective**

Belfast, of course, is not alone:

Lancashire County Council has reported that

- "A history of designing streets for vehicular traffic has often resulted in unattractive, unwelcoming and often segregated environments."  
Lancashire County Council, "Creating Civilised Streets", June 2010

The Commission for Architecture and the Built Environment has stated:

- "In the middle of the 20th century, as motor vehicles became common, two ideas came to dominate thinking about the design of streets. The first was that their most important role was to facilitate vehicle journeys. The second was that mixing traffic and pedestrians was inherently dangerous and that ideally pedestrians should be kept completely separate from traffic."  
Civilised Streets, Commission for Architecture and the Built Environment, 7 March 2008.

The Guardian Newspaper has noted:

- "*Throughout most of the 20th century, engineers and planners had assumed that efficient traffic flows and road safety could be achieved only by separating vehicles from civic spaces.*"  
Ben Hamilton-Baillie [The Guardian](#), Saturday 2 February 2008.  
*Obituary of Hans Monderman.*

#### 4. Recent Guidance

More recent advice recognises that these “movement-first” principles have had unintended consequences by allowing traffic to dominate places which people had used and enjoyed in a multitude of ways as streets and squares for centuries. The Manual for Streets published by the Department for Transport, and Communities and Local Government on 29 March 2007 emphasises this:

- “A clear distinction can be drawn between streets and roads.” (Paragraph 2.2.1) and “Most critically, streets should have a sense of place, which is mainly realised through local distinctiveness and sensitivity in design.” (Paragraph 1.1.7)

The Department for Transport’s ambition of civilised places in cities – not treating multi-function streets as single function road schemes – is reflected in guidance. It is evident that civilised cities are not achieved by a single design process carried out by one professional discipline. They require visionary design and multi-disciplinary collegiate working in both the process and the end product, together with continuing management for change.

- “1 Collaborative and multi-disciplinary approach  
2 Identify and maintain shared design vision throughout delivery  
3 Participants to support aspiration for delivery of design quality  
4 Seamless and informed handover between scheme delivery agents  
5 The recognition of place  
6 Benefits of minimalist ‘blank sheet’ approach towards design  
7 Recognition of flexibility within regulations  
8 Cross-discipline training – raising awareness/improving skills”

Department for Transport Traffic Management and Streetscape Local Transport Note 1/08 2008

<http://www.dft.gov.uk/pgr/roads/tpm/ltnotes/ltn108.pdf>

#### 5. Management, Maintenance, Design and Planning

An enjoyable city centre needs continuous maintenance and management as a total place and not just as a series of individual components such as streets, footpaths, bins, bus stops, shelters, landscape, facades, lights, seats or open spaces. Excellent local maintenance and management can provide immediate improvements without significant redesign or additional cost. Skills

improve when local people, managers of places and managers of traffic work together with designers of places. Consulting each other is good, but working together is far better. Working together can make sure that traffic and transport infrastructure will not in future dominate the city as it has in the past. Management and design should continuously involve local people, city managers, urban designers, architects, landscape architects and artists working with traffic specialists, police and enforcement officers, transportation and civil engineers.

## 6. Flexibility

Flexibility is an important criterion for city centre management, design and planning. The city centre is a principal focus for Belfast and must be able to continuously adapt to new circumstances, reflecting the city's responses to changing needs and aspirations of society. Streets and squares must therefore be designed to allow for easy adaptation to suit the management of the city centre. Flexibility means not having to expensively design and redesign, build and rebuild kerb lines, crossing points and guard rails. Over-prescriptive design for single functions should be avoided; it is inflexible, costly to implement and slow to change. Single function over-design is bad design. By contrast, good design simplifies. Good design makes places adaptable ..... and delightful.

### WELLINGTON PLACE



**BEFORE**

**AFTER**

Unfortunately the computer generated representations above give no confidence that they will create a better environment in the city centre. The proposals are overdesigned with fussy detailing attempting to segregate the various forms of movement in the city centre and do nothing to slow traffic or make the city more permeable.

## MAY STREET



Proposals destroy the historic environment in the Conservation area with poor quality painting of roads and do not attempt to encourage more responsible driver behaviour. They treat road users as irresponsible people who need to be “controlled”. They assume traffic signals and stopped traffic. With slower movement and attention to good design, the stationary traffic and single function detailing could be removed.

### 7. **A continuous integrated approach**

The MAG advocates a continuous integrated approach with local people and city centre managers working alongside professional transportation specialists, designers and engineers.

### 8. **Enhanced city centre**

The document produced by Roads Service recognises the benefits of a city centre with enhanced opportunities for walking, cycling and public transport. Regrettably, however, its proposals will not achieve the intended results. Roads Service proposes the re-routing of traffic:

- *“About 60% of traffic travelling on the main city centre streets is ‘through’ traffic with no destination in the central area. This unnecessary traffic adds to congestion causing conflicts with pedestrians and contributing to poor air quality. Much of this traffic could be re-routed around the city centre”.*

Re-routing does not achieve a solution – it moves the problem, degenerating the overall city centre and cutting it off from the rest of the city. Re-routing traffic does not achieve the fundamental ambition to create a thoroughly good environment across the city. Roads Service proposes to “create a western gyratory system”. This will seriously reduce the level of amenity for people walking, cycling or

using public transport in this area, making one-way streets which are acknowledged to encourage faster traffic speeds and create confusion in attempting to navigate the city centre. One-way streets require an increased clutter of signs and protective measures for other street users. Jan Gehl is an international authority on the creation of delightful and memorable city centres. Jan Gehl's website, "Sustainable Cities", includes an article by Malene Freudendal-Pedersen, PhD dated 23 January 2009.

- ".....diverting traffic around the area ..... creates new barriers and enclaves. This is not good enough. It is essential and required that we take into account the influence traffic has on our neighbourhoods and just as important to be responsible towards that which surrounds it and the people who live there."  
Malene Freudendal-Pedersen is an external consultant to Sustainable Cities™ and Assistant professor at the Department of Environmental, Social and Spatial Change, Roskilde University

## 9. **Changing back to two way streets in North America**

Parts of North America, where cars dominated cities in the 20<sup>th</sup> century, are changing:

- "*Downtown Rebirth through Two-Way Street*".  
The city of Richmond, Virginia, is hoping to undo years of downtown driving confusion and congestion by converting its web of one-way streets into two-way streets. .... a vision of bringing life and commerce back to streets that had become impersonal thoroughfares."  
Michael Martz and Carol Hazard, Richmond Times-Dispatch, 22 August 2010

In Somerville, Massachusetts, an early traffic management scheme had converted major two-way streets (Highland Avenue and Elm Street) to one-way traffic and changed traffic signals.

- "This led to 5 years of fast-moving traffic careening through the square and to what many residents decried as a very dangerous situation for pedestrians. "I can't cross the street" and "you take your life into your hands"....."  
Transit Cooperative Research Program sponsored by The Federal Transit Administration

TCRP Report 33. Transit-Friendly Streets: Design and Traffic Management Strategies to Support Livable Communities.  
Transportation Research Board National Research

In Ann Arbor, Michigan a decision was made to allow people and slow moving traffic to co-exist while dramatically improving access to public transport:

- "In the early 1960s, the city of Ann Arbor, Michigan, made the decision to revitalize Main Street by *not* turning it into a pedestrian mall, unlike many other mid-western cities, but rather to beautify it with streetscape improvements, thereby enhancing the pedestrian environment and keeping it open to traffic. Twenty years later, the city of Ann Arbor improved upon the design of Main Street to encourage sidewalk cafes, to enhance pedestrian lighting, and to reconfigure existing parking bays to make them more efficient. At the same time, the city, through the Downtown Development Authority (DDA), began to extend streetscape improvements to the side streets east and west of Main Street to help create a downtown shopping district. Transit services, at the same time, were growing and evolving. In 1987, the Blake Transit Center opened one block from Main Street, replacing street bus stops with a secure, comfortable, climate controlled terminal for passengers ..... The center disseminates transit information, reduces the necessity for passengers to transfer across busy Fourth Avenue by placing all the buses on the same side of the street, and, in general, creates a strong presence and identity for transit in the downtown area. Today, Ann Arbor has a downtown where business is growing and transit ridership is increasing. Unlike other case studies, this result was not due to coordinated planning between the city and the transit agency, as both worked more or less independently but, fortunately, in pursuit of complementary goals. The city, business community, and transit agency have rediscovered one another and are now working to more closely integrate future efforts."

TCRP Report 33

Focus Group participants agreed:

- "We need to encourage people to spend more time downtown, not move through quickly. By widening the sidewalks or adding diagonal parking or taking a look at two-way traffic again, it would have some impact on the Blake Transit Center. People would think

about it differently—not just as transportation but as a destination.”  
TCRP Report 33

## 10. **Two way streets in Great Britain**

One way streets symbolise fast moving traffic with real and perceived danger to people walking, cycling and waiting for buses. Current good practice suggests that there should be fewer (not more) one way streets in Belfast. This may mean the conversion of some of Belfast's one way streets into two way streets which create more civilised, slower moving, but less congested traffic, and which are easier to navigate, more permeable and flexible, in line with current guidance and award winning schemes in Britain, Europe and North America.

In Great Britain, the Manual for Streets recommends:

- “To create a permeable network, it is generally recommended that streets with one-way operation are avoided. They require additional signing and result in longer vehicular journeys.” (Paragraph 4.2.8 Manual for Streets, Department for Transport & Communities & Local Government March 2007.

## 11. **Permeability**

Lancashire County Council's handbook, “Creating Civilised Streets”, June 2010, also advocates permeability:

- “Poorly connected routes could also result in vehicular traffic being concentrated on one route increasing vehicle movements and negatively impacting local character. By creating a permeable layout, access to the surrounding network by all modes is easier. This allows a more even spread of motor traffic throughout the area improving the sense of place.”

Permeability is part of the flexibility advocated in paragraph 6 above to ensure that the city can continuously respond to changing circumstances. Permeability is particularly important in Belfast where experience over 40 years has shown that a single incident on a restricted route with low permeability does not allow traffic to disperse into the surrounding streets and instead creates a major disruptive blockage to the functioning of the entire city's transport systems.

- “It's the blood supply of the city. If you block off the arteries, you kill it.”

Rachel O. Flynn, city director of planning and development review,  
Richmond, Virginia.

Ashford, Kent, was a finalist in the 2009 Prime Minister's Award for Better Public Building. The judges commented

- "This urban project reverses old ideas about ring-roading city centres and instead provides civilised streets."

Better Public Building website

<http://www.betterpublicbuilding.org.uk/finalists/2009/ashford/>

- "The three-lane, one-way ring road had been identified as a barrier to creating a viable and sustainable place for living and working. The design aimed to provide a better balance among different road users, rather than just focusing on the car. A series of interconnected town centre streets were created....."

Better Public Building website

## 12. 20 mph Speed Limits

A study from the Commission for Integrated Transport in 2001 found that where cities have 20 mph speed limits covering between 65% and 85% of the street network, they are transformed

- "from being noisy, polluted places into vibrant, people-centred environments."

This is in keeping with the aspirations for Belfast City Centre in the draft Belfast Metropolitan Area Plan.

- "20 mph brings streets to life

The 20 mph limits approach is cheap and easy to achieve. It is an important first step in stating what constitutes a civilised speed for our streets."

**Living Streets** Policy Briefing 02/09 June 2009.

**Living Streets** is the national charity that stands up for pedestrians.

SPEED	PEDESTRIAN SURVIVAL RATE – CHILDREN ARE MOST VULNERABLE
20 MPH	97%
30 MPH	80%
35 MPH	50%
40 MPH	15%

SPEED LIMIT	REDUCTION IN CHILD PEDESTRIAN DEATHS
20 MPH	70%
30 MPH	0

SPEED LIMIT (HULL)	REDUCTION IN SERIOUS / FATAL INJURY COLLISIONS
20 MPH	90%
30 MPH	0

**13. A 20 mph zone and the removal of traffic lights from the city centre**

- At a busy junction in the Dutch town of Drachten, there used to be five fatalities a year. Now, since the lights have been removed and the streets re-designed, even collisions are rare. Any collision that might occur is minor, because approach speeds are low. At rush-hour, buses equipped with priority transponders used to take 58 seconds to cross the junction. Now, with no lights or transponders, they take 28 seconds.

Fit Roads - Roads Fit for People. Martin Cassini March 2008

[www.fitroads.org](http://www.fitroads.org)

**14. On-Street Parking and off-street parking**

The Roads Service proposal reduces the quantity of on-street parking. On-street parking has many advantages. It helps to reduce traffic speeds by causing drivers to be more aware of possible hazards. On-street parking improves the vitality of the streetscape with people coming and going to their cars. It also improves the viability of small and medium sized enterprises, many of which depend on the fact that people can stop for a short time to do shopping or carry out business. By contrast, the proposals do not have any impact on the long stay off-street car parking which does little for the vibrancy of the city centre but instead encourages commuter traffic into the centre, by providing all day parking and consequent rush hour congestion which will not be improved by the proposals. The proposals take no cognisance of the many buildings occupied by government which have large basement or lower ground floor car parking provision for people who simply use their cars for journeys to and from work, encouraging commuting by car rather than public transport. These off-street car parks do not present the advantages of on-street parking, being almost exclusively negative in their impact on traffic and congestion in Belfast.

**15. Loading Bays**

In contrast to on-street parking, dedicated Loading Bays sterilise streets during the day with large and obtrusive vehicles such as vans and lorries. The solution to the impact of deliveries on the wider aspects of the enjoyment of the city centre is simple. Deliveries should be

restricted to times that suit the principal users and the sense of place of the city centre – that is, deliveries should be made before 10.00am and after 6.00pm only.

## **16. Conclusion**

I invite the Minister for Regional Development to engage with the MAG, the Department of Culture, Arts and Leisure and other relevant agencies including public transport and taxi providers, DoE, DSD, Belfast City Council, and Belfast Chamber / City Centre Management Company, and agree an appropriate team-based city centre management and design methodology.

The MAG asserts that city making is an art which embraces many management, design, science and engineering disciplines, not just roads.

Active participation by a wide range of individuals and groups who are active in maintenance, management, design and planning of the city centre is the most effective use of resources in a time of close scrutiny of expenditure.

**Arthur Acheson**  
**Chair of the MAG**