Design Manual for Urban Roads and Streets

An Roinn Iompair Turasóireachta agus Spóirt
Department of Transport, Tourism and Sport

Comhshaol, Pobal agus Rialtas Áitiúil
Environment, Community and Local Government

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MINISTER'S INTRODUCTION

Ireland's major towns and cities are now linked by a network of high quality, well planned inter-urban roads. This achievement has resulted in a significant improvement in journey times and contributed to a welcome reduction in road fatalities and injuries as well as greater savings in fuel and lower carbon emissions.

The completion of the National Road network has delivered tangible economic, social and environmental benefits throughout Ireland. It is now timely to build on this progress by re-examining the role and function of streets within our urban areas, where vehicular traffic is most likely to interact with pedestrians and cyclists and where public transport can most effectively and efficiently be planned for and provided.

Better street design in urban areas will facilitate the implementation of policy on sustainable living by achieving a better balance between all modes of transport and road users. It will encourage more people to choose to walk, cycle or use public transport by making the experience safer and more pleasant. It will lower traffic speeds, reduce unnecessary car use and create a built environment that promotes healthy lifestyles and responds more sympathetically to the distinctive nature of individual communities and places.

Whether travelling to work, school or college or for shopping, social or leisure purposes, improved street design as envisaged in this document will enhance how we go about our business, how we interact with each other and have a positive impact on our enjoyment of the places to and through which we travel.

This Manual offers a holistic approach to the design of urban streets in cities, towns, suburbs and villages in Ireland for the first time and promotes a collaborative and consultative design process. It requires professionals of different disciplines to work together to achieve better street design. We welcome this Manual and look forward to the added value and improvements in quality of life that will be achieved through implementation of this integrated and progressive approach.

Leo Varadkar, TD
Minister for Transport, Tourism and Sport

Jan O'Sullivan, TD
Minister of State, Department of Environment, Community and Local Government with special responsibility for Housing and Planning

PREFACE

It is beyond doubt that the streets of our cities and towns, suburbs and villages, should be safe, attractive and comfortable for all users. As well as cars and other vehicles this encompasses pedestrians, cyclists, and those using public transport. It also includes people of all ages and abilities and is equally relevant to residents and visitors.

As Ireland follows the global trend towards increased urbanisation we must ensure our cities and towns are pleasant, safe and healthy places to live. Any form of movement within densely populated space entails risk. Perception of risk is an important part of road safety. Spaces that 'feel' safe for driving are often hazardous places to walk or cycle. These spaces sometimes induce a false sense of safety and a tendency to drive at inappropriate speed. Thus, well intended designers inadvertently transfer risk from motorists to more vulnerable road users.

The desire for safe, attractive and vibrant streets is reflected in a range of existing transport, planning and environmental policies and objectives. These policies and objectives address how neighbourhoods, villages and towns are created and protected. They relate not only to road safety and civil engineering, but also to town planning, urban design, architecture, landscape architecture and conservation.

More significantly, they bear directly on broad societal issues, ranging from economic development, employment, tourism and recreation, through health, crime and security and onto education, social inclusion, energy efficiency and climate change.

In other words, the design of safer, more attractive and vibrant streets will benefit everyone by generating and sustaining communities and neighbourhoods, with wide ranging economic, social and environmental consequences.

It is significant to note that the evolution of current policy extends back more than a generation. A paper given at a 'Streets for Living' Conference in Dublin in 1976 stated:

> 'We are expecting from our human settlements the characteristics of streets in order to humanise them, particularly in our residential areas, and yet we have set our designers the task of designing and building and indeed maintaining what are undoubtedly roads…traffic taken in isolation can be a totally destructive force in the formation of human settlements.'[1]

The above has remained more accurate than ever, but given the extent to which policy and legal frameworks have advanced in recent years, it is now possible to achieve change. Accordingly, this Manual does not seek to set out new policy. It gives effect to existing policy by providing guidance on how to approach the design of urban streets in a more balanced way.

1 Paper entitled *The Visual and Social Problems of the Design of Residential Areas Today*, Ruairi Quinn, *Streets for Living Conference*, Dublin 1976.

ABOUT THIS GUIDE

This Manual complements previous advice issued viz:

- *Traffic Management Guidelines* (2003).
- *Smarter Travel* (2009).
- *Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns and Villages)* (2009)
- *National Cycle Manual* (2011).
- *Draft Planning Guidelines: Local Area Plans* (2012).

DMURS provides guidance relating to the design of urban roads and streets. The Design Manual for Roads and Bridges (DMRB) shall not henceforth apply to urban roads and streets other than in exceptional circumstances. Where those circumstances arise, written approval shall be obtained from the relevant sanctioning authority (as set out in Section 1.3 Application of this Manual).

This document is designed to be universally accessible to all professionals associated with street design. It presents a series of principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes with regard to street networks and individual streets. It does so by presenting these in a structured format, ranging from macro level to micro level considerations.

The principles, approaches and standards set out in this Manual are intended for use by suitably qualified and experienced designers who work within the built environment professions. Designers must exercise a duty of care when applying the Manual. Compliance with a standard does not in itself confer immunity from legal obligations.

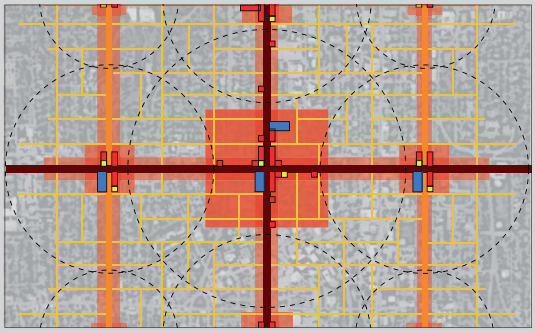
This Manual does not purport to account for every scenario that a designer will encounter, particularly when retrofitting existing streets. Nor can this Manual cover every technical detail. Many matters are left to the professional expertise and judgement of users, while others are covered elsewhere in relevant Irish, British or European standards, in codes of practice and guidelines, many of which are cross-referenced throughout this Manual.

CONTENTS

Chapter 1 introduces the goals of the Manual and demonstrates its context within the evolution of Government policy aimed at promoting more sustainable communities.

Chapter 2 makes the case for change and sets out the principles for a new direction that seeks to balance the needs of Place and Movement.

CHAPTER 3: STREET NETWORKS



Chapter 3 outlines the approaches to the design and management of street networks with the aim of creating better connected places.

CHAPTER 4: STREET DESIGN

Chapter 4 outlines the approaches and standards applicable to the design of individual streets with regard to context and the promotion of a self-regulating environment.

5. IMPLEMENTATION

Chapter 5 outlines a plan-led, multidisciplinary approach that will facilitate the implementation of the Manual.

APPENDICES