

NB: The wide range of situations encountered makes it impossible to cover all the elements of the cross section in an exhaustive and overall way. The recommendations presented here provide a general framework that needs to be adapted according to the topography, area taken up by build-ings, parking, etc.

These elements are covered in more detail in the guide "Le profil en travers, outil du partage des voiries urbaines" published in 2009 by Certu¹.

Built-up area entrances and exits

Managing speed limits on roads entering and leaving built-up areas is also a major challenge. The transition between interurban and urban environment (and vice versa) requires the user to adapt his/her speed significantly. The effective positioning of signs when entering and leaving a built-up area helps to reinforce the validity of the speed limit and therefore its observance by the user.

Article R110-2 of the French Highway Code defines a built-up area as a "space in which buildings are grouped close together, the entry and exit points of which are indicated by road signs along the road which runs through it or alongside it."

Urbanisation is the main indication that the road user is entering built-up area. It is characterised by:

- reduced space between buildings (typically less than 50 metres),
- buildings close to the road,
- a significant frequency of residential driveways.

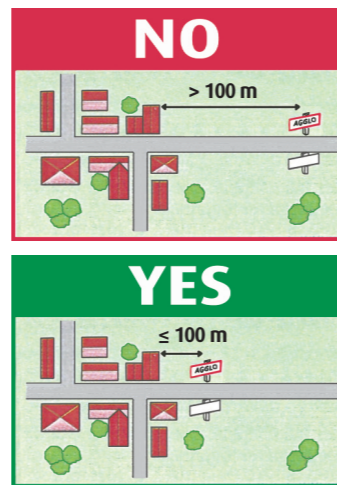
It is often accompanied by the following:

- the start of pedestrian facilities (sidewalk, etc.),
- urban-style street lighting,
- urban furnitures and planted areas, etc.

These elements create a visual change or a door effect which helps to indicate the transition from the interurban environment.

Built-up entrance and exit signs are positioned opposite each other on the right-hand verge at least 100 metres (indicative value) from the built-up environment and the elements which characterise the existence of a town.

The built-up area limits set by the mayor have an effect not only on traffic, but also on urban planning regulations, tax and publicity, etc...



(1) A consequent English abstract of this guide "The cross-section, a sharing tool for urban roads" was published by Certu in 2012.

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Improving consistency between speed limits and the road environment

This sheet is designed to offer a brief overview.

The information provided can therefore not be exhaustive and may include some generalisations.

Motorised road users frequently complain of the difficulty in understanding the speed limit in some places. They often mention the lack of consistency between the speed limit and the characteristics of the urban environment. This fact sheet proposes a general framework to help local authorities to set speed limits which are consistent with the road's characteristics, design, functions and uses and the urban environment.

Introduction

In order to be accepted and observed, a speed limit must be appropriate to the characteristics of the urban environment and its uses. The aim is for the rule to lead to appropriate behaviour from road users without them having to constantly look for signs indicating the applicable speed limit. Looking for signs takes the driver's attention away from other road users and increases the risk of conflict. That is why speed limits need to match the intuitive understanding of traffic rules. The user must be able to judge them by observing the urban environment and the main characteristics of the road.

Authorities with police powers are in charge of setting speed limits on the road networks they are responsible for. The French Highway Code has traditionally set a speed limit of 50 km/h in built-up areas. This limit is lower in certain areas to allow the safe coexistence of motorised and active modes of transport (bikes, pedestrians) and encourage the development of local life, and

higher on some roads to cater for motorised traffic. The setting of such limits must be accompanied by an analysis of the existing system to ensure the consistency of speed limits with the environment in question.

This consistency is often not adequately ensured and the 50km/h speed limit is applied by default without taking into account the characteristics of the roads, their uses and the environment. The result is a lack of appropriateness, uniformity and compliance with the rule.

A number of factors need to be taken into account to determine the most appropriate speed limit for a particular urban road environment. An overview of the main factors is provided below for each of the 4 main speed limit categories in urban areas: **30 km/h for 30 zones**, **50 km/h**, 20 km/h for pedestrian-priority zones and 70 km/h.

Recommendations are also given to improve compliance with speed limits in transition areas when entering and leaving built-up areas.

Statut of the zone or road	pedestrian area	pedestrian-priority zone	30 zone	urban area	70 section
Speed limit	Walking pace	20 km/h	30 km/h	50 km/h	70 km/h
Balance between local life / traffic function	Local life	Local life	Local life	Local life	Local life
% of the road network desired in the long term	0 % - 10 %	2 % - 15 %	60 % - 90 %	10 % - 40 %	0 % - 5 %

The main factors to take into account when setting speed limits in urban areas on the existing road network

Important : The information contained in the table offers a general framework to help to determine speed limits which are consistent with and appropriate to each road in the existing road network. The characteristics to analyse must be considered as a whole rather than individually. The proposed hierarchy it is preferable to follow should be adapted to the actual situation.

Urban environment				
- Urban environment	<ul style="list-style-type: none"> High concentration of shops and services Tourist or historic district Proximity to a pedestrian hub Public transport hub area 	<ul style="list-style-type: none"> Blocks of buildings Residential or shopping streets and squares 	<ul style="list-style-type: none"> A range of uses, users and functions Few buildings adjacent to the streets Good visibility ahead and to the sides 	<ul style="list-style-type: none"> Very few pedestrians Very few residential driveways No buildings adjacent to the streets Very good visibility ahead and to the sides
- Example of the environment				
General operation				
- Traffic management	<ul style="list-style-type: none"> Pedestrians have right-of-way over vehicles 	<ul style="list-style-type: none"> Balance between pedestrian and vehicle flow 	<ul style="list-style-type: none"> More vehicle traffic than pedestrian flow 	<ul style="list-style-type: none"> Much more vehicle flow than pedestrian flow
- Road sharing	<ul style="list-style-type: none"> All users share the road including pedestrians 	<ul style="list-style-type: none"> Different vehicles share the road including bikes 	<ul style="list-style-type: none"> Visual or physical separation of the different modes of transport on the road 	<ul style="list-style-type: none"> Physical separation of the different modes of transport on the road
- Intersection management	<ul style="list-style-type: none"> Give way to the right 	<ul style="list-style-type: none"> Give way to the right 	<ul style="list-style-type: none"> Roundabout, give way, stop, traffic lights, give way to the right 	<ul style="list-style-type: none"> Roundabout, traffic lights, junctions are not very close together
Urban layout				
- Type of road	<ul style="list-style-type: none"> Road or square the appearance of which makes the pedestrian feel like they have right-of-way (low or no kerb, no markings on the ground) 	<ul style="list-style-type: none"> Road with sidewalk Layout and/or presence of systems consistent with travelling at a moderate speed Section of a road where it is difficult to channel pedestrian flow when crossing 	<ul style="list-style-type: none"> Road with cycle facilities Pedestrian crossings 	<ul style="list-style-type: none"> Through traffic or bypass roads Radial roads of medium-sized or large towns Main urban roads
Size according to type of road				
- Width for one-way streets for motorised vehicles <i>(minimum indicative widths - see note on page 4)</i> <i>PT means Public Transport</i>	All users			
- Width for two-way streets for motorised vehicles <i>(minimum indicative widths - see note on page 4)</i> <i>PT means Public Transport</i>	All users			
- Parking of motorised vehicles on the road	<ul style="list-style-type: none"> Limited to a few designated spaces 	<ul style="list-style-type: none"> Possible 	<ul style="list-style-type: none"> Possible 	<ul style="list-style-type: none"> No parking spaces
Pedestrians facilities				
- Indication of where to walk along the road	<i>The concept of sidewalk and crossing does not apply as pedestrians walk all over the area</i>	<ul style="list-style-type: none"> Sidewalk adjacent to the road 	<ul style="list-style-type: none"> Sidewalk usually adjacent to the road 	<ul style="list-style-type: none"> Dedicated pedestrian route or sidewalk not adjacent to the road
- Indication of road crossings		<ul style="list-style-type: none"> Raised plateau, suggested crossings, pedestrian crossings are rare 	<ul style="list-style-type: none"> Pedestrian crossings 	<ul style="list-style-type: none"> More pedestrian facilities at junctions
Cycle facilities				
- In the direction of travel	<ul style="list-style-type: none"> No cycle facility identified 	<ul style="list-style-type: none"> No cycle facility in general 	<ul style="list-style-type: none"> Cycle facility on the road 	<ul style="list-style-type: none"> Cycle facility not adjacent to the road
- Two-way cycle lane <i>(one-way streets)</i>	<ul style="list-style-type: none"> General case: possibly with the use of several bike pictograms 	<ul style="list-style-type: none"> General case: with or without indication of the separation 	<ul style="list-style-type: none"> Presence is possible with physical or visual separation 	<ul style="list-style-type: none"> Presence is possible with physical separation
Desired regulatory speed limit	Pedestrians right-of-way → 20 km/h	30 km/h	50 km/h	70 km/h

Note: Pedestrian areas are not addressed in this table.