About iRAP

The International Road Assessment Programme (iRAP) is a registered charity dedicated to saving lives through safer roads.

We provide tools and training to support government and non-government organisations to make roads safe. Our activities include:

- inspecting high-risk roads and developing Star Ratings and Safer Roads Investment Plans

- provision of training, technology and support that will build and sustain national, regional and local capability

- tracking road safety performance so that funding agencies can assess the benefits of their investments.

The programme is the umbrella organisation for EuroRAP, AusRAP, usRAP, KiwiRAP and ChinaRAP. Road Assessment Programmes (RAP) are now active in more than 70 countries throughout Europe, Asia Pacific, North, Central and South America and Africa.

iRAP is financially supported by the FIA Foundation for the Automobile and Society and the Road Safety Fund. Projects receive support from the Global Road Safety Facility, automobile associations, regional development banks and donors.

National governments, automobile clubs and associations, charities, the motor industry and institutions such as the European Commission also support RAPs in the developed world and encourage the transfer of research and technology to iRAP. In addition, many individuals donate their time and expertise to support iRAP.

For more information

For more information about this document, contact:
James Bradford
iRAP Global Operations Manager
james.bradford@irap.org
              (GMT+0)

To find out more about the programme, visit _____
You can also subscribe to 'WrapUp', the iRAP e-newsletter, by sending a message to icanhelp@irap.org.

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1 Introduction

Deaths and injuries from road vehicle crashes are a major and growing public health epidemic. Each year 1.3 million people die and a further 50 million are injured or permanently disabled in road crashes. Road crashes are now the leading cause of death for children and young people aged between 10 and 24. The burden of road crashes is comparable with malaria and tuberculosis and costs 1-3% of the world's GDP.

In low and middle income countries, road crashes represent a major health concern. More than 85% of the global death toll and serious injuries occur in developing countries. Whereas road deaths are expected to fall in high-income countries, they are likely to increase by more than 80 per cent in the rest of the world.[1]

The International Road Assessment Programme (iRAP - _____) has drawn upon the extensive knowledge base of the developed world's Road Assessment Programmes (EuroRAP, AusRAP and usRAP), with the generous support of the FIA Foundation, to develop a road survey methodology for low and middle income countries. This Star Rating methodology does not require detailed crash data and works directly from road surveys.

1.1 About this document

Of all the processes involved in producing iRAP results, the recording of road attributes, referred to as road coding, is one of the most important and demanding. It is an area in which errors can have a significant impact on the results, leading to incorrect Star Ratings and poor quality Safer Road Investment Plans. The *iRAP Star Rating and Investment Plan Coding Manual* (available at http://irap.org/en/about-irap-3/specifications) specifies how the road attributes are to be recorded, however there are occasions when queries arise from unique characteristics of the road environment that are not specifically addressed within the coding manual.

This document attempts to address several commonly occurring questions that have been brought to the attention of the iRAP core team of experts by members of iRAP accredited coding teams on matters relating to the interpretation of the coding manual. The questions and answers provide guidance and clarification on many of the frequently asked questions and common issues that coding teams encounter.

If a particular situation or query is not addressed within this document, coders are encouraged to seek advice from their coding team supervisor. The coding team supervisor will provide guidance and will seek further clarification from iRAP if required. This document will be updated and amended as new commonly occurring questions are received and will be used in the continuous improvement of the *iRAP Star Rating and Investment Plan Coding Manual*.

This document should also be read in conjunction with the Star Ratings and Investment Plans: Quality Assurance Guide.

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[1] World Health Organisation, *Global Status Report on Road Safety. Time for Action*, 2009

2 Coding Questions and Answers

The following questions and answers are grouped in terms of the road attributes to which they relate. For ease of reference the order in which the attributes are shown in this document follows the same order as that used in the *iRAP Star Rating and Investment Plan Coding Manual*.

Note: this document does not contain questions and answers relating to all coding attributes.

2.1 Carriageway label

Question No.:	2.1.1
Date:	25-02-2014
Road attribute(s):	Carriageway label
Question:	Should the carriageway label for the image below be coded as divided or undivided?
Image:	
Answer:	This is an undivided road, carriageway label U.
Discussion:	Despite the presence of a continuous turn lane this is regarded as an undivided single carriageway.

Question No.:	2.1.2
Date:	05-07-2013
Road attribute(s):	Carriageway label, median type
Question:	How should the carriageway label be recorded?

Image:	
Answer:	Undivided road
Discussion:	Although the physical median gives this section the appearance of a divided road the median separation is only present for a short length where the intersection is present, and typically this would only be surveyed in a single direction, therefore, it suggested that this is recorded as an undivided road but with a physical median.

2.2 Upgrade cost

Question No.:	2.2.1
Date:	17-07-2014
Road attribute(s):	Upgrade cost
Question:	Should I code medium or low upgrade cost?
Image:	
Answer:	Medium upgrade cost.
Discussion:	Despite this rural undeveloped area, in order to upgrade the road with an additional lane some moderate earthworks would be needed due to the upward slope on left and downward slope on the right so medium upgrade cost should be used.

2.3 Motorcycle flow observed

Question No.:	2.3.1
Date:	05-07-2013
Road attribute(s):	Motorcycle flow observed, vehicle parking
Question:	Should parked motorcycles and auto-rickshaws be recorded?
Image:	
Answer:	No, only those in use (in motion) should be recorded in the flow observed attribute.
Discussion:	Parked vehicles should be recorded in Vehicle Parking attribute.

Question No.:	2.3.2
Date:	05-07-2013
Road attribute(s):	Motorcycle flow observed
Question:	If a motorcycle is travelling at a similar speed to the survey vehicle, it will be captured in numerous 100m lengths, how should this be coded?
Image:	No image provided
Answer:	The number of motorcycles should be counted within each 100m segment length, irrespective of whether or not they have already been recorded in other 100m lengths.
Discussion:	This means that the same motorcycle may be counted many times.

2.4 Bicycle flow observed

Question No.:	2.4.1
Date:	05-07-2013
Road attribute(s):	Bicycle flow observed