

**Specialist Professional and Technical Services  
Framework  
Task Ref: 1-286**

**Task Title: Road Safety Audit - Maintain & Develop  
Road Safety Audit Database**

**QUARTERLY REPORT  
October 2019 to December 2019**



## Document Control

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## Reviewer List

Name	Role
Michael Pinder	ACJV Technical Review
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## Approvals

Name	Signature	Title	Date of issue	Version

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# 1. Introduction

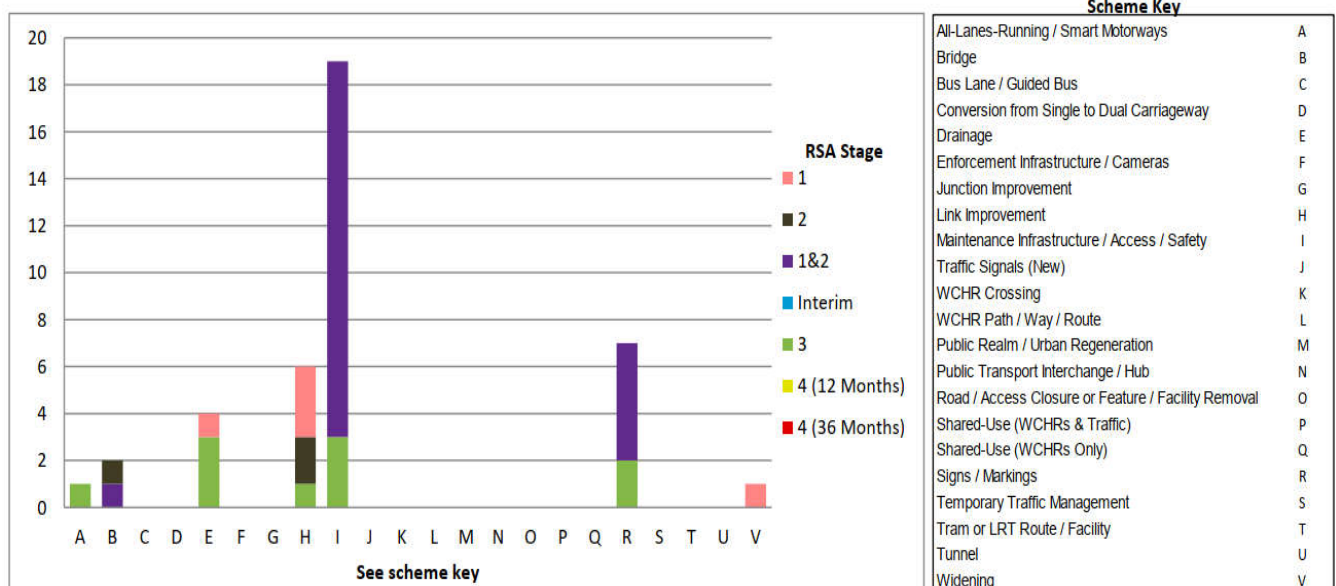
## 1.1. Quarterly Reporting

This report comprises the quarterly review of Road Safety Audit (RSA) reports submitted to the Highways England Safer Roads - Design Team (SR-DT) inbox at [roadsafetyaudit@highwaysengland.co.uk](mailto:roadsafetyaudit@highwaysengland.co.uk) between 1<sup>st</sup> October 2019 and 31<sup>st</sup> December 2019 (inclusive).

## 1.2. Scope

During this quarter, **a total of 40 RSAs were submitted**, all of which were carried out to GG 119. The types of schemes covered by the submitted RSAs are shown in Figure 1-1 below.

**Figure 1-1 RSAs submitted this quarter (October-December 2019) by scheme type**



From these, **27 sample reports** were selected as suitable for review. The list below details the numbers of each stage of RSA forming the study sample together with totals submitted for the quarter.

- Stage 1 RSAs 5 reports of 5 submitted
- Stage 2 RSAs 3 reports of 3 submitted
- Combined stage 1 & stage 2 RSAs 10 reports of 22 submitted
- Stage 3 RSAs 9 reports of 10 submitted

No interim RSAs or stage 4 RSAs were submitted this quarter.

Seven stage 4 RSA “non-audit notes” were submitted but these are not RSA reports and so were not sampled for this qualitative review.

Only 14 of the 40 reports submitted to the SR-DT inbox this quarter detailed any road safety concerns. Therefore, 13 zero-problem reports were added to the sample group to make up the required sample size of 27.

### 1.3. RSAs Submitted by Highways England Areas

Figure 1-2 below illustrates all RSAs submitted to the SR-DT inbox since 1<sup>st</sup> January 2014 by each Highways England area.

**Figure 1-2 RSAs submitted since 1<sup>st</sup> January 2014 by Highways England Operational Area**

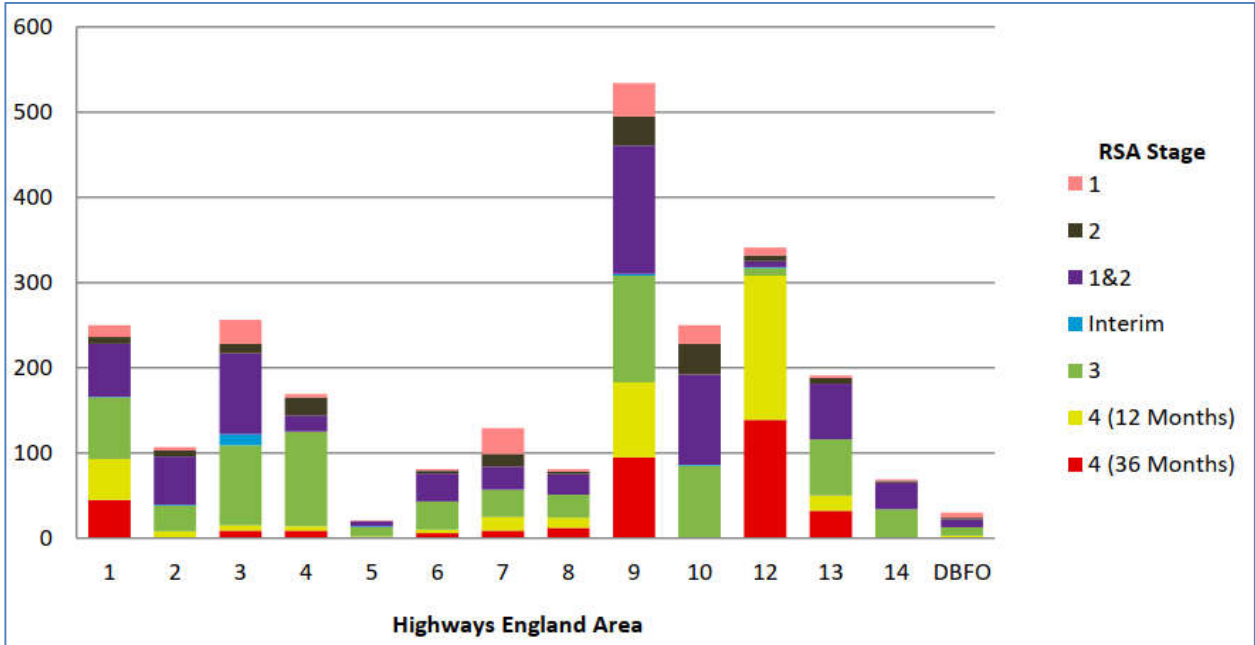
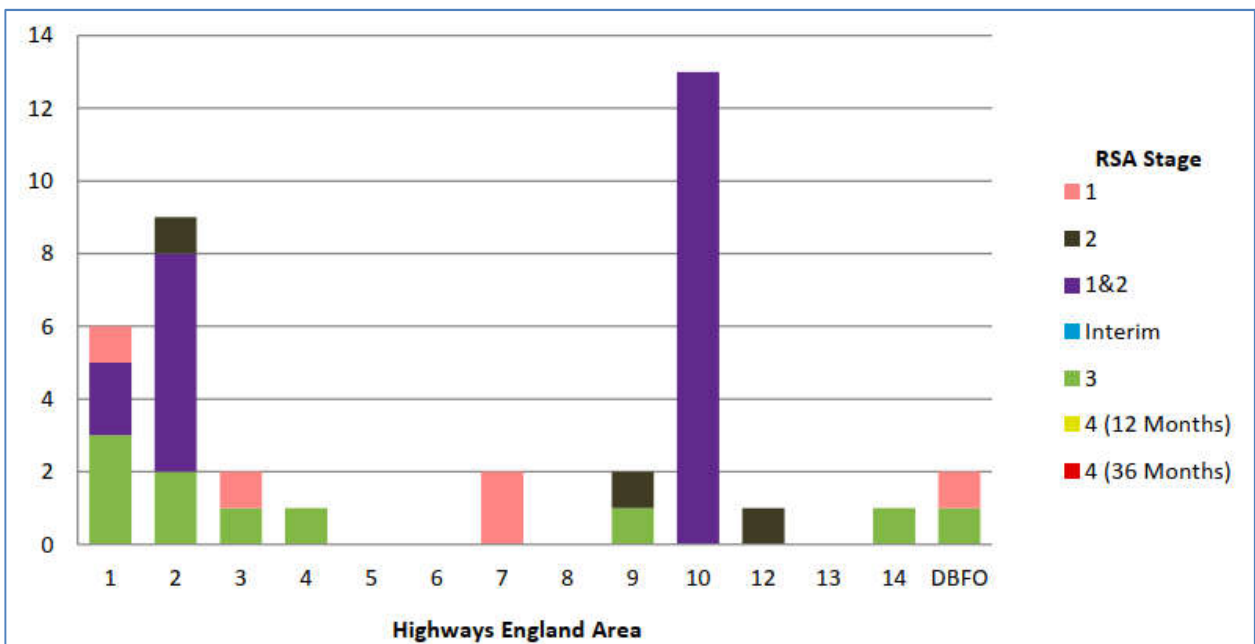


Figure 1-3 below illustrates all RSAs submitted to the SR-DT inbox during this quarter, 1<sup>st</sup> October 2019 to 31<sup>st</sup> December 2019.

**Figure 1-3 RSAs submitted this quarter (October- December 2019) by Highways England Operational Area**



## 2. Qualitative Review of RSA Reports

This section comprises a qualitative review of RSAs sampled from those recorded in the main database. The sample selection is described under heading 1.2 above. The sampled reports have been used as the principal source for this review but occasionally, reference is made to the database as a whole for context.

As far as is practicable, this quarterly report seeks to feed discussion on:

- Common road safety problems raised by audit teams with a view to providing information which might be used by the SR-DT and others in the industry to identify and inform potential changes to Requirements and Advice Documents (RADs). This comprises a high-level categorisation of the problems raised;
- Inconsistencies between problems and recommendations raised for similar design elements; and
- Good practice and areas for potential improvement as evident from the sampled RSA reports.

### 2.1 Common Road Safety Problems

This section comments on the frequency with which road safety problem types appeared in RSAs within the sample set.

For clarity, this section uses the following terms of reference. Definitions are as given in GG 119:

- **road safety problem** – An identified road safety matter together with a resultant potential road traffic collision type, identified highway scheme location and summary;
- **road safety matter** – An element of the existing road environment or proposed road environment that could potentially contribute to a road traffic collision or features that could present a risk of injuries to road users; and
- **recommendations** – A proportionate and viable suggestion for improvement to eliminate or mitigate an identified road safety audit problem.

Where appearing in quoted text, the words “*problem*”, “*matter*” and “*recommendation*” may have been used differently.

The sampled reports detailed a total of 71 road safety problems covering 76 road safety matters. These include previously raised problems not resolved at the time that the RSA was undertaken.

This gives an average of 1.07 road safety matters per problem reported which is identical to the 1.07 average in the preceding quarterly report (July to September 2019).

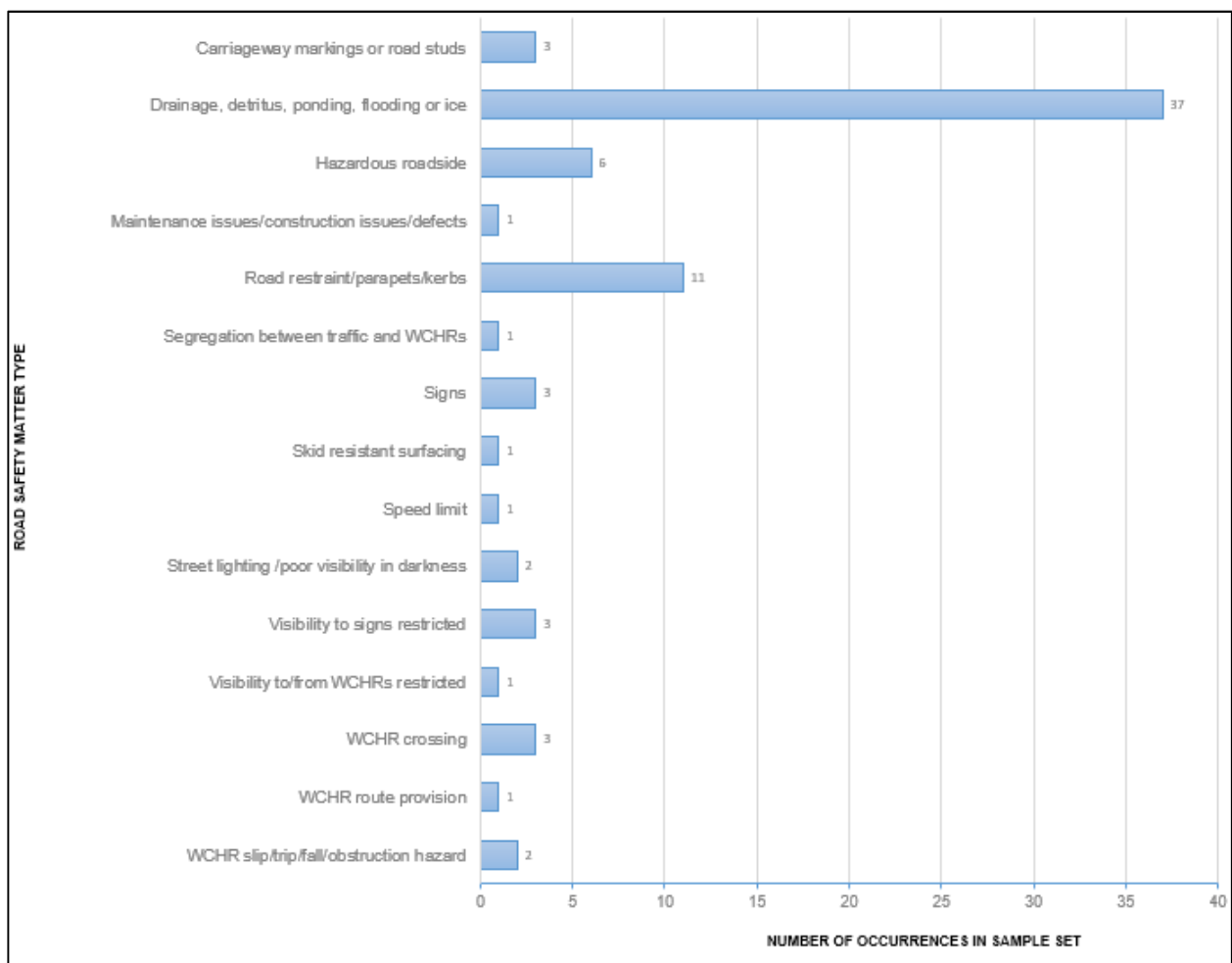
For the purpose of this quarterly report, the high-level categorisation of the problems and matters identified within the sample group have been expressed as follows, with problem categorisations in **bold** type and matters in [square brackets]:

- **Carriageway markings or road studs** [inconspicuous / confusing]
- **Drainage and related detritus, ponding, flooding and ice** [carriageways]
- **Hazardous roadside** [cabinets / street furniture / trees / structures / objects not passively safe]
- **Maintenance issues, construction issues or defects** [debris]
- **Road restraint / parapets / containment kerbs** [inadequate / terminals / working width compromised]
- **Segregation between traffic and WCHRs** [inadequate]
- **Signs** [absent / incorrect]

- **Skid resistant or high friction surfacing** [inadequate]
- **Speed limit** [signs absent]
- **Street lighting / poor visibility in darkness** [light levels reduced by obstruction / confusing]
- **Visibility to signs restricted** [by vegetation]
- **Visibility to / from and between WCHRs restricted** [by traffic]
- **WCHR crossing** [inadequate / tactile paving]
- **WCHR guardrailing** [absent / inappropriate / inadequate / excessive / clearance between]
- **WCHR route provision** [narrow]
- **WCHR slip, trip, fall or obstruction hazard** [street furniture]

The 76 road safety matters covered in the sampled reports are categorised in Figure 2-1 below which indicates the frequency of occurrence. The categories of these are shortened to fit the figure dimensions and the chart should be read in conjunction with the bullet list above for a fuller description.

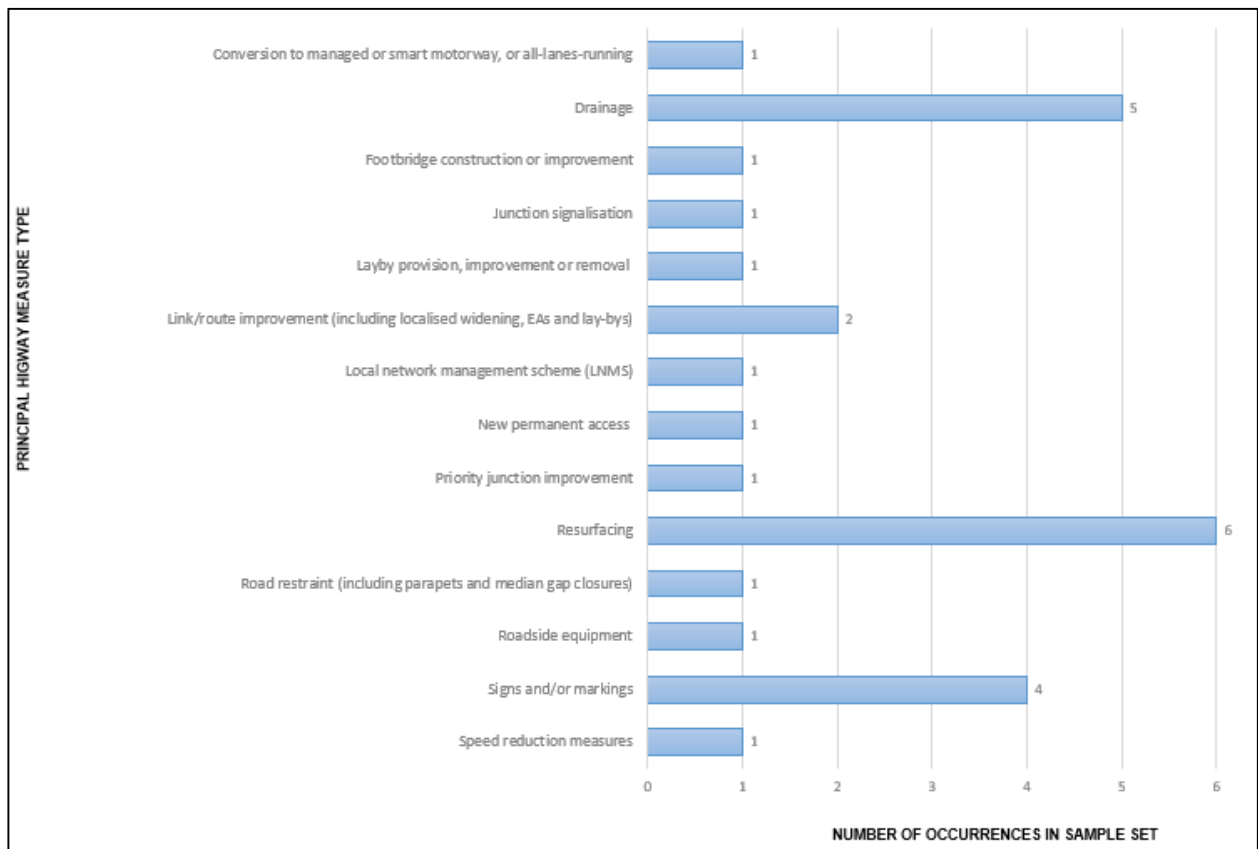
**Figure 2-1 Road safety matters by number of occurrences**



As context for the occurrences of road safety matters given above, Figure 2-2, overleaf, charts the principal highway measures that best describe the scheme type for each RSA report in the sample set.



**Figure 2-2 Principal highway measures by number of occurrences in sample set**



## 2.2 Good Practice and Areas for Improvement

This section identifies areas of good practice and areas with potential for improvement as evident from the RSAs sampled for the purpose of this quarterly report.

Text and other materials quoted or copied from real RSA reports have been anonymised. Accordingly, all road, scheme and location names and descriptions, together with the names of persons and organisations involved, should be taken as fictional and not associated with any actual scheme, location, organisation or person.

### 2.2.1 Statements seemingly endorsing the RSA brief or design process

A number of the RSA reports reviewed contain the statement, *“It was considered that the information provided was sufficient for the purpose of carrying out the Road Safety Audit requested.”* RSA teams should be careful not to include statements which might be read as endorsing the RSA brief.

Another report contains a section of text detailing elements of technical detail presented as a number of paragraphs, numbered in line with the rest of the RSA report text. It culminates in a statement saying, *“It is the design team’s opinion that this provides suitable justification for removing lay-bys, that may be causing a number of collisions.”* This statement might be a quote from the brief, but it expresses a subjective opinion. Such opinion should be not be included in RSA reports, particularly following descriptions of technical detail where it could be read as an endorsement of the scheme proposals and of the technical processes adopted in the design.

### 2.2.2 Comments regarding missing detail

One RSA report, having previously stated that the RSA team considered the information provided to be sufficient, went on to state, *“The Road Safety Audit Team was not provided with information*



on the 85<sup>th</sup>ile traffic speeds data in respect of this scheme” and “No queue length data was provided in respect of the scheme.” If the RSA team feel that technical data not provided is not pertinent, then there is no need to comment on that missing detail. If the RSA team does feel that missing data is pertinent to the scheme and audit, then it needs to be requested by the RSA team. If it is not then provided, a statement should be included within the report (see GG 119 paragraphs 4.5 and 4.5.1).

### 2.2.3 Site visit attendees

Most of the stage 3 RSAs reviewed describe the invitation of a police representative but none describe the invitation to the maintaining agent. RSA teams for stage 3 RSAs are required to invite both police and maintaining agent representatives in accordance with Table 5.42 in GG 119.

Furthermore, a number of the stage 3 RSA reports reviewed contain the statement “A representative of the [Police Force] was invited to attend as Police Observer but was unable to do so on the day in question.” The term “Police Observer” is not a GG 119 term and might imply a formal role in the RSA process outside of the GG 119 terms of reference.

### 2.2.4 Use of obsolete terms

Four of the RSAs reviewed RSAs refer to the “Overseeing Organisation Project Sponsor” which, was an HD 19/15 term, now no longer used in GG 119. RSA teams should use only the terms of reference given in GG 119.

### 2.2.5 Stage 3 RSA on incomplete works

It is recognised that when stage 3 RSAs are carried out, some elements of the works might be incomplete at the time of the site visit. Where such incomplete works are very minor in nature, this might be acceptable. However, one of the stage 3 RSAs submitted this quarter describes that the street lighting introduced by the scheme (including sign illumination) was not powered at the time of the site visit. The effectiveness of pre-existing or new street lighting is fundamental to the site visit during hours of darkness and is a necessity to completing a Stage 3 RSA.

### 2.2.6 Design process advice with no collision risk described

In the reports reviewed, RSA teams occasionally comment on the design processes adopted and go on to make technical recommendations relating to those processes. In one example, a problem reads:

*“The Auditors noted that none of the walls is provided with VRS protection in front of the walls as these were classified as ‘smooth faced walls’. The Guidance on the use of the Road Restraint Risk Assessment Process (RRRAP) associated with TD19/06 (Issue 1 rev 2 dated 30 March 2011) states that: A smooth faced wall over 1m in height should not require safety barrier protection to prevent errant vehicles impacting the face of the wall and may be suitable as a vehicle restraint, but a safety barrier may be required to prevent errant vehicles from impacting leading edge of the wall.*

*Examining provided drawings the Auditors noted that several sections of retaining walls are in fact under 1m in height. For example, RW1 – is in sections 800mm in height, RW4 height varies between 400mm – 800mm, RW5 height varies between 650mm to 800mm, RW6 varies between 500mm to 750mm, at some locations the RW7 height is as low as 539mm.”*

This text is highly technical and relates only to compliance with standard. It describes no resulting collision risk arising from the scheme being audited.

The recommendation reads:

*“It is recommended that need for VRS protection is established and risk assessed (RRRAP). The Auditors acknowledge that it may be not possible to establish adequate protection due to existing constraints, but this should be recorded as stated in TD19/06 para 3.29.”*

GG 119 defines a road safety audit recommendation as “a proportionate and viable suggestion for improvement to eliminate or mitigate an identified road safety audit problem.” RSA teams should be mindful that the proportionality and viability of their recommendation is very dependent on a collision risk being clearly identified.

### 2.2.7 Template errors

It is clearly common and time-efficient for RSA teams to use previous RSA reports as a template for a new RSA.

In a number of the reports reviewed, this results in incorrect headings which contradict the stage of RSA being carried out. For example, some of the stage 1 or combined stage 1 and stage 2 reports contain the heading, “Items raised at this Stage 2 Road Safety Audit”. Another report misdescribes the scheme name in a number of places.

Some of the RSAs submitted also use contradictory role-descriptions where the persons described in the introduction as fulfilling the RSA team leader and RSA team member roles, are transposed in the RSA team statement section.

RSA teams should take great care to ensure that new RSAs using previous RSAs as a template are comprehensively checked for erroneous descriptions and copy/paste errors.

### 2.2.8 Combined stage 1 and stage 2 RSAs

GG 119 requires that a stage 1 RSA is carried out at the completion of preliminary design. The combination of stage 1 and stage 2 RSA reports is only permitted at completion of the detailed design stage where no preliminary design has been undertaken. During this quarter, in comparison to the proportion of RSAs carried out separately at stage 1 and stage 2, the proportion of GG 119 RSA reports at combined stage 1 and stage 2 was 73%. This shows no substantial change from the proportion recorded in the previous quarter (70%).

- **5** no. stage 1 RSAs to GG 119 this quarter
- **3** no. stage 2 RSAs to GG 119 this quarter
- **22** no. combined stage 1 and stage 2 RSAs to GG 119 this quarter.

A study of the database has revealed that the proportion of combined stage 1 and stage 2 RSAs submitted (when compared to separate stage 1 and stage 2 RSAs) has remained relatively consistent since January 2014 and that no significant change in proportion has been evident since GG 119 was introduced.

The sample set of GG 119 RSAs for this quarterly review included ten stage 1 and stage 2 RSAs which had been combined. From a consideration of the scheme types, problem descriptions, and the drawings listed in the appendices of combined stage 1 and stage 2 RSAs within the sample set, there is no evidence that separate stage 1 and stage 2 RSAs would have been more appropriate.

# Appendix A

**Quarterly Factsheet**

**1<sup>st</sup> October 2019 to 31<sup>st</sup> December 2019**

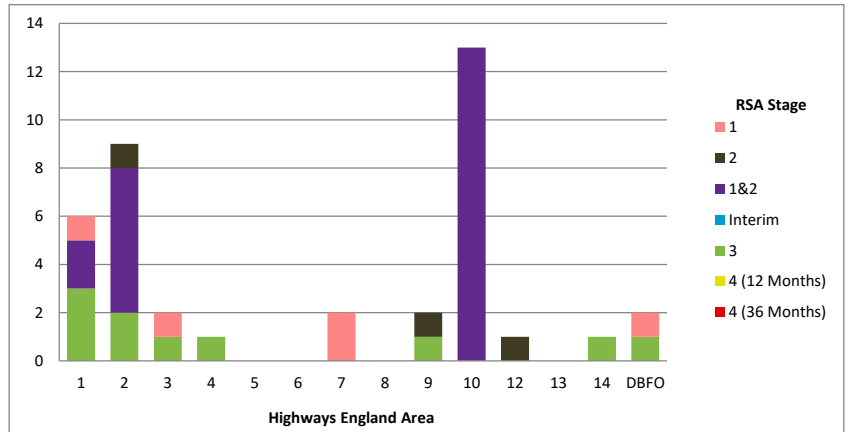
## Quarterly Factsheet - 1st October 2019 - 31st December 2019 (Rev. 1.1)

### Basic information

	This Quarter	Database Since Jan 2014
Number of RSAs submitted	40	2509
RSA team leader specifically identified	98%	96%
Overseeing Organisation project manager specifically identified	100%	90%

	This Quarter	Database Since Jan 2014
Average number of problems recorded	1.8	1.7
Response report issued	5%	3%
Exception report issued	0%	1%

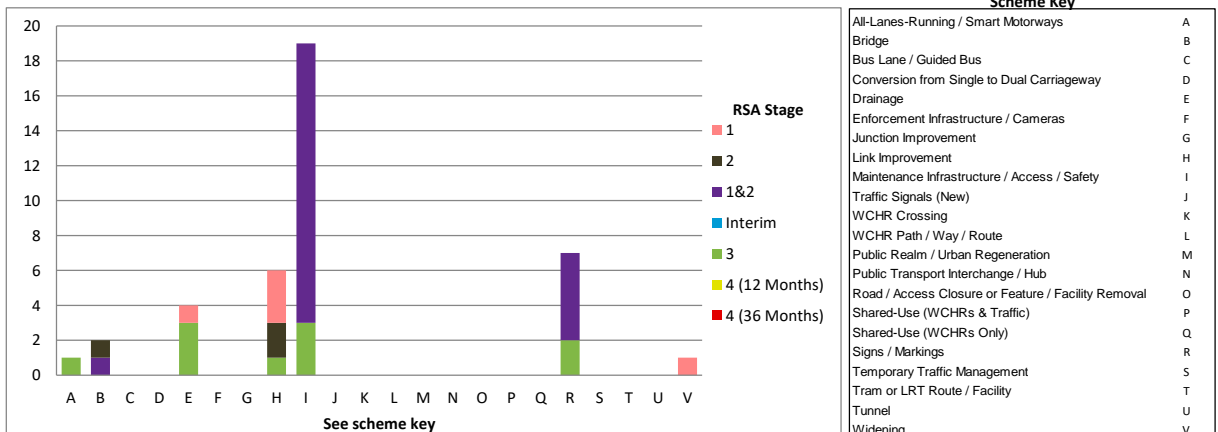
### RSAs by Highways England area - This quarter



### RSAs By scale of scheme - This quarter



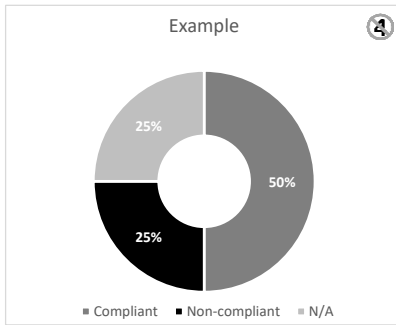
### RSAs by scheme type - This quarter



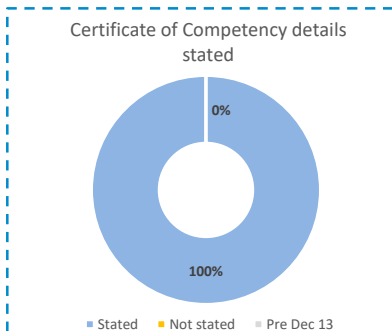
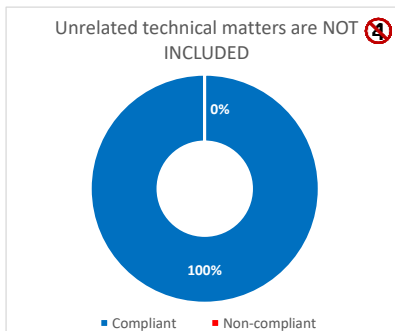
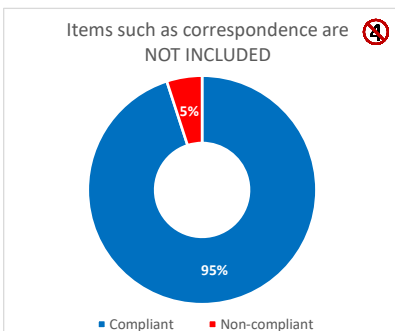
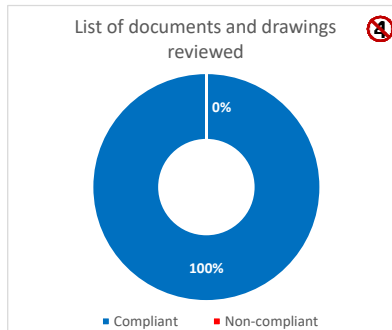
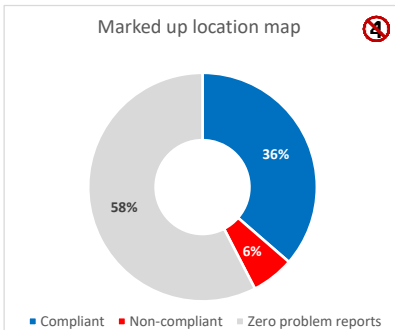
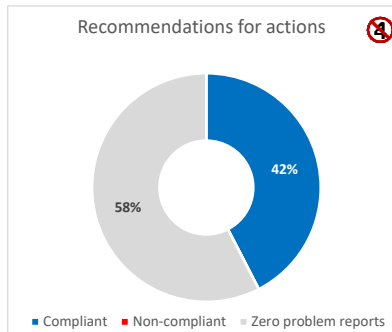
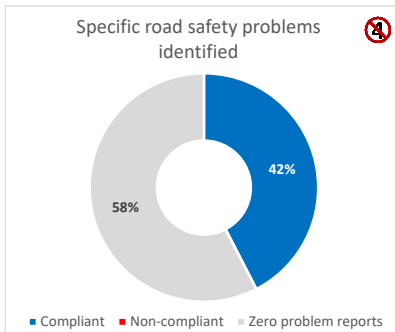
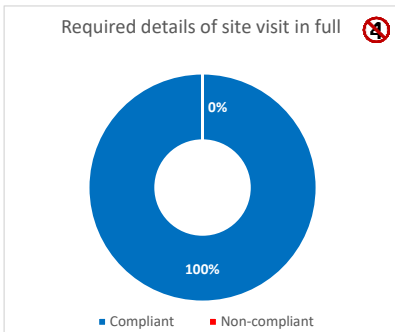
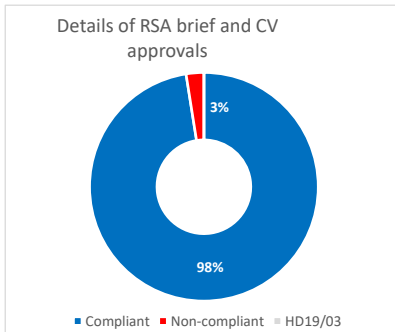
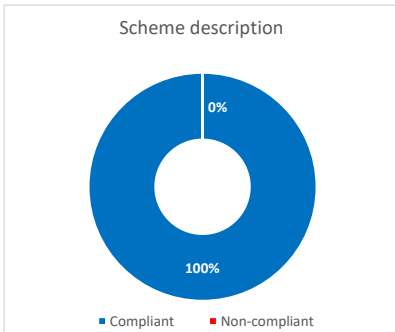
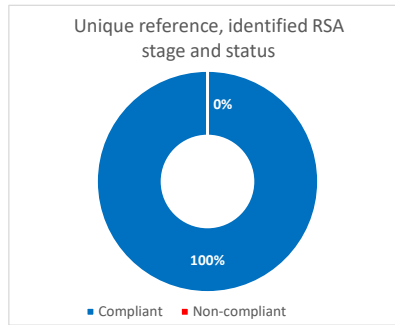
Scheme Key	
All-Lanes-Running / Smart Motorways	A
Bridge	B
Bus Lane / Guided Bus	C
Conversion from Single to Dual Carriageway	D
Drainage	E
Enforcement Infrastructure / Cameras	F
Junction Improvement	G
Link Improvement	H
Maintenance Infrastructure / Access / Safety	I
Traffic Signals (New)	J
WCHR Crossing	K
WCHR Path / Way / Route	L
Public Realm / Urban Regeneration	M
Public Transport Interchange / Hub	N
Road / Access Closure or Feature / Facility Removal	O
Shared-Use (WCHRs & Traffic)	P
Shared-Use (WCHRs Only)	Q
Signs / Markings	R
Temporary Traffic Management	S
Tram or LRT Route / Facility	T
Tunnel	U
Widening	V

## Quarterly Factsheet - 1st October 2019 - 31st December 2019 (Rev. 1.1)

RSAs by compliances - This quarter - Refers to all RSA stages unless indicated (see key)



4 Charts marked by this symbol exclude data for stage 4 RSAs as those compliances are not directly comparable



Inclusion of Certificate of Competency details is not mandatory