

# SERVICE DELIVERY REVIEW



EASTERN REGION

20  
17



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## Introduction

Highways England East works closely with road safety professionals delivering interventions across the East region. Whilst not delivering interventions 'on the ground', Highways England East supports the partnership activities and wants to ensure that the most effective interventions are delivered, for the benefit of the whole region.

As such, Road Safety Analysis (RSA) were commissioned to undertake a review of road safety interventions delivered in the East of England which are specifically aimed at reducing motorcycle casualties. The purposes of the review are:

- to ensure that the types of motorcyclists most at risk are included in the target audiences of the interventions delivered;
- to ascertain whether the interventions are evaluated; and
- to identify gaps and duplications.

## Methodology

The Service Delivery Review process involved consulting with road safety professionals across the East region, to obtain in-depth insight into the motorcycle interventions being delivered. To this end a questionnaire was developed, as shown in Appendix A – Questionnaire on page 49.

The questionnaire was sent out to road safety partnerships and main delivery partners across the region, and recipients were encouraged to share the questionnaire with local colleagues and partner organisations.

The questionnaire was comprised of a set of mainly open questions, to be completed for each intervention. The questions were designed to build up a picture of each intervention in terms of who the delivery partners are; funding provisions; frequency of delivery and when it started; details of the target audience and behaviours, and how these were identified; and whether the intervention has been evaluated.

The submissions were collated and summarised, starting with mapping the interventions against target groups identified by Will Cubbin in 'Powered-2-Wheelers in the Eastern Region'. Motorcyclists are far from homogeneous and the collisions in which they are involved also differ. Whilst there are similarities in motorcycle collisions across the East region, there are also key differences and each individual area has its own target audiences. These are presented in full in the section on Motorcycle Target Groups. Each intervention's description was compared to the target groups identified by collision analysis to determine if the targets were consistent with collision issues in the area.

The syntheses of each intervention also included identifying the focus of the activity, such as skills training, awareness raising, changing attitudes or imparting advice. A key component was assessing whether the intervention had been evaluated and what the evaluation results recommended. A graphical synopsis of the interventions delivered in the East of England is shown in the section on Summary of Interventions.

A key part of the process was to identify opportunities for cross-regional collaboration, where similar interventions are being delivered. These opportunities could realise economies of scale, consistency



of messaging and reduce duplication. Additionally, a gap analysis was conducted to ensure that there were not key target groups or focuses that were omitted from an area's interventions.

The process culminated in rating the interventions on a scale of 'best practice', based on a combination of evaluation results; targeting appropriate audiences; and supporting information. The ratings are a product of the author's judgement, her knowledge of effective road safety interventions and evaluation techniques, and the information provided. The rating scale begins with 'no evidence of best practice' (which does not mean that the intervention is not effective or worthwhile, but does reflect that there was no evidence supplied to demonstrate its efficacy); 'worth considering but more evidence required' (where interventions have a strong evidence base and/or evaluation, but where more researched could enhance evidence of efficacy); and 'best practice based on evidence' (where the evaluation results and evidence base provided suggest the intervention is worth pursuing).

## Responses

There were 39 interventions submitted from across the region, from the following areas:

- Bedfordshire – 8
- Cambridgeshire – 4
- Essex - 10
- Hertfordshire – 3
- Norfolk - 6
- Suffolk – 8

Figure 1 - Types of intervention submitted

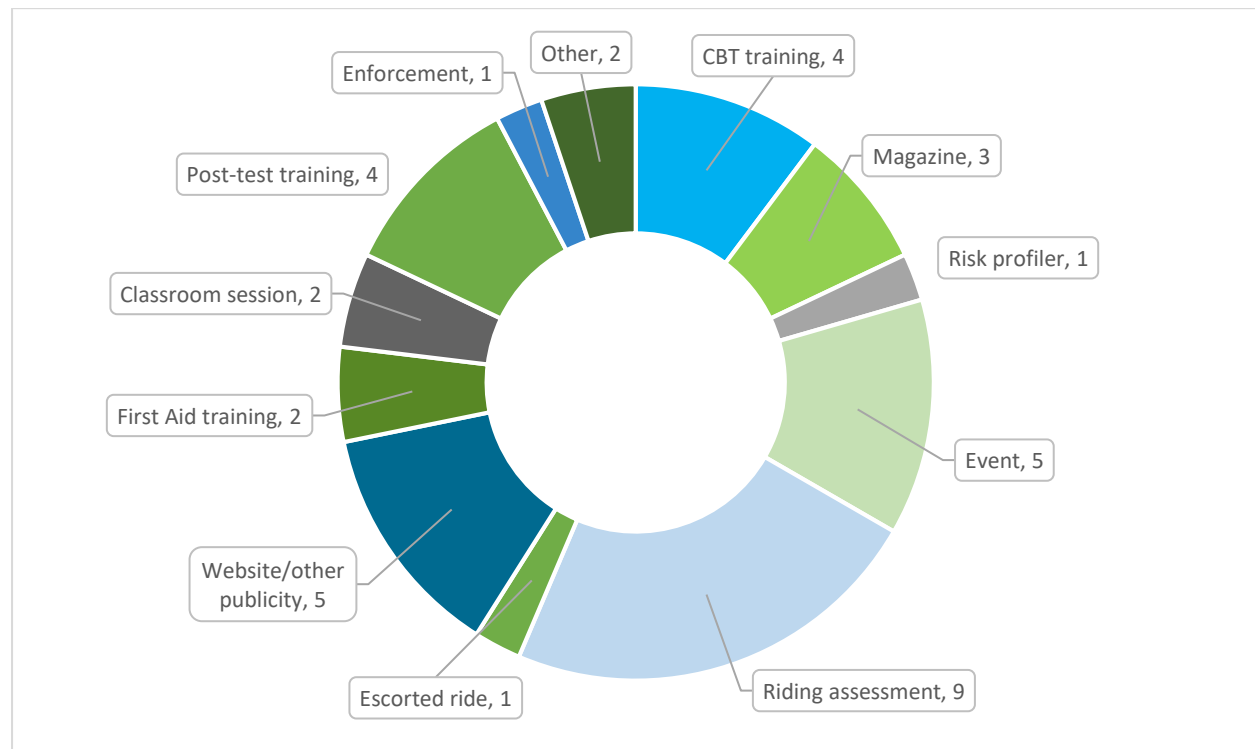
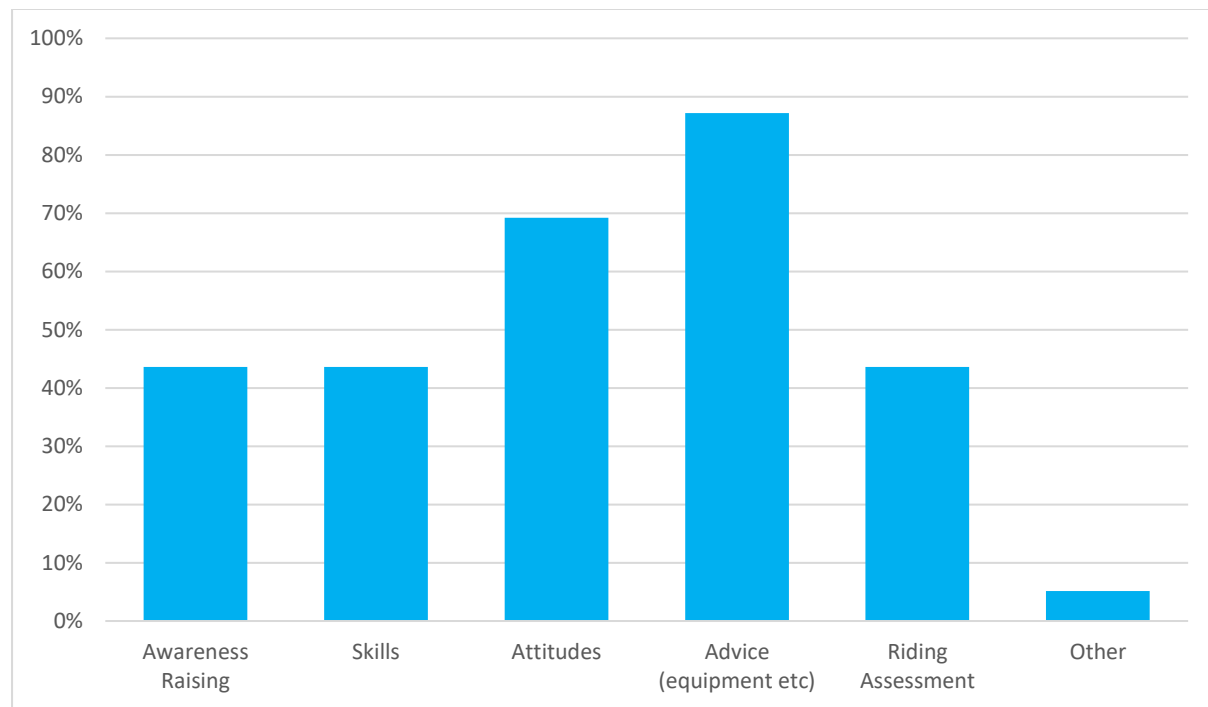




Figure 1 shows the types of intervention submitted, with a quarter described as ‘riding assessments’ and 10% ‘CBT training’. In total, 13% of the interventions could be described as ‘events’ and a further 13% as ‘website/other publicity’.

The interventions were also categorised according to focus, shown in Figure 2. Each intervention could have multiple focuses. It shows that almost all of the interventions involved some sort of ‘advice giving’, whilst 70% were targeting ‘attitudes’.

Figure 2 - The focuses of the interventions



The target groups recommended by the collision analysis are explored in the next section. They can be summarised into four main groups:

- Commuters (any engine size)
- Leisure riders (over 500cc)
- Young riders (up to 125cc)
- Other riders

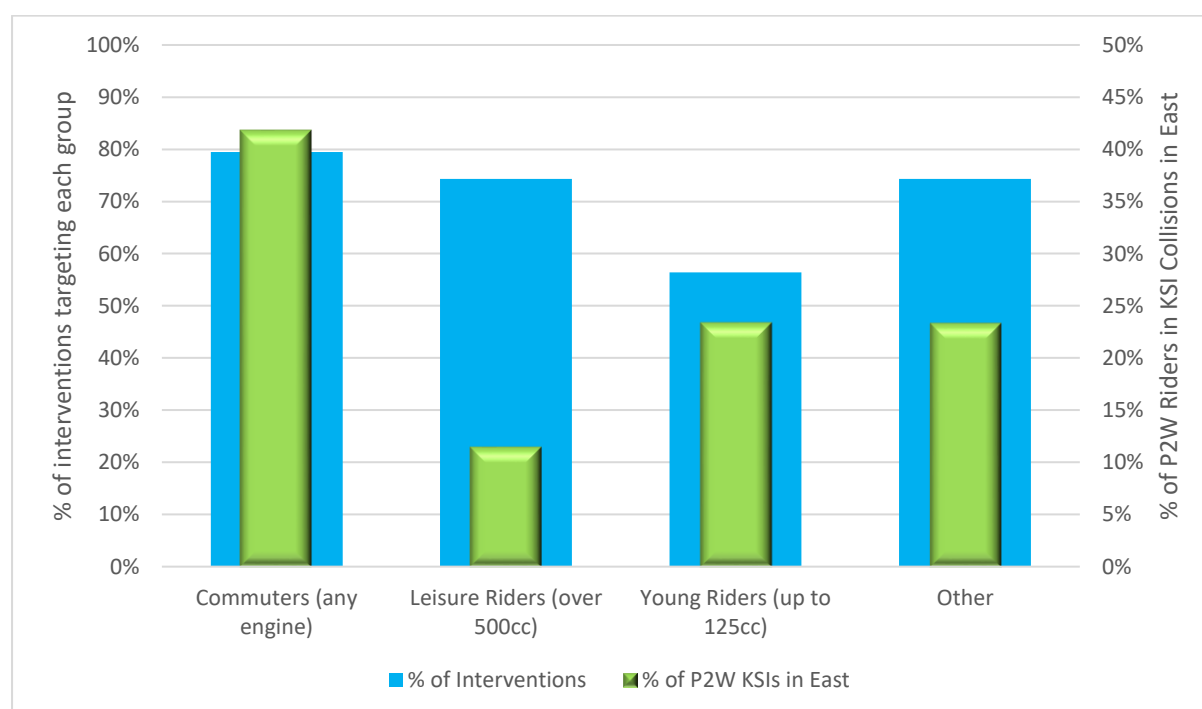
Figure 3 shows that many of the interventions target more than one type of motorcyclist. Nearly 80% were trying to communicate, and reduce the risk, of commuter riders, with three-quarters aimed at leisure riders on large motorcycles. A similar percentage target ‘other’ types of riders – this was selected when an intervention was described as targeting all types of motorcyclist or when an audience was identified that did not fit the profile of the other three (for example, riders of up to 125cc motorcyclists of any age, not just young). Whilst the smallest target group was young riders, 56% of the interventions still targeted this segment. The chart also shows the percentages of riders in killed or serious collisions (KSI) for each rider group. It shows that the largest casualty group is ‘commuters’ and this was also the group for which the highest percentage of interventions were



targeting. The next largest group for intervention targeting was 'leisure riders': however, this group only represented 11% of riders involved in KSI collisions in the East.

The other conclusion from this analysis is that interventions tend to target multiple groups. There are pros and cons of these interventions targeting more than one audience type. On one hand, these interventions are obviously trying to get the messages to as wide a target audience as possible, all of which are over-represented in the casualty statistics. On the other hand, there is a danger that the interventions have too broad a focus by trying to appeal to multiple target audiences and there could be an argument for refining and adopting some of them to narrow that focus and ensure that the specific target audience is engaged with.

Figure 3 - The target groups for the interventions



## Motorcycle Target Groups

A major piece of analysis was undertaken by Will Cubbin, Road Safety Analyst for the Safer Essex Roads Partnership, on behalf of Highways England<sup>1</sup>. The purpose of the analysis was to provide an insight into fatal and serious injury collisions involving powered two-wheelers (P2W) in the Eastern Region. The analysis uses the most recently reported injury data, as recorded in STATS19 (2011-2015), to profile geographical hotspots, road types and routes as well as temporal trends of times of day and seasons. Junction analysis and manoeuvres and contributory factors of other participants were also analysed. The types of riders involved in the collisions were also profiled for each police force area, focusing on home address locations, distance from home (and thus the potential for cross border activity), demographic characteristics and motorcycle type.

<sup>1</sup> Cubbin, W., *Powered-2-Wheelers in the Eastern Region: Version 2.2*, (Safer Essex Roads Partnership, February 2017)





The report should be used alongside this Review to ensure that the right messages are being delivered, to the right target audience in the right places.

The demographic analysis suggested three rider profile groups should be created, based on age, engine size and type of collision:

- Young Riders – Aged 16 to 25 years on motorcycles with engines up to 125cc (23% of riders involved in KSI collisions)
- Commuters – Aged 26 to 65 years on motorcycles of any engine size in weekday collisions (42% of all riders involved in KSI collisions)
- Leisure Riders – Aged 26 to 55 years on motorcycles with engines over 500cc (11% of all riders involved in KSI collisions).

The rider profile groups differ across the East region, with some profiles featuring more highly in collisions in some areas than others. This means that the casualty reduction priorities are not the same across the East and therefore the interventions delivered should reflect this.

Figure 4 shows that 'commuter riders' account for over 35% of all riders involved in collisions in all regional police forces apart from Norfolk and Suffolk. Bedfordshire, Norfolk and Suffolk had over 35% of riders crashing on their roads from the 'young rider' category, with Norfolk and Suffolk having the highest percentages of 'leisure riders' in injury collisions (9% and 8% respectively and 15% and 13% in KSI collisions). Approximately 20% of riders involved in injury collisions in the East do not fit the three rider groups, with 22% of those in injury collisions in Essex not fitting any profile.

Figure 4 - Rider Profile Breakdowns by Police Force Area – All Severities (2011-2015)

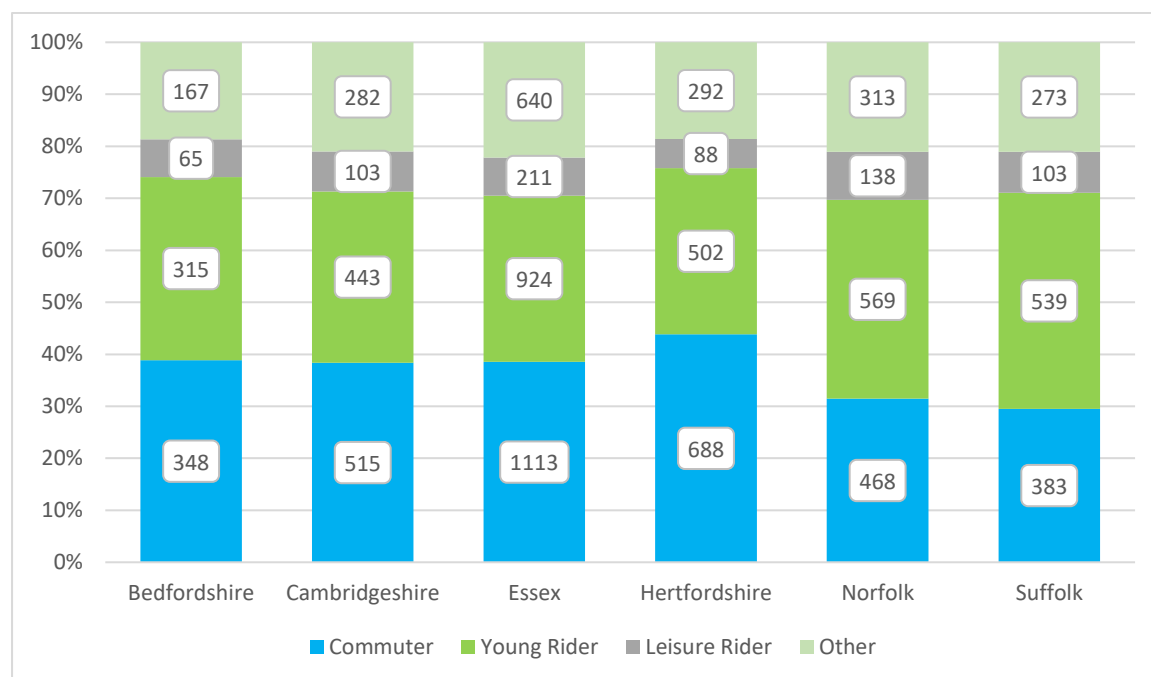
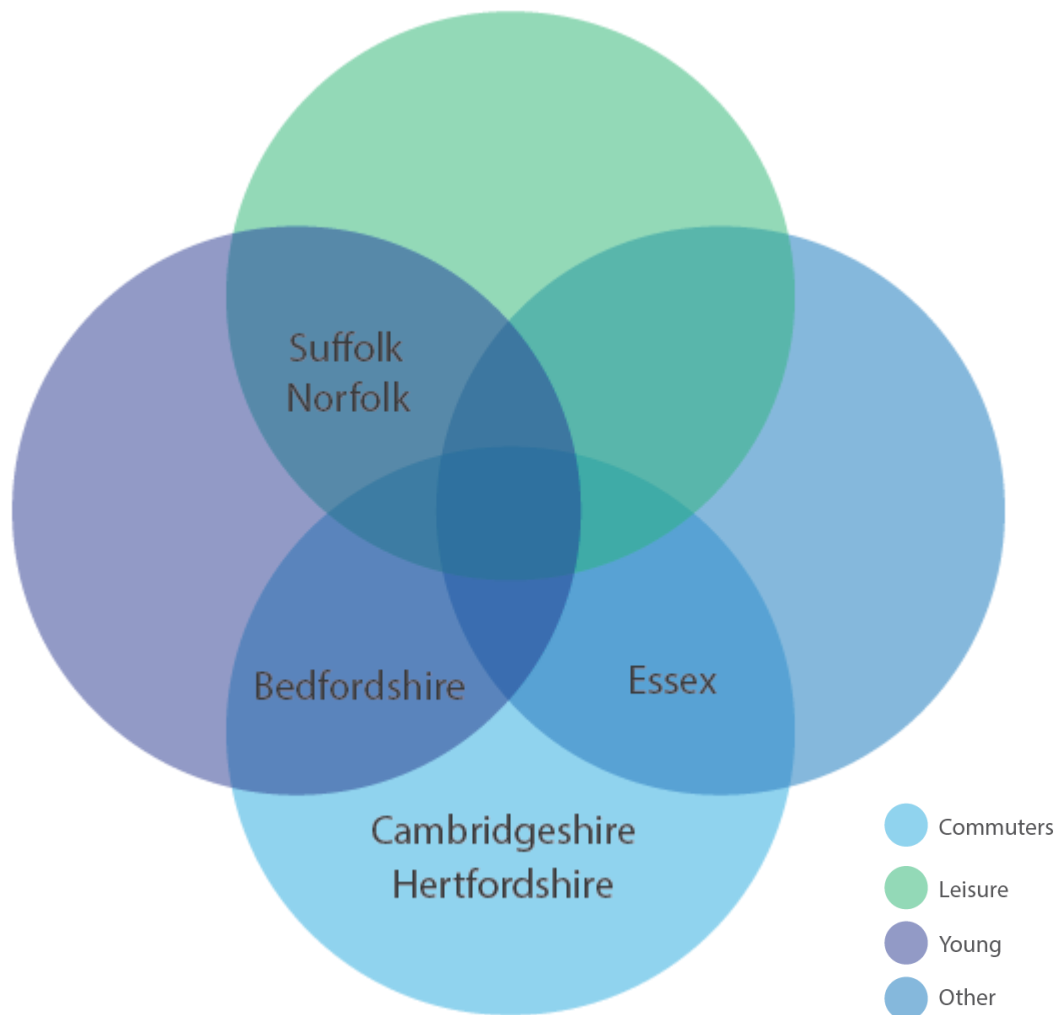


Figure 5 shows the target groups of each of the police force areas and shows how different areas have different priority areas, although there are some similarities and overlaps.





Figure 5 - Target Casualty Groups by Police Force Area



## Summaries of Rider Profile Groups

### Commuter Riders

“Riders in this group are concentrated at the younger end of the 26-65 age group, but with a secondary peak age in their mid to late forties. They tend to have collisions on urban roads during afternoon commuting times, with a smaller morning peak, an average of about 10 miles from where they live. These riders tend to live in areas of lower than average incomes. Almost 12% live in Mosaic Type G areas (village communities) some of which may be underserved by affordable public transport alternatives.”<sup>2</sup>

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<sup>2</sup> *Ibid.*, p.46



### Leisure Riders

“Riders in this group are most likely to be aged in their mid-forties to early fifties. They tend to have collisions on rural roads during afternoons at the weekend, particularly Sundays. Consequently, their collision locations are fairly dispersed, resulting in fewer areas suitable for on-the-road interventions. They appear to ride further than the commuter group, average 16 miles from home to collision location. Although over represented in areas of lower than average incomes, they are on average more affluent than other P2W rider groups.”<sup>3</sup>

### Young Riders

“Mosaic, deprivation and age distribution data suggests many individuals in the ‘Young Riders’ group may be influenced by financial or transport availability related factors, more than a specific desire to ride a motorcycle.

The fact that the vast majority of collisions occur on urban roads throughout the week and weekend, combined with the average distance from home to collision of 3.6 miles, indicates Young Riders do not usually travel long distances.

A combination of inexperience, low quality CBT training, and greater numbers on the road may be a reason for the greater number of riders at the younger end of this age group being involved in KSI collisions. As riders reach their early to mid-20s, they may avoid collisions due to experience and maturity, and be fewer in number as other options such as car ownership become viable.

Comparison of young drivers with young P2W riders suggests that some young P2W engagement could ‘piggy back’ on more general young driver initiatives, but it is important to include specific engagement for young P2W riders to address the issues most pertinent to this group.”<sup>4</sup>

### Movement across the region<sup>5</sup>

In addition to understanding who to target in terms of rider type, it is important to know where the target audience could be found. The collision analysis compared the percentages of ‘local’ riders (those involved in a collision in the same local authority district or unitary authority as they live) with the percentage of riders crashing in an area who live elsewhere (the ‘Import rate’) and the percentage of riders living in a district or unitary who crash elsewhere (the ‘Export rate’).

### Local Riders

In Ipswich and Southend-on Sea, there are *low* import and export rates and *high* rider involvement rates per head of local population. In these areas, it makes sense to target local resident P2W riders.

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<sup>3</sup> *ibid.*, p.49

<sup>4</sup> *ibid.*, p.54

<sup>5</sup> *ibid.*, p.24



Table 1 - Authorities with high proportions of local riders

| District               | Import Rate | Export Rate | KSI rate per 10k population - Locally | KSI rate per 10k population – Region Average |
|------------------------|-------------|-------------|---------------------------------------|--|
| <b>Ipswich</b>         | 29%         | 37%         | 5.11                                  | 4.96   |
| <b>North Norfolk</b>   | 32%         | 32%         | 3.69                                  |  |
| <b>Peterborough</b>    | 29%         | 13%         | 4.52                                  |  |
| <b>Southend-on Sea</b> | 39%         | 27%         | 5.23                                  |  |
| <b>Waveney</b>         | 19%         | 27%         | 4.92                                  |  |

### Non-Local Riders

Epping Forest, Hertsmere and Three Rivers are all areas where there are *high* import and *low* export rates and *high* rider involvement rates per head of local population. In these areas, it makes sense to target riders on the roads and collaborate with other authorities in the area to communicate with their residents.

Table 2 - Authorities with high proportions of non-local riders

| District             | Import Rate | Export Rate | KSI rate per 10k population - Locally | KSI rate per 10k population – Region Average |
|----------------------|-------------|-------------|---------------------------------------|--|
| <b>Brentwood</b>     | 60%         | 39%         | 4.63                                  | 4.96   |
| <b>Broxbourne</b>    | 57%         | 20%         | 2.92                                  |  |
| <b>Epping Forest</b> | 73%         | 34%         | 7.77                                  |  |
| <b>Hertsmere</b>     | 62%         | 23%         | 5.08                                  |  |
| <b>Three Rivers</b>  | 67%         | 43%         | 5.42                                  |  |

Areas with a *low* rider involvement rate per head of local population and a *low* import rate but *high* export rate, will have low numbers of casualties on local roads. However, their residents are still involved in collisions as P2W riders but elsewhere in the East region. Castle Point, Great Yarmouth and Luton could all collaborate with neighbouring areas to communicate with their residents and reduce their risk elsewhere on the region's roads.

Table 3 - Authorities who export riders to other areas

| District              | Import Rate | Export Rate | KSI rate per 10k population - Locally | KSI rate per 10k population – Region Average |
|-----------------------|-------------|-------------|---------------------------------------|--|
| <b>Castle Point</b>   | 39%         | 58%         | 3.49                                  | 4.96   |
| <b>Harlow</b>         | 47%         | 52%         | 3.55                                  |  |
| <b>Broadland</b>      | 45%         | 49%         | 5.16                                  |  |
| <b>Great Yarmouth</b> | 38%         | 46%         | 3.46                                  |  |
| <b>Luton</b>          | 34%         | 41%         | 2.65                                  |  |



## Summary of Interventions

Figure 6 shows a summary of the interventions provided as part of the syntheses. Each intervention is defined by the area it is delivered in; which KSI targets the intervention seeks to engage with (denoted by the coloured circles); which KSI targets are the priority groups for that area (shown as green shaded areas); what the focus of the interventions are (indicated by blue circles); whether the intervention has been evaluated; and a rating out of five, as assigned by the author, where a rating of 1 corresponds to 'no evidence of best practice' and 5 to 'best practice based on evidence' (determined as per the methodology described above).

Each intervention is described in full, including evaluation results where available, in the section on Descriptions of Interventions. The descriptions provide an insight into the ratings which have been applied. Links to each full description are accessible through the table. The section on 'Interventions Worth Considering' on page 37 gives some guidance on how additional information could be obtained to improve the evidence (and thus the ratings) for these schemes. Furthermore, the opportunities afforded by these interventions and improving their evidence base are discussed

A further section on the groups of interventions in each level of rating is shown on page 36 in Best Practice Findings.



Figure 6 - Summary of Interventions

| Area         | Intervention                                    | KSI Target |         |       |       | Focus             |        |           |        |                   |       | Evaluated | Rating |
|--------------|---|------------|---------|-------|-------|-------------------|--------|-----------|--------|-------------------|-------|-----------|--------|
|              |   | Commuter   | Leisure | Young | Other | Awareness Raising | Skills | Attitudes | Advice | Riding Assessment | Other |           |        |
| Bedfordshire | <a href="#">MTM 1<sup>st</sup> Ride Pre-CBT</a> |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |
|              | <a href="#">MTM Bedfordshire Biker Magazine</a> |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |
|              | <a href="#">MTM Biker Risk Profiler</a>         |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |
|              | <a href="#">MTM Ride Free open day</a>          |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |
|              | <a href="#">MTM Ride Safe</a>                   |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |



| Area           | Intervention                              | KSI Target |         |       |       | Focus             |        |           |        |                   |       | Evaluated | Rating |
|----------------|---|------------|---------|-------|-------|-------------------|--------|-----------|--------|-------------------|-------|-----------|--------|
|                |   | Commuter   | Leisure | Young | Other | Awareness Raising | Skills | Attitudes | Advice | Riding Assessment | Other |           |        |
|                | <a href="#">MTM Take Control post CBT</a> |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |
|                | <a href="#">MTM Winter Skills day</a>     |            |         |       |       |                   |        |           |        |                   |       | ✓         | 1      |
|                | <a href="#">Enhanced Rider Scheme</a>     |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |
| Cambridgeshire | <a href="#">BikeSafe</a>                  |            |         |       |       |                   |        |           |        |                   |       | ✓         | 4      |
|                | <a href="#">Motorcycle shows</a>          |            |         |       |       |                   |        |           |        |                   |       | ✗         | 1      |
|                | <a href="#">Ride to work day</a>          |            |         |       |       |                   |        |           |        |                   |       | ✗         | 1      |



| Area          | Intervention                            | KSI Target |         |       |       | Focus             |        |           |        |                   |       | Evaluated | Rating |
|---------------|---|------------|---------|-------|-------|-------------------|--------|-----------|--------|-------------------|-------|-----------|--------|
|               |   | Commuter   | Leisure | Young | Other | Awareness Raising | Skills | Attitudes | Advice | Riding Assessment | Other |           |        |
|               | <a href="#">TWIST</a>                   |            |         |       |       |                   |        |           |        |                   |       |           | 3      |
| Hertfordshire | <a href="#">Biker Down</a>              |            |         |       |       |                   |        |           |        |                   |       |           | 3      |
|               | <a href="#">Rider Magazine</a>          |            |         |       |       |                   |        |           |        |                   |       |           | 1      |
|               | <a href="#">BikeSafe</a>                |            |         |       |       |                   |        |           |        |                   |       |           | 4      |
| Suffolk       | <a href="#">Progress Motorcycling</a>   |            |         |       |       |                   |        |           |        |                   |       |           | 1      |
|               | <a href="#">Young Apprentice Scheme</a> |            |         |       |       |                   |        |           |        |                   |       |           | 3      |





| Area | Intervention                              | KSI Target |         |       |       | Focus             |        |           |        |                   |       | Evaluated | Rating |
|------|---|------------|---------|-------|-------|-------------------|--------|-----------|--------|-------------------|-------|-----------|--------|
|      |   | Commuter   | Leisure | Young | Other | Awareness Raising | Skills | Attitudes | Advice | Riding Assessment | Other |           |        |
|      | <a href="#">Fire Bike/<br/>Biker Down</a> | ●          | ●       | ●     | ●     |                   | ●      | ●         | ●      |                   |       | ✗         | 3      |
|      | <a href="#">Suffolk Hugger</a>            | ●          | ●       | ●     | ●     | ●                 |        | ●         | ●      |                   |       | ✓         | 3      |
|      | <a href="#">College open event</a>        |            |         | ●     |       |                   |        | ●         | ●      |                   |       | ✗         | 1      |
|      | <a href="#">Rider Plus/Young Rider</a>    | ●          | ●       | ●     | ●     |                   | ●      | ●         | ●      | ●                 |       | ✓         | 2      |
|      | <a href="#">Safe Rider</a>                | ●          | ●       | ●     | ●     |                   | ●      | ●         | ●      | ●                 |       | ✓         | 3      |
|      | <a href="#">Wheels to Work</a>            | ●          |         | ●     |       |                   | ●      | ●         | ●      |                   |       | ✓         | 3      |



| Area    | Intervention   | KSI Target |         |       |       | Focus             |        |           |        |                   |       | Evaluated | Rating |
|---------|--|------------|---------|-------|-------|-------------------|--------|-----------|--------|-------------------|-------|-----------|--------|
|         |  | Commuter   | Leisure | Young | Other | Awareness Raising | Skills | Attitudes | Advice | Riding Assessment | Other |           |        |
| Norfolk | <a href="#">Safe Rider</a>   | ●          | ●       | ●     | ●     |                   | ●      | ●         | ●      | ●                 |       | ✓         | 3      |
|         | <a href="#">Pedsafe</a>  |            | ●       | ●     |       |                   |        | ●         | ●      |                   |       | ✗         | 2      |
|         | <a href="#">Norfolk &amp; Suffolk Biker Magazine</a>                     | ●          | ●       | ●     | ●     | ●                 |        | ●         | ●      |                   |       | ✓         | 3      |
|         | <a href="#">i2i Motorcycle Academy</a>                                   | ●          | ●       | ●     | ●     |                   |        | ●         | ●      |                   |       | ✓         | 4      |
|         | <a href="#">Norfolk &amp; Suffolk Casualty Reduction motorcycle team</a> | ●          | ●       | ●     | ●     | ●                 |        |           | ●      |                   | ●     | ✗         | 3      |
|         | <a href="#">Hugger's Challenge</a>                                       | ●          | ●       | ●     | ●     |                   | ●      | ●         | ●      | ●                 |       | ✓         | 5      |



| Area  | Intervention   | KSI Target |         |       |       | Focus             |        |           |        |                   |       | Evaluated | Rating |
|-------|--|------------|---------|-------|-------|-------------------|--------|-----------|--------|-------------------|-------|-----------|--------|
|       |  | Commuter   | Leisure | Young | Other | Awareness Raising | Skills | Attitudes | Advice | Riding Assessment | Other |           |        |
| Essex | <a href="#">Firebike</a>                                 | ●          | ●       | ●     | ●     | ●                 |        | ●         | ●      |                   |       | ✓         | 3      |
|       | <a href="#">Firebike Better Biking Courses</a>           | ●          | ●       |       | ●     |                   | ●      | ●         | ●      | ●                 |       | ✓         | 3      |
|       | <a href="#">Firebike Advanced Machine Skills Courses</a> | ●          | ●       | ●     | ●     |                   | ●      | ●         | ●      | ●                 |       | ✓         | 3      |
|       | <a href="#">BikeSafe</a>                                 | ●          | ●       |       | ●     |                   | ●      | ●         | ●      | ●                 |       | ✓         | 4      |
|       | <a href="#">Hugger Advanced Instructor Training Days</a> | ●          | ●       |       | ●     |                   | ●      |           | ●      | ●                 |       | ✗         | 2      |
|       | <a href="#">Essex Hugger Challenge</a>                   | ●          | ●       |       | ●     | ●                 |        |           |        |                   |       | ✓         | 3      |



| Area | Intervention  | KSI Target |         |       |       | Focus             |        |           |        |                   |       | Evaluated | Rating |
|------|---|------------|---------|-------|-------|-------------------|--------|-----------|--------|-------------------|-------|-----------|--------|
|      |   | Commuter   | Leisure | Young | Other | Awareness Raising | Skills | Attitudes | Advice | Riding Assessment | Other |           |        |
|      | <a href="#">Essex Hugger Campaign – Other Road Users</a>    |            |         |       |       |                   |        |           |        |                   |       | ✗         | 2      |
|      | <a href="#">Motorcycle pitstop events</a>                   |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |
|      | <a href="#">Young moped/Scooter Rider education days</a>    |            |         |       |       |                   |        |           |        |                   |       | ✓         | 3      |
|      | <a href="#">Street Spirit Moped/Scooter Safety campaign</a> |            |         |       |       |                   |        |           |        |                   |       | ✗         | 3      |



## Descriptions of Interventions

### - MTM 1<sup>st</sup> Ride Pre-CBT (Bedfordshire)

1<sup>st</sup> Ride was originally designed as a pre-CBT intervention. The concept was to target those just prior to and at the point of taking a CBT. The original assumption was that the audience would be younger riders, accessed through schools and colleges. However, it became apparent that older new riders were using mopeds for commuting and so the attendance age range was broadened.

It proved challenging to recruit participants to the original format of the intervention and discussions with local trainers suggested that a shift to post-CBT training would be most useful, as the audience was already captive, having chosen to do CBT. The adapted version was conceived as a response to concerns that elements of CBT, even if delivered to DSA standards, were not necessarily given adequate time allocation, notably practical time and experience of on-road riding. The intervention made use of the appeal of more bike time to provide additional theory and guidance and insights into attitude and behaviour, making use of group scenarios.

1<sup>st</sup> Ride was first delivered in 2008 and continued until 2010, until funding became an issue. Trainers gradually disengaged as it was seen as a resource-intensive non-essential extra to the CBT.

The intervention was evaluated as part of a full evaluation of Motorcycle Training Matters<sup>6</sup> by Dr Julie Gandolfi in March 2010. Questionnaires and interviews were used to assess the effectiveness of 1<sup>st</sup> Ride. Significant confidence increases were observed in the questionnaire responses before and after 1<sup>st</sup> Ride. Whilst increased confidence was linked to an increase in risky attitudes and behavioural intention in young novice riders, these measures were safer at the end of the intervention than at the beginning (although attitudes to 'close following' deteriorated). The perception of the level of risk faced by participants as a motorcyclist also increased. These findings suggest that messages related to risk perception and risky attitudes and riding behaviours were absorbed by the participants. It would be interesting to see the results of a comparison group of those who had just taken CBT to see the additional benefit of 1<sup>st</sup> Ride.

*Assessment: Worth considering but more evidence required*

### - MTM Bedfordshire Biker Magazine (Bedfordshire)

Bedfordshire Biker was a magazine which was distributed as a hard copy to motorcyclists, using a variety of different motorcycle outlets and at events which were organised and run by the local road safety partnership. The magazine was also offered in batches to dealers and training bodies, who could make use of it as a giveaway. An online version of the magazine was free to subscribers via the <http://www.motorcyclingmatters.org> website.

Bedfordshire Biker was designed to appeal to the widest possible riding audience, with articles relevant to the full range of the training continuum rider experience. It was principally used to raise awareness of local motorcycle activity and to provide an update on local developments in highway maintenance.

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<sup>6</sup> Gandolfi, J., *Evaluation of the Bedfordshire and Luton Casualty Reduction Partnership Motorcycle Training Matters Project 2008-2010*, (Driving Research Ltd., 2010)



The magazine started in 2010 and five editions were produced before funding cuts prevented further support for the free publication. It is no longer delivered.

Bedfordshire Biker was evaluated in a review of Central Bedfordshire's education training and publicity programme in 2012<sup>7</sup>. An online survey of a very small self-selected sample of participants (10) were asked a set of questions about the magazine. Whilst the feedback suggested that the content was valued by these readers and that some of them would be prepared to pay a small charge for the magazine, it is difficult to draw strong conclusions on the value of the magazine from this study.

*Assessment: Worth considering but more evidence required*

#### - MTM Biker Risk Profiler (Bedfordshire)

The Biker Risk Profiler (BRP) was a tool devised to assist training providers to establish a rapport with trainees through their own self-awareness and knowledge of trainees' attitudes to risk to enable more effective coaching relationships and training outcomes.

The Biker Risk Profiler was developed by Driving Research Limited as there was no attitudinal or behavioural measure of rider risk available. It was administered and refined during 2009, 2010 and 2011 as part of the grant funding for Motorcycle Training Matters and subsequently the Enhanced Rider Scheme. The tool provided an opportunity for both trainer and trainee to develop self-awareness and to explore where attitude and resultant behaviour modifications might yield more successful riding outcomes.

A suitable framework was statistically established and additional items were created from interviews with riders. The pilot version of the Biker Risk Profiler created 5 behavioural factors – Safety-Oriented Behaviour, Riding Concerns, Thrill Seeking, Interaction with Other Road Users, and Fatigue Proneness. It also created 4 coping factors – Confrontational Coping, Task Focus Coping, Avoidance Coping and Anxious Coping, and one Socially Desirable Responding factor to measure the extent to which a participant may be under-representing their risk.

The evaluation<sup>8</sup> found that the Biker Risk Profiler has the ability to differentiate between sub-groups of riders, categorised on the basis of situational variables, and therefore it is a valid instrument. It was recommended that more detailed validity analysis is carried out using a larger sample of participants.

*Assessment: Worth considering but more evidence required*

#### - MTM Ride Free open day (Bedfordshire)

Ride Free open day events were a means to showcase all things motorcycling related locally and to actively promote and refer riders along 'The Training Continuum' in the direction of their next training step should they wish to find out more.

The events were based on comprehensive partner involvement with engagement from all key stakeholders within the training continuum. The objectives of the event were promotion of rider training opportunities; encouragement of safe riding practices; and increasing awareness of

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<sup>7</sup> Roberts, P., McMurray, I., Horan, L., Simmons, J. and Bell, R., *Road Safety Education, Training and Publicity: an Evaluation of Central Bedfordshire's 2011/2012 Programme: Motorcyclists*, (University of Bedfordshire, 2012)

<sup>8</sup> Gandolfi, (2010)



Motorcycling Matters/Motorcycling Training Matters. The events were held annually until 2014, when reduced funding and partner staffing changes made it difficult to continue to justify the intervention.

The audience were generally self-selecting and tended to be older, experienced riders. An evaluation of the Ride Free event in 2014 found that “whilst elements of the event did promote rider training opportunities and encourage safer riding practices, the conclusion is that Ride Free 2014 did not actively do this among visitors who did not consciously seek out the corresponding attractions. However, the event was effective at increasing awareness of Motorcycling Matters/Motorcycle Training Matters.”<sup>9</sup>

*Assessment: Worth considering but more evidence required*

#### - MTM Ride Safe (Bedfordshire)

RideSafe was designed after National BikeSafe had been criticised by Approved Training Bodies for stepping into the realm of training. Therefore, RideSafe is a ‘referral only’ mechanism to post-test and advanced training opportunities locally.

RideSafe is led by Bedfordshire Police and involves providing existing riders/full licence holders with the opportunity of a police-assessed ride, free of charge. The Motorcycle Training Matters project arranges for a group of police motorcyclists to be available on a Sunday morning approximately once a month. The Police-devised routes incorporate town, country and open roads and rides last for 30 to 45 minutes. On their return, riders are de-briefed by their assessor and provided with feedback documentation to assist them in developing their riding skills. RideSafe was first delivered in 2009 and has been delivered every month in the biking season annually since.

RideSafe provides assessment only and no training is involved so it is not reasonable to expect a measurable attitudinal or behavioural change to occur because of the intervention. This meant that no quantitative research was included in the evaluation. Interviews<sup>10</sup> with RideSafe participants provided an insight into the reasons why they undertook the assessment and how satisfied they were with the experience. However, it is difficult to assess whether the intervention led to greater levels of post-test training being undertaken.

*Assessment: Worth considering but more evidence required*

#### - MTM Take Control post CBT (Bedfordshire)

The Take Control intervention was a natural post-CBT evolution of the 1<sup>st</sup> Ride pre-CBT scheme. Casualty data analysis identified some primary riding behaviours which were more frequently present in collisions involving younger, inexperienced 16 to 20-year-old (mostly male) riders. These riders seemed to have more difficulty assessing how road situations might change which created hazards during manoeuvres, including close following or filtering. It was also felt that attitudes to speeding and towards clothing and safety equipment requirements needed to be addressed.

Take Control was designed to target new riders, aged 16 to 20 years old who had recently passed CBT. An independent Approved Training Body (ATB) (90-One Rider Education) trained interested local ATBs and then offered a quality assurance input to ensure delivery remained consistent with the design.

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<sup>9</sup> Gandolfi, J., *Ride Free 2014 Event Evaluation*, (Driving Research Ltd., 2014)

<sup>10</sup> Gandolfi, (2010)





The intervention was only delivered in 2011, where feedback from trainers was mixed, which impacted on the consistency of the delivery.

A pre-and post-evaluation<sup>11</sup> was conducted on the day of training to examine the demographic characteristics of the riders in terms of their riding experience, intentions and susceptibility to risky riding behaviour. It also aimed to assess the effectiveness of the training designed to enhance young riders' confidence and riding skills, knowledge, attitudes and behaviours. The evaluation comprised of a small sample size of 20 participants and there was no long-term effectiveness measured, which limits the usefulness of the results. However, improvements in riders' perceived risks and confidence post-training were observed.

*Assessment: Worth considering but more evidence required*

- MTM Winter Skills day (Bedfordshire)

The Winter Skills Day was an event considered to be a useful focused sub-Ride Free event, which was well received and attended and provided further opportunities to promote post-test training, notably the Enhanced Rider Scheme. This focused event was primarily led by post-test training partners.

The event was delivered in 2011 and 2012 with an aim to raise awareness to motorcyclists of a range of issues related to winter riding skills. However, it could not be sustained financially. The skills were particularly focused on the demands and considerations which are useful for winter riding. The interventions were focused on enabling riders to have greater confidence in their understanding of their machines' and their own capabilities. Defensive riding strategies were particularly relevant.

An evaluation of the event<sup>12</sup> examined the activities which participants attended; the usefulness of the event; and whether knowledge, understanding and confidence of winter riding skills had improved as a result of attending the event. A survey was conducted at the event, of a small sample of participants (16). However, the survey was only conducted after the event, so it was not possible to determine if change had occurred, beyond changes that respondents reported themselves immediately after the event. It is therefore very difficult to assess the usefulness of these days.

*Assessment: No evidence of best practice*

- Pan-Regional Enhanced Rider Scheme (Bedfordshire)

The Pan-Regional project was a Department for Transport grant funded scheme which was divided into several work streams, including an analysis of the marketing of the Enhanced Rider Scheme (ERS) by Warwickshire /West Mercia team; trainer capacity analysis by Devon and Cornwall; and an evaluation of ERS by the East of England team.

The evaluation project was in two phases – the first was establish if there were measurable benefits being delivered to ERS users; were the benefits consistent and enduring over time; which types of user gained the most benefit and what approaches could be used to maximise effectiveness of ERS nationally. Phase two developed the questionnaires used in phase one and aimed to further

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<sup>11</sup> Roberts et al, (2012)

<sup>12</sup> Roberts et al, (2012)



understand the types of riders taking part in ERS and their reasons for doing so, their experiences of the scheme and attitudinal and behavioural change brought about from participating in the scheme.

Phase one<sup>13</sup> was designed to include quantitative and qualitative approaches, however, there were issues with participant access and only a small sample emerged. There were also some key assumptions made at the research proposal stage about the role of the DSA in the project and that ERS was delivered using a standardised framework. Unfortunately, these assumptions were all proven to be incorrect, leading to some changes in research approach, focusing mainly on the qualitative feedback. Phase one found that take-up was low and that ERS was not promoted widely enough. Trainers and trainees both felt that incentives were required to encourage participation.

Phase two<sup>14</sup> involved collecting data from 18 riders during 2011 and therefore represents a small sample size. Of these 18 participants, eight had previously completed a post-test assessment or training. The questionnaire collected demographic information; a short-adapted version of the Biker Risk Profiler (collecting key attitudinal and behavioural tendencies); and a section on the expectations and experiences of ERS. Despite the small sample size, the research found results that were indicative of an increase in rider self-esteem, confidence and positive self-evaluation. Participants reported improved hazard perception, dealing with traffic and dealing with stressful riding conditions.

*Assessment: Worth considering but more evidence required.*

#### - BikeSafe (Cambridgeshire)

BikeSafe is a national scheme that has been delivered in Cambridgeshire by Cambridgeshire Police, Cambridgeshire IAM and Cambridgeshire Advanced Drivers and Riders (CADAR) annually since 2002. The motorcycle safety workshops and assessed rides are delivered across five hours in one day. There are five workshops per year between May and September in Cambridgeshire.

BikeSafe seeks to bridge the gap to post-test training. The target audience are across the spectrum of rider types and are self-selecting, with the target behaviours of thrill-seeking, bends, overtaking, filtering, attitudes to riding and group riding all addressed by BikeSafe.

A large scale national evaluation of BikeSafe<sup>15</sup> was conducted in 2016. It involved a pre-questionnaire delivered before workshop attendance and a post-questionnaire completed 12 months after workshop attendance. There were 530 respondents who participated in both stages of the evaluation and were included in the analysis. The principal aim of BikeSafe is to encourage the take-up of post-test training and nationally, a specific objective of at least 20% of respondents undergoing accredited training with a year of attendance was set. This objective was met by national BikeSafe, with 26% of attendees reporting undergoing training in the 12 months after their workshop. Furthermore, analysis of those who progressed to post-test training found an encouragingly diverse cohort of new riders, including Riding Hobbyists (defined in research by Christmas et al<sup>16</sup> as risk adverse and unlikely to have undertaken training) and Look-at-me Enthusiasts (defined as young riders who tend to exhibit high

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<sup>13</sup> Gandolfi, J., *Perceptions of the Enhanced Rider Scheme and the role of attitudinal and behavioural assessment and coaching*, (Driving Research Ltd., 2011)

<sup>14</sup> Gandolfi, J., *Enhanced Rider Scheme Participant Study – Phase 2: 2011-2012*, (Driving Research Ltd., 2012)

<sup>15</sup> Fosdick, T., *National BikeSafe Evaluation: One Year After Attendance*, (2016)

<sup>16</sup> Christmas, S., Young, D., Cookson, R. and Cuerden, R., *Passion, performance, practicality: motorcyclists' motivations and attitudes to safety – motorcycle safety research project*, (PPR442, TRL, 2009)



levels of confidence and engage in risky riding behaviours). Positive shifts in attitudes were also observed, suggesting a heightened awareness of the importance of defensive riding and higher reported usage of reflective and high visibility riding gear. There was some evidence of positive behavioural change found, including in speed-related behaviours, however, there were no significant changes in hazard perception or reported collision involvement rates. Two undesirable changes in rider hostility were also observed.

It should be remembered that BikeSafe is not a training tool and is instead a mechanism for referring to post-test training. As such, the change in behavioural measures should be limited. The report recommended that any future refinement of BikeSafe should give consideration to focusing on the consequences of skills limitations among riders and other road users.

*Assessment: Best practice based on evidence*

- **Motorcycle Shows (Cambridgeshire)**

Motorcycle shows have been held at three locations in Cambridgeshire (Meldreth Bike Show, MCN Show in Peterborough and St Ives Festival of Motorcycling) since before 2000. The shows involve police motorcyclists and road safety officers providing information and advice to attendees and the promotion of BikeSafe courses.

The target audience is anyone associated with motorcycling and they are self-selecting. There are no specific behaviours which are targeted as the main purpose is to signpost attendees to BikeSafe and advanced riding. The events have not been evaluated.

*Assessment: No evidence of best practice*

- **Ride to Work Day (Cambridgeshire)**

Delivered since 2010, Ride to Work Day is a multi-agency initiative delivered once a year in Cambridgeshire. It involves an organised escorted ride from Lazy Dayz Café to the Shire Hall in Cambridge and a chat with the riders over tea and biscuits, with small amounts of information provided.

The ride is advertised through all contacts, including BikeSafe and social media and riders are from across the spectrum. The main purpose of the ride is to increase awareness of motorcyclists amongst drivers by holding a mass event. The Day has not been evaluated.

*Assessment: No evidence of best practice*

- **TWIST (Cambridgeshire)**

TWIST is an acronym of 'That's Why I should Think', the core elements of the campaign being a series of tongue-in-cheek animated short films which signpost riders to the campaign website ([www.twistandride.net](http://www.twistandride.net)), which hosts information on post-test training. Initially, the campaign focused on schemes local to Cambridgeshire, but has expanded to host a database of over 40 courses available around the country.

The first phase of the campaign, in 2012, created a two to three-minute short film showing caricatured motorcyclist profiles involved in collisions. Feedback was polarised and particular emphasis was on the suggestion that a similar film should show things that drivers do wrong. In the second phase, three



30-60 second films were developed showing driver mistakes. The main tagline throughout signposts riders to further training as they come off worst in collisions so it is in their own interest to learn to anticipate other road user's actions. Social media delivery of the campaign ceased in 2015, but there is a continuous online presence.

The target audiences for the campaign were identified through analysis of collisions and existing research related to motorcyclist sub-groups. The research undertaken in the development of the campaign identified key target profiles: 'Scooter boy' (16-17 year-old boy using his bike as a means of getting from A to B); 'Power Ranger' (high powered motorcycle, involved in single vehicle collisions); and 'Born-Again Biker' (returning to riding on tourer type bike, generally aged 35 to 55 years old).

The campaign aims to target risk-taking, over-confidence, rider error and hazard perception. A number of objectives are set for the campaign: in the short term engaging with targeted PTW riders in safer messages and recruiting riders to ScooterSafe and BikeSafe courses; in the medium term increasing the skills level of PTW riders and developing a better understanding that their actions can mitigate the risk of being involved in a crash; and in the long term reducing the number of PTW casualties.

The campaign has been evaluated in relation to the short term aims with the initial animation achieving over 30,000 views and generating lots of discussion among motorcyclists, (both positive and negative), which created an opportunity to discuss issues and engage with riders. Riders engaged with BikeSafe courses but there was no take-up for ScooterSafe. The medium and long-term objectives have not been evaluated.

*Assessment: Worth considering but more evidence required*

#### - Biker Down (Hertfordshire)

Biker Down is a free three-hour course delivered to motorcyclists in three modules, which respectively cover 'what to do when first on scene at an accident'; 'basic lifesaving first aid actions'; and 'how to enhance your conspicuity and prevent accidents at junctions'. It is a national initiative, developed initially by Kent Fire and Rescue Service, which is delivered locally by Hertfordshire Fire and Rescue Service with Herts and Beds Advanced Motorcyclists.

It was first delivered in Hertfordshire in 2014 and has been delivered every year since then. The target audience is all types of motorcyclists but tends to attract older 'power bikers'.

Biker Down has been evaluated locally and since then a partnership with Hertfordshire County Council Behavioural Science Unit has been developed to create pre-and post-course questionnaires to better evaluate the effectiveness of the course. An initial evaluation of 118 candidates on the previous format of evaluation found extremely positive feedback post-course but the questions were limited in terms of behavioural measures and it was more of a process evaluation (focusing on candidates' views of the venue, instructors and course content). The future evaluation will provide a better insight into effectiveness.

*Assessment: Worth considering but more evidence required*

#### - Rider magazine (Hertfordshire)

Rider is an online magazine for the motorcycling community, produced by First Car. The magazine covers a range of motorcycling issues but retains underlying safety messages. It is not pitched as a



road safety document but road safety messages are included alongside valuable and engaging content. Content is localised and offers good advice and tips for riders (such as best protective clothing), combined with information on interesting rides.

The magazine was previously called Biker and started in 2010. The magazine changed format and went online as Rider in 2015. It is currently published twice a year, although issues were more frequent in the past and this is being examined again.

The target audience is all riders but road safety professionals are particularly interested in making the product inclusive and including young riders on mopeds and older riders on powerful bikes, both of which represent the motorcycling community in Hertfordshire.

The magazine has been evaluated but not recently.

*Assessment: No evidence of best practice*

- **BikeSafe (Hertfordshire)**

As explained in the Cambridgeshire section, BikeSafe is a national scheme with workshops which combine theory with practical riding, including observed rides, an assessment and a referral. The overall aim is to encourage the take-up of post-test training.

In Hertfordshire, workshops have been delivered every year since 2006, with four workshops a year.

The results from the national evaluation are set out in the section: BikeSafe (Cambridgeshire) on page 23.

*Assessment: Best practice based on evidence*

- **Progress Motorcycling (Suffolk)**

Progress Motorcycling was first delivered in 2012 with a group of ex-police officers who offered to accompany motorcyclists on a ride which is video-recorded, and then provide feedback on their performance.

Full licence holding motorcyclists were invited to take a ride with an ex-police motorcyclist who videos the ride for a full discussion afterwards. There is no cost to the customer. The purpose was to address unsafe riding and poor skills by giving riders advice on how to ride more skilfully.

It is not known if the initiative is still running or if it has been evaluated.

*Assessment: No evidence of best practice*

- **Young Apprentice Scheme (Suffolk)**

Suffolk County Council employs a Young Apprentice (NVQ Level 3 in Youth Work) within the road safety team, who is about to take delivery of a moped. Working with Wheels to Work, Ipswich Rider Training and the road safety team, her progress through CBT and other training will be blogged and promoted on social media as a way of interacting with other young riders.

The target audience is 16 to 24-year-old young riders, identified through casualty analysis. The content will cover obtaining a machine, correct training options, attitudes to safety, correct clothing and peer group pressures.



The intervention has not been delivered yet but an evaluation is planned to be incorporated into the scheme.

*Assessment: Worth considering but more evidence required*

- Firebike/Biker Down (Suffolk)

Suffolk Fire and Rescue Service deliver the Firebike and Biker Down initiatives to give post-crash advice, basic first aid and advice on safe riding. It is often delivered in conjunction with the Police Safe Rider courses.

Invited motorcyclists are shown, in a classroom environment, what to do at the scene of a crash involving a motorcyclist. First aid advice is given as well as general riding advice. A Fire and Rescue service marked up motorcycle is used as a publicity device. It was first delivered in Suffolk in 2015 and every year since.

Currently, the target audience is experienced riders and it is hoped to be developed for younger riders soon. It has not been evaluated in Suffolk but see the section on page 25 for the evaluation of Biker Down (Hertfordshire).

*Assessment: Worth considering but more evidence required*

- Suffolk Hugger (Suffolk)

The Suffolk Hugger campaign, which comprises of roadside posters, publicity events (including at colleges) and engagement through Twitter and Facebook, is part of a Norfolk County Council led campaign.

Publicity events are designed to encourage riders and drivers to have safer attitudes and reminder posters placed on the most used motorcycle routes. There is also a dedicated website. Suffolk Hugger started in 2014 and it has been delivered ever since, with a target audience of all riders and other road users. The main purpose is to encourage drivers and riders to consider one another and seeks to achieve a better understanding of the vulnerability of powered two wheel users.

The intervention has been evaluated by Norfolk County Council and is detailed on page 31 in the section on Hugger's Challenge (Norfolk).

*Assessment: Worth considering but more evidence required*

- College open event (Suffolk)

Open days are held in several large further education colleges in Suffolk where students are engaged with using a motorcycle simulator, a dynamometer, a moped with indicated faults, a reaction timer and printed materials and publicity freebies.

The initiative started in 2011 and was also delivered in 2013 and 2015, upon the invitation of colleges and the availability of support agencies. A day is spent in a local college motorcycle parking area with trained mechanics offering bike checks. There is a mobile display and staff from Suffolk County Council, Suffolk Police and Suffolk Fire and Rescue Service giving advice to attending riders.

The target audience are mostly young inexperienced riders, many on poorly maintained machines; a group identified through collision statistics and discussions with college staff. The main target





behaviours are to improve machine maintenance, prevent illegal machines, increase the use of rider protective clothing and improve attitudes towards safety.

The intervention has not been evaluated.

*Assessment: No evidence of best practice*

- Rider Plus/Young Rider (Suffolk)

Rider Plus/Young Rider is an initiative offering further rider training at a small cost, plus extra training for recipients of scooters provided by the Wheels to Work scheme (participants are rewarded with one month's free rental), paid for by Suffolk County Council.

The scheme, which is part self-funding, started in 2011 and has been delivered every year since. It targets experienced motorcyclists wanting further advanced training and less experienced riders needing training beyond CBT. The purpose is to identify poor riding techniques and encourage improvement, through demonstrating techniques to avoid many of the common crash types. The training is student centred.

There has not been a full evaluation although there is continued support from Community Action leaders and there has been a reduction in the number of reported crashes amongst those using Community Action scooters.

*Assessment: No evidence of best practice*

- Safe Rider (Suffolk)

Safe Rider is a development of the National BikeSafe course, where Suffolk Police motorcyclists provide theory and practical training sessions throughout the summer months for experienced motorcyclists.

Part-funded by Suffolk Police and a contribution from each client, the intervention includes theory and practical assessment rides. It is delivered approximately six times a year since 2005. Experienced motorcyclists are assessed in order to identify poor riding techniques and encourage improvement through the uptake of further training.

It has not been evaluated in Suffolk but similar schemes, such as BikeSafe, have been shown to meet the key objective of encouraging the take up of post-test training.

*Assessment: Worth considering but more evidence required*

- Wheels to Work (Suffolk)

The Wheels to Work scheme is an initiative where clients are lent scooters to access education or employment. Since 2013, 45 riders have been trained. Community Action Suffolk are the lead agency with clients paying £40 a week towards expenses.

Clients are people who require transport for work and/or education activities but cannot afford to pay for it out of their own funds. A machine (50 or 110cc) is provided, with some protective clothing and access to training (CBT and an offer of a Young Rider course). After six months, it is expected that the client will be able to fund their own transport and return the motorcycle. The target audience for the scheme is disadvantaged job seekers and those in education requiring personal transport.





Safety advice is given as part of the lending scheme, with the aim of reducing the chances of collisions in the early days of ownership. It provides transport for a group who otherwise would not be able to afford it.

The scheme has been evaluated through Community Action and has been supported by Government funding. However, no details of its effectiveness were available.

*Assessment: Worth considering but more evidence required*

#### - Safe Rider (Norfolk)

Safe Rider first started in 1998, introducing riders to police riding practices with a classroom session, demo ride and assessed rides. It was eventually absorbed into BikeSafe and dual branded. It split from BikeSafe two years ago and reverted to its original title following disagreements with BikeSafe over the cost of the national booking system and other prescriptive issues.

Safe Rider involves a classroom session, based around a series of downloadable rider skills' documents and group activity sessions. This is followed by a road session with a demo ride and assessed rides by a police motorcyclist. It has been delivered every year since 1998, with ten courses of 150 people each year.

The target audience are full licence holders with no other restrictions. Groups are matched according to experience and type of bike, with the target group predominantly middle aged on larger motorcycles, echoing the KSI casualty figures.

The target behaviours are: selecting the appropriate speed for the conditions, road position, reading bends, observation and planning issues. All of these behaviours are standard Roadcraft practice. The sessions aim to get riders to think about what they are currently doing and make them realise that there is so much more to learn, pointing them towards further training with advanced riding groups or with bespoke training through Norfolk County Council.

An evaluation was conducted by RSN Associates<sup>17</sup>, which found that the scheme was hugely popular. Evaluation involved the use of two questionnaires: one given out at the end of the course (validation questionnaire) and another several months afterwards (post-course). No baseline data were collected from participants. All of the questions are open-ended and therefore required coding before any analysis could take place. In the post-course phase, 51 questionnaires were reviewed and a third reported not being involved in any collisions or near misses, with many cited that the skills that they had learnt had prevented incidents from occurring. However, without baseline collision involvement rates and closed, less subjective questions, it is difficult to quantify the efficacy of the scheme.

*Assessment: Worth considering but more evidence required*

#### - Pedsafe (Norfolk)

Pedsafe is a PowerPoint based presentation aimed at school students in Year 11, particularly those who own a motorcycle or who are seriously considering it. The scheme borrows some material from the now defunct Bare Bones project from Nottinghamshire. Starting in 2010, the scheme has been

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<sup>17</sup> Clayton, A. And Platt, V., *An evaluation of a Motorcycle Campaign in Norfolk*, (RSN Associates LLP, 2010)



delivered every year since then, with an average of six sessions a year. However, it can be very difficult to get into the schools in Year 11 because of the busy school year.

The target group were identified through the casualty statistics and the scheme aims to highlight the risks associated with motorcycling activity. It points out the increasing severity of injury caused directly by wearing inappropriate clothing; the hazards of peer group pressures; the costs involved in motorcycle ownership; Section 59 offences and the issues with de-restriction of machines; and common road hazards. It addresses these behaviours by getting young people to think about the consequences of their own and other people's behaviour.

A short questionnaire<sup>18</sup> was used at the end of the presentation. One set of 13 completed questionnaires were received from one presentation. The evidence from this small sample suggested that the presentations were received positively but the small sample size prevented any firm conclusions from being reached.

*Assessment: No evidence of best practice*

- **Norfolk and Suffolk Biker Magazine (Norfolk)**

Norfolk and Suffolk Biker Magazine is an annual magazine which is designed to integrate road safety messages and advertise training courses and Rider Skills downloads with other more general interest material. It was started in 2015 and has been delivered ever since.

The target audience is anyone but the content is aimed at full licence holders and mainly the older audience, rather than young riders. It is primarily a promotional tool for training options and is in a format that is more likely to be kept by readers than flyers.

A smart survey is in place for readers to provide feedback on what they think about the magazine, what encouraged them to take it home, what interested them, what type of rider they are and whether they have taken any training after reading the magazine. The survey is promoted with a prize draw but response levels are low. There has been positive feedback but there have been insufficient responses to form a genuinely useful picture. Improved prizes for 2017 may improve the response rate.

*Assessment: Worth considering but more evidence required*

- **i2i Motorcycle Academy (Norfolk)**

In Norfolk County Council's search to provide something different that may attract 'harder-to-reach' riders, the road safety team joined with the i2i Motorcycle Academy based in York, who travel to Norfolk for three weeks of the year and deliver machine control courses.

The courses are funded by clients, in which they examine the physics of what makes bikes do what they do. They learn stability control exercises; how to relax and let the bike sort out its own problems; how stable the bike is until the rider interferes with it; advanced braking exercises; counter steering; the cone effect; hazard avoidance; and low speed control. The intention is to retrain instinctive

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<sup>18</sup> Clayton and Platt, (2010)



reactions so that if things should go wrong, the rider is less likely to do the instinctive thing which very often will make matters much worse.

The course started in 2010 and has been delivered over three weeks annually since then, with approximately 800 riders trained in that time. Motorcyclists attend with their own machines at an airfield. Riders are recommended to do the course and the course trainers recommend that riders do some form of Roadcraft based training as the i2i courses are explicitly an add-on to defensive riding based training, not an alternative to it.

The target audience is anyone, with the aim of retraining instinctive reactions to stop inappropriate emergency braking techniques and dangerous use of the back brake as well as increasing the understanding of vehicle stability and the physics that control the bike, increasing confidence in low speed riding.

The scheme has been evaluated internally through Survey Monkey to measure changes in perceptions and understanding, which found improvements in people's understanding and confidence levels.

*Assessment: Best practice based on evidence*

- **Norfolk and Suffolk Road Casualty Reduction motorcycle team (Norfolk)**

Suffolk and Norfolk Constabulary, in conjunction with the two separate road safety partnerships, have four police motorcyclists each. These are funded from road safety partnerships and diversionary course funds.

The activities, undertaken by the two teams of police motorcyclists, focus on education and prosecution. Both teams follow the National Roads Policing campaign calendar in conjunction with Tispol and NPCC. Casualty reduction offences, including Fatal 4 offences, are dealt with robustly. It involves policing of known motorcycle hotspots. Education is delivered in the form of roadside advice, stands at local shows and at motorcycle events and through local motorcycle dealers, schools and further education premises.

The combined targeted activity began in 2015 and has continued since, with vulnerable groups, including full motorcycle licence holders of all ages and young inexperienced riders targeted. The purpose is to promote safe riding and reduce aggressive riding through education and enforcement.

There has not been any formal evaluation, although enforcement activities are reported back to the partnerships.

*Assessment: Worth considering but more evidence required*

- **Hugger's Challenge (Norfolk)**

The Hugger Branding was created to carry the motorcycle road safety messages in Norfolk (since bought into by Suffolk and Essex County Councils). It addresses motorcyclist training messages and advice to riders as well as addressing car drivers with the Think Bike message (through the use of car stickers and roadside signs).

As part of this, Hugger's Challenge was created as a training option linked to the DVSA Enhanced Rider Scheme and conducted by trainers on the Register of Post Test Motorcycle Trainers (RPMT). As detailed in the section on Pan-Regional Enhanced Rider Scheme (Bedfordshire), there were marketing



issues with ERS nationally and issues with the format of ERS led to Norfolk disengaging with the national scheme and making it more customer-focused locally. The course is tailored to the needs of the client, rather than adhering to a DVSA topic guide that does not address what the client wants to improve. If a client is a provisional licence holder wanting training, it is delivered by DVSA approved CBT/DAS trainers to avoid any conflict with what will be required for test level by DVSA.

The course, which is one-to-one assessment and instruction, has been in place since 2009 and has been delivered annually since. The clients pay for courses and so far, 420 riders have been trained. The target audience consists of riders who require an assessment or training either before or after Safe Rider, don't want a police-led course or don't like riding in a group.

It seeks to teach appropriate speed for the conditions, reading bends, road position and lines through bends, observation and planning issues and overtaking. The purpose is to assess riders' current standards and advise and train where necessary to improve safety margins.

The course was evaluated<sup>19</sup> through a pre-questionnaire before the ride and one a few weeks afterwards (or after any additional training). Pre-ride questionnaires were received from 24 riders and post-ride questionnaires from 45 riders, with 14 completing both. The pre-questionnaire asked how they had heard about Hugger's Challenge, why they chose to apply and information about themselves and their riding history. The post-questionnaire included process questions about booking the ride, arranging the ride with the instructor, the ride itself and the final debriefing. It also asked about skills improvement, overall views and additional training. There were positive responses to the organisational questions and respondents reported improved skills after the assessment ride. Six respondents were advised to take additional training and four had done so by the time they had completed the questionnaire.

#### *Assessment: Best practice based on evidence*

##### *- Firebike (Essex)*

FireBike is Essex County Fire and Rescue Service's educational and engagement product designed to promote motorcycle safety throughout Essex. It positively engages with motorcyclists and their pillion on a range of safety and related issues. The aim is to promote safer riding; encourage the use of personal protective equipment; and promote the benefits of advanced rider training.

The FireBike key messages are: become a better rider; train as if your life depends on it; protect yourself and your pillion; and learn to share the road. The FireBike product has four motorcycles and nine team members (to be increased to 11 in 2017). All team members are advanced motorcyclists and advanced instructors with RoSPA.

FireBike was started in 2009 and has been delivered annually every week during the main motorcycling season. It targets engagement with riders who are aged 16 to 28 years old on bikes with engines no more than 125cc; aged 21 to 30 on bikes with engines over 500cc; aged over 30 years on bikes with engines smaller than 500cc; and aged 31 to 60 years on bikes with engines over 500cc. It engages with motorcyclists at known biker meeting locations in the county, at specific events and rallies, at

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<sup>19</sup> Clayton and Platt, (2010)



motorcycle dealerships and at motorcycle clubs. There is the target of attending/delivering 100 events per year and engaging with 2,000 riders.

It has been evaluated through rider engagement questionnaires, where 100% of respondents 'strongly agreeing' or 'agreeing' that FireBike is worthwhile and effective at delivering motorcycle specific road safety advice and information. However, no further information was provided on specific evaluation methodologies, sample sizes or if proxy measures for behaviour were incorporated into the evaluation.

*Assessment: Worth considering but more evidence required*

- Firebike Better Biking Courses (Essex)

The FireBike Better Biking Courses provide on-road observed riding assessments for motorcyclists as an alternative choice to Police BikeSafe workshops and are designed to attract riders who otherwise would not be inclined to undertake further training.

The courses comprise of a one-hour classroom session on motorcycle safety/roadcraft (the principles of advanced riding) followed by a four-hour observed ride on urban and rural roads. The assessed ride provides practical advice and guidance about observation, hazard perception, positioning, speed, gear selection and overtaking. The observer provides the motorcyclist with feedback on their riding, highlighting strong points and suggesting areas where improvements can be made through practice. Options to pursue further rider training opportunities are explained. It was first delivered in 2013 and has been provided weekly during the riding season ever since.

The target audience is specifically 21 to 60 year olds on 500cc+ engines and 30+ year olds with engines smaller than 500cc. The overall aim is to improve skills and rider behaviour. The courses have been evaluated with post-course questionnaires, where positive feedback has been received. However, no details of the evaluation were provided in terms of sample size and the responses quoted appear to indicate that a process evaluation was undertaken.

*Assessment: Worth considering but more evidence required*

- Firebike Advanced Machine Skills Courses (Essex)

The focus of the FireBike Advanced Machine Skills Course is all about machine control – slow speed handling, positive steering, merging, swerving skills, emergency avoidance techniques and advanced braking skills. The course is all about sharpening some key skills which are rarely practiced but help improve riding on the road and reduce the chances of a collision. The courses are run at a local airfield and are delivered in partnership with a team of highly experienced instructors.

The courses were first delivered in 2010 and have been delivered annually, every month between April and October, ever since. A variety of rider types are targeted with the intervention including young riders on smaller machines, older riders on smaller machines and those across the age ranges on larger motorcycles. The courses are promoted during face to face engagements and through social media. Word of mouth recommendations from course participants are also really important.

The courses have been evaluated with post-course questionnaires, where positive feedback has been received. However, no details of the evaluation were provided in terms of sample size and the



responses quoted appear to indicate that subjective feedback was provided (as opposed to using proxy measures to assess change)

*Assessment: Worth considering but more evidence required*

- **BikeSafe (Essex)**

Essex Police lead on BikeSafe in the county. The workshop explores the main riding hazards bikers face. By delivering theory presentations and observed riders, a BikeSafe workshop helps riders discover their strengths and weaknesses and also where to go next to develop and get more from their biking. It has been delivered in Essex since 2000 and six BikeSafe workshops are provided each year.

The results from the national evaluation are set out in the section: BikeSafe (Cambridgeshire) on page 23.

*Assessment: Best practice based on evidence*

- **Hugger Advanced Instructor Training Days (Essex)**

The Advanced Instructor training days are offered to motorcyclists as part of the Essex Hugger Challenge initiative, for those riders having already undertaken a FireBike Better Biking Course or an Essex Police BikeSafe course.

The Advanced Instructor days build on those two courses but are delivered for a full day on a 2:1 student-instructor ratio, using radio communications. These days provide more in-depth instruction to improve motorcyclists' general roadcraft skills. Skills include observation, hazard perception, road positioning, speed, gear selection and overtaking. The intervention started in 2015 and has been delivered weekly during the biking season since. Target riders are motorcyclists on larger engine machines or those aged over 30 years on smaller motorcycles.

The courses are promoted through face to face engagements, on websites and through social media. Positive word of mouth recommendations are significant.

No formal evaluation has been undertaken to date but feedback questionnaires are being introduced in 2017.

*Assessment: No evidence of best practice*

- **Essex Hugger Challenge (Essex)**

The Essex Hugger Challenge was first delivered in 2015 and is designed to encourage motorcyclists to undertake additional training and to improve their on-road riding skills and their machine control skills. It encourages riders to undertake the Better Biking Course or BikeSafe Workshop, which entitles them to attend a FireBike Advanced Machine Skills Course and a full day's rider training with one of the commercial advanced riding instructor partners. The Challenge is delivered weekly during the biking season and targets the same rider types as the related courses.

Safer Essex Roads Partnership (SERP) holds the view that improving the road riding and machine control skills of motorcyclists is key to reducing killed or seriously injured casualties. The adoption of the Hugger campaign in Essex created the opportunity to draw together all partners' motorcycle safety initiatives, and to offer rider training opportunities in one package.





The courses available under the Essex Hugger Challenge are promoted through face to face engagements, on websites and through social media, as well as through word of mouth.

The Challenge itself has not been evaluated and whilst individual courses are, the evaluations could be stronger.

*Assessment: Worth considering but more evidence required*

#### - Essex Hugger Campaign – Other road users (Essex)

The Essex Hugger Campaign is an Essex-wide promotional campaign specifically targeting other road users and to encourage them to be aware of and consciously look out for motorcyclists and other P2W riders. Collision analysis shows that other road users contribute to a significant proportion of incidents involved motorcyclists.

Safer Essex Roads Partnership and its partners had long been involved in a number of activities aimed at the rider, but there had been little or no focus on specifically educating other road users to look out for motorcycles. The campaign is focused around key collision locations across Essex and involves a combination of bus back advertising, radio slots and washroom advertising in key locations. In 2016, the campaign involved petrol station forecourt advertising as well.

The campaign's key messages are related to drivers failing to see P2W riders, misjudging the P2W rider's path and misjudging the P2W rider's speed.

The campaign has not been evaluated in Essex.

*Assessment: No evidence of best practice*

#### - Motorcycle Pitstop Events (Essex)

Motorcycle Pitstop Events are staged on key motorcycling routes in Essex and all motorcyclists on that route are pulled in by police officers. The riders are offered free refreshments in exchange for a dialogue on motorcycle safety and to promote the rider training opportunities provided under the Essex Hugger Challenge. The event is held four times a year and has been delivered annually since 2010.

The target audience are those riders who could and should take up the training courses offered under Hugger Challenge. In 2017, the target is to hold four events and achieve engagement with at least 800 riders. There will also be a series of smaller motorcycle dealer engagement days with the target of engaging with 200 riders. Around 30% of those interacted with at Pitstops go on to undertake one or more of the Essex Hugger Challenge courses.

The events were evaluated in 2016 and there was a strong positive endorsement of the quality of the Pitstop intervention, and strong support for the range of rider training opportunities available. Further details of the evaluation methodology and sample sizes were not provided.

*Assessment: Worth considering but more evidence required*

#### - Young Moped/Scooter Rider Education Days (Essex)

Young Moped/Scooter Rider education days involve delivery of a dedicated moped and scooter safety presentation package, involving a combination of a structured lecture, video films and still images.





This presentation is specifically designed to give young prospective and novice riders, aged 16 to 25 years old, an understanding of the specific risks associated with riding a moped or scooter on the road.

The intervention started in 2010 and is delivered six to eight times a year. The target audience are young riders on machines with engines no more than 125cc. In 2016, the SERP target was to engage with 70 young riders, although in 2017 there is to be a significant increase in the target interventions associated with the new Street Spirit campaign (below). Young riders are primarily engaged with at schools and colleges and there are also some general 'drop in' visits at some known young rider meeting locations.

With key target behaviours of general roadcraft, hazard perception and vehicle maintenance as the main focus of the sessions, the aim is to improve the risk awareness of young prospective and novice riders.

The evaluation of the education days involved feedback questionnaires where positive feedback about the presentation was provided and that the participants reported that they had learnt new things about safety and that it would make them think more. There was no information provided on sample size or if the evaluation involved proxy measures for actual behaviour.

*Assessment: Worth considering but more evidence required*

- **Street Spirit Moped/Scooter Safety Campaign (Essex)**

A new initiative for 2017 is 'Street Spirit' which is a campaign involving a major competition with the chance to win two top prizes (a brand new 50cc and 125c moped with all the personal protective equipment (PPE) and CBT training, if appropriate); three runners up prizes of full PPE; 'Street Spirit' promotional material, involving a dedicated website, including an online hazard awareness game; and education and engagement with young riders at schools and colleges. The direct interaction involves delivery of a presentation; provision of maintenance advice (including free mechanical checks); trial rides on a closed course for those young people about to embark on riding a P2W; 20 minute on-road assessed rides for those already riding; and drop-in engagements with young riders at known meeting locations. There is a target of reaching 2,500 young and prospective riders with this campaign.

The aim is to target general roadcraft, positioning, hazard perception and vehicle maintenance. The campaign has not started yet so there are no evaluation results, although it will be evaluated through feedback questionnaires.

*Assessment: Worth considering but more evidence required*

## Best Practice Findings

### Best Practice Interventions

Figure 7 shows the five interventions which were considered 'best practice' based on the identification of target audiences, supporting information and evaluations. All of the best practice interventions are related to advanced rider training – either through the assessment and referral of riders or through actual training schemes.



Figure 7 - Best Practice Interventions

|  |                       |                               |   |
|--|-----------------------|-------------------------------|---|
|  | <b>Cambridgeshire</b> | <b>BikeSafe</b>               | National evaluation - BikeSafe achieved its aim of pointing at least 20% of attendees to post-test training. Work needs to be done to establish the efficacy of post-test training. |
|  | <b>Hertfordshire</b>  | <b>BikeSafe</b>               | National evaluation - BikeSafe achieved its aim of pointing at least 20% of attendees to post-test training. Work needs to be done to establish the efficacy of post-test training. |
|  | <b>Norfolk</b>        | <b>i2i Motorcycle Academy</b> | Internal evaluation via Survey Monkey to measure changes in perceptions & understanding. High improvement in understanding & confidence levels                                      |
|  | <b>Norfolk</b>        | <b>Hugger's Challenge</b>     | Sample size of 45 riders in a post-intervention evaluation. Reported that skills were improved, post-training. Extremely positive feedback  |
|  | <b>Essex</b>          | <b>BikeSafe</b>               | National evaluation - BikeSafe achieved its aim of pointing at least 20% of attendees to post-test training. Work needs to be done to establish the efficacy of post-test training. |








### Interventions Worth Considering

Figure 8 shows the 24 interventions which are worth considering but where extra evidence of efficacy would be useful. These include a range of intervention types, including training, awareness-raising, events, advice-giving and enforcement.


Figure 8 – Interventions Worth Considering

|  |                     |  |   |
|--|---------------------|--|---|
|  | <b>Bedfordshire</b> | <b>MTM 1<sup>st</sup> Ride Pre-CBT</b> | Demonstrated benefits and enhancing the CBT seems a positive move but need evidence of value over and above the CBT itself.   |
|  | <b>Bedfordshire</b> | <b>MTM Bedfordshire Biker Magazine</b> | With such a small sample of post-only questions by a self-selecting audience, it is difficult to assess the value of the magazine. Could be a useful tool for event promotion and providing tips and advice – more evidence needed. |



|   |                       |                                  |  |
|---|-----------------------|----------------------------------|--|
|    | <b>Bedfordshire</b>   | <b>MTM Biker Risk Profiler</b>   | Initial analysis indicates it is a valid instrument but needs more analysis with larger sample. Shows promise as a tool used in conjunction with a coaching-based approach                       |
|    | <b>Bedfordshire</b>   | <b>MTM Ride Free open day</b>    | Attendees tended to be older, experienced riders - focus should be on training promotion. 40% had not done training in last 10 years. Intentions to take further training didn't improve         |
|    | <b>Bedfordshire</b>   | <b>MTM Ride Safe</b>             | No clear aims & objectives measured against. Primary purpose is to encourage post-test training but this was not assessed. Process evaluation suggests that right audience were targeted.        |
|   | <b>Bedfordshire</b>   | <b>MTM Take Control post-CBT</b> | Small sample size of 20 participants who completed a pre-and post-evaluation on the day of training (no long-term effectiveness assessed). Significant improvements in a variety of measures.    |
|  | <b>Bedfordshire</b>   | <b>Enhanced Rider Scheme</b>     | Small sample size of 18 participants. 8 were experienced riders & 8 had completed post-test training or assessments already. Self-reported measures  |
|  | <b>Cambridgeshire</b> | <b>TWIST</b>                     | Short-term evaluation with initial reach of 30,000 views, generating lots of discussion. Riders engaged with BikeSafe but no take-up of ScooterSafe.   |
|  | <b>Hertfordshire</b>  | <b>Biker Down</b>                | An initial evaluation of 118 candidates on the previous format of evaluation found very extremely positive feedback post-course but the questions were limited in terms of behavioural measures. |



|   |                |   |   |
|---|----------------|---|---|
|    | <b>Suffolk</b> | <b>Young Apprentice Scheme</b>              | Project is now starting so no evidence yet of effectiveness   |
|    | <b>Suffolk</b> | <b>Firebike/ Biker Down</b>                 | No evaluation in Suffolk and process of evaluation in Hertfordshire provided positive feedback but no measures of behaviour change                          |
|    | <b>Suffolk</b> | <b>Suffolk Hugger</b>                       | Evaluation in Norfolk shows strong brand recognition.   |
|    | <b>Suffolk</b> | <b>Safe Rider</b>                           | Reported fewer near misses or collisions and occasions where their new skills had resulted in evasive action. Some limitations in the questionnaire design. |
|    | <b>Suffolk</b> | <b>Wheels to Work</b>                       | Evaluated and positive feedback reported but no details provided  |
|   | <b>Norfolk</b> | <b>Safe Rider</b>                           | Reported fewer near misses or collisions and occasions where their new skills had resulted in evasive action. Some limitations in the questionnaire design  |
|  | <b>Norfolk</b> | <b>Norfolk &amp; Suffolk Biker Magazine</b> | Smart survey gives feedback on content & whether it has led to further training. Small sample size so difficult to assess effectiveness presently           |
|  | <b>Norfolk</b> | <b>Casualty Reduction Teams</b>             | Enforcement activities are reported back to partnerships  |
|  | <b>Essex</b>   | <b>Firebike</b>                             | Evaluated through questionnaires, with respondents stating that it was worthwhile and effective. (No details of proxy measures beyond satisfaction levels)  |
|  | <b>Essex</b>   | <b>Firebike Better Biking Courses</b>       | Evaluated through questionnaires, with respondents stating that it was worthwhile and effective. (No details of proxy measures beyond satisfaction levels)  |



|  |       |  |  |
|--|-------|--|--|
|  | Essex | <b>Firebike Advanced Machine Skills Courses</b>    | Evaluated through questionnaires, with respondents stating that it was worthwhile and effective. (No details of proxy measures beyond satisfaction levels)   |
|  | Essex | <b>Essex Hugger Challenge</b>                      | No evaluation of the campaign itself but the related courses are all evaluated.  |
|  | Essex | <b>Motorcycle Pitstop Events</b>                   | The events were evaluation in 2016 and there was a strong positive endorsement of the quality of the Pitstop intervention, and strong support for the range of rider training opportunities available.                     |
|  | Essex | <b>Young Moped/Scooter Rider Education Days</b>    | The evaluation involved questionnaires where positive feedback about the presentation was provided and that the participants reported that they had learnt new things about safety and that it would make them think more. |
|  | Essex | <b>Street Spirit Moped/Scooter safety campaign</b> | New initiative so no evidence yet to show efficacy.  |









### Interventions with limited evidence of efficacy

Figure 9 shows the interventions where there is no or limited evidence of effectiveness. This is not to say that these interventions are ineffective or have unintended consequences, but insufficient information was provided or no evaluation has been undertaken to make a judgement. These interventions have tended to be large scale publicity events, which can be difficult to evaluate as prior contact with the target audience is difficult to achieve.

Figure 9 – No evidence of best practice

|  |                |                          |   |
|--|----------------|--------------------------|---|
|  | Bedfordshire   | <b>Winter Skills Day</b> | Small sample size of 16 participants. Post-only questionnaire, asking them to report on skills & knowledge they think they have gained. |
|  | Cambridgeshire | <b>Motorcycle Shows</b>  | No specific behaviours targeted and no evaluation undertaken.   |



|   |                       |   |   |
|---|-----------------------|---|---|
|    | <b>Cambridgeshire</b> | <b>Ride to work day</b>                         | Targeting driver awareness of motorcyclists but no evaluation undertaken.   |
|    | <b>Hertfordshire</b>  | <b>Rider magazine</b>                           | No recent evaluation to determine who the readership consists of or what messages they are taking from the content.   |
|    | <b>Suffolk</b>        | <b>Progress Motorcycling</b>                    | It is not known if the initiative is still running or if it has been evaluated.                                       |
|    | <b>Suffolk</b>        | <b>College open day</b>                         | No evaluation to determine if target audience are absorbing the key messages and behaving differently as a result.    |
|   | <b>Suffolk</b>        | <b>Rider Plus/Young Rider</b>                   | Limited feedback reports a reduction in the number of reported crashes amongst those using Community Action scooters. |
|  | <b>Norfolk</b>        | <b>Pedsafe</b>                                  | Small evaluation of one class. No real conclusions could be reached.  |
|  | <b>Essex</b>          | <b>Hugger Advanced Instructor Training Days</b> | No formal evaluation to date  |
|  | <b>Essex</b>          | <b>Essex Hugger Campaign – other road users</b> | No evaluation in Essex  |



## Recommendations

### Collaboration and Duplication

The process of synthesising the motorcycle road safety interventions has shown that there are similar approaches being delivered independently across the region. This does not necessarily mean that there is duplication, but knowing where similar interventions are being delivered could afford opportunities for collaboration, sharing best practice and achieving economies of scale.

Figure 10 shows ten interventions where collaboration across the region might be possible. From the casualty analysis detailed earlier, it is known that motorcyclists travel across the region and are involved in collisions in the East but outside of their own home area. It therefore makes sense to deliver consistent, co-ordinated messages.

One opportunity is through magazines. There are currently three different magazines produced in the East. Whilst it is important to retain a local focus, there could be benefits to including articles that cover riding routes from across the region, or the same safety article or special feature could be included in multiple magazines. Areas which do not currently produce a magazine might want to consider buying into one of the existing products, thus achieving economies of scale. Further collaboration could facilitate evaluation opportunities to ensure that the readership reflects the intended target audience and that the key messages are being absorbed. Consideration could be made to pooling resources for one biker magazine for the whole of the East.

There are currently seven assessment interventions being delivered in the East. There are differences in approach with these assessment programmes, with Bedfordshire's Ride Safe being clearly defined as not training whilst Norfolk and Suffolk's Safe Rider appears to include training elements. BikeSafe is clearly defined at the national level as a referral tool and is not designed to be training, although delivery may differ locally. These differences make it difficult to recommend collaboration of courses beyond the adoption of National BikeSafe (which may not suit all), but there are opportunities to promote other schemes in cross-border work. So, when engaging with motorcyclists across the region, it could be possible to signpost riders to the various assessment options available in the East.

There are also four specific training courses (beyond those offered by local advanced riding groups). The two training courses previously offered in Bedfordshire have been included as concepts from these could be shared elsewhere in the region. The training courses differ in terms of target audience and cost and some of the courses are part of a defined local programme of assessment and training. Despite these differences, there may be elements of these training courses which could be shared across the region, and there could be opportunities to signpost riders to courses across the East rather than just in their particular home area.

There are also two areas offering the same Biker Down course of first aid training and conspicuity advice. If the same syllabus is being followed in both areas then there could be opportunities to collaborate on an evaluation of the course.



Figure 10 – Interventions with similar characteristics

|  |                       |                                  |
|--|-----------------------|----------------------------------|
|  | <b>Bedfordshire</b>   | MTM Bedfordshire Biker Magazine  |
|  | <b>Hertfordshire</b>  | Rider Magazine                   |
|  | <b>Norfolk</b>        | Norfolk & Suffolk Biker Magazine |
|  | <b>Bedfordshire</b>   | MTM Ride Safe                    |
|  | <b>Cambridgeshire</b> | BikeSafe                         |
|  | <b>Hertfordshire</b>  | BikeSafe                         |
|  | <b>Suffolk</b>        | Safe Rider                       |
|  | <b>Norfolk</b>        | Safe Rider                       |
|  | <b>Essex</b>          | Firebike Better Biking Courses   |
|  | <b>Essex</b>          | BikeSafe                         |
|  | <b>Bedfordshire</b>   | MTM 1 <sup>st</sup> Ride pre-CBT |





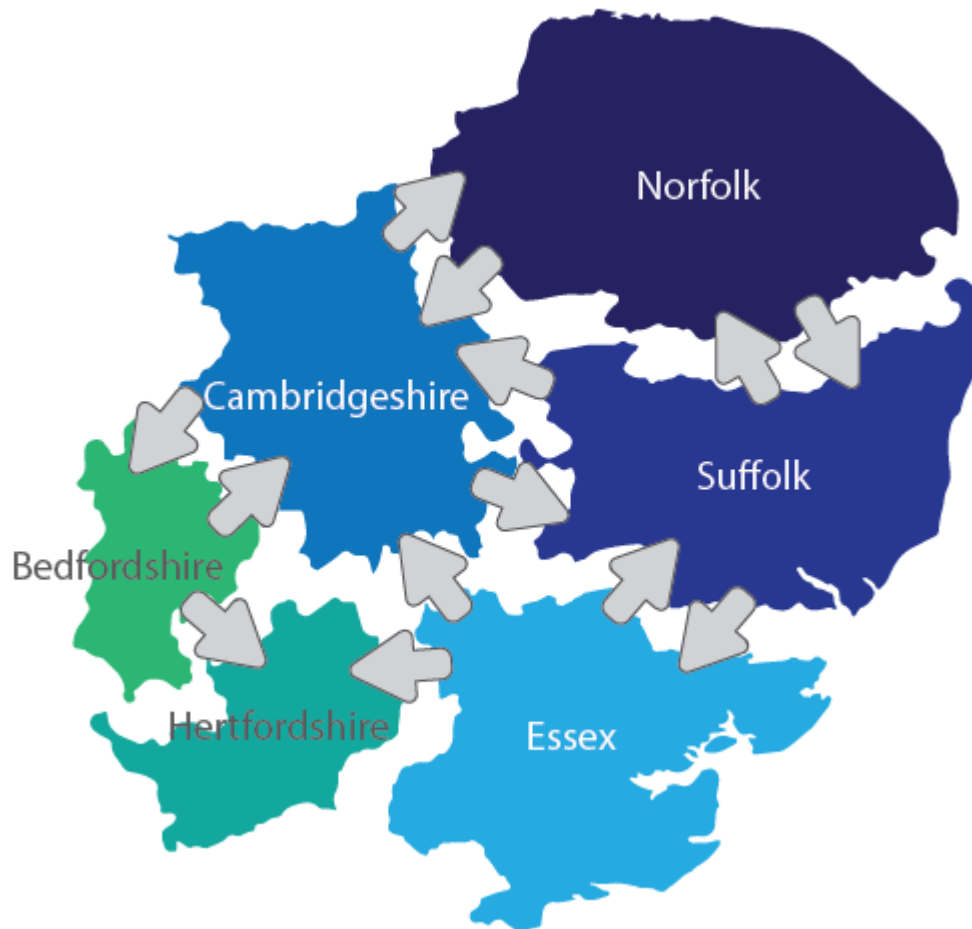
|  |               |  |
|--|---------------|--|
|  | Bedfordshire  | MTM Take Control post-CBT                |
|  | Suffolk       | Rider Plus/Young Rider                   |
|  | Norfolk       | i2i Motorcycle Academy                   |
|  | Essex         | Firebike Advanced Machine Skills courses |
|  | Essex         | Hugger Advanced Instructor Training Days |
|  | Hertfordshire | Biker Down                               |
|  | Suffolk       | Biker Down                               |

In addition to sharing ideas and achieving economies of scale through working on similar projects together, collaboration between specific areas should be encouraged. As highlighted in the section on Movement across the region on page 9, the casualty analysis has revealed that there are specific areas which have high numbers of casualties from outside of their area involved in collisions on their roads. Epping Forest, Hertsmere and Three Rivers are all areas where there are *high* importing and *low* exporting of casualties. Conversely, there are areas where riders are not coming in to crash on local roads but local residents are particularly at risk, especially elsewhere on the region's roads. Castle Point, Great Yarmouth and Luton could all collaborate with neighbouring areas to communicate with their residents to reduce their risk elsewhere.

Looking at rider crash involvement at the partnership level, Bedfordshire could benefit from working with Cambridgeshire and Hertfordshire. In addition to working with Bedfordshire, Hertfordshire could also work with Essex, whilst Cambridgeshire should seek to develop relationships with Essex, Norfolk and Suffolk, as well as Bedfordshire. Essex should be working with its neighbours of Hertfordshire, Cambridgeshire and Suffolk, with Norfolk also working with these latter two counties. Suffolk, having multiple neighbouring authorities, has import and export relationships with Norfolk, Cambridgeshire and Essex. These relationships are shown in Figure 11.



Figure 11 - Import and Exporting of P2W Casualties by Partnership Area



### Gap Analysis – What’s Missing?

Whilst the range of interventions submitted covered a variety of activity types and are aimed at the full spectrum of at-risk motorcyclists, there are some elements which could be described as ‘missing’.

1. **A focus on young riders** - The casualty analysis highlighted that 23% of the riders involved in KSI collisions in the East were classified as young riders, yet this group had the lowest percentage of interventions aimed at it. Conversely, a larger percentage of interventions were targeted at leisure riders when this group only represented 11% of KSI involved riders.
2. **Evaluations** - Many interventions are not evaluated or if they are, small sample sizes are used or the evaluation methodology is limited to a post-intervention only study where the questions focus on the participants’ views of the intervention. To establish the effectiveness of motorcycle interventions, clear and measurable objectives should be set, with appropriate sample sizes and solid methodologies. In addition to participant feedback on the delivery of



the intervention (which is important), established measures of behaviour, attitudes and knowledge should be utilised.

3. **A consistent message** – Whilst some partnership collaboration already exists, given the analysis highlighting the importing and exporting of P2W casualties, a consistent message across the whole region is currently missing. There are existing brands used across partnership areas that could be expanded to the rest of the region to provide consistency or alternatively, brands could be retained but messages adapted to ensure that the same focus is delivered across the region.

### Specific Recommendations

There are several recommendations which emerge from the process of synthesising and assessing the motorcycling interventions delivered in the East of England. There are also additional recommendations which were included in the casualty analysis<sup>20</sup> conducted to accompany this report. The recommendations are as follows:

1. Continue the use of assessment-based interventions, based on the evaluation results of the National BikeSafe scheme.
2. Ensure that post-test training schemes which follow riding assessments are all of high quality, are consistently delivered, demonstrate value for money and are available across the region.
3. Consider more refined targeting of some of the schemes to ensure that motorcyclists from the prominent casualty groups are the audience engaged with and that messages are tailored to their needs.
4. Consider a shift from targeting leisure riders to focusing on younger riders on smaller machines for some of the interventions.
5. Consider evaluating a sample of the following types of scheme, adopting a regional approach to achieve economies of scale. Clear objectives should be set to assess these interventions against. The schemes which should be evaluated are:
  - a. Magazines
  - b. Publicity campaigns
  - c. Young rider interventions
  - d. Biker Down
  - e. Events
6. Consider further collaboration as a region to:
  - a. Ensure best practice sharing
  - b. Look at economies of scale for similar interventions
  - c. Work with specific neighbours where importing and exporting of casualties is an issue
  - d. Share evaluation opportunities
7. Consider the creation and adoption of a universal brand that could be used to communicate with both motorcyclists and other road users about the vulnerability of motorcyclists across the whole region.

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<sup>20</sup> Cubbin (2017)



Additionally, the following recommendations were made in 'Powered-2-Wheelers in the Eastern Region':<sup>21</sup>

- a) Consider enforcement activity aimed at addressing driver distraction and poor manoeuvres by drivers and riders, concentrating on urban areas during afternoon commuting times.
- b) Consider a publicity campaign to encourage other vehicle drivers to look out for motorcycles, particularly at junctions.
- c) Consider a campaign to lobby for the introduction of a 'vulnerable road users' element to the driving test, requiring new drivers to demonstrate an understanding of how to fulfil their duty of care to vulnerable road users, including P2W riders.
- d) Consider a campaign aimed at normalising good practice for P2W riders when riding on busy urban roads, such as safe filtering/overtaking and avoiding rear end collisions with slowing traffic. The campaign media and content should be tailored to the main Mosaic Groups identified in the casualty analysis.
- e) Consider the installation of rear facing average speed cameras on routes identified in the collision analysis.
- f) Consider a campaign to increase participation in rider skills courses, focusing on road craft and hazard perception, using the main Mosaic Groups identified in the casualty analysis to help target engagement.
- g) Consider the creation and incentivisation of participation in road craft, bike handling and hazard perception training tailored to young riders.
- h) Consider the creation of publicity and engagement materials designed to appeal to young males, particularly those living in lower incomes areas.

## Conclusions

All six of the partnership areas deliver or did deliver a range of motorcycle activities. There were 39 interventions submitted – with a quarter being 'riding assessments'. Of the other interventions, 13% are events and 13% are websites or other publicity.

Most of the interventions offer advice, and over two-thirds are hoping to address attitudes.

Commuters are the main focus of the interventions, which corresponds to the casualty analysis. The next largest target group are leisure riders, but these are the smallest group of riders involved in collisions in the East. Conversely, young riders are a key casualty group but are the focus of the fewest interventions.

The casualty focus across the region differs: Cambridgeshire and Hertfordshire have commuters as their main casualty group; Bedfordshire has young riders and commuter riders as their casualty target groups; Suffolk and Norfolk have leisure riders and young riders; whilst Essex has commuters and other riders.

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<sup>21</sup> *ibid.*,



There is movement across the region with some districts 'importing' casualties from neighbouring authorities whilst other districts 'export' their residents who crash elsewhere. There are also districts where the casualties tend to be local residents.

The interventions were assessed to determine the casualty target groups and the focus of the message. The interventions were 'scored' according to the information provided and any evaluation that had been conducted.

There were five interventions which were rated as 'best practice interventions'. These interventions were all related to advanced rider training, either as assessments and referrals or as actual training schemes.

There were 24 interventions which are worth considering but where extra evidence of efficacy would be useful. These interventions covered a wide range of activities, including training, awareness-raising, events, advice-giving and enforcement. Evaluations of some of these interventions could increase the rating level to best practice.

There were 10 interventions which were rated as having 'no evidence of best practice'. This is not to say that these interventions are ineffective or have unintended consequences, but that there were no evaluations and/or insufficient information showing how they were evidence-led. These interventions tend to be large scale publicity events, which can be difficult to evaluate as prior contact with the target audience is difficult to achieve.

There are opportunities to collaborate in the region, where similar interventions are being delivered in multiple areas. This does not necessarily mean there is duplication, but there could be opportunities for collaboration, sharing best practice and achieving economies of scale. Examples of opportunities include motorcycling safety magazines; assessment interventions; training courses, and first aid training. Collaboration could also take place between neighbouring partnership areas where there are importing and exporting of casualties.

A gap analysis identified that there should be a renewed focus on younger riders. Many of the interventions are not evaluation and this could be an area where the region works together to improve evidence around the effectiveness of schemes. Lastly, there are opportunities to provide a consistent message to both motorcyclists and drivers across the region.

Several recommendations were made, based on the review of the interventions and the assessing the casualty analysis. These recommendations include the opportunities for collaboration outlined above and filling the identified gaps.



## Appendix A – Questionnaire



### Motorcycling Road Safety Activity in the East of England

This questionnaire has been designed to capture information on road safety activities and interventions in the East of England which are targeted at improving motorcyclists' safety. The responses will be used to identify opportunities for collaboration in the region and where best practice could be shared.

Please complete one of these questionnaires for EACH motorcycling activity undertaken in your area.

Please pass to colleagues/partners to complete, where appropriate.

Please try to answer each question and state where the information is unavailable.

We appreciate your co-operation with this exercise.

1. PLEASE PROVIDE THE NAME AND / OR DESCRIPTION OF THE MOTORCYCLING ACTIVITY / INTERVENTION:

2. WHO IS THE LEAD DELIVERY PARTNER FOR THE ACTIVITY?

3. PLEASE LIST ALL THE OTHER PARTNERS WHO ARE INVOLVED IN DELIVERING THE ACTIVITY:

4. HOW MUCH DOES THE ACTIVITY COST TO DELIVER ANNUALLY? £

5. WHO FUNDS THE ACTIVITY?



## Motorcycling Road Safety Activity in the East of England

6. PLEASE PROVIDE A BRIEF DESCRIPTION OF WHAT THE ACTIVITY INVOLVES:

7. IN WHICH YEAR WAS THE ACTIVITY FIRST DELIVERED?

2016

8. HAS IT BEEN DELIVERED EVERY YEAR SINCE THEN?

YES / NO

9. IF IT HASN'T BEEN DELIVERED EVERY YEAR SINCE THEN, PLEASE EXPLAIN WHY NOT AND IN WHICH YEARS IT WAS DELIVERED:

10. HOW OFTEN IS IT DELIVERED EACH YEAR?

Once / Twice / Monthly / Weekly/ Other

11. WHO IS THE TARGET AUDIENCE? (PARTICULAR AGE GROUP, TYPE OF RIDER ETC.)

12. HOW WAS THE TARGET AUDIENCE IDENTIFIED?

13. WHICH TARGET BEHAVIOURS ARE ADDRESSED BY THE ACTIVITY?

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## Motorcycling Road Safety Activity in the East of England

14. WHAT DOES THE ACTIVITY SEEK TO ACHIEVE?

15. HAS THE ACTIVITY BEEN EVALUATED/MEASURED FOR SUCCESS?

Yes / No

16. IF SO, HOW WAS IT EVALUATED?

17. BRIEFLY DESCRIBE THE MAIN RESULTS OF THE EVALUATION:

18. DID YOU LIAISE WITH LOCAL MOTORCYCLE GROUPS WHEN DESIGNING OR DELIVERING THE INTERVENTION?

Yes / No

19. IF YOU DO/DID WORK WITH MOTORCYCLE GROUPS, PLEASE DESCRIBE HOW YOU LIAISED WITH THEM:





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