



ASSESSING NATIONAL HIGHWAYS' EVALUATION
OF ITS SMART MOTORWAY EDUCATION
CAMPAIGNS

Evaluation Report
For the Office of Rail and Road

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SERVICES

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Final Evaluation Report

For the Office of Rail and Road

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1. EXECUTIVE SUMMARY

- 1.1. Smart Motorways have existed in England since 2002, having been introduced as a technology-driven approach to deal with congestion through increasing capacity and controlling the flow and speed of traffic. There have been safety concerns raised by road safety stakeholders leading to the DfT's *Smart Motorway Safety Evidence Stocktake and Action Plan* (DfT, 2020) in which there was a commitment to improve public information and awareness of Smart Motorways, providing information on what to do in an emergency.
- 1.2. The Office of Rail and Road (ORR) was tasked by the House of Commons Transport Select Committee with evaluating how successful the action plan has been in educating drivers on what to do if they breakdown in a live lane.
- 1.3 This review supports the ORR with fulfilling its role by assessing the approaches undertaken by National Highways in evaluating its campaigns. Whilst the task of educating drivers was within the DfT's action plan, the design, delivery and evaluation of the campaigns were undertaken by National Highways. ***This report assesses the approach undertaken by National Highways in evaluating its education campaigns.***
- 1.4 The findings provide that assessment but have also been set out to assist National Highways in the future development of its campaigns, using the Government Communication Service (GCS) Evaluation Framework as a base, and ensuring best practice approaches are incorporated. The campaign reviewed is not the only education campaign delivered in recent years by National Highways to communicate to road users as to how behave on the Strategic Road Network (SRN), or Smart Motorways, specifically. However, it was the focus of this review as an example of the evaluation processes undertaken by National Highways.
- 1.5. The rationale for the Breakdowns campaign in particular came from the Smart Motorway (Evidence Stocktake) and Action Plan, creating a change to the normal process of campaign design and evaluation. The origin of the Breakdowns campaign, therefore, means that some of the usual processes could not be followed, influencing the subsequent evaluation; these findings should be viewed in this context.
- 1.6. The documentation review has revealed that there are many areas where a very strong level of alignment with the GCS Framework is evident, with National Highways' approach reflective of the Framework's prioritisation of outputs and outcomes. The demonstration of recommendations which were informed by 'lessons learnt' were a strong part of the campaign outtakes, and which mapped the evolution of the campaign between different waves.
- 1.7. In addition to a high level of compliance with the GCS Framework, there are several areas of the Breakdowns evaluation which demonstrate that a robust approach has been adopted. There is evidence of additional C-SMART and OASIS planning used in the evaluation. It is also positive that impact assessment is treated as a distinct element of evaluating the outcomes of the campaign. In this area, National Highways has extended beyond the GCS Framework.
- 1.8. The demonstration of recommendations which were informed by 'lessons learnt' were a strong part of the campaign outtakes and shaped the evolution of the campaign between different waves.
- 1.9. To identify where National Highways' current evaluation approach could be improved, Agilysis conducted a 'gap analysis' in order to inform recommendations. This gap analysis identified four overarching areas where the evaluation approach could be further strengthened:
 - A deeper and richer evidence base to inform campaign design

- Greater application of behavioural insights from previously commissioned research
 - A theory of change which is underpinned by a relevant behavioural model
 - A developing rationale which is increasingly informed by evaluation
- 1.10. The main measurement of effectiveness for the Breakdowns campaign has been the self-reported attitudes, knowledge, and confidence of drivers who use the SRN. National Highways is in a unique position, however, collecting a wealth of data across the SRN in England, creating opportunities to tap into data collected elsewhere in the organisation. Optimising these new data sources to measure on-road behaviour will be invaluable in informing improvements in understanding campaign performance and the effectiveness of communication strategies.
- 1.11. The GCS Framework represents a standardised and tested approach to evaluating behaviour change and awareness campaigns for the public sector. Good practice intervention design will go further, including the creation of intervention design guidance that reflects behaviour change frameworks and includes:
- a clear articulation of the evidence for intervention;
 - the behavioural diagnosis;
 - theory of change;
 - coded behaviour change elements; and
 - mechanisms for measuring change through the evaluation process.
- This requires ongoing involvement from an interdisciplinary team of evaluators and behaviour change experts, ensuring that the design process is robust and delivery consistently reflects the emerging evidence.
- 1.12. Overall, this independent analysis found:
- National Highways has followed the GCS Framework for the Breakdowns campaigns, incorporating best practice approaches into the evaluation process.
 - There are opportunities moving forward to utilise research and analysis to strengthen the inputs and objectives used in Breakdown campaigns
 - Extending the way in which internal behaviour change experts are involved can help to place the unwanted and desired behaviours in context, influencing the messages provided and the measurements collected
 - Quantitative data, collected on the SRN, could be used to provide a snapshot of actual driver behaviour (both in terms of the rate of breakdowns and the proportion of drivers using the left-hand lane) at specific locations and over the lifetime of the campaign
 - Additional qualitative testing could help to gauge the continuing relevance of the campaign content and enhance the lessons learnt
 - Other evaluation frameworks from wider transport campaigns and public health communications design best practice can be used to enhance the GCS Framework and delve more deeply into understanding the problem being addressed by the campaign

2. INTRODUCTION

- 2.1. This report sets out the findings of an independent assessment of the evaluation of National Highways' (NH) Smart Motorway education campaigns, focusing on the 'Breakdowns' campaign. The Office of Rail and Road (ORR) was tasked by the House of Commons Transport Select Committee with evaluating how successful the action plan has been in educating drivers on what to do if they breakdown in a live lane (House of Commons Transport Committee, 26 October 2021).
- 2.2. To complete this task, ORR commissioned independent transport consultants and behaviour specialists, Agilysis, to provide support in seeking:
 - a. validation of National Highways' current evaluation framework, including the existing processes and governance in place to evaluate its education campaigns that can be applicable to Smart Motorways; and
 - b. a proposed methodology for assessing the on-road behavioural impact of National Highways' education campaigns that can be applied to Smart Motorways.
- 2.3 The findings of the report have been set out to assist National Highways in the future development of campaigns, using its current evaluation methodology as a base, ensuring best practice approaches are incorporated (suggestions are outlined in the Suggested Improvements section below).
- 2.4 The Breakdowns campaign differs from many National Highways' communications interventions in its origins. In October 2019, the Secretary of State for Transport asked the Department for Transport (DfT) to carry out the Smart Motorway Safety (Evidence Stocktake) and Action Plan to gather the facts on the safety of Smart Motorways and make recommendations. One of the actions in the plan was to increase communication with drivers, with a commitment for funding for national and targeted communications campaigns to further improve the public perception of and confidence in Smart Motorways (DfT, 2020).
- 2.4 Given that the rationale for the campaign came from the Smart Motorway Safety (Evidence Stocktake) and Action Plan, it changed the process of design and evaluation for National Highways. National Highways has a needs analysis process incorporated into behaviour change campaigns, using collision analysis and supplementary evidence to inform design and identify the target audience.
- 2.5 This understanding of the target problem influences the design and delivery of campaigns, and the way that effectiveness is measured. For example, if it is determined that there is a knowledge deficit in relation to a specific problem, an awareness campaign to increase understanding could be designed and any subsequent evaluation would be measuring changes in knowledge amongst the target audience. The origin of the Breakdowns campaign means that some of the usual processes could not be followed at the design stages, influencing the subsequent design of the evaluation. These findings should be viewed in this context.
- 2.6 The review of National Highways' evaluation processes presented here commences with an assessment of alignment with the Government Communication Service (GCS) Framework (Government Communication Service, June 2018), which has been used by National Highways since 2016 to evaluate paid-for campaigns. It assesses whether the GCS Framework and processes adopted by National Highways is the right evaluation method and if it was applied correctly, determining if lessons learnt from previous campaigns are routinely applied and embedded into future campaigns. It also reviews other sectors and methods which go beyond the GCS Framework

and provides recommendations to improve National Highways' current approach, including its processes and governance.

3. CONTEXT

3.1. BACKGROUND

3.1.1. This review supports the ORR with fulfilling its role of evaluating how successful the Department for Transport's action plan (DfT, 2020) has been in educating drivers on what to do if they breakdown in a live lane, by assessing the approaches undertaken by National Highways in evaluating its campaigns. (Recommendation 6, part C in the House of Commons Transport Committee report on the rollout and safety of Smart Motorways (House of Commons Transport Committee, 26 October 2021). Whilst the task of providing more communication with drivers was within the DfT's action plan, the design, delivery and evaluation of campaigns were undertaken by National Highways. ***This report assesses the approach undertaken by National Highways in evaluating its education campaigns.***

3.1.2. Smart Motorways have existed in some form in England since 1995 and are managed by National Highways. Smart Motorways were introduced as a technology-driven approach to deal with congestion through increasing capacity on motorways and controlling the flow and speed of traffic.

3.1.3. The term 'Smart Motorways' describes a set of three motorway designs, comprising:

- Controlled Motorways (CM), which add variable and mandatory speed limits to a conventional motorway to control the speed of traffic, while retaining a permanent hard shoulder. Overhead electronic signs display messages to drivers, such as warning of an incident ahead;
- All Lane Running (ALR) motorways, which apply the controlled motorway technology, permanently convert the hard shoulder as a running lane and feature emergency areas. Emergency areas are places to stop in an emergency.
- Dynamic Hard Shoulder Running (DHS) motorways, which apply the above controlled motorway technology. The hard shoulder is some of the time, but not always, used as a live running lane, with electronic signs to guide drivers when it is safe to use. Emergency areas are installed as on ALR motorways. (DfT, 2020, p. 7)

3.1.4. There have been safety concerns raised by road safety stakeholders and road user groups, and by the Transport Select Committee. These concerns and discussions led to the DfT's Smart Motorway Safety Evidence Stocktake and Action Plan (DfT, 2020). The Action Plan put forward actions to convert Dynamic Hard Shoulders (where hard shoulders are a live running lane some of the time) into All Lane Running motorways; increasing the deployment of stopped vehicle detection technology; faster attendance by more traffic officer patrols; and increasing the quantity, distance between, and visibility of emergency areas. Finally, there was a commitment to improve public information and awareness of Smart Motorways, providing information on what to do in an emergency.

3.1.5. The Department for Transport's action plan states that:

3.1.6. 'Many motorists do not know exactly what a Smart Motorway is and are not aware of whether they are on one or not. We need to tackle the public perception of, and public confidence in, the safety of Smart Motorways as much as the reality. We recognise that we could do more. We are therefore committing to an additional £5 million on national and targeted

communications campaigns to further increase awareness and understanding of Smart Motorways, how they work and how to use them confidently. We will ensure drivers receive advice to help them keep safe on Smart Motorways including advice on what to do in a breakdown. We will run these campaigns using the most effective and accessible media based on market research and insight to ensure it has the desired impact.’ (DfT 2020, p. 66)

- 3.1.7. As a consequence, at the time of writing, four ‘waves’ of Breakdowns campaigns were designed and delivered, providing advice on what to do in a breakdown, seeking to increase awareness and understanding, whilst attempting to build confidence in their use. The campaign also has implications for driver behaviour on the Strategic Road Network (SRN) more broadly. National Highways routinely evaluates communications campaigns to measure impact and identify lessons learned to make future improvements. (Breakdown wave 5 was launched in December 2022 but is beyond the scope of this review).
- 3.1.8. In response to the Smart Motorway Safety (Evidence Stocktake and Action Plan) the Transport Select Committee made a number of recommendations regarding assessing the actions undertaken by the Department for Transport and National Highways. One of the recommendations tasked ORR with evaluating how successful elements of the Action Plan have been, including determining whether the plan has reduced the incidences of live lane breakdowns; and if it has reduced the time for which people are broken down or stop in a live lane and are at risk. As part of this recommendation, ORR was also tasked with evaluating how successful the Action Plan has been in educating drivers on what to do if they breakdown in a live lane. Another recommendation commissioned ORR to conduct an independent evaluation of the effectiveness and operation of stopped vehicle technology.
- 3.1.9. This current report relates to this last recommendation, and specifically to the ORR’s obligation to review the evaluation approach undertaken by National Highways to assess the effectiveness of its awareness campaigns.
- 3.1.10. This report is presented to the ORR as a systematic review of the evaluation approach adopted for the Breakdowns campaign, which has been carried out across four waves since pre-campaign preparation began in November 2020:
- Breakdown Wave 1: March 2021
 - Breakdown Wave 2: October 2021 – November 2021
 - Breakdown Wave 3: January 2022 – March 2022
 - Breakdown Wave 4: July 2022 – August 2022

Breakdown wave 5 was launched in December 2022. The timing of this review has led to a focus on breakdown waves 1-3.

3.2. National Highways’ Breakdowns Campaign Evaluation

- 3.2.1. National Highways has been evaluating its communication campaigns using the guidance set out in the Government Communication Service (GCS) Framework (Government Communication Service, June 2018). The Framework itself is a part of wider government support available to help plan effective communications campaigns, contributing to standardised and best practice approaches across all public sector communications activity. Many of the Frameworks are mandatory for Central Government Departments, and are recommended for use by public sector agencies and local government. The Framework provides guidance on evaluating paid-for campaigns and other communication activity to achieve behaviour change, recruitment to public sector roles, and/or increase awareness. It advises on the design of evaluating communications campaigns, defining the recommended

components and outcome metrics. Following its guidance allows government organisations to consistently measure the success of campaigns and appraise activities.

3.3. *Smart Motorways and Road Safety*

3.3.1. Smart Motorways are an initiative managed by National Highways to increase capacity on the SRN through speed control. All Lane Running and Dynamic Hard Shoulder schemes use variable speed limits on motorways to create better traffic flows on busy roads. Technology, (such as variable and mandatory speed limits, stopped vehicle detection, and Red X signals) and features (like emergency areas) are used to reduce risk of incidents in live lanes leading to collisions. The safety of Smart Motorways has caused concerns amongst road safety stakeholders and groups of road users. (Simpson, 2021).

3.3.2. As set out earlier, the DfT committed an additional £5 million on national and targeted campaigns to further increase awareness and understanding of Smart Motorways, and how to use them confidently.

3.3.3. Therefore, the core objectives of such campaigns, which were measured in the evaluation are to:

- Increase driver awareness on what to do in the event of breakdown on a motorway, including where there is no hard shoulder
- Increase understanding on what to do in the event of a breakdown on a motorway, including where there is no hard shoulder
- Increase confidence and capability on what to do in the event of a breakdown on a motorway, including where there is no hard shoulder
- Increase driver confidence in the safety of Smart Motorways

3.3.4. An example of an education campaign is 'Go Left'. The focus of the campaign was to convey the message of 'Go Left' in the event of a breakdown, providing information about indicating left, moving left, finding an emergency area, hard shoulder, taking the first exit off the motorway, or using service areas; putting hazard lights on; leaving the car using the passenger side (if it is possible); and calling for help.

4. METHODOLOGY

4.1. TASK 1: REVIEW OF NATIONAL HIGHWAYS' CURRENT EVALUATION FRAMEWORK

4.1.1. National Highways shared with Agilysis relevant documentation related to the development and evaluation of the Breakdowns campaign. Agilysis undertook a comprehensive review of all the relevant documentation, including the processes and governance of the evaluation. The purpose was to understand the application of the GCS Evaluation Framework in National Highways' evaluation plans and reporting.

4.1.2. *Government Communication Service (GCS) Evaluation Framework 2.0*

4.1.2.1. The Government Communication Service (GCS) Evaluation Framework is a set of guidance for use by public sector bodies and agencies when formulating campaign material for interventions which fall within the sphere of public communications. The Framework provides strategic guidance to enable evaluations, with a view to demonstrate impact and maximise campaign success, with recommended metrics for different types of campaign, alongside suggested methods for their measurement. Breakdowns, as an educational communications campaign, incorporates both behaviour change and awareness

components, in addition to general communication metrics, as set out in the GCS Framework. The Framework also signposts to supporting documentation that is recommended to be used in conjunction with the GCS Framework, to ensure public communication interventions are designed and evaluated in accordance with best practice.

- 4.1.2.2. The GCS Framework is the guiding document used by National Highways to develop its evaluation approach, and therefore the first task in the review process was to assess the level of compliance between the evaluation approach adopted for the Breakdowns Campaign and that which is put forward as best practice. To bring focus to this initial task, the Framework was thematically divided into five sections by Agilysis, covering the relevant content for the Breakdowns Campaign. This allowed the team to systematically review the National Highways documentation against specific guidance in the Framework.

Table 1 - GCS Framework

1.0	Introduction and Best Practice Overview
1.1	Use of recommended metrics
1.2	Listening to public stakeholders
1.3	Updated guidance
2.0	Recommended Evaluation Process
2.1	Behaviour change and awareness campaigns
2.2	Recommended metrics (overview)
2.3	C-SMART and OASIS planning
3.0	Recommended Evaluation Metrics (Behaviour Change and Awareness Building)
3.1	Inputs
3.2	Outputs
3.3	Outtakes
3.4	Outcomes/Impact
4.0	Additional Framework Guidance
4.1	Calculating Return on Investment (ROI)
4.2	Reputation
4.3	Ethical Data Use
5.0	All Communications Activity
5.1	Inputs
5.2	Outputs
5.3	Outtakes
5.4	Outcomes/Impact

4.1.3. National Highways' adherence to the GCS Framework

- 4.1.3.1. The documentation review has revealed that there are many areas where a very strong level of alignment with the GCS Framework is evident, with National Highways' approach reflective of the Framework's prioritisation of outputs and outcomes. Whilst National Highways' evaluation approach generally aligns with the approach advocated in the GCS model, both in terms of the measurement of recommended metrics and strategic activity, there are some areas which could be enhanced in order to maximise adherence to the GCS Framework.

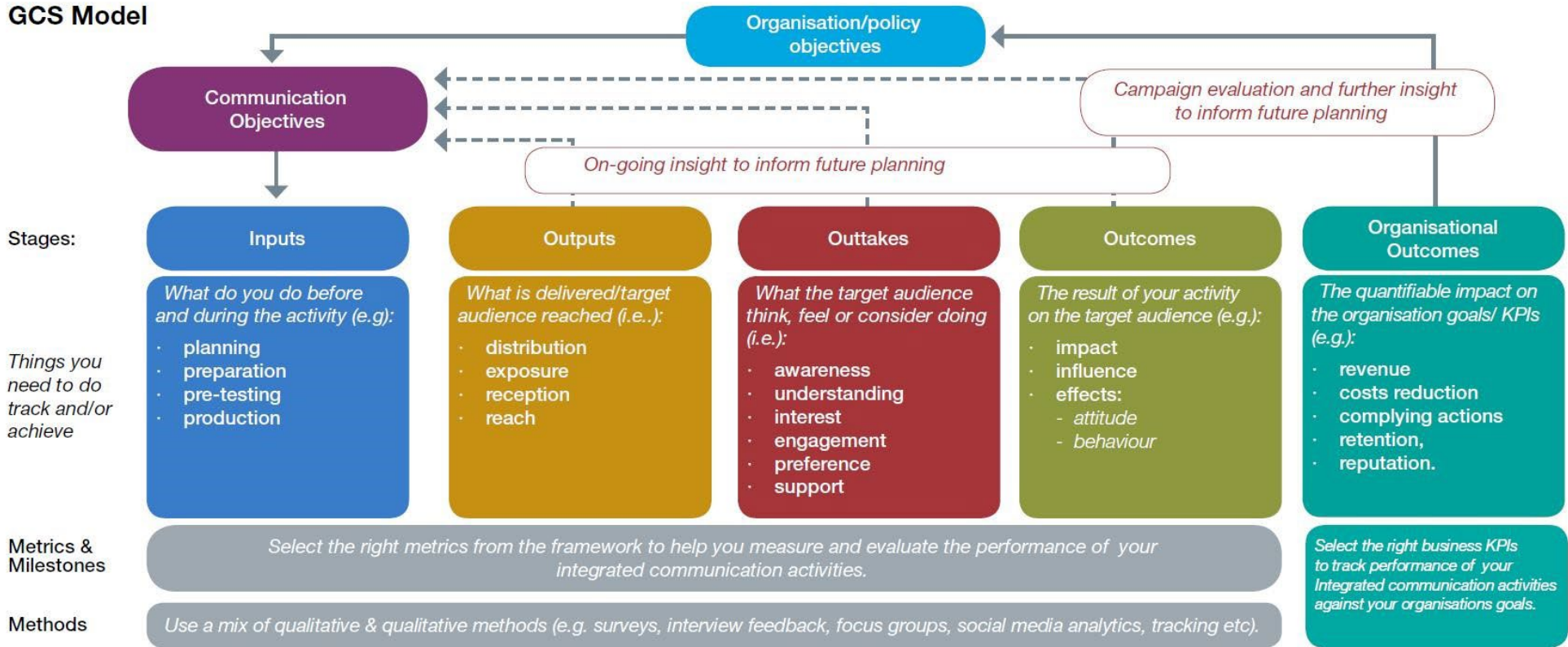
However, given that the origin of the Breakdowns campaign is not representative of how interventions are usually implemented by National Highways, the level of adherence is comprehensive, under the circumstances.

4.1.3.2. Figure 1 shows the GCS Model contained within the Framework, which sets out the metrics which should be used by campaign planners and evaluators. It includes the metrics categorised by the International Association for the Measurement and Evaluation of Communication (AMEC):

- Inputs (what we put in, our planning and content creation)
- Outputs (what is produced, such as audience reach)
- Outtakes (subject-oriented stakeholder experiences and communicator-oriented learning about communication practice)
- Outcomes (stakeholder behaviour, what the impact of communication and engagement activity is, and whether we achieved the desired organisational impact or policy aim). (Government Communication Service, June 2018, p. 3)

Figure 1 - GCS Model (Government Communication Service, June 2018, p. 32)

GCS Model



4.1.4. Areas of compliance with GCS

- 4.1.4.1. This section sets out the areas of National Highways' evaluation of the Breakdowns campaign which are aligned well with the GCS Framework.
- 4.1.4.2. For campaign inputs, pre-wave 1 evidence from ICM Research, incident data from Control Works' data analysis, and the logic model were used to design and demonstrate the connection between the target audience experience and the core objectives, which all aligns well with the GCS Framework. Content creation, the review of effectiveness, and pre-testing are all solid in adding value to the campaign, as well as adhering to the Framework.
- 4.1.4.3. Campaign outputs also generally align strongly with the Framework, from communication and creative activity being measured and subject to customer testing; estimating campaign content reach by specific target audience segments; and the comprehensive use of partnership outreach, using a multi-layered approach to communication activity; and the comprehensive review of outputs. This is evidenced by TV, radio and social media advertising; with notable partnership activity carried out with JOE and Purple Goat to target relevant and vulnerable road users (young drivers and those with disabilities/impairments). The level and format of customer testing carried out to gauge the effectiveness of Breakdowns' creative anchors was impacted by pandemic restrictions. The development and delivery of outputs in this regard reflects these circumstances where in-person events were not always feasible.
- 4.1.4.4. Some of the campaign inputs that were measured consistently include total aggregate spend, spend to date on media, and content creation. Similarly, outputs, like reported reach for paid social media and website content (segmented by digital platforms) and estimated offline reach (through traditional, non-digital platforms), were all recorded as part of the campaign output measurement metrics, as well as partnerships secured to amplify campaign effects.
- 4.1.4.5. The demonstration of recommendations which were informed by 'lessons learnt' were a strong part of the campaign outtakes, and which mapped the evolution of the campaign between different waves.
- 4.1.4.6. Attitudinal metrics, related to measuring the attitudes of the target audience to core messaging and campaign content, were strong within the campaign outtakes section. Spontaneous recall and prompted actions amongst the target audience are factored into the evaluation analysis to measure knowledge and awareness. Targeted uplift and 'uplift bands' are set out but are not always addressed in the reported analyses. Expected uplift and what level of behaviour change is being targeted for each wave is decided using previous campaign wave outcomes measured by ICM Research, and targets informed from driver questionnaire responses (categorised into uplift bands 'good', 'great' and 'excellent'). Change is monitored on this basis, with realistic but ambitious targets grounded in existing campaign and historic data. Uplift here means the expected level of change for each of the core metrics as a direct result of the campaign.
- 4.1.4.7. Core objective metrics and messaging sentiment were collected and analysed, and the associated metric changes were incorporated into subsequent wave analysis and recommendations. The core metrics were consistent across all ICM's evaluation reports.

4.1.5. Areas where adherence to GCS could be improved

- 4.1.5.1. Certain areas of the GCS Framework were not relevant to this type of communications campaign evaluation and those were excluded from assessment.
- 4.1.5.2. Some areas, however, did not directly align or comply with the Framework and those have been identified as gaps and potentially missing from National Highways' evaluation.

- 4.1.5.3. As has already been set out, the Breakdowns campaign came about because the Department for Transport felt awareness of, and confidence in, Smart Motorways needed to increase amongst road users. For National Highways, this rationale for the campaign meant that the usual design and evaluation process could not be followed. Usually, STATS19 road collision analysis and an evidence review of the influences on the target behaviour would be completed as campaign inputs. The collation of this evidence is usually used to inform the content of campaigns, the intended target audience, and what metrics will indicate campaign success. For example, if it is clear that the evidence shows there is a knowledge deficit which influences how people behave in a given scenario, a campaign could be designed to increase knowledge and the evaluation would focus on measuring how knowledge rates change compared with the baseline situation.
- 4.1.5.4. For the Breakdowns campaign, these inputs are limited and present an incomplete evidence base. However, this is not a deficit in National Highways' processes but an artefact of the campaign's origins and where there was available evidence, it has been incorporated into the campaign and its evaluation. It does mean that certain assumptions have had to be made when setting campaign objectives.
- 4.1.5.5. Traditional media has also been used in the campaign, the main source of which has been out-of-home advertising (OOH) at motorway service stations. This outreach activity, and other types of traditional, non-digital marketing, were not deployed to the same extent as online outputs in the campaign. This was because of the nature of the campaign and the time it was deployed: COVID-19 pandemic restrictions were in place which affected the amount of road users on the SRN itself. The Framework recommends the use of both online and traditional non-digital outputs, however, given the wider context and the most suitable channels for this campaign, there is a greater focus on online media and digital content in the Breakdowns campaigns. The channels that were selected were influenced by the target audience and based on an expert review carried out by the media planning agency.
- 4.1.5.6. The key campaign messaging and recommendations did not always evolve between campaign waves, although there is evidence of campaign feedback reinforcing the aims in each wave. More information on this is provided in the section on Task 2.
- 4.1.6. The targeted uplift and metric change forecasts evident in the ICM timelines are not always defined with a culmination date; this is because a particular campaign can have multiple consequent waves, depending on strategic periodic reviews and campaign effectiveness. Expected uplift in the core metrics used to evaluate objectives could include end dates to be specific as to when uplifts are expected to be achieved. This ensures that achievement of the chosen objectives is time-bound through setting targets. The desired and expected results forecast are not consistently factored into the analysis surrounding achievement of the campaign objectives. This is because campaigns are subject to periodic strategic reviews. These reviews affect the overall strategic direction and level of resource available, as well as targets for specific behaviour change campaigns. Setting medium and long-term uplift targets cannot therefore always be done accurately beforehand.
- 4.1.6.1. Whilst there is adherence to most recommended outcome metrics in the GCS Framework, intended behaviour change is not measured explicitly in the evaluation. This is due to possible self-reported biases related to intended behaviour, and therefore knowledge and awareness were used as a proxy for behaviour change.

4.2. TASK 2: RECOMMENDATIONS TO IMPROVE EVALUATION APPROACH

4.2.1.1. Using the findings from the review in Task 1, this task is to provide recommendations to strengthen the framework utilised by National Highways to evaluate its campaigns. This includes identifying other methods which could be considered appropriate for future Smart Motorways and other National Highways campaigns. This section sets out the strengths and gaps in the current methodology used for the Breakdowns evaluation, signposting to other best practice evaluative approaches.

4.2.1. Evaluation Approach: Strengths

4.2.1.2. In addition to a high level of compliance with the GCS Framework, there are several areas of the Breakdowns evaluation which demonstrate that a robust approach has been adopted. The key strengths of the approach are:

4.2.1.3. Objective-setting: The selected objectives are clear statements of what the campaign sets out to achieve, which focuses effort on the purpose of the intervention and how it is implemented and reviewed. There is a general level of consistency in the objectives chosen, meaning that it is relatively straightforward to determine what the campaign intends to measure, which in turn focuses thinking on how this might be done and by when. There is evidence of C-SMART and OASIS planning used in the evaluation, taken from supplementary guidance in the GCS Framework (Government Communications Service, 2018). C-SMART (Challenging, Specific, Measurable, Attainable, Relevant, and Time-bound) is evidenced in that:

- Explanations of core metric changes are grounded in previous wave outcomes (challenging)
- Baselines are measured for each objective via associated metrics (specific)
- Actual outcome data is compared to 'uplift' targets (measurable)
- Pre-campaign research and incident data used to inform objectives (relevant)

4.2.1.4. OASIS planning (Objectives, Audience Insight, Strategy/Idea, Implementation, and Scoring and Evaluation) is evidenced in that objectives have baselines using the most recently available data. This has ensured that many of the principles of social marketing are evident in the approach. Gaps in C-SMART objective setting and OASIS planning are set out in the 'gap analysis' section of this report.

4.2.1.5. Demonstrating success: There is a primary focus on demonstrating success through quantitative (closed-response campaign questionnaire, for example) and qualitative research methods (public correspondence and customer testing, for example). Measuring the effectiveness of the campaign through core metrics linked to the main objectives themselves is the pillar of the approach taken across all three completed waves of the campaign. The data collection method chosen to gauge driver responses (ICM Research questionnaire) has been designed and tested to allow for direct measurement of the defined objectives. The adopted approach also enables comparative analysis of spontaneous recall of the central campaign messages, including the correct actions to be carried out in the event of a breakdown. This contributes to a granular view of the impact the campaign has had so far upon metrics related to specific aspects of driver behaviour on Smart Motorways, and the SRN generally. The evaluation has been able to demonstrate the level of success the campaign has generated, based on the objectives because of this well-developed connection between objective-setting; core metric measurement; and questionnaire design (data collection).

4.2.1.6. Improving delivery: critical analysis and identification of how the campaign could be improved and delivered to better achieve the stated objectives is considered at various stages of the evaluation. Firstly, pre-campaign testing was used to test both the core creative content and

the delivery methods appropriate for the target audience. Key outtakes featured across the campaign waves include reflections on campaign success to date in achieving the desired outcomes.

- 4.2.1.7. **Outputs:** The campaign utilises an array of creative elements, including videos, stills and clips, print and out-of-home posters and digital displays, disseminated as online and traditional media outputs. For online outputs, National Highways has clearly invested significant resource in onboarding partners to produce social marketing content. These outputs include an array of educational and communications media, ranging from content produced in collaboration with social media websites and personalities, to TV and radio advertisement. Traditional media outputs, whilst not as central to the campaign, are carried through out-of-home (OOH) messaging at motorway services and at similar points of interaction between drivers and services on the SRN. The reach of each output activity (proportion of target audience reached) is measured through a key performance indicator (KPI) framework at each wave. Outputs feature prominently in consideration of how lessons learnt can inform recommendations for future development.
- 4.2.1.8. **Outcomes:** Measuring outcomes is the primary focus of the evaluation, with sufficient consideration given to how effective the campaign has been in achieving its stated aims across the waves. This analysis is supplemented with a measurement of how trustworthy drivers believe National Highways to be in terms of the dissemination of advice and information. Together, these measurements provide a solid basis for gauging the behavioural impact versus the organisational impact, which helps to inform National Highways as to the continuation and development of the campaign. It is positive that impact assessment is treated as a distinct element of evaluating the outcomes of the campaign. In this area, National Highways has extended beyond the GCS Framework. The results for metrics related to core objectives, including the perceived efficacy of the messaging, campaign recognition, and levels of trust are all analysed by age, providing a granular understanding of how different aspects of the campaign have affected different driver segments.
- 4.2.1.9. **Lessons learnt and recommendations:** There is strong evidence of outtakes being used to directly inform the recommendations moving forward across the campaign waves, particularly with regards to:
 - a. Core messaging reception and sentiment
 - b. Driver segmentation and targeting approach
 - c. Campaign issues and messaging awareness and action recall
 - d. Campaign material efficacy and partner input
- 4.2.1.10. The relationship between outtakes and the key findings of the evaluation, with recommendations put forward, is charted for the 'Go Left' messaging and the various media channels and material through which it is delivered. Questions of how to maintain and improve rapport with customers (drivers on the SRN and Smart Motorways) through high quality messaging and delivery are addressed. Secondly, the effectiveness of the campaign, for specific road users (neurodiverse drivers, young drivers, female drivers, and drivers with physical disabilities) and those who did not experience the same level of improvements against core and spontaneous action metrics, is factored into the analysis to influence future improvements. Thirdly, campaign issue awareness (awareness of the 'Go Left' message and the correct steps to take in the event of a breakdown) is one of the key focus points of the headline analysis across all three waves of the campaign. Evaluation reporting consistently connects this focus back to stated objectives, the target audience, and recommendations.

The relevancy and effectiveness of outputs produced with, or by, partner organisations is used to inform discussions of how the campaign material might better relate to segments of the target audience (such as those who are neurodiverse or those with notably reduced confidence or knowledge, such as young drivers).

4.2.2. *ICM Research*

- 4.2.2.1. National Highways commissioned ICM Research to design and distribute a questionnaire aimed at drivers who use the SRN, analysing responses both before, during, and after each wave of the campaign. This was carried out to measure a number of attitudinal metrics, gathering baseline levels from before the intervention, to compare to subsequent measurements from after the campaign launch, demonstrating the extent to which the campaign's stated objectives were achieved. This was the main source of data used to measure achievement of the core objectives across the campaign waves. Questions around intentions to change behaviour were not included in the ICM surveys, as these types of question were previously tested as part of an earlier 'Close Following' Campaign and were found to produce bias in self-reporting.
- 4.2.2.2. The evaluation reporting across all waves of the Breakdowns campaign contains insights related to the core metrics, reporting relative change from baseline levels and what these tell us about confidence of what to do in the event of a breakdown. It was observed in the baseline measures that confidence and awareness levels, as well as knowledge of what to do in the breakdown, were relatively high. This baseline analysis (ICM Research Unlimited, PreWave March 2021 'Go Left' Campaign Evaluation) presents 'behavioural gaps' that are taken forward through to subsequent waves:
 - That whilst confidence levels are relatively high, they are lower when thinking about Smart Motorways compared with standard motorways
 - That drivers are less confident on what steps they should take in the event of a breakdown on Smart Motorways than on regular SRN configurations.
 - Whilst the campaign messaging and advice is generally easy to follow, greater reassurance is needed to emphasise that the recommended steps to take are easy and that they apply in all scenarios on the SRN.
- 4.2.2.3. For future waves of the Breakdowns campaign, the ICM Research insights are used to provide three strong recommendations, which are well based in the data collected:
 - Given that the impact of the creative elements of the campaign has remained stable moving into Wave 3, new creative elements in Wave 4 would likely increase the campaign's impact. This is particularly important in order to engage segments of the target audience where impact has been lower (such as younger drivers).
 - Given that there is still some confusion around the correct steps to take in the event of a breakdown (especially on Smart Motorways), there is a need to consider how best to broaden the campaign to re-iterate those correct steps and increase awareness and understanding of them.
 - Given that the correct use of, and familiarity with, emergency refuge areas (ERAs) was identified after Wave 1 as a particular area where drivers lack confidence, the next wave should include added focus on this, thinking about how best this could be done alongside core messaging. Specific videos featuring use of ERAs have been upweighted as part of the evaluation process by the media buying team; increasing the frequency with which they are featured across the designated channels.

4.2.3. *Evaluation Approach: Gap Analysis*

4.2.3.1. To identify where National Highways' current evaluation approach could be improved, it has been necessary to conduct a 'gap analysis' of what is missing in order to inform recommendations. This gap analysis has identified four overarching areas where improvements could be made. Whilst the initial inputs and development are artefacts of the campaign's origins, there are aspects of the evaluation design which could be further developed to demonstrate that the approach taken is grounded in established best practice and the available evidence base:

- a. **Evidence base** – this refers to evidence regarding the intervention itself, but also to evidence relating to other case studies where the intervention under review (or similar interventions) has been evaluated previously.
- b. **Commissioned research** – this refers to how ICM Research insights have been used and the consistency between them and the analysis and findings as presented in evaluation reporting.
- c. **Logic model (theory of change)** – this refers to the creation and development of a model which shows how an intervention (often delivered through a 'campaign') is carried out; connecting all constituent components to demonstrate how together they result in the desired changes and therefore achieve the chosen objectives.
- d. **Evaluation process development** – this refers to the various steps undertaken to complete the process of the evaluation; how far these stages connect with each other to provide a comprehensive view of how effective an intervention has been in achieving its stated aims. Similarly, the development of the evaluation as a process of improvement through learning and the continual application of the insights generated is critical to success.

4.2.4. *Evidence Base*

Intervention design rationale and evidence

4.2.4.1. Whilst the campaign was not initiated because collision data identified a behavioural problem, evidence around the behaviours could have been collated to inform the campaign development and direct the evaluation planning. Behavioural analysis could be undertaken to explore the specific problem to address, detailing the target behaviour and target audience (Fylan, 2017). Whilst the COM-B model is referenced, greater exploration of this behaviour change model could help to identify what capabilities are required to perform the desired behaviour; what the opportunities are to perform the desired behaviour; and what the motivations are to carry out the desired behaviour (Michie, Atkins, & West, 2014).

4.2.4.2. The current application of COM-B does not define the answers to these questions based on a consistent behavioural problem to be overcome, but instead sets out what is meant by the 'behaviour gap'. The behaviour gap would benefit from a more detailed explanation of the behavioural problem within a COM-B Framework. Other behaviour change theories may be more applicable to assist in the diagnosis and problem definition and how it can be understood from a behaviour change perspective.

Research and Data Insights

4.2.4.3. Whilst there is consistent use of breakdown incident data for each of the campaign's evaluation waves, research insights from other similar campaigns or evaluations are not directly used to inform benchmarks or contextualise the Breakdowns campaign as a road

safety intervention. A lessons learned tracker was used to review insights from previous waves and inform the current one.

Breakdowns Campaign Objectives

- 4.2.4.4. Whilst measurement of the core objectives is systematic and factored into the development of the evaluation process, there is minimal analysis to demonstrate how and why the chosen objectives were formulated. Full application of C-SMART and OASIS planning would help to define them further by answering the following questions:

C-SMART

- How are the objectives **attainable**? Are there any other case studies which could demonstrate this?
- How are the objectives **time-bound**? What is the time scale for achieving the target uplifts in core metrics?

OASIS Planning

- What difference will the campaign make? What realistic forecasts can be made?
- How does the evidence justify the targeted uplifts in metric changes?
- How far can the campaign impact be attributed to specific actions?

- 4.2.4.5. The relevancy of the campaign objectives to the targeted behavioural problems also requires further exploration:

*Objective 1: Increase driver **awareness** on what to do in the event of a breakdown on a motorway, including where there is no hard shoulder*

- 4.2.4.6. Whilst campaign activity to build awareness is evident in the approach adopted, it would be beneficial to break this down even further and provide insightful analysis on awareness of messaging versus awareness of recommended steps. This would assist in identifying what type of awareness deficiencies exist and what the persistent barriers to building driver awareness are, specifically in relation to Smart Motorways. Pre-campaign awareness was measured to be 73% amongst drivers, this increased to 80% post Wave 1, and has remained at this level with only marginal fluctuation to a post Wave 3 measurement of 83%. This consistently high level of driver awareness on what to do in the event of a breakdown suggests that awareness may not be the pre-eminent behavioural problem. In addition to questioning awareness as a focal point for the campaign, the assumption that increasing awareness leads to improved confidence requires further explanation.

*Objective 2: Increase **understanding** on what to do in the event of a breakdown on a motorway, including where there is no hard shoulder*

- 4.2.4.7. As an educational communications campaign, increasing understanding of what to do in the event of breakdown is measured for a whole range of steps undertaken by drivers. To better identify if a knowledge gap exists and if advice is understood, it would be beneficial to measure changes in understanding of the recommended steps to take in the event of a breakdown as well as changes in understanding in terms of what is believed to be the correct procedure. There are many steps set out as the correct procedure so understanding where the knowledge gaps are in relation to specific actions would be useful.

- 4.2.4.8. Levels of understanding of what to do in the event of breakdown remains largely stable across the campaign waves (pre-wave 1 33% versus post-wave 3 35%). It is unclear as to whether

drivers do not understand the correct procedure in its entirety, that they are unaware of specific steps, or that they disagree with the actions set out in the recommended procedure.

- 4.2.4.9. As with objectives for driver confidence and capability, disaggregated results for Smart Motorways versus regular configurations of motorways would be useful to inform campaign development.

Objective 3: *Increase driver **confidence and capability** on what to do in the event of a breakdown on a motorway, including where there is no hard shoulder*

- 4.2.4.10. Combining metrics into one objective makes it difficult to determine if that objective has been met. In this case, it could be that driver confidence increases but driver capabilities do not, because of some external influence unrelated to confidence. Providing evidence to demonstrate that increasing confidence automatically increases capability would make it easier to explain this dual objective. It would also be useful to explore why drivers feel more confident and capable on standard motorway configurations than on Smart Motorways.

Objective 4:

- *'Increase driver confidence on motorways with and without a hard shoulder' (Wave 1)*
- *Increase driver confidence in the safety of motorways (Waves 2 and 3)*

- 4.2.4.11. As is the case with Objective 3, driver confidence in the safety of motorways is disaggregated between Smart Motorways and regular configurations. Analysis provided focuses on the level of confidence drivers have on regular versus Smart Motorways, and in their belief as to whether Smart Motorways are safe or not. Whilst this change to the fourth objective reflects Wave 1 findings that drivers feel less confident on Smart Motorways, precise discussion of changes in confidence and capability (and the relationship between them) could help to identify persistent or even emerging behavioural issues experienced by drivers.

Behavioural Insight Programme: Breakdowns and Incidents

- 4.2.4.12. A Behavioural Insight Programme undertaken by National Highways in 2019 was provided for the documentation review; its findings provide relevant insights for pre-campaign intelligence, and therefore could have been used to support the commissioned research provided by ICM. The findings of this study have a direct bearing on many of the core objectives of the Breakdowns campaign, particularly around its conclusions that:

- The **opportunity** to carry out vehicle checks prior to journeys on the SRN is reduced by a greater tendency amongst drivers to prioritise having enough fuel. This is influenced by the 'principle of least effort'. This opportunity gap could be filled to increase the number of drivers who carry out vehicle checks prior to using the SRN. The **motivation** to perform this behaviour and the **capability** to identify the risks and carry out checks, are therefore part of the behavioural gap experienced by drivers with regard to breaking down on the SRN. There was an overwhelming feeling amongst respondents in this study that breakdown cover, insurance policies, and MOT servicing could be relied upon to avoid a breakdown, which when coupled with the belief that drivers do not feel they would ever breakdown, suggests that a 'false sense' of security and a lack of understanding around the potential risk for a breakdown to occur are present
- Despite a lack of **awareness** of the characteristics of Smart Motorways and their various configurations, and a lack of **understanding** about where hard shoulders and emergency

refuge areas (ERAs) are, most drivers possess a level of **knowledge** that they should move left where possible, use hazard lights, and exit the vehicle safely. Of the drivers surveyed, 86% stated they would use an ERA as part of their procedure initiated once they begin to experience a breakdown.

- The report suggests, however, that there is a lack of knowledge on what to do in the event of a breakdown. The analysis suggests that this deficiency is more about the recognition of Smart Motorway attributes than it is about the level of awareness required to navigate them and their features in a **confident** manner.
- The ‘panic’ response when experiencing a breakdown is evident for all segments of the target audience and mitigating this response through strategic messaging could inform safer driver behaviour. Anxiety and confusion are both observed by traffic officers as part of this common response to breakdowns. Conversely, overconfidence is observed as a predictor of unsafe driver behaviour (such as incorrect vehicle exit procedure and complacency about the risks of remaining in the vehicle).

4.2.4.13. Referring to these insights would have provided an expanded evidence base to inform the campaign’s core objectives, especially those of increasing the levels confidence, awareness, and understanding experienced by drivers on Smart Motorways. The study highlights the differences between driver awareness of Smart Motorways, including knowledge of their configurations and what to do in the event of breakdown (and how this is connected to driver confidence). The Breakdowns evaluation does not explain how National Highways determined that developing knowledge and understanding will increase confidence and capability, or how increasing awareness has an impact upon driver confidence, either in the context of experiencing a breakdown or in relation to the confidence drivers have in Smart Motorways themselves as a safety initiative. Beyond reference to previous campaigns which found that confidence was the ‘main issue surrounding breakdowns on Smart Motorways,’ there is minimal inclusion of previous studies to ground the campaign in a longer-term view of changing behaviour and addressing driver safety on Smart Motorways.

Linking objectives to research

4.2.4.14. The ICM Pre-Wave report acknowledges that it is a challenge to increase knowledge ‘where confidence of what to do in a breakdown is already relatively high’. This presents a contradiction with the focus across the waves that confidence is the main issue to be tackled, and by increasing knowledge and awareness, confidence on the procedure of what to do in the event of a breakdown also increases. Mapping out the relationship between the core metrics would have helped clarify the correct focus, and the implications of changes in metrics across the campaign waves.

4.2.4.15. However, it is acknowledged that the DfT directed the focus of the campaign to be confidence and awareness.

Theory of change

4.2.4.16. A robust logic model sets out the inputs, outputs, outcomes, overall impact, and objectives which influence the data collection methodologies used to determine whether a campaign was successful.

For each element of the logic model, a number of key questions should be answered:

- Inputs:
 - Which behaviour change model(s) has been used to design the campaign?

- What is the evidence base used to understand existing behaviour and the mechanisms for changing/maintaining behaviour?
 - **Outputs:**
 - How does National Highways measure campaign reach?
 - How does National Highways determine if the intended target audience is accessed?
 - **Outtakes:**
 - How does National Highways measure campaign awareness and resonance (reception and reaction)?
 - What does National Highways learn from engagement with the target audience that could inform future campaigns?
 - How do different segments of SRN user respond to the campaign?
 - **Outcomes:**
 - How does National Highways collect baseline data to understand behaviour before the campaign?
 - What data sources are used to measure behaviour change?
 - How does National Highways predict levels of behaviour change and how does it assess actual levels of change against predicted levels?
 - **Objectives:**
 - Are C-SMART objectives set for each campaign?
 - How do the outcome measures relate to the objectives?
- 4.2.4.17. The same logic model is used across the campaign waves. Amendments based on what has and what has not worked would show a greater a level of development of outcomes and inputs across the waves and through the evaluations.
- 4.2.4.18. A greater incorporation of research and data to demonstrate that the campaign and its creative design elements have influenced the diagnosis of the behavioural problem. This would include research in the input stages of the logic model, influencing objectives and campaign content.
- 4.2.4.19. It could also demonstrate how the campaign objectives are part of an overall communication strategy, indicated by charting connections within the logic model itself and building upon the GCS model.

Evaluation Process Development

- 4.2.4.20. Across evaluation reports of subsequent waves, similar findings and recommendations were reported. Demonstrating how the previous evaluation findings have been factored into the current wave of the campaign would fully demonstrate that the Breakdowns campaign is the result of a continually developing educational and communications process. Discussions as to how recommendations have directly affected actions taken by National Highways and partners helps bring focus to the evaluation development process and the implementation of findings.

4.2.5. Suggested Improvements

- 4.2.5.1. In this section, suggested improvements to National Highways' current evaluation approach are given for each evaluation stage:

Inputs

- 4.2.5.2. The following areas are where the inputs could be strengthened.
- 4.2.5.3. Include additional research and data insights from previous campaigns run by National Highways, and relevant findings from external evaluations, to provide context and demonstrate Breakdowns' contribution towards the evidence base. Exploration of other available data sources would provide an opportunity to cross-reference recorded breakdown incident (Controlworks) data to inform the campaign.
- 4.2.5.4. Fully apply C-SMART and OASIS evaluation planning guidance to improve objective setting and measurement processes.
- 4.2.5.5. Fully explain changes to core objectives with reference to campaign development and emerging findings.
- 4.2.5.6. Increase work with National Highways' Customer Insights and Behaviour Change to explore and apply a relevant behaviour change theory, based on 'problem to be remedied' diagnosis. This will help to inform COM-B analysis. Two theories which might be relevant are:
- a) Theory of Planned Behaviour (Ajzen, 1991). This model places attitudes, subjective norms (perception of others' approval of the specified behaviour), and perceived behavioural controls at the centre of changing behaviour. This behavioural model is underpinned by the function of 'control beliefs': the presence of factors that facilitate or impede performance of the desired behaviour.
 - b) Prototype Willingness Model (Gerrard, Gibbons, Houlihan, Stock, & Pomery, 2008). This model places performance of desired behaviours into two possible spheres: **reasoned path** and **social reaction path**. This dual-process model is typically used to help identify adolescent risk based on the idea that a lack of 'reasoned response' does not result from intentions, but from a willingness to carry out behaviour which is influenced largely by social identity (where social reaction results from how one feels about oneself and 'cognitive' representation of the type of person who engages in the defined behaviour, rather than reasoned decision-making). This model proposes that a 'social reaction' is the default path to informing behaviour, which needs replacing by a reasoned path, where more positive attitudes and subjective norms influence behaviour change.
- 4.2.6. These models could be relevant to understanding and defining behaviour gaps experienced by drivers on Smart Motorways, as respectively they provide focus to the underlying factors and barriers that facilitate behaviour, and to the decision-making processes at the centre of individuals' motivations and willingness to carry out the correct steps in the event of breakdown.

Outputs

- 4.2.6.1. Outputs could be strengthened through the following approaches:
- Whilst the success of outputs in terms of reach is set out comprehensively, consideration should be made as to how to adapt outputs to the target audience, in terms of content and delivery mechanisms, with a view to optimising their implementation. This will help to maximise the reach and efficacy of core messages. Different content is developed for different audiences but the impact of this differentiation could be maximised.

Outtakes

- 4.2.6.2. The outtakes phase of the evaluation could be enhanced by:

- Lessons learnt from the research, analysis, and impact for each wave should be actively discussed, and evidence of any changes implemented should be made clear across the campaign waves. This will enhance the development process of the evaluation to show that key outtakes are being acted upon and implemented with material effect across inputs, outputs, and outcomes.

Outcomes/Impact

4.2.6.3. With outcomes, it would be useful if National Highways could:

- Provide further commentary and analysis on how and why metric changes have occurred, thinking about which campaign elements have been the most effective and ineffective based on target audience reception and empirical observation
- Reflect on causality, attributing change to specific campaign elements
- Consider how findings reflect or contradict the pre-existing evidence base
- Consider how to best ensure that data collection and analysis is carried out throughout the campaign, using available incident databases to full effect

4.3. TASK 3: PROPOSED METHODOLOGY FOR MEASURING ON-ROAD BEHAVIOURAL IMPACT

4.3.1.1. This section provides an overview of novel data sources (such as MIDAS) for this campaign and possible methods to extract insight from them, which have been selected and reviewed with the Breakdowns campaign in mind. Optimising the monitoring of new data sources to measure on-road behaviour will be invaluable in informing improvements in understanding campaign performance and the effectiveness of communication strategies. No new methodology has been proposed as the GCS Framework, and National Highways' application of it, include the factors required to conduct a robust evaluation. Best practice insights from intervention design and evaluation from other sectors are also included to support improvements to the current evaluation methodology.

4.3.1. Data sources and methodologies

4.3.1.2. The main measurement of effectiveness for the Breakdowns campaign has been the self-reported attitudes, knowledge, and confidence of drivers who use the SRN. This is a valid approach and provides consistent and comparable data across campaign waves and with other behaviour change campaigns. It provides a clear indication of where knowledge, attitudes, and confidence were before the campaign and where improvements have made since the campaign launch. These measures are consistently used in evaluations as proxies for behaviour and their use is consistent with GCS Framework guidance.

4.3.1.3. National Highways is in a unique position, however, collecting a wealth of data across the SRN in England. There are, therefore, opportunities to tap into data collected elsewhere in the organisation to monitor changes in driver behaviour on the network.

4.3.1.4. As part of monitoring and evaluation for the Breakdowns Campaign, Performance Analysis Unit (PAU) data was reviewed to indicate whether the campaign had reduced the number of breakdown incidents over the duration of Wave 1. The number of recorded breakdowns actually increased during the first wave of the campaign. The rise in breakdowns could be due to an increase in traffic after the end of COVID-19 lockdown restrictions. As a result, it was not possible to establish a link between the campaign's effect and the number of breakdowns that occurred. However, ongoing monitoring of this data could reveal trends and used in

conjunction with traffic flow data, could show the proportion of breakdown incidents over time.

MIDAS

4.3.1.5. There is the opportunity to access and analyse available Motorway Incident Detection and Automatic Signalling (MIDAS) data to strengthen understanding of breakdown incidents and behaviour on the SRN. MIDAS is a system to detect queuing traffic and alert drivers approaching queuing traffic. From a road user perspective, the system communicates live information to inform safer driving and decision-making. MIDAS databases facilitate the monitoring of traffic flow across vital routes, with the detection software contributing to building capacity for integrated transport solutions and traffic management. The strength of MIDAS data lies in its capacity to allow transport managers to spot early warning signs of traffic build upon which may predicate network congestion, indicating how events such as breakdowns may affect traffic dynamics in specific areas. MIDAS detection systems use inductive loops to monitor, and report change in, traffic flow across each lane within a designated stretch of motorway.

4.3.1.6. MIDAS data monitors traffic flow across motorway lanes, detecting events such as breakdowns. For evaluating the campaign, MIDAS data could provide breakdown insights in multiple ways to:

- a. identify specific locations where breakdowns are more prevalent, providing an opportunity to focus future Breakdowns campaigns in that specific area.
- b. monitor the number of breakdowns over time, providing a metric of campaign effectiveness. Given that the loops monitor traffic flow, rates for the number of breakdowns per million vehicles could be created to measure any changes in breakdown rates over the campaign lifetime.
- c. As traffic flow is monitored by individual lane, the proportion of vehicles in each lane could be analysed to determine if a greater number of drivers are opting to 'keep left' as their normal driving behaviour.

4.3.1.7. It is recognised that MIDAS is not installed across all of the SRN and data is not available for the entire network. Therefore a sample of sites would need to be selected to provide supplementary analysis to the self-reported metrics. The evaluation team would need to work with the owners of the data to understand the scope and feasibility of dip-sampling MIDAS data to gather insights on breakdown and vehicle-per-lane rates.

Incident Data

4.3.1.8. Regional Operations Centres provide network management control, monitoring the response to incidents. Reported incidents can be generated from a range of situations, including collisions, breakdowns, debris, suicide attempts, animals or prohibited vehicles on the network.

4.3.1.9. Details of the incident and National Highways (and partner) responses are recorded in incident logs, which can provide a rich, descriptive source of information regarding the locations, circumstances, and subsequent actions of drivers and responders involved in breakdown incidents.

4.3.1.10. Control Works data was analysed in the campaign formation to provide an understanding of breakdown incidents but obtaining and analysing further samples of incident data could increase understanding of actual driver behaviour in the event of a breakdown.

Increased Qualitative Testing

4.3.1.11. The Breakdowns campaign benefited from customer testing during pre-campaign launch and intervention design phases. This testing, carried out with Ipsos Mori, explored the views and reactions of the general public to the 'creative hooks' which had been prepared by agency partner, adam&eveDDB, for use in the campaign. These were the 'Bugs', 'Go Left', and 'Cars' creatives. Customer feedback found that:

- The 'Go Left' call to action was well understood and was easily recalled by drivers after viewing the creative
- Participants felt that the 'Go Left' film gave them a better understanding of the detail as to 'how' and 'why' they should carry out certain actions in the event of breakdown
- Some participants found that the 'Go Left' creative lacked sufficient detail to explain the 'Go Left' message and its rationale
- Some participants noted that it was not clear that the film took place on a Smart Motorway, leaving uncertainty as to what they should do in the event of breakdown on a Smart Motorway, as opposed to a regular motorway
- Whilst the 'Go Left' theme song was memorable, the use of bugs as the central feature was not always popular, this was often the opinion of those who stated that they already understood the creative's core message

4.3.1.12. Future qualitative testing would help to gauge customer reaction to the core creative contents and ensure that they remained persuasive and relevant in alignment with the campaign's aims. As a result of this initial testing, the social marketing element of the campaign has been informed by the public's instinctive reactions, views on how clear the creatives explain key messages, and how they affect specific demographics and segments of driver who use Smart Motorways. Revisiting this testing to understand its continuing relevance would be useful.

4.3.2. *Communication activities evaluation guidance*

4.3.2.1. Evaluation frameworks and guidance used more widely provide added insight into what constitutes rigorous appraisal of communications campaigns. This section provides an overview of additional guidance to supplement the approach taken by National Highways in its application of the GCS model to the Breakdowns Campaign. As set out in the proposal for this independent review, insights from wider communications design best practice, as well as transport and public health more broadly, have been considered. This overview can be used by National Highways to inform amendments to their current evaluation methodology moving forward. Whilst the GCS Framework represents a standardised and tested approach to evaluating behaviour change and awareness campaigns for the public sector, the emphasis that the GCS model places upon outputs and outcomes needs to be balanced so as not to compromise the integrity of the intervention design process. Good practice will include the creation of intervention design guidance that reflects these frameworks and includes a clear articulation of the evidence for intervention, the behavioural diagnosis, theory of change, coded behaviour change elements and mechanisms for measuring change through the evaluation process. This requires ongoing involvement from an interdisciplinary team of evaluators and behaviour change experts ensuring that the design process is robust and delivery consistently reflects the emerging evidence.

4.3.2.2. The featured best practice insights included in this section may have already been taken into consideration by National Highways in some capacity. The approach taken, centred upon the

GCS Framework, could be further enhanced through the use of other best practice guidance used to complement communications and evaluation design. These additional sources have been identified as ways to support amendments to the current evaluation methodology, based on Agilysis' overall assessment of the approach adopted. National Highways has contributed to best practice and development in this area through the work of its Social Research and Behaviour Change Centre of Excellence, working to support behaviour change practitioners both within National Highways and in road safety partners across the country. There may be guiding manuals and frameworks produced by the Centre of Excellence, which are relevant to the further development of the Breakdowns communications campaign.

- 4.3.2.3. Similarly, additional guidance signposted to from the GCS Framework recommends that communications activities should aim to make the desired behaviour easy, attractive, social, and timely (The Behavioural Insights Team, 2014). This EAST Framework is best applied to communications campaigns by asking the following questions to generate strategic value during campaign planning (Government Communications Service, 2018):

Easy:

- Are you making the ask simple and straightforward, e.g., breaking bigger actions down into simple, concrete steps?
- Are you making the desired behaviour the default choice where possible?
- Are you requiring unnecessary additional effort to fulfil the ask, e.g., the number of click-throughs required on online adverts?

Attractive:

- Does your communications attract attention from your target audience?
- Is it personalised?

Social:

- Do a majority of people already engage in the desired behaviour? If so, can you demonstrate that to your target audience?
- Could people commit to the behaviour up front?
- Are you getting peers within your audience to advance your message?

Timely:

- Are you communicating with your audience when they will be most receptive to your message?
- How immediate can you make the benefits of change?
- Can you get people to plan for future actions now?

- 4.3.2.4. The following guidance has been selected from the European Commission communications best practice toolkit to assist the Breakdowns evaluation process to fully imbed a 'learn and improve' approach to the campaign. Strong communication planning requires that objectives are thoroughly informed by the following principles (European Commission, 2017):

- Be grounded in intelligence and thorough research
- Identify and target the segments of the intended audience
- Aim for specific behaviour (concise definitions)
- Develop motivating propositions
- Cut through complex environments
- Recognise people's whole experience (including how delivery affects experience)

- Worked out with policy, delivery, and stakeholders in mind to improve customer experience
 - Be open and accountable
- 4.3.2.5. Understanding, defining, and measuring objectives that are evidence-based is equally as important as the final outcomes and behavioural impacts. Without this, evaluation becomes more difficult, and the chances of success greatly reduced, better communication planning means better evaluation.
- 4.3.2.6. Formulating objectives that are grounded in intelligence can be achieved by answering essential question about the proposed campaign (European Commission, 2017):
- Who has an interest in the campaign issue(s)?
 - What other similar activity is going on elsewhere?
 - When are the campaign components? (to inform a roadmap of the proposed direction of the campaign)
- 4.3.2.7. Once sufficient intelligence has been gathered, it is imperative to map out the baselines for the communication intervention. The information and analysis gathered should help answer the following questions (European Commission, 2017).

Who?

- Who is involved with the policy/issue?
- What do they need from us?
- What do they think of us?
- What are the barriers to involvement?
- How important/engaged are they compared with the target audience?

What?

- What do we need the campaign to deliver?
- What has happened before?
- What worked in the past?
- What doesn't work anymore?

Where?

- Where do changes need to be made?
- Where are the key areas?
- Where is the best practice taking place?

Which means?

- What does all this mean for communication?
- What do we have to take account of?
- Who has to approve/agree/support us?

- 4.3.2.8. Answering these questions when formulating campaign objectives means that the objectives are more likely to be grounded in the actual purpose of the campaign, based upon what can realistically be achieved with the resource available. On the question of who the campaign is aimed at, it is important to consider the level of audience engagement and what commitment stage they are at regarding the desired behaviour. This again supports a targeted approach.
- 4.3.2.9. To operationalise the intelligence gathering and ensure that baseline metrics are at the centre of the campaign's evaluation framework, the chosen objectives should be formulated as a development process (European Commission, 2017). This demonstrates that the objectives are based on everything that has been done before:

Table 2 - Template for objective setting

Policy/issue phase	Audience	Communication Aim	Objectives/Journey	Activity
<i>What campaign phase are you at?</i>	<i>Who is the best audience for this?</i>	<i>What is your overall desired communication outcome?</i>	<i>What are your SMART communication objectives?</i>	<i>What activity will you take to achieve?</i>

4.3.2.10. Before all of these components are brought together in a harmonised process, the design and evaluation need to take a more critical approach to the core messages put forward, thinking about the campaigns ‘core script’ and ‘calls to action’: (European Commission, 2017)

- Do some words upset your audience or bore them? Good communication is about personalising the message and needs to address your aim: what do you need to say to engage your audience?
- What information do they need?
- What reassurance do they need?
- What action do they need to take? When?
- Have you said what the benefits are to them?
- If you are asking them to make a significant change, are you presenting a compelling reason for them to change?

4.3.2.11. Building upon the synchronised approach in Table 2, these elements should all be synthesised to provide a strong level of iteration between the campaign design process and objective setting, and the selected data collection and evaluation methods (shown in Table 3)

4.3.2.12. This communications guidance builds upon many components of the GCS evaluation framework, and this process is recommended to further improve the approach adopted for the Breakdowns campaign. (European Commission, 2017)

Table 3 - Communications Campaign Design and Evaluation

Context	Communication Aim	Audience	Communication Objectives	Messages/Content	Steps for Action	Activities	What are the signs of success for this activity?	How can the campaign be evaluated?
<p><i>Which policy will your communications campaign support?</i></p> <p><i>What are desired policy outcomes (what is the policy trying to achieve)?</i></p>	<p><i>What is your desired communication outcome?</i></p>	<p><i>Who is the best audience for this?</i></p>	<p><i>What are your communication objectives?</i></p>	<p><i>What would you like your audience to learn/known/support/do?</i></p>	<p><i>What are the steps you expect your audience to take?</i></p>	<p><i>What activity will you undertake to achieve it?</i></p> <p><i>Do they link back sufficiently to the previous steps?</i></p>	<p><i>How many people are doing/aware of/supporting the campaign objectives by their actions?</i></p>	<p><i>How can the campaign be evaluated?</i></p> <p><i>How will you collect data to inform your indicators?</i></p> <p><i>How will you analyse this data?</i></p> <p><i>By whom?</i> <i>And when?</i></p>

Wider Transport Sector

4.3.2.13. Communications campaigns in other areas of the transport sector also benefit from standardised best practice guidance. A prime and relevant example of this is the RESTRAIL Project. (RESTRAIL, 2014) This project, commissioned under European Union funding, has put forward a standardised framework for designing, implementing, and evaluating interventions aimed at preventing suicides on the rail network. It provides specific best practice guidelines for the evaluation of different types of interventions aimed at suicide prevention, including public communications and awareness-building campaigns. The guide has two main components:

- To provide guidance on structuring the planning, implementation, and evaluation phases of suicide prevention initiatives into a multi-step approach where optimal preventive levers are chosen, with selected measures reviewed
- To provide specific guidance on formulating intervention design and evaluation steps, including how to maximise intervention efficacy and enhance expected outcomes.

4.3.2.14. For each type of intervention included in the guide, case studies are put forward where interventions have incorporated elements of best practice from the guide. This compendium of case study interventions provides insights to optimise communication campaign appraisal. A targeted public awareness and educational campaign for trespassing is set out as a template of what considerations should be made for this type of intervention. Excerpts of social marketing content from relevant campaigns are shown to highlight best practice and approaches to be avoided. The key recommendations and warning points for communications campaigns relevant to the Breakdowns Campaign are:

4.3.2.15. Recommendations for campaigns to raise awareness: (RESTRAIL, 2014)

- Identification of target incidents and audience be clearly defined to make sure that the design of the campaign means that thorough impact assessment can take place
- A solid foundation of research, statistics, and relevant databases should be used in equal measure to ensure that:
 - a. core messages are optimised for different media channels (avoid blanket messaging unless evidenced)
 - b. stakeholders are involved at every stage of the campaign process
 - c. Communications campaigns that are based around media content will have little effect if not combined with other measures. It is recommended to reinforce information campaigns by combining them with physical/environmental measures, as well as supplementary incentives and enforcement procedures.

4.3.2.16. Warning points for campaigns to raise awareness:

- A quick decline in terms of impact is expected with this type of intervention; successful elements of the campaign need to be repeated for durable effect
- The language used may not be the only spoken language in a given area; foreign language content should therefore be used, where appropriate
- Acceptance may depend on the target incidents as well as on the approach chosen to deliver the message. For example, fear appeals (using explicit pictures of crashes, casualties, injuries and blood, and the related emotions of pain, sorrow and grief of victims and relatives) can generate undesirable responses, leading to poorer behaviour
- Poorly designed campaigns can be counterproductive (and lead to performance of unwanted behaviours, actually causing harm.)

Public Communication in Health

4.3.2.17. An exploration of a public health communication campaign evaluation framework (Coffman, 2002) identified two types of media campaigns in the public health area. The campaigns were defined by their campaign type and goal with the first focusing on individual behaviour change and the other on public will.

Table 4: Two types of Media Campaigns

Campaign Type/Goal	Individual Behaviour Change	Public Will
Objectives	<p>Influence beliefs and knowledge about a behaviour and its consequences</p> <p>Affect attitudes in support of behaviour and persuade</p> <p>Affect perceived social norms about the acceptability of a behaviour among one's peers</p> <p>Affect intentions to perform the behaviour</p> <p>Produce behaviour change (if accompanied by supportive program components)</p>	<p>Increase visibility of an issue and its importance</p> <p>Affect perceptions of social issues and who is seen as responsible</p> <p>Increase knowledge about solutions based on who is seen as responsible</p> <p>Affect criteria used to judge policies and policymakers</p> <p>Help determine what is possible for service introduction and public funding</p> <p>Engage and mobilize constituencies to action</p>
Target Audience	Segments of the population whose behaviour needs to change	Segments of the general public to be mobilised and policymakers
Strategies	Social marketing	Media, advocacy, community organising and mobilisation
Media Vehicles	Public service/affairs programming: print, television, radio, electronic advertising	News media: print, television, radio, electronic advertising
Examples	Anti-smoking, condom usage, drunk driving, seat belt usage, parenting	Support for quality childcare, after school programming, health care policy

4.3.2.18. The public health communications guidance presented outlines that using a social marketing approach is most appropriate to achieve individual behaviour change and campaign objectives. Evaluation is divided into four main types: formative, process, outcome, and impact.

Table 5: Evaluation Types

Evaluation Type	Definition/Purpose	Example Questions
Formative	Assesses the strengths and weaknesses of campaign materials and strategies before or during the campaign's implementation.	How does the campaign's target audience think about the issue? What messages work with what audiences? Who are the best messengers?
Process	Measures effort and the direct outputs of campaigns — what and how much was accomplished. Examines the campaign's implementation and how the activities involved are working	How many materials have been put out? What has been the campaign's reach? How many people have been reached?
Outcome	Measures effect and changes that result from the campaign. Assesses outcomes in the target populations or communities that come about as a result of strategies and activities. Also measures policy changes	Has there been any effective change (beliefs, attitudes, social norms)? Has there been any behaviour change? Have any policies changed?
Impact	Measures community-level change or longer-term results that are achieved as a result of the campaign's aggregate effects on individuals' behaviour and the behaviour's sustainability. Attempts to determine whether the campaign caused the effects.	Has the behaviour resulted in its intended outcomes (e.g. lower cancer rates, less violence in schools) Has there been any systems level change?

4.3.2.19. The Rainbow Framework (Better Evaluation, 2014) is included as part of the UK Government health and well-being guidance evaluation. The tool is aimed at those new to evaluation and incorporates themes related to logic modelling, planning, data collection, ethics, needs assessments, communications and evaluation planning. It is a clear and comprehensive guide, taking readers from engaging stakeholders to ethical considerations to developing capacity and meta-evaluations. It does not include economic evaluations.

4.3.2.20. The WHO provides guidance for evaluating campaigns and other complex communication interventions (WHO, 2022). When communicating for public health improvements, the principles for effective communication include the following features:

- Accessible
- Actionable
- Credible
- Relevant
- Timely
- Understandable

4.3.2.21. The use of logic models and evaluation at every stage of the communications campaign and intervention is to be considered, from a formative baseline evaluation to mid-point evaluation as the project progresses to establish if a project is advancing towards its goals, and finally a summative evaluation to be conducted at the end to compare outputs and outcomes with baseline measures. The following questions should be considered at any stage of the logic model to evaluate the communication:

- Were communication activities completed? (Activities)
- Were the required numbers and types of products developed? (Outputs)
- Did audiences take recommended actions or demonstrate new awareness/skills? (Outcomes)
- Were health goals achieved? (Impact)

4.3.2.22. Using the example and practice of public health campaigns and other communication evaluation frameworks, the main area of focus for continuous improvement and assessment is evaluation at every step of the campaign design and delivery.

4.3.2.23. Measuring impact by defining success and purpose is vital as it helps shape the communications delivered, plan and account for improvement and reassess the effectiveness. The wider transport and public health sector evaluations all support the GCS Framework and can be used as supplementary guidance to achieve best outcomes.

5. CONCLUSIONS

5.1. ADHERENCE TO THE GCS FRAMEWORK

- 5.1.1. The comprehensive review of relevant National Highways' documentation related to the development and evaluation of the Breakdowns campaign found strong application of the Government Communication Service's evaluation Framework.
- 5.1.2. Despite the origin of the Breakdowns campaign not being representative of how interventions are usually implemented by National Highways, the level of adherence is high.
- 5.1.3. Good evaluations of communication campaigns should use the evidence identified at the input stage to set strong objectives, and whilst the usual data sources were not the foundation of this campaign, available evidence was used to inform the logic model and demonstrate the connection between the target audience experience and the core objectives. There was consistent measurement of campaign inputs, including total aggregate spend, spend to date on media, and content creation.
- 5.1.4. Focusing on objective setting, there is evidence of C-SMART and OASIS planning used in the evaluation, take from supplementary guidance in the GCS Framework. (Government Communications Service, 2018)
- 5.1.5. For the Breakdowns campaign, National Highways measured the recommended outputs, as set out in the GCS Framework, including measuring communication and creative activity, estimating content reach and partnership outreach. The reach of each output activity (proportion of target audience reached) is measured through a key performance indicator (KPI) framework at each wave. Outputs feature prominently in consideration of how lessons learnt can inform recommendations for future development.
- 5.1.6. The demonstration of recommendations which were informed by 'lessons learnt' were a strong part of the campaign outtakes, and which mapped the evolution of the campaign between different waves. Outtakes provide an indication of the campaign's effectiveness, and the evaluation measures the attitudes of the target audience to core messaging and campaign content, messaging sentiment, as well as key metrics related to the awareness and confidence objectives. There is a focus on demonstrating success through quantitative (closed-response campaign questionnaire, for example) and qualitative research methods (public correspondence and customer testing, for example). Measuring the effectiveness of the campaign through core metrics linked to the main objectives themselves is the pillar of the approach taken across all three completed waves of the campaign.
- 5.1.7. Critical analysis and identification of how the campaign could be improved and delivered to better achieve the stated objectives is considered at various stages of the evaluation. This includes assessing core message reception, driver segmentation and targeting approach, message awareness and recall, and campaign material efficacy and partner input.
- 5.1.8. Measuring outcomes is the primary focus of the evaluation, with sufficient consideration given to how effective the campaign has been in achieving its stated aims across the waves. This analysis is supplemented with a measurement of how trustworthy drivers believe National Highways to be in terms of the dissemination of advice and information. Together, these measurements provide a solid basis for gauging the behavioural impact versus the organisational impact, which helps to inform National Highways on the continuation and development of the campaign. It is positive that impact assessment is treated as a distinct

element of evaluating the outcomes of the campaign. In this area, National Highways has extended beyond the GCS Framework

5.2. GAPS IN APPROACH

- 5.2.1. There are some areas where National Highways' adherence to the GCS Framework could be improved. The campaign inputs related to the evidence base are not as comprehensive as they could be (but this does relate to the campaign origins and time pressures). It has meant that assumptions were made when setting objectives and this could influence the campaign effectiveness. Undertaking behavioural analysis using appropriate behaviour change models could ensure that the campaign is targeting the correct issue and that the evaluation is monitoring the right metrics and setting the most appropriate objectives. A 2019 National Highways report, Behavioural Insight Programme, provided relevant insights which explored the influences on driver behaviour related to breakdowns. In interview, it was stated that this was used to inform the campaign but greater reference to the findings would have explained how the research influenced the objectives. The DfT set the focus of the campaign to increase awareness and confidence, but pre-campaign research found that confidence about what to do in a breakdown was already relatively high.
- 5.2.2. The key campaign messaging and recommendations did not always evolve between campaign waves, although there is evidence of campaign feedback reinforcing the aims in each wave. Due to the infancy of the Breakdowns campaign, the same logic model was used across the campaign waves, and it may have been useful to revisit the logic model to demonstrate how input and outcomes are developed as evaluation findings emerge. An iterative process for the development of the logic model between the campaign waves would have incorporated the lessons learnt which may have emerged from the discovery of new data sources, external evidence and a review of logic model components including assumptions and external factors.
- 5.2.3. National Highways' campaigns are subject to periodic reviews which affect the direction and level of targeted funding and prioritisation for specific behaviour change campaigns, which means it is not possible to set timelines for achieving specific objectives. The GCS Framework recommends setting medium and long-term uplift targets and the way in which campaigns do not necessarily have a defined end-date limits the use of targets. National Highways defines short-term outcomes on the basis that they are objectives to be achieved within the current campaign wave. Medium-term outcomes for campaigns are those which are to be achieved after multiple waves; allowing for confidence and capability to improve. Whilst National Highways aims to define these outcomes consistently, the relevant information is not always provided, meaning that it is difficult to always set these out in evaluation plans and campaign reporting.
- 5.2.4. Whilst there is a strong level of adherence to most recommended outcome metrics in the GCS Framework, intended behaviour change is not measured explicitly in the evaluation. This is due to possible self-reported biases related to intended behaviour, and therefore knowledge and awareness were used as a proxy of behaviour change.

5.3. SUGGESTED IMPROVEMENTS

- 5.3.1. Based on the evidence which demonstrates that inputs could be strengthened for the Breakdowns campaign, the following improvements have been suggested:
- A deeper and richer evidence base to inform campaign design
 - Greater application of behavioural insights from previously commissioned research

- A reviewed and dynamic theory of change which is underpinned by a relevant behavioural model
 - A developing rationale which is increasingly informed by evaluation
- 5.3.2. With outputs, the success in terms of reach is set out comprehensively. One way the evaluation could be improved is to:
- Consider how to adapt outputs to the target audience, in terms of content and delivery mechanisms, with a view to optimising their implementation. This will help to maximise the reach and efficacy of core messages.
- 5.3.3. For Breakdowns campaign outcomes, the following improvements have been suggested:
- Provide further commentary and analysis on how and why metric changes have occurred, thinking about which campaign elements have been the most effective and ineffective based on target audience reception and empirical observation
 - Expand consideration of how cause and effect can be explored in relation to specific campaign components (as is already achieved for 'campaign advertisements' through the questionnaire design)
 - Consider how findings reflect or contradict the pre-existing evidence base
 - Consider how to best ensure that data collection and analysis is carried out throughout the campaign, using available incident databases to full effect

5.4. FUTURE APPROACHES

- 5.3.4. No new methodology has been proposed as the GCS Framework, and National Highways' application of it, include the factors required to conduct a robust evaluation. Best practice insights from intervention design and evaluation from other sectors are also included to support improvements to the current evaluation methodology. There are recommendations as to other data sources which could be used to measure on-road behaviour and inform campaign performance and the effectiveness of communication strategies.
- 5.3.5. Motorway Incident Detection and Automatic Signalling (MIDAS) data monitors traffic flow across motorway lanes, detecting events such as breakdowns. For evaluating the campaign, MIDAS data could provide breakdown insights in multiple ways:
- a. It can be used to identify specific locations where breakdowns are more prevalent, providing an opportunity to focus future Breakdowns campaigns in that specific area.
 - b. It can also be used to monitor the number of breakdowns over time, providing a metric of campaign effectiveness. Given that the loops monitor traffic flow, rates for the number of breakdowns per million vehicles could be created to measure any changes in breakdown rates over the campaign lifetime.
 - c. As traffic flow is monitored by individual lane, the proportion of vehicles in each lane could be analysed to determine if a greater number of drivers are opting to 'keep left' as their normal driving behaviour. This would demonstrate an absorption of the message that keeping left as they use the SRN will assist drivers if a breakdown does occur.
- 5.3.6. Other data sources which could provide more insight include the Control Works data, which details the circumstances of incidents on the SRN.
- 5.3.7. Qualitative testing of the campaign creative was undertaken at the development stage and revisiting this could be useful to gauge the continuing relevance of the campaign content. Whilst marketing and insight generating activities can be costly, incorporating some form of customer testing during the 'live' period of the campaign is beneficial for evaluating the

potency of 'creative content'. This in turn can inform how to strike the correct balance between quality assured content and maintaining a cost-effective approach.

5.3.8. Other evaluation frameworks for communications campaigns were reviewed. The EAST framework, the European Commission communications best practice toolkit, RESTRAIL, a public health communication campaign evaluation framework, the Rainbow Framework, and WHO manual all provide guidance on additional questions that can be asked in the design and delivery of campaigns and their evaluations. These questions explore the influences on behaviour and help to target the content to the correct audience. In turn, this process helps to set the evaluation framework and determine the methodology employed and the metrics monitored. Using one or more of these additional frameworks will extend the usefulness of the GCS Framework and allow National Highways to refine campaign content and evaluation processes.

5.3.9. In summary,

- National Highways has followed the GCS Framework for the Breakdown campaigns, incorporating best practice approaches into the evaluation process
- There are opportunities moving forward to utilise research and analysis to strengthen the inputs and objectives used in Breakdown campaigns
- Extending the way in which internal behaviour change experts are involved can help to place the unwanted and desired behaviours in context, influencing the messages provided and the measurements collected
- Quantitative data, collected on the SRN, could be used to provide a snapshot of actual driver behaviour (both in terms of the rate of breakdowns and the proportion of drivers using the left-hand lane) at specific locations and over the lifetime of the campaign
- Additional qualitative testing could help to gauge the continuing relevance of the campaign content and enhance the lessons learnt
- Other evaluation frameworks from wider transport campaigns and public health communications design best practice can be used to enhance the GCS Framework and delve more deeply in to understanding the problem being addressed by the campaign.

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