

## Suicide prevention measures on the transport network: What is effective for reducing rail suicides?

### Invitation to Tender for an evidence review

<b>Commissioners</b>	Olivia Cayley, Head of Rail at Samaritans Dave Brown, Senior Programme Manager (Rail) at Samaritans Katie Hardcastle, Senior Research Manager at Samaritans
<b>Budget</b>	Up to £15,000
<b>Proposals submitted</b>	7 <sup>th</sup> April (23:59)
<b>Applicant interviews</b>	Between 10 <sup>th</sup> and 19 <sup>th</sup> April
<b>Contract duration</b>	May to October 2024 (6 months)

We are seeking an experienced evidence synthesis specialist or team to deliver an evidence review of what is currently known about the effectiveness of suicide mitigation and reduction measures on rail and road networks, with a view to their further applicability to the overground rail network in Great Britain. The review should have a particular focus on mitigation and prevention measures which are unique to the rail environment, as well as those that exist on the wider transport network which may have applicability to the rail network (e.g. bridges, CCTV etc). The commissioned contractor will be responsible for all aspects of the evidence review including the selection of most suitable investigative research methods and methodology and recommendations for future research questions.

This document provides brief background to the project and information about Samaritans. It includes requirements of the research parameters and synthesis, key milestones, budget, and how to apply.

### Background and context

Samaritans is the UK and Ireland's largest suicide prevention charity. Our listening service is always open - 24 hours a day, 365 days a year - and we answer a call for help every 10 seconds. We also provide support in communities, prisons, schools, universities and workplaces, work with governments to change policy, strive to increase safety in high-risk locations, work with the media to ensure that suicide is reported responsibly, host coalitions, conduct research, and publish ground-breaking industry guidance.

As part of our suicide prevention work in high-risk locations, Samaritans works on the rail and road networks, holding contracts with Network Rail and National Highways. These programmes comprise multiple workstreams; providing expert guidance and advice as well as delivering

suicide prevention initiatives in key areas such as crisis signage, staff training, bystander campaigns, promotion of interventions and advising on physical mitigations.

The need for suicide prevention programmes in these high-risk locations is well evidenced. In 2022/23, 240 suspected suicides occurred on the rail network, accounting for around 4% of all suicides in the UK. As a proportion of suicides within the general population, the amount of people taking their life on the railway has been relatively static (4 to 5%) for the last decade. On the Strategic Road Network (motorways and some A roads), National Highways estimate that there are 50 to 60 suicides every year.

There is a growing body of general research on suicide attempts on the rail <sup>1,2,3</sup> and road <sup>4, 5</sup> networks. However, by design, these studies have focused more on increasing understanding of why people take their lives on the transport network and who might be more at risk of choosing rail or road as a suicide methodology <sup>1, 2, 3, 4</sup>. The current research project seeks to synthesise the existing evidence <sup>6</sup> on what dissuades and prevents people from taking their life on the rail and road networks - which we term 'mitigation and prevention methods' – with a view to informing future suicide prevention strategy on the overground rail network.

### Aims and research questions

The aim of this project is to synthesise existing research evidence on the effectiveness of suicide mitigation and reduction measures across the transport network, with a particular focus on the further applicability of the findings to the overground railway network in Great Britain. This evidence review seeks to address the following research questions:

- What suicide prevention measures have been implemented across transport networks, and what evidence exists regarding their effectiveness?
- How do the characteristics of the transport network influence the effectiveness of different suicide prevention strategies?
- What gaps exist in the current research on suicide prevention measures within the transport network?
- What recommendations can be made for future suicide prevention strategies and research for rail suicide prevention?

---

<sup>1</sup> Norman et al. (2022). Suspected Suicides on the Railways in England: A Psychological Autopsy Study. Research report

<sup>2</sup> Marzano et al. (2019). Factors deterring and prompting the decision to attempt suicide on the railway networks: findings from 353 online surveys and 34 semi-structured interviews. *The British Journal of Psychiatry*. 215. 1-6. [10.1192/bjp.2018.303](https://doi.org/10.1192/bjp.2018.303)

<sup>3</sup> Marzano, Lisa (2018). Why do people take their lives on the railways in Great Britain? An update of available evidence. Research report

<sup>4</sup> Norman et al. (2023). Factors prompting and deterring suicides on the roads. *BJPsych Open*. 9. 1–8. [10.1192/bjo.2023.52](https://doi.org/10.1192/bjo.2023.52).

<sup>5</sup> Samaritans & Design Council. Innovative design and technology approaches to preventing suicide at high-risk locations on the strategic road network. Research report

<sup>6</sup> Barker E, Kolves K, De Leo D. Rail-suicide prevention: Systematic literature review of evidence-based activities. *Asia Pac Psychiatry*. 2017 Sep;9(3). doi: [10.1111/appy.12246](https://doi.org/10.1111/appy.12246). Epub 2016 Jul 14. PMID: 27412891.

We would use the findings of this research review to inform future priorities and influence decisions on investment in the subsequent years.

Whilst the scope of the review should cover global literature, consideration should be given to external validity and the applicability of the research findings to implementation on the overground rail network in Great Britain. For example, it is known that the installation of platform edge doors on rail networks reduces suicide rates <sup>7</sup>, however this is not possible to implement at scale on the overground rail network in Great Britain due to the diverse range of rolling stock in operation.

Consideration should be given to whether to include interventions which pertain to trespass reduction <sup>8</sup>, if deemed applicable to suicide prevention.

Consideration should also be given to the cost effectiveness of mitigation and prevention methods, as well as potential risks and unintended consequences of implementation.

### Roles and responsibilities

Responsibility for the project within Samaritans will lie with Dave Brown who will manage the contract for Samaritans, and with whom the successful provider will agree a programme of work and deadlines for deliverables. The contractor/s will be expected to keep the Samaritans Project Manager informed on progress through regular project management meetings.

The commissioned researcher/team will adopt a clear, transparent and well-documented approach to the search, identification and synthesis of studies, following best practice guidelines. For example, registering the review protocol with PROSPERO, and adhering to reporting guidelines (e.g., PRISMA). They will work with the Samaritans Project Manager to finalise search parameters and study inclusion/exclusion criteria.

The contracted evidence synthesis specialist or team will be responsible for:

- Determining the most appropriate method of evidence synthesis for the research
- Designing and implementing systematic approaches for identifying and reviewing academic literature
- Designing and implementing systematic approaches for identifying and reviewing a selection of grey literature
- Determining and actioning the most appropriate analysis method for conducting a critical appraisal of included studies to assess the strength of the evidence
- If required, making more informal approaches to subject matter experts and organisations who may be able to share relevant publications or insights

---

<sup>7</sup> Chung YW, Kang SJ, Matsubayashi T, Sawada Y, Ueda M. The effectiveness of platform screen doors for the prevention of subway suicides in South Korea. *J Affect Disord*. 2016;194:80-83. doi:10.1016/j.jad.2016.01.026.

<sup>8</sup> Havârneanu, GM, Burkhard J-M, Paran F. A systematic review of the literature on safety measures to prevent railway suicides and trespassing accidents. *Accident Analysis & Prevention*, Volume 81, 2015, Pages 30-50, ISSN 0001-4575, <https://doi.org/10.1016/j.aap.2015.04.012>.

- Synthesis and reporting of findings in a clear and accessible research report, highlighting key themes, effectiveness of interventions, and areas for further research
- Liaising with Samaritans throughout the project to provide updates and discuss preliminary findings

Samaritans will provide:

- Oversight and governance through regular project management meetings. This shall include providing guidance on the scope of the review and ensuring the review addresses the key research questions relevant to Samaritans’ work
- Constructive feedback on initial findings and draft outputs
- Subject matter expertise in both suicide and rail suicide prevention. This includes insights into effective suicide prevention strategies, understanding of the operational context of rail and road networks, and awareness of the challenges and opportunities in implementing suicide mitigation measures
- If required, Samaritans can facilitate connections with key stakeholders in the field, including researchers, practitioners and policy-makers
- Upon completion, Samaritans will play a crucial role in promoting and disseminating the findings of the review to relevant industry stakeholders. This includes those involved in policy, practice, and advocacy in suicide prevention on the transport network

### Deliverables

The commissioned individual/team will be expected to initially submit a technical report of findings, and an excel spreadsheet with extracted study details that addresses the review questions.

We would also like them to present their findings to the Network Rail central suicide prevention team (CSPT) and rail industry suicide prevention working group / strategy group, and lead a discussion of evidence gaps and emerging priorities. A written summary of this activity should be provided in the form of a briefing paper or similar.

The table below outlines the deliverables expected.

<b>Title</b>	<b>Suicide prevention measures on the transport network: What is effective for reducing rail suicides?</b>
<b>Purpose</b>	To synthesise existing evidence on the application and effectiveness of suicide mitigation and prevention measures on the transport network in order to reduce fatalities on the overground rail network in Great Britain
<b>Composition</b>	<ul style="list-style-type: none"> <li>• Detailed review protocol, including scope of the review, method and approach (including databases searched and grey literature identification strategy), inclusion criteria and assessment of quality</li> <li>• Identification of data gaps and recommendations for further research.</li> <li>• A PowerPoint presentation and Briefing Paper summarising the key findings</li> <li>• A written research report</li> </ul>

<b>Sign off and dissemination</b>	<p>The final research report will be signed off by Samaritans. The research will be shared internally and within the rail industry. It may be presented by Samaritans at external meetings, conferences etc. The research findings will be used to inform decisions about areas for further research and influence decisions on prioritisation and investment in rail suicide prevention mitigations.</p> <p>Should the commissioned researchers wish to publish the research within an academic journal, the Samaritans Project Manager retains the right to sign-off on the proposed article and be included as co-author.</p>
-----------------------------------	--

## Budget

The budget for this work will be set at a maximum fee of up to **£15,000** including VAT. Please include your best quote for this piece of work with your submission. Criteria for payments will be agreed via contracts.

## Timelines and milestones

The proposed project timelines are given below. Applicants will need to provide a more detailed plan considering these key milestones.

Date	Activity
7 <sup>th</sup> April	Deadline for submission of proposals
10 <sup>th</sup> – 19 <sup>th</sup> April	Interviews with shortlisted applicants
Week of 22 <sup>nd</sup> April	Terms agreed and contract signed
Week of 29 <sup>th</sup> April	Inception meeting
Week of 27 <sup>th</sup> May	Design and approval
3 months	Data collection and analysis
2 months	Report collation
31 <sup>st</sup> October	Report submitted

## Contract

The successful applicant(s) will be required to enter into a contract with Samaritans, within Samaritans' standard terms and conditions. This will include conditions such as: 1. Completion of the services within the timeframe specified. 2. Reduction of payment or non-payment for work not completed. 3. The work cannot be sub-contract to a third party without the prior written consent of Samaritans. 4. Agreed input from Samaritans during reviewing and editing stages. 5. Terms related to intellectual property. Once the contract is agreed and signed, the successful applicant(s) and Samaritans will be required to adhere to all terms and conditions.

We encourage all interested parties to contact us prior to submitting their proposal. Please contact Dave Brown at [d.brown@samaritans.org](mailto:d.brown@samaritans.org)

To be considered for this work, please submit a document briefly outlining:

- Background of you/your organisation
- Previous experience and examples of similar evidence synthesis projects.
- Proposed method of evidence synthesis
- Proposed timelines, including key milestones to take account of the dates included above
- Breakdown of costs (including in-kind costs)

Although references are not required as part of the proposal, Samaritans may request them before deciding on the successful applicants.

All applications must be submitted in writing by **23:59 on 7<sup>th</sup> April**

Samaritans may contact the applicant to clarify aspects of the submission. Samaritans reserves the right to invite shortlisted applicants to an interview to discuss their proposal in detail, however the decision may be taken based on the written submission alone. The successful candidate/organisation will be notified no later than **22<sup>nd</sup> April**.

We will make every effort to ensure the application process and working relationship is as accessible as possible. If you require this invitation and any other documents and communications in a different format or have any other accessibility requirements for the tender process and work, please let us know

Please apply to Dave Brown at [d.brown@samaritans.org](mailto:d.brown@samaritans.org)

### Further information

For any further information please contact Dave Brown at [d.brown@samaritans.org](mailto:d.brown@samaritans.org)