



Report to Partnership Meeting 12 September 2025

Research and Strategy Delivery

Kirkwall Autolink Project / UK Government Consultation

PURPOSE OF REPORT

To update Members on developments in the Kirkwall Autolink project, a Connected and Automated Mobility (CAM) Pathfinder Feasibility Study funded by Innovate UK. The report also shares a consultation response submitted by officers in response to the UK Government consultation on the Automated Passenger Services (APS) permitting scheme under the AV Act 2024.

BACKGROUND

The Kirkwall Autolink project is led by Urban Foresight, with support from Aurigo and HITRANS. It is one of 14 projects across the UK to receive funding through the CAM Pathfinder Feasibility Studies Competition, part of the UK Government's £150 million Connected and Automated Mobility (CAM) programme.

The project explores the feasibility of deploying an autonomous zero-emission shuttle service in Orkney, connecting key transport hubs—Kirkwall Harbour and Kirkwall Airport. As a rural and remote location, Orkney presents a compelling testbed for understanding how autonomous mobility solutions can support connectivity in non-urban environments.

The feasibility study brings together technical analysis, stakeholder engagement, and strategic business planning to develop an evidence-based case for potential commercial deployment. In doing so, the study aims to demonstrate how innovative mobility solutions can address challenges such as social isolation, driver shortages, and transport emissions in rural areas. The work builds on previous work in SATE 1 looking at a Surface Access Plan for Kirkwall Airport.

The Highlands and Islands Transport Partnership (HITRANS) is contributing to the project by ensuring the outcomes align with regional transport priorities, and that community engagement reflects the local transport needs and aspirations.

PROJECT UPDATE

The project officially commenced in July 2025 following the public announcement on 21st July.

Key activities currently underway include:

- Stakeholder engagement to identify local priorities, constraints, and aspirations for the service.
- Technical scoping and route analysis between Kirkwall Harbour and Kirkwall Airport to assess operational viability of an autonomous shuttle.
- Development of a business case for the future deployment of autonomous services tailored to rural environments.
- Integration of social and environmental considerations to ensure responsible innovation.

While the project is at the feasibility stage, early discussions and assessments have highlighted the potential for autonomous shuttles to support sustainable, cost-effective, and inclusive transport in Orkney and similar regions.

The project builds on previous trials in the Highlands and Islands and leverages learning from earlier HITRANS collaborations with Aurigo and other industry partners. It also supports the long-term vision of using new technologies to transform access to services in rural and island communities.

UK GOVERNMENT CONSULTATION ON AUTOMATED PASSENGER SERVICES

Drawing from our learning in Autolink and previous work funded through the EU PAV and Ride 2 Autonomy projects and the collaboration with University of Glasgow through UK Government's CCAV HITRANS officers submitted a proposal to the UK Government's consultation on the Automated Passenger Services (APS) permitting scheme under the AV Act 2024. The full proposal is attached as an Appendix to this report.

The paper proposes that rural and communities underserved by public transport be prioritised in future autonomous vehicle (AV) pilot deployments, ensuring innovation benefits all regions—not just urban centres.

Key Points:

- **Context and Mission:**
HITRANS represents one of the UK's most rural regions, covering 40% of Scotland's landmass. It seeks to ensure that transport innovation addresses the challenges of remote and logistically complex areas.
- **Track Record:**
HITRANS has led two CAV pilot projects in Inverness and is experienced in testing AV services in rural contexts, including working with leading industry and academic partners.
- **Core Proposal:**
HITRANS proposes that the APS permitting process:
 - Prioritise pilot deployments in remote or transport-poor communities
 - Test AVs in challenging rural environments to broaden evidence on functionality, safety, and public value
 - Focus on inclusivity, especially for older adults and those with disabilities
- **Collaboration Offer:**
HITRANS offers to support future AV deployments by identifying suitable rural test sites, facilitating permissions, engaging communities, and supporting impact evaluation.
- **Alignment with Government Goals:**
The proposal supports the UK Government's priorities around accessibility, innovation, and equitable deployment under the APS scheme.

BUDGET

HITRANS receive 100% funding based on the organisation classification within the UKRI programme. HITRANS budget allocation is £32,967.

RISK REGISTER

RTS Delivery

Impact – Positive

Comment – *The project aligns with RTS goals by testing innovation and sustainable rural transport models.*

Policy

Impact – Positive

Comment – *Supports the implementation of Scotland's CAV Roadmap and the UK's Industrial Strategy.*

Financial

Impact – Positive

Budget line and value – *Full funding is secured from Innovate UK under the CAM Pathfinder programme.*

Equality

Impact – Positive

Comment – *Promotes inclusive transport access in remote areas and helps address rural transport inequality.*

RECOMMENDATION

Members are asked to note the report.

Report by: Ranald Robertson

Designation: Partnership Director

Date: 27th July 2025

Background papers: Appendix A – Consultation Response Proposal Paper

Appendix A - Proposal for Enhancing Accessibility through Pilot Deployments of Automated Passenger Services

Submitted by:

Highlands and Islands Transport Partnership (HITRANS)

Date: 23 July 2025

1. Introduction

The Highlands and Islands Transport Partnership (HITRANS) welcomes the UK Government's consultation on the Automated Passenger Services (APS) permitting scheme as part of the wider implementation of the **Automated Vehicles (AV) Act 2024**. We are particularly encouraged by the Government's ambition to support the deployment of commercial self-driving services and place safety, accessibility, and innovation at the heart of future legislation.

As a regional transport partnership with a strategic remit to improve connectivity across some of Scotland's most rural and logistically complex communities, HITRANS believes strongly that automated vehicle (AV) pilots must include deployments in areas where **public transport options are currently limited or absent**. This presents an opportunity to test AV technologies in diverse environments while also delivering tangible benefits to communities that are currently underserved.

2. About HITRANS and Our Commitment to Innovation

HITRANS serves the Highlands and Islands of Scotland—a region that spans from **North Ronaldsay to Machrihanish and from Vatersay to Cullen**. Though home to only **10% of Scotland's population**, our region represents **40% of the country's landmass**, creating unique challenges for transport and connectivity.

Strategic Context

Our newly submitted Regional Transport Strategy (RTS), endorsed by our five partner councils and key stakeholders, is built around **six strategic objectives and 11 thematic priorities**. Among them, the theme "**Embrace New Technologies**" is central to our efforts to shape a **just**

transition to a post-carbon, sustainable transport future. This includes ensuring that innovation in transport systems is **inclusive of rural realities—not just metropolitan models.**

We believe transport technology should be tested in **Edinbane as well as Edinburgh.** A solution that performs well in the rural Highlands will almost certainly adapt successfully to urban environments—but the reverse is often not true.

3. HITRANS' Experience with Connected and Autonomous Vehicles (CAV)

HITRANS has been a **pioneer in testing the feasibility and societal value of CAV technologies** within Scotland. With support from UKRI and in partnership with leading institutions and private sector innovators, HITRANS has:

- Delivered two CAV **pilot routes**:
 - Inverness Airport Terminal to Inverness Airport Station
 - Inverness College UHI Campus to the National Treatment Centre and Retail/Business Park
- Modelled a further extended route connecting to Raigmore Hospital
- Explored **responsible business models** and community integration with the University of Glasgow's Adam Smith Business School
- Worked with partners including Aurrigo, Navya, Stagecoach, and Darwin to understand the **connectivity and infrastructure demands** of CAV in rural and mixed-use settings

Our findings underscore the potential of AV services to support rural mobility needs, particularly by:

- Offering **flexible, on-demand transport**
 - Reducing **transport poverty**
 - Operating efficiently on **low-traffic, single-track rural roads** with national speed limits and weather challenges
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4. Proposal: Prioritising Accessibility in Pilot Deployment Permits

As the Government moves forward with its APS permitting scheme, HITRANS proposes that **accessibility for underserved or isolated communities** be **formally prioritised in the awarding of pilot deployment permits.**

Proposal Objectives

1. **Broaden the testing environment** for automated vehicles to include a range of urban, semi-urban, and rural settings
2. **Accelerate deployment in areas with limited or no public transport**, ensuring communities can directly benefit from innovation
3. **Improve real-world understanding** of how AV technology functions in challenging physical and climatic conditions
4. **Support inclusion and access** for older adults, disabled persons, and those facing transport barriers

Why Rural Pilots Matter

- They **stress-test** AV performance in narrow, variable road conditions
 - They demonstrate **public value** in areas with few alternatives
 - They help develop **business and service models** adapted to decentralised populations
 - They improve **public confidence** and **political support** for wider deployment
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5. HITRANS' Offer of Collaboration

HITRANS is committed to supporting both Government and industry in the safe, effective, and equitable roll-out of automated passenger services. Our region offers a **unique and proven environment for innovation**, and we propose to collaborate with permit applicants and national bodies to ensure pilot deployments deliver both meaningful testing outcomes and real benefits for communities.

Highlands and Islands: A Proven Innovation Testbed

The potential for our region to serve as a **living laboratory for innovation** has already been demonstrated through the **Sustainable Aviation Test Environment (SATE)**—a UKRI Future Flight Challenge-funded project led by HITRANS. SATE brought together a wide range of partners to test low- and zero-carbon aircraft in live environments across the Highlands and Islands, proving the area's suitability as a **national exemplar for early-stage, high-impact transport innovation**.

Just as SATE has shown that remote and rural areas are ideal for developing and validating new models of aviation, we believe that the **deployment of connected and autonomous vehicle (CAV) technologies** can follow a similar approach. By using our region as a proving ground, developers can:

- Assess how AV systems perform in complex, real-world conditions
- Collaborate with stakeholders across the public, private, and academic sectors
- Create replicable business and service models that can scale to other regions

- Build public trust and generate meaningful community insights

Our Commitment

As part of our support for CCAV deployments, HITRANS can:

- **Identify and help prepare suitable pilot sites** across the Highlands and Islands with a range of road types, accessibility challenges, and transport needs
- Facilitate **local authority engagement** and permissions
- Coordinate with **community groups and accessibility advocates** to ensure deployments are inclusive
- Support **data gathering, impact evaluation**, and knowledge exchange with UK partners
- Help extend pilots into **urban and semi-urban environments** in our region, recognising the importance of diverse deployment scenarios

We believe this collaborative approach builds on the successful model demonstrated by SATE and is fully aligned with the **UK Government’s ambition to position the country at the forefront of sustainable, inclusive mobility innovation.**

6. Alignment with Government Priorities

Our proposal aligns closely with several key elements of the APS permitting framework, including:

- The need to **enhance accessibility**
 - The intention to build a **robust evidence base** through pilot activity
 - The requirement for **comprehensive testing environments** that reflect the UK’s transport diversity
 - The emphasis on **safe, sustainable deployment** and a just transition
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7. Conclusion

The upcoming APS permitting scheme offers a unique opportunity to ensure that **no community is left behind in the evolution of transport technology.** HITRANS urges the Government to prioritise accessibility and regional inclusion as core criteria for pilot deployment approval—and we stand ready to work with partners to ensure that AV pilots are not only innovative, but also impactful.

We look forward to contributing to the ongoing consultation and engaging in further discussion.