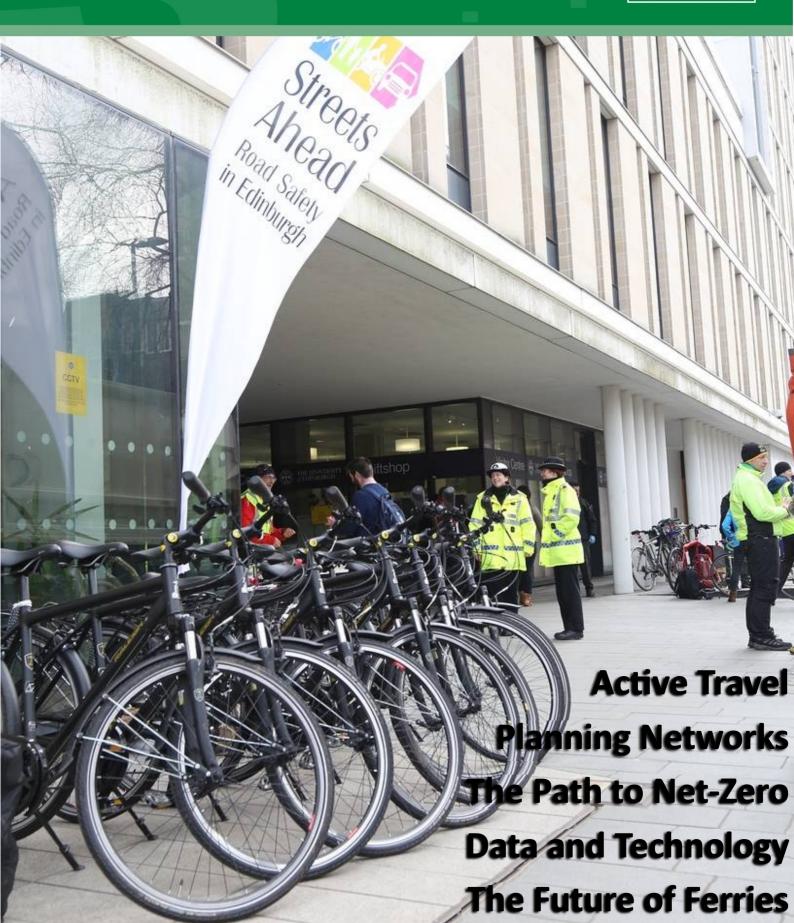
# Scottish transport review

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#### **Contents**

Active Travel	2-9
Planning, Data and Technology	10-15
The Path to Net Zero	16-20
Ferries	21-24

# **Time to Raise Standards in Our Delivery**

# STSG Chair John Yellowlees says the huge increase in investment in active travel is a great opportunity but also a new challenge

There has been a very welcome increase in the budgets for active travel. Walking is the most popular way to travel, and Transport Scotland also say it should be the most important mode, at the top of the hierarchy when people plan a trip. However, transport authorities have a lot to do to show that they are finally giving active travel the priority it deserves.

It has taken Edinburgh City Council nine years to reopen a short section of the Water of Leith walkway near Dean village, and we must ask how many road closures take nine years to fix. As Chair of Murrayfield Community Council, I am also acutely aware of the bad feeling that has been created in the planning and construction of the City Centre East-West Cycle Link. Work to build the new route in Roseburn Terrace seems endless, and with no compensation on offer from the Council at a time when businesses trying to recover from the pandemic, their chances of survival being damaged. Across Scotland many Councils are removing unpopular temporary widened footpaths and cycleways built under the 'spaces for people' programme prompted by the pandemic.

We will never get every scheme right, but if we want

people to walk and cycle more often to local services and facilities, then we must do better. Scotland finally has a level of expenditure on active travel which it can be proud of, but it does not yet have a good track record of uniting communities around the sort of vision for active travel which we all want to see. In this issue of Scotlish Transport Review the findings we see recent research by Public Health Scotland reveals little evidence of good practice in community engagement for road space reallocation, so it is little wonder that many communities do not understand the benefits of prioritising active travel.

In January, the Highway Code changed to require better sharing of road space implementing in the formal rules of the road many of the changes that Scotland's road-share campaign has long called for. There, has already been a visible behaviour change amongst some road users, such as in giving greater priority to walkers crossing roads at junctions and respecting the hierarchy of road users. Moving forward we need to make active travel investment far more popular, winning the support of local communities through more collaborative design approaches.

The aims of the Scottish Transport Studies Group are to raise awareness of the importance of transport for the Scottish economy and Society. STSG is a charity registered in Scotland SCO14720.

This Review is Published by the Scottish Transport Studies Group. Views expressed are those of individuals who contribute and should not be taken to represent the views of other STSG subscribers generally. Contact STR Editor Derek Halden if you can contribute to STR—editor@stsg.org.

**Photographs Donald Stirling** 

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#### **Active Travel Centre Stage**

When cycle campaign Group SPOKES started their annual monitoring of local authority spending in the mid 1990s some authorities had no dedicated budget whilst leading authorities budgeted up to £2 per resident. With recent changes in transport funding the new level of spending of £58 per person per year in Scotland dwarfs the £10 per head per year currently invested in England

Over the last 25 years Scottish Transport Review has often reported calls for the active travel budget to rise to a level more consistent with leading European practice. Active travel Minister Patrick Harvie has noted that more is to be spent on active travel in Scotland than in the Netherlands but there is a lot of catching up to do. Levels of active travel in Scotland have been falling in recent years, though the pandemic has made analysis of trends in active travel difficult over the last two years. The huge new challenge facing transport in Scotland is to turn the new investment in active travel into travel behaviour change.

To manage the largest share of the investment Transport Scotland are relying heavily on the charity Sustrans, including investing and additional £40m of the new budget with them. Paths charity Paths for All are also benefitting from a new £1.5m paths fund. The Transport Scotland investment in Sustrans now dominates the activities of the charity, and across the UK of Sustrans £66m overall expenditure, £45m was from Transport Scotland.

A welcome condition of all infrastructure grants is that recipients comply with the excellent new Cycling by Design Guidance, updated last September, and it falls to Sustrans to ensure that projects follow the guidance. Some local authority staff note the hollowing out of expertise in active travel within local transport authorities as a result of the dependence on the charities, but

part of the brief for Sustrans is to provide expertise and support to enable local authorities to consult, design and build high quality infrastructure working closely with local authority teams. Sustrans also embed experienced officers into local authority teams to provide a range of active travel support, from delivery of the active travel strategy to design work on specific schemes.

Despite research project recommendations over the last 20 years to clarify the remit of Scottish local authorities for active travel, Scottish local authorities do not yet have specific legislation to require them to produce long term plans beyond their voluntary transport strategies and statutory development plans. These plans do not always contain maps of future walking and cycling networks, equivalent to those required by the Active Travel (Wales) Act 2013, or the legislation governing the remit of Active Travel England.

Only time will tell whether the English and Welsh reliance on public authorities is more or less effective than the Scottish reliance on active travel charities, particularly Sustrans, but an active travel forum has been set up in Scotland to offer guidance with representation from the Society for Chief Officers in Transport (SCOTS), Transport Scotland and Regional Transport Partnerships.

The active travel programme is set for a huge step up in its level of action and it will be a major challenge to ensure cost effectiveness and efficiency in working towards policy aims. Perhaps the greatest current concern is that many local authorities are unable to maintain the new active travel routes since maintenance is not included in any of the grant offers available to the authorities. There is concern that to attract investment local authorities will make commitments to future maintenance that they subsequently find they are unable to keep.

Many local authorities are unable to maintain the <u>new active travel routes</u>

## **Transforming Active Travel Delivery in Scotland**

John Yellowlees reports back from an active travel round table hosted by Active Travel Minister Patrick Harvie and Chaired by Claire Reid of SCDI

As part of the Active Travel Transformation Project, led by Transport Scotland, Sustrans Scotland invited a small group of stakeholders to this workshop on Innovation and Exemplar Activity — the first in a programme of workshops to be delivered through the Project

## Patrick Harvie looked forward to delivery moving from piecemeal to a new coherence

Active travel minister Patrick Harvie introduced the event noting that cycling felt unsafe in Glasgow compared to his experiences in Europe. Increased active travel would bring benefits not only for decarbonization but also for health, society, the economy and our sense of place. At £320M the active travel budget was now Scotland's biggest-ever but just a step on the way towards £320M in 2024/5 when it would become 10% of the total transport budget. However, it was not enough that the provision at £58 per head was well ahead of England and Wales since we had to bring pace and scale to our delivery, challenging old assumptions by introducing a new system for active travel implementation that by helping enablers to overcome barriers would provide for engagement and involvement, pushing us all out of our comfort zone in accordance with principles of 1) longer-term funding 2) all projects to provide revenue spend and 3) provision for a comprehensive network.

The Scottish Government was opening an office in Copenhagen, and Andreas Rohl from Gehl Architects spoke about the rise from 36 to 44% during 2006-14 in cycling as a proportion of Danish journeys as part of a focus on how transport could help make cities liveable. He noted that there had been no target for impact on modal split, and that funding of localities had made cross-border schemes a challenge.

Claire Reid of the Scottish Council for Development and Industry (SCDI) sought clarification on where the Danish approach had been truly innovative and how we could adopt parts of it in Scotland. Rowena Colpitts urged better feedback so that we could share what had worked and what hadn't. Stuart Hay of Living Streets



thought we spent too much time discussing strategy and not enough on implementation, thus confusing our stakeholders: while cycling might be about transport, walking was more about urban regeneration. Daisy Narayan agreed that we needed to be more outcomefocused, ensuring that we were talking to the right people.

Richard Millar for Scottish Canals said they had gone from being a navigation authority towards maximising use of their towpaths. With growing motorization, the lowland canals had lost their way, closure following Glasgow's motorway plans, but then civic society rose up to demand the return of canalside places, and so there was born a team that built belief in the vision of the Millennium Link. At Falkirk they transformed the site of a tarworks into a tourist destination, and by rebuilding 110km of towpath in a £25M investment created NCN 754 offering amazing interconnectivity and

While cycling might be about transport, walking was more about urban regeneration

Bowling Harbour turned from a dumping-ground for old boats into the community's vision of an equivalent to the New York Highline

providing for broadband and other services buried beneath the towpath. Attractive lighting had turned the Falkirk Tunnel into a safe space, and The Helix protected Green Belt between Falkirk and Grangemouth with The Kelpies as a second iconic tourist destination. The impact on the local economy could be measured in terms of employment, housing and construction, and has prompted further tackling of dark corners with Bowling Harbour turned from a dumping-ground for old boats into the community's vision of an equivalent to the New York Highline. In North Glasgow, where the M8 stops the spread of economic value from the city centre, the Phoenix Flowers have improved neighbourhood amenity, while a Smart Canal concept draws floodwater from new housing into sustainable drainage and a new bridge will improve connectivity, creating unstoppable momentum in advance of regeneration that has been enhanced by the post-pandemic appreciation of local environments.

Participants in the round table highlighted perceived obstacles to progress, and opportunities for short-term improvements that would lead to a better long-term future. Stuart Hay mentioned particularly the welcome





Active travel provision was not just for lycra-clad enthusiasts but could engage with communities in the provision of accessible and inclusive public spaces

dialogue about and with low-income communities. Richard Millar commended the benefits for low carbon and for fibre-optic provision as well as for confidence-building. Rebecca Colpitts saw delivery as being not just to people but with them - and placemaking as being also corridor-making. Richard pointed out that while not every community can have its Kelpie, smaller things too could be appreciated such as the tiny figure of a diver at Spiers Lock which is Wee Jimmy to the local community.

Concluding the event, Patrick Harvie looked forward to delivery moving from piecemeal to a new coherence, bringing together a whole range of organisations to demonstrate that improved active travel provision was not just for lycra-clad enthusiasts but could engage with communities in the provision of accessible and inclusive public spaces.

#### **Pathways to Road Space Reallocation**

# In March 2022 Public Health Scotland published a Health Impact Assessment (HIA) of road space reallocation

Road space reallocation policies can achieve many positive outcomes for people and communities including health benefits and reduced health inequalities. This new report by Public Health Scotland recommends increased action to ensure everyone has a realistic alternative to private car travel. The report makes recommendations for ways to implement road space reallocation to be implemented in a way that maximises the potential gains for health, equity and sustainability in Scotland.

A car-dominated transport system has well-recognised adverse effects including GHG emissions, poor health, greater inequalities, congestion and the opportunity cost of the public space given to cars. Road space reallocation can also bring positive impacts for communities through the alternative use of the space. The reallocated space may provide infrastructure for active or public transport as an alternative to car use, or create space to meet other local needs such as local retail or hospitality, play space, greenspaces and other community assets. This can improve the physical environment for communities and support the Scottish Government ambition of '20-minute neighbourhoods'.

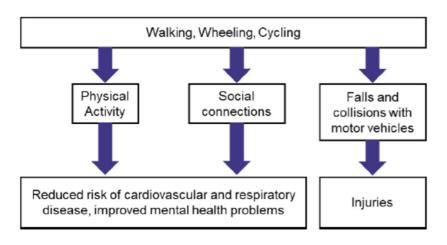
Road space reallocation should be used as part of a placemaking approach to create places that meet local needs and promote community wellbeing and quality of life. People contributing to the assessment reported a perception that recent road space reallocation schemes during the COVID-19 pandemic prioritised cyclists above pedestrians and that public transport, especially buses,

The report makes recommendations for ways to implement road space reallocation to be implemented in a way that maximises the potential gains for health, equity and sustainability in Scotland

was disproportionately adversely affected. Road space should be reallocated to ensure priority in line with the Sustainable Travel Hierarchy: the needs of pedestrians and wheelers should be prioritised first, followed by cyclists, followed by public transport. Pedestrian space should be fully accessible for people of all ages and abilities. Road space reallocation initiatives should take a placemaking approach to improve local communities and meet local needs.

Road space reallocation initiatives should consider different needs of communities and be designed to contribute to multiple health, equity, economic and climate outcomes. There may be a need to debate and agree how to prioritise different needs and outcomes. Car travel adversely affects the health of the individual car traveller through physical inactivity, increased in-car exposure to air pollutants, and vehicle collisions. Motor traffic also has adverse health impacts on other road users and the wider community through air and noise pollution, GHG emissions, collisions, the severance

effect whereby communities are separated by traffic routes, loss of public space and creating an environment that feels unsafe for walking, wheeling and cycling. A cardominated transport system increases inequalities as people on low incomes, young people, older people and disabled people are less likely to be able to access a car so are at risk of transport exclusion. Interventions that reduce



Meaningful community engagement has health benefits, ensures that changes are appropriate to the local context, can prevent accessibility issues for disabled people and facilitates implementation

overall car use and increase other modes should therefore benefit the health of individuals and communities.

Other alternative uses of space can bring other health benefits. Creating civic spaces or community assets where people can interact can enhance social capital. Providing space for local businesses can contribute to community wealth building. Creating areas of greenspace, or improving links to existing greenspaces, can enhance exposure to greenspace, with benefits to physical and mental health. Creating play space can contribute to children's health and development. We found less direct research evidence on the impacts of reallocating road space to these other uses but there is evidence that each of these community assets can benefit health.

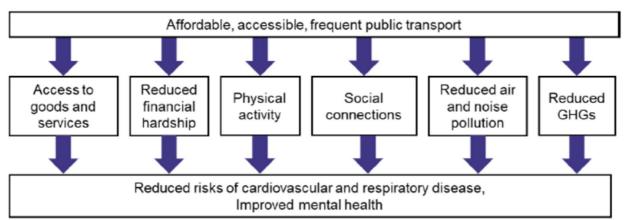
Reallocated space should be viewed as a community resource. There should be consideration of potential uses including formal and informal play, recreation and civic space to promote social interaction. In most cases the local authority will remain responsible for management and maintenance.

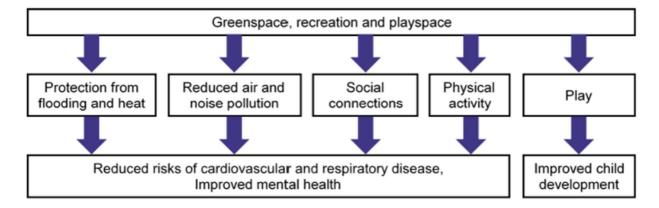
People recognised the difficulty of meeting different needs that may be conflicting, and highlighted the importance of consultation with stakeholders who have the experience and expertise to advise how to create accessible space. In addition, some disabled people are essential car drivers and were disadvantaged by removal of parking bays. Key informants highlighted the need for significant improvements in accessible public and community transport to give more disabled people realistic alternatives to travelling by car. The potential for traffic displacement should be considered at the start of road space reallocation schemes and plans implemented to monitor and mitigate this.

Priority should be given to improving quality space and increasing transport options for communities that have low levels of car ownership but high volumes of traffic. Road space reallocation can create bus priority and segregated cycleways on high-traffic main roads but should also be considered for lower-traffic residential streets to prevent displacement to these. Support for road space reallocation should not be limited to urban areas. Rural towns may also benefit through improved access to amenities and services, particularly those with through arterial routes with high levels of traffic causing severance

Meaningful community engagement has health benefits, ensures that changes are appropriate to the local context, can prevent accessibility issues for disabled people and facilitates implementation. Press and social media reports suggest polarisation of public opinion about road space reallocation and conflict between users, particularly cyclists and drivers. We found little evidence of good practice in community engagement for road space reallocation but people suggested the following good practice:

 Follow good practice guidance on accessible communication. In particular, avoid reliance on architects' drawings or plans, which are inaccessible to many people and need to be accompanied





by explanation and description. Ensure websites are accessible. Provide easy read and Braille documents and the opportunity to complete consultation responses with someone on the phone.

- Involve Access Panels where they exist. It is important to ensure these include a diversity of needs, as the needs of disabled people differ.
- Speak to disabled people's organisations and other relevant interests proactively. Go to them, rather than expect them to come to you.
- Involve people iteratively in planning and consultation. Sometimes it is not clear what is proposed until you can actually see it.
- Use example cases, even if they are an artificial scenario. Often views are based on anecdote and it is useful to give people the opportunity to talk through examples rather than respond to abstract ideas.
- Ask different questions of individuals and organisations. Some consultations only have questions that are relevant to residents, but often organisations act as advocates for disabled people or other interests, so provide a way for them to respond appropriately.

A lack of local monitoring and evaluation of road space reallocation initiatives was found, which meant that perceptions were based on assumptions rather than evidence

- Use a range of methods including digital platforms like Teams/Zoom to reach more people, beyond the 'usual suspects'.
- Engage through discussion and genuinely listen to concerns. Use good facilitators to allow discussion and ensure participants can give their views.

There should be broad and inclusive engagement with communities about road space reallocation at an early stage, including the alternative use of the space. This may include communities that live in, work in and use services in the space, local businesses and people of different ages and with different needs. The Place Standard can be a useful tool to help structure discussion with communities about priorities. Population-level evidence should be gathered to support and inform the changes and road space reallocation initiatives should be subjected to impact assessment.

A lack of local monitoring and evaluation of road space reallocation initiatives was found, which meant that perceptions were based on assumptions rather than evidence, and there was suspicion of evidence from outside Scotland, noting that outcomes of reallocation schemes are sensitive to the local context. Road space reallocation schemes sometimes had unclear aims but could impact on multiple outcomes. Monitoring of the impacts of individual schemes is needed to allow adaptations to be made where necessary and more local evaluations are needed to increase the evidence base for future developments. Monitoring should identify any differences in impacts between different population groups and take place over a sufficient period of time to fully realise the impacts.

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#### **How Safe are E-Scooters?**

#### A new study of the safety of e-scooters shows the importance of good regulation

A new study of the safety of E-scooters by RoSPA shows the importance of good regulation with the controlled trial areas showing far better safety that the unmanaged adoption elsewhere. The research suggests that e-scooters have the potential to be a very safe mode of travel. As an emerging mode of transport, E-scooters offer a range of benefits to communities.

Their growing popularity in cities across the world speaks to their promise of convenience, affordability and environmental sustainability. As with any emerging technology, E-scooters present some novel risks, and safety must be considered by manufacturers, operators, city authorities and riders.

The new research considers the scale and nature of the injury risk associated with E-scooter use, drawn from publicly available datasets and incident reports from Neuron, an E-scooter company participating in a number of trial locations. It provides indicative comparisons with other transport modes, so as to assess the relative safety of E-scooters.

In the summer of 2020, the Department for Transport (DfT) introduced regulatory changes that allowed Escooter hire schemes across England to commence operation on a pilot basis. Unfortunately, there were no pilot areas in Scotland so further work may be needed to understand escooter safety where features of the build and natural environment in Scotland could be different from the English case studies.

As of September 2021, 11 operators participated in trials in over 50 towns and cities, operating around 20,000 E-scooters. In addition to these schemes, and despite it being illegal to ride them on public land, RoSPA estimates there to be more than 360,000 private E-scooters in use in Great Britain.

Given the emerging use of E-scooters, and the fact that 2020 was an outlier year because of the coronavirus pandemic, our conclusions remain limited and indicative. Notwithstanding these factors, the key findings are as follows:

 E-scooters are safer than many other travel modes, with significantly lower casualty rates (0.66 collisions per million miles travelled) compared to bicycles which were 5 times more likely

- to be involved in a collision (3.33 per million miles) and motorbikes which were 9 times more likely to be involved in a collision (5.88 per million miles).
- The vast majority (94%) of incidents occurred in local authorities where there was no E-scooter rental scheme running.
- The risk to pedestrians, often the perceived most vulnerable group, is low. Collisions with pedestrians accounted for just 13% of incidents. In comparison, 79% of crash events were collisions involving a larger and powered vehicle, such as a motorbike, car, truck or lorry. It has not been possible to derive causation from this DfT dataset beyond vehicle/casualty involvement.
- In 2020, DfT recorded, in its Stats19 database, 461 crashes that involved E-scooters in Great Britain. In addition, DfT estimated there to have been 484 casualties, including one fatality. The review is based on the published dataset for the 461 crashes; and the calculations are derived from the 431 casualties provided within that untransformed dataset.

The analysis demonstrates that, despite the continued debate surrounding the safety of E-scooters, that the risk of E-scooter accidents is lower than the risk of accidents on traditional modes such as motorbikes and bicycles .



## What Strategic Projects Should Scotland Invest in?

# Derek Halden suggests that Transport Scotland's consultation on strategic projects (STPR2) needs to consider how sustainable its plans really are

There is a very welcome new focus on active travel in the recommendations of the STPR2 where for the first time active travel is recognised as 'strategic', rather than local. To act globally and nationally and think local is a key part of recognising how climate change policies will be implemented. However, STPR2 does not include the new mechanisms to empower the local action on strategic aims. Active travel is therefore just one of the growing areas for change where there appears to be a gap between the future investment needs and the capacity to implement the change.

Critically, STPR2 views capital as built infrastructure such as roads, railways, paths and streets and even clarifies that ongoing subsidy for buses and trains is not included. It is hard to see how restricting the scope to infrastructure capital can be consistent with sustainability principles for a more circular economy where social and natural capital are at least as important as infrastructure.

It is hard to see how the STPR2 behaviour change goals can be achieved without a major rethink about investment in social capital. Indeed, part of the narrative about climate change policies and future sustainable finance is that a circular economy develops where traditional boundaries between capital and revenue need to be completely reconsidered. The social and human capital needed to achieve travel behaviour change requires a much smarter approach to investment than STPR2 envisages. Behaviour change interventions will fail if not accompanied by price signals. It is of little use encouraging people to use public transport if it remains unaffordable compared to car use and decades of price data demonstrate that public transport has become progressively less affordable.

Specifically, STPR2 makes no attempt to define the business models to invest in managing demand for each mode of travel to become sustainable. Set against the Scottish Government's national target to reduce car kms by 20% by 2030, STPR2 offers little clarity on how the projects proposed will succeed in delivering the national vision.

Ambitious plans for trams and rapid trasit in Aberdeen, Edinburgh and Glasgow again do not identify what if any contribution these might make to road traffic reduction, or whether they are primarily intended to replace many of the existing bus routes. The analysis is not presented in sufficient detail to understand what the impacts might be. In the absence of such detailed analysis,

structure such as roads, railways, and paths but ongoing support for transport operation and promotion is not included. It is hard to see how the STPR2 behaviour change goals can be achieved without a major rethink about investment in social capital in the business plans

it is hard to see how a credible business case could be developed, but this is suggested as the next step for the proposals.

Similarly with the proposed fixed links to islands, such as to the island of Mull, it is even less easy to see how practical business cases could be developed without more detailed analysis in the reporting. Some organisations, such as sustainable transport campaign group Transform Scotland describe the fixed link proposals as preposterous and published responses to STPR2 largely appear to view these proposals as having little prospect of being delivered.

Of particular importance will be to link transport and land use proposals but the STPR2 proposals make no attempt to explain how this will be achieved. Transport planners will face many practical decisions about how to influence future land use with transport spending but strangely land use proposals have been excluded from the scope of the review. This means that the review provides little insight into strategic transport planning questions such as what a net zero transport strategy for hospitals provision looks like, for example. Even where land use issues are discussed, such as 20 minute neighbourhoods, STPR2 attempts to separate the land use investment from the walking routes investment which defeats the entire philosophy of collaborative working in communities. Many strategic projects are needed to implement the strategic policies for integration to align STRP2 with the NPF4 approach but it is not clear how this alignment will be achieved. Overall, STPR2 calls for a lot more work to identify a practical way forward and it is difficult to disagree with that conclusion.

# Why Every Transport Operator Should Have Data Collaboration Agreements to Maximise the Value of their Data

#### The Open Data Institute recommend wider use of data collaboration agreements

Large data companies such as Google make much of their money through intelligent use of the data they collect from their users. As people travel around on buses and trains data companies are sometimes making as much value from the data about travel as the transport operators are achieving from carrying the passengers. In the same way transport operators can substantially grow their value by paying more attention to their data, understanding who is using their services and what other added value they can offer to their customers.

As the data economy has grown some large multinational data companies have become able to provide new insights into society. The Open Data Institute reviewed the responses that each of these companies made to make their data more open to society during the pandemic.

The review recommended wider use of data collaboratives to enable data or data expertise held by an entity in the private sector to be leveraged in partnership with another entity (from the public sector, civil society, and/or academia) for public good. Data collaboratives draw together otherwise siloed data and a dispersed range of expertise, matching supply and demand and ensuring that relevant institutions and individuals are using and analysing data in ways that maximize the possibility of new, innovative social solutions

Transport operators can substantially grow their value by paying more attention to their data



### **Data Revolution Demands Rethink of Transport Governance**

#### The International Transport Forum at the OECD provide a blueprint for action

Over the last decade there have been increasingly strong calls for government to introduce a regulatory framework for transport data to ensure appropriate social use of such data. Organisations such as the Open Data Institute have proposed the key principles on which such governance should be based. A new report by the International Transport Forum at the OECD now sets out in greater detail what needs to happen as summarised below.

"Reporting Mobility Data Good Governance Principles and Practices 2022" notes that transport systems and the people using them generate an ever-increasing amount of data. These data represent a largely untapped potential source for transport system performance improvement but also pose significant and often poorly understood risks.

Data-governance frameworks are comprised of two pillars – data sharing and data reporting. Data sharing refers to data shared among market actors and other stakeholders, which enables the delivery of mobility and other services and which supports the functioning of transport markets. Data reporting refers to data provided by stakeholders and market actors to public authorities that enables the latter to monitor, guide or intervene to enact public policy.

The work found that good governance often requires access to sensitive or personal data and these data are increasingly found in the private sector requiring new data-governance frameworks that reconcile what is technically possible, what is desirable and what is legally permitted.

Reporting of personal data should adhere to principles that ensure the highest level of privacy protection. Personal data can be linked directly or indirectly to natural persons and therefore poses the most significant risk to

Planning data are not principally concerned with where individuals travel but with how communities function and, therefore, do not need to be highly disaggregated or available in real-time

Data-governance frameworks are comprised of two pillars – data sharing and data reporting

potential impacts on privacy rights. The definition of "personal data" should be expansive, given that the risks of re-identification continue to increase over time. Whether data are considered personal does not prevent the collection or reporting of such data but should trigger additional care in its processing and handling. Public authorities can reduce both real and perceived data-reporting risks by adopting proportionate and transparent data-collection and handling protocols that protect personal and commercially sensitive data.

Data collection by authorities may be compulsory, for example, by making data reporting conditional to accessing a service or a set of rights, voluntarily or on commercial terms. Public authorities select data acquisition pathways depending on the types of public mandates they hold and the policy objectives they aim to achieve. Governments and firms must consider the relative costs of different data acquisition pathways, as well as the proportionality and balance of these costs in relation to the expected benefits from such data collection.

Data reported to public authorities enables them to plan, manage transport operations or enforce regulations. For this reason, public authorities often require data reporting from market actors or make it a condition of licensure. The level of detail or aggregation of data required by authorities is linked to the specific task at hand. When mandates for public authorities are clear and well-articulated – for example, the need to ensure high levels of road safety or to manage public spaces for the public good – then direct or conditional compulsion of data reporting is warranted, provided that the burdens imposed on reporting parties are in line with expected benefits.

Planning data are not principally concerned with where individuals travel but with how communities function and, therefore, do not need to be highly disaggregated or available in real-time. Operational data allows authorities to control traffic, manage public spaces and respond to incidents in real-time. Operational data requires greater granularity than planning data but can

still be collected and reported at an appropriate level of aggregation. Data supporting enforcement actions relate directly to unique vehicles, individuals and their specific behaviours. As such, this is the most privacy-sensitive of the three data-reporting streams.

Current practices in data governance are generally unfit for delivering desired policy outcomes – including the protection of individuals' fundamental rights, welfareimproving competition, equity and sustainability. These data-governance frameworks were developed outside the sphere of public governance and not designed to deliver on such outcomes. Unlike public spaces, digital spaces are largely unregulated, or rather, they are only partially regulated, imperfectly, and with no clear consensus on how and for whom they should be regulated. New governance frameworks are needed in order to govern digital spaces effectively. The European Union has undertaken the most extensive and ambitious effort to update regulation for modern data-rich societies -The General Data Protection Regulation 2016 (GDPR) alongside a number of other developing datagovernance initiatives.

New mechanisms and building blocks are required to ensure that the data ecosystem preserves privacy and protects commercial interests by default. These mechanisms will build on new concepts, such as data trusts, personal data spaces and data architectures expressly built to deliver on public outcomes – the "public stack"

Current practices in data governance are generally unfit for delivering desired policy outcomes – including the protection of individuals' fundamental rights

– but will require tangible and actionable tools. Such tools are only just emerging.

The new report recommends:

e Embedding individual privacy rights at the heart of data-reporting policies. Data-governance frameworks must explicitly seek to avoid eroding privacy rights while at the same time maximising benefits. Reporting data for planning and operational purposes should avoid personal data by default. Data reporting related to enforcement should be given the highest protection and treated with adapted and privacy-preserving reporting pathways and processing protocols – separate, distinguishable and more secure than other data-reporting pathways. In this respect, a fundamental precautionary principle is that enforcement

#### **Use and Analysis**

Data access

Ethical use and processing of data

Policies to enable public, private, or other third parties to access shared data and to ensure the ethical use of data to protect public interests

Governance and Accountability

Control over data

Structure of the governing body

Policies that establish the roles and rights of parties over their data and shape the structure of the governing bodies

Data Infrastructure

Financing infrastructure investment

Policies related to the development of physical and digital infrastructure to allow the management of data resources and flows of data

**Data Standards** 

Standard development

Standard adoption

Policies to support the development and adoption of data and metadata standards, to ensure interoperability across multiple stakeholders

**Data Collection and Merging** 

Privacy and data protection

Aggregation of data

Policies to enable the collection of data generated from diverse sources and the assembly of data sources within a datasharing initiative

- actions should only collect, process and retain data on contravening incidents.
- Adopting coherent data-governance frameworks by developing and adopting a coherent datagovernance framework helps defuse tensions around personal or commercially sensitive data reporting and build trust concerning how and why authorities require data from the private sector. Where data-governance frameworks do not exist at the supra-national or national level, local and regional authorities should seek to clearly specify and adopt best-practice datagovernance approaches – including undertaking assessments of personal data protection. As part of this approach, authorities should clearly identify data-stewardship and data-custodianship roles and responsibilities and establish an inventory of data-reporting mandates.
- Establishing, documenting and communicating the basis for public authority data-reporting mandates so that public authority data-reporting mandates the specific purposes for which a public authority is collecting data, including the legal basis for data collection.
- Aligning data-reporting mandates to targeted outcomes so that authorities clarify the need for the stated data collection especially regarding personal or commercially sensitive data. Public authorities should evaluate alternatives to mandatory or conditional reporting of personal data. This assessment should be open and provide opportunities for stakeholders to identify and provide evidence on the ability and efficacy of non-personal data alternatives to achieve stated objectives.
- Creating and adhering to clear personal data processing, retention and destruction policies where clear data policies are necessary to build confidence that personal data will be handled and disposed of according to its sensitivity. This includes ensuring that data subjects were notified of public authority processing when their consent was obtained, assessing if the outcome of data processing is suited for the purposes for which it was collected and if any biases have emerged from the processing of personal data. Public authorities should limit the sharing of personal and sensitive data to the minimum extent necessary to achieve the purpose of its collection. They should also ensure that sufficiently strong data access controls are in place.

Exploring ways to ensure that data reporting preserves privacy and protects commercial interests.
 Public authorities should explore the development and adoption of new and adapted datagovernance building blocks that enable the emergence of in-built privacy protection within the data ecosystem. This would enable data protection for data sharing and reporting by design, not by retro-fit.

Data collection by authorities may be compulsory, for example, by making data reporting conditional to accessing a service or a set of rights, voluntarily or on commercial terms





**Reporting Mobility Data**Good Governance
Principles and Practices



## Time for a Rethink on "As a Service" Approaches to Transport?

Professor David Hensher at the University of Sydney recommends that Mobility as a Service backers change their Focus

In a recent review<sup>1</sup> Professor David Hensher at the University of Sydney recommends that Mobility as a Service backers change their focus from multimodal designs to multiservice approaches.

After seven years of study, including heading the twoyear Sydney Mobility-as-a-Service trial, David Hensher believes the challenges MaaS faces will be difficult to overcome. Among the challenges are unsustainable business models, lack of compelling offers for users and, just as importantly, substantial mistrust among mobility providers and other parties that would participate in a MaaS scheme.

Hensher is saying that MaaS may not ever be able to scale and doesn't have a sound business case. What matters for a sound business case is that MaaS actually attracts people to change their travel behaviour. That needs a different type of approach. If MaaS cannot change travel behaviour in a sustainable way then it has no value at all. He observes that at the moment, nowhere in the world is MaaS getting people out of their cars in any significant way.

Hensher notes that MaaS products on the market are pump-primed by venture capital or government subsidy. MaaS will only have a future if it changes travel behaviour of a sufficient number of people. This has led him to move away from MaaS as a multimodal framework to a multiservice framework. That is pretty much what many other sectors do anyway, like the airlines, which package a hotel and a rental car and discounts for certain shops through your frequent flyer points.

Using new technology anchoring plans for travel and access within trusted organisations is once again proving to be the sustainable approach to integrated transport subscriptions

Among the challenges are unsustainable business models, lack of compelling offers for users and, just as importantly, substantial mistrust among mobility providers and other parties that would participate in a MaaS scheme

Looking forward Hensher suggests that investment should focus on performance requirements like reduced emissions and reducing car use. Group subscriptions or employer-based subscriptions may actually have more legs initially than individual subscriptions, because employers, who have these social licenses or these sustainability goals, see some merit in promoting these modes to their employees.

Travel plans and accessibility plans for organisations that have long been the anchor of travel behaviour change, and with new technologies are once again proving to be the sustainable approach to integrated transport subscriptions. Hensher notes that the goal must be to use technology better to build a single business model to benefit transport suppliers who each have their own different business models and cannot quite see how they can talk to each other. Further reading about how to achieve that sort of approach is presented in STSG Occasional Paper OP2021/1².

- 1. https://www.mobility-payments.com/2022/03/10/maas-expert-mobility-as-a-service-initiatives-on-wrong-track-new-framework-needed/
- 2. https://stsg.org/a-new-look-at-making-sustainable-transport-work-for-everyone

# Strong Environmental Pledges at Loganair's 60th Birthday Celebrations

If Loganair can progressively decarbonise their short haul flights to Scotland's islands over the next decade this will be a major boost to green living in Scotland's remotest areas. With the costs of offsetting rising, the netzero pledge made by the airline creates a strong incentive for the airline to decarbonise its operations

Since 2021 every customer on Loganair flights has been charged a surcharge towards fully offsetting the carbon emissions generated from Loganair's operations.

With the costs of offsetting rising, the net-zero pledge made by the airline creates a strong incentive for the airline to decarbonise its operations. Currently the airline is developing green hydrogen, and other electric battery technologies for progressive deployment over the next few years..

Speaking at Loganair's 60th birthday celebrations Jonathan Hinkles, Loganair's Chief Executive, said:

"The next 60 years will undoubtedly see a different set of challenges, yet I'm already hugely encouraged by progress to develop new carbon-neutral electrical and hydrogen power sources for domestic flights. It's clear that short-haul domestic flights will be the first to benefit from these new technologies, and I fully expect that we'll see the first of these powering Loganair customers to the destination within the first six of our next 60 years."

If Loganair can progressively decarbonise their short haul flights to Scotland's islands over the next decade this will be a major boost to green living in Scotland's remotest areas













#### Without More Detail the Government's Net Zero Plans will Fail

In February 2022 the House of Commons Committee of Public Accounts reported on prospects of the UK achieving Net Zero transport

The government's net zero strategy requires government, local government, regulators, businesses, and consumers to deliver its targets. A top-down strategy from government won't deliver on its own. There is a risk that a series of disconnected initiatives announced by central government will not bring about the changes that are set out in law. Instead, government now needs to be clear about what impact new measures will have across the board, particularly for local government.

The committee say that the government has unveiled a plan without answers to many of the key questions of how it will fund the transition to net zero, including how it will deliver policy on and replace income from taxes such as fuel duty, or even a general direction of travel on levies and taxation. The Government has no reliable estimate of what the process of implementing the net zero policy is actually likely to cost British consumers, households, businesses and government itself. The HM Treasury witnesses we questioned were reluctant to be drawn on what the future costs of achieving net zero would be, cautioning that while the Climate Change Committee has provided estimates, they contain 'heroic assumptions' with errors potentially compounding over very long periods.

Government is relying heavily on rapidly changing consumer behaviours together with technological innovations driving down the costs of green options but it is not clear how it will support and encourage consumers to purchase greener products. Certainty for business and consumers is critical but as highlighted repeatedly in the Committee's recent reports, government has too often pursued stop-start strategies which undermine confidence for business, investors and consumers in committing to measures which would reduce carbon emissions, especially when some green alternatives are still significantly more expensive than current options.

It is not clear how the Government will support and encourage consumers to purchase greener products

No answers to key questions on how to replace income from taxes such as fuel duty

The government needs to monitor and report its progress including on how it will ensure consumer engagement and buy-in; and how it plans to ensure both the civil service and private sector are equipped with the technical skills to deliver government's ambition. In addition, Government rightly recognises it has much more work to do to understand the emissions impact of international supply chains, including the risk of domestic emissions being only window dressing if these are merely shifting emissions offshore to other countries



## The Future of Public Transport in the Wake of the Pandemic

# Transport analyst Chris Cheek writing in Passenger Transport Monitor offers some thoughts on the future of bus and rail travel

The last three years have been tough for the bus industry and there is no sign that it will get easier. Just getting the buses out every morning can sometimes seem like a minor miracle, given staffing issues, parts shortages and all the myriad of other things that can go wrong. American guru Carl Sagan who once said, "You have to know the past to understand the present". And if you don't understand the present, what chance have you with what's likely to come after?

Looking first to the past there have been seven major pieces of legislation affecting the bus industry since 1968, all with the avowed intention of reversing the decline in bus use. None of them has worked and fundamentally, it's been about lack of funding, lack of appreciation of the detail, and in failing to address the huge competitive disadvantage the bus has against the private car in door-to-door journey times.

Nevertheless, operators that have delivered high quality service provision accompanied by sustained partnerships with local authorities in consistent, pro-public transport policies have seen patronage growth and trip rates double or even treble other areas of the country. The industry exists in a constantly shifting market place and must constantly adapt to economic change and social upheaval. The idea that we might "return" to some mythical age of stability in which networks never changed and buses always turned up on time is pure fantasy.

Even before Covid, the bus industry was falling victim to growing congestion and a decade of massive cuts to tendered bus services. The effect of the pandemic with lockdowns and the consequent shift online in so many aspects of our lives. Based on assumptions about changes in journey purpose, it looks as if the most we can expect to win back is around 90% of pre-Covid bus patronage levels.

Looking to the future any projection of current trends looks worrying but technological change and the challenges of climate change bring both opportunities and threats. The end of the diesel-engined bus is now almost inevitable, driven by the need to improve local air The first trials of the CAVForth project could herald new opportunities for lower staffing levels, However, it is likely some form of customer care staffing will continue to be provided in all future options

quality, the government's net zero policies and the demonisation of diesel by the media. Zero Emission Buses (ZEBs) are the future, and it is quite likely that some operators are buying their last diesel buses now, yet the commercial case for ZEBs is not always there.

The first trials of the CAVForth project could herald new opportunities for lower staffing levels, and with current recruitment issues and a potential cost saving of up to 40%, there will inevitably be pressure to achieve progress. However, it is likely some form of customer care staffing will continue to be provided in all future options.

The decarbonisation agenda promises to be one of the most decisive influences on the future of the bus industry in the next 30 years. There are ambitions government targets for car demand reduction that could imply large shifts to bus use, but there must be questions about whether a change on such a scale is really going to happen. There is no real sign that the public fully grasps the scale of the changes being talked about, or that there is any political will to force the issue in the face of the tabloid press and the motoring lobby.

There are major uncertainties about many influences on our lives, but we do know that life in 2052 will be very different from what it is today. Whatever happens, the bus will remain the most flexible, responsive and costeffective form of public transport yet devised. This means that it has a vital role to play in delivering net zero policies, guaranteeing its central role in 2052. If it is to achieve this, it will need to evolve and adapt to changes, just as it has done over the last 120 years.

## The Future of The Future of Vehicle Refuelling

#### Scotland's Largest Public Ultra-Rapid Electric Vehicle Charging Hub Opens

In the early days of motoring, pharmacies started to sell petrol, but garages soon emerged. These garages were often blacksmiths converting their premises from shoeing horses to maintaining cars and selling petrol. As cars now convert to electric, a range of new types of places are emerging where people can fill up their cars. Some petrol filling stations are adding EV charge facilities, but many other businesses see ways of diversifying into EV charging such as retailers, leisure attractions and others.

Motorway service areas were a new concept set up at the same time as the motorway programme as rest and refuel points for travellers on long distance journeys. However, to spread the load of the electricity charge on the electricity grid it looks likely that many more locations will be needed just off motorway junctions at locations where the electricity grid can accommodate more chargers.

In January 2022 the Scottish Government set out a new vision for public electric vehicle charging networks to encourage more private companies to expand in Scotland, and in May 2022 Netherlands based Fastned opened Scotland's largest ultra-rapid charging station at junction 6 on the M74 with 10 chargers eight of which

In January 2022 the Scottish Government set out a new vision for public electric vehicle charging networks to encourage more private companies to expand in Scotland

are able to charge an EV with a typical 40-50kWh battery in 10-15 minutes.

Peer to peer parking provider Just Park has also set up a new service to allow people to charge their cars on the driveways of other people's houses so that people without dedicated parking at their house can still charge their car at a house nearby.

It is too early to tell which of the new types of charging location will prove to be most popular with travellers, but three main types of charging have been identified: home charging (the cheapest option with slower charging at 11kW or less), destination charging (with fast charging at typically 22kW or less), and rapid top-up charging (the most expensive option with speeds of 50-300kW).



## New Infrastructure must be able to "Pay-Off" its Carbon Impact

# The DecarboN8 Network Calls for New Infrastructure to Face Greater Scrutiny on Carbon Impacts

The carbon implications of infrastructure are rarely adequately considered in the strategic cases for investing in transport infrastructure. In February 2022 the DecarboN8 partnership published a new report showing that even with generous assumptions about the potential for technical innovations to decarbonise the construction process over time, there remains a core of emissions which is hard to decarbonise.

In the case of roads, the emissions from construction are unlikely to be paid back by operational improvements so the policy case for new roads is difficult to make in the age of net-zero.

For public transport infrastructure, one of the aims is to enable lower car use and therefore many schemes will be more than able to 'pay off' the emissions they generate in construction. However, here too, the 'pay back' period needs to be understood.

The emissions from maintenance of the existing network are also at least as significant as new build emissions and these must also be considered.

# A radically different approach to transport

When using offsetting techniques to mitigate carbon from construction, the investments in offsetting must be intrinsically linked with, or necessarily part of the case for, any new infrastructure.

It is essential to ensure that before investing in any transport infrastructure that it is clear why the transport infrastructure is needed in a zero-carbon future. Getting to zero carbon needs a radically different approach to transport with a different set of infrastructure investments to those currently planned. Nowhere is yet on track to bring transport emissions down in line with the carbon budgets set out in legislation and national policy. Funded and credible strategies and commitments are needed before we can determine whether specific projects or programmes are appropriate in carbon terms. It is critical that we stop borrowing on the carbon overdraft by building new infrastructure before we have established whether we can afford to pay it back.

# Cycle Lanes Must not be allowed to Delay the Bus

The Confederation for Passenger Transport (CPT) has published their Covid recovery manifesto including an integrated approach to active travel and bus use

CPT suggest that to encourage people out of cars an integrated approach to buses, cycling and walking is needed. Bus passengers on average undertake at least 20 minutes of exercise per day as part of their journey, which will often be cycling or walking before or after their bus journey. Faster cheaper buses lead to mode switching from active travel to buses, so people promoting active travel want to put the active modes at the top of their hierarchy and delay the bus if there is competition for road space.

CPT want to move away from the type of thinking that sets one sustainable mode above another, and instead see buses and active travel as allies in helping to encourage healthier lifestyles. They note that the promotion of walking and cycling during the Covid-19 pandem-

CPT want to move away from the type of thinking that sets one sustainable mode above another

ic has on occasions been at the expense of the bus with road space set aside for bus reallocated to cycling or used to widen pavements. While well intentioned and an understandable short term measure in response to the pandemic it does mean that buses have become stranded in congestion. It is vital that these temporary measures do not become a permanent feature of our road network

# Has the Scottish Government's Ferry Advisory Group Run its Course?

Ferries have been increasingly in the spotlight with the ongoing delays to the completion of new ferries, but looking forward, could there be a fresh approach to ferry procurement able to offer much better value with cheaper, more frequent ferry services for islanders? It sems that several ferry experts think this is possible.

The Scottish Government set up The Ferry Industry Advisory Group to help facilitate a dialogue about ferry provision but the group has not met since October 2019 and in December 2021 Transport Scotland wrote to Advisory Group members informing them that they could consider that the Group had been wound up.

Former Group members Alf Baird and Roy Pedersen therefore wrote an open letter to former transport Minister Graeme Day in January 2022 to set out key elements of the ferry debate which they felt the Scottish Government should explore. In addition to a total of over 30 years serving on the committee of STSG, Baird and Pederson have an international reputation as maritime experts. After retiring from Highlands & Islands Enterprise Pedersen served as a SNP Councillor and was Transport Convenor in Highland Council.

In their letter Baird and Pedersen noted that "As the group, originally the Expert Ferry Group, was a ministerial creation, it is right that we, the independent members, report our concluding remarks directly and formally to the current minister. In so doing we stress that we seek wholeheartedly to support the Scottish Government in securing the best connectivity to aid the economic and social well-being of our island communities commensurate with economy of public funds......almost all of the evidence-based recommendations made or queries raised by us have been ignored by Transport Scotland and its ferry agencies".

Regarding the ill-fated procurement of new vessels from Ferguson Marine which has recently been criticised by Audit Scotland they say:

"Perhaps the most ill-starred of such matters was when the concepts of Glen Sannox and 802 were presented to the group, we queried the justification for such large complex 1,000 passenger capacity vessels with lavish The Scottish Government set up the Ferry Industry Advisory Group to help facilitate a dialogue about ferry provision but despite the growing controversy about ferry policy and procurement in December 2021 the Group was wound up

crew provision, each vessel also requiring expensively reconfigured terminals which, as it transpires, will collectively cost in excess of a third of a billion pounds. We repeatedly stated to FIAG, that the entire 31-ship Cal-Mac fleet could be replaced for less"

The Glen Sannox misjudgement actually predated the formation of the Expert ferry Group when the former CEO of CMAL erroneously discounted the catamaran design proposed by us and Sea Transport Solutions (STS) by grossly understating the vessel's deadweight (i.e. payload). Had this robust and proven design been adopted, the capital saving would have been in excess of £100 million and the operating cost around half that anticipated for Glen Sannox; an operating cost saving of £5m per annum implies a further cost saving well over £100m over the 25+ year ship lifetime. The question remains: Was the misstating of deadweight a deliberate attempt to mislead or a genuine mistake?"

"The 1,000 passenger capacity 802, earmarked for the Little Minch services, is a different matter. When asked in writing how many times more than 350 passengers were ever carried on the intended services, no answer from Transport Scotland was forthcoming. The actual answer is never. Why then specify such an excessive passenger capacity and as a consequence incur the far higher cost of a disproportionately large crew? Again no answer. When Mr Pedersen's Little Minch Ferry Options paper was presented to the group. It demonstrated (as almost unanimously recommended by island residents, local authority and others) that commissioning two sim-

pler 80 car, 350 passenger, 12-14 crew vessels to be focussed separately on each of Harris and North Uist, would not only provide for much more vehicular capacity, plus offer more regular, frequent schedules and attract more traffic and revenue, but would be done for less capital and operating cost while offering more resilience at time of breakdown. Why then was the construction of 802 and the hugely expensive and amenity damaging associated terminal works proceeded with?"

Looking more broadly at the potential solutions for Scotland's ferries Baird and Pedersen explained:

"we set out a representation of concerns which sought to summarise the shortcomings of the then and current ferry policy and practice within the Transport Scotland/ CMAL/David MacBrayne Group and to offer some pointers as to how this may be addressed. In essence it highlighted long-standing poor productivity because of inefficient over-manned vessels, overly complex labour-intensive terminals and concomitant high berthing charges, infrequent and inconvenient scheduling, etc.

The net result is inordinately high and growing financial deficits coupled with inadequate service levels to the detriment of island economic and social well-being. We then summarised how these issues should be addressed by adoption of best practice as demonstrated by efficient Scottish and overseas operators......When, after a couple of reminders, a telephone conference was eventually arranged to discuss the matter, Mrs Pacitti [of Transport Scotland] confirmed that there was little in the document with which she would disagree. This notwithstanding, no effective change in policy appears to have taken place. Why not?"

In their letter they also raise questions of accountability:

"We noted that in her letter, Mrs Pacitti referred to the improved and standardised approach to community engagement for new vessel projects, as evidenced only by 'positive feedback' from the Islay community on their new vessels. While it is undoubtedly true that many in Islay will welcome the appearance of (any) new vessels, not having themselves to contribute to their financing or



operation, most other island communities are left with little to celebrate."

"As submitted in our representation of August 2020, we assumed Transport Scotland, as advisors to ministers, custodians of taxpayers' funds and paymasters of CMAL, the David MacBrayne Group and NorthLink-Serco, to be in control of setting policies and procedures to ensure efficient and cost effective investment in and operation of those ferry services that it funds. That the productivity and performance of this state funded sector is so manifestly abysmal, demonstrates that these objectives are not being achieved......While civil servants are well-meaning, as generalists and without expertise in maritime economics and other specialist skills, Transport Scotland officials appear to have become over reliant for guidance, on appointed individuals in CMAL and the DMG, each with their own vested interests and prescribed operating arrangements to protect, and in some cases with debatable previous experience or success in ferry operations."

"Such a reliance on CMAL in particular for advice, seems highly questionable......several Scottish local authorities, harbour authorities and others manage large marine infrastructure projects with success. Highland Council alone owns 100 piers and Harbours, from busy ports such as Kyle, Lochinver and Kinlochbervie, seven vehicle ferry terminals and a wide variety of other marine works. Shetland Islands Council has a long history of commissioning and operating a fleet of efficient ferries that provide a quality of service far in excess of any in the CHFS network. And of course private operators have proven able to commission large vessels in short timescales and operate them with exemplary efficiency, without the need for public funding."

"The David MacBrayne group is in the unenviable position of inheriting from previous managements a dysfunctional system – obsolescent vessels, unhelpful schedules and restrictive labour practices, exacerbated by current difficulties in mustering sufficient personnel to fill the bloated crew compliments of the large openwater vessels...........CalMac's annual operating subsidy of some £150m is now two-thirds of total income, farebox income just one third. In 1991 the subsidy was £5.8m or 18% of turnover and the service then carried

"So there it is – by persisting with monohulls over catamarans, Islay have missed out on a 33% increase in service frequency; 25% increase in HGV capacity; and 50% increase in car capacity. Taxpayers will be spending £113 million more than they would have over the next 25 years – enough to build another five catamarans. And that, in a nutshell, goes a long way to explaining why the whole network has such an ageing, expensive and increasingly incapable fleet."

more passengers (6.4m). Notwithstanding the enormous sums of public money now devoted to DMG/CMAL, community dissatisfaction with ferry services has never been greater"

Baird and Pedersen's solutions would be for a far more diverse ferry sector in Scotland where successful operators can thrive and grow:

"the existence of CMAL as a separate vessel owning body is irregular, inefficient, unique to Scotland and should be disbanded......CMAL/DMG should be dealt with in equal manner to other entities such as local authorities, private ferry operators, harbour authorities, etc......drawing on Scandinavian practices and those of



efficient domestic operators such as Western Ferries, Pentland Ferries and Shetland Islands Council".

"certain island community ferry groups, in particular Mull and Arran, have both come forward with innovative proposals............the logical outcome of which would be de-bundling these connections under separate tenders. The myth that the large CalMac fleet enables vessels to be replaced easily in the event of breakdown or other disruption is belied in practice in that CalMac performs worse in this regard in terms of service disruption and capacity constraints than other Scottish operators".

"Ministers are being played as fools, by fools, and we are all paying the price"

"Scotland's predicament now seems very reminiscent of Italian state-owned Tirrenia ferry company whose enormous and out of control subsidies were eventually ended by Rome, leaving an obsolete and mostly unrepairable ferry fleet laid-up in the Port of Civitavecchia, and with island communities left in the lurch. All so reminiscent of the unfortunate yet inevitable direction of travel for state ferries in Scotland, which is entirely due to an unwillingness to change."

"Ministers are being played as fools, by fools, and we are all paying the price. This is the time for resignations and if not, sackings. This is a level of incredible incompetence and mismanagement on a grand scale. Like so many other things, this will not go away."

