This report gives an account of the discussions at the five regional forum sessions. The Infrastructure Commission for Scotland (the Commission) would like to thank the sector experts who gave their time to attend. The views expressed and recommendations provided form part of the Commissions’ overall evidence gather, inclusion within the report does not necessarily indicate that the they represent the views of the Commission.

What are the future strategic infrastructure needs for Scotland and what decisions must we make to meet our stated commitment for net zero carbon by 2045 and inclusive economic growth for all of Scotland’s people? This was the starting point for the Commission’s five regional forums, which took place in Inverness (10 June 2019), Glasgow (31 July), Aberdeen (8 August), Edinburgh (14 August) and Moffat (28 August), and garnered a range of opinions from professionals and interest groups working in the delivery of infrastructure across Scotland. More than 135 people, representing 100 organisations, gave their time to take part in a spirit of goodwill, honest reflection and information sharing. While the issue of future infrastructure is a serious concern for planners, policymakers and politicians, the wit and wisdom from across the nation was strongly evident.

The forum’s format was introduced by Ian Russell; Chair of the Commission, who explained the objective of the Commission’s forum was to listen to what is being experienced across Scotland and all participants were encouraged to speak openly and candidly about the issues. All of the comments were unattributed to individuals or specific organisations. Each forum was divided into small tables of up to ten participants, led by a facilitator, so that all views could be heard. The public sector, covering the 32 local authority areas, the education and NHS were well represented, however there were a number of contributions from private sector participants, including construction and home-building companies. Commissioners also contributed to the sessions but were in listening mode and intervened only to clarify comments from participants. Ian Russell also sat in on each session.

The three major topics tackled at each roundtable were:

- What are the immediate priorities?
- How can we ensure that future infrastructure includes inclusive economic growth, as defined by the Scottish Government?
- What does net zero carbon mean for each organisation with regard to future infrastructure?
- What does future-proofing mean to your organisation?

Each session was asked to look at the top priorities in moving towards net zero carbon by 2045. While there were obvious regional issues to be discussed, the commonality of thinking about infrastructure for the whole of Scotland was remarkably similar. The five general themes which emerged from all five forums were:

- All parties and interest groups must be involved from the start of any major infrastructure projects. Collaboration, shared leadership and a genuine desire to deliver projects which benefit Scotland must be embedded from the start and re-enforced for the duration of the project.
- It is virtually impossible to predict what future technologies will be deployed, but we must move ahead and be radical, and accept that there are risks with choosing a wrong path. Then we need to be flexible enough to pivot to adapt to such technological change. Digital connectivity underpins everything.
- Contemplating future infrastructure is difficult when there are immediate requirements to fix existing infrastructure that is crumbling and not being properly maintained.
- There must be better procurement mechanisms to ensure the private sector, particularly housing and construction companies, pay a fairer proportion of costs for infrastructure improvements, such as new roads, schools and community facilities.
- Scotland needs to share its pockets of expertise by highlighting ‘exemplar’ projects and capture knowledge and skills rather than starting from scratch on each project. It needs a proper audit of the most carbon-heavy activities and decide on the most appropriate way to tackle reduction.

The geographical range of the forum.

In Inverness, the geographical range of issues discussed related to the Inverness region and Invergordon, Sutherland, the Western Islands, including the Inner and Outer Hebrides, the Orkney Isles and Shetland, and the Moray coastal area.

In Glasgow, the geographical range of issues discussed related to the Greater Glasgow region, including Renfrewshire, North and South Lanarkshire, the Clyde Valley, Ayrshire, Dunbartonshire, and Argyll & Bute.
In Aberdeen, the geographical range of issues discussed included Aberdeenshire, Aberdeen city and the wider Grampian area, Kincardineshire, and the Banff & Buchan coast, the Moray Firth area, and Angus district, including Forfar, Brechin and Montrose, and Dundee.

In Edinburgh, the geographical range of issues discussed included Edinburgh City, Midlothian, East and West Lothian, Stirlingshire, Clackmannanshire, Perthshire, Fife and Tayside.

In Moffat, the geographical range of issues included North and South Ayrshire, Dumfries and Galloway, Scottish Borders, Midlothian, and Glasgow.

The infrastructure under discussion:

Ian Russell, in his brief introduction reminded participants of the Scottish Government’s broad definition of infrastructure which included homes and the built environment, construction, transport and transportation infrastructure, human mobility including people and places, national health, well-being and social care, and digital infrastructure. This allowed participants to take a broad-brush approach to the issues of infrastructure.

In all forums, discussion on infrastructure criss-crossed into these areas with remarkable ease, and as one participant put it, planning for the future must have the human element at its heart, building communities which not only provide homes but create connections that can build ‘social capital’ where people can flourish in the circumstances they find themselves. This was about communities that are thoughtfully designed, flexible and future-proof.

There was obvious uncertainty about which future digital and transport technologies will emerge and therefore which direction to take to ensure future-proofing. A recurring theme was that infrastructure planning was often stymied by silo thinking. It was therefore difficult to actually make a difference across several sectors.

The issue of homes was fundamental to any discussion. Here there were deep concerns relating to landowners, housing developers and their ability to work with the public sector to provide infrastructure, such as schools and community centres. Building new homes against the need to retrofit existing homes, where there is a larger carbon footprint, was discussed.

“Landscape architects are obsessed with specifying granite which comes from China. How is this carbon friendly? There needs to be a shift in the palette of materials. But do we re-open new quarries in Scotland. Hands up who will vote for opening up quarries around Edinburgh? There would be a public outcry if we did this,”

said one participant.

Future proofing of domestic energy was around which form this should take, whether heat pump source or photo-voltaic solar panels.

Local government planners were frustrated that developers were not always able or willing to pay for infrastructure and that the burden of new infrastructure fell onto cash-strapped local authorities.

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“The whole planning system is broken because we are effectively creating a tension between the council and the developers,”

said a local authority resources chief.

There was a consensus that the Section 75 planning process isn’t right and not working as intended.

“Even if you stop the clock now on development there is still major infrastructure spending that is required. In some respects, it is widened out into the overall tax system. What does society in Scotland want to see in terms of infrastructure servicing their everyday needs,”

said one participant.
One deeper concern is the extent of council, government and Scottish Enterprise cut-backs which has meant a reduction in expertise within planning authorities.

“The skillset required to do regional spatial strategies has gone. Councils have become increasingly reactive as opposed to proactive. They’re scrabbling around firefighting and finding ways to save money, not thinking widely about the long-term needs,” explained one official.

There was discussion about ‘exemplar’ projects becoming the template for projects across the rest of Scotland. Projects that work well can lead to sharing best practice in other areas.

It needs to be the ‘declared intention’ that we change the way we do development in Scotland and this needs to be supported for more than one political cycle.

“I think we need a revolutionary change in our thinking but that’s very difficult. We need exemplars like Shawfair and there are huge initiatives all over the country. Central government needs to say, ‘We are going to work like this as a nation’ or it says ‘Look guys, you will get our full encouragement and support when you work in partnership and collaboration, working together with honesty and integrity in building relationships’,” said a representative.

A key issue raised on numerous occasions was land value in Scotland. While it was recognised that the land owner and private developer needed to make commercial profit, a shortfall on infrastructure funding for roads, water services and other community services was falling on local authorities. The issue of climate change emergency was raised and well understood by participants.

Transportation and mobility are an acute challenge for future national infrastructure.

Scottish Minister Michael Matheson launched the National Transport Strategy in July 2019. This gives an idea of where the Scottish Government wants us to go, becoming more active and to walk and cycle more. It wants more people in Scotland to use public transport to get to their workplace, schools and hospitals and expects the 32 councils to follow this lead. The aspiration is about making us a healthier nation. From this will emerged the Strategic Transport Projects Review (STPR), published in this parliament by 2021, and schemes will come out of this. Despite this, there were complaints.

“We don’t have a joined-up strategy coming from the Scottish Government dealing with all the issues we are talking about. It is very silo-driven. It is about changing the silo mentality… we need to get into the complexity and live with it,” said a Glasgow participant.

The critical dilemma is between discouraging travel which increases levels of carbon yet ensuring that people enjoy travel for the purpose of employment, recreation and social interaction. Human contact is a fundamental principle and enhances well-being.

Scotland’s love affair with the motor car was discussed at length at each forum. How can this be shifted to net zero carbon modes and meet the necessity of climate change? One participant encapsulated the dilemma when she admitted she chose to live in a rural location yet drove to work in the city, eschewing public transport because it did not fit her working and childcare arrangements. Cost was clearly a factor. This highlighted the individual nature of this national issue. Our current way of life has given many Scots high levels of convenience and it will take a massive change in behaviour to accept radical changes in a car-owning habits. Yet for many rural and Highland areas where public transport services are non-existent or intermittent, the car is deemed as an essential.
“It is all very well for someone in Morningside in Edinburgh dispensing with their car and pontificating about net zero carbon for all of Scotland. They can get cheap and regular public transport. This is not the case in much of the Highland and Islands.”

said an Inverness participant.

Indeed, there was gentle hostility from rural participants towards urban dwellers who say that the petrol and diesel car must be banned. The central question is how will Scottish people be persuaded to leave behind the petrol and diesel cars, and what are the future options for electric vehicles and for hydrogen public transport? Here it was viewed as carrot and stick. While legislation and regulation will be necessary, more positive approaches must be undertaken to persuade drivers to use their cars less.

Seismic behavioural change is required to move the nation away from individual car ownership, with participants suggesting a massive push on electric car sharing, and community vehicle schemes, taking community vehicle sharing to new level. It remains to be seen whether politicians will enact radical legislation which will seriously curb car usage.

However, the view from the forums was that road congestion will simply continue if 1,000 petrol and diesel car are replaced with 1,000 electric vehicles. Public transport has to be shown to be superior, faster and cheaper than using private vehicles. Generally, this is not the case today outside of the urban centres.

The future of e-bikes, e-scooters and other electric transport is certain to develop with the more Active Travel routes.

There was a consensus that it was unlikely that more major trunk roads and networks will be built in the traditional way. The new Aberdeen Western Peripheral Route (AWPR) bypass was viewed as an exemplar project in terms of its sustainable credentials, but there were questions raised about its future maintenance and long-term upkeep. There were genuine concerns about the current poor state of the road network across Scotland which has been starved of investment. There is a backlog of investment needed to bring many roads up to current standards. Yet pilot projects, such as the Forth Crossing between Stagecoach and Transport Scotland, are being undertaken on existing trunk roads to assess their suitability for autonomous private and commercial vehicles.

There was much discussion across all of the meetings about charging points for electric vehicles, including the provision of charging points within new build housing. Energy representatives spoke about the shape of the future grid. The Highland & Islands could become net producers of local energy which could be fed into the grid. How might this be able to sustain electrical charging points in the correct positions? Should we encourage a shift towards rural petrol stations becoming fast charging stations for the future?

The bus and coach representatives claimed their side of public transport was viewed as a poor relation yet holds the key to future net zero carbon connectivity. Increasing levels of inclusion will be skewed more towards bus usage rather than train. Per head of population, buses receive a smaller subsidy than for rail or ferry. It is also easier to shift bus services to service new development, but key question of how to sustain such a service. Who will pay for the long term sustainability of such routes? Bus services have been withdrawn because of lack of usage although local campaigners, including councillors, fought to retain bus routes yet statistics showed campaigners didn’t use the bus. For public transport services, the public message must be ‘Use it or lose it’.
NET ZERO CARBON

The objective of net zero carbon was well understood but achieving this was generally vague. This was not an end to all carbon usage but a clear decision about what was ‘necessary’ carbon use and what was ‘optional’. Zero net carbon is also about greening more of Scotland’s landscape with tree and bush plantations integrated into infrastructure and foliage which offset up carbon. Encouragement of wild landscape and city garden and parkland spaces. This could mean the reversal of parking places in domestic front gardens to encourage greenery. Several participants pointed out that the average Scots continues to consume global resources at an unsustainable level. There was discussion on how this equates with net zero carbon and inclusive economic growth when there needs to a reduction in consumption, particularly in plastics and in food waste. Some participants suggested that more calculations need to be undertaken to measure different activities. It was also suggested there should be a public information campaign about personal carbon use as an educational starting point.

“People do not have a clue about their individual carbon use. Eighty per cent of the population are not clear on what they can do to reduce carbon use despite 20 years of trying. You have to make it real to them,” said one representative.

But another summed up the views of many participants: “If we are in a Climate Emergency, we need to be sure we are addressing the well-being and health of the Scottish people in our investment decisions.”
The Forums
Inverness

Forum participants raised serious concerns about the trunk road network with strategic routes suffering from major congestion and maintenance issues. Hot spots included Oban/Fort William; Rest and Be Thankful and access routes to the Western Isles. The road network south and north of Inverness has been deteriorating since 2000. Inverness city has issues including the lack of slip roads on the Kessock Bridge to help traffic flow north and south. In addition, although the A96 is supposed to be being connected to the A9 south of Inverness, this has not yet happened.

Although some improvements taking place, there is little thought given to infrastructure problems that flow from successful completions, such as the requirements of housing developments and business parks. Flagship projects, such as A9 dualling, are welcome, but more thought needs to be given to other major roads which carry, for example, timber and whisky industry lorries.

More and better housing is the key to sustainable population growth in the Highlands & Islands. The high cost of living in the Highlands is a barrier to inclusive growth, with costs up to 20 per cent higher in rural areas. This includes fuel and transport costs and basic items in shops. This is a major barrier to enabling young people to continue to live in these areas. Infrastructure means access to basic services for all.

Many rural communities in the Highlands & Islands are isolated and there are pockets of economic deprivation which rival the Central Belt. So, the provision of adequate housing for local people is at the root of inclusive economic growth.

“We can’t grow unless we get houses. If we want to accelerate the economy, we need houses otherwise incomers won’t come here and young people from the area will move to the Central Belt. There is a need to invest in housing provision to meet the needs of key group of people who increasingly have families and want garden space,” said one participant.

There are key shortages in recruitment in a number of sectors and it is difficult for nurses to find suitable and affordable accommodation in Inverness. It is increasingly difficult for young couples on lower incomes to own a home, with the national housing problem a serious concern in the Highlands and Islands.

Skye is now a thriving rural economy, with a real positivity about the island, but economic success is bringing its own consequences. As well as strains on local NHS services, the affordability of housing – to buy or rent – is now a significant problem for island residents. This is being exacerbated by the impact of tourism. There are now few long-term lets on the island, as property owners prefer the higher income from short-term holiday lets. Some properties previously on the long-term letting market are now being marketed for £1,700-£2,000 a week. Property prices are also escalating. Two-bedroom homes on the Sleat peninsula can now command sale prices of around £300,000, excluding young families who want to stay on the island from the housing market.

On construction, the example was given of building six homes in Raasay. There was a complexity of regulation and permissions and also the issue of utilities, including Scottish Water. Easier to build 60 houses in Kirkcaldy then six in Raasay.

Many mid-market developers (50-100 houses) dropped out of the market because of the economic downturn and there is an urgent need to get that capacity back. However, those developers find it very difficult to get loans from lending institutions. Developing local construction skills is a priority. One participant pointed out were over 110 vacancies locally. The construction industry in Highlands needs the capabilities and the training to deliver infrastructure.

“We are turning away work in the North because we don’t have the people. There is a lot of opportunity but commercially it is easier to undertake work in central England rather than the Highlands of Scotland. It is less viable to do infrastructure work up here,” said a participant.
The local skills shortage is hampering infrastructure and Brexit is bad news for the region.

Many Europeans have made a massive contribution to the area in hospitality, construction, extraction industry and fish farming. Many have gone home and are not coming back. This is a major challenge for Highland and Islands, which needs to get more working age people into the tax system.

Immediate priorities.

> Completing the delayed Inverness Airport stop for trains;
> Make harbour improvements in the islands to allow all sizes of vessels to dock; better planning of ferry replacements;
> Complete promised road improvements;
> Encourage business growth: there are not enough small house builders;
> End the social divide between Highland and Islands, and the rest of Scotland;
> Gather better data and methodology on how to keep up and compare with the rest of the country.
> Sort the ferry situation.
> Invest in the local planning regime.

**FUTURE PROOFING**

“The digital divide is as wide as it has ever been. There are new things coming along and the urban areas are pulling away from us again. We have to catch up. The lag is always there.”

“In the sphere of connectivity what we need is collaboration to make this happen for the Highland community. It’s not affordable for a single operator to create on single network, with everybody, including public and private sector, needing to chip in. There is a lot of cynicism. High level of expectation. That a good digital infrastructure can overcome shortcomings of the other infrastructure shortfalls.”

The Highlands and Islands demands better digital connectivity to allow more people to work from home, access services and reduce geographical barriers to effective commerce. Ultra-fast broadband has to become the norm. The Highland area has always been at back of the queue for traditional infrastructure, from electricity to phones. The coming decades must bring an expansion of rural business hubs, providing flexible bases for micro and small business into which other providers, such as the NHS, can move in at a local scale. Not only will this help businesses to thrive, it reduces social isolation, with hubs becoming community centres, helping to sustain village life. This will also help in building a better infrastructure for an ageing population, which will require greater provision of health and social services. More local facilities and better digital connectivity will reduce the need for NHS patients and their families to travel long distances.
How do we future-proof decisions?

2. Public sector support and investment in broadband including roll-out of 5G connectivity. Government support to fill in the gaps
3. Ensure better transportation, especially on ferries and trains, and more consistent approach to road improvements.
4. The public sector must use the same communications platforms and technologies to enable seamless communications.
5. There is a need for shared outcomes and clarity on responsibility.
6. Organisations must listen more to local communities and act. Young people’s voices had to be heard more. There are too many local councillors in their 60s – and in the Western Isles there are no female councillors.

NET ZERO CARBON

Across the region a lot more planning is in place for electrical vehicle infrastructure. People in the Highlands and Islands will not be giving up their private vehicles. Planning means new requirements for charging points in new homes with building regulations demanding alternative energy sources such as solar panels.

Net Zero Carbon Priorities:

1. More fuel-efficient road networks to allow increase in electric vehicle infrastructure.
2. Essential to build grid to the islands. Need a plan on how micro-grid generation can be connected to main UK grid. Power grid capacity to help harness renewable potential of Highlands and Islands.
4. De-centralisation of decision-making and budgets to local communities, with direct involvement in procurement of infrastructure.
5. A trade with urban areas: we’ll provide the power, you cut the energy prices.
6. Determine the rights of people and set minimum standards for digital infrastructure.
“West of Scotland PLC needs to get its act together,”

“We couldn’t have created more complex structures if we had wanted to,” said one representative, who pointed out that rail and bus services are run by private companies on public infrastructure.

said one public sector representative.

Public, private and third sector participants agreed that future proofing a successful city region such as Glasgow requires co-ordinated infrastructure which works for everyone. Simplifying the current fragmented structures is required over the next five years to allow Glasgow to prosper over the next 30 years and become a net zero carbon region. Other major European city regions, such as Copenhagen or Amsterdam, had much simpler governance systems with one body responsible for all transport matters. Central government has a role in giving local authorities more permissions to create more effective regional strategic bodies.

Through the Infrastructure and Assets Portfolio work on behalf of the City Region, an immediate priority must be to ensure that when City Deal projects are ensuring that every infrastructure company, utility organisation; where there are workload impacts, is around the table, having discussions about priorities, timelines and the investment required. This is to ensure the City Deal projects are delivered on time.

The City Deal infrastructure projects are being mapped and there are high level discussions with key people in Scottish Gas, Scottish Power, Scottish Water, about timelines and if there are gap how can this be resolved in time.

“It is working extremely well. Although we are probably at a very fluffy, happy early stage. We have had some immediate success,”

said a council participant.

What became a clear priority was that no one really understood competing priorities, and responsibilities of the respective organisations. This became apparent early on and it was clear everyone had a different master and set of KPIs and priorities. It was also clear that the utilities did not understand how public sector made their decisions, especially in matters of planning.

There was discussion that the City Deal for the region had limitations and there was a need for City Deal 2.

“Once City Deal 1 is delivered, we want to avoid seven years of nothing before another one is set up,”

said one participant.

The recent Connectivity Commission for Glasgow recommended a new Metro system for the City region, which would help improve connectivity with Glasgow International Airport.

Scottish Natural Heritage (SNH), a statutory consultee and government advisor, working with planning and the development industry has climate emergency at the top of its agenda, with concerns about loss of nature and species. There is also a public health and well-being concern for Scottish people. This all comes together as green infrastructure and nature-based solutions to development. More focus on natural solutions rather than hard-wired traditional infrastructure solutions. SNH fund the Glasgow Clyde Valley Green Network partnership with other stake-holders. The fund is £38 million which is helping change neighbourhoods. This is about active travel and shifting mobility patterns, away from road expenditure, including taking account of the rise of the e-bike. Any infrastructure planned must include the ‘green agenda’ with no funding issued unless the ‘green agenda’ is a priority.

Electric cars are not necessarily the future as they encourage continued motor vehicle use and sustain a ‘suburban’ lifestyle. Future proofing requires more people to live in existing inner-city areas rather than in new suburban housing developments. Glasgow Gateway is exemplar of modern living. The catalyst for this was Glasgow 2014. Public sector investment is able to create prime change. On social inclusion, the regeneration and remediation of brown field urban sites next to areas of low income and low social index has a beneficial impact. Gentrification of areas with proximity to jobs has ability to raise levels of inclusion.
“We talk a good game in terms of net zero carbon, but we are still spending far more on roads than on active travel,” said one public sector representative.

The regeneration of land, especially brownfield sites, has to be a starting point for any infrastructure in Glasgow region, said one participant. This was often seen as a poor relation. This included putting the basic water, sewerage, roads and transport, flood prevention in place. Without this fundamental work being done in parts of the West of Scotland, you can’t build the infrastructure on top of this. It isn’t glamorous, but it is essential because of Scotland’s industrial past and the legacy.

“If we are serious about inclusive growth, it will have to looked at this because in many cases those excluded from the labour market are living next to vacant and derelict sites and areas that can’t be invested in because of the lack of infrastructure.”

**Immediate Priorities:**

1. “We need to develop skilled people in sectors where we know what projects are happening over the next ten years and train the workforce starting now.”
2. Public sector funding needs to meet the green agenda better.
3. A commitment to City Deal 2 and when it comes to immediate economic priorities, they have got to be regional.
4. Adapt the regulatory regime for the electricity network. We need a UK Government policy decision on heat.
5. Raise the funding for Glasgow Metro with a proper strategy for suburban rail.
6. Reduce flood risks, Victorian culverts need replacing, otherwise we could see key drainage arteries collapsing.
7. A major focus on the digital agenda, making places more digital ready with 5G.
8. Glasgow and Edinburgh must link together for investment propositions, make connections closer.

**INCLUSIVE ECONOMIC GROWTH**

Inclusive economic growth requires better planning from the start of a new project. One example of forward thinking was the location of new HMRC offices. The HMRC contacted local authorities five years before the opening of the development to ensure transport services were co-ordinated. This brought well-paid jobs into an area with local employment problems and reduced the need for commuting.

The importance of large amounts of upfront public investment for projects such as the Glasgow Games and Ravenscraig remains vital for the West of Scotland. However, decisions have to be made about the role of public authorities and how outputs are measured as opposed to Gross Value Added (GVA), gross value added. It is difficult to quantify the invisible benefits of major projects, such as Active Travel and improvement on public health outcomes. Green networks do have a link to GVA but also have an impact on public health outcomes, nature and flood control.

If Glasgow could be marketed as ‘Climate Ready’, it could attract significant inward investment, because the city has world class engineering expertise, innovation in its universities, and a skilled workforce which could be harnessed and positioned to capitalise on emerging opportunities.

**Net Zero Carbon Priorities:**

1. Help business capitalise on the new opportunities, either alone or through joint ventures.
2. Legislate to enforce net zero carbon house building and set timelines for when the new policies will come into force.
3. Support companies to innovate, diversify and expand, building expertise and knowledge – creating sustainable employment and capture exemplar models to share.
4. Strategic policy decision-making and legislation must be freed up and focused on enabling investment in infrastructure.
5. Create Market and policy certainty for business.
Aberdeen is isolated from the rest of Scotland. Almost three hours by train to Glasgow and Edinburgh is ‘ridiculous’ said one local authority resources chief. Central Belt passengers can get to London almost as quickly as we can reach Edinburgh/Glasgow. “Fact that trains are so irregular is just a joke,” declared a housing industry manager.

The twinning of the line at Montrose could allow twin track between Aberdeen and London. The bottleneck is the bridge at Montrose Bay, an upgrade planned before the First World War but put on hold and then never delivered. Aberdeen station is a bottleneck and therefore services to Inverness are impacted. Meanwhile the increase in intercity times between Scottish cities has impacted negatively on places, such as Laurencekirk, which is deterring people from using the train.

‘People would be prepared to pay more in tax if we fixed the potholes,’

said one public sector representative.

At Aberdeen Airport there is only one carrier flying to London making Aberdeen unattractive for investment and for people to come to work.

Meanwhile in the Granite City there has never been a time when there have been so many empty buildings in the city centre. Any granite building is listed – a big restraint on developers. There needs to be a more realistic view of what is worth keeping in the city.

Aberdeen is about to get a second port and, post-Brexit, will have potential for free port but no connectivity with rest of Scotland to facilitate that. The opening of Aberdeen Western Peripheral Route (AWPR) demonstrated the right investment can make a massive difference.

In Aberdeen, focussing of Park and Rides (P&R) revealed a national issue that P&R are not being properly utilised, and the uptake is poor, while in Perth there was a view that the cost of land for P&R was too prohibitive when compared to land usage for housing.

This was an issue of land valuation and earmarking usage for social needs.

There are 32 local authorities all competing for growth, but can they all expect to grow?

“In the local authority where I work, every single one of the seven towns want to grow at the same rate. Instead of saying these are the two locations where we want to put our investment. Somebody mentioned the phrase ‘hospice town’, which is a horrible phrase because it’s a case of just looking after what is there, but we can’t keep investing in everywhere,”

said a representative.

Money has been poured into declining areas, and there is some justification for that, but we need to ensure the transport connections are there to ensure the public can travel to where there are growth opportunities. We are not investing in the gems.

“It’s about hard political decision and choices, and we are not brave enough to do this,”

said one participant.

Recent new-builds in Aberdeenshire and through Early Years provision has opened eyes to the poor state of schools in Aberdeenshire. There has been a lack of investment for many years. Primary children have to be a starting point. There is a backlog of maintenance at schools which is about ten years. We are thinking about new schools and development but even if you had a chunk of money tomorrow you would only be catching up.

There is an appreciation that Aberdeen and the North East has massive expertise in the energy supply chain. This was a transition to net zero carbon where the North East’s engineering infrastructure has massive role to play and must be encouraged and expanded. North east worked in a different cycle to rest of Scotland. Carbon capture could become a major industry, if it was thought viable. Vital skills needed to be retained for Scotland. Also, the remaining oil and gas should be earmarked for domestic Scottish use.
Immediate Priorities.

1. Physical infrastructure requires immediate financing to overcome a backlog. National infrastructure funding has not been fairly distributed despite Aberdeen generating £16,000 per head in taxation, the highest amount in Scotland.

2. Central and local government needs to look at road charging again as a priority, said one representative, as a means of generating new revenue for infrastructure projects.

3. District heating systems (DHS) are a way forward to reducing carbon emissions in the housing sector but this is likely to require government-level regulation to ensure compliance across the country.

4. Decide the infrastructure priorities for investment and stick with this decision.

NET ZERO CARBON

Functional, reliable and affordable public transport must play a major role in reducing carbon emissions but, representatives agreed, there were major barriers to providing it. One was confusion over which new technology to adopt. Although electric vehicles were ‘de rigueur’ were they really the way forward? Should there instead be a hiatus until the possibilities of no-emission hydrogen fuel technology was fully explored and either adopted or discounted?

Major funding was required to pay for the necessary research if targets were to be met.

“We will not hit the targets unless we have chosen the right technology,”

said one representative.

Even if the push towards electric vehicles is encouraged, other barriers are a shortage of charging point, those who have adopted the technology need to be educated to charge their vehicles at times that did not strain the electricity transmission network.

Representatives agreed a barrier to reducing carbon emissions was a plethora of plans from different agencies working to different agendas. The ‘five-year cycle’ of politics in the UK was also hampering long-term infrastructure planning.

“We spend more time in talks about plans than on actually getting things done,”

said one representative.

Local councils must have more freedom to use their funding. One representative said national regulations laid down that 75% of grant funding had to be spent on certain services, such as education and social care. Councillors should be given more freedom to allocate money in different way.

“If they (national government) constrain our budgets we will not meet the 2045 (net zero carbon) target. Give us the financial levers to act,”

said one local authority representative.

Bus industry representatives said only small parts of their fleets would be electric vehicles for the foreseeable future because of reliability and refuelling issues. In the interim, they would favour more priority bus lanes to encourage travellers to use public transport.

Although Aberdeen region makes a disproportionate contribution to the Scottish economy and is a global hub for talent and innovation, it is poorly served in terms of broadband speeds and connections. Rural areas are losing population as a result.

“For our competitors in Houston, Texas, and Perth, Australia, for example, this is not an issue,” “All we want is a level playing field in terms of business competitiveness.”

said one public sector representative.
In Edinburgh there are conflicting issues related to the success of the city and the immediate areas. The over-heating of a small, space-restricted central economic node, which is Edinburgh City, is still attracting people inwardly from those new communities. You could change the character of Edinburgh by increasing the density of housing. How far do we go in the densification of the urban area of a UNESCO city attracting visitors for the city’s architecture and heritage?

In Edinburgh, the suburban areas are now being rebuilt with considerably higher densities than set out in the early 20th century, based on a tram or a rail network. Social environment in the outlying areas beyond the city are completely car orientated. However, every time the Edinburgh City Region gets together, the City takes one view, while the surrounding councils, such as Midlothian, take another view. Challenges are about behaviours of those living in the surrounding areas.

“I’m not demonising Midlothian!”

said one participant.

The Development Plan Action Programme for Edinburgh has involved engagement with the NHS. Unless it is scoped out early, then infrastructure projects run into a number of problems. Question of legacy is only now being addresses. The challenge is about resourcing. A big figure can be put on public infrastructure but less than half is being raised from the developer contribution process. Who is taking the risk, it is falling back on local authorities and partner organisations? Every year the council has to reflect on that level of risk. The answer can be found in Land Value Capture (LVC) and the work done by Land Commission to think in the longer term. In LVC the value is made by the land-owner, and not the developer who claims he cannot afford to develop the infrastructure.

An Architecture representative said breaking thinking down to ‘place’, ‘processes’, and ‘parts’, which are the components of the built solution. Often we jump to ‘parts’ without making sure we know what we are looking for. This gives a task list which helps bring clarity, making sense of complexity.

Housebuilders don’t have any responsibility for the ‘units’ they put up once they are built. They move on. How do we get legacy in perpetuity? There are issues about the morality of house-building. We should be building communities rather than units. No Monopoly-style housing and more green space. Off the shelf design doesn’t bring community and well-being. We need to look at more timber-framed buildings, a good example in Portobello. Scandinavians and Germans are looking at this, but it also depends on a healthy local supply.

In Stirlingshire, a local hot-desking hub in the Trossachs is getting people working locally but it needs long-term support. There are a lot of people with a healthy skill set that we are relying on to work in social enterprise for nothing, but we don’t support them. There is still a silo mindset. We should be building a community of ‘well-being’.

In speaking about exemplar projects, this forum heard about the investment in Dundee with the V&A building at the centre which was a successful example of the public and private sector working together. In Edinburgh, Shawfair, with 4,000 houses, was an example where willing and able local governments, in Edinburgh and Midlothian, have worked with a willing local land-owner, who has had the vision to create a legacy. There are examples of where it works but it needs to be done at a national level where there is a proper long-term funding mechanism and there is the economy of scale. It requires a national plan which thinks about place and can it satisfy housing demand.

In the Central Belt there was discussions about new-build architects choosing granite which came from China as opposed to local stones and slate which had a less of a carbon footprint.

The Scottish Prisons Service requires renewed funding to complete the transformation of the prison estate to make it fit for the 21st century. Although the programme is 75% complete, funding has dried up since 2014 even though the prison population is rising. Prisoners doubling up in cells designed for one person. Plans to replace the ageing Barlinnie Jail on a brownfield site in Glasgow are on hold awaiting sufficient funding. This is important in infrastructure terms as new prisons can help to economically regenerate an area and more able to rehabilitate offenders.

“Houses with gardens and capacity for two cars are still very much in demand and the norm. The region (Edinburgh and the Lothians) is still creating the places and conditions that encourage and enable people to drive,”

said one representative.
Immediate Priorities:

1. Extending the tram link to Leith would increase accessibility and make travel to work more affordable. “We should target free travel for young people not the over 60s”
2. There is considerable existing infrastructure across Scotland that is not being used to maximum efficiency – increase capacity on this first.
3. Peak-time congestion on transport and during major events needs drastic improvement. Edinburgh Festival and Fringe is at capacity and creating huge pressure.
4. Deal with the overloading in areas of Edinburgh which results in unfair infrastructure use and investment – while marginalising other areas.

NET ZERO CARBON.

There was acknowledgement that the world is facing a ‘climate emergency’ and there is a need for radical solutions. One way would be to make everyone responsible for their own carbon output through carbon rationing.

“It would come down to choice. You can choose to fly to Australia but if you do you cannot use your car for a year,” suggested on participant.

However, some representatives said this would require carbon output per person to be measured very accurately and technology is not ready for this yet.

The gas network is being future proofed by installing plastic pipes to carry new fuels such as hydrogen. The Scottish Government can do more to encourage future technologies including hydrogen, while the transfer of skills from oil and gas into new infrastructure skills is required.
A general view from the forum held in Moffat was Scotland’s councils must set their traditional rivalries aside and focus on supporting projects aimed at promoting economic growth at a regional level. To an extent, this is already happening in Ayrshire, where the three councils are co-operating on a regional growth deal signed in March 2019.

One participant said councils need to ‘work together collectively and holistically’ to identify the productivity and growth gains of each regional investment proposal. However, there are inconsistencies in data and data-gathering between local authorities, which makes comparisons very difficult, need to be ironed out if this is to be achieved. Scottish Enterprise is seeking to address this with a national economic asset register.

A key priority for south-west Scotland is the M77/A77 Glasgow to Stranraer route. One council official said a Maybole bypass is an urgent requirement, adding better East-West routes such as the A75 linking Stranraer and Gretna are also needed. Crumbling infrastructure was evidenced by the closure of rail services from Glasgow to Stranraer during 2018 as a result of the possible collapse of the disused Station Hotel in Ayr.

In the broader area and in Ayrshire, there were concerns about the level of flooding and whether future infrastructure was capable of dealing with the results of climate change.

There has been an awareness for a decade about need for flood protection for Selkirk and Melrose, but rural areas are left behind in the roll-out of infrastructure.

Better broadband for consumers, business and public services is paramount. Five years ago Dumfries and Galloway had 25% superfast coverage, now it is at 92/93%, but the Scottish average is 97%. Dumfries and Galloway is well behind, whereas the Ayrshire’s are ahead of that. Edinburgh and Glasgow are now getting Ultra-Fast broadband with speeds of 330mbt. Nobody needs this but there is an arms race between Virgin and BT and competitions which is fuelling this. Openreach bidding for a tranche of the £100 million R100 money to deliver 100% of Scotland, to 30mbt. “This is a fantastic ambition for Scotland.”

But building this in rural areas is massively expensive and difficult. What has been easier than previously thought was going into the centre of a village, installing a green box and then sending out the fibre to homes and premises. Openreach need to build it right to the door of rural homes, not aggregated to a local village, up a farm lane it is harder to provide. Around £600,000 spent on small village in Benbecula to deliver to 25 houses. Scottish Government has earmarked £140 million for across the whole of the south of Scotland.

“We should be able to get to 100% or as near as damn it, with that level of money,” said a telecoms industry insider.

The immediate priority is to get everyone on that level playing field. Then e-health can be better monitored through the infrastructure. Opportunity is great for Scotland if we can get digital connectivity for all.

One Borders participant suggested the national road network should come under the auspices of one unitary body, because Transport Scotland was only responsible to 13% of Scotland’s major roads and that 32 council had 32 budgets for road and bridge infrastructure. The bidding for City and Regional deals meant there was unnecessary duplication on road spending, although most council participants note dramatic reduction in road investment in last ten year.

Agriculture, a major employer in the Scottish Borders region, is viewed as a major contributor to carbon emissions. Trees are important filters of CO2 but more efficient economic use of forestry is needed. The forestry industry is driven primarily driven by motive of tax relief. Planting more trees and thinning growth at least once before felling won’t reduce the amount of wood but will provide more jobs for the community and can allow tenant farmers to plant woodlands themselves: e.g. a sheep farmer could plant 1,000 acres of woodland, keep 2,000 acres for sheep and be better off. The farming community has embraced wind power generation and energy storage resulting in the fact that a lot of power can now be stored in container sized battery facilities.

Immediate Priorities:

1. Think about inclusive economic growth from the start of any development.
2. Look at the resilience of hard assets – instead of building new roads look at the state of existing one.
3. Set a goal of eradicating poverty.
4. Have more open space to allow people to integrate.
5. Plan for future growth and learn lessons such as platforms being too short on the Borders Railway.
6. The taxation model needs to be completely changed. We need a tax system that encourages infrastructure investment and is compatible with inclusive economic growth.
7. Bring the NHS into modern digital era – for example by giving customers/patients the ability to track and liaise with a district nurse via an app.

**NET ZERO CARBON**

Digital connectivity must be improved and enhanced across the region. Business growth requires enhanced levels of connectivity. The roll-out of 5G is vital for the whole region but will require public sector support in remote and rural areas.

**Net Zero Carbon Priorities:**

1. The objectives of the Commission are laudable but short term, there may be the case for a standing Commission on Infrastructure to deliver on net zero carbon economy.

2. Stop investing in silos – there is not one simple set of criteria that will address climate change and achieve net zero carbon. Collaboration and goodwill are essential.

3. Digital connectivity underpins everything.