



Economic Development and Infrastructure Services Committee

Tuesday, 02 May 2023

NOTICE IS HEREBY GIVEN that a Meeting of the **Economic Development and Infrastructure Services Committee** is to be held at **Council Chambers, Council Office, High Street, Elgin, IV30 1BX** on **Tuesday, 02 May 2023** at **09:30**.

BUSINESS

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- 2 **Declaration of Group Decisions and Members Interests ***
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- 4 **Written Questions ****
- 5 **Notice of Motion - Whisky duty - Councillors Harris and Warren** 19 - 20
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Report by Depute Chief Executive (Economy, Environment and Finance)

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| | Consider any oral question on matters delegated to the Committee in terms of the Council's Scheme of Administration. | |

Information Reports - Not for Discussion at this Meeting

Any member wishing to call in a noting or information report from one meeting shall give notice to Committee Services at least 48 hours before the meeting for which the report is published. The Notice shall be countersigned by one other elected member and shall explain the reason for call in including any action sought.

Information Report - List of Property Transactions

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concluded under Delegated Powers

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Report by Depute Chief Executive (Economy, Environment and Finance)

Information Report - Scottish Local Authorities

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Economic Development Indicator Framework Report

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2021-22

Report by Depute Chief Executive (Economy, Environment and Finance)

Summary of Economic Development and Infrastructure

Services Committee functions:

Roads Authority; Lighting Authority, Reservoirs Act 1975, Public Passenger Transport; Flood Prevention; Twinning; Piers and Harbours and Coast Protection; Industrial and Commercial Development; Environmental Protection; Burial Grounds; Assistance to Industry or Commerce; Public Conveniences; Council Transportation; Catering & Cleaning; Land Reform (Scotland) Act 2003; Countryside Amenities; Tourism, monitoring funding from European Programmes, youth training and employment creation scheme and provide Architectural, Quantity Surveying, Maintenance and Allied Property Services.

* **Declaration of Group Decisions and Members Interests** - The Chair of the meeting shall seek declarations from any individual or political group at the beginning of a meeting whether any prior decision has been reached on how the individual or members of the group will vote on any item(s) of business on the Agenda, and if so on which item(s). A prior decision shall be one that the individual or the group deems to be mandatory on the individual or the group members such that the individual or the group members will be subject to sanctions should they not vote in accordance with the prior decision. Any such prior decisions will be recorded in the Minute of the meeting.

** **Written Questions** - Any Member can put one written question about any relevant and competent business within the specified remits not already on the agenda, to the Chair provided it is received by the Proper Officer or Committee Services by 12 noon two working days prior to the day of the meeting. A copy of any written answer provided by the Chair will be tabled at the start of the relevant section of the meeting. The Member who has put the question may, after the answer has been given, ask one supplementary question directly related to the subject matter, but no discussion will be allowed.

No supplementary question can be put or answered more than 10 minutes after the Council has started on the relevant item of business, except with the consent of the Chair. If a Member does not have the opportunity to put a supplementary question because no time remains, then he or she can submit it in writing to the Proper Officer who will arrange for a written answer to be provided within 7 working days.

*** **Question Time** - At each ordinary meeting of the Committee ten minutes will be allowed for Members questions when any Member of the Committee can put a question to the Chair on any business within the remit of that Section of the Committee. The Member who has put the question may, after the answer has been given, ask one supplementary question directly related to the subject matter, but no discussion will be allowed.

No supplementary question can be put or answered more than ten minutes after the Committee has started on the relevant item of business, except with the consent of the Chair. If a Member does not have the opportunity to put a supplementary question because no time remains, then he/she can submit it in writing to the proper officer who will arrange for a written answer to be provided within seven working days.

THE MORAY COUNCIL

Economic Development and Infrastructure Services Committee

SEDERUNT

Councillor Marc Macrae (Chair)
Councillor Amber Dunbar (Depute Chair)

Councillor Peter Bloomfield (Member)
Councillor John Cowe (Member)
Councillor John Divers (Member)
Councillor David Gordon (Member)
Councillor Juli Harris (Member)
Councillor Sandy Keith (Member)
Councillor Graham Leadbitter (Member)
Councillor Paul McBain (Member)
Councillor Shona Morrison (Member)
Councillor John Stuart (Member)
Councillor Draeyk Van Der Horn (Member)
Councillor Sonya Warren (Member)

Clerk Name:	Lissa Rowan
Clerk Telephone:	07765 741754
Clerk Email:	committee.services@moray.gov.uk

Minute of Meeting of the Economic Development and Infrastructure Services Committee

Tuesday, 07 February 2023

Council Chambers, Council Office, High Street, Elgin, IV30 1BX

PRESENT

Councillor Peter Bloomfield, Councillor John Cowe, Councillor John Divers, Councillor Amber Dunbar, Councillor David Gordon, Councillor Juli Harris, Councillor Sandy Keith, Councillor Graham Leadbitter, Councillor Marc Macrae, Councillor Shona Morrison, Councillor John Stuart, Councillor Draeyk Van Der Horn, Councillor Sonya Warren

APOLOGIES

Councillor Paul McBain

IN ATTENDANCE

Chief Executive, Head of Environmental and Commercial Services, Head of Economic Growth and Development, Head of Housing and Property, Roads Maintenance Manager, Mrs D Anderson, Senior Engineer (Transportation), Consultancy Manager, Property Asset Manager, Harbour Development and Operations Manager, Open Spaces Manager, Mr C Muir, Senior Officer (Economic Strategy and Development), Legal Services Manager and Mrs L Rowan, Committee Services Officer as Clerk to the Committee.

1 Chair

Councillor Macrae, being Chair of the Economic Development and Infrastructure Services Committee, chaired the meeting.

2 Declaration of Group Decisions and Members Interests

In terms of Standing Order 21 and the Councillors' Code of Conduct, there were no declarations from Group Leaders or Spokespersons in regard to any prior decisions taken on how Members will vote on any item on the agenda or any declarations of Member's interests in respect of any item on the agenda.

Councillor Dunbar did however state that, in relation to item 7 "Electric Vehicle Infrastructure Fund Strategy and Expansion Plan" she is Vice-Chair of HITRANS as the report details HITRANS Officer involvement. This was noted.

3 Withdrawal of Item 14 - Land at Commercial Road Buckie

The Chair stated that Item 14 "Land at Commercial Road Buckie" had been withdrawn from the agenda and was being replaced with a revised report "Land at

Commercial Road Buckie” which would be circulated to the Committee and uploaded to CMIS. This was noted.

4 Resolution

The meeting resolved that in terms of Section 50A (4) and (5) of the Local Government (Scotland) Act 1973, as amended, the public and media representatives be excluded from the meeting during consideration of the items of business appearing at the relevant paragraphs of this minute as specified below, so as to avoid disclosure of exempt information of the class described in the appropriate paragraphs of Part 1 of Schedule 7A of the Act.

Paragraph No. of Minute

Paragraph No. of Schedule 7A

20

8 and 9

5 Minute of Meeting dated 15 November 2022

The Minute of the meeting of the Economic Development and Infrastructure Services Committee dated 15 November 2022 was submitted and approved.

6 Written Questions

The Committee noted that no written questions had been submitted.

7 Notice of Motion - Levelling Up Fund

The following Notice of Motion was submitted by Councillor Leadbitter and seconded by Councillor Stuart:

Levelling Up Fund

Committee regrets the UK Government’s decision to allocate £0 of its £2.1 billion Levelling Up Fund Round 2 to Moray.

Committee commends the work of Council officers in submitting a strong and ambitious bid for funding that would have stimulated the regeneration of the Elgin town centre and created jobs in the area.

Committee instructs the Chair of Economic Development and Infrastructure Services to write to the Secretary of State for Levelling Up to express its dismay at the decision to not allocate any funding to Moray and to ask that it be reversed.

The Chair stated that there were 529 bids for the funding with 111 successful and stated that a further round of funding was expected in the future. He further stated that he had received a letter from Douglas Ross MP sharing the concern and frustration of the Council that there was not a successful outcome to its bid however pledged to support Moray’s bid in future funding rounds. Douglas Ross further stated that he had secured meetings with the Secretary of State for Levelling Up, The Rt Hon Michael Gove MP, to discuss Moray’s bid and where improvements can be made going forward.

Councillor Dunbar stated that she shared the disappointment felt by other Councillors on hearing that the Council had been unsuccessful in its bid for levelling up funding however stated that it was not fair on other local authorities to ask for a reversal of the decision. She welcomed the assurance from Douglas Ross to support Moray in its bid in future funding rounds and moved as an amendment to the motion that, instead of asking for the decision to be reversed, the Committee ask that feedback be given on the application. This was seconded by Councillor Gordon.

On a division there voted:

For the Motion (7):	Councillors Leadbitter, Stuart, Harris, Keith, Morrison, Van Der Horn and Warren
For the Amendment (6):	Councillors Dunbar, Gordon, Bloomfield, Cowe, Divers and Macrae
Abstentions (0):	Nil

Accordingly, the Motion became the finding of the Meeting and the Committee commended the work of Council officers in submitting a strong and ambitious bid for funding that would have stimulated the regeneration of the Elgin town centre and created jobs in the area and agreed to:

- (i) note the UK Government's decision to allocate £0 of its £2.1 billion Levelling Up Fund Round 2 to Moray; and
- (ii) instruct the Chair of Economic Development and Infrastructure Services to write to the Secretary of State for Levelling Up to express its dismay at the decision to not allocate any funding to Moray and ask that it be reversed.

8 Roads Asset Management Planning

A report by the Depute Chief Executive (Economy, Environment and Finance) informed the Committee of the latest road network condition information.

Following consideration, the Committee agreed:

- (i) to note the latest Road Condition Indicator (RCI) results for Moray Council;
- (ii) that the RCI results continue to be monitored and reported back on an annual basis to this committee; and
- (iii) to note the clear commitment to the use of Road Asset Management Planning in Moray Council.

9 Electric Vehicle Infrastructure Fund Strategy and Expansion Plan

A report by the Depute Chief Executive (Economy, Environment and Finance) informed the Committee of proposals for the future operation and expansion of the publicly available electric vehicle charging infrastructure in Moray. It was noted that the report covers publicly available charging infrastructure only and that the decarbonising of the Moray Council's fleet and the requirements for supporting

electric vehicle infrastructure to service the fleet will be the subject of a separate report to this Committee.

During discussion surrounding the provision of electric vehicle charging infrastructure in rural areas, it was noted that this would be considered at the second stage of the strategy and that this would involve considering land that the Council does not own.

The Chief Executive advised that the Council has a positive relationship with the Crown Estate and that he would be willing to raise any issues that may arise in relation to the installation of electric vehicle charging points in rural locations not owned by the Council with them directly. This was noted.

Thereafter, the Committee agreed to:

- (i) note that the availability of future grant funding for the expansion of the electric vehicle charging infrastructure is subject to having an approved Strategy and Expansion Plan which meets the criteria set by Scottish Government;
- (ii) approve the draft Electric Vehicle Infrastructure Strategy and Expansion Plan attached as set out in Appendix 1 of the report and grant delegated authority to the Head of Environmental and Commercial Services to approve the final version following any feedback received from Scottish Futures Trust and Transport Scotland; and
- (iii) to note the Council's positive relationship with the Crown Estate and the willingness of the Chief Executive to raise any issues that may arise in relation to the installation of electric vehicle charging points in rural locations not owned by the Council.

10 Update on Zero Emission Fleet Replacement Strategy

Under reference to paragraph 18 of the Minute of the meeting of Moray Council dated 6 April 2022, a report by the Depute Chief Executive (Economy, Environment and Finance) provide the Committee with an update on the approach and progress to date in decarbonising the Council's fleet.

During discussion surrounding aligning Moray Council targets for fleet decarbonisation with the Scottish Government targets to phase out light commercial vehicles by 2030 and heavy duty vehicles by 2040, Councillor Bloomfield was of the view that phasing out light commercial vehicles by 2030 would be challenging and moved that this be changed to 2040 in line with heavy duty vehicles.

The Head of Environmental and Commercial Services advised that the targets referred to by Councillor Bloomfield were Scottish Government targets and pointed out that if this amendment were carried then that would put the Council out of line with Scottish Government targets.

On considering the advice from the Head of Environmental and Commercial Services, Councillor Bloomfield withdrew his motion.

Thereafter, the Committee agreed to:

- (i) note the progress being made by Fleet Services to contribute to the Council meeting its ambitious net zero targets;
- (ii) note the challenges faced within the transport sector as outlined in this report means it is highly unlikely that Moray Council will be able to remove all of its fleet carbon emissions by 2030;
- (iii) align Moray Council targets for fleet decarbonisation with the Scottish Government targets to phase out light commercial vehicles by 2030 and heavy duty vehicles by 2040 which will allow Moray Council to replace vehicles with low energy alternatives as soon as is practically feasible;
- (iv) note that adopting this approach may save money by delaying purchase of certain vehicles until the market has stabilised, but will still require capital investment which will be subject to consideration as part of the standard financial planning process going forward; and
- (v) note that implications on any delay in reducing Moray Council carbon emissions from fleet vehicles will be worked into the update of the Moray Council's Route Map to Net Zero (RMNZ) which is being reported to this Committee in May 2023.

11 Cloddach Bridge Structural Assessment

Under reference to paragraph 6 of the Minute of the meeting of this Committee dated 6 September 2022, a report by the Depute Chief Executive (Economy, Environment and Finance) informed the Committee of the structural condition of Cloddach Bridge which is currently closed in the interest of public safety and advised on the options available for the future operation of this bridge and provide an update on the meeting held with community representatives.

Councillor Morrison stated that she had attended the meeting with other Councillors, Officers and residents where residents had asked for support from the Council to raise funds to keep the bridge open and moved that the Committee agree recommendation (i) and (iii) in the report. This was seconded by Councillor Warren.

Councillor Macrae recognised the impact that the closed bridge was having on local residents and expressed a strong desire to support the community in their attempts to raise external funding to keep the bridge open however after considering the current financial state of the Council could not justify a spend of £30,370 for investigative works that may not result in the bridge re-opening. He moved that the Committee agree options (i) and (ii) in the report with a commitment, in conjunction with his Group, to pursue alternative funding sources with a view to keeping Cloddach Bridge open. This was seconded by Councillor Bloomfield.

Councillor Cowe shared Councillor Macrae's desire to help the community raise the funds however also shared his concern with regard to the financial position of the Council and also noted that there was no budget for staff resource to support the community in this regard and moved a second amendment that the Committee

agree options (i) in the report with a further recommendation to support potential options for the community to keep the bridge open, at no cost to the Council.

The Chair reiterated his motion and pledge as Chair of the Economic Development and Infrastructure Services Committee and member of the Conservative Group to pursue alternative funding sources with a view to keeping Cloddach Bridge open and hoped that other Councillors would do likewise.

After considering the Chair's comments, Councillor Cowe withdrew his amendment and stated that he, in conjunction with his fellow Heldon and Laich Councillors, would also pursue alternative funding sources with a view to keeping Cloddach Bridge open.

On a division there voted:

For the Motion (5):	Councillors Morrison, Warren, Harris, Leadbitter and Stuart
For the Amendment (8):	Councillors Macrae, Bloomfield, Cowe, Divers Dunbar, Gordon, Keith and Van Der Horn
Abstentions (0):	Nil

Accordingly, the Amendment became the finding of Meeting and the Committee agreed:

- (i) to keep Cloddach Bridge closed to vehicular traffic but open to pedestrians and cyclists with regular inspections to monitor the condition of the bridge;
- (ii) when bridge condition deteriorates further and it is not safe for any user, this route is closed permanently and the bridge is removed; and
- (iii) to note the Chair's commitment, in conjunction with his Group, to pursue alternative funding sources with a view to keeping Cloddach Bridge open.

12 Suspension of Standing Orders

The Chair sought the agreement of the Committee to suspend Standing Order 77 to allow the meeting to progress beyond 12:45 pm. This was agreed.

13 Port Marine Safety Code Quarterly Report - Quarter 3

Under reference to paragraph 6 of the Minute of the meeting of this Committee dated 20 March 2018, a report by the Depute Chief Executive (Economy, Environment and Finance) informed the Committee on matters of Marine Safety and compliance with the Port Marine Safety Code (PMSC) for the period Q3 year 2022/23.

During discussion surrounding lights at the pier in Buckie Harbour, it was noted that harbour users disembarking their boats when it was dark had to walk in the dark to obtain the spotlight and it was queried whether consideration could be given to lighting the pier to ensure the safety of harbour users.

In response, the Harbour Development and Operations Manager advised that he would explore a solution to ensure the safety of Buckie Harbour users disembarking their boats onto the pier when it is dark.

During further discussion surrounding the Council's harbour dredging programme, it was queried when dredging would be carried out at Hopeman Harbour.

In response, the Harbour Development and Operations Manager advised that he would provide an action plan for dredging Hopeman Harbour at the next meeting of this Committee.

In response to a query in relation to the number of planned and unplanned maintenance days for the Selkie, the Harbour Development and Operations Manager agreed to provide this information to the Committee following the meeting.

The Committee joined the Chair in thanking the Buckie Harbour Staff for their patience and flexibility during the office move and thereafter agreed:

- (i) to note the safety performance, fulfilling its function as Duty Holder under the Port Marine Safety Code;
- (ii) that Officers explore a solution to ensure the safety of Buckie Harbour users disembarking their boats onto the pier when it is dark;
- (iii) that an Action Plan for dredging Hopeman Harbour would be provided at the next meeting of this Committee; and
- (iv) to provide the Committee with the number of planned and unplanned maintenance days in Quarter 3.

14 Use of Glyphosate to Control Weeds in Open Spaces

A report by the Depute Chief Executive (Economy, Environment and Finance) informed the Committee of the legally approved use of Glyphosate to control weeds in open spaces.

Councillor Van Der Horn, having considered the report, was of the view that there was not enough information within the report for the Committee to agree the recommendations. He stated that he would like to see more information in relation to costings for an alternative to glyphosate and asked for more research to be carried out in relation to the link of glyphosate to some forms of cancer. He further raised concern on the implications on biodiversity as glyphosate is considered to be harmful to pollinators. Councillor Van Der Horn moved that the Committee agree to defer consideration of the report until this information is available. This was seconded by Councillor Harris.

In response, the Head of Environmental and Commercial Services advised that she did not have the staff resource to undertake this level of research and that if Committee were minded to ask for this information then further staffing budget would be required.

The Legal Adviser further advised that, should the Committee agree to ask for this additional information, given that further budget would be required then this would have to be agreed by either the Corporate Committee or Full Council.

Councillor Bloomfield noted that the Council is reducing its use of glyphosate and further noted that it is legally approved for use until December 2025 and moved that the Committee agree the recommendations in the report. This was seconded by Councillor Dunbar.

The Chief Executive advised that the report included actions to reduce the use of glyphosate and noted that the Head of Environmental and Commercial Services had advised that there was no budget to carry out further research in this regard however suggested that the Committee may find it helpful if a report detailing how the Council plans to phase out the use of Glyphosate by 2025 is brought to a future meeting of this Committee with the understanding that if obtaining this information required further budget, this would have to be agreed at either the Corporate Committee or Full Council.

On considering the advice from the Chief Executive, Councillor Van Der Horn and Bloomfield agreed to withdraw their motions. Accordingly, Councillors Harris and Dunbar withdrew their seconds.

There being no-one otherwise minded, the Committee agreed to:

- (i) note that, although there are public concerns, Glyphosate is legally approved for use in Great Britain until December 2025 and that it continues to be the most cost effective and efficient method of managing weeds;
- (ii) approve the proposals to reduce the use of Glyphosate through a managed approach in certain settings as outlined in paragraph 6.3, and note that, whilst these can be introduced without additional cost, a greater presence of weeds and longer vegetation would need to be accepted and tolerated within the environment;
- (iii) note that Officers will continue to monitor the cost and effectiveness of alternative approaches of weed control; and
- (iv) that a further report be brought to a future meeting of this Committee detailing how Glyphosate will be phased out by 2025.

15 Resumption of Meeting

PRESENT

Councillor Peter Bloomfield, Councillor John Divers, Councillor Amber Dunbar, Councillor David Gordon, Councillor Juli Harris, Councillor Sandy Keith, Councillor Graham Leadbitter, Councillor Marc Macrae, , Councillor John Stuart, Councillor Draeyk Van Der Horn, Councillor Sonya Warren

APOLOGIES

Councillor John Cowe, Councillor Paul McBain and Councillor Shona Morrison

16 Moray Routes - Bright Futures

Under reference to paragraph 16 of the Minute of the meeting of Moray Council dated 6 April 2022, a report by the Depute Chief Executive presented to Committee the Strategic Tourism Infrastructure Development Plan, Moray Routes: Bright Futures and sought permission to approve the plan and its proposals.

During discussion, the Moray Routes: Bright Futures Plan was welcomed however it was noted that there was no route passing through Elgin and it was queried whether consideration could be given to including a route through Elgin in future plans.

In response, Mr Muir, Senior Officer (Economic Strategy and Development) advised that the routes in the plan were taken from existing routes however agreed to explore a route through Elgin in future plans.

During further discussion surrounding the Fish Wives Path linking Buckie to Keith, it was noted that this was not included in the plan and, as it is a significant route in the area, it was queried if it could be included.

In response, Mr Muir, Senior Officer (Economic Strategy and Development) advised that this had not been included due to land owner restrictions preventing access on the route however agreed to look into this further and provide further information in this regard to the Committee following the meeting.

Thereafter, the Committee agreed:

- (i) subject to the qualification at para 4.6 of the report, to approve the Moray Routes: Bright Futures plan and authorise officers to prepare (subject to staffing capacity) subsequent applications to future rounds of the Rural Tourism Infrastructure Fund, once announced, to progress the Tier 1 and selected Tier 2 projects referenced in the report;
- (ii) that consideration would be given to including a suitable route passing through Elgin in future plans; and
- (iii) that further information in relation to land owner restrictions preventing the Fish Wives Path from being included in the Moray Routes: Bright Futures plan be provided to the Committee.

17 Environmental and Commercial Services and Economic Growth and Development Services Capital and Revenue Budget Monitoring to 30 September 2022

Under reference to paragraph 4 of the Minute of the meeting of Moray Council dated 22 February 2022, a report by the Depute Chief Executive (Economy, Environment and Finance) informed the Committee of the current position regarding Environmental and Commercial Services and Economic Growth and Development Services (Economic Development) Capital and Revenue Budgets and long term financial plans.

Following consideration, the Committee joined the Chair in commending the Lands and Parks Service for the work that they do with a small team of people and agreed to note the budget monitoring report for the period to 30 September 2022.

18 Energy Consumption Action Options and Decarbonisation of Corporate Buildings

Under reference to paragraph 11 of the Minute of the meeting of this Committee dated 15 November 2022, a report by the Depute Chief Executive (Economy, Environment and Finance) sought Committee authority to progress with appropriate actions to reduce energy consumption in the Council's Corporate Buildings in the short term and note longer term projects which will be developed and brought back to Committee as appropriate. The report also apprised Committee of the proposed methodology for phasing the decarbonisation of Moray Council Buildings, taking account of current financial resources and corporate priorities.

During discussion it was noted that various funding opportunities are available to eligible local authorities to deliver energy efficient projects and the Head of Housing and Property Services sought delegation from the Committee to apply for such funding opportunities if eligible. This was agreed.

Following consideration, the Committee agreed to:

- (i) approve the further reduction in the heat set point within our properties to 18 degrees which coincides with the school Easter break;
- (ii) instruct officers to progress the development of spend to save energy proposals (LED lighting and Solar PV) which will be presented to future meetings of the Asset Management Working Group for approval, subject to payback period for each project;
- (iii) note the link between energy consumption, decarbonisation strategies and the ongoing development of a Heat in Buildings Strategy;
- (iv) note the financial challenges arising from the conversion of our property estate to non-carbon based heating systems and the proposed methodology for determining affordability and value for money in appraising options in the interim;
- (v) note that officers will prepare detailed information to assist the budget setting process as outlined in paragraph 5.7 of the report; and
- (vi) to grant delegated authority to the Head of Housing and Property Services to apply for funding opportunities if eligible as set out in para 7.2 of the report.

19 Question Time

Under reference to paragraph 5 of the Minute of this Committee dated 15 November 2022, Councillor Warren queried whether any Active Travel Groups had been set up in Communities in Keith and Buckie with a view to spending the funding.

In response, the Head of Environmental and Commercial Services advised that Communities would be consulted with as part of the implementation of the Active Travel Strategy and that input from any Community based Active Travel Group would be welcomed.

Under reference to paragraph 18 of the Minute of this Committee dated 15 November 2022, Councillor Warren queried where Action Logs and Minutes from Harbour Advisory Committee meetings could be found.

In response, the Head of Environmental and Commercial Services advised that, following discussion with Committee Services, these would be uploaded to CMIS and the Clerk confirmed that this would be in the Councillor Document section of CMIS.

With regard to the Dial M Service, Councillor Warren sought further clarification on how this service could be accessed as, in her capacity as Older Person Champion, it appears that many older people are not aware of this.

In response, the Head of Environmental and Commercial Services advised that promotional activity and marketing is underway as Dial M transitions to M-Connect.

Councillor Warren further stated that Age Scotland are willing to promote the M-Connect service through their platform.

Under reference to paragraph 9 of the Minute of this Committee dated 15 November 2022, Councillor Harris queried whether money from the Nature Restoration Fund could be used to help with the reduction in the use of Glyphosate.

In response, the Head of Economic Growth and Development advised that the key projects were identified at the meeting of this Committee in November, one of which included an action for the reduction in the use of glyphosate.

Under reference to paragraph 5 of the Minute of this Committee dated 15 November 2022, Councillor Van Der Horn sought an update in relation to the survey of on carriage cycle paths.

In response, the Head of Environmental and Commercial Services advised that this information had been uploaded to CMIS as an Action Response and the Clerk agreed to send Councillor Van Der Horn the link to this information.

Councillor Warren noted that Electricians from Aberdeen were currently carrying out work in HQ and asked how the Council tendered for tradesmen as using local tradesmen would lessen the Council's carbon footprint.

In response, the Property Asset Manager advised the Council uses a framework for contractors and that local contractors were encouraged to tender for Council contracts through the framework.

Councillor Gordon stated that he had recently undertaken work with the Moray Reachout Team at Moycroft Depot and paid tribute to the staff there. He noted that some items were being added to recycling bins that were not recyclable and asked that further information be circulated to members of the public in this regard and asked what happened to our waste once recycled.

In response, the Head of Environmental and Commercial Services advised that the Council's waste was recycled by reputable contractors and pointed out that Moray currently performs well with regard to recycling being ranked 4th for recycling

amongst other Scottish Local Authorities and confirmed that promotional material with regard to recycling is regularly issued.

Councillor Keith highlighted a recent news article which stated that whisky tourism was at risk due to a crackdown on alcohol advertising and asked that, as whisky tourism contributed significantly to the economy of Moray, the Chair instruct Officers to respond to the consultation which is due to close on 9 March 2023 and that this response be brought to Group Leaders for approval before submission.

The Chair agreed to take this action forward with the relevant officer and report back through Group Leaders.

Councillor Warren noted that a recent salt delivery for Moray had come after being delivered in bulk to Aberdeenshire Council and asked that consideration be given to future deliveries coming direct to Moray to reduce the Council's carbon footprint.

In response, the Head of Environmental and Commercial Services advised that this was a one off incident where the Council had been able to obtain some salt delivered to Aberdeenshire at a reasonable cost.

20 Land at Commercial Road Buckie [Para 8 and 9]

Under reference to paragraph 20 of the Minute of the Meeting of Moray Council dated 10 August 2022, a report by the Depute Chief Executive (Economy, Environment and Finance) updated the Committee on the Place Based Investment Programme spend for 2022/23 and sought approval to conclude a property acquisition and approval in principle for a related sale of property.

The Committee noted that this report had been brought to Committee in terms of the Local Government (Access to Information) Act 1985, the Chair certifying that, in his opinion it required to be considered on the grounds of urgency in order to give early consideration to decision making in line with grant funding timescales and the emerging property market position.

Following consideration, the Committee agreed to:

- (i) approve the purchase of land in the vicinity of Buckie Harbour with strategic fit for harbour and supply chain development;
- (ii) give delegated authority to the Legal Services Manager to conclude the purchase of property for a price within the available funding envelope; and
- (iii) approve in principle the sale of land at Rothes Industrial Estate as set out in para 5.5, delegating authority to the Property Asset Manager and Legal Services Manager to finalise terms acceptable to the Council.

Notice of Motion**Economic Development and Infrastructure Services Committee on 2 May 2023**

Committee notes that the UK Government's Spring Budget 2023 includes a 10.1% increase on spirits duty.

Committee further notes that the Scottish Whisky Association has described the increase as a “historic blow to the Scotch whisky industry”¹ that will “reduce already tight margins for an industry that employs tens of thousands of people and invests hundreds of millions annually across the UK”, and that Moray MP said that the increase is “a blow to the industry which is so vital for jobs and the local economy in Moray”².

Committee recognises that the Scottish Whisky Association suggests that the duty increase will limit the industry’s ability to reinvest in job creation.

Committee recognises that roughly 50 percent of Scotland's whisky is produced in Speyside, and that the duty increase will therefore disproportionately negatively impact Moray’s job market.

Committee instructs the Chair of the Economic Development and Infrastructure to write to the Chancellor asking that the duty on spirits be reduced as a matter of urgency.

Proposer: Cllr Juli Harris

Seconder: Cllr Sonya Warren

¹<https://www.scotch-whisky.org.uk/newsroom/scotch-whisky-hit-with-historic-blow-after-tax-increase/>

²<https://www.forres-gazette.co.uk/news/moray-mp-very-disappointed-by-whisky-duty-hike-as-msp-hits-307036/>

Motion to Economic Development and Infrastructure Services Committee

2 May 2023

The Future of Disposal Vapes

That Committee understands that around 1.3 million disposable vapes are thrown away every week in the UK, although this figure is assumed to be greatly underestimated. As they are classed as nicotine based products primarily designed to reduce/replace smoking habits the figures are based on surveys from adults. Hence the figures don't include the number of teenagers who use them, especially as most of the disposable products are packaged and presented to appeal to younger generations.

A significant amount of the disposable vapes thrown away each week are not recycled properly and are instead littered or discarded with residual waste.

That Committee are concerned about the increasing number of these products and their improper disposal. The 1.3 million figure represents the equivalent of 1,200 electric car batteries or 10 tonnes of lithium – which is being sent to landfill or waste incinerators each year.

Committee notes that the country that produces the bulk of these products (China) has totally banned the sale and use of these disposable vapes. This is also the case in some European countries.

Vapes do fall under the current WEEE regulations both in England and Scotland, and should be disposed of correctly as any other electrical item. The Producer/Retailer responsibilities also apply, and each retailer of electrical equipment should either:

1. Provide a free, in store take back service
2. Set up an alternative free take back service
3. Join the distributor Takeback Scheme

However, as disposable vapes are now sold in many different outlets such as newsagents, cafes and hairdressers, these retailers are probably not fully aware of their responsibilities and most certainly don't comply with/promote take back schemes or even 'How to dispose of' information. As a result we are seeing more of these items disposed of as litter and they are becoming the new 'cigarette butt' alternative.

Committee asks that the Council Leader write to both the Scottish and UK Governments calling for a ban on the sale and manufacture of disposable vapes as soon as possible.

Proposer: Cllr Marc Macrae

Seconder: Cllr Draeyk Van Der Horn



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

SUBJECT: LOSSIEMOUTH TO HOPEMAN ACTIVE TRAVEL ROUTE

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To inform the Committee of the activity being undertaken by the Laich of Moray Active Travel Routes group (LoMATR), who are part of the Lossiemouth Community Development Trust (LCDT) to secure a new Active Travel Route (ATR) between Lossiemouth and Hopeman.
- 1.2 This report is submitted to Committee in terms of Section III (F) (17) of the Council's Scheme of Administration relating to traffic management functions.

2. RECOMMENDATION

2.1 It is recommended that the Committee:

- i. **note the activity undertaken by the Laich of Moray Active Travel Routes group to develop and seek funding for an Active Travel Route between Lossiemouth and Hopeman;**
- ii. **agree criteria set out in para 6.2 that must be met by the group if Moray Council is to pursue a Compulsory Purchase Order (CPO) or use path designation powers; and**
- iii. **agree that until the criteria identified in para 6.2 has been met, support for this project by Council officers be limited to the on-going provision of advice and information, in keeping with the current level of support.**

3. BACKGROUND

- 3.1 Officers receive regular requests from members of the public and through Elected Members for active travel infrastructure to support every day journeys. Officers have also actively sought suggestions through consultation on the Active Travel Strategy and more recently as part of consultation on the Local Development Plan review (which is ongoing) and have a list of road safety

and active travel interventions identified through studies commissioned and their own knowledge and observations.

- 3.2 The team delivering active travel and road safety interventions is limited to 2 Engineers and 1 Technician, with input from the Senior Engineer. The capacity of this delivery team is limited as they also cover a number of other duties and activities within Transportation. The majority of interventions delivered are small/medium scale and within a single financial year.
- 3.3 Not all active travel interventions are viable or offer best value for money. Therefore proposed active travel and road safety interventions are reviewed in terms of:
- Demand;
 - Usage;
 - Benefits;
 - Deliverability; and
 - Cost/Funding Sources.
- 3.4 Schemes identified to be delivered or further developed during 2023/24 are outlined in the Transportation Capital and Revenue Budgets report for consideration on this agenda.

4. CONSIDERATION OF THE PROPOSED LOSSIEMOUTH TO HOPEMAN ACTIVE TRAVEL ROUTE

- 4.1 The Lossiemouth to Hopeman project is a community led scheme currently being funded through the Sustrans Places for Everyone grant. The community group, the Laich of Moray Active Travel Routes (LoMATR)/Lossiemouth Community Development Trust (LCDT) have been working on the project since 2013. Moray Council officers have provided support to the group through assistance in completing grant application forms and the commissioning of studies.
- 4.2 The LoMATR have secured funding from Sustrans for Stage 2 Concept Design of the project. Stage 1 of the project, Preparation and Brief included a Feasibility Study undertaken by a consultant on behalf of the LoMATR during 2018. A copy of this study has been published on the LoMATR website and has been uploaded to CMIS along with the agenda for this meeting as an additional meeting document.
- 4.3 The 2018 Feasibility Study determined preliminary cost estimates for three options for the route as between £2.184m and £3.29m (2018 prices). The LoMATR are pursuing a preferred option, which connects Lossiemouth to Duffus (a section of the route some 6.6 kilometres in length). It is understood that further investigation and design work on this section of the route has been commissioned. However, the work currently underway has not been shared with Council officers and an updated cost estimate for the preferred option has not been shared.
- 4.4 The Sustrans funding process seeks a Full Business Case as part of Stage 2 to support a project along with the identification of Match Funding sources.

For community groups Match Funding is a percentage of the project costs (usually 30%). For Local Authorities Match Funding can be provided 'in kind' for some elements of a project through demonstrating construction of active travel infrastructure to the same value as the project (i.e. 100% match), during the same financial year.

- 4.5 For Financial Year 2022/23, the Council received a grant of £614k from the Scottish Government for Active Travel Infrastructure. The value of the works completed using this grant are considerably lower than the amount which would be required to Match Fund the Lossiemouth to Hopeman Active Travel route. It is unclear as to how much match funding could be demonstrated for this project, even if it was to be undertaken by the Council.
- 4.6 Finally, as with all new infrastructure, identification of the annual and long term maintenance costs of the infrastructure is required. Based on current costs for maintaining Council cycle tracks it is anticipated that an annual contribution to maintenance would be in the region of £2,000. This could be an annual payment or an agreed lump sum. Whilst the route would be built to adoptable standard, even new infrastructure requires vegetation management and some level of surface repair it is
- 4.7 Any cycle path built in line with Sustrans funding requirements would need to be of adoptable standard, which would result in the path automatically being added to the List of Public Roads, and the ongoing responsibility for the path throughout its lifespan would fall to the Council, including repair and maintenance. The path would need roads construction consent as roads infrastructure.

5. LAND OWNERSHIP CONSTRAINTS TO DELIVERY OF THE ACTIVE TRAVEL ROUTE

- 5.1 The preferred route is under multiple land ownership. The LoMATR/LCDT have had discussions with these landowners from the inception of the project in 2013. However to date there remains barriers to reaching agreement with the various landowners. The LoMATR/LCDT has requested that the Council take on the project, in full or part, so that their Compulsory Purchase (CPO) or Path Designation powers can be utilised.
- 5.2 The compulsory purchase process requires demonstration that the project is required and that funds are available to build the project. If the Council did choose to pursue a compulsory purchase order, sufficient funding to purchase the land and cover all legal costs (including costs to cover an Inquiry should the order be objected to) would need to be identified. Before any CPO could be pursued the Council would need to be able to show it had tried to secure the land through negotiation.
- 5.3 An alternative which has been suggested is that the Council uses its powers under the Land Reform Act to designate the route as a path. This may be done even where the land is in third party ownership. As with the compulsory purchase process there are costs to the Council associated with utilising those powers, including preliminary work to establish the case to use these powers.

6. **NEXT STEPS**

- 6.1 There are a number of outstanding issues/queries, which would need to be answered. These answers would need to demonstrate that the project offered value for money and was the best use of the Council's limited resources. Further information is needed to demonstrate that any financial risk to the Council is minimised and that there is a long term plan for the maintenance of the route.
- 6.2 Through correspondence during Autumn 2022 and at a meeting in January 2023, officers highlighted to the LoMATR the need for a positive Business Case, the identification of match funding sources along with the need for a long-term maintenance plan for the route. To date these queries remain unanswered. The following table sets out the issues/information sought by officers and what would need to be provided by the LoMATR to address them:

Issue	Information sought to address Issue
Does the project offer best value for money/use of resources?	A copy of a Full Business Case undertaken as part of the Sustrans grant application process.
Up to date cost of scheme (2023 Prices) is not in public domain.	Full Business Case would provide up to date cost of scheme, including contingencies.
Sources of Match Funding are unknown and will require to be significant.	List of identified sources of match funding and steps to be taken to secure match funding.
Deliverability – including Land Ownership	Plan for delivering the project, including project management and steps undertaken to date to secure third party land.
Costs of Compulsory Purchase Order / Path Designation Order and how they will be met, including any need for a CPO Inquiry.	Confirmation that the funding body meets all costs of the process, not just the cost associated with any purchase of the land.
Limited staffing resources within the Council to work on a large-scale project.	Plan for managing the project including roles and responsibilities and how these will be filled. Confirmation that the LoMATR will manage the project through to conclusion of construction
Plans for on-going maintenance	Details of how contributions to the annual and long-term maintenance of the scheme will be funded and delivered by LoMATR or LCDT.

- 6.3 Finally, it should be noted that Scottish Government is awarding increasing levels of grants for active traffic infrastructure but also acknowledges that there is a skills gap to deliver these projects within Local Authorities and the construction industry as a whole.

- 6.4 Directing officer time/resources towards one large-scale project will have consequences on the delivery of other projects. Any decision made to re-direct these limited resources away from priorities determined according to accepted methodologies as set out at paragraph 3.3 above.

7. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Active Travel infrastructure supports Moray's 2026 priorities for healthier citizens as well as for older people to sustain active lives in their community. As well as supporting economic development targets by providing greater choice for travel within and between communities.

(b) Policy and Legal

Should the Committee decide that the Council will promote, develop and implement the Lossiemouth to Hopeman Active Travel Route then there is likely to be a requirement for a Compulsory Purchase Order to secure the land required to deliver the route.

Planning Permission will be required for some sections of the preferred route as they are not contiguous to the Public Road.

(c) Financial implications

Corporate Management Team Additional Expenditure Warning
When the Council approved the budget for 2023/24 on 1 March 2023 (paragraph 5 of the Minute refers) it balanced only by using reserves and one-off financial flexibilities. The indicative 3-year budget showed a likely requirement to continue to make savings in the order of £20 million in the next two years. All financial decisions must be made in this context and only essential additional expenditure should be agreed in the course of the year. In making this determination, the committee should consider whether the financial risk to the Council of incurring additional expenditure outweighs the risk to the Council of not incurring that expenditure, as set out in the risk section below and whether a decision on funding could reasonably be deferred until the budget for future years is approved.

Whilst the funding body Sustrans has indicated that monies can be made available to employ technical support to deliver the project, there would still be a requirement for Council staff to act in governance roles and in the pursuit of any legal orders. There is no revenue grant available to cover these costs.

There are significant costs implications should a Compulsory Purchase Order be objected to.

There has been no sight of a Business Case undertaken for the project and the estimated costs (2022 Prices) of the preferred route have not been shared with Council officers.

With increased infrastructure, a bigger proportion of the maintenance budget will be needed to be spent in the future on Active Travel Routes, including winter maintenance and gritting. Roads Maintenance are currently responsible for 25 miles of cycle tracks. The Lossiemouth to Hopeman Active Travel Route is some 6.6 kilometres long and will increase the council's maintenance requirements by some 16.4%. Expenditure on cycle track maintenance in 22/23 was £45k. Hence the request for an up-front commitment to contribute to maintenance costs.

(d) Risk Implications

Limited resources mean that directing officer time to the Lossiemouth to Hopeman ATR will result in other Active Travel and Road Safety projects being delayed or not delivered, and the annual CWSR and Road Safety Grants from Scottish Government not being fully utilised.

The project is at Stage 2 in the Sustrans Places for Everyone funding programme and still has 2 Stages to go through before full funding for implementation is secured and a further 3 Stages before the project is completed. The Spaces for Everyone programme is a competitive fund with a number of projects across Scotland seeking to secure funding from a limited 'pot'. There is no guarantee that the project will secure funding at the subsequent stages.

The Financial Risk for this project cannot be quantified at this time, as officers have not had sight of a Business Case.

If the CPO or Path Designation Order is unsuccessful then the project would not be progressed and any benefits from the projects not realised.

The Planning Permissions will be required for certain sections of the route, which are remote from the public road, which may not be granted.

(e) Staffing Implications

Additional resource will be required to deliver the Lossiemouth to Hopeman Active Travel Route including officers from Legal and Property Services, along with Transportation officers. The Governance of a project of this scale will require significant input from senior members of Council staff.

Directing staff towards a large-scale project would have an adverse impact on the delivery of other committed projects funded through the annual Cycling Walking and Safer Routes grant. There would also be an impact on the development of future projects to be delivered through applications to the Scottish Government's Active Travel Transformation Fund and any Active Travel projects, which may form part of any future application to the UK Government's Levelling Up Fund.

There will also be staffing implications for Property and Legal Services associated with the pursuit of any Compulsory Purchase or Path Designation Order, which would impact on the ability of these services to support other Council priorities.

(f) Property

If the Council was to take on this project it would require to use compulsory purchase powers to secure the necessary property rights from third parties.

(g) Equalities/Socio Economic Impact

An Equalities Impact Assessment (EIA) for the project is a condition of the Sustrans grant funding. An initial assessment has identified a range of positive impacts, particularly on the grounds of sex, disability and age (elderly and children), in tackling rural isolation. It is expected that the EQIA will be developed in more detail throughout the various stages of the application.

(h) Climate Change and Biodiversity Impacts

Promoting Active Travel is one of the key actions in the Council's Climate Change Strategy. The Lossiemouth to Hopeman ATR could provide a positive impact on the climate through enabling and encouraging alternative modes of travel through Moray. Reduced emissions supports nature recovery and the overall improvement of environments.

(i) Consultations

Depute Chief Executive (Economy, Environment and Finance), Head of Environmental and Commercial Services, Legal Services Manager, Committee Services Officer (L Rowan), Asset Manager (Commercial Buildings) and Equalities Officer have been consulted and any comments made are included within the report,

8. CONCLUSION

8.1 The Lossiemouth Community Development Trust (LCDT)/Laich of Moray Active Travel Routes (LoMATR) have been developing and promoting an Active Travel Route(ATR) between Lossiemouth and Hopeman but have been unable to progress due to resourcing and third party land issues. The LoMATR have requested that the Council take on the project to enable the use of their CPO powers to secure the necessary land.

8.2 If staff resources are directed to the Lossiemouth to Hopeman ATR then other Council projects will be delayed or not delivered (due to missed funding opportunities).

8.3 Officers currently review Active Travel and Road Safety interventions against the following criteria to ensure that limited resources (funding and officer time) are directed appropriately:

- Demand;
- Usage;
- Benefits;
- Deliverability; and
- Cost/Funding Sources.

8.4 There is insufficient information provided by the LoMATR to enable such a review to take place and for a decision to be made to ensure the best use of reduced capacity for such work within the Transportation team.

Author of Report: Diane Anderson Senior Engineer Transportation

Background Papers:

Ref: SPMAN-524642768-878



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

SUBJECT: COUNCIL POLICY - BRIDGE MAINTENANCE PRIORITISATION

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To inform the Committee of the proposed Council Policy relating to prioritisation of bridge maintenance works, which will formalise the existing prioritisation process.
- 1.2 This report is submitted to Committee in terms of Section III (F) (15) of the Council's Scheme of Administration relating to management and implementation of the requirements of the Roads (Scotland) Act 1984.

2. RECOMMENDATION

- 2.1 **It is recommended that Committee agree to endorse the Council Policy as set out in paragraphs 3.4 to 3.11 in relation to prioritisation of bridge maintenance works.**

3. BACKGROUND

- 3.1 Moray Council's bridge stock includes 376 road bridges. The Council's revenue budget for bridges is £130,000 and this is predominantly used to undertake pointing work to masonry bridges and vegetation clearance work. Significant maintenance works are funded through the Council's capital budget.
- 3.2 The condition of the Council's bridges is monitored through general inspections undertaken every two years and Principal Inspections undertaken every six years. Each bridge is scored on its general condition and on the condition of its critical elements. This score in combination with the strategic importance of the bridge is used to prioritise significant maintenance or refurbishment works.
- 3.3 Prioritisation of bridge maintenance works has previously been based on the critical importance of the bridge, its condition and where appropriate engineering judgment. It is proposed that the prioritisation procedure is formalised as policy for all future capital maintenance works on bridges.

- 3.4 Future capital maintenance works on all bridges on the public road network in Moray will be prioritised based on a range of factors grouped under two main indicators: Network Criticality, which indicates the importance of the bridge to the road network in Moray; and Bridge Alert Status which indicates the probability of failure of the bridge. These factors will be combined according to an algorithm to produce a Priority Score for each bridge. Details of these factors and the priority scoring process are provided in the **Appendix**.

Network Criticality

- 3.5 Network Criticality will be split into three categories, Vital, Important and Standard. As a large number of bridges are expected to be categorised as Standard, this category will be sub-categorised into Standard – High, Standard – Medium and Standard – low.
- 3.6 Bridges will be categorised as Vital if they carry more than 7000 vehicles per day, provide sole access to twenty or more properties or provide sole access to critical infrastructure. Critical infrastructure will include main hospitals (those with A&E Departments); main fire stations (those with full time crew); water supply, treatment and storage, including reservoirs, power generation and major substations; and major armed forces sites.
- 3.7 Bridges will be categorised as Important if they are on a Priority 1 gritting route or they provide sole access to eight or more properties. A range of factors relevant to the specific social and economic geography of Moray are used when determining Priority 1 gritting routes, including access to essential infrastructure. Essential infrastructure is local hospitals (those without A&E); secondary fire stations (those with retained/part time/volunteer crews); sewage treatment sites (not including private systems); and primary schools.
- 3.8 All bridges that do not meet the criteria set out in paragraphs 3.6 and 3.7 will be categorised as Standard. As a significant number of the council's bridge stock is likely to come under the Standard category, it has been subdivided into high, medium and low. Standard – high will include critical routes, defined as a credible direct link connecting settlements or localities together. Settlements and localities are statistical entities defined by the National Records of Scotland as groups of densely populated postcodes that add up to 500 or more people and represent urban or built-up areas of Scotland. Standard – medium will include routes that provide sole access to eight or fewer properties, are on a School bus route or have a diversion route greater than 7.5 miles. All remaining bridges will be categorised as Standard – low.

Bridge Alert Status

- 3.9 The Bridge Alert Status will indicate when a bridge is likely to fail. Failure is defined as the point where a bridge becomes unserviceable, requiring a weight restriction or closure. The Bridge Alert Status will consider load carrying capacity, condition, environmental risk and recent movement and / or deterioration.
- 3.10 By combining the outputs from both the Network Criticality and Bridge Alert Status a Priority Score will be given to every Network bridge in Moray. A worked example of this process is provided in Appendix D of the Appendix.

- 3.11 To ensure the prioritisation remains relevant the input date will be updated when changes occur. The prioritisation will also be reviewed annually or when a significant event occurs. It should be noted that while the Bridge Alert Status will change over time it is unlikely that there will be a significant change in the Network Criticality of most bridges.

Policy

- 3.12 Based on the information provided in Paragraphs 3.4 to 3.11 the proposed policy for Members consideration is provided below. As stated above this is a formalisation of the existing prioritisation process, as set out in the Appendix to this report.

- All bridges on the public road network in Moray will be prioritised based on a combination of Network Criticality and Bridge Alert Status, which will be used to produce a Priority Score.
- The bridge prioritisation will be reviewed annually to allow for changes that occur throughout the year.

4. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

“Building a better future for our children and young people in Moray”

(b) Policy and Legal

Moray Council in its role as Local Road Authority has a statutory duty under the Roads (Scotland) Act 1984 to manage and maintain the road network.

(c) Financial implications

If the bridge prioritisation policy is not adopted there is a risk that future spend would not be managed in an objectively justified way within budgets. This policy will also ensure that best value is achieved.

(d) Risk Implications

There are no risks associated with the recommendations in this report.

(e) Staffing Implications

There are no staffing implications associated with the recommendations in this report.

(f) Property

All of the network bridges in Moray currently vest with Moray Council in its role as Road Authority.

(g) Equalities/Socio Economic Impact

There are no equalities of socio economic implication associated with the recommendations in this report.

(h) Climate Change and Biodiversity Impacts

Where possible we would seek to recycle and/or reuse the waste material generated through demolition of the existing bridge.

(i) Consultations

Depute Chief Executive (Economy Environment and Finance), Head of Environmental and Commercial Services, Chief Financial Officer, Legal Services Manager, Senior Engineer Transportation, Strategic Planning Development Manager, Equal Opportunities Officer and L Rowan, Committee Services Officer have been consulted and their comments incorporated into the report.

5. CONCLUSION

5.1 Significant maintenance of Moray Council's bridge stock is funded from the Council's Capital Budget.

5.2 Maintenance works are currently prioritised based on strategic importance and condition.

5.3 The proposed bridge prioritisation policy set out in this report would formalise this process.

Author of Report: Debbie Halliday Consultancy Manager

Background Papers:

Ref: SPMAN-524642768-886

Moray Council

Bridges Workbank Prioritisation



Prioritisation Procedure Report

April 2023

CONSULTANCY

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1.0 Background, Scope, and Approach

- 1.1 A prioritisation scheme is required to help formalise the current system that is in place regarding the prioritisation of capital funded maintenance, repair, strengthening and renewal (“works”) for the public road bridges that are under Moray Council ownership. This system will ensure that the available capital funding is used in the most effective manner in relation to the road network.
- 1.2 The prioritisation procedure will be applied to all **bridges** on the public road network. This includes all structures with spans that are 1.5m and over, and is inclusive of culverts. Bridges (or culverts) with spans under 1.5m are deemed to be drainage structures and are not covered by this procedure (being the responsibility of Roads Maintenance).
- 1.3 The prioritisation of bridges for works will be based on a range of factors, grouped as follows: (1) an indicator of the importance of the structure as a component of the Moray Council road network, termed “**Network Criticality**” and in broad terms classifying the scale of the consequences of any failure or loss of functionality of the bridge, and (2) an indicator of the probability of failure of the structure, termed “**Bridge Alert Status**” and in broad terms classifying the scale of the threats to the functionality of the bridge.
- 1.4 These factors will be combined according to an algorithm to give a **Priority Score** for each individual bridge.
- 1.5 This prioritisation will be maintained periodically and can be expected to change over time as the above factors change. It is suggested that the prioritisation should be revised on an annual basis taking account of the latest available information. For example, Bridge Alert Status will change with time as bridge condition deteriorates with asset age (typically as detected and updated by the routine, cyclical inspection programme), or as bridge works are implemented (maintenance, repair, strengthening, and/or renewal). Network Criticality will change as the social and economic geography of Moray develops (for example, construction of new roads and new residential developments and businesses, commissioning or decommissioning of strategic infrastructure and sites of civic amenity such as water treatment works, secondary schools and hospitals, demographic change, and changes to the spatial distribution of population and economic activity).
- 1.6 The determination of Network Criticality and Bridge Alert Status are defined in the following sections of this report. The algorithm for combination of these factors to determine the Priority Score is then defined, and a worked example is presented.

2.0 Network Criticality – Categorisation Process 1

- 2.1 For bridge prioritisation, a “Network Criticality” will be defined for each bridge. Initially the structures will be sorted into three Network Criticality categories: **Vital**, **Important** and **Standard**. A large number of structures are expected to be categorised as Standard, so a further sorting will be carried out to categorise these structures as Standard-High, Standard-Medium or Standard-Low.
- 2.2 For Moray, this cannot simply be done using the existing national road classification system (i.e. A, B, C and U class roads) as this approach, devised by central government in the 1920s, does not realistically consider the present-day use of the roads at a local level. Also, with 376 public road bridges maintained by Moray Council, the national road classification does not provide sufficient granularity for effective prioritisation of the bridges work bank. Several Moray-specific factors will be used to determine which Network Criticality category each bridge goes into.
- 2.3 Network Criticality will consider whether a bridge is on a heavily used route or an important access to dwellings, businesses, or crucial infrastructure in Moray. Properties that provide sole vehicular access to residential or business addresses will be deemed more critical than those for which there is an alternative route.
- 2.4 Bridges that carry heavy traffic will be classified as Vital. Heavy traffic is defined as Average Annual Daily Traffic (AADT) of 7000 vehicles. This data is generally only available for major roads. However, where this information can be found it will be utilised.
- 2.5 Secondly, a check will be carried out on the number of individual properties (residential or business) for which the bridge provides a sole vehicular access. Bridges that are the sole access for twenty or more properties will be classified as vital, since these properties would lose all vehicular access should the bridge become unserviceable. This will be based on counting permanent residences and rateable businesses (this definition will apply wherever the term “properties” is used below).
- 2.6 Thirdly, a check will be carried out on whether the bridge provides sole access to **Critical Sites** or **Critical Infrastructure**. These sites/infrastructures will include: main hospitals (those with an accident and emergency department); main fire stations (those with full-time crews); water supply treatment and storage, including reservoirs; power generation and major substations; and major armed forces sites. A list of these sites in Moray will be compiled, and any bridges that provide sole access will be classified as Vital.

- 2.7 Bridges that do not satisfy one of the above checks will be considered Important or Standard.
- 2.8 Fourthly, a check will be carried out to determine if the bridge is on a **Priority 1 (P1) Gritting Route**, as defined in the council's Winter Service Operational Plan. It is assumed that a range of factors, highly relevant to the specific social and economic geography of the Moray Council area, have already been accounted for in the prioritisation of routes for gritting, and that this work does not need to be duplicated. It is assumed that this will cover important infrastructure such as: local hospitals (those without A&E); secondary fire stations (those with retained/part-time/volunteer crews); sewage treatment sites (not including private systems); and primary schools (it is assumed that this captures all the sites deemed "Essential Infrastructure" as defined in National Planning Framework 4 (NPF4) which are not already covered by the Critical Infrastructure definition above). Bridges on such routes will be classified as Important.
- 2.9 It is considered that if a site or infrastructure has not been judged to be sufficiently important to be on a P1 gritting route, then it is not important site for the purposes of bridges prioritisation.
- 2.10 Fifthly, a check will be carried out to determine if the bridge provides sole vehicular access to eight or more properties. Bridges meeting this threshold will be classified as Important.
- 2.11 Remaining bridges will be classified as Standard.
- 2.12 The process described above is summarised in a flowchart in **Appendix A**.

3.0 Network Criticality – Categorisation Process 2

- 3.1 Based on a trial application of the above process, it is expected that it will result in a large number of structures of Standard Criticality. To provide greater granularity for prioritisation of works, a further process will be followed to subdivide the Standard Criticality bridges.
- 3.2 The remaining bridges will be those that do not provide access to critical or important infrastructure, and do not provide sole vehicular access to eight or more properties (i.e. they exist upon a network or, minimally, a loop of road such that there is at least one route that bypasses the bridge).
- 3.3 Firstly, a check will be carried out to determine whether the route carried by the bridge is a **Critical Route**. This is defined here as a credible direct link connecting **Settlements** or **Localities** together. Settlements and Localities are statistical entities defined by National Records of Scotland (NRS) as groups of densely populated postcodes that add up to 500 or more people,

and represent urban or built-up areas of Scotland. The purpose of this check is to identify a functional minimum road network connecting not only the larger settlements in Moray but also modest concentrations of population such as small towns and villages. These routes are likely to be important for social and economic reasons, being key routes from homes to workplaces and civic amenities for large numbers of people. When carrying out this check, links to the closest Settlements and Localities outside Moray will be considered as well as intra-Moray links. A popular route-finding tool such as Google Maps will be used to derive realistic Critical Routes between all the Settlements and Localities recorded by NRS. In practice, for many settlements this will involve finding a credible route to a key cross-Moray artery such as the A96 trunk road.

- 3.4** If a structure is found to be on a Critical Route, it will be classified as Standard-High in terms of Route Criticality. Furthermore, if a bridge is on a route that provides sole access to eight or fewer properties, then it will also be classified as Standard-High. All other structures will be subject to additional tests to determine if they are Standard-Medium or Standard-Low.
- 3.5** A check will be carried out to identify the shortest diversion routes if the structure is ever closed or restricted, if the diversion route is over 7.5 miles, the structure will be classified as Standard-Medium. Additionally, any remaining structures on a school bus route will also be classified as Standard-Medium.
- 3.6** All remaining structures will be defined as Standard-Low.
- 3.7** The process described above is summarised in a flowchart in **Appendix B**.

4.0 Bridge Alert Status

- 4.1** A “Bridge Alert Status” will be defined for each bridge to categorise the structures according to an appraisal of the likelihood that the bridge will fail prematurely. Failure is defined as the point where a bridge becomes unserviceable (resulting in a need for weight restriction, closure, or other load mitigation measures) and/or collapse. The Bridge Alert Status for each structure considers the following factors:
 - **Load carrying capacity** – Based on original design loading criteria where known, or structural assessment results where these are available and supersede the design criteria. The structure will be considered higher risk if it does not pass assessment at the required category of load carrying capacity (the required loading will be 40/44 tonnes in most, if not all, cases). Engineering judgement may be used to tentatively classify the structure in the event that a design/assessed load carrying capacity is not documented, but in most cases such structures will be deemed higher risk.

- **Condition** – based on the Bridge Condition Indicator (BCI) score calculated from the results of the most recent cyclical inspection. The BCI Critical score will be used as this indicator focuses on the elements most critical to the ongoing safety and serviceability of the structure to carry vehicular traffic.
- **Environmental Risk** – based on exposure to conditions that are considered likely to promote accelerated degradation, with high risk defined as the existence of any one of: (1) exposure to chlorides from de-icing agent (if the bridge is on a P1 or P2 gritting route then the risk is deemed to be high); (2) exposure to chlorides from seawater or airborne salt (i.e. if the bridge would have an exposure class of XS1, XS2, or XS3 according to BS 8500; for exposure to airborne salt from seawater this will be taken to be any structure within 200m of the Normal Tidal Limit or High Water Mark as shown on an Ordnance Survey 1:50,000 scale map); (3) any degree of scour damage or vulnerability reported in the most recent Principal Inspection, General Inspection, or Special Inspection (e.g. following a significant flood/spate event). Vulnerability will be indicated by the bridge inspector recommending a specific scour inspection in the relevant inspection report.
- **Recent movement/deterioration** – based on whether the bridge is subject to a monitoring regime or has been subject to monitoring in the past six years (or since the most recent Principal Inspection, whichever interval is shorter).

4.2 A flowchart will be used to determine the Bridge Alert Status, which can be seen in **Appendix C**. The output from the flowchart (Appendix C) gives each bridge a Bridge Alert Status in the form of a coloured tiered system. This ranges from Green, Yellow, Amber, Red and Black, increasing in severity.

5.0 Prioritisation Algorithm

5.1 By combining the outputs from both the Network Criticality and Bridge Alert Status, an 'Initial Priority Score' can be given to each of the structures. Each output will have an associated rating with it, which are given in Tables one and two below.

Table 1: Network Criticality Ratings

Network Criticality (NC)	NC Rating
Vital	7
Important	5
Standard-High	3
Standard-Medium	2

Standard-Low	1
--------------	---

Table 2: Bridge Alert Status Ratings

Bridge Alert Status (BAS)	BAS Rating
Black	7
Red	5
Amber	4
Yellow	2
Green	0

- 5.2 Using the associated ratings, the Initial Priority Score of any bridge is calculated as follows:

$$\text{Initial Priority Score} = 10 \times \text{BAS} \times \text{NC}$$

- 5.3 For a full worked example please refer to **Appendix D**.

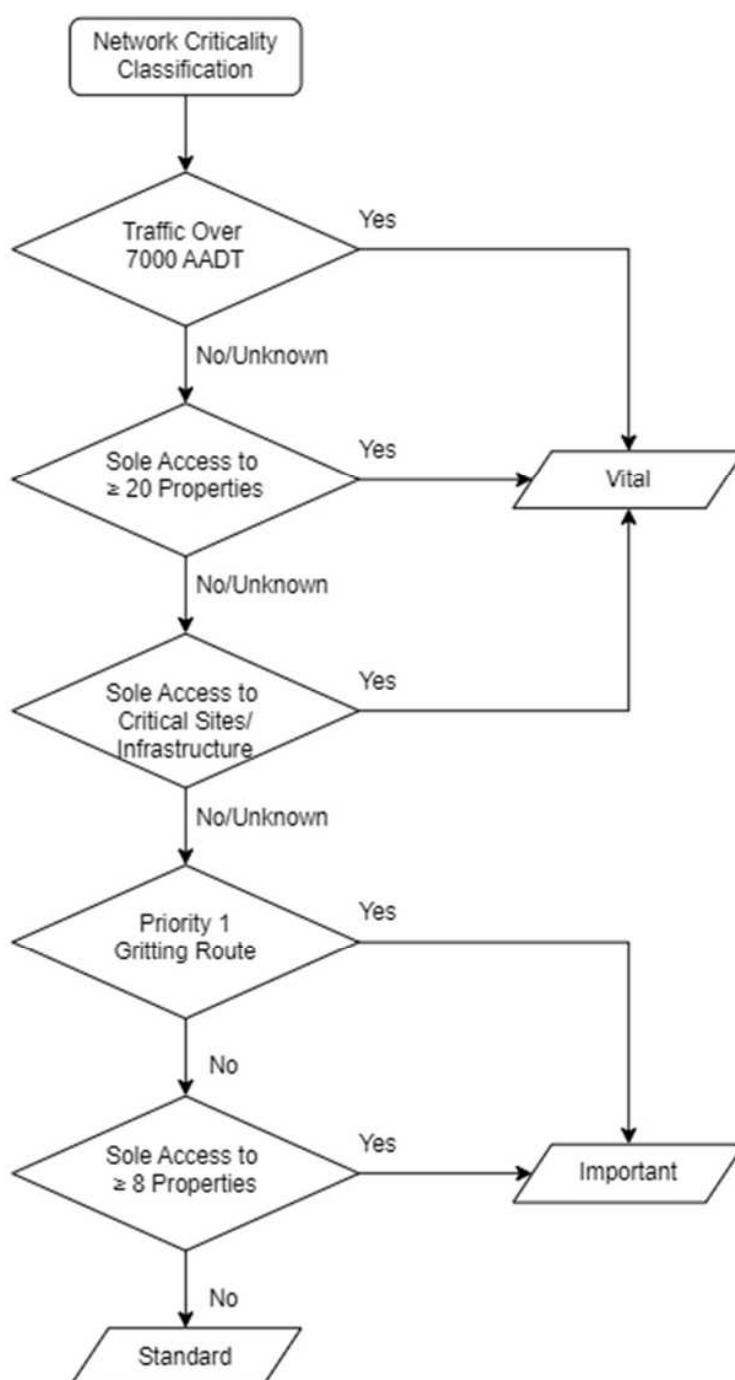
6.0 Future Considerations

- 6.1 To ensure the prioritisation remains relevant, the input data needs to be updated when changes occur. An annual review is suggested. Further one-off reviews should be considered when significant events occur, such as major storms, floods, or spates with potential to damage road infrastructure in a local area.
- 6.2 Through regular inspections the condition of the bridge stock is monitored. In the event that any significant changes are documented, a review of the Bridge Alert Status and prioritisation is recommended as this may elevate the priority of the bridge for works above other planned schemes.
- 6.3 The prioritisation will not provide a definitive answer on the prioritisation of bridges. It should be considered as guidance to inform the process of planning the bridges work bank. In particular, the process described above does not take into account potentially important interactions between sets of two or more bridges. For example, two bridges on a loop of road could be ranked as “Standard-Low” and deprioritised for works, when in reality both bridges are the only alternative vehicular route in case the other is closed or load-restricted. Exhaustively identifying such cases is significantly more complex and time-consuming and has therefore been left to be determined when work

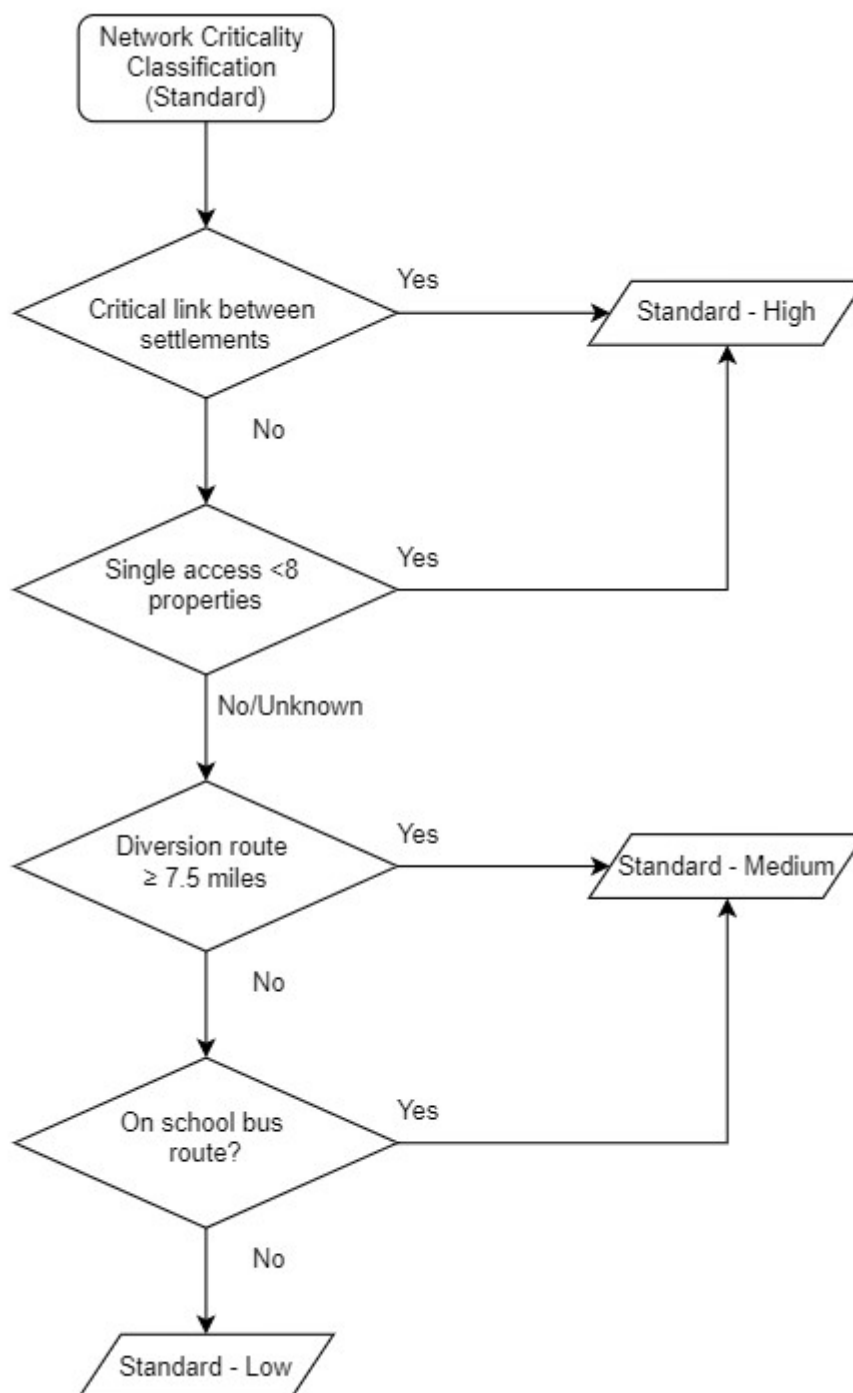


on these structures is being considered. This task would involve consultation with internal stakeholders (school transport, waste collection, and roads maintenance), to identify any significant financial implications for the council regarding bridge closure or load restriction to determine a way forward on a case-by-case basis.

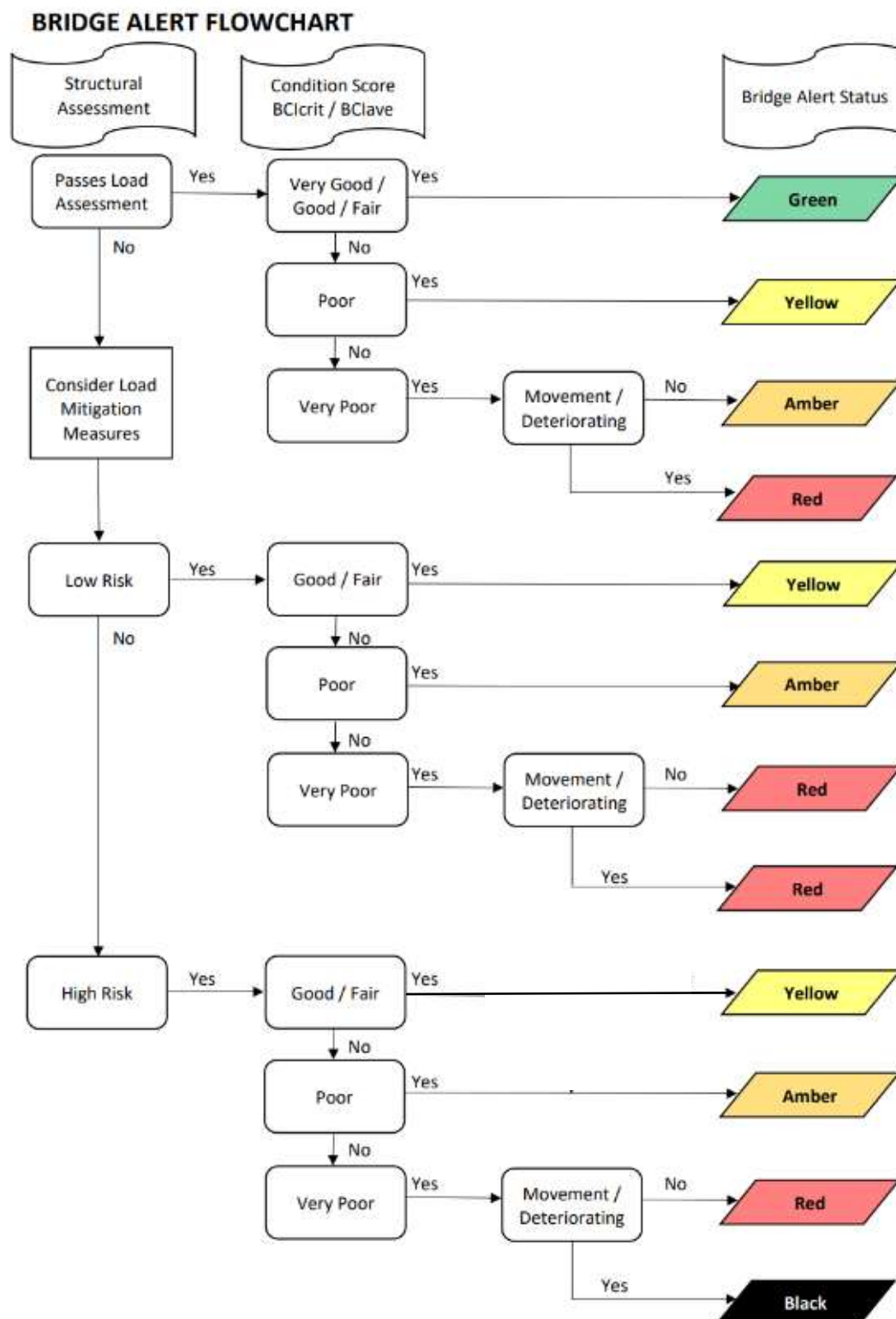
Appendix A – Network Criticality Procedure 1



Appendix B – Network Criticality Procedure 2

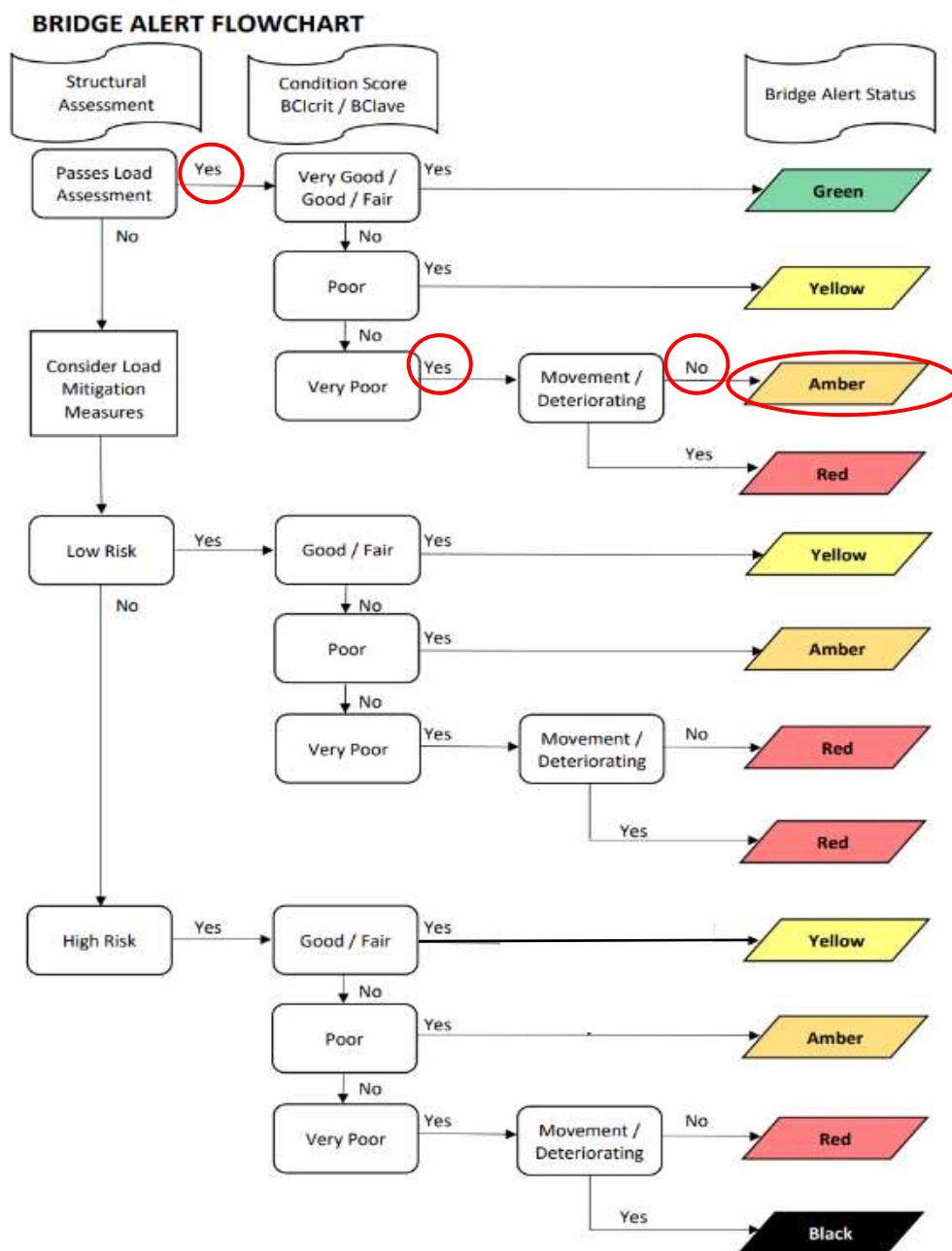


Appendix C - Bridge Alert Status Procedure



Appendix D – Worked Example

Keithmore bridge (A920/190) has been selected to show how the Bridge Prioritisation procedure works.



Assessed for 40T GVW (passes load assessment)

As the structure has passed its assessment, the risk does not have to be considered however, as Keithmore bridge is on a P1 gritting route, it would be considered high risk

BCI score of 31 (very poor if $BCI_{CRIT} < 39$).

Not monitored at present (no evidence of movement/not deteriorating rapidly)

The Network Criticality of this structure has been assessed to be Vital.

Initial Priority Score = $10 \times 4(BAS) \times 7(NC) = 280$



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

**SUBJECT: ROADS MAINTENANCE REVENUE AND CAPITAL BUDGET
2023/2024**

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To ask the Committee to note the interim outturn position for 2022/23 and to approve detailed plans for the expenditure of funds allocated from the Revenue Budget 2023/24 to Roads Maintenance and from the Capital Budget 2023/24 including resurface/reconstruction, surface dressing, footways, drainage, lighting column replacement and lighting improvements.
- 1.2 This report is submitted to Committee in terms of Section III (A) (2) and (F) (16) of the Council's Scheme of Administration relating to the consideration of Capital and Revenue Budgets and exercising the functions of the Council as Roads Authority.

2. RECOMMENDATION

2.1 The Committee is asked to:

- (i) approve the detailed allocation of funds, from the Revenue and Capital Budget 2023/24, to Roads Maintenance activities, as outlined in Section 5 of this report;**
- (ii) grant delegated authority to the Roads Maintenance Manager to proceed with necessary roads maintenance works whilst noting that the Roads Maintenance Manager will, as soon as possible, publish a main list of schemes, which can be funded from the budget provision recommended in this report, and a reserve list of desirable schemes, which cannot presently be funded, along with a list of projects to be funded from the Capital allocation; and**
- (iii) note that the list of schemes will be drawn up in accordance with the principles and objectives detailed in this report, in the Roads Asset Management Plan and in the Capital Plan.**

3. **BACKGROUND**

- 3.1 The road network represents by far the largest asset owned by the Council and therefore regular and adequate maintenance is vital to ensure it does not deteriorate, become dangerous and that considerable past investment is not lost.
- 3.2 The allocation of capital funds for 2023/24 was approved by Council on 1 March 2023 (paragraph 5 of the Minute refers). Following this approval, work is progressing on preparing the detailed lists of proposed maintenance works, which is envisaged to be completed by 30 April 2023.
- 3.3 The process will be adopted as previous years that a main list of schemes which can be funded from the budget provisions will be made available as soon as possible. The proposed information will be supported by a reserve list of schemes and will be circulated to Elected Members and published on the Council's website.

4. **STATISTICS**

- 4.1 An idea of the extent of the road network and associated assets can be gauged from Table 1 below:-

Table 1 – Road Asset Inventory (as at 13/03/23)

(a)	LENGTHS	
	A Class roads	157.3 km
	B Class roads	296.3 km
	C Class roads	365.3 km
	Classified roads (A+B+C)	818.9 km
	Unclassified roads	741.4 km
	Total road length	1,560.4 km
	Footways, footpaths & cycle tracks	55.3 km
(b)	INVENTORY	
	Street lights	19036 no
	Illuminated signs & bollards	1104 no
	Vehicle restraint systems	31669 linm
	Road Gullies	18870 no

- 4.2 The roads asset is by far the largest asset owned by the Council at a replacement value of almost £1.7 billion. The roads asset values at the end of 2021/22 are shown in Table 2 below:-

Table 2 – Roads Asset Value (as at 31/03/22)

Asset Group	Gross Replacement Cost £'000	Depreciated Replacement Cost £'000
Carriageway	£ 1,250,958	£ 1,087,268
Footway	£ 93,347	£ 61,035
Structures	£ 128,410	£ 123,726
Street Lighting	£ 51,851	£ 34,318
Street Furniture	£ 18,712	£ 9,254
Traffic Man. Systems	£ 2,242	£ 1,529
Land	£ 132,573	
Total	£ 1,678,092	£ 1,317,130

*These figures are based on the SCOTS Road Asset Valuation template – part of the RAMP tools. The basis of valuation in the annual accounts is different.

5. REVIEW OF 22/23

- 5.1 Due to current staffing resources the priority has been to spend the Capital Carriageway Resurfacing/Reconstruction/Surface Dressing budget of £3.617m and it is reported in Table 3 below that we were close to achieving that budget spend in 2022/23. The works undertaken are having a positive impact on our most recent RCI indicators and rankings.
- 5.2 The slight overspend within the structural works for timber traffic was as a result of more works being completed on site and the council receiving an increase in the grant contribution from the STTS fund.to cover increases in spend.
- 5.3 The proposed safety works on the A95 River Isla following a landslip have been redesigned. There has been a delay in the works commencing on site due to a contract issue but that has now been resolved. The budget required to complete works has been carried forward into 23/24 (Special meeting of Moray Council on 8.3.23, Para 12 of the draft minute refers) and works are planned for completion by end of September 2023.
- 5.4 Unfortunately, some of the allocated capital budgets will not achieve full spend, mainly as a result of staff capacity to both design and deliver the programmes. In addition, the recruitment of staff continues to be a problem and at this present time it is reported that the service have 9 staff vacancies from the approved staffing establishment. The service is actively looking to fill the vacancies to allow the delivery of the 23/24 works programme, as set out in paras 6.6/6.7.
- 5.5 In addition, the prolonged snow events experienced during the current season diverted resources from normal planned work activities to winter related duties, to ensure that roads and footways were kept safe.

5.6 The General maintenance revenue budget is increasing by £300k as a one off budget increase approved by Council on the 1 March 2023 (para 5 of the minute refers). This additional budget will be used to develop an additional programme of road patching which will help to address the number of potholes that have formed following the winter season.

5.7 Table 3 below includes a summary of the estimated outturn expenditure for 2022/23 and the proposed budget allocation for 2023/24.

Table 3 – Outturn Expenditure for 2022/23 & budget allocation for 2023/24

	2022/23 budget	2022/23 estimated expenditure	2023/24 budget
Capital Budget			
Carriageway Resurfacing/Reconstruction/Surface Dressing	£ 3,617,000	£ 3,225,000	£ 3,500,000
Structural works for timber traffic	£ 180,000	£ 183,400	£ 840,000
Drainage & Other Works	£ 400,000	£ 260,200	£ 500,000
Footways, footpaths & steps	£ 275,000	£ 175,000	£ 300,000
Kerb Edge Replacement	£ 25,000	£ -	£ 50,000
A95 Landslip River Isla	£ 403,000	£ 403,000	£ 796,000
Column Replacement	£ 800,000	£ 508,000	£ 800,000
Replace SOX & SON lights with LED lights	£ 213,000	£ 127,000	£ -
Capital Sub-total =>	£ 5,913,000	£ 4,881,600	£ 6,786,000
Revenue Budget (Roads Maintenance)			
General Maintenance	£ 1,715,098	£ 1,715,098	£ 2,015,098
Traffic Works	£ 91,905	£ 91,905	£ 91,905
Lighting Maintenance	£ 145,000	£ 145,000	£ 145,000
Revenue Budget (Roads Maintenance) Sub-total =>	£ 1,952,003	£ 1,952,003	£ 2,252,003
Revenue Budget (Winter & Emergency)			
Winter Maintenance & Other Emergencies	£ 1,771,189	£ 2,471,189	£ 1,771,189
Revenue Budget Sub-total =>	£ 1,771,189	£ 2,471,189	£ 1,771,189
Revenue Budget (Electricity)			
Lighting	£ 389,136	£ 389,136	£ 389,136
Signs	£ 12,000	£ 12,000	£ 12,000
Revenue Budget (Electricity) Sub-total =>	£ 401,136	£ 401,136	£ 401,136
Summary			
Capital Budget Total	£ 5,913,000	£ 4,881,600	£ 6,786,000
Revenue Budget Total	£ 4,124,328	£ 4,824,328	£ 4,389,328
Capital and Revenue Total =>	£ 10,037,328	£ 9,705,928	£ 11,175,328

6. **SCHEME PROGRESS - ROADS 2022/2023**

- 6.1 A summary of progress against our roads related budgets are highlighted in Table 4 below.

Table 4 – Summary of Schemes (Roads)

Work Type	Status (at 31/03/23) :-			
	Ongoing	Completed	Cancelled / Not Started	Grand Total
Resurfacing / Reconstruction	10	54	9	73
Surface Dressing	0	94	30	124
Footway Works	10	29	24	63
Drainage & Other Works	12	34	41	87
Street Lighting Works	0	48	59	107
Timber Route Improvements	0	1	0	1
Grand Total	34	260	158	452

- 6.2 Carriageway maintenance treatments can be grouped in to 3 broad categories; resurfacing, reconstruction and surface dressing. Each has a different range of benefits and costs, and some are only appropriate under certain circumstances.
- 6.3 The surface dressing programme continues to have the highest number of schemes delivered. This treatment is based on preventing damage from water getting into the road layers, and restores surface texture to improve skid resistance. Surface dressing does not add any strength to the road, but it does maintain an already strong road in a strong condition for longer. Surface Dressing is a cost effective treatment and costs approximately £3-5 per m2, while the cost of Resurfacing can range from £20-50 per m2.
- 6.4 In 2022/23 54 resurfacing/reconstruction schemes were completed which, although more expensive than Surface Dressing, will have had the added advantage of both restoring the road surface to a new condition and adding structural benefits.
- 6.5 It is proposed that the majority of the cancelled schemes will be rolled forward into 2023/24 however these will be assessed during the programme building exercise and considered along with any other high priority schemes that have come to the attention of the service over the year.
- 6.6 To ensure that the 2023/24 programmes are delivered, it is intended that staffing vacancies are filled as soon as possible, and the service is actively looking at different advertising channels such as Facebook/Twitter and job fairs to increase awareness of the roles available.
- 6.7 The service have not been successful to date in any Strategic Timber Transport Scheme (STTS) related works for 2023/24. The STTS project undertaken during 2022/23 utilised grant funding to improve the road network. Although this had a slight negative, in that this funded works diverted internal resources from planned works programmes.

7. **SCHEME PROGRESS – STREET LIGHTING 2022/2023**

7.1 A summary of progress against budget is highlighted in Table 5 below.

Table 5 – Summary of Schemes (Lighting)

Work Type	Status (at 31/03/23) :-			
	Ongoing	Completed	Cancelled / Not Started	Grand Total
Street Lighting Capital Replacement Works	0	48	59	107
Lighting Improvement Works	0	0	0	0
Grand Total	0	48	59	107

7.2 The Council approved a change to the Capital Plan at a meeting of the Moray Council on 11 November 2015 to allow for a LED Spend to Save project (para 24 of the minute refers). This has involved the fitting of new LED lanterns as a replacement for the existing stock. By changing to LED, the Council has benefitted from lower energy consumption and reduced maintenance visits, resulting in significant revenue budget savings.

7.3 The unit costs for LED replacement are reported to be £665 per unit during 2022/23 which is significantly higher than previous years of the project. This is due to many of the remaining lanterns being non-standard and requiring special LED lanterns which cost more to purchase. On site productivity has declined from previous years due to many of the remaining units being located at one off locations throughout Moray.

Table 6 – LED Cost Installation Summary

Year	Expenditure	Units Installed	Unit Cost
2015/16	£ 218,000	445	£ 490
2016/17	£ 1,110,000	3,304	£ 336
2017/18	£ 867,000	4,363	£ 199
2018/19	£ 922,000	4,877	£ 189
2019/20	£ 666,000	3,613	£ 184
2020/21	£ 100,000	478	£ 209
2021/22	£ 150,000	400	£ 375
2022/23	£ 133,000	200	£ 665
Totals	£ 4,133,000	17,745	

7.4 Over 99% of lanterns have now been replaced with LED. LED lanterns have been purchased for the small number that remain, and they will be installed early in the new financial year. The LED project is substantially complete and has been delivered with a significant underspend from the original business case.

7.5 In addition, the project's annual saving estimate of £540k per year has been surpassed with this project currently saving the council £626k per year as a result of energy, carbon and maintenance savings.

- 7.6 There are currently 5,753 lighting columns in Moray which are beyond their design life. **APPENDIX 1** shows the age profile of these design life expired columns.
- 7.7 The capital allocation for 2023/24 has been set to continue the replacement of columns which are beyond design life. A replacement programme is currently being delivered with an emphasis placed on replacing design life expired columns with the most older columns being replaced first.

8. WINTER GRITTING

- 8.1 The actual spend that will be reported at end of season will be an overspend due to the impact of a few weather events of prolonged periods of snow and also the increase of salt prices which is affecting budgets. The current expenditure is £2.680m against budget of £1.762m for 2022/23.
- 8.2 Average expenditure on winter maintenance over the last 10 years is £1.929m against an average budget of £1.722m. It is worth noting that the winter maintenance budget has been historically set based on a mild winter. An average or severe winter will result in additional budget pressure to the Council. This will be reviewed in early 23/24 to determine whether a budget pressure should be recognised on the basis of overall spend within the service and the long term trend in cost of winter treatment.
- 8.3 Detailed information on the number of winter actions and salt used, including comparisons with previous years, is shown in **APPENDIX 2**. It is worth highlighting that to date, the total number of winter treatments on routes has increased on last year, and it is reported that the amount of salt used has also increased. This is as a result of seeing a number of prolonged snow events that have resulted in much more salt being used when treating carriageway and footway routes.

9. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Several objectives of these plans are influenced by the condition of the public roads network. Effective budget management is an essential component of delivery of Council priorities on a sustainable basis.

A Growing, Diverse and Sustainable Economy – the public road network is used by all sections of society, to access shops and services and to transport goods within and to and from Moray.

Building a better future for children and young people in Moray encouraging active travel options of walking and cycling require well maintained, and adequately treated during the winter months, facilities.

Empowering and connecting communities – road and footway hazards have the potential to cause injury. Winter gritting provision contributes to making communities safer.

(b) Policy and Legal

The Council is responsible for the maintenance of 1555km of road network which have been adopted by the Local Authority in terms of the Roads (Scotland) Act 1984. The Act places a duty on the Local Authority to maintain the roads, lighting units and structures so adopted, but does not prescribe the level of maintenance to be delivered.

The Well Maintained Highway Infrastructure Code of Practice which identifies good practice and consideration has been taken into consideration.

(c) Financial implications

It is proposed to develop appropriate programmes to reflect the budgets approved as part of the Council's budget setting process and what was included in the current indicative 10 year plan as reported to Full Council on 1 March 2023.

(d) Risk Implications

Pressure on general maintenance budgets will increase in terms of reactive maintenance as carriageway conditions deteriorate. There is the risk of a budget pressure in relation to winter maintenance.

(e) Staffing Implications

The staffing implications relating to recruitment are covered in the body of the report.

(f) Property

There are no property implications as a result of this report.

(g) Equalities/Socio Economic Impact

There are no equalities implications as a result of this report.

(h) Climate Change and Biodiversity Impacts

There are no climate change implications as a result of this report. Whilst efforts are made to be mindful of the carbon implications of roads maintenance there are not yet active measures in place to reduce the carbon impact, outside sustainable and active travel which is reported via Transportation. Any trials of alternative products are being led by research bodies rather than directly by the council.

(i) Consultations

Depute Chief Executive (Economy, Environment and Finance), Chief Financial Officer, the Legal Services Manager, the Equal Opportunities Officer and Committee Services Officer (L Rowan) have been consulted and any comments taken into consideration.

10. CONCLUSIONS

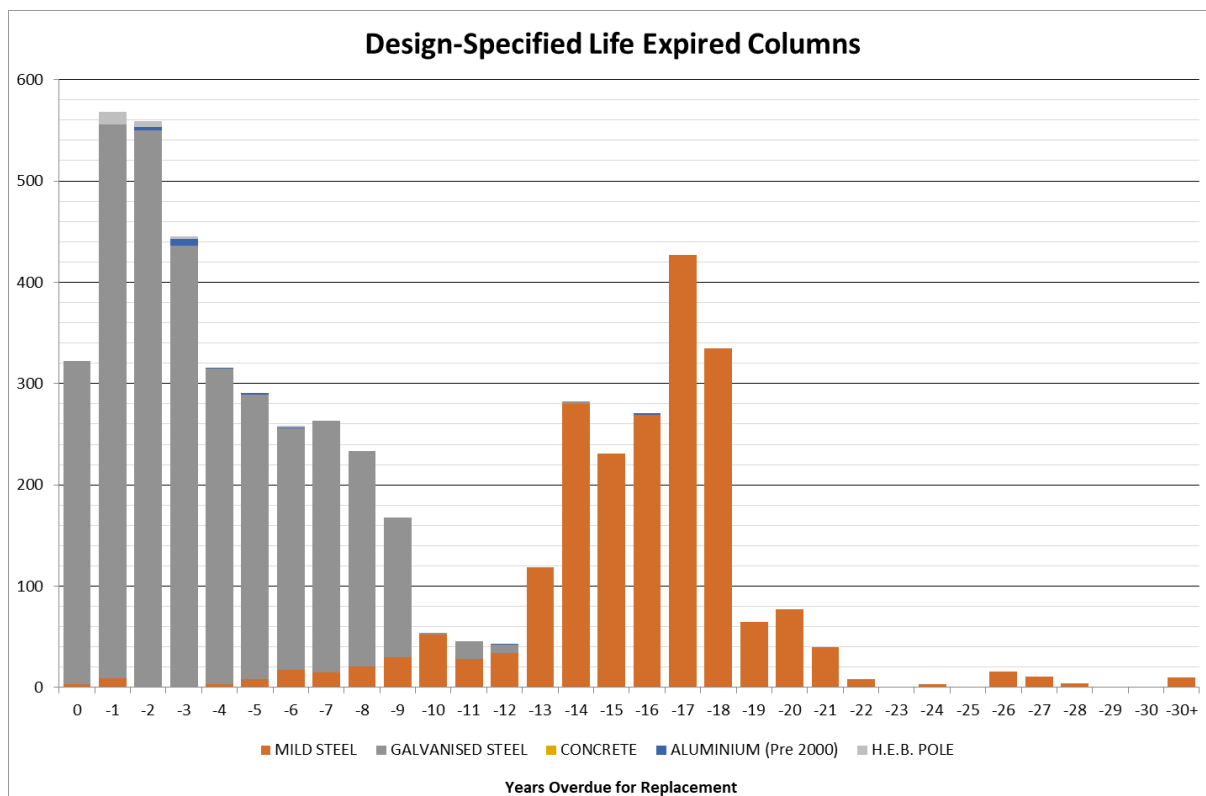
10.1 Note the outturn position of the 2022/23 roads capital and revenue programme;

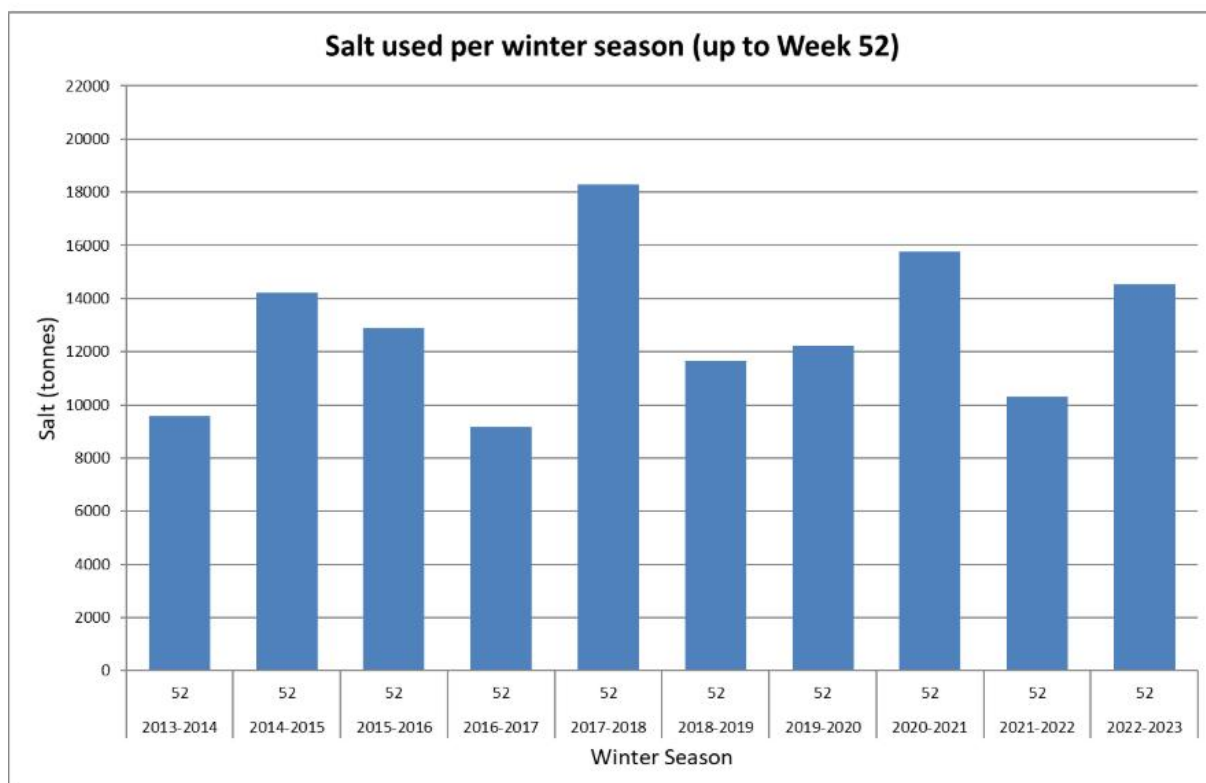
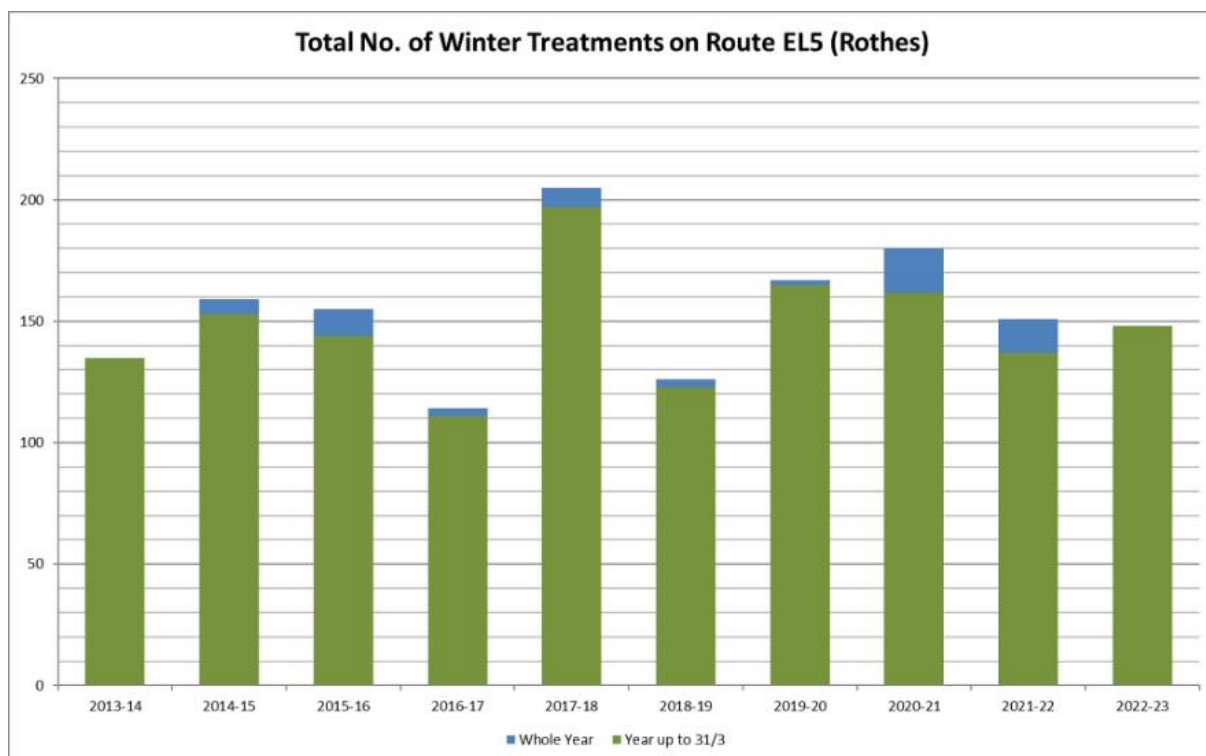
10.2 **Approve the expenditure for 2023/24.**

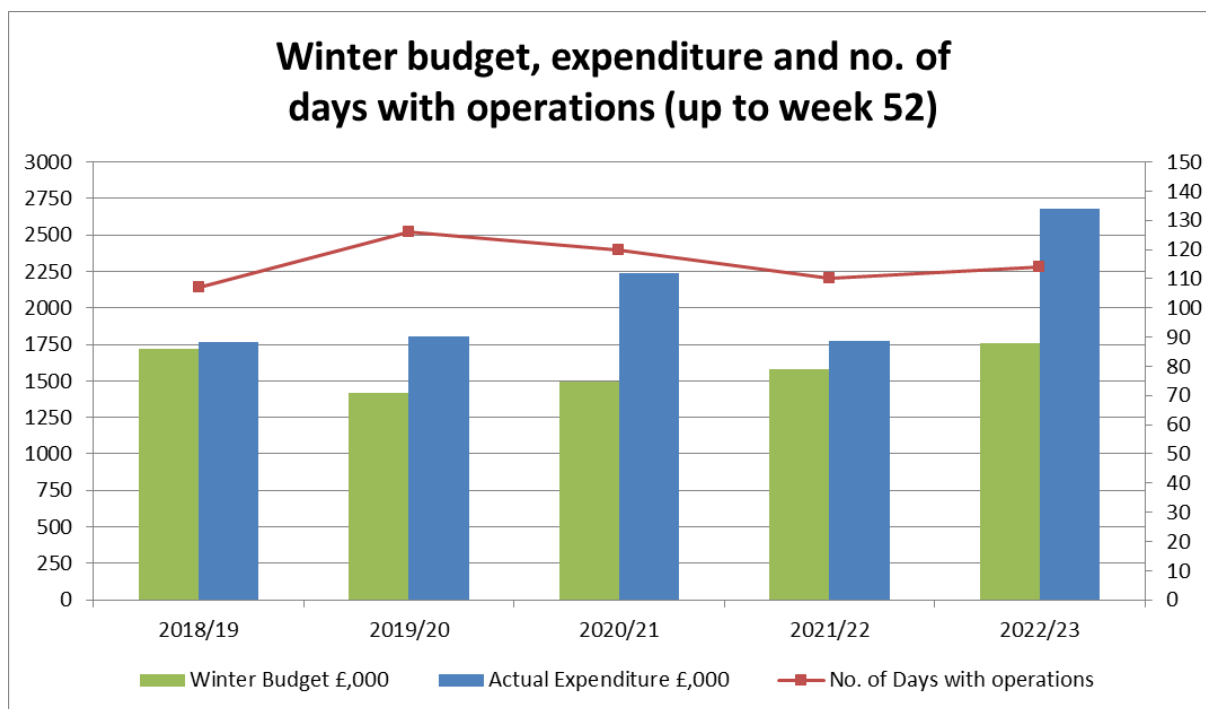
Author of Report: Mark Atherton, Roads Maintenance Manager

Background Papers:

Ref: SPMAN-524642768-887









**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

**SUBJECT: FLOOD RISK MANAGEMENT AND BRIDGES CAPITAL AND
REVENUE BUDGETS 2023/24**

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To inform Committee of the Flood Risk Management Schedule of Clearance and Repair for 2023/24, and the Bridge Maintenance Schedule of Works and the programme of Capital works for Bridges for 2023/24.
- 1.2 This report is submitted to Committee in terms of Section III (A) (2) of the Council's Scheme of Administration relating to the consideration of Capital and Revenue Budgets and long term financial plans.

2. RECOMMENDATION

2.1 It is recommended that Committee agree:

- (i) the Flood Risk Management Schedule of Clearance and Repair for 2023/24; and**
- (ii) the proposed Schedules of Road Bridge Revenue and Capital Maintenance Works and Non-network Bridge Capital Maintenance Works to be undertaken for 2023/24.**

3. BACKGROUND

Flood Risk Management

- 3.1 The Flood Risk Management (Scotland) Act 2009 (the Act) requires the Council to deliver the Actions within the Local Flood Risk Management Plans for Findhorn, Nairn and Speyside, and North East Local Plan Districts.
- 3.2 The Act places upon the Council a duty to assess relevant bodies of water (other than canals) in its area, for the purpose of ascertaining whether the condition of any such body of water gives rise to a risk of flooding. Where a water body gives rise to flood risk and the Council considers clearance and repair works would substantially reduce that risk, the Council must prepare a schedule of those works and carry them out.

- 3.3 During 2022/2023 work has been on going to complete the 2022/23 Clearance and Repair Schedule. There was no under or over spend on the FRM Revenue budget for 2022/23.
- 3.4 General maintenance of the Council flood schemes has continued throughout the year. Work has also been undertaken to improve access to the Tyock Burn at the confluence with the Linkwood Burn and review flood scheme models to assess the impact climate change has on the flood schemes at Rothes and Elgin. Assessment of the Elgin model is ongoing and will be completed in 2023/24.
- 3.5 The 2023/24 Flood Risk Management Annual revenue Budget is £282,270. The budget does not include for damage to assets or any clearance and repairs following a flood event. If an event occurs this will be considered as a budget pressure.
- 3.6 The proposed Schedule for Clearance and Repair for 2023/24 is provided in **Appendix 1**. The Schedule contains, recurrent works, reactive works as well as planned works, together with routine survey and monitoring works. The council's Asset Management System provides a risk based system to identify potential flooding issues. Reports from other sources continue to inform the production of the Schedule. The Schedule will be published on the Council's website, subject to agreement by this Committee.
- 3.7 The Schedule includes the maintenance of the flood schemes in accordance with their Operation and Maintenance Manuals. This covers schemes in Aberlour, Rothes, Elgin, Forres, Dallas, Newmill and Lhanbryde.
- 3.8 Key projects for the 2023/24 year will be:-
- Update of the Flood Model for schemes at Arradoul, Longmorn and Aberlour to include the impact of changes in Climate Change predictions and complete the model update for the Elgin Scheme.
 - Tyock Burn channel maintenance
 - Development of a Surface Water Management Plan for Forres and Findhorn
 - Mosset Burn channel maintenance.

Flood Risk Management Capital

- 3.9 The Flood Risk Management Plans for Cycle 2, 2022 to 2028, were agreed by members at a meeting of this committee on 15 November 2022 (Paragraphs 6 and 7 of the minute refer) and were published in December 2022. A number of projects to reduce flood risk have been identified as actions in these plans. However, the significant funding gap in Scottish Government's Flood Risk Management budget, means the timing of these projects is uncertain.
- 3.10 Significant maintenance work to replace life expired elements and remove trees from flood plains is required at Elgin, Forres Burn of Mosset and Forres Findhorn Flood Schemes at a total cost of £468,000, which is allowed for in the Capital Budget for 2023/24.

Road Bridges Revenue

- 3.11 Under the Roads Scotland Act 1984, Moray Council has a duty to manage and maintain the safety of the road network in Moray. Moray Council's road network includes 376 bridges and 160 retaining walls.
- 3.12 In 2022/23 planned masonry repairs to parapets were undertaken at Balnamoon Bridge on the B9018/30, Berryhillock Bridge on the C47H/40, Chapelford Bridge on the U8E/20, Crooksmill Bridge on the C54H/10, Landshut Bridge on the C22E/11 and Sandyhill Bridge on the U57H/40 at a cost of £93,000. Work to repair scour damage at Victoria Bridge in Buckie was undertaken at a cost of £7,000. £32,000 was spent on an underbridge unit to facilitate routine Principal Inspections. This has resulted in a slight overspend of 3%.
- 3.13 The maintenance programme for 2023/24 is based on scheduled inspection reports and the associated condition score of each bridge. Resources are targeted at bridges with low condition scores, also taking into account the criticality or importance of the route carried. If an inspection report indicates that maintenance works would significantly reduce future costs, engineering judgement is used to assess if this work should be prioritised over bridges with a lower score.
- 3.14 The bridges revenue budget for 2023/24 is £130,000. Based on recent annual reactive expenditure and ongoing construction inflation, £50,000 of this is to be allocated for unplanned repairs such as non-recoverable traffic collision damage. The revenue budget allows for work to repair Parapet damage in Dufftown, scour protection in South Forres and masonry repairs in Dyke. There is also an allowance of £25,000 to support routine Principal Inspections.
- 3.15 The bridges team investigated the potential benefits of installing ANPR cameras at accident hot spots, to reduce the financial burden of undertaking collision repairs. The findings of this investigation are it would not be economically beneficial to install cameras. Only two bridges have suffered repeat strikes in the last five years and the cost of installing Number Plate Recognition cameras would be significantly more than the cost of repairing the damage caused.

Road Bridges Capital

- 3.16 Capital bridge refurbishment schemes were completed during 2022-23 at Willowbank Bridge, Culach Bridge, Nether Tomdow Bridge, Dykeside Bridge, Aldunie Bridge, Shougle Bridge and Blackwater Bridge. Phase 2 of Craigellachie Bridge refurbishment was completed in March 2023. Planned repairs to Slateford Bridge have been deferred to 2023/24 to avoid potential delays and increased costs associated with working in winter months.
- 3.17 Refurbishment and major works for 2023/24 are based on scheduled inspection reports. Where significant maintenance or refurbishment works that will extend the life of the structure are required, funding is sourced from the Council's Capital budget. Subject to Members agreement, all future

maintenance works will be prioritised in line with the proposed Bridge Maintenance Prioritisation Policy, which is the subject of a report to this committee.

- 3.18 The bridges Capital Programme for 2023/24 includes delivery of Kirkhill Drive Bridge, Lea Bridge and New Bishopmill Bridge, with an estimated total cost of £1,028,000. An additional £250,000 will be requested to be carried forward to undertake works at Slateford Bridge, deferred from 2022/23. Carry forward requests will be reported to Council in June.
- 3.19 The bridges Capital Programme for 2024/25 includes funding to replace the deck on Arthurs Bridge. This work will be subject to a feasibility study, which is planned for 2023/24 at a cost of £100,000. The Capital programme for 2023/24 also includes £300,000 plus £100,000 carried forward from 2022/23 to undertake 40 Principal Inspections with high level outline design for maintenance/refurbishment works.

Non-Network Bridges Capital

- 3.20 Maintenance of the Council's non network bridges, which consist of footbridges and some small vehicular bridges, is funded through a capital allocation of £50,000 per year. .
- 3.21 The majority of the 2022/23 budget was spent on repairs to Findochty footbridge at a cost of £33,000. Surveys at Marywell Bridge, the Ballie Bridge at Morriston Playing Fields and the Red Bridge were also undertaken at a cost of £1,000. The remainder of this budget will be requested to be carried forward to fund works to replace the deck boards at Marywell Footbridge, which, subject to tender returns will be undertaken in 2023/24.

Vehicle Restraint Systems (VRS) Capital

- 3.22 Capital works were undertaken in 2022/23 to eight Vehicle Restraint Systems (VRS) across Moray at a cost of £192,260. In 2023/24 two VRS schemes are planned, these are wooden post replacements at the Lecht and hazard protection works at Ruthven Bridge. The estimated cost of these schemes is £143,000.
- 3.23 A breakdown of the Capital projects for Road Bridges, Non-Network Bridges and Vehicle Restraint Systems is provided in **Appendix 2**.

4. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

"Confident, skilled and self-reliant communities where expectations and aspirations are raised and achieved"

"Growing diverse and sustainable economy"

(b) Policy and Legal

Under the Flood Risk Management (Scotland) Act 2009, the Council has a statutory duty to implement the Actions from the Local Flood Risk Management Plans. The Council can do works not included in the Plans

that will manage flood risk, provided it does not affect the delivery of those actions in the Plan.

Bridge maintenance work is undertaken in accordance with the Council's duty to maintain a safe road network, under the Roads (Scotland) Act 1984.

(c) Financial implications

The proposed Capital and Revenue works as estimated are contained within the Council's budget for 2023/24

No allowance has been made in the Flood Risk Management budget for dealing with the consequence of exceptional rainfall/flood events. This will be considered as a budget pressure, if such events arise.

(d) Risk Implications

There are no risk implications as a result of this report other than to recognise that flooding and coastal issues are unpredictable and the items in the Schedule will be carried out in recognising this uncertainty.

(e) Staffing Implications

There are no staffing implications associated with the recommendations in this report.

(f) Property

There are no property implications associated with the recommendations in this report.

(g) Equalities/Socio Economic Impact

There are no equalities/socio economic implications associated with the recommendations in this report.

(h) Climate Change and Biodiversity Impacts

During the design and implementation of Flood Risk Management works we aim to increase biodiversity where ever practicable.

Where a negative impact on climate change occurs as a result of the work we do we endeavour to mitigate this where possible. This includes sourcing materials from a sustainable source and re-using materials.

(i) Consultations

Depute Chief Executive (Economy Environment and Finance), Head of Environmental and Commercial Services, Chief Financial Officer, Legal Services Manager, Equal Opportunities Officer and L Rowan, Committee Services Officer have been consulted and their comments incorporated into the report.

5. CONCLUSION

5.1 The Council has a duty under the Act to implement Flood Risk Management Plans, including clearance and repair of water bodies. The

proposed allocations in the 2023/24 Flood Risk Management Revenue Budget take account of this duty.

- 5.2 The Council has a duty under the Roads (Scotland) Act to maintain a safe road network. The proposed allocations for 2022/23 Bridges Revenue and Capital Budget takes account of this duty, based as far as practicable, on a risk-based plan-led approach.**

Author of Report: Debbie Halliday Consultancy Manager

Background Papers:

Ref: SPMAN-524642768-884

Appendix 1

Flood Risk Management Revenue

Schedule of Clearance and Repair Works 2023/24

Location	Improvement Works Description	Estimated Cost (£)
Elgin FAS	Flood Scheme Model updates	£10,000
Ardoul FAS	Scheme Review and Model update	£7,500
Longmorn FAS	Scheme Review and Model update	£7,500
Aberlour FAS	Scheme review and Model updated	£10,000
Telemetry	Upgrade Life Expired Equipment	£10,000
Forres	Forres SWMP investigation work	£5,000
Findhorn	Findhorn SWMP	£5,000
Burn of Mosset	Vegetation Maintenance	£15,000
	Vegetation Maintenance (trial and equipment purchase)	£20,000
Tyock Burn	Tyock culvert.	£30,000
	Total	£120,000

Location	Annual Maintenance Works Description	Estimated Cost (£)
Various	Reactive Works	£8,000
Telemetry	Telemetry Maintenance	£5,000
Kingston	Shingle Bank Survey	£3,190
Forres FAS	Shingle Bank Survey	£9,636
Longmorn FAS	Longmorn FAS - Operation and	£564
Dallas FAS	Dallas FAS - Operation and Maintenance	£2,255
	Findhorn and Pilmuir FAS - Operation and Maintenance	£46,453
Forres FAS	Aberlour FAS - Operation and Maintenance	£2,255
Aberlour FAS	Asset Maintenance, Operation and	£575
Millbuies Reservoir	Rothies FAS - Operation and Maintenance	£6,968
Rothies FAS	Elgin FAS - Operation and Maintenance	£40,590
Elgin FAS	Burn of Mosset FAS - Operation and	£11,275
Forres FAS	6 Monthly aerial Photos	£4,440
Aerial Photos	Newmill FAS - Operation and Maintenance	£5,638
Newmill FAS	Lhanbryde FAS - Operation and	£6,991
Lhanbryde FAS	Coastal Surveys	£5,000
Coastal Adaption plan	Adaption plan communication and Flood	
	Product Events.	£3,000
Community Engagement	Total	£161,829
	Revenue Total	£281,829

Appendix 2

Flood Risk Management Capital Expenditure**Harbours**

Location	Improvement Works Description	Capital Plan Value	
	Bridge of Slateford, Tomnavoulin:		
U117H/10	Strengthening and Parapet works	£	250,000.00
	Kirkhill Drive, Lhanbryde. Localised Deck		
U170E/20	works	£	600,000.00
	New Bishopmill Bridge: Joints and Bearing		
A941/340	works	£	390,000.00
B9103	Arthur's Bridge: design work	£	100,000.00
Various	Remote Footbridges (Marywell)	£	50,000.00
U173E/10	Lea Bridge, Forres	£	38,000.00
Various	Road Safety Barrier	£	143,000.00
Various	Principal Inspections inc carry forward	£	400,000.00
	Total	£	1,971,000.00



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

**SUBJECT: TRANSPORTATION CAPITAL AND REVENUE BUDGETS
2023/24**

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To inform the Committee of plans to deliver the capital and revenue programme in Transportation for 2023/24.
- 1.2 This report is submitted to Committee in terms of Section III (F) (33) of the Council's Scheme of Administration relating to the provision, development and monitoring of the Council's Economic Development and Infrastructure Services.

2. RECOMMENDATION

2.1 It is recommended that Committee:

- (i) **approve the plans to deliver the capital and revenue programme for 2023/24 as contained in this report;**
- (ii) **delegate authority to the Head of Environmental and Commercial Services to apply for grants for the funding areas set out in this report at paras 5.13 and 6.16; and**
- (iii) **approve the plans for expenditure of the additional revenue funding for Road Safety as set out in para 7.6.**

3. BACKGROUND

- 3.1 The Transportation team delivers the council services and duties in relation to public transport, home to school transport, transport development, traffic management, road safety, sustainable and active travel, car parks and harbours, as well as advising and preparing recommendations to members on matters of transport strategy.
- 3.2 This report sets out plans for each team within Transportation to deliver those services and duties in line with the approved revenue and capital budgets for the financial year 2023/24.

4. **PUBLIC TRANSPORT UNIT**

- 4.1 The 2023/2024 revenue budget for the Public Transport Unit is £5,628k. As is normally the case, the major element of the budget relates to the statutory provision of entitled home to school transport. The budget is factored to 191 school days, which reflects the projected school calendar. The major areas of expenditure are set out below.

Category	£k
Home to School Transport	4,947
Infrastructure, Systems and Services	70
m.connect	328
Minibus Contract	0
PTU Staff Costs	283
Total	5628

Home to School Transport

- 4.2 The Council has a statutory duty to provide transport between home and school for entitled pupils travelling to and from their zoned schools. The service was retendered in February 2019 for five years with an optional one year or two year extension. Home to school transport is provided by a mix of external coach and bus suppliers, taxi companies, bolstered by the use of the Council's own fleet. School routes are commissioned to maximise efficiency of vehicle provision in line with the requirements of individual schools. This includes transport for pupils with varying degrees of Additional Support Needs to enhanced provision centres across Moray.

The budget for this service is £4,947k and provides home to school transport for 2,550 pupils per year. Income of £7K is budgeted in relation to Privilege Transport, which offers pupils not entitled to free provision access to a seat on a closed contract school bus. The Under 22 free bus travel scheme launched in January 2022 does not cover closed school contracts.

Infrastructure, Systems and Services

- 4.3 This area of expenditure covers statutory maintenance for roadside passenger shelters and bus stops plus software licensing and maintenance fees for the m.connect demand responsive booking system and on bus ticket machines.

Minibus Hires and Social Care Transport

- 4.4 Transport is provided by the Public Transport Unit to a number of projects, day care centres and respite centres for vulnerable social care clients. Costs of this transport are recharged back to the various social care teams and project managers across the Council. Income is also generated by the hire of minibuses to external sources viable under the Section 19 Community Bus Permit scheme. Revenue from this is gradually recovering from the lack of confidence following the Covid pandemic.

m.connect

- 4.5 This is the budget allocated to m.connect, the council's bus services which includes a proportion of the overall vehicle and property costs associated with the delivery of public transport. This line also factors in predicted income, an area still facing some uncertainty as the country comes out of the Covid era of restrictions. Budgeted external income is £378K, made up of m.connect

£280K (concessionary fare reimbursement, on bus fares paid, Network Support Grant) and Minibus £98K (Network Support Grant). The Dial M brand is being replaced this year by the m.connect brand in line with the additional services and vehicles as part of the Growth Deal project.

Income

- 4.6 Income is generated from a number of sources including adult concession fare reimbursement, the under 22's free bus scheme reimbursement, the Network Support Grant (which replaced the Bus Service Operator Grant), and other service user income. The income figure is factored in the m.connect figure.

5.0 HARBOURS

- 5.1 The total revenue maintenance expenditure can be split into categories as follows:

Description	£
Dredging services	180,000
Maintenance	49,500
Inspections & surveys	25,000
Port Marine Safety Code compliance	6,500
Total	261,000

Infrastructure Maintenance

- 5.2 This will include the following items, although the full amount is not allocated to enable reactive repairs such as winter storm damage to be carried out:

- Ladder repairs / replacement
- Repairs to pier and harbour surfaces (potholes, storm damage etc.)
- Repairs to safety railings and barriers
- Maintenance and upgrade of all LSA (Life Saving Appliances)
- Upgrade of harbour signage
- Pontoon repairs (including replacement sections, chains, hinges, and decking)
- Refurbishment and painting of quayside furniture and equipment e.g. lighthouses, bollards and toe rails.
- Repairs to and replacement of navigation lights
- Repairs to various items of equipment e.g. fish barrow wheels, chiller doors and curtains, replacement of water hoses
- Harbour property repairs as managed by Estates
- Cleaning and maintenance of ice plant and associated equipment
- Cleaning and maintenance of slipways
- Repairs to harbour lighting in conjunction with Street Lighting
- Pest control, drain clearance
- Replacement of oil spill response equipment
- Maintenance and upgrade to Lifejackets and PPE for staff
- Annual Service and Calibration of Weighbridge at Buckie Harbour
- Annual Service and Calibration of Scales in the Fishmarket building
- Staff medical examinations (ENG 1)
- Upgrade and replacement of items of equipment such as VHF radios
- Maintenance of Pilot Boat

Maintenance of Dredger
 Maintenance of Fork Lift
 Maintenance and repair of quayside fendering.

Inspections & Surveys

- 5.3 Engineering surveys, including underwater work, are carried out periodically by an external contractor to determine the state of the harbour structures. This work is now managed by Consultancy in close co-operation with the harbours team. These detailed surveys of the harbour structures are vital to assist in programming capital works effectively, and are normally carried out every 2 years. The survey plan for the next 6 years is detailed in the following table.

Harbour	2022/23	2023/24	2024/25	2025/26	2026/27	2026/27
Buckie		Dive			Boat	
Burghead			Boat			Dive
Cullen	Boat			Dive		
Findochty	Dive			Boat		
Hopeman		Boat			Dive	
Portknockie			Dive			Boat

Boat – visual inspection from a vessel

Dive – in water inspection

- 5.4 Bathymetric surveys were been carried out in Buckie harbour in 2022/23 and it is proposed that Buckie is surveyed twice annually and Burghead annually to link in with dredging activity. Surveys are also carried out periodically on the harbour estate when required and other required surveys such as asbestos, contaminated land surveys completed when necessary.

Port Marine Safety Code Compliance

- 5.5 A marine consultant is engaged as Designated Person to ensure that the council is fully compliant with the Port Marine Safety Code, which is the industry guidance document for good practice produced by the Department for Transport and the Maritime and Coastguard Agency. The duty of Designated Person is a prescribed post in the Port Marine Safety Code. PMSC training for ED&I Committee Members was carried out in August 2022 to ensure understanding in the role of duty holder held by Committee Members.

Income

- 5.6 Income generated by harbours has generally been increasing year on year, since 2015. There has been a slight decrease in income in the financial year 2021/22 due to reduced harbour fee income as a result of a covid delayed pontoon replacement project. The general pattern of increase however has returned with a healthy increase in income over the last financial year as detailed in the chart below.



5.7 The 2022/23 income figure used for the graph is a projection based on latest income for February and an estimate for March.

5.8 The steady increase is the result of benchmarking and rationalisation of harbour fees and charges, and the hard work put in by the team on the front line to deliver quality services to all our customers.

5.9 The outline dredging plan for Moray Council harbours for 2023/24 is as follows:

Days dredging 2021/22							
	Burghead	Buckie	Findochty	Portknockie	Cullen	Hopeman	Total
Budget	60K	60K	12K	12K	6K	30K	180K
Days	20	20	4	4	2	10	60

5.10 On average the dredger will load approximately 180 tonnes into the hopper per dig, and aim to carry out 2 digs per day. However, this will depend on the specific gravity of the material being dredged, the tides, and the prevailing conditions on the day - not only at the dredge location but also at the sea disposal site.

5.11 Actual days worked at any of the harbours will depend on weather and tide, and availability of crew, vessel and machinery. Therefore the final split of days across the harbours will change over time. The priority of the harbourmaster will always be to maintain the depth of the channel and approaches to the commercial harbours at Buckie and Burghead. Hopeman, Findochty and Cullen are classed as drying harbours. However, the harbour authority has a duty and responsibility to ensure safe passage of vessels to and from their berths. Portknockie always has a good depth of water and needs minimal maintenance dredging. It is the intention to deliver the number of days planned in each harbour over the financial year.

The current 3 year dredging licences for the commercial harbours at Buckie and Burghead are valid until 2024. The licences for the leisure harbours at Cullen, Portknockie, Findochty and Hopeman are valid until 2023. These are being renewed and relevant authorities including SEPA and Marine Scotland are handling the new dredging licences which are planned to include abilities to dispose of some spoil to suitable land based sites. This will provide an ability to carry out land based dredging activities in areas especially Hopeman and Cullen which are providing a challenge to access.

- 5.12 There is a capital dredging programme agreed upon which is planned to be completed in second quarter of 2023/24. This will provide a large scale dredge of Buckie to provide 3.0m of depth in basins 1/2/3 and channel and in Burghead entrance channel. The work in Burghead will be accompanied by capital work to fix the beach groyne defence at Burghead beach. The cost of the capital dredging programme is £300,000 and the groyne repair works £575,000 (this is a joint budget including repair works to Findochty quay sink hole).
- 5.13 In line with the Transportation team's remit to develop the harbours sustainably there can be mid-year opportunities to benefit from grant funding to deliver these priorities. The deadlines often preclude submission of a report to the service committee. It is requested that delegated authority is granted to the Head of Environmental and Commercial Services to approve grant funding applications where these fit with clear 'business as usual' work priorities, and do not required any other unbudgeted expenditure by the council.

6. TRANSPORT DEVELOPMENT

- 6.1 The transport development team has a revenue budget of £37,224 for 2023/24 (excluding staffing costs). This budget is for required licences such as Geographical Information Systems (GIS) and the Trip Rate Information Computer System (TRICS). A modest amount is included in this budget for the commissioning of transport studies – principally for runs of the Elgin Traffic Model to support the team's role in assessing the impact of changes to the road network and to commission specific transportation studies/surveys for which there is no grant funding available. There is also £250,000 approved for the update of the Elgin Traffic Model and preparation of the Transport Appraisal required to support the review of the Local Development Plan, which has commenced during April 2023 and continue through the next two financial years.

7. TRAFFIC

- 7.1 The Traffic Team has a net revenue budget of £262,047. This covers the statutory duties in relation to road safety, street works and road construction consents. The planned expenditure for the team is set out in more detail below.
- 7.2 The revenue budget includes an anticipated income of £263,528. This comprises £173,008 for processing Temporary Traffic Regulation Orders and issuing permits such as Road Opening Permits. £90,520 is budgeted for income relating to Road Construction Consent inspections.

- 7.3 The budget also includes allowances for licences for Road Traffic Accident software (£6.7k) and software for the collection and analysis of traffic count and vehicle speed data (£3.5k) from permanent and temporary counter sites across Moray. Accident and traffic data is important information required to enable Transportation's statutory duties in relation to road safety and the preparation of transport strategies to support the Moray Local Development Plan.
- 7.4 The Council has a statutory duty to carry out studies of road accidents and "take such measures as appear to the authority to be appropriate to prevent such accidents". The Road Safety budget of £366k in the Capital Plan provides funding to deliver works in priority areas and a small allowance for minor interventions. This year's budget includes monies deferred from 2022/23 budget.
- 7.5 During 2023/24, the Road Safety capital budget will be used to complete the works commenced during 2022/23 for the installation of a Toucan crossing on Thornhill Road at School Walk and the replacement of the existing pedestrian crossing on Thornhill Road with a central pedestrian island. Other works being pursued include a new Toucan crossing on Coulardbank Road, Lossiemouth along with supporting works to routes to the crossing point.
- 7.6 An additional £50k for Road Safety measures was agreed during the budget discussion at the Council meeting of 3 March 2023. This additional revenue funding will be used to refresh faded road markings at junctions and at locations where on-street parking presents a hazard to road safety, which have deteriorated to an extent that they are now unclear (due to limited revenue budgets for the re-fresh of road markings over the past five years in the region of £35k to £40k).
- 7.7 Furthermore, an application to the Scottish Government Road Safety Fund will be made once this fund opens (anticipated to be in May). Should the application be successful funding will be available to improve the A940 Edinkille/U88e Divieside Road junction at and to undertake upgrades to road markings and 'cat's eyes' on the A941 Lossiemouth to Dufftown Road and the A940 Forres to Grantown Road.
- 7.8 The Council also has a statutory duty to provide disabled parking spaces near the homes of eligible people when they apply. The Council also receives requests for dropped kerbs to assist people with mobility disabilities and parents/carers with pushchairs at places where they need to cross the road. The Disability Adaptation capital budget enables the Traffic Team to deliver appropriate improvements. This £76k budget provision will enable in the region of 60 parking spaces and approximately 25 dropped kerbs. This year's budget will also be utilised to remove on-street disabled person's parking spaces where the person for whom they were created no longer resides at the property in question.
- 7.9 The New Road Signs and Markings Capital Budget of £57k is for the provision of new road signs, markings and the like to allow the Traffic team to react to changes to the road network – often highlighted by communities, elected members and council officers. This will include new signs and road markings

replacing life expired elements with a particular focus on the continued removal of centreline markings on rural roads narrower than 5.5 metres and replacing them with edge markings on both sides of the road. Undertaking this particular change, which is compliant with Traffic Signs Manual Chapter 5, has resulted in reductions in verge overrun on these rural roads and has added road safety benefits of defining the edge of the carriageway during the hours of darkness and periods of weather related poor visibility.

- 7.10 There is a small capital allocation of £27k for the replacement of life expired traffic signals and traffic data equipment. Councils are required to provide Transport Scotland with some data and regularly carry out surveys to help respond to concerns raised or to inform design decisions. The collection and analysis of data is also a key part of providing an evidence base in relation to the Local Development Plan. The budget enables the replacement of life expired items such as batteries, and for the repair of permanent automatic traffic counter sites. In the long term, there is a requirement to review and upgrade the count equipment itself, which is dated and no longer supported by manufacturers. This requires research with costs to be identified as part of the 10 year Capital Plan.
- 7.11 Each year Moray Council is awarded ring fenced funding for Cycling, Walking and Safer Routes (CWSR). For 2023/24 the grant to be awarded has been confirmed as £616,000. The grant is to be used only for the purposes of undertaking a programme of works for local cycling, walking and safer routes projects, with a recommended minimum spend of 36% and preferably over 50% of the grant being used for works to promote cycling and walking for both short and long distance journeys. An allocation of £50k from the award forms part of a Participatory Budgeting exercise, where communities are being asked to identify locations for additional cycle parking and/or cycle repair stations. The first communities to participate are Buckie and Keith.
- 7.12 It is proposed to use this year's CWSR budget to design and implement projects. The projects include the provision of a new footway in Rafford to connect properties to the village hall, a footway and pedestrian island on St Leonard's Road, Forres. Smaller schemes include new sections of footway in Garmouth near the War Memorial and in Roseisle at the Village Hall (deferred from last year due to contractor issues).
- 7.13 The CWSR grant can also be used to develop designs for interventions. This year design projects will include footway and pedestrian island provision on Boroughbriggs Road, Elgin, further development of options for improving pedestrian and cycle routes through the Victoria Road roundabout at Forres, options for improving the pedestrian route at the Barhill Road/Golf View Drive/St Peters Road junction in Buckpool and design of the active travel route along Coularbank Road, Lossiemouth.
- 7.14 In 2022/23 Scottish Government introduced a new supporting grant for the CWSR, the CWSR Direct Resource grant, which provides revenue funding to support for active travel. The grant is for the removal of barriers and to improve the quality of existing cycling infrastructure and/or to fund additional staff to deliver cycling projects. Should this grant be awarded for 2023/24, it will be used to provide the Council's contribution towards funding the existing

Sustrans Embedded Officer and for works to improve the Elgin to Lossiemouth cycle path and repairs to other existing cycle paths.

- 7.15 An application has been made to the Smarter Choices Smarter Places (SCSP) fund for £90.8k for support to deliver active travel promotions in relation to schools, support for the Moray Council operated bus services and for the continuation of the Moray Bothy project. The Moray Bothy project focuses on promoting accessible and inclusive cycling and walking opportunities to the residents of Elgin, Buckie, Keith, Forres and Lossiemouth. The fund is for behaviour change activities, which promote the use of sustainable transport modes. The fund is allocated to all Local Authorities based on population size. An application was submitted in January with the grant expected to be awarded in May.
- 7.16 In line with the Transportation team's remit to promote road safety, sustainable and active travel, and public transport, there can be mid-year opportunities to benefit from grant funding to deliver these priorities. The deadlines often preclude submission of a report to the service committee. It is requested that delegated authority is granted to the Head of Environmental and Commercial Services to approve grant funding applications where these fit with clear 'business as usual' work priorities, and do not required any other unbudgeted expenditure by the council.
- 7.17 The Traffic Team is responsible for a revenue budget for traffic signals, signs and lines for general maintenance and the refreshing of road markings. The delivery of the budget is the responsibility of the Roads Maintenance Manager and will be reported separately. Appropriate well-maintained road markings, cat's eyes, junction markers and signage all contribute to the safety of road users on rural roads.
- 7.18 However, it should be noted that over the past five years this revenue budget has significantly reduced with only prioritised maintenance of these assets being carried out. The additional Road Safety revenue budget agreed as part of the budget for 2023/24 is therefore being allocated to the refreshing of road markings (see para 7.6 above).

8. CAR PARKS

- 8.1 The 2023/24 revenue budget for car parks is £(293)k, taking into account budgeted income of £(765)k. This maintains the car parks in Moray governed by the car park order and fund the enforcement of the regulations governing the use of the pay and display in Elgin.
- 8.2 The infrastructure and maintenance of grounds includes the following items:
- Guardrails and Barriers
 - Grounds Maintenance
 - Gully Emptying
 - General Maintenance
 - Patching and Kerbing
 - Roads Markings & Signs
 - Winter Maintenance
 - Lighting Maintenance

- 8.3 The balance of the expenditure in revenue includes employee costs, rent, rates and energy costs, clothing and uniform.
- 8.6 Batchen Lane Car Park, refurbishment scheme will be delivered 2023/24 with an estimated cost of £450,000.
- 8.7 Following the potentially serious structural defects identified in St Giles Car Park the upper floors of the car park were closed in the interest of public safety. Options for the future of St Giles are currently being considered by officers.

9. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Carrying out the planned functions of the Transportation team as set out in this report, enables the fulfilment of statutory duties and contributes towards the council priorities of a growing sustainable economy, healthier citizens and safer communities.

(b) Policy and Legal

Delegated authority to make grant applications is requested in this report, which is a deviation from the Financial Regulations. The Head of Financial Services has been consulted and is supportive of this request.

(c) Financial implications

This report sets out the plans to deliver the revenue and capital budget allocation to Transportation for 2023/24.

(d) Risk Implications

The predicted incomes for harbours, traffic and car parks are based on the best available information but may be subject to variation based on external influences.

(e) Staffing Implications

There are no staffing implications associated with the recommendations in this report.

(f) Property

There are no property implications associated with the recommendations in this report.

(g) Equalities/Socio Economic Impact

There are no equalities issues arising from this report. There are various expenditure items which promote equalities and / or have a socioeconomic benefit, in particular the spend on road safety and public transport.

(h) Climate Change and Biodiversity Impacts

Public Transport, Active and Sustainable Travel all contribute to reducing carbon emissions and promoting health & wellbeing.

(i) Consultations

The Depute Chief Executive (Economy, Environment and Finance), Head of Environmental and Commercial Services, Legal Services Manager, Head of Financial Services, Principal Accountant, Equalities Officer and Committee Services Officer have been consulted and their comments incorporated into the report.

10. CONCLUSION

10.1 Committee is asked to approve plans and programmes for expenditure as set out in this report.

Author of Report: Debbie Halliday, Acting Transportation Manager

Background Papers:

Ref: SPMAN-524642768-880



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

**SUBJECT: ENVIRONMENTAL AND COMMERCIAL SERVICES AND
ECONOMIC GROWTH AND DEVELOPMENT
SERVICES (ECONOMIC DEVELOPMENT) CAPITAL AND
REVENUE BUDGET MONITORING TO 31 DECEMBER 2022**

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To inform the Committee of the current position regarding Environmental and Commercial Services and Economic Growth and Development Services (Economic Development) Capital and Revenue Budgets.
- 1.2 This report is submitted to Committee in terms of Section III (A) (2) of the Council's Scheme of Administration relating to the consideration of Capital and Revenue Budgets and long term financial plans.

2. RECOMMENDATION

- 2.1 **It is recommended that Committee considers and notes the budget monitoring report for the period to 31 December 2022.**

3. BACKGROUND

- 3.1 The Performance Management Framework 2020 (page 27) requires that progress against Capital and Revenue Expenditure and the Capital Plan is reported to the relevant Service Committee every Committee cycle. Expenditure is reported in the first instance to Corporate Committee (formerly Policy and Resources) quarterly.
- 3.2 The Capital Plan for 2022/23 was approved by a meeting of Moray Council on 22 February 2022 (para 4 of the minute refers). Amendments (largely carry forwards from 2021/22) approved by the Council at its meeting on 23 February 2022 (paragraph 7 of the Minute refers) and 29 June 2022 (paragraph 17 of the minute refers), by the meeting of Corporate Committee on 30 August 2022 (paragraph 9 of the minute refers) and by the Council at its meeting in 7 December (paragraph 11 of the minute refers) have been incorporated to give a current approved 2022/23 capital plan for Environmental and Commercial services of £28,036,000. The current projected expenditure is an estimate that should be treated with caution due

to volatile conditions within the Construction Industry and in supply chains of materials.

- 3.3 Policy and Resources Committee on 10 May 2016 agreed to amendments to the information provided in response to the Audit Scotland report “Major Capital Investment in Councils” (paragraph 7 of the Minute refers). Accordingly this report includes a separate **APPENDIX 4** giving details of expenditure on projects which span more than one financial year.
- 3.4 The Council recognises five principal drivers for capital expenditure: Legislative requirements, efficiencies or spend to save projects, maintenance of assets and operations at current approved levels, service developments, council priorities. Capital expenditure is funded from three sources: capital grants from Scottish Government and other sources; capital receipts from the sale of assets or from developer obligations; and borrowing. When the Council borrows for capital expenditure, the capital financing charges incurred are met from the revenue budget. Therefore the Capital Plan has a direct impact on the revenue budget and the two are considered jointly at the same budget-setting meeting of Council. The Revenue budget was approved at a meeting of the Council on 22 February 2022 (para 4 of the minute refers). The Council has agreed savings of £1.576 million in 2022/23. The current total Revenue budget for Environmental and Commercial Services is £27.977 million in 2022/23. Any further amendments to the Capital and Revenue budgets are first approved by Corporate Committee or Full Council, depending on the timing of meetings.

4. ENVIRONMENTAL AND COMMERCIAL SERVICES REVENUE BUDGET

- 4.1 **APPENDIX 1** details the Environmental and Commercial Services Revenue Budget position to 31 December 2022.

4.2 REVENUE BUDGET POSITION 31 DECEMBER 2022

Annual Budget	Budget Year to Date	Actual & Committed Year to Date	Variance Year to Date
£000s	£000s	£000s	£000s
27,977	18,708	18,606	102

- 4.3 Environmental and Commercial Services actual and committed budget has an overall Underspend to budget, of £102,000 for the period to 31 Dec 2022. The position is shown in **APPENDIX 1**. The 3 key variances are as follows: Fleet Services £112,000 underspend, Engineering Design £125,000 overspend, Building Cleaning and Catering £189,000 underspend. Underspends or Overspends are against budgets for the period only. All variances will be monitored closely and reported to Committee as the year progresses.
- 4.4 An overspend of £125,000 on Engineering Design arises from the timing of work carried out and expenditure is forecast to be on budget by the year end.

- 4.5 Catering had a net underspend to budget of £189,000 at 31st December 2022. This was mainly due to an underspend of £243,000 on food and supplies. The Catering food budget has previously been increased for new nutritional standards, provision of nursery meals, universal free school meals for p4-5s and for above inflation price rises and these have all impacted on the overall cost of food. On the income side, income from paid meals and functions was under achieved by £70,000 and this reduction in uptake has also contributed to the food budget underspend.
- 4.6 Overspends of £120,00 on spare parts and £112,000 on vehicle hires are more than compensated for by additional charges service users, resulting in an underspend against budget to date of £111,000. The year end position is anticipated to be closer to budget (£37,000 underspend).
- 4.7 Revenue budget monitoring for QTR 3 was previously reported to a special meeting of Moray Council on 8 March 2023 (Agenda item 5 refers)

5. ECONOMIC GROWTH AND DEVELOPMENT SERVICES (ECONOMIC DEVELOPMENT) REVENUE BUDGET

5.1 REVENUE BUDGET POSITION 31 DECEMBER 2022

Annual Budget 2022/23 £000s	Budget Year to Date £000s	Actual & Committed Year to Date £000s	Variance Year to Date £000s
1,642	834	833	1

- 5.2 Development Services - Economic Development, the variance to projection is an underspend of £1,000.

6. ENVIRONMENTAL AND COMMERCIAL SERVICES CAPITAL BUDGET TO 31 DECEMBER 2022.

- 6.1 **APPENDIX 2** details the Environmental and Commercial Services Capital Budget position to 30 December 2022 (QTR 3). The total Capital Plan budget of £28.864 million has an actual spend at the end of December 2022 of £5.977 million and a projected spend at end of March 2023 of £29.864 million.
- 6.2 **APPENDIX 3** shows the projects within the Capital Budget with a summary of the ratings estimated by budget managers.
- 6.3 Environmental and Commercial Services Capital Budget position to 31 December 2022 (QTR 3) and proposed amendments to the capital plan were reported to a special meeting of Moray Council on 8 March 2023 (Agenda item 7 refers)
- 6.4 Two bridge projects are currently predicting a status of red (Bridge of Slateford and Principal Bridge Inspections). Current construction industry inflation, along with a lack of internal resources to progress tenders has resulted in delays to these projects. Issues around consent has meant that the project at the Meikle Cantlay Landslip has been delayed and will now be completed over two financial years.

- 6.5 Lack of resources within the Roads Service means that a programme of works kerb edge replacements and replacement street light columns and lights has seen delays.
- 6.6 The timing of the commissioning stages of the Energy from Waste project is impacting on the timing of capital payments for the relevant milestones of this project.

7. RISK AND EMERGING ISSUES

- 7.1 Budget managers have been requested to identify any specific areas of risk for the projects in the Capital Plan for which they are responsible.
- 7.2 As reported to Economic Growth, Housing and Environmental Sustainability Committee on 24 August 2021 (paragraph 7 of the minute refers) a risk to the capital plan is an increase in the cost of materials and scarcity of many materials which are key for the construction industry. Scotland Excel have informed the Council of unavoidable increases to costs on four of their frameworks and some key materials such as concrete, wood and steel are currently difficult to source and costlier if they are available. This is partly a world-wide reaction to the pandemic, and partly due to Brexit, and the war in Ukraine is also having an impact. The construction industry is also over-heated and some recent procurement exercises have stalled. The Strategic Territory Partnering Board are also monitoring market volatility.
- 7.3 There is a risk that contract inflation might increase the eventual cost of projects in future years of the capital plan and a risk that any deferment of projects relating to asset condition might result in element failure, potentially incurring unbudgeted costs. The figures in the 10 year plan are based on current costs and are likely to increase by the time the project is undertaken.
- 7.4 The main risk for the vehicle replacement programme is manufacturers failing to deliver to agreed timescales and this risk is heightened at this time due to the world-wide shortage of semi-conductors.
- 7.5 Lack of staff resources and staff turnover can impact on project timescales and other emerging work priorities can impact in scheduled works and this is reflected in delays where work planned to be out-sourced is being brought inhouse as a result of poor response to tender requests. Poor responses to tender requests are an increasing phenomenon and work is on-going with organisations such as Hubco to attempt to improve market engagement, as well as support from the Procurement team to engage local suppliers and contractors. Lack of staff resources is a more intractable problem and current recruitment difficulties, coupled with additional funding streams with short time envelopes for spend, which adds pressure to staff workloads, is creating difficulties and therefore slippage in many areas of the capital programme.
- 7.6 There is a risk that time-limited funding is not spent within time-frame and that the Council therefore loses the opportunity to improve or create assets at no or reduced cost to the Council.

- 7.7 Projects can be subject to risks which are out with the direct control of the Council, such as poor weather conditions and some assets such as harbours are particularly vulnerable to bad weather events.
- 7.8 No other project risks have been specifically identified by budget managers.

8. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan, (Local Outcomes Improvement Plan (LOIP))

Effective budget management is an essential component of delivery of Council priorities. The capital plan is one of the vehicles through which the Council's priorities can be delivered. The approved capital plan for 2022/23 and the outline ten year plan incorporates measures designed to address the LOIP priorities of building a better future for our children and young people, empowering and connecting communities and developing a diverse, inclusive and sustainable economy

(b) Policy and Legal

There are no policy or legal implications arising directly from this report

(c) Financial implications

The financial implications are highlighted within the report and detailed in **APPENDICES 1 – 4**.

Environmental and Commercial Services revenue spend to 31 December 2022 is £18.606 million against a budget to end December of £18.708 million giving an underspend of £102,000. The annual revenue budget for 2022/2023 is currently £27.977 million.

Economic Growth and Development Services – (Economic Development) Revenue spend to 31 December 2022 is £833,000 against a budget year to date of £834,000 giving an underspend variance of £1,000.

Environmental and Commercial Services - Capital spend is £5.977 million to 31 December 2022.

(d) Risk Implications

Budget managers are aware of their responsibilities for managing budget allocations and approval for variance will be sought from Committee in line with the Financial Regulations.

(e) Staffing Implications

There are no staffing implications arising from this report.

(f) Property

There are no Property implications arising from this report.

(g) Equalities/Socio Economic Impact

There are no equalities implications arising from this report because the report informs the Committee on budget monitoring.

(h) Climate Change and Biodiversity Impacts

There are no climate change or Biodiversity impacts arising from this report,

(i) Consultations

This report has been prepared in consultation with Depute Chief Executive (Economy, Environment & Finance), Head of Environmental and Commercial Services, Head of Economic Growth and Development Services, Chief Financial Officer, Legal Services Manager, Committee Service Officer (Lissa Rowan) and Environmental and Commercial Services Management Team and Budget Managers. Any comments have been taken into consideration.

9. CONCLUSION

9.1 This report sets out the budget monitoring position and comments on variances for the Environmental and Commercial Services and Economic Growth and Development Services (Economic Development) Capital and Revenue Budgets for the period to 31 December 2022.

Author of Report: Nichola Urquhart, Quality Management Systems Officer

Background Papers:

Ref: SPMAN-524642768-874

**ENVIRONMENTAL AND COMMERCIAL SERVICES - REVENUE BUDGET PROGRESS
PERIOD TO 31 DECEMBER 2022 (QTR 3)**

Service	Annual Budget	Budget to date	Actual & Committed YTD	Variance to date
	£000s	£000s	£000s	£000s
Fleet Services	-1,867	-1,402	-1,514	112
Engineering Design	1,075	625	750	-125
Roads Management	4,627	2,703	2,692	11
Traffic & Transportation Mgmt	5,791	3,682	3,747	-65
Waste Management	8,481	5,914	5,922	-8
Building Cleaning & Catering	7,381	5,349	5,160	189
Parks & Open Spaces	1,645	1,111	1,111	0
Env& Com Services Admin / Suppt Svs /H&S	484	358	357	1
Emergency Planning	60	12	13	-1
Env & Com Services Covid 19	244	228	238	-10
Efficiency Savings	-67	0	0	0
Direct Services Directorate	183	140	143	-3
Total Env & Com Services	27,977	18,708	18,606	102 UNDERSPEND

APPENDIX 2

APPENDIX II ENVIRONMENTAL AND COMMERCIAL SERVICES - CAPITAL BUDGET PROGRESS – PERIOD TO 31 DECEMBER 2022

Service Description	Total Number of Projects	Current Capital Plan Budget 2022 - 2023	Actual & Committed to 31 EC2022	Total Projected Expenditure 30 March 2023
		£000s	£000s	£000s
Vehicle Plant and Equipment	12	4,731	1,959	3,936
Lands and Buildings	8	8,928	1,647	8,916
Infrastructure	40	14,377	7,043	12,156
Total	62	28,036	10,649	25,008

CAPITAL PROJECTS 2022 / 2023
As at 31 December 2022

	Current Capital Plan 2022/23	Actual to 31 Dec 2022 (QTR 3)	Total Projected Expenditure 2022/23	Projected Variance	RAG	Service
	£000	£000	£000			
LANDS AND BUILDINGS						
Cemetery						
Cemetery infrastructure (paths, walls, railings, signage)	70	32	68	2	A	Environmental Protection
Cemetery Provision – Elgin, Lossiemouth, Keith	31	21	31	0	G	Environmental Protection
Parks & Open Spaces						
Paths, car parks, steps, walls, fences, signage	86	10	76	0	A	Environmental Protection
Waste Management						
Dallachy Landfill site – new calls, capping & reinstatement	906	732	906	0	G	Environmental Protection
NESS energy from waste – construction phase	7,777	799	7,777	0	A	Environmental Protection
Moycroft	0	0	0	0	G	Environmental Protection
Transportation						
Replace waterproof and expansion joints at multi-story car parks and lighting, car park resurfacing	5	0	5	0	G	Transportation / Consultancy
RTIF Rural Tourism Infrastructure Fund (Fully Funded by Grant Funding)	53	53	53	0	G	Transportation / Consultancy
TOTAL - LANDS AND BUILDINGS	8,928	1,647	8,916	2		

CAPITAL PROJECTS 2022 / 2023 (Continued)

As at 31 December 2022

	Current Capital Plan 2022/23	Actual to 31 Dec 2022 (QTR 3)	Total Projected Expenditure 2022/23	Projected Variance	RAG	Service
	£000	£000	£000			
INFRASTRUCTURE						
Bridges						
A941/ New Craigellachie Bridge	3,786	548	1,846	1,940	A	Consultancy
A941/100 Blackwater bridge, lower Cabrach	485	173	300	185	A	Consultancy
A941/340 New Bishopmill Bridge	10	1	10	0	G	Consultancy
B9103/100 Boat O Brig Bridge, Orton	4	0	15	(11)	A	Consultancy
Remote footbridges	50	32	50	0	G	Consultancy
U117H/10 Bridge of Slateford / Tomnavoulin	16	9	16	0	R	Consultancy
U170E/20 Kirkhill Drive, Lhanbryde	30	7	30	0	A	Consultancy
U173E/Lea Brige Forres (Complete)	10	0	10	0	A	Consultancy
U82H/10 Aldunie Bridge, Cabrach / Dykeside	485	424	485	0	G	Consultancy
U118E/10 Shougle Bridge	589	473	550	(39)	R	Consultancy
Knockando Bridges	130	144	144	(14)	G	Consultancy
MacDowall Bridge	10	8	10	0	G	Consultancy
Lossiemouth Bridge	171	171	171	0	G	Consultancy
Arthurs Bridge	0	1	0	0	G	Consultancy
Principal Bridge Inspections	175	0	175	0	R	Consultancy
Flood Risk Management and Coastal Protection						
Elgin Flood Alleviation Scheme	149	6	149	0	G	Consultancy
Findhorn Flood Alleviation	7	7	7	0	G	Consultancy
Coastal change adaption	160	39	90	70	A	Consultancy

CAPITAL PROJECTS 2022 / 2023 (Continued)
As at 31 December 2022

	Current Capital Plan 2022/23	Actual to 30 Sept 2022 (QTR 2)	Total Projected Expenditure 2022/23	Projected Variance	RAG	Service
	£000	£000	£000			
INFRASTRUCTURE						
Harbours						
Power Upgrade – Buckie Harbour	500	0	500	0	G	Consultancy
Replacement of life expired elements and upgrade	374	30	308	0	A	Consultancy
Burghead Groyne	250	0	250	0	G	Consultancy
Findochty sink hole	195	0	175	0	G	Consultancy
Findochty Pontoon	50	0	50	0	G	Consultancy
Buckie Harbour ice plant	18	0	18	0	G	Consultancy
Economic Development	0	32	0	0	G	Consultancy
Road Improvements						
A95 Landslip River Isla	403	3	403	0	R	Consultancy
Carriageway resurfacing / reconstruction/ surface dressing	3,617	2,822	3,617	0	G	Roads Maintenance
Drainage and other works	400	235	400	0	G	Roads Maintenance
Footways	275	62	250	25	A	Roads Maintenance
Kerb Edge Replacement	25	0	0	25	R	Roads Maintenance
Timber Traffic	180	902	180	0	G	Roads Maintenance
Street Lighting						
Replacement Columns and Lights	500	6	500	0	R	Roads Maintenance
LED Lighting	113	30	113	0	G	Roads Maintenance
Road Safety						
Disability Adaptions	76	39	76	0	A	Transportation
New Road Signs and Markings	58	29	58	0	G	Transportation
Road Safety Barrier Provision	195	60	195	0	G	Consultancy
Road Safety Provision	135	5	135	0	G	Transportation
CWSR	613	267	613	0	G	Transportation

CAPITAL PROJECTS 2022 / 2023 (Continued)

As at 31 December 2022

	Current Capital Plan 2022/23	Actual to 30 Sept 2022 (QTR 2)	Total Projected Expenditure 2022/23	Projected Variance	RAG	Service
	£000	£000	£000			
INFRASTRUCTURE						
Traffic						
Wards Road Junction Improvements	133	257	257	(-124)	G	Transportation
LCTT Speyside Way	0	221	0	0	G	Transportation
TOTAL - INFRASTRUCTURE	14,377	7,043	12,156	2,135		

VEHICLES PLANT & EQUIPMENT						
Vehicle & plant replacement Programme	3,296	1,685	3,296	0	A	Roads Maintenance
Facilities Management Equipment	13	2	13	0	G	Environmental Protection
Children's Play Areas (Parkland)	253	74	253	0	A	Environmental Protection
Car charge Point Upgrades	0	52	0	0	G	Roads Maintenance
Waste Management						
Domestic & Trade Waste Bins	100	90	100	0	G	Environmental Protection
Gull Proof Bins	19	19	19	0	G	Environmental Protection
Replacement HWRC	800	5	5	795	G	Environmental Protection
Upgrade of containers at Recycling Centres	20	0	20	0	G	Environmental Protection
Chemical Waste Disposal Points	15	6	15	0	G	Consultancy
Traffic						
Orchard Road Signal	192	26	192	0	G	Transportation
Traffic Data Collection Equipment	7	0	7	0	G	Transportation
Traffic Signal replacement	16	0	16	0	G	Transportation
TOTAL - VEHICLES PLANT & EQUIPMENT	4,731	1,959	3,936	795		

APPENDIX 4

Major Capital Projects spanning more than 1 financial year (as at 31 December 2022)

Description	Approved Budget	Total Expenditure in previous financial years	Current 2022-23 Budget	Actual spend to 2022-23	Remaining Budget 2022-23	Project Spend 31/03/22	Life to Projected Future Years Budget Required	Estimated Final Cost	Projected Budget Variance
	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s
LED Street lighting replacement programme	5,000	3,904	213	30	183	3,934	883	5,000	0
NESS Energy from waste	27,224	19,447	7,777	799	6,978	20,246	0	27,224	0
Total	32,224	23,351	7,990	829	7,161	24,180	883	32,229	0



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

**SUBJECT: MARINE SAFETY AND OPERATIONAL SUMMARY OF 2022/23
UPDATES Q4 2022-2023**

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To inform the Committee on matters of Marine Safety and compliance with the Port Marine Safety Code (PMSC) for the year 2022/23 and details of Q4 2022/23.
- 1.2 This report is submitted to Committee in terms of Section III (F) (25) of the Council's Scheme of Administration relating to the functions of Council as Statutory Harbour Authority (SHA).

2. RECOMMENDATION

- 2.1 **Committee is asked to consider and note the safety performance, fulfilling their function as Duty Holder under the Port Marine Safety Code.**
- 2.2 **Committee is asked to amend the reporting requirement from quarterly to 6-monthly as set out in para 6.2**

3. BACKGROUND

- 3.1 Under the statutory requirements of the Port Marine Safety Code (PMSC) the organisation (Moray Council) must appoint a duty holder to ensure compliance with the PMSC is achieved. The organisation must provide a report on PMSC performance annually as a minimum.
- 3.2 The role of Duty Holders is held by members of this committee. The role requires accountability for ensuring the organisation's compliance with the PMSC.
- 3.3 At a meeting of this committee on 20 March 2018 it was agreed that a report on PMSC would be submitted quarterly (paragraph 6 of the minute refers).

- 3.4 Moray Council, in its capacity as a Statutory Harbour Authority, is committed to undertaking and regulating marine operations to safeguard all its harbour areas, the users, the public and the environment through its safety management system, (SMS).

4. ANNUAL REVIEW 2022/23

- 4.1 The following sections of the report set out an overview of marine safety performance in 2022/23, with specific details for Quarter 4 2022/23 attached as **APPENDIX 1**.

PMSC Audit

- 4.2 A full annual audit of Moray Council compliance with PMSC was carried out by Marex Marine within their capacity as designated person. The Audit was conducted at Buckie Harbour Office on 27 March 2023 and concluded that the Moray Council harbours are compliant with the Port Marine Safety Code.

The report from the audit is still in production and when received it will be made available

Key Performance Indicators

- 4.3 The paragraphs below detail the main statistics from the major areas of concern for review of compliance with PMSC. Where applicable details of KPI's that will continue to be reported at future committee meetings will be detailed and explained.

Annual Accident, Incident and Near Miss Statistics

- 4.4 The table below summarises the incidents that occurred throughout 2022/23

Quarter	Injuries	Incidents	Near Misses
1	0	2	0
2	1	1	0
3	0	0	0
4	0	0	0
Total	1	3	0

- 4.5 The following details the injuries, incidents and near misses for the year 2022/23 as a whole. All information below was reported on in previous quarterly reports to this committee.

- 4.6.1 Incident: Portknockie harbour fisherman washed in to water.

Date: 8 June 2022.

- 4.6.2 Incident: Findochty Harbour East pontoon excessive swing.

Date: 25 June 2022

- 4.6.3 Incident: Watchman struck in abdomen

Date: 26 September 2022.

- 4.7 The number of injuries and incidents at Moray Council harbours during 2022/23 is extremely low. There is however room for improvement and lessons learned from 2022/23 and the findings from Marex Marine as Designated Person will be used to implement further safeguards for the coming year. With this in place the target for Accidents, Incidents and near misses is 0. All accidents, incidents and near misses will continue to be investigated thoroughly and reported accordingly at quarterly and annual meetings. Lessons learned and actions arising from the events will also be detailed.

Aids to Navigation

- 4.8 As a Local Lighthouse Authority, Moray Council is required to report the availability of all of its navigational lights to the Northern Lighthouse Board in March of each year. Currently the Port Closed light on the North Pier in Buckie is unavailable resulting in availability figures being decreased. This has been discussed with the Northern Lighthouse Board and they have noted it is not an urgent requirement as the light is not mandatory and other provisions to communicate any port closures are available.
- 4.9 New solar powered lights will be installed in Burghead and Buckie. The new solar powered lighting will decrease the number of faults observed and as a result over time lead to an increase in the availability figures for all navigational aids. This work has been funded by Scottish Government Marine Fund Scotland Scheme.
- 4.10 A risk assessment for changing the lighting system will be prepared and approved by the Northern Lighthouse Board. A Notice to Mariners has been prepared and this will be sent to all harbour users and the UK Hydrographic Office (UKHO) so visiting vessels can be informed of this change. Work will be concluded by end of Q2 2023/24.
- 4.11 The table below summarises the availability of Navigational lights under Moray Council's responsibility.

IALA Category	No Of Aids	Total Hours	No Of Failures	OOS Hours	MTTR	MTBF	Availability	Target Availability
Moray Council								
CAT 1	1	26,304	0	0:00	0:00	0:00	100.00 %	99.80 %
CAT 2	15	394,560	6	31333:58	5222:20	60537:40	92.06 %	99.00 %
CAT 3	4	105,216	1	5222:00	5222:00	99994:00	95.04 %	97.00 %
No Category	0	0	0	0:00	0:00	0:00	0.00 %	0.00 %
Totals	20							

The 'Availability Objective' is calculated over a rolling 3-year period. This means that over this period a Cat 1 Aid to Navigation needs to be functional for 99.8% of the time. Currently Moray Council are meeting this target. The availability of Cat 2 and 3 lights is below the target availability.

- 4.12 The target for the year 2023/24 is to increase the availability figures of Cat 2 lights to 95% and cat 3 lights to 97%. This will be achieved by utilisation of new solar powered lights that, once installed, will provide more efficiency due to less reliance on unsuitable cabling prone to faults.

Pilotage

- 4.13 Pilotage is not compulsory at Buckie harbour, and therefore not all cargo movements require the services of a pilot. The number of pilotage acts carried out in the year 2022/23 was 38, in relation to 112 vessel movements in and out of the harbour.

Training

- 4.14 Pilotage training continues for 2 members of staff with 1 member of staff deemed competent to pilot during daylight hours after an assessment from the authorised Pilot.

Training requirements for all harbour staff is currently being reviewed.

Staffing

- 4.15 Annual recruitment within the harbours team includes the appointment of 2 new harbour assistants.

Conservancy

- 4.16 In Buckie the current depth under chart datum is 2.5 Metres with relevant Notice to Mariners promulgated.

There is a target Depth of 3.0 metres to be reached in all areas of the channel and basins 1-3 by the end of calendar year 2023. Progress toward this will be reported quarterly as a KPI.

Immediate dredging plans are to complete work in the channel entrance and basin 2 of Buckie. The dredging plan includes provision to continue to dredge at Buckie regularly as the main priority of the dredging programme including in Basin 4 with aid from stakeholders in planning.

- 4.17 Burghead is attended any time there is a suitable weather window during manned periods and when tidal conditions suit. Currently the depth below chart datum at the entrance of Burghead harbour is 0 metres. This build-up of material is due to the deterioration of the groyne at Burghead. Work to complete renovation of the groyne at Burghead is currently awaiting a Marine Licence issue. Once the license has been received by Marine Scotland work will be undertaken promptly.
- 4.18 A capital dredging programme was agreed at a council committee meeting on 29 June 2022 (paragraph 22 of the minute refers,) and is being prepared to incorporate substantial work at Burghead and Buckie. Sediment sampling and processing is completed and awaits issuing of capital licence by Marine Scotland. During the licence issuing process tendering of the required dredging vessel is being completed with a target date of August set for dredging works to be completed.
- 4.19 Currently with the constraints at Burghead, a Notice to Mariners is published warning vessels of the fluctuating depths within the entrance channel of

Burghead. This notice advises all mariners to contact Harbourmaster for accurate information and tidal information.

- 4.20 The priority areas for dredging remain Burghead (sand bank approaching harbour entrance) and Buckie (entrance channel). Other dredging requirements include:
- Hopeman: Different options to increase the efficiency of dredging at Hopeman are being considered and a plan detailing these will be developed in 2023/24 Q1. The inner basin and channel will both be included in dredging plans.
 - Cullen: dredging by the Selkie will focus on the beach side of the basin. There is a small sand bank in the south side of the harbour which Selkie would not be able to access. An alternative land based approach will be explored.
 - Portknockie: there is no need for dredging at Portknockie at this time however the entrance and pontoon basin will be closely monitored.
 - Findochty: Dredging is required at the entrance channel and areas around the middle jetty.
- 4.21 There has been an increase in available water under chart datum of 1.0 metre in the west basin and channel at Findochty harbour as a result of the dredging campaign in 2021/22.

Selkie

- 4.22 MV Selkie has completed works within Buckie, Burghead and Findochty during the year of 2021/22. The below table summarises the work carried out during the year:

Days worked and total tonnage removed 2022/23 vs 2021/22 and 2020/21

Year	Days working	Weather days	Maintenance	Working days %	Tonnage Removed
2022/23	94	68	46	46	12,880
2021/22	77	62	59	39	14,120
2020/21	38	14	46	39	11,240

Tonnage removed per harbour during 2022/23

Harbour	Total Tonnage removed
Buckie	9,080
Burghead	2,720
Findochty	540
Portknockie	540

During 2022/23 there has been a decrease in the total tonnage removed to spoil by MV Selkie compared to the previous year. There has however also been a decrease in downtime due to maintenance (22% vs 30%). However, there has been an increase in the amount of days the vessel has not been able to work due to adverse weather resulting in a working percentage which is the same for both years.

The plan for increased efficiency moving forward is to maximise the number of days crewed on vessel and continue to work effectively with maintenance to lower the number of maintenance days further.

KPIs measuring the percentage of days working and days of maintenance have been introduced and will continue to be reported moving forward. The KPI's are a measure of the vessels working efficiency with a target of 50% working days and 20% maintenance days set.

Comparison of working days compared to weather and maintenance

Year	Days working %	Weather days %	Maintenance %
2022/23	46	32	22
2021/22	39	31	30
2020/21	39	14	47

Green Harbours

- 4.23 There has been continuing work carried out with the focus on lowering carbon emissions and promoting overall environmentally sound practices within the harbours.

5. FUTURE DREDGING

- 5.1 In 2023/24 it is proposed that MV Selkie continues to fulfil its role in carrying out maintenance dredging across the council's 6 harbours. This will be conducted alongside the aforementioned capital dredging campaign (para 4.18). The external dredging campaign is scheduled to be completed at the end of Q2 2023/24 and will comprise of work in Buckie harbour to ensure 3.0 metres of depth under chart datum for all areas of channel and basins 1-3. MV Selkie will work in Basin 4 with consultation with shipyard to ensure adequate depths for their requirements.
- 5.2 In addition to work in Buckie there will also be external dredging work conducted in Burghead to significantly improve access in and out of the harbour entrance. This will be further improved by the replacement of damaged beach defence groyne to the immediate south of the harbour entrance at Burghead. The groyne is due to be replaced during Q1 of 2023/24.
- 5.3 The external works are subject to new dredging licences and these are already in the process of approval with Marine Scotland after requirements for sediment sampling and analysis were completed in Q4 2022/23.
- 5.4 Procurement of a suitable dredging vessel is underway with support from Moray Council procurement officers and is designed to be completed in parallel with receiving of updated capital dredging licence during Q2 2023/24.
- 5.5 SEPA have been contacted to explore the possibility of allowing spoil recovered from dredging to be deposited to a suitable land based site. With aid from specialists involved with the sediment sampling works, this will provide a suitable route if granted to dredge Hopeman and Cullen harbours utilising land based excavators with greater access to the harbour inner basins and avoid the issue of access by Selkie to the inner basins and the

strict issues surrounding movement of spoil recovered from below high water line. In essence this would allow a land based dredging approach to be conducted in Hopeman and Cullen providing a good solution to their immediate dredging need.

6. FUTURE OBJECTIVES AND PLANS

6.1 Objectives identified for 2023/24 include the following:

- Publication of new Safety Management System: the SMS was reviewed during quarter 3 and 4 and a revised SMS will be presented to this committee after it has been reviewed by designated person. This work included emergency response and preparedness review, full risk assessment and health and safety reviewing and updating. Currently Designated person whom completed PMSC audit in March 23 is in receipt of updated SMS. Upon its review Audit report and SMS will be brought to committee for review and consideration.
- Further development of SMS support checklists to aid compliance with Safety management system.
- Continued reporting and review of installed KPIs.
- Undertake further reviews of Marine Policy and Harbour Bye-laws.
- Review training requirements and request necessary training.
- Increase momentum of Pilot training and accreditation leading to 2 fully competent Pilots within the Harbour team.

6.2 As progress has been made in recent years in terms of visible governance and assurance on progress, it is recommended that reporting of PMSC compliance moves to a 6 monthly reporting cycle from quarterly. It is proposed that this position is reviewed after a year. All members of ED&I are able to discuss marine safety and governance with the Head of Environmental & Commercial Services, the Transportation Manager or the Harbours Manager at any time. Further, coastal members are all members of the relevant Harbour Advisory Committee.

7. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Sustainable harbours maintained to operate safely and efficiently contribute to the economic development of Moray.

(b) Policy and Legal

Non-compliance with the Code will have legal implications.

(c) Financial implications

Non-compliance of the Code may have financial implications.

(d) Risk Implications

Failure to comply with the Port Marine Safety Code could result in prosecution of the authority.

(e) Staffing Implications

No staffing implications arise from this report.

(f) Property

There are no property implications arising from this report.

(g) Equalities/Socio Economic Impact

There are no specific equalities matters, however, the Equalities Officer has been consulted and comments incorporated into this report.

(h) Climate Change and Biodiversity Impacts

There are no climate change and biodiversity implications arising from this report.

(i) Consultations

The Depute Chief Executive (Economy, Environment and Finance), Legal Services Manager, Chief Financial Officer, Committee Services Officer (L Rowan), and Equalities Officer have all been consulted and their comments incorporated into this report.

8. CONCLUSION

8.1 The Council is currently deemed to be compliant with the PMSC, however, work to maintain a safe environment remains an ongoing matter in a dynamic environment. Diligent staffing and constant monitoring and risk assessing will be utilised to maintain compliance as demands evolve.

Author of Report: Stuart Akass, Harbours Development and Operations Manager

Background Papers:

Ref: SPMAN-524642768-882

Appendix 1**1. Q3 Review**

- 1.1 The following sections of the report set out an overview of marine safety performance for Q4 of 2022/23.

PMSC Audit

- 1.2 A full annual audit of Moray Council compliance with PMSC was carried out by Marex Marine, within their capacity as designated person. The Audit was conducted at Buckie Harbour Office on 12 October 2021 and concluded that the Moray Council harbours are compliant with the PMSC. The Audit process made observations. The open items from this are provided in the table below.

Observation	Progression
Review Harbour Bye-laws with particular regard to continued relevancy	Liaison with legal department required to establish a time to review bye-laws during 2022/23. Target Date completion 31/03/23
Consider cyber security protocols	Addition of cyber security policy to be added to SMS during review cycle including update of IT systems in new harbour office. IT consultation is ongoing with council officers during process of office move. Target Date completion 30/11/22
SMS updates, rewording suggestions	Review of SMS completed. Compilation draft of new document being finalised ready to be presented for consultation and Duty Holder approval at end of quarter 3, Target date completion 31/12/22.
Consideration of adding extra safety signs around harbour	In conjunction with ongoing water safety group meetings and work stream considerations for signs required to be discussed. Signs on order and being produced currently. Target Date for completion 30/11/22
Increasing drills carried out with external institutions suggested	Plans to be made to include exercises with local fire brigade large scale cross council drill to be organised with Aberdeenshire council with Emergency planning officer. Target date TBC no later than 31/03/23

- 1.3 The 2022/23 Annual Audit conducted by Marex Marine was conducted in March 2023 at Buckie harbour office Buckie drifter. The report and findings brought to this committee at the next scheduled date after report is received with the above table being amended to reflect new report.

- 1.4 The Audit focused on updates to safety management system which have been undertaken and on the risk assessment processes in place within the harbours.

Key Performance Indicators

- 1.5 Details of the Council's compliance with PMSC are provided below.

Q4 Accident, Incident and Near Miss Statistics

Incident statistics Summary Table

Quarter	Injuries	Incidents	Near Misses
4	0	0	0

Aids to Navigation

- 1.7 As a Local Lighthouse Authority, Moray Council is required to report the availability of all of its navigational lights to the Northern Lighthouse Board in March of each year. Currently the Port Closed light on the North Pier in Buckie is unavailable, resulting in availability figures being decreased. This has been discussed with the Northern Lighthouse Board and they have noted it is not an urgent requirement as the light is not mandatory and other provisions to communicate any port closures are available.
- 1.8 New solar powered lights will be installed in Burghead and Buckie. The new solar powered lighting will decrease the number of faults observed and as a result lead to an increase in the availability figures for all navigational aids. This work has been funded by Scottish Government Marine Fund Scotland Scheme.
- 1.9 A risk assessment for changing the lighting system is in preparation by Harbourmaster and after completion by end of April 23 will be approved by the Northern Lighthouse Board. A Notice to Mariners has been prepared and this will be sent to all harbour users and the UKHO so visiting vessels can be informed of this change.
- 1.10 The table below summarises the availability of Navigational lights under Moray Council's responsibility.

IALA Category	No Of Aids	Total Hours	No Of Failures	OOS Hours	MTTR	MTBF	Availability	Target Availability
Moray Council								
CAT 1	1	26,304	0	0:00	0:00	0:00	100.00 %	99.80 %
CAT 2	15	394,560	6	31333:58	5222:20	60537:40	92.06 %	99.00 %
CAT 3	4	105,216	1	5222:00	5222:00	99994:00	95.04 %	97.00 %
No Category	0	0	0	0:00	0:00	0:00	0.00 %	0.00 %
Totals	20							

The 'Availability Objective' is calculated over a rolling 3-year period. This means that over this period a Cat 1 Aid to Navigation needs to be functional

for 99.8% of the time. Currently Moray Council is meeting this target. The availability of Cat 2 and 3 lights is below the target availability.

- 1.11 The target for the year 2023/24 is to increase the availability figures of Cat 2 lights to 95% and Cat 3 lights to 97%. This will be achieved by utilisation of new solar powered lights that once installed, planned by end of Q2 2023/24, will provide more efficiency due to less reliance on unsuitable cabling, prone to faults.

Pilotage

- 1.12 Pilotage is not compulsory at Buckie harbour, therefore, not all cargo movements require the services of a pilot. The number of pilotage acts carried out in the fourth quarter of 2022/23 was 9, in relation to 18 vessel movements in and out of the harbour. This included 3 acts of pilotage in hours of darkness.

Training

- 1.13 There are currently two members of staff deemed competent to pilot, one unrestricted and one restricted to daylight hours. By end of Q1 2023/24 it is anticipated that both members of staff will be competent to pilot without restrictions and that a third member of staff will be fully trained. Training will begin for other harbour staff after Q1 with 2 new harbour assistants beginning training.
- 1.14 Training for Port Facility Security is currently being sourced to be completed by 2 members of staff. Currently harbours are compliant with PMSC and International ship and port facility code (ISPS) however additional trained staff will provide additional resilience and shared responsibilities.

Staffing

- 1.15 One member of staff remains absent from work due to long term sickness and this post is being covered by an agency appointed watchman until Occupational Health recommendations and advice have been confirmed.
- 1.16 Recruitment need for MV Selkie staff is ongoing with a new recruitment round for vessel master being planned for undertaking during Q1/2 of 2023/24

Conservancy

- 1.17 Dredging has continued into the quarter 4 of 2022/23, with priority given to Buckie navigational channel and Burghead channel.
- 1.18 From 1 January 2023 to 31 March 2023 the total amount of spoil removed to designated spoil grounds was 2,440 Tonnes over 17 digging days. This includes the harbours Burghead and Buckie (see table 2 para 4.27).

- 1.19 Burghead groyne is at the end of its serviceable life, which is increasing the deposition of sediment at the harbour channel. A contract has been awarded to undertake significant maintenance work to the groyne. This work is subject to a marine licence which is currently being progressed by Marine Scotland. Work is scheduled to be undertaken in Q1 2023/24.
- 1.20 In Buckie the current depth under chart datum is officially 2.5 Metres with relevant Notice to Mariners promulgated. There has been significant improvement in the depth of the channel as a result of work carried out in 2022/23. Indication from Selkie and pilot boat sounding is that depth under chart datum exceeds 3.0 metres in entrance channel.
- 1.21 There is a Notice to Mariners published warning vessels of the fluctuating depths within the entrance channel of Burghead advising all mariners to contact Harbourmaster for accurate information and tidal information.
- 1.22 The priority areas for dredging remain Burghead (sand bank approaching harbour entrance) and Buckie (entrance channel). The agreed capital works to undertake outsourced dredging, (agreed on 29 June 2022 paragraph 22 of the minute refers,) is currently progressing with preparation works. Sediment sampling and its analysis is being procured and conducted to satisfy Marine Scotland licencing requirements. The planned works will incorporate work to dredge all harbour basins in Buckie utilising a combination of Selkie and external vessel. Other dredging requirements include:
- Hopeman: Different options to increase the efficiency of dredging at Hopeman are being considered and a plan detailing these will be developed in 2022/23.
 - Cullen: dredging by the Selkie will focus on the beach side of the basin.
 - Portknockie: Work at Portknockie was undertaken in Q1 with a plan for some minor additional work to be carried out during November.
 - Findochty: Further dredging is required at the entrance channel to complete work started in Q2.
- 1.23 There has been an increase in available water under chart datum of 1.0 metre in the west basin and channel at Findochty harbour as a result of the dredging campaign in 2021/22. Dredging in Q2 of 2022/23 has removed 540 tonnes of spoil from the entrance area and approach to the new pontoons, maintaining good access to all vessels.

Selkie

- 1.24 MV Selkie has completed works within Buckie and Burghead during the fourth quarter of 2022/23. The tables below summarises the work carried out during this quarter:

Table 1: Days worked and total tonnage removed during 2022/23 per quarter

Year	Days working	Weather days	Maintenance	Working days %	Tonnage Removed
2022/23 Q4	17	25	7	35	2,440
2022/23 Q3	23	13	5	46	3,360
2022/23 Q2	24	17	14	44	3,260
2022/23 Q1	30	12	20	48	3,460
2021/22 Q4	24	30	9	38	3,330

Table 2: Summary of works carried out per harbour during Q4

Harbour	Cumulative working days	Cumulative weather days	Cumulative maintenance days	Tonnage removed
Buckie	15	21	7	1,960
Burghead	2	4	0	480
Total (%)	17 (35)	25 (51)	7 (14)	2,440

- 1.25 During the Q4 of 2022/23 there has been a decrease in the total tonnage removed to spoil by MV Selkie compared to the previous quarters. This total has been completed over 17 working days which is a decrease in working day percentage from 46% to 35%.
- 1.26 The updated figures for the current year 2022/23 are now 46% working days 32% weather days and 22% maintenance days (planned and unplanned). This is still below the target KPI of 50% working days (see paragraph 4.35). There has been a decrease in days lost to unplanned maintenance down to 22% however this is still not at the target of 20% or less.

Table 3: Comparison of working days compared to weather and maintenance

Year	Days working %	Weather days %	Maintenance %
2022/23 Total	46	32	22
2022/23 Q4	35	51	14
2022/23 Q3	56	32	12
2022/23 Q2	44	31	25
2022/23 Q1	48	20	32

- 1.27 The plan for increased efficiency moving forward is to maximise the number of days crewed on vessel and continue to work effectively with maintenance to lower the number of maintenance days. A computer based planned maintenance system on board Selkie and throughout the harbours is now delivered and is currently being readied, use started in Q3. This system will increase efficiency of auditing maintenance, allow greater ability to scrutinise maintenance and its history and allow remote access monitoring of all maintenance.

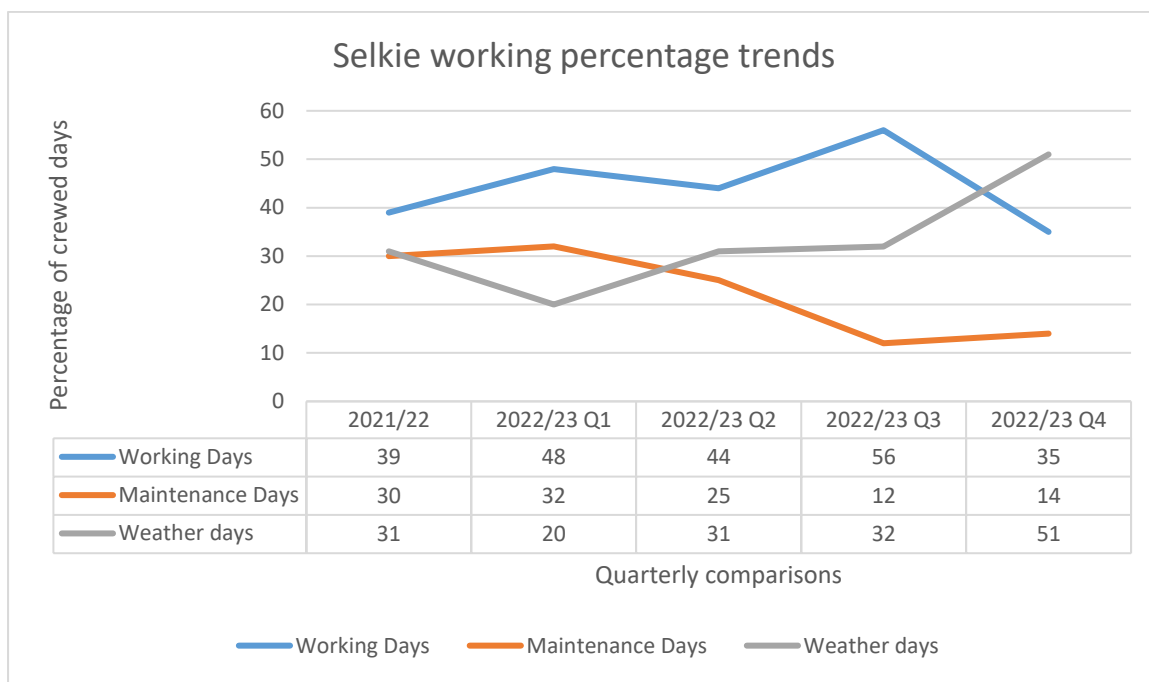
Environmental Considerations

- 1.28 There has been continuing work carried out with the focus on lowering carbon emissions and promoting overall environmentally sound practices within the harbours. This includes plans to upgrade the electrical infrastructure available within Buckie harbour, allowing less reliance on fossil fuel generators for power.

1.29 KPI Summary Table

KPI	Progress at the end of Q2	Completion Target Date
Conservancy		
Buckie Channel Depth 3.0M	Current official depth 2.5M	31/08/23
Buckie Basin 1/2/3 depth 3.0M	Current depth 2.2M	Review of progress 31/03/23 Fully achieved by 31/08/23
Provide 0.3M channel Burghead	Current depth 0.0M	Review of progress 31/03/23 Fully achieved by 31/08/23
Productivity		
Maintenance days less than 20%	Currently 22%	Continuous review
Working days greater than 50%	Currently 46%	Continuous review
Total minimum tonnage removed above 14,120 Tonnes (aspirational target 18,000 Tonnes)	End of Q4 12,400	31/03/23
Total working days above 77 (target 100)	94	31/03/23
Staffing		
Full Time master	Q1/2 recruitment campaign (long term skilled agency worker currently)	30/09/23 postponed due to staffing issues within harbour office and reviewed target
Safety management/ Maintenance		
SMS review and Update	Reviewed and awaiting audit review by designated person to be carried out March 23	15/05/23
Full Risk assessment update	In progress annual review completed.	31/10/22
Planned maintenance system implementation	Procured and installed, assets being added to database for complete functionality	31/08/22
Financial		
Lower Running costs to within Budget	To be reviewed	31/03/23

1.30 Graph of Selkie Working availability trends



- 1.31 The general pattern of Selkie working day availability compared across quarters in 2022/23 vs 2021/22 shows a slight decrease in maintenance days and overall a slight increase in working days. There is however still continued improvement required to reach the desired KPIs highlighted in the table in paragraph 4.34 above. A trend graph will continue to be added in future reports to highlight progress toward KPIs identified for working day and maintenance day targets.

2 **General Safety Updates**

Safety related works

- 2.1 There have been a number of jobs completed during Q4 improving safety conditions within all harbours, these works include:

Buckie

Fixed salvage pump
 Cleaned up 'Oily Hole' area in NE of Basin 4
 Replaced west Mucks navigational light
 Street light removed from pier 3 as broken and causing a hazard
 Lifebuoy holder reattached and buoy's replaced x 2
 Re-stocked all grit bins
 Pier 1 and pontoon pressure washed
 Remove and replace retaining wire on north pier for fishing gear

Burghead

Various algae treatments and pressure washing of piers
Repaired broken panel on chill
Repaired trolley transporters

Hopeman

Repair to pontoon at bottom of ramp before it became a trip hazard due to excessive movement at the bolt
Removed boulder from harbour
Secured safety sign to pole which had come unattached
Property service have repaired water hose.

Findochty

Repair to ladder top handrail
Installed new mooring rings

Portknockie

Remove finger from pontoon and store
Treat McDonald's Pier, BBQ area and slipway pressure washed to remove algae
Temporary repair to bottom of southern pontoon with contractor working on a long term repair.

Cullen

Treated pontoon with algaecide

Pathfinder

Various inspections and checks carried out
Replaced lifebuoy floating light

Signage

- 2.2 The signs listed below have been ordered and will be erected when received. Delay was caused by long term sickness absence but will now be completed by end of Q1 2023/24.

1. Four signs to restrict general access to the pontoons
2. Harbour operations signs.
3. Designated visitor berths.
4. Operational speed restrictions
5. Keep slipway clear signs.

3. Objectives identified for 2023/24

- Publishing of updated SMS: the revised SMS will be presented to a future meeting of this committee.
- Undertake further reviews of Marine Policy and Harbour Bye-laws.
- Review training requirements and request necessary training.
- Continue momentum of Pilot training and accreditation leading to 2 fully competent Pilots within the Harbour team by end of Q2 2023/24 in addition to freelance contracted pilots.



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

SUBJECT: NATURE AND BIODIVERSITY POSITION STATEMENT

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To inform the Committee of how existing Council strategies and action align with national and international biodiversity policy and to ask the Committee to approve continuing support for the North East Biodiversity Partnership for the next three years.
- 1.2 This report is submitted to Committee in terms of Section III (F) (13) of the Council's Scheme of Administration relating to matters regarding environmental protection.

2. RECOMMENDATION

2.1 It is recommended that the Committee:-

- (i) **note how existing council policies, strategies and action align with the Global Biodiversity Framework and Scottish Biodiversity Strategy;**
- (ii) **note the opportunities and challenges involved in delivering the council's statutory duty to further the conservation of biodiversity, and;**
- (iii) **approve continued support for the North East Scotland Biodiversity Partnership for next three years;**
- (iv) **agree to add the biodiversity actions highlighted in appendix 1 to the Climate Change Plan and Route Map to Net Zero; and**
- (v) **agree that the actions identified within this report form the basis of a Moray biodiversity strategy to be reported in 2024 setting out priority actions for nature recovery in Moray in accordance with the limitations set out in para 5.12.**

3. BACKGROUND

- 3.1 Moray Council declared a climate and ecological emergency on 27 June 2019 (para 6 of the minute refers). 'Land use, biodiversity & adaptation' was identified as one of the resulting strategy themes, however the associated action plan contained notably few actions relating to these areas.
- 3.2 The council has since strengthened its commitment to act on biodiversity loss by agreeing to sign the Edinburgh Declaration on 10 August 2022 (para 21 of the minute refers) and by declaring a Nature Emergency on 2 February 2023 (para 9 of the minute refers). Council also agreed at that meeting that a further report be submitted that;

“8) Outlines how existing Council strategies such as the North East Scotland Local Biodiversity Action Plan, Climate Strategy, and woodland strategy align with the GBF and Scottish Biodiversity Strategy, and notes any changes to existing strategies required to deliver against these.

9) Provide an update on the North East Scotland Local Biodiversity Action Plan, including specific consideration to:

An ecological coherence approach to effectively identify and target actions required to tackle the nature emergency and deliver against the various strategies listed above, including through the further development of the region's Nature Network as defined and outlined in the Scottish Biodiversity Strategy to 2045.

Adopt a partnership approach, including working with project partners, to maximise opportunity for delivery of the strategies listed above, and taking learning from the partnership model developed as part of the 2030 Climate Strategy work”

- 3.3 The council undertakes various functions that can either drive biodiversity loss or nature recovery. These include our responsibility as a planning authority through delivery of the Development Plan, the development management function and Regional Spatial Strategy; as a landowner by how we manage greenspace; our work with partners and communities to deliver projects; and as an education authority through how well we connect young people with nature.
- 3.4 There are a range of benefits to the council resulting from action to reverse biodiversity loss and restore nature. Reversing biodiversity loss will help prevent climate change and help us adapt to its impacts, will improve health outcomes and create jobs. These nature based solutions are considered to be cost-effective responses to a wide range of challenges.

4. CURRENT DELIVERY OF BIODIVERSITY DUTY

- 4.1 Under the Nature Conservation (Scotland) Act 2004, Moray Council has a duty to further the conservation of biodiversity. In accordance with the Wildlife and Natural Environment (Scotland) Act 2011 the council must also publicly report its compliance with this biodiversity duty. The next biodiversity duty report is due for publication in 2024, covering the period 2021-2023.
- 4.2 It is recognised by the Scottish and UK governments that this is a critical decade for tackling the biodiversity crisis. The Scottish Government's new Biodiversity Strategy aims to reverse nature loss by 2030 and restore biodiversity by 2045, and is aligned with the Global Biodiversity Framework, of which the UK is a signatory.
- 4.3 These strategies are primarily focused at the national and international level, however the Scottish Government have outlined several actions that are directly relevant to local authorities within the Scottish Biodiversity Strategy;
- "Ensure we secure positive effects for biodiversity from our National Planning Framework (NPF4)
 - Ensure that every local authority area has a nature network improving ecological connectivity across Scotland
 - Ensure that productive forests and woodlands deliver increased biodiversity and habitat connectivity as well as timber production
 - Maintain and seek to increase investment in nature restoration through our £65 million Nature Restoration Fund"
- 4.4 A range of actions are already in progress that align with the Scottish Biodiversity Strategy and Global Biodiversity Framework and fulfil our biodiversity duty, most of which are outlined below.

Biodiversity enhancement through the planning process

- 4.5 The recently adopted National Planning Framework (NPF4) presents a step change in the planning system by placing climate change and biodiversity loss at the heart of development decisions.
- 4.6 The council's Local Development Plan 2027 and Regional Spatial Strategy will embed this principle and NPF4 outcome that biodiversity will be 'enhanced and better connected including through strengthened nature networks and nature-based solutions.' Several pieces of work have been commissioned to support their delivery;
- Local habitats and species data will be collated and mapped. This evidence base will inform planning decisions, the protection and development designated sites and Nature Networks. Nature Networks are similar to what would often be referred to as wildlife corridors, linking internationally designated nature sites through coherent routes for biodiversity to move freely.
 - The revised Woodland and Forestry Strategy will bring together opportunities for biodiversity, carbon reduction, health and wellbeing as well as skills development and the economy. The strategy will support the Scottish Biodiversity Strategy's action to: "Ensure that productive

forests and woodlands deliver increased biodiversity and habitat connectivity as well as timber production”.

- A baseline review of natural capital has been undertaken using Just Transition funding (referenced in the Climate Change Plan and Route Map to Net Zero reported separately to this committee). The study recommends a biodiversity first approach to pursuing opportunities for carbon offsetting.

- 4.7 A series of Topic Papers are being collated by officers within Strategic Planning and Development. These will form the basis of workshops with members to inform the Local Development Plan Evidence Report which will be presented to Planning and Regulatory Services Committee in March 2024.

Local Biodiversity Partnership

- 4.8 The North East Scotland Local Biodiversity Action Plan is a locally driven process to meet the requirements of Scottish and UK government biodiversity action plans and the Convention on Biological Diversity, of which the UK is a signatory. The North East Biodiversity Partnership (NESBiP) produced and maintains this action plan, which outlines the habitats and species in most need of urgent local action.
- 4.9 The partnership strives to progress ‘joined-up’ approaches to tackling landscape scale threats to nature, also referred to as ecological coherence. It also seeks to support the delivery of projects on the ground to enhance biodiversity as well as people’s lives and wellbeing. This approach will support the Scottish Biodiversity Strategy’s goal to not only expand protected areas by 30% by 2030 (referred to as ‘30x30’), but to ensure they are adequately linked through nature networks. It can also contribute to the councils meeting its biodiversity duty, which extends beyond the management of sites, habitats and species and also aims to increase connection between people and nature and encourage biodiversity to be considered throughout all aspects of our work. It is likely that councils will also be responsible for mainstreaming biodiversity when delivering nature networks.
- 4.10 Supporting NESBiP enables the council and partners to pool limited resources to meet legal obligations as well as the requirements of our own policies and plans. Currently the council makes limited use of the partnership and there are a number of opportunities that could be taken advantage of through more active involvement;
- Habitat and species statements (the local biodiversity action plan) on the NESBiP website can be used by developers and other key parties
 - Influence content and advice provided to developers on NESBiP website can improve quality biodiversity considerations within planning applications
 - Training for Planning, Roads and Environmental Protection on best practice and ensuring compliance with wildlife laws and statutory duties
 - 30x30 and Nature Networks may become statutory duty. Being in partnership with neighbouring local authorities will help deliver this

- Project support and collaborative working, potentially also for joint funding
- Support with communication, engagement and awareness raising online and at community events

A copy of NESBiP's Strategic Plan 2022-2025 is published on the council's website.

- 4.11 The partnership agreement is currently being renewed. Moray Council has been making its financial contribution from the Strategic Planning Revenue budget, within Economic Development and Infrastructure. It is proposed that this same budget continue to cover the financial contribution to the partnership and it is anticipated that this budget will be able to accommodate the funding for the next three financial years.
- 4.12 The proposed contribution for the duration of the renewed agreement, and as requested by the partnership, is as follows:
- | | |
|---------|----------|
| 2023/24 | £1750.48 |
| 2024/25 | £1803.00 |
| 2025/26 | £1857.09 |
- 4.13 Moray Council's contribution is the lowest of all the partners, by a wide margin when compared to the two other local authority partners, Aberdeenshire and Aberdeen City. Small though it may be, Moray Council's contribution is very valued by the partnership and ensures that the core costs of the partnership can be met.
- 4.14 An officer from within Strategic Planning and Development currently sits on the NESBiP management and steering groups but there is very limited capacity to contribute additional time to support the work of the partnership.

Nature Positive Management of Council Land

- 4.15 While in-house capacity to drive and deliver positive outcomes for nature has been severely limited by budget restraints over the years, officers from Environmental Protection have continued to make improvements in how council land is managed for nature while carrying out statutory functions.
- 4.16 Investment in the last two years from the Scottish Government through the Nature Restoration Fund has enabled some additional work to be progressed that contributes to the fulfilment of the council's biodiversity duty. Strategic Planning and Development officers have taken the lead on delivering the direct grant and continue to be well supported by officers from Environmental Protection, with both sections managing this alongside other heavy workloads. The challenges associated with delivering projects that directly benefit nature under existing resources were outlined in a report to this committee on 5 November (para 9 of the minute refers).
- 4.17 The living lawn and wildflower program approved by the Economic Growth, Housing and Environmental Sustainability Committee on 1 December 2020

(para 19 of minute refers), continues to support the national strategy for action on pollinators. 26 sites across Moray have already benefitted from wildflower planting and/or adjusted mowing patterns. Simple signage has engaged public support for these improvements.

- 4.18 Scotland's four most invasive non-native plant species are Giant hogweed, Japanese knotweed, Himalayan balsam and *Rhododendron ponticum*, all of which may be treated by the council if they present an issue on council land. The council has, via the Nature Restoration Fund, supported the work of the Scottish Invasive Species Initiative who co-ordinate a wider program of work along the river catchments within and upstream of Moray.
- 4.19 Renewed management of two key nature sites has been enabled via the Nature Restoration Fund grant. One of the largest areas of woodland under council management, Millbuies, now has a plan in place to protect and enhance the site for both nature and public enjoyment. The Wards wildlife site is of exceptional value as an urban wetland and predominantly wild space. Restoration of the site was an action identified by NESBiP, and now has a new management plan in place with community engagement and gradual wetland improvements currently underway. Climate resilience and biodiversity are at the heart of both projects.
- 4.20 Many schools have been taking opportunities to improve outdoor learning environments to support deliver of this approach to learning which is embedded in the curriculum. These spaces often directly enhance biodiversity in addition to connecting young people with nature and developing green skills within the young workforce. The Moray Growth Deal STEM project is considering options to develop a dedicated outdoor learning hub for young children.
- 4.21 The use of glyphosate based herbicides to treat unwanted vegetation is being monitored, with its application being minimised where practical and at no additional cost. On 7 February 2023 this committee agreed that a report will be brought to committee detailing how glyphosate will be phased out by 2025 (para 14 of the minute refers).
- 4.22 Biodiversity is a key benefit identified within the Moray Food Growing Strategy which was approved 3 March 2020 (para 7 of the minute refers) to fulfil the council's duty under the Community Empowerment (Scotland) Act 2015. Staffing capacity means a reactive approach to the strategy is currently being taken, however a more proactive approach will be taken in 2024/25 once early engagement on the Local Development Plan is complete. The council continue to support communities to deliver on the ground projects including Elgin allotments, REAP's therapeutic garden and various community orchards and other edible planting in suitable locations.

5. OPPORTUNITIES and CHALLENGES GOING FORWARD

- 5.1 The new Scottish Biodiversity Strategy calls on us to raise our ambition and act decisively on nature loss in conjunction with our climate action. However it

is also recognised that these are extremely challenging times and that there are limited resources available to achieve this.

- 5.2 The strategy outlines that every local authority will be required to have a nature network. NatureScot are currently developing guidance on this but it is clear that the delivery of these networks will be the responsibility of local authorities.
- 5.3 A primary lever for delivering nature networks will be through the planning system, with the commissioned work outlined in para 4.6 and the development of the Regional Spatial Strategy providing an excellent opportunity to ensure we are prepared for these increased duties through identifying strategic ecological connections.
- 5.4 Cross-border collaboration will be essential to this process and the council's contribution to NESBiP presents an efficient mechanism for collaborating with our neighbours to identify the network connections and pool resources for biodiversity enhancements. This will be an increasingly valuable partnership going forward as our biodiversity responsibilities expand.
- 5.5 Partnership working at the local level will also be required for successful delivery of nature recovery and officers from Strategic Planning and Development are currently identifying a network of stakeholders to co-ordinate biodiversity action within Moray.
- 5.6 The management of council land presents both challenges and opportunities. It is clear after the council meeting of 2 February 2023 that there is a strong mandate among the public and councillors to enhance biodiversity, however any major change to current management practices would require additional resource and resource allocation must be looked at in the context of wider financial planning.
- 5.7 There are grant opportunities for biodiversity and greenspace enhancement, however there is limited capacity to access funding, discussed in more detail in a report to this committee on 5 November 2022 (para 9 of the minute refers). In the immediate term, multi-benefit opportunities such as carbon insetting, delivering nature networks, working with volunteers and enhancing health and wellbeing and STEM opportunities within the curriculum should therefore be explored.
- 5.8 The Scottish Government has committed to continuing its Nature Restoration Fund, however the direct grant to local authorities is not guaranteed. NESBiP presents opportunities for the kind of landscape scale partnership working the Nature Restoration Fund competitive streams ask for – reducing the burden on Moray Council while contributing to biodiversity duty.
- 5.9 The Climate Change Strategy includes a vision to 'work to retain, protect and enhance biodiversity across Moray', however the accompanying list of actions do not strongly support this aspiration. Closer alignment of the council's action on nature within the Route Map to Net Zero will reflect the twin relationship of these two emergencies, as well as recognise the value and statutory importance of the existing actions being undertaken across council services.

- 5.10 It is proposed that the actions listed in **Appendix 1** be included within the Climate Change Plan and Route Map to Net Zero and updated Climate Change Strategy due in 2024. There are no additional costs to the council resulting from the inclusion of these actions within the strategy. To the contrary it will enable closer monitoring of biodiversity actions through an existing and appropriate channels, thereby streamlining existing work. The outcome should be reduced, rather than increased, officer time and should facilitate greater accountability and detail in future biodiversity duty reports.
- 5.11 The interlinking work currently being commissioned (outlined in para 4.6) provides an excellent opportunity for the development of a biodiversity plan to deliver national and local strategic priorities. It is proposed that a biodiversity strategy be prepared and reported to this committee in conjunction with the biodiversity duty report in 2024.
- 5.12 Given the budget gap, it is proposed that a biodiversity strategy be prepared using existing staff capacity. It should be noted that if members wish to progress biodiversity action beyond the ongoing work described in this report, further resource would be required at a time when the council cannot meet its current resource demands. Biodiversity should also not be viewed in isolation but within the wider approach to managing the network of green and blue spaces. Many areas of the council's work that do not have an obvious link to nature may have surprising influence, and so embedding knowledge across the council will greatly improve the council's success in meeting our biodiversity duty.
- 5.13 Supporting the recovery of local wildlife is very important to people and concern around issues such as the use of glyphosate based herbicides and the spread of avian flu are currently high. However there are also conflicts to be balanced between expectations of what is aesthetically acceptable, cost-effective, and provides real space for nature to recover.
- 5.14 These are changing times. The traditional expectation of how public greenspaces should be managed, and the built environment developed, has centred on the control of nature and tidiness, which we are only now starting to recognise has come at a cost. Reframing the council's relationship with nature will not be without its challenges, however there is strong public support for protecting and enhancing our natural environment and there are significant benefits to be realised, including for health and wellbeing, the economy and climate resilience.

6. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Action on biodiversity loss also supports the delivery of corporate plan priorities for people place and the future by; improving health and wellbeing, strengthening communities, minimising harm and costs arising from climate change impacts, creating economic opportunities.

(b) Policy and Legal

Some policies and legislation relating to biodiversity that are particularly relevant include;

- Nature Conservation (Scotland) Act 2004
- Wildlife and Natural Environment (Scotland) Act 2011
- Scottish Biodiversity Strategy to 2045
- Pollinator Strategy for Scotland
- Local natural heritage designations
- National Planning Framework 4
- Climate Change (Scotland) Act 2009 and 2019
- Moray Climate Change Strategy
- Moray Woodland and Forestry Strategy
- Moray Food Growing Strategy
- Curriculum for Excellence through Outdoor Learning
- Scotland's National Strategy for Economic Transformation

(c) Financial implications

The actions outlined in para 4.6 are being funded through Just Transition grant and through existing revenue budget as part of preparation of the Evidence Report for LDP2027. The proposed contribution outlined in para 4.12 is anticipated to be covered by existing revenue budget. The activities referred to in 4.17 - 4.21 have been funded through the Nature Restoration Fund grant and existing operational resources.

(d) Risk Implications

There is a risk that should the council choose not to renew its contribution to NESBiP, it will be more difficult to demonstrate we are fulfilling our biodiversity duty and to deliver nature networks.

There is a risk that staff resources are not sufficient to deliver a Moray Biodiversity Strategy so the preparation of this will need to take account of staff capacity to ensure it is realistic and achievable.

There is also a reputational risk should the council not take meaningful action following its declaration of a Nature Emergency.

(e) Staffing Implications

. While the actions set out above can be managed by climate change and planning officers within Strategic Planning and Development, additional actions would require additional resources.

Some areas, such as delivery of the food growing strategy, are currently unable to progress due to limited staff capacity and reprioritisation however this will be delivered more proactively in future.

(f) Property

None directly arising from this report.

(g) Equalities/Socio Economic Impact

Decisions taken to enhance biodiversity should also contribute to community health and wellbeing and aim to reduce inequalities of access to nature.

(h) Climate Change and Biodiversity Impacts

Humans are part of nature and our survival depends on healthy ecosystems and rich biodiversity. However, Scotland is one of the most nature depleted countries in the world and we are continuing to lose biodiversity at an alarming rate. Pressures on nature include changes in land and sea use, climate change impacts, pollution, over exploitation and invasive non-native species. NatureScot recognises the underlying driver of these combined pressures as stemming from people's disconnect with nature and lack of recognition for its value.

The risks associated with the loss of vital ecosystem services range from disrupted food systems and water supplies to increased damage resulting from climate change impacts and reduced capacity to absorb carbon emissions. The independent Dasgupta Review published by HM Treasury in 2019 clearly outlines that we need to adequately value and take action on biodiversity. Failure to act now will lead to catastrophic implications on our economy and the health and wellbeing of future generations.

While the recommendations in this report have limited impact on their own, there are significant positive biodiversity, carbon reduction and climate resilience impacts arising from the approaches and actions referenced.

(i) Consultations

The Depute Chief Executive (Economy, Environment and Finance), Head of Economic Growth and Development, the Legal Services Manager, Open Spaces Manager, Chief Financial Officer, Lissa Rowan (Committee Services Officer) and Equal Opportunities Officer have been consulted and comments received have been incorporated into the report.

7. CONCLUSION

- 7.1 Biodiversity has not been a priority for the council in recent years, however there are increasing opportunities to both influence and take action to restore nature. The policy drivers for local authorities are only expected to increase as the global response to the climate and nature emergencies continue to align more closely and the additional benefits of working with nature are recognised.**

Author of Report:	Sophie Ward, Climate Change Strategy Officer
Background Papers:	Economic Development and Infrastructure Services Committee, 5 November 2022 Moray Council, 2 February 2023

Economic Development and Infrastructure Services
Committee, 3 March 2020
Economic Growth, Housing and Environmental
Sustainability Committee, 1 December 2020
10 August 2022

Ref:

<http://spman.moray.gov.uk/MANComRepDraftSite/DevServLib/2023%2005%2002%20EDI%20Committee/20230502%20Nature%20and%20Biodiversity%20Position%20Statement.doc>

Appendix 1: Proposed 'Nature and Carbon Sequestration' actions to be included in the Climate Action Plan and Route Map to Net Zero

Deliver the direct grant from Scottish Government's Nature Restoration Fund

Increase nature positive management of council land

Participate in NESBiP management and steering group (local biodiversity action plan)

Promote and support developments to be nature positive through the planning process

Co-ordinate a network of partners to progress biodiversity actions at the local level and support the development of Nature Networks



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

SUBJECT: NORTH HIGHLAND AND MORAY SPACE CLUSTER STRATEGY

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To present Committee with an overview of the North Highland and Moray Space Cluster Strategy as presented in **APPENDIX 1** and ask the Committee's approval to support Highlands and Islands Enterprise (HIE) in the implementation of the strategy which may include providing staff resource from Economic Growth and Regeneration section to support economic development opportunities related to the development of the Moray Space Cluster.
- 1.2 This report is submitted to Committee in terms of Section III (F) (2) of the Council's Scheme of Administration relating to the exercise of functions that promote economic development.

2. RECOMMENDATION

2.1 It is recommended that the Committee:

- (i) **recognise the current developments and future ambitions for the North Highland and Moray Space Cluster; and**
- (ii) **agrees to the commitment of staff resource within Economic Growth and Regeneration section to provide ad hoc support to HIE in the implementation of the Moray Space Cluster Development Strategy.**

3. BACKGROUND

- 3.1 The UK Space sector is a fast growing sector which generated an estimated income of £17.5 billion in 20/21 and supports 48,800 jobs across the UK.

Figures from the latest size and health of the UK Space Industry 2022 noted that in 19/20 the UK space industry growth (+5.1%) outpaced the growth of the global space industry (+1.6%), whilst the wider UK economy declined by - 7.6%.¹

- 3.2 The Scottish space sector is growing faster than anywhere else in the UK, that is aiming to grow in value to £4 billion by 2030. As highlighted by the table below, in 20/21 Scotland is home to 76 Space Headquarters that generate an income of £180m, an increase of 28% from the previous years. The sector employs 8568 people attributing to 18% of the total UK industry.

Year	19/20	20/21
UK space organisation population by region, 2020/21	144	183
Space HQs	101	76
UK space industry income by region (of organisation HQ), 2020/21	£141 m	£180 m
UK space industry employment by region, 2020/21	8840	8568

- 3.3 The North Highlands and Moray steering group have developed a strategy for the development of a Space Cluster associated with the new space port in Sutherland, known as Sutherland Spaceport. Moray is included in the space cluster as Orbex, a widely recognised vertical space launch company who operate from Forbes Enterprise Park plays a significant part of the cluster.
- 3.4 Orbex have recently signed a 50 year lease to develop and operate its home space port in Sunderland, meaning they will be the first European launcher to manage a dedicated spaceport. The Company has also recently raised £40.4 million and are looking to grow their existing workforce from 90 persons to around 400 locally within the next five years.
- 3.5 The space sector offers significant opportunity for growth and high quality jobs in Moray, the presence of Orbex and the development of the associated supply chain is a good foundation for developing a space cluster in Moray and North Highland.
- 3.6 In recognition of Moray Council's support to the development of the space sector, on the 15 September 2021 (paragraph 30 of the minute refers), Moray Council approved Councillor Leadbitter to participate in the Local Space Leadership Group given his wealth of experience gained from being Chair of this Committee and also his particular interest in aerospace. The group was established in 2022 and held a number of meetings in the first half of 2022. Future meetings of the LSLG are intended to provide a route for the approval

¹ [Size and Health of the UK Space Industry 2022](#)

of work and decisions required to develop the local Space sector. Regular meetings will see this as ongoing action.

4. NORTH HIGHLAND AND MORAY SPACE CLUSTER DEVELOPMENT STRATEGY

- 4.1 The North Highland and Moray Space Cluster strategy produced for Caithness and North Sutherland Regeneration Partnership is to capitalise on economic opportunities that will be generated by satellite launches from Sutherland Spaceport and to attract a space business cluster to the North Highlands and Moray.
- 4.2 The Strategy was funded by Dounreay Site Restoration Ltd (DSRL), Highlands and Islands Enterprise (HIE) and UK Space agency (UKSA) and prepared by Jacobs group with Caithness Chamber of Commerce and the UpNorth! Community Trust.
- 4.3 Key recommendations arising from the strategy that Moray Council could support include:
- Ensure provision of the necessary residential and business infrastructure and resilience in the area to meet the needs of a growing high-tech data driven space ecosystem.
 - Enhance talent attraction capability through focused efforts on promoting the liveability of the area.
 - Unlock further public and private investment through regional planning initiatives integrating other sectors leveraging a 'Space Growth Deal' akin to the 'Moray Growth Deal'. This needs input from UK and Scottish Government who fund these initiatives.
 - Create a dedicated structured and resourced effort to attract inward investment (new businesses) to the area through a coordinated and collaborative approach.
 - Create a shared vision across the private and public sector to realise the benefits locally and regionally through a 'Space Coast 2030' conference.
- 4.4 The strategy concluded that it is envisioned Space Hub Sutherland will bring significant economic impact to the North Highlands and Moray region. The strategy has highlighted that the North Highlands and Moray Space Cluster is estimated to generate:
- 390 jobs by 2030 in the Highlands and Islands Region
 - 740 jobs by 2030 in the Highlands and Islands region as a result of the space cluster
 - Launch activities will generate £22m GVA for the Highlands and Islands Economy
 - The power of the wider space sector will generate £56m GVA for the Highlands and Islands Economy.

5. SUMMARY OF IMPLICATIONS

- (a) **Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))**

The development of the local space cluster supports the corporate plan priority of promoting economic development and growth, as well as the LOIP priority of a growing and sustainable economy.

(b) Policy and Legal

None.

(c) Financial implications

There is no direct financial implications arising from this report.

(d) Risk Implications

None.

(e) Staffing Implications

There will be work associated in the implementation of the strategy with supporting actions for the Economic Development and Regeneration section, however this work fits with the priorities established within the LOIP and corporate plan for economic development.

(f) Property

None.

(g) Equalities/Socio Economic Impact

None.

(h) Climate Change and Biodiversity Impacts

There are no direct climate change or biodiversity arising from this report. It is recognised that the space sector plays a significant role in development of our understanding and monitoring of climate change and as with all sectors will developing its own targets to achieve net zero.

(i) Consultations

Consultation has taken place with the Depute Chief Executive (Economy, Environment and Finance), the Head of Economic Growth and Development, the Legal Services Manager, the Equal Opportunities Officer, and Lissa Rowan (Committee Services Officer) have been consulted and comments received have been incorporated into the report.

6. CONCLUSION

6.1 This report provides an overview of the the ambitions for growth within the North Highland and Moray space cluster.

6.2 Given the significant economic impacts of developing a local space cluster in Moray, the Committee is asked to recognise and support the North Highland and Moray Space Cluster strategy with the ask to provide staff resource when necessary to promote and grow the space cluster within Moray.

Author of Report: Shannon Creswell, Community Wealth Building Officer

Background Papers: North Highland And Moray Space Cluster Strategy

Ref:

<http://spman.moray.gov.uk/MANComRepDraftSite/DevServLib/2023%2005%2002%20EDI%20Committee/REPORT%20-%20NORTH%20HIGHLAND%20AND%20MORAY%20SPACE%20CLUSTER%20STRATEGY.doc>



NORTH HIGHLAND & MORAY SPACE CLUSTER STRATEGY

Version 1

September 2021

North Highland and Moray Space Cluster Strategy

September 2021

Developed for Caithness and North Sutherland Regeneration Partnership (CNSRP) through Caithness Chamber of Commerce (CCoC).

Funded by Dounreay Site Restoration Ltd (DSRL) and Highlands and Islands Enterprise (HIE).

Prepared by Jacobs, Caithness Chamber of Commerce and UpNorth! Community Trust.

Supported by a Space Cluster Steering Group comprising government, public, private and community organisations.



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Foreword

Foreword to the Strategy for the North Highland and Moray Space Cluster. By Ian Ross, Chairman of Caithness and North Sutherland Regeneration Partnership.



I am delighted to present this Strategy and Action plan for the development of a new Space Cluster in the North of Scotland, with a particular focus on the North Highland and Moray. This sets out a justifiably ambitious approach to taking forward the actions that have been developed in the area over the last few years.

The report recognises the vision that 'By 2026 North Highland and Moray will have established one of the most significant Space Clusters in the UK' and aims to deliver a set of actions that will see real activity and positive progress in the North of Scotland Space sector.

The report demonstrates the very effective and wide ranging partnership based approach to the formulation of the strategy and action plan, with over 20 separate organisations taking part. This includes the UK and devolved governments, agencies, industry, academia and community bodies. I would highlight the important formation of the local Space Leadership Group for the areas identified and consider this a key means of ensuring that the key actions and tangible benefits will be delivered.

The strategy builds on recent documents from the UK Space Agency and BEIS; and also the Scottish Space Leadership Council. Partnership working with these bodies will form an important part of the delivery of this strategy.

The development of this Strategy and the gathering of organisations aiming to create a working Space Cluster, demonstrates the real opportunity that exists with the key assets of a Spaceport; a Launch Vehicle manufacturer approaching an operational state; and crucially the wealth of skills and resources that the North of Scotland is well placed to deliver for an emerging Space sector. This is the right place with the right people at the right time.

I congratulate those that have brought this strategy forward and look forward to seeing the results of this work in developing the Space sector in the North Highland and Moray.

W.J (Ian) Ross OBE

CNSRP Executive Board Chairman
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Executive Summary

The purpose of this strategy is to set the high-level direction for the development of North Highland and Moray as a centre of the burgeoning UK commercial space industry – a space cluster. This strategy is driven by both ambition – and evidence.

The strategy reviews the global space economy, space sector needs; the existing North Highland and Moray ecosystem and the requirements and key focus areas pertaining to achieving a sustainable Space Cluster. Space Hub Sutherland has a valuable opportunity to take a leading position not only in the emerging small satellite launch sector and in the wider space sector. This is captured in the vision for the space cluster:

'By 2026 North Highland and Moray will have established one of the most significant Space Clusters in the UK'

The Strategy contains six chapters. These are:

- **Chapter one:** the economic opportunity on a global, national and local basis.
- **Chapter two:** space sector needs of the upstream, midstream and downstream segments and how those needs can be met in a number of areas.
- **Chapter three:** the existing ecosystem in the North Highland and Moray.
- **Chapter four:** what the area has to offer currently in meeting space sector needs.
- **Chapter five:** the economic opportunity, the size of the prize for the North Highland and Moray.
- **Chapter six:** the steps that should be taken to develop the local Space Cluster.

Chapter one: the economic opportunity on a global, national and local basis

Commercial space activity is creating rapid changes within key organisations, funding models and sources, and technological advances. The global space economy, incorporating both commercial space activity as well as government spending by space faring nations, has grown at an average annual rate of approximately 7% to reach a total of nearly \$447 billion in 2020.

As an enabler for all other space activities, the orbital launch industry has been the focus of a great deal of attention in recent years. The reliable and frequent access to space is essential if there is going to be a sustained expansion of commercial activities in space. Nearly \$31 billion has been invested in more than 400 space companies by non-government sources of capital since 2011, and a new annual record of \$8.9 billion was set in 2020. Behind the headline figures, it is important to note that most private funding has flowed to a relatively small number of companies and almost all of the capital was dedicated to launch vehicle development and satellite manufacturing and operations.

A further challenge facing the space industry is that the sources of private capital are not very diverse with the majority from government funding and venture capital. Governments have consciously supported the growth of space start-ups, including through direct and indirect investment in incubators and accelerators, however many businesses that emerge from these programmes fail to secure the additional investment or sales revenue to enable them to thrive. The space sector needs to be able to attract funding from a more diverse range of

funding sources, including institutional investment and debt. To do so, requires clearer identification of risks and potential mitigations and business strategies that provide investors with multiple paths to generating returns. There is a need to educate private investors on how the space industry works and how to reduce the risks of space investments to an acceptable level. To ensure that stakeholders and potential funders can make informed decisions on how to manage their resources and policies the space sector needs to develop a more comprehensive and integrated approach to estimating its direct value and how it supports wider value creation through the services and products that it enables across society.

Supporting the steady increases in traditional launches, advances in technology combined with lower launch costs have led to a boom in nanosatellites (spacecraft weighing 10kg or less) and small satellites being launched. In the case of both small-satellite launch vehicles and spaceports, there will likely be a first-mover advantage that enables some participants to take a commanding lead, and there is now a global race to secure that position. In this respect, the UK is positioned well, with space legislation in place, a regulatory framework being formulated, two launch sites funded for development, and commitments from three launch operators. Space Hub Sutherland is in a particularly good state, with two launch operators developing vehicles specifically with the spaceport in mind, and the capacity to bring in additional operators.

The development of Space Hub Sutherland is a natural addition to the portfolio of space activities already present in Scotland, offering customers a complete value chain from design and manufacture to launch and operation of satellites.

According to Size & Health of the UK Space Industry 2020, 17% of all UK space jobs are based in Scotland. Looking across the entirety of the Scottish space sector, the value in 2017 was estimated to be £2.5 billion, and there are ambitions to grow to £4 billion per year by 2030.

Space Hub Sutherland will support this goal in the coming years by spurring the creation of new businesses headquartered in Scotland to be closer to Sutherland and other space industry clusters.

Chapter two: space sector needs

To understand the needs of the space sector, and how North Highland and Moray can seize its opportunities, Chapter two of the strategy defines a model comprising of three supply chain “segments” of the space value chain – Upstream, Midstream and Downstream.

The Upstream sector, often termed “space manufacturing” accounts for 10-20% of the potential space market. The development of Space Hub Sutherland and the vehicle assembly, engine testing and mission control centre at Forres means that the upstream sector provides a specific opportunity for North Highland and Moray.

In terms of the value, the Midstream segment currently accounts for 5-10% of the potential space market. The Midstream is less dependent on close physical proximity to space manufacturing and launch facilities than the upstream, but the skill sets, and supply inputs

are common to both segments, meaning that a midstream cluster is more likely to form around a focus of existing upstream activity.

The Downstream segment involves the processing (adding value to) data collected in space and sale to end consumers, and the development and manufacture of equipment and provision of ancillary services for the application of space data. Together, provision of these services and the development and manufacture of equipment account for 70-85% of the total space market – the largest segment.

While the greatest economic opportunities are concentrated in the downstream segment, these industries are far more mobile and globalised – and can be located anywhere in the world, wherever the comparative advantage dictates that it is most economic for the firms to do so.

Chapter two also addresses infrastructure gaps, leveraging workers from adjacent sectors such as Nuclear, Oil & Gas and Defence; providing support such as the development and rapid scaling of early-stage companies; the attraction, retention and skilling of a diverse workforce to support the sector.

The space sector employs the most highly educated workforce of any sector in the UK. The UK Government has announced ambitions for 119,100 people to be working in the space sector by 2030. In 2019, some 45,100 people were already doing so. Scotland accounts for 17% of space sector employees (around 7,700 jobs) and is home to 173 space organisations including 96 space sector company head offices.

In 2020, around two-thirds of space sector companies reported difficulty in recruiting into their company. For the North Highland and Moray to overcome these skills challenges will require leveraging the existing skills advantages that the region can offer in other sectors over elsewhere in the world and building and expanding on the many schemes that are already developed to support skills training and increasing diversity across the UK, Scotland and locally.

The strategy identifies the needs of the space industry with particular focus on case studies from the US, Europe, New Zealand and the UK. The case studies consider the supply chain, skills, infrastructure, regulatory environment, and access to investment.

Geography is a key component, as latitude and the availability of real estate for launch ranges is a factor in where the upstream space launch operations locate. Higher latitudes are more optimal for the launch of satellites into Low Earth Orbits and a location near the sea and remote from population centres mitigates the risks from abortive launch. While this is only relevant for one small part of the overall space sector, the potential for space launch and spaceports to form the nucleus of a wider cluster, including ground stations and vehicle assembly means that geography may also be a differentiator in the midstream and downstream segments.

Chapter three: the local area ecosystem

In the North Highlands region, several firms are already engaged in high value manufacturing – including optics, imagery and advanced materials, supplying the Dounreay nuclear research facility and the oil and gas sector. None currently supply the space sector. Business services, construction and general support services are well represented.

In the Moray Region, the expanding Orbex launch vehicle development and manufacturing facility at Forres forms a growing nucleus for the space sector. There is the potential for a clustering of innovative businesses at the Forres Enterprise Park, complementing the existing aviation and defence sector supply chain and talent pool serving RAF Lossiemouth. The food and drink sector in Moray also sustains a highly skilled workforce and advanced engineering supply chain.

Across the region, the Defence and Energy sectors are specifically contributing highly skilled technical engineers with continued investments and project opportunities.

There are several local programmes that support the development of the skills required by space. The Moray Aerospace, Advanced Technology and Innovation Campus (MAATIC) and co-located Manufacturing Innovation Centre for Moray (MICM) at Lossiemouth, due to start on site in 2022 will create a supply of engineering talent – and incubation space for innovative engineering businesses, serving space and other sectors.

While a large number of premises in the North Highlands Region are not connected to the UK gas network, the region has a plentiful and expanding supply of renewable energy (wind and tidal) and benefits from the existing and planned onshoring of HV power cables, providing an affordable and stable energy supply.

In the Moray region more than 40,000 homes and businesses have access to the fibre network, making it one of the best-connected local authority areas in the Highlands and Islands region. However, there are still some areas of the North Highlands which lack access to superfast broadband or 4G mobile connectivity. Business facilities are available in North Highland and Moray with gigabit / full fibre connections. The onshoring of international data cables offers the potential for hyper-connectivity businesses in the medium to long term.

The region is ranked as one of the most deprived in Scotland for accessibility by land (road and rail), although connectivity within the Moray sub region is good. Air and sea links to the North Highland region are however well-developed, a legacy of the oil and gas industry.

While equatorial launch is more efficient, North Highland proves launch access to the Polar and Sun-Synchronous orbits due to the trajectories that can be achieved from the region. The north coast of Scotland provides geographic advantages for small rocket launch facilities. Within the North Highland and Moray there are multiple business parks and commercial facilities suitable to host SMEs and startups. While there is the potential for pressure on the local housing supply, community and educational services in the North Highlands region are of a high standard and able to accommodate growth. The liveability of

the region and outstanding natural environment are key strengths in attracting inward investment.

Responses to an online survey sent to businesses within the region demonstrated the self-sufficiency within the North Highland and Moray businesses with most respondents claiming that on average over 60% of their supply chain is local. The manufacturing, engineering and designs firms identified that key barriers to their future growth plans were 'Regulation/Red Tape', 'Macro Economic Disruption' and 'Quality of digital infrastructure'. In terms of space awareness, all respondents expressed interest at the opportunities proposed by Scotland's Space sector.

Chapter four: the area offering

Chapter four of the strategy considers the gap analysis between the needs of the Space sector and the existing ecosystem in North Highland and Moray.

The gap analysis indicates that the cluster has advantages in terms of launch vehicle development and operations with potential for development of midstream applications (ground stations and data centres) in the mid to long run, due to the strategic advantages of the onshoring of HV power lines and international data cables.

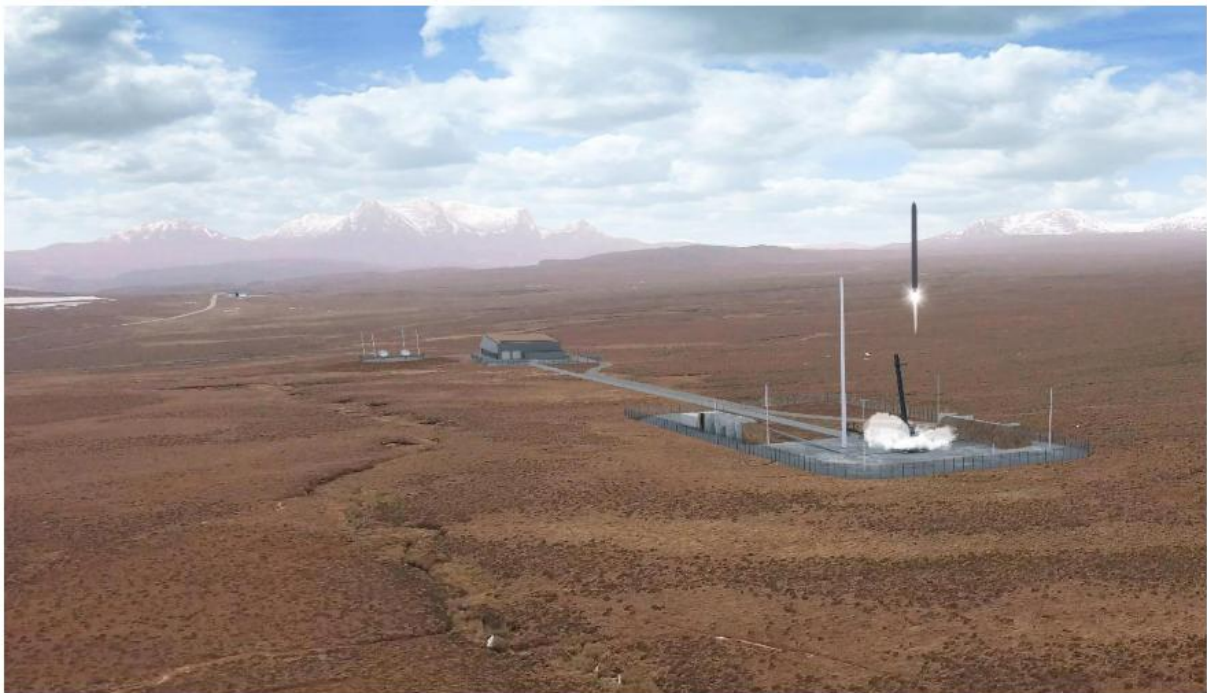
Supply of Services and Skills as well as infrastructure are examined with strengths identified in the areas of geography, existing aerospace and advanced engineering supply chain and potential cluster nuclei centred around Space Hub Sutherland in North Highland and Orbex in Moray. The analysis also identifies a lack of specialist space launch services, no specific comparative advantage for downstream growth and potential challenges in attracting talent to the area.

There are clear opportunities identified such as leveraging the synergies with the hydrogen economy, existing oil & gas, renewables, precision engineering and clean facilities from the food and drink sector, life sciences, nuclear and aerospace skills base. HVDC and data cable landings in the area provide power and data capability in support of midstream and downstream activity, while tourism and the visitor economy could build on the success and learnings of the NC500 and Malt Whisky Trail. Taking advantage of these opportunities would mitigate several risks the report identifies including the declining population in the area, competition from other UK and European space clusters for midstream and downstream growth and uncertainty around the size of the total addressable market for small launch of satellites in support of constellations.

Chapter five: the size of the prize

Chapter five of the strategy considers the 'size of the prize' for North Highland and Moray on 2026, 2030 and 2050 time horizons. Developing the UK's launch capability at Sutherland brings a multitude of benefits. It will provide vital local economic impacts for the region by offering a range of locally based employment opportunities and the chance to be at the forefront of an exciting emerging sector which will also bring indirect impacts to boost the already thriving tourism economy in the region. It will help to retain highly skilled

individuals in the North Highlands and offer opportunities to young people to help stem the flow of depopulation.



It is vital to sustain the emerging Moray space cluster as without a space port it is highly likely that existing launch providers will relocate. Space Hub Sutherland will unlock further development of the Moray space cluster and support UK and Scottish government objectives for growing the space sector.

Jobs figures are presented including direct jobs associated with the construction and operation of Space Hub Sutherland and indirect and induced jobs at a Highlands and Islands (including Moray), Scotland and UK level. GVA is also estimated at these same three levels. Three scenarios; baseline, Scenario 1 and Scenario 2 are presented highlighting different launch cadences and visitor numbers which in turn have an impact on jobs and GVA over the time horizons indicated. In 2020, it was estimated that the space economy contributed £6.6bn of GVA to the UK's economy and unlocked at least £360bn of GVA by supporting industries that are dependent on satellite services including navigation, meteorology, communications and earth observation.

By 2030 it is anticipated that other launch providers will be using Space Hub Sutherland and that growth in the midstream and downstream segments will support 740 full time equivalent jobs and value for upstream, midstream and downstream activities of £56m GVA for the Highlands and Islands.

Chapter six: next steps

Chapter six of the strategy considers the way forward in developing the Space Cluster. Opportunities in the midstream could include ground station and data centre capability in the North and downstream applications could leverage space infrastructure to enhance activities in sectors where the area is already strong such as energy, the environment and

tourism. This will be achieved by aligning efforts with the findings of the UK Space Agency's Space Sector Skills survey through leveraging the existing area skills base and developing new offerings through the University of the Highland and Islands (UHI) and its partners.

The strategy and recommendations which follow will be distilled into a clear action plan owned by the Local Space Leadership Group.

The positive impact of the local rural communities, particularly around the Spaceport through cluster development could include projects such as a space education centre, social housing provision, small scale business support and a community-based fund for sustainable community initiatives.

They will meet regularly to ensure that the actions assigned are being taken forward and that the participating organisations have the drive and ambition to deliver. Progress will be reported on regularly and a review of progress on the Strategy should be planned for 2025/26.

No.	Recommendation	Timescale
1	Create specific programmes through universities and supply chain partners to address the science/engineering skills shortages in space industry leveraging nuclear, oil & gas and MOD know-how. (Address early years engagement, Space STEM, technician level training and sector specific qualifications).	4 years
2	Explore area wide interventions to stimulate downstream growth in the area (70-85% of the market). This would likely need an understanding of market need. While this will involve appropriate connectivity and property it is likely to focus on labour supply and working with academia to deliver a labour pipeline.	4 years
3	Consider the use of job creation and training fiscal incentives to stimulate employment and how they can focus on the space sector.	4 years
4	Review options for Accelerator Programmes as an enabler of start-ups and existing tech supply chain to diversify and engage (networking) with the (upstream in first instance) space sector.	Within 12 months
5	Ensure provision of the necessary residential and business infrastructure and resilience in the area to meet the needs of a growing high-tech data driven space ecosystem.	5 years
6	Develop an incubation centre (hub) associated with Space Hub Sutherland leveraging existing resources to give growing companies the opportunity to learn from an operational spaceport.	Within 36 months

No.	Recommendation	Timescale
7	Enhance talent attraction capability through focused efforts on promoting the liveability of the area.	2 years
8	Create a Local Space Leadership Group to champion the interests of the area and to drive forward the recommendations from the Strategy.	Within 3 months
9	Unlock further public and private investment through regional planning initiatives integrating other sectors leveraging a 'Space Growth Deal' akin to the 'Moray Growth Deal'. This needs input from UK and Scottish Government who fund these initiatives.	Within 24 months
10	Educate the wider investment community on the benefits and risks of investing in the space industry in the area. Consider an 'Investor Ready' approach to help both the company and investor.	24 – 48 months
11	Create a dedicated structured and resourced effort to attract inward investment (new businesses) to the area through a coordinated and collaborative approach.	Within 6 months
12	Create a shared vision across the private and public sector to realise the benefits locally and regionally through a 'Space Coast 2030' conference.	12 months

Summary

This strategy offers an excellent opportunity for North Highland and Moray to develop a Space Cluster which could deliver 740 jobs and £56m of GVA to the Highlands and Islands by 2030. The recommendations identified in the strategy have been developed through a detailed understanding of the space sector needs and the strengths and areas for development in the North Highland and Moray. These recommendations will lead to actions focused on inward investment, business support, infrastructure enhancements and skills development critical to the success of the Space Cluster. The creation of a Local Space Leadership Group to develop and drive forward the action plan will be instrumental in the Space Cluster achieving its forecast potential.

Chapter 1 - Space: The economic opportunity

Key Points

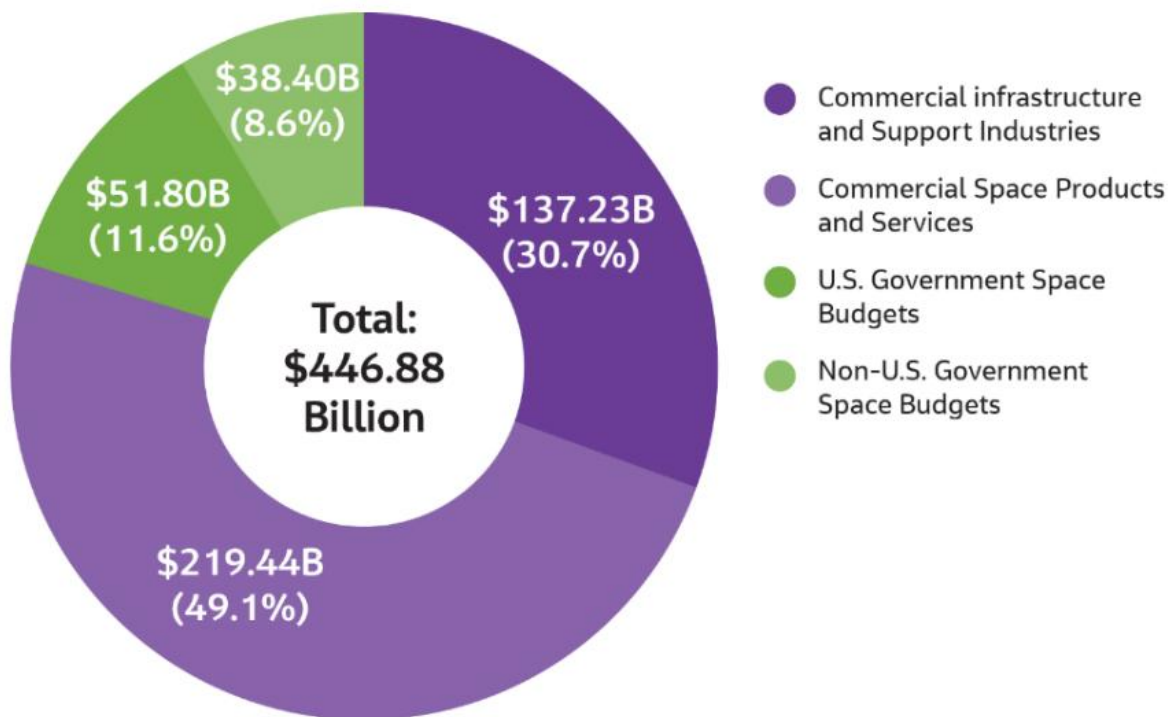
- The space industry is experiencing growth around the world, both in terms of government spending and commercial earnings. Multiple governments, including various levels of government in the UK, are investing in space to stimulate further economic growth for the benefit of their people.
- To date, the majority of private funding for space start-ups has gone to a handful of companies, almost all of which are focused on manufacturing or operating launch vehicles or satellites.
- There is interest in the space sector from private investors but most require further education on how the industry works and how to reduce risks associated with the sector to an acceptable level. This will then allow more conservative investors to enter the sector and unlock additional types of investment.
- Economic forecasts of space industry growth tend to be either too global or too sector- specific to be useful for planning national or regional economic development.
- A more comprehensive and integrated approach is required to support public and private investment. The economic benefit of space can be multiplied many times over when space is appropriately integrated with other sectors.
- The trends are favourable for small satellite launch sites and launch vehicle operators, but there is a need to move quickly to secure a lasting advantage. Space Hub Sutherland has a valuable opportunity to take a leading position in this emerging sector.

1.1 The global opportunity

The size of the global space economy continues to grow steadily but with rapid changes occurring in key organisations, funding sources and technological advances. From the emergence of SpaceX as the leading provider of commercial orbit launches and operator of the world's largest satellite constellation through to a wide range of entrepreneurial companies seeking to disrupt the status quo. Many different commercial launch vehicles are in various stages of development from concepts on paper, through to testing phase and government backed programmes. It is likely that only a small number of these will become operational. Demand is surging for constellations of small satellites in Low Earth Orbit, developing, and in some cases replacing, market opportunities associated with the large, more expensive Geosynchronous Orbit satellites that were the foundation for the first wave of commercial space activity.

New models of funding are arising including billions of pounds from equity funding, upending the traditional processes of both the commercial sector and government space programmes although the sustainability of these new funding approaches remains to be determined.

Figure 1.1 Global Space Activity Nears \$447 Billion in 2020



Source: Space Foundation database

Source: Space Foundation 2021

1.1.1 Size and growth of the global space economy

Over the past decade, the space economy, incorporating both commercial space activity as well as government spending by spacefaring nations, has grown at an average annual rate of approximately 7% to reach a total of nearly \$447 billion in 2020.¹ Commercial activity constituted 79.8% of the total in 2020. Within the commercial sector, most of the revenue is derived from direct-to-home satellite television, an industry whose growth has slowed in recent years.

Telecommunication operators have diversified into provision of internet and other data services via satellite.

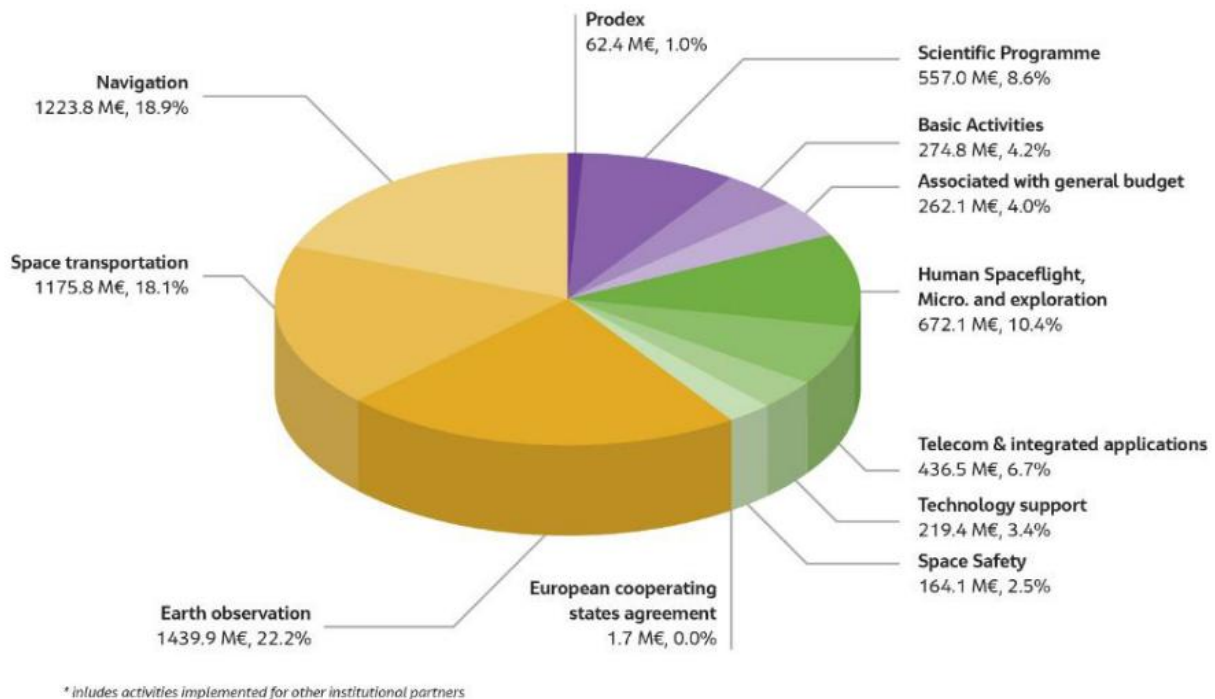
In Europe, the top four programmes funded through the European Space Agency (ESA) are Earth Observation, Space Transportation, Navigation (primarily paid for by the EU), and

The global space economy, incorporating both commercial space activity as well as government spending by spacefaring nations, has grown at an average annual rate of approximately 7% to reach a total of nearly \$447 billion in 2020.

¹ [The Space Report](#)

Human and Robotic Exploration. At the 2019 ESA Ministerial Council, the UK Government committed to contribute £374 million annually to ESA over the next five years.²

Figure 1.2 ESA investment budget 2021 (Euro)



Source: The European Space Agency

As an enabler for all other space activities, the orbital launch industry has been the focus of a great deal of attention in recent years. Many nations (and multinational organisations such as ESA) are aware that reliable and frequent access to space is essential if there is going to be a sustained expansion of commercial activities in space, and they are investing accordingly. This is one of the reasons why the Space Transportation line in ESA's budget is so large, although most of the funding is committed to a single project — development of the Ariane 6 launch vehicle.

To support launch vehicles, a range of locations across the globe are being considered for spaceports. Despite the ultimate goal of stimulating commercial space activity, these spaceports are rarely approached as commercial developments but are generally seen as a government infrastructure investment. In many cases, funding is provided both by a national government and the local or regional government where the proposed spaceport is located.

² UK Government, [UK invests in European Space Agency programmes](#), November 2019

1.1.2 Private investment in space

In the past decade, there has been a surge of investor interest in space, with a dramatic increase starting in 2015. Nearly \$31 billion has been invested in more than 400 space infrastructure companies by non-government sources of capital since 2009, and a new annual record of \$8.9 billion was set in 2020.³ Of the total funds committed by non-government sources in the past decade, 64% has flowed to US companies, followed by UK companies at 15%.⁴

Nearly \$31 billion has been invested in more than 400 space companies by non-government sources of capital since 2011, and a new annual record of \$8.9 billion was set in 2020.

The influx of capital has changed the relationship between different players in the space industry with many organisations' moving from being the sole funder or customer for their contractors to one of many customers.

Behind the headline figures, it is important to note that the majority of private funding has flowed to a relatively small number of companies, and almost all of the capital was dedicated to launch vehicle development and satellite manufacturing and operation. Other emerging sectors such as private space stations, manufacturing in space, private exploration, and space resource harvesting have generated a substantial amount of hype but to date have attracted little capital. Another element that is often overlooked is that major space companies are still often dependent on government contracts. For example, SpaceX has received more than \$6.7 billion in private investment and more than \$9.2 billion in contracts and grants from the US government.⁵ SpaceX also generates revenue from launches for commercial customers, but external investment (whether from government or private sources) remains critical for the company's survival and its development of new hardware.

A further challenge facing the space industry is that the sources of private capital are not very diverse with the majority from government funding and venture capital. As a source of funding, government processes tend to be slow and bureaucratic to ensure public resources are managed prudently, whereas venture capital firms tend to expect speed and offer limited oversight of the technology development in order to rapidly generate returns for their investors. Governments have consciously supported the growth of space start-ups, including through direct and indirect investment in incubators and accelerators, the most notable of which are the ESA Business Incubation Centres. Unfortunately, many of the businesses that emerge from

The Venture Capital (VC) system is designed to rapidly scale a product or service to capture a large market share and exit by means of a merger and acquisition (M&A) transaction or an initial public offering (IPO).

³ [Space Angels, Space Investment Quarterly: Q4 2020](#)

⁴ [Space Angels, Space Investment Quarterly: Q4 2020](#)

⁵ [Pitchbook, SpaceX](#), accessed 21 July 2021; [USAspending.gov, Recipient Profile: Space Exploration Technologies Corp.](#), accessed 21 July 2021

these programmes fail to secure the additional investment or sales revenue that would enable them to thrive, resulting in their disappearance after a few years. Managing the transition from incubators to operational status remains a challenge worldwide, and not just for the space industry.

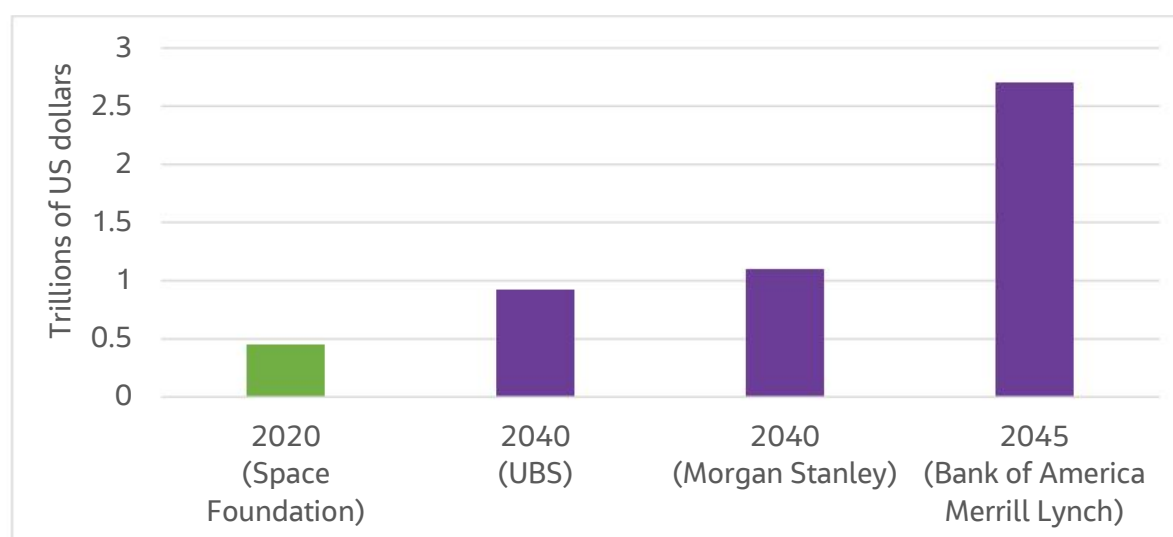
The Venture Capital (VC) system is designed to rapidly scale a product or service to capture a large market share and exit by means of a merger and acquisition (M&A) transaction or an initial public offering (IPO). While this has the potential to accelerate product development, the VCs may suddenly pull the plug on a start-up company if they do not see a sufficiently rewarding M&A or IPO in the near future. The best-case scenario is usually M&A executed by a traditional government space contractor. Ultimately, the VC system is not currently designed to reward companies that grow steadily and constantly produce innovation over time, which has unfortunate implications for the future of the space sector.

The space sector needs to be able to attract funding from a more diverse range of funding sources, including institutional investment and debt. To do so, requires clearer identification of risks and potential mitigations and business strategies that provide investors with multiple paths to generating returns. There is a need to educate private investors on how the space industry works and how to reduce risks of space investments to an acceptable level.

1.1.3 Forecasts of economic value

As a relatively young economic sector, there are many different forecasts for growth of the space industry. To achieve a space economy size of \$926 billion to \$2.7 trillion (by 2040 or 2045, depending on the forecast) requires a compound annual growth rate of between 4.5% to 7.5% before inflation is factored in. While this is a respectable rate for some investors, it does not meet the criteria of others such as VC firms who are looking for returns of at least ten times their initial investment.

Figure 1.3 Global Space Economy Forecast



The value of space extends beyond the revenue generated by the industry itself and existing economic models find this difficult to capture. For example, the Global Positioning System (GPS) is estimated to have produced a cumulative private-sector benefit of approximately \$1.4 trillion for the United States alone from 1984 through 2017 (with most of the benefits accruing in the last decade of that period).⁶ To ensure that stakeholders and potential funders are able to make informed decisions on how to manage their resources and policies the space sector needs to develop a more comprehensive and integrated approach to estimating its direct value and how it supports wider value creation through the services and products that it enables across society.

The Global Positioning System (GPS) is estimated to have produced a cumulative private-sector benefit of approximately \$1.4 trillion for the United States alone from 1984 through 2017 (with most of the benefits accruing in the last decade of that period).

1.1.4 Launch Activity Growth

Supporting the steady increases in traditional launches, advances in technology combined with lower launch costs have led to a boom in nanosatellites (spacecraft weighing 10kg or less) and small satellites being launched. By April 2021, more than 4,000 active satellites were in orbit, having nearly doubled from 2,200 in December 2019⁷ and operators of global spanning communications networks have ambitions to launch constellations that will require tens of thousands more. The parallel trends of demand for small satellites and an increase in launch activity bode well for the emerging small satellite launch industry. These satellites currently reach orbit either through ride-sharing on a large launch vehicle or through dedicated services provided by relatively inexpensive small vehicles.

In 2019, there were more than 70 small launch vehicles that were either operational or in development, mostly the latter. These efforts were spread across 15 nations or multinational partnerships.

In 2019, there were more than 70 small launch vehicles (those capable of carrying a maximum of 1000kgs to Low Earth Orbit) that were either operational or in development, mostly the latter.⁸ These efforts were spread across 15 nations or multinational partnerships, highlighting the global competition for the small satellite launch market.

Launch vehicles require a spaceport that can accommodate the unique needs of small launch vehicle operators and their customers. In 2019, there were 40 active spaceports with 10 more in development and a further 13 in proposal stage.

⁶ RTI International, [Economic Benefits of the Global Positioning System \(GPS\): Final Report](#), June 2019

⁷ Union of Concerned Scientists, [UCS Satellite Database](#), updated May 2021

⁸ Carlos Niederstasser, A 2019 View of the Impending Small Launch Vehicle Boom, paper presented at the 70th International Astronautical Congress, October 2019

In the case of both small satellite launch vehicles and spaceports, the general expectation is that many will prove not to be economically viable in the long term. As with other emerging industries, there will likely be a first-mover advantage that enables some participants to take a commanding lead, and there is now a global race to secure that position. In this respect, the UK is positioned well, with space legislation in place, a regulatory framework being formulated, two launch sites funded for development, and commitments from three launch operators. Space Hub Sutherland is in a particularly good state, with two launch operators developing vehicles specifically with the spaceport in mind, and the capacity to bring in additional operators.

1.2 The opportunity for the UK

The UK is well positioned to take advantage of the economic opportunities presented by the emerging new era of space activity. The UK's existing space sector is vibrant and healthy with existing clusters in the Midlands of England and the Scottish Central Belt. It is hoped that this strategy will be a direct complement to the emerging **UK National Space Strategy**, and the recently-launched (July 2021) [UK Innovation Strategy](#), and play its part in establishing the UK Space sector as one of the most commercially vibrant in the world over the next decade.

Developing the Sutherland Space Cluster will contribute to the global scientific efforts to create a better connected and sustainable world. One of the most valuable tools in the push towards a more sustainable planet is the ability to gather and distribute large data, to better understand how, when and why our planet and societies are changing. Innovations within this space cluster will continue to allow scientists to record more about our planet. Emission levels, resource consumption, deforestation and even animal migrations can be accurately monitored with satellites, enabling scientists to work with incredibly insightful data at cheaper rates. Sutherland Space Hub provides a unique opportunity to host and expand the skillsets in the UK that enable the space industry to provide such incredible opportunities for science.

1.3 The opportunity for Scotland

The development of Space Hub Sutherland is a natural addition to the portfolio of space activities already present in Scotland, offering customers a complete value chain from design and manufacture to launch and operation of satellites. According to *Size & Health of the UK Space Industry 2020*, 17% of all UK space jobs are based in Scotland.

17% of all UK space jobs are based in Scotland - 7,500 Scottish space jobs, distributed amongst more than 130 space organisations.

That translates to more than 7,700 Scottish space jobs, distributed amongst more than 170 space organisations. Of these organisations, 96 are headquartered in Scotland and generate a combined income of £137 million, or 0.8% of total income generated by UK space organisations in 2018/19.⁹

⁹ London Economics, [Size & Health of the UK Space Industry 2018](#), January 2019

Looking across the entirety of the Scottish space sector, the value in 2017 was estimated to be £2.5 billion, and there are ambitions to grow to £4 billion per year by 2030.

The disparity between Scotland's 17% share of UK space employment and its 0.8% share of UK space income is due in part to the report's methodology, which attributes all of a company's income to the region where it is headquartered. Given that the UK space industry is heavily concentrated, with 13 organisations accounting for 82% of income and the remainder being split amongst 1,205 smaller organisations, it is not surprising that a large proportion of Scotland's space workforce is employed by large

organisations headquartered elsewhere. However, there are ambitions to grow the Scottish space sector to £4 billion per year by 2030.¹⁰ Efforts such as the establishment of Space Hub Sutherland will support this goal in the coming years by spurring the creation of new businesses headquartered in Scotland to be closer to Sutherland and other space industry clusters.



1.4 The opportunity for North Highland and Moray

With the development of Space Hub Sutherland as a new UK Launch site for vertical orbital launch and the subsequent attraction of Orbex to Forres, the North Highland and Moray are well positioned not only to benefit from future developments in the Launch sector but also for wider Space opportunities.

¹⁰ [Scottish space industry's ambition for £4bn growth trajectory](#), September 2020

The early positioning of these assets is complemented by a number of other factors in terms of supporting Space specific launch projects as well as wider Space opportunities. These are focussed on labour supply, connectivity and infrastructure.

Both the North Highland and Moray have benefited from the presence of a highly skilled workforce through the development of the Nuclear sector in the North and Aerospace activity from the former RAF Kinloss (now Kinloss Barracks) and current RAF Lossiemouth bases. The presence of these facilities has enabled a capability in the labour market through the supporting supply chains to perform advanced engineering, in a safety critical and demanding environment and ensuring that products and services are delivered within tight tolerances and strict inspection and certification regimes. This capability lends itself to a range of upstream, mid-stream and downstream Space activities.

Recent developments in the main fibre supply of next generation broadband have enabled both areas to respond to the growing remote delivery of services. This provision by BT, funded mainly by grant by HIE, has proven timely in terms of the current pandemic and will continue to prove valuable in offering data analysis services as well as the potential for the provision of hyper connectivity on the north coast. Landfall of an international subsea data cable meeting in Castletown, Caithness offers a real opportunity for hyperconnected services and data storage to be made available to the Space industry.

Infrastructure provision in the areas includes mainline rail access to both Forres and the railhead at Georgemas in Caithness. Both areas have 'A' road access with Space Hub Sutherland being accessible to articulated vehicles. Area Harbours currently support Oil & Gas and Offshore Wind activity with Scrabster currently undergoing a redevelopment to provide enhanced laydown and berthing for service, cargo and cruise vessels. Development land in the Enterprise Park Forres, other Moray sites and a number of sites in Caithness also ensure the ability to develop physical sites if needed. Existing arrangements from the Moray Growth Deal such as the development of the UHI led Moray Aerospace Advanced Technology and Innovation Campus (MAATIC) reinforce the scale of the ambition of the area. On a smaller scale it is also noteworthy to understand the ambition of the local community around the Space Hub Sutherland to consider the possibility of incubation units near to the Spaceport.

Both areas are well placed to build on a good reputation for Tourism with Moray having a significant presence of distilleries and the North Highlands benefiting from the growing North Coast 500 route. The emerging market for 'staycations' in the north as a consequence of COVID-19 travel restrictions has increased capacity in the area which serves to support future Space Tourism.

1.4.1 Area Drivers

The population of the Caithness and Sutherland area is forecasted to drop by 3.9% based on local authority 2018 mid-year estimates compared with 2011 numbers. In 2011 the population over age 45 made up 52.5% of the population, higher than both the Highlands and Islands and Scottish averages. An ageing population compounded by the continued decommissioning of the Dounreay nuclear site over the next decade and a half underlines the need to attract working age people and families to the area to support the future economy.

Highland has been designated priority 3 (lowest) in the UK Government criteria for attracting funding support through the UK Community Renewal and Levelling Up agendas. This places an increasing importance on the successful attraction of private sector investment as an enabler for future growth.

An oversupply of renewable energy production in the North Highland and Moray areas provides a unique opportunity to embrace the decarbonisation initiatives as outlined in the Net Zero ambitions of both the UK and Scottish Governments. With over 70 consortiums bidding in the recent ScotWind leasing round for offshore sites around the North Highland and Moray coasts complementing the existing onshore capacity, the potential exists to embrace area hydrogen production in support of decarbonising heat and transportation in the area for both industrial and domestic applications. This will assist new and existing businesses to establish genuine green credentials in support of net zero Space related activity.

Chapter 2 - Space: Sector needs

Summary

- The space sector comprises of Upstream (the design and launch of rockets and their payloads), Midstream (covering satellite operations and data sales) and Downstream (satellite service provisioning, user equipment manufacturing and services utilising data for people and businesses).
- Space Hub Sutherland and the vehicle assembly, engine testing and mission control centre at Forres provides the North Highland and Moray region with a competitive advantage for upstream activities.
- The space sector creates jobs for highly skilled people and Scottish based companies already employ 17% of the UK's space sector workforce. Similar to other rapidly expanding, high tech-based sectors, the space industry is finding it challenging to recruit new employees and is also seeking to diversify its existing workforce to further boost productivity.
- Our case studies taken from the USA, New Zealand, Europe and the UK show that there is a ready market for small launch facilities and that investment in supporting the space sector brings a wide range of positive impacts for local, regional and national economic development.
- To maximise these potential benefits requires a shared vision and coordinated action from across the private and public sector.

2.1 Introduction

The purpose of this strategy is to set the high-level plan for the development of North Highland and Moray as a centre of the burgeoning UK commercial space industry – a **space cluster**. This strategy is driven by both ambition and evidence.

As may be expected for an emerging and disruptive industry, there are a range of different 'models' for the commercial space sector. Terms are sometimes used interchangeably with sometimes different definitions. This section (Chapter two) sets out our understanding of the space sector as a foundation for the logical analysis that follows.

This includes our understanding of: key terms and concepts; how the space sector is structured (or "segmented"); the needs of the sector its needs in terms of the supply of **goods** (the traditional supply chain), **skills** (or talent) and **infrastructure**, against which we have mapped the current or potential supply in North Highland and Moray to identify our priorities for the future. This section also includes three **case studies** – to provide a reality check on the theory and identify **lessons learned**.

2.1.1 Jargon-busting: Clusters, Ecosystems & Hubs¹¹

Three key terms are worth definition at this point: **Cluster**; **Ecosystem** – and **Hub**.

A **cluster** is the concentration of specialised industries in particular localities benefitting from 'economies of scale', such as a shared supply chain (of both services *and* skills) and advantages of co-location such as easier sharing of ideas and collaboration on higher risk, innovative projects. This leads to more efficient development and production of new products – particularly in new and innovative sectors. Simply, the more densely concentrated businesses in a given sector are in a given area, known as "agglomeration" in economics theory, the more productive, competitive and successful those business are likely to be, and the greater the benefits for the local economy.¹²

The **Ecosystem** is the wider network in which the cluster forms. This includes:

- the **non-sector specific supply** chain – general services such as business services and facilities management;
- the **regulatory and legal environment** that can either enable or hinder the development of new products;
- The network of **state support** to provide the start-up funding, capacity building, business skills development that the market will not – due to perceptions of risk, lack of understanding of the opportunities, or where (simply) no single firm can make a profit;
- The **supply of private finance**, in particular Venture Capital (VC), to fund the start-up and scale-up of individual businesses.

A **Hub** is a *physical space* provided for innovative firms to operate on flexible, lower cost terms and co-locate with similar innovative firms. Hubs both help to lower the "barriers to entry" for new companies by reducing the cost of starting up and provide a platform for collaboration with other innovative firms. An example of this would be the Horizon Scotland hub¹³ on the Enterprise Park in Forres. A hub is an *enabler* of a cluster, and – along with anchor businesses – a potential nucleus.

Other key means of support of innovative firms, and the promotion of clustering include:

- **Incubators** – physical workspaces specifically designed to nurture the most innovative firms at their very earliest stages, such as the ESA business incubation Centres¹⁴, and;
- **Accelerator** programmes, which provide intensive business support – in particular how to access finance - when these firms are ready to make the leap to operating and producing at scale.

¹¹ [Harwell Space Cluster](#), September 2021

¹² OECD, [Agglomeration economies in Great Britain](#), June 2020

¹³ [Horizon Scotland, Business and Innovation Centre](#)

¹⁴ European Space Agency, [ESA Business Incubation Centres](#), accessed September 2021

2.1.2 Anatomy of the space sector – the three streams¹⁵

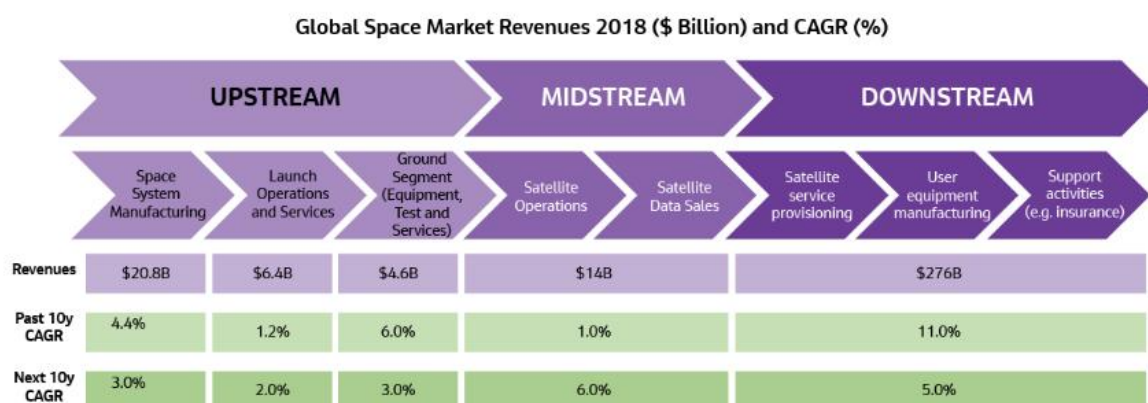
To understand the needs of the space sector, and how North Highland and Moray can seize its opportunities, it's useful to first define a **model** of the space industry.

As befits a rapidly evolving and disruptive industry, there are a number of different models in use to understand the structure of the global space sector. For clarity, this strategy and the action plan that underpins it is based on a **three-stage** model of the space value chain.

This model comprises three supply chain “segments” – **Upstream**, **Midstream** and **Downstream**. Firms in each of these segments play a role in ultimately supplying goods and services to consumers. This is illustrated in figure 2.1 below.

It should be noted that many firms will operate “horizontally” across sectors - and will supply space and other innovative / high tech sectors in particular aviation, defence and telecommunications.

Figure 2.1 Segmentation of the Global Space Sector



Source: Euroconsult Report 2019, SpaceTec Partners Analysis

*CAGR = Compound Annual Growth Rate

2.2 The Space supply chain

2.2.1 Upstream

The first stage in the space supply chain is the **Upstream** segment – often termed “space manufacturing”. This segment involves the development and manufacture of software, components and Original Equipment for launch vehicles and satellites. This also includes supply and operation of ground-based facilities required for launch and establishment of the assets in space, such as space launch facilities (range control) and

The upstream sector accounts for 10-20% of the potential space market.

¹⁵ [Industry 4.0 and the Future of UK Space Manufacturing; Summary Report: The Size & Health of the UK Space Industry](#)

mission control. In terms of value, the upstream sector accounts for 10-20% of the potential space market.

The development of Space Hub Sutherland and the vehicle assembly, engine testing and mission control centre at Forres means that the upstream sector provides a specific opportunity for North Highland and Moray. While space launch makes up only a small proportion of the total space market, the **upstream** sector and space launch is a particular focus of this strategy and action plan.

For this strategy, we have defined the needs of the **Upstream** segment as follows. This has been used for the Gap Analysis in Chapter four.

Table 2.1 Space - The Upstream Segment

Sub-segment	Supplier category
Space Systems Manufacturing	R&D – aerospace
	R&D - all sectors
	Advanced Engineering – aerospace
	Advanced Manufacturing – aerospace
	Advanced Engineering - all sectors
	Advanced Manufacturing - all sectors
Launch Operations	Propellant (gases) manufacture & processing
	Launch & Range Control
	Airport Services
	Specialist Logistics
	Payload integration
	Business services – insurance, HR and accountancy
	Tourism & hospitality
	General site services
Ground Systems	Ground Stations (data download and transmission)
	Mission Control

Orbit heights and launch weights

Space launch is categorised into **Nano-launchers**, <50kg payload mass examples including Astra Rocket 3 (payload mass 25kg) and JAXA SS 520 (payload mass 4kg). **Micro-launchers**, 50-500kg payload mass, examples of micro-launchers include: Kuaizhou-1A (payload mass 250kg), Rocket Lab Electron (payload mass 200kg). **Small launchers**, 500kg-2,000kg payload mass, examples include: Firefly Alpha (payload mass 1,000kg), Isar Aerospace Spectrum (payload mass 1,000kg), Rocket Factory Augsburg (payload mass 1,200kg). **Medium launchers**, 2,000kg-6,000kg payload mass, examples include: Soyuz-2 (4,200kg payload mass), Northrop Grumman Antares (payload 8,000kg). **Heavy launchers**, 6,000kg-30,000kg payload upmass, examples: SpaceX Falcon 9 (payload mass 22,800kg), ULA Delta

IV heavy (payload mass 25,000kg). **Super Heavy**, >30,000kg payload upmass, Only SpaceX Falcon heavy (payload mass 63,000kg) is operational so far, future payload ambitions include, SpaceX Starship (payload mass 100,000kg), Blue Origin New Glenn (payload mass 45,000kg), NASA's SLS (payload mass 85,000kg).

2.2.2 Midstream

The Midstream segment currently accounts for 5-10% of the potential space market.

In terms of the value, the Midstream segment currently accounts for 5-10% of the potential space market. The Midstream is less dependent on close physical proximity to space manufacturing and launch facilities than the upstream, but the skill sets and supply inputs are common to both segments, meaning that a midstream cluster is more likely to form around a focus of existing upstream activity.

As Low Earth Orbit (LEO) becomes increasingly congested with constellation satellites, the risk of collisions with space debris increases and the technology for the manoeuvre of micro satellites in space improves, the active management of assets in space – otherwise known as “space situational awareness”¹⁶ is expected to grow. Along with the transfer of “raw” space data to earth via ground stations and its intermediary storage in data centres, this comprises the **Midstream** segment in the space value chain.

For this strategy, we have defined the needs of the Midstream segment as follows. This has been used for the Gap Analysis in Chapter four.

Table 2.2 The Midstream Segment

Sub-segment	Supplier category
Ground Systems	Ground stations (near earth observation and data download)
	Data Centres

2.2.3 Downstream

The downstream segment currently accounts for 70-85% of the total space market.

By far the largest and most valuable stage in the space supply chain is the “downstream” segment. This involves the processing (adding value to) data collected in space and sale to end consumers, and the development and manufacture of equipment and provision of ancillary services for the application of space data. Together, provision of these services and the development and manufacture of equipment account

for 70-85% of the total space market.

This includes firms engaged in the supply of:

- Satellite navigation services
- Direct to The Home (DTTH) broadcasting services;

¹⁶ European Space Agency, [Space Situational Awareness – SSA](#), accessed September 2021

- Meteorology and climate services;
- Other earth observation services – including land use monitoring and asset management;
- Satellite internet

With the growth of constellation satellites – such as the Anglo-Indian OneWeb, the US StarLink and Amazon networks, and the Canadian Telsat, the consumer market for satellite internet services is expected to grow significantly over coming years.

While the greatest economic opportunities are concentrated in the **downstream** segment, these industries are far more mobile and globalised – and can be located anywhere in the world, wherever the comparative advantage (costs, ease of trade and business operations) dictates that it is most economic for the firms to do so.

For this strategy, we have defined the needs of the Upstream segment as follows. This has been used for the Gap Analysis in Chapter four.

Table 2.3 The Downstream Segment

Sub-segment	Supplier category
Downstream applications	Satellite data processing
	Satellite data applications: R&D
	Satellite data applications: manufacturing
	Telecoms & media - any
	Earth Observation (EO) - any
	Satellite navigation - any

2.3 Skills for Space

The space sector employs the most highly educated workforce of any sector in the UK with three quarters of employees holding at least a primary degree. The UK Government has announced ambitions for 119,100 people to be working in the space sector by 2030. In 2019, some 45,100 people were already doing so. Scotland accounts for 17% of space sector employees (around 7,700 jobs) and is home to 173 space organisations including 96 space sector company head offices.¹⁷

The space sector employs the most highly educated workforce of any sector in the UK.

¹⁷ [The Size and Health of the UK Space Industry 2020](#)

In 2020, around two-thirds of space sector companies reported difficulty in recruiting into their company.

Over half of space companies across the UK (54%) are expecting to employ more staff in the coming three years. As with any rapidly developing sector, there are challenges in ensuring that a suitable set of skilled individuals are readily available to meet the demand arising from companies.

According to the UKSA Space Skills Survey 2020 Report, around two-thirds of space sector companies reported

difficulty in recruiting into their company with more of a challenge identifying people with specialist space skills. The lack of a single focus for training and development at undergraduate level and above as the types of jobs required are so niche makes it particularly challenging to develop space skills quickly.

Key reasons for recruitment difficulties in the sector (given in descending order of reported importance as reported by space companies) are:

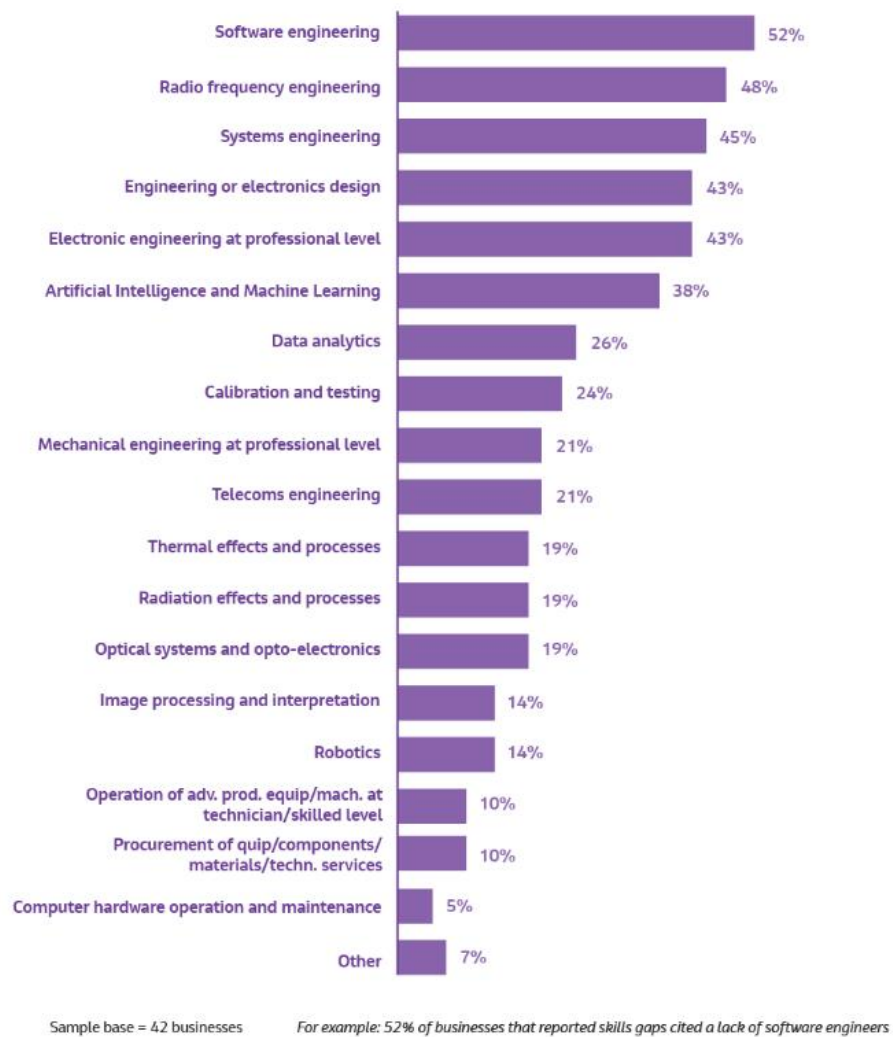
- 1) A lack of experience within the space sector
- 2) A lack of specialist skills, knowledge or qualifications
- 3) Challenges in attracting European candidates post Brexit (likely to be exacerbated by the global Covid pandemic)
- 4) Perceived competition attracting talent both from other sectors and within the space sector
- 5) Challenges to attract people to work in the locations where space sector companies are located
- 6) A lack of appropriate specialist training provided by UK educational institutions
- 7) Perceptions of uncompetitive pay or conditions
- 8) Shortfall of interest from young people in technology/science/engineering and maths
- 9) Perceptions of applicants lacking required behaviours, attitude, motivation or personality

Another pressing challenge for the space sector is to ensure diversity of staff to maximise productivity within the sector. The industry hires people from across the world, particularly from Europe, providing a depth of knowledge and cultural sharing and ensuring efficient engagement with international partners and clients. There is no reported under-representation of minority ethnic groups within surveys undertaken. However, women are still under-represented in the space sector, in part, due to lower proportions of females studying STEM subjects in schools and universities.

For the North Highland and Moray to overcome these skills challenges will require leveraging the existing skills advantages that the region can offer over elsewhere in the world and building and expanding on the many schemes that are already developed to support skills training and increasing diversity across the UK, Scotland and locally.

Space businesses reported the following skill gaps or limitations among their workforces. Multiple responses were allowed and encompassed a variety of engineering skills, artificial intelligence and machine learning, data analytics and calibration and testing skills gaps within the existing workforce.

Figure 2.2 Proportion of businesses that report having skill gaps or limitations amount their workforce



Source: UKSA Space Sector Skills Survey 2020

2.4 Infrastructure

2.4.1 Energy

By their nature, Research and Development (R&D) and manufacturing have higher energy needs than other industrial sectors such as warehousing. The **midstream** segment – in particular data centres for storage and processing of data are some of the most energy-hungry of all business operations, and access to High Voltage power networks is likely to be a key driver of where these data centres choose to locate – along with access to national and international data cable networks.

2.4.2 Digital

Access to digital infrastructure – gigabit broadband – to enable the reliable and high-speed transfer of data to and from points on the earth is critical for all high-technology and data-driven businesses. The space sector is no exception. Direct and convenient access to national and international data cable “backbone” networks is particularly vital to growth of the **midstream** segment, most importantly ground stations and data centres, which collect, store and then distribute data collected from space.



2.4.3 Transport

The efficient movement of *goods* is also particularly critical for the **upstream** segment (satellite and launch vehicle development and manufacturing), for safely moving assets, launch vehicles and gases (fuel and purge gases) to launch sites. Efficient and reliable transport of goods is vital to those parts of the **downstream** segment engaged in manufacture and supply of components and equipment. The free movement of *people* across

a cluster, to enable the face-to-face collaboration and sharing of ideas to drive innovation and productivity is also critical.

2.4.4 Real Estate and Facilities

The availability of appropriate facilities for space businesses is also a key factor in attracting and retaining firms operating in the R&D and manufacturing sections of the **upstream** (satellite and launch vehicle development and manufacture) and **downstream** (equipment development and manufacturing) segments. Specialist facilities include clean rooms and flexible office space, expanding with the needs of these often small and agile businesses.

2.4.5 Liveability

The *liveability* of an area can often be the determining factor in attracting new firms to locate in an area and attracting and retaining the human capital – talent – needed for any cluster to grow.

Liveability includes: the quality of community services such as schools, Further Education (FE) colleges and Higher Education (HE) institutions; health services; leisure opportunities; the supply of affordable, good quality housing, and; the quality of the natural environment. Ease of access to major towns and cities via good national and international transport links also contributes to the liveability of an area, and its appeal as a place to live, work and invest.

Liveability can be the decisive factor in a firm or an individual's choice to invest in an area – and can be a key differentiator in the competitive and globalised **downstream** sector.

2.4.6 Geography – Space Launch-specific

Latitude and the availability of real estate for launch ranges is a factor in where the **upstream** space launch operations locate. **Higher latitudes** are more optimal for the launch of satellites into Low Earth Orbits and a location near the sea and remote from population centres mitigates the risks from abortive launch. While this is only relevant for one small part of the overall space sector, the potential for space launch and spaceports to form the nucleus of a wider cluster, including ground stations and vehicle assembly means that geography may also be a differentiator in the **midstream** and **downstream** segments.

2.5 Regulatory & Legal

A mature national legal and regulatory environment that reduces the risk of innovation and protects Intellectual Property (IP) is a critical enabler of any innovative industry, including space.

- International agreements that enable frictionless trade – in terms of supply of goods and of licensing of Intellectual Property (IP)
- International agreements that allow the reciprocal sharing of technology with other leading space nations, in particular the USA
- Intellectual Property law, ensuring that technologies and products developed are protected and indemnified against piracy
- Cybersecurity infrastructure, and the ability of a nation state to guarantee the security of intellectual property assets

- Rule of law and ability to guarantee security of physical assets (in particular launch operations)
- Business-friendly regulation for higher risk operations in the **upstream** segment - engine testing and space launch.

Like any growth sector, space businesses require a favourable national and local **planning environment**, including local planning guidance that gives developers and businesses confidence. This is particularly relevant for higher risk engine testing and launch operations, which require a higher level of scrutiny and examination.

2.6 Inward Investment & Access to Finance

2.6.1 Inward Investment

Inward Investment is the new investment of capital by firms headquartered outside of an area in the expansion of their existing local operations; their merger and acquisition of local firms – or the formation of new joint ventures with existing local firms.¹⁸

A key focus of Inward Investment activity is the attraction of Foreign Direct Investment (FDI) by firms from overseas. For a cluster to grow, a coherent and high value proposition to potential investors is critical – and may be the differentiator in the highly competitive **downstream** segment.

2.6.2 Access to Finance

Many of the firms in a new and disruptive industry, like space, will be wholly new businesses, often spinning out of research institutions. A high proportion of firms operating in a space cluster may be start-ups – developing products and solutions at proof of concept or validation stage. Due to the high risk and uncertain rewards of new and innovative technologies, private finance (usually in the form of equity, as these firms lack the assets against which to secure loans) is often hard to come by. These firms face very high set up costs, and even higher costs for moving from concept to prototype to full production.

The availability of public funding to provide the capital to individual firms that the market may not is vital for the development of any innovation cluster – and space is no exception. The injection of US public funds in the form of grants to satellite communication firms in order for them finance launches with SpaceX was critical to their later global success.¹⁹

¹⁸ [Department for International Trade Inward Investment Results 2019-20](https://www.sdi.co.uk/); <https://www.sdi.co.uk/>

¹⁹ Export-Import bank of the United States, [Ex-Im Bank Approves \\$105.4 Million Loan to Finance SpaceX Launch](#), August 2013

2.7 Transferable Lessons from Case Studies

Interviews were undertaken with representatives from other spaceports and companies already active within the space industry to learn from the experiences of other locations in developing their local ecosystem and to identify transferrable lessons applicable to the North Highland and Moray region.

Representatives from the following organisations were interviewed and/or provided material to support the development of Sutherland's Space Strategy:

Table 2.4 Organisations engaged with in developing this strategy

Country	Organisation
USA	Kennedy Space Centre, NASA
USA	Space Coast Economic Development Commission
USA	Space Florida (Part of the State of Florida Government)
New Zealand	Rocket Lab
New Zealand	Ministry of Business, Innovation and Employment
Europe	European Space Agency
USA	Phase Four
UK	Orbex
UK	UK Space Applications Catapult
UK	UK Space Agency

2.7.1 Employment

Infrastructure improvements to support the launch facility will stimulate a wide range of jobs beyond the space sector and local area

Mahia in New Zealand is a small rocket launch site developed entirely by the private sector. While the local job numbers associated with the launch facility has provided high skilled employment the much larger boost in job creation arose locally from the upgrade to the local infrastructure required to support a launch pad, such as improved roads and broadband, has acted as an enabler to a wide range of organisations and improved productivity levels of existing companies.

The launch facility has also stimulated employment in the research and development and manufacturing of space vehicles at a national level with space clusters emerging in both Auckland and Christchurch.

The importance of leveraging workers from adjacent sectors

Given the space sector is a niche and rapidly growing sector, future employees are likely to arrive from adjacent sectors. For example, in New Zealand there was a deep pool of local knowledge and skills in carbon composites derived from yacht building for the America's Cup and medical technologies. Both of these are transferrable to the space sector. For the

Highlands and Islands, there is a need to ensure reskilling of the skilled workers available from the nuclear sector, oil and gas, food and drink, renewable energy sector and defence sector who are well represented in the local area.

In addition, while it is recognised that the Highland and Moray region provides a good quality of life, it is still a relatively remote location. While this is mitigated by well-developed air and sea services, the region may struggle to attract a globally mobile space workforce in the mid and downstream segments where co-location with a spaceport is not required. This strengthens the requirement to retrain the local existing highly skilled workforce.

There is a strong need to ensure job opportunities arising within the space industry are widely advertised and there are ample opportunities for interactions between companies from different sectors.

2.7.2 Supporting ecosystem development

Provide support to the development of early-stage companies

The space sector employs highly skilled and highly adaptable workers – many of whom over time may wish to establish their own companies. This process will support the evolution of an ecosystem over time which can be further enhanced by carefully planned business support services. The most successful clusters within the space sector arise from the co-location of regulatory developers, private companies and public sector organisations. To support the ecosystem requires anchors from global space companies and attractors for innovative SMEs.

Regulatory and trade environment

The Highland and Moray region will be competing with a range of countries to attract space companies and to find clients for space launch facilities. The Space Industry Regulations 2021 were introduced to compliment The UK Space Industry Act 2018 to provide a collective detailed regulatory framework for commercial space activities (involving both launch to orbit and sub-orbital spaceflight) and the development of spaceports in the UK. The new regulatory framework details more specifically the requirements for the spaceport operator licensing, public and operator safety requirements and the compliancy with international compliance of the United Kingdom.

As a comparator, New Zealand who were also starting with a history of no launch facilities was able to establish a space agency, pass launch-related legislation and manage an orbital launch attempt over a 2-year period between 2016 and 2017.

In June 2020, the US and UK signed a Technology Safeguards Agreement (TSA) which will allow US companies to participate in space launches from the UK. Several concerns have been raised about this agreement being unreasonably restrictive to members of the UK industry around sourcing of sub-component parts and if it restricts other countries from coming to the UK to use launch facilities.²⁰

²⁰ Claire Housley and Elizabeth Rough, The UK Space Industry, Briefing paper CBP 2021-9202, 22nd April 2021, House of Commons Library.

2.7.3 Incentives

Across the world, the public sector frequently uses incentives to encourage companies to locate, remain and expand within their borders. For example, The Florida Space Coast offers streamlined permitting, low operating costs, aggressive and targeted incentives and access to a wide and deep space related talent pool.

Academic evidence has shown that job creation tax credits and job training grants are more effective at supporting local economies than incentives such as investment tax credits, research and development tax credits and property tax reductions.²¹

Given the rapid growth of the space sector there are benefits for locations that can provide advice in how to scale up operation. For example, Orbex are looking to grow their existing workforce from 90 persons to around 400 locally within the next 5 years.

Phase Four are an in-space propulsion company that spun out of the University of Michigan. They specialise in cost effective electric propulsion systems and have been learning from locally based local automotive manufacturers about how to increase their manufacturing outputs. Phase Four are adopting Kanban techniques (a scheduling system for lean manufacturing adapted from Toyota) to allow them to build up to 50 propulsion systems per month.

Requirements for co-location of companies and the launch facility

The need for different types of companies to be co-located next to the launch pad is still unclear. While there will be a requirement for clean facilities to support last minute checks on launch vehicles and payloads, many of the other requirements will be delivered to site. This means that there is a requirement for excellent local logistics providers but other companies may not need physical proximity to the launch pad itself. Instead, a supportive business environment, access to highly skilled individuals and a well-established ecosystem will be of greater importance.

The New Zealand government has acknowledged that the launch facility has benefitted the initial seeding of the space sector within the country but going forward intend to have a stronger push for supporting companies in the downstream part of the sector where they see opportunities for greater job creation and economic growth.

Linking research and development with commercial companies to create new opportunities

With the growth of propulsion technology, it is increasingly likely that commercial constellations will be launched on larger rockets with small rockets assisting with replenishment. However, there will inevitably be new opportunities for lighter payloads that will need launch facilities. The close interaction between universities, wider research and development and commercial companies needs to be supported to ensure early adoption of new technologies.

²¹ Bruce D. McDonald III, J.W. Decker, Brad A. M. Johnson, [You don't always get what you want: the effect of financial incentives on state fiscal health](#), February 2020

Growing and Diversifying the Workforce

Given the space sector's requirements for high level skills and the current struggle to attract women into the sector there are a wide range of approaches adopted internationally and locally to help make the space sector a welcoming, inclusive and attractive sector to work within.

Educational programmes

Both NASA and ESA have well developed education programmes engaging with schools, colleges and universities, from early years through to post-graduate level. They are increasingly providing online content which is incorporated into local curriculums. This is important for increasing awareness of the opportunities that the space sector offers for improving everyday lives through to providing opportunities for employers and the future workforce to engage with each other.

Early years engagement

Critical for diversifying the space workforce is early years engagement so that children and in particular young girls start to picture themselves working in the industry and are not discouraged from studying the subjects that will make that a possibility in the future. In line with this is the need to train up teachers, who themselves may be lacking STEM skills.

Retaining existing highly skilled workers in the region

Retraining of highly skilled workers is essential for the space sector and is critical to retain the highly skilled workforce being released from Dounreay and the Ministry of Defence activities in the North Highland and Moray region.

Effective supply chain management

The space industry is already well recognised for providing training and work placement opportunities for new entrants into the sector. To further stimulate the development of the space ecosystem requires effective supply chain management as well as individual companies providing training opportunities. For example, NASA mandates through a penal contracting system that its primary contractors use SMEs and importantly, SMEs who are owned by under-represented groups, within their subsequent supply chain to provide services for NASA. This encourages more diverse entrants into the space sector. Similarly, effective supply chain management can boost the provision of apprenticeships and training opportunities if these are mandated within supply chain contracts. A new level 4 space engineering technician apprenticeship has been set up by the University of Leicester, UK Space Agency and Airbus and is expected to have more than 50 apprentices begin their training by the end of 2021. A level 6 (degree level) apprenticeship standard is currently in development.

Chapter 3 - North Highland and Moray 2021: The existing ecosystem

Summary

- In the North Highland region, a number of firms are already engaged in high value manufacturing – including optics, imagery and advanced materials, supplying the Dounreay nuclear research facility, the oil and gas sector. None currently supply the space sector.
- In the Moray Region, the expanding Orbex launch vehicle development and manufacturing facility at Forres forms a growing nucleus for the space sector. There is the potential for a clustering of innovative businesses at the Forres Enterprise Park, complementing the existing aviation and defence sector supply chain and talent pool serving RAF Lossiemouth. The food and drink sector in Moray also sustains a highly skilled workforce and advanced engineering supply chain.
- There are also a number of local programmes that support the development of the skills required by space. The Moray Aerospace, Advanced Technology and Innovation Campus (MAATIC) and co-located Manufacturing Innovation Centre for Moray (MICM) at Lossiemouth, due to start on site in 2022 will create a supply of engineering talent and incubation space for innovative engineering businesses, serving space and other sectors such as defence.
- While a large number of premises in the North Highlands region are not connected to the UK gas network, the region has plentiful and expanding supply of renewable energy (wind and tidal) and benefits from the existing and planned onshoring of HV power cables.
- While digital connectivity is limited in rural areas of the North Highlands region, business facilities are available in North Highland and Moray with gigabit / full fibre connections. The onshoring of international data cables offers the potential for hyper-connectivity businesses in the medium to long term.
- The region is ranked as one of the most deprived in Scotland for accessibility by land (road and rail), although connectivity within the Moray sub region is good. Air and sea links to the North Highlands region are however well-developed, a legacy of the oil and gas industry.
- The north coast of Scotland provides geographic advantages for small rocket launch facilities. While there is the potential for pressure on the local housing supply, community and educational services in the North Highlands region are of a high standard and able to accommodate growth. The liveability of the region – and outstanding natural environment are key strengths in attracting inward investment.

3.1 The North Highland and Moray Space Cluster

The focus of this strategy is the **North Highlands**, focused around **Space Hub Sutherland** (centred around the Dounreay Travel to Work Area) and **Moray**, focused around the **Orbex testing, manufacturing, and mission control centre at Forres** (centred around the Elgin Travel to Work Area).

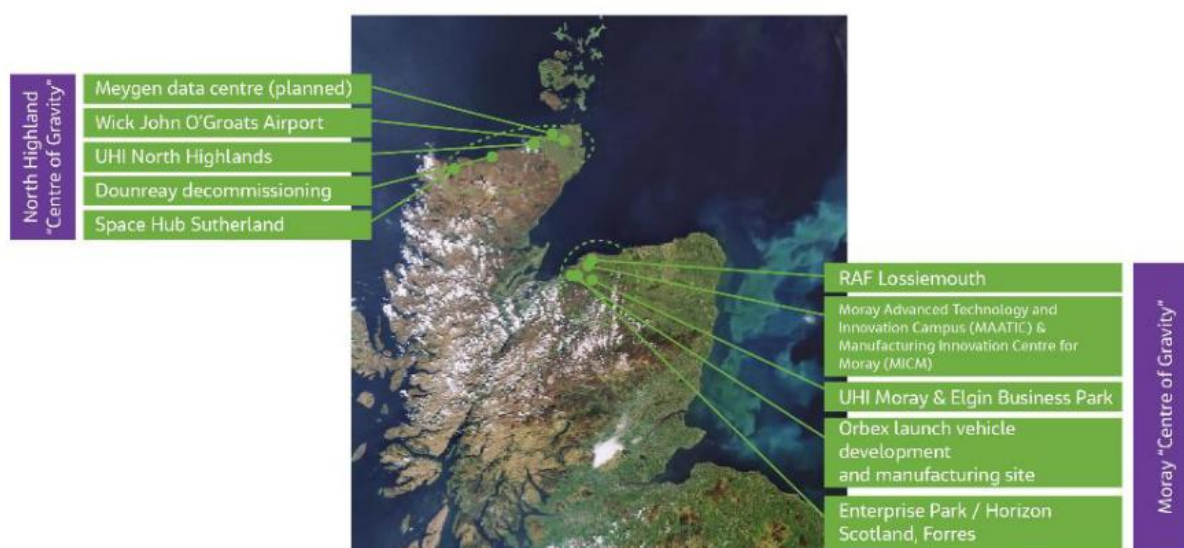
These two 'zones' or 'centres of gravity' form the potential nuclei for the **North Highland and Moray Space Cluster**.

In support of this strategy a comprehensive local ecosystem audit was undertaken by Caithness Chamber of Commerce, supported by Moray Chamber of Commerce and Highlands and Islands Enterprise (HIE). The detailed evidence base prepared is provided at **Appendix 1** and summarised in this chapter.

Figure 3.1 below sets out the regional spatial context, and existing or short-term planned space sector activity and key existing local assets relevant to developing a space sector cluster in the medium to long term.

Figure 3.1 A North Highland and Moray Space Cluster

Ground zero: A North Highland & Moray Space Cluster



3.2 Existing Supply Chain

The supply chain audit has shown that in the **North Highlands** sub-region, a number of firms are already engaged in high value manufacturing – including optics, imagery and advanced materials, supplying the Dounreay nuclear research facility, the oil and gas sector. None currently supply the space sector. Business services, construction and general support services are well represented.

In the **Moray** sub-region, the expanding Orbex launch vehicle development and manufacturing facility at Forres forms a growing nucleus for the space sector – suggested by the location of a UK Launch Services Ltd (UKLSL) regional office in the Horizon Scotland hub.

²²There is the potential for a general clustering of innovative businesses at the Forres Enterprise Park, served by the 'Horizon Scotland' growth hub, complementing the existing aviation and defence sector supply chain and talent pool serving RAF Lossiemouth. The food and drink sector in Moray also utilises a highly skilled workforce and advanced engineering supply chain.

3.3 Existing Skills and Talent

Across the region, the Defence and Energy sectors are specifically contributing highly skilled technical engineers with continued investments and project opportunities.

The Moray Aerospace, Advanced Technology and Innovation Campus (MAATIC) aims to create hundreds of new student places and provide the skills needed for working in the aviation sector. It is one of the key projects of the £100m Moray Growth Deal. The MAATIC project concept and design phase is due to start in March 2021 and will take the project to the next step towards the construction phase due to start in April 2022. Discussions between HIE, UHI, Moray College and private partners such as Boeing and Orbex on the services to be provided at the centre have a growing focus on space.

Additionally, both the North Highland and Moray Colleges are providing industry specific training and assessment centers to enable the students to train and practice skills required for work within Oil and Gas industry.

North Highland and Moray Colleges are also participants within the Developing the Young Workforce Programme managed by the Scottish Government which aims to better prepare young people for the world of work.

3.4 Existing Infrastructure

3.4.1 Energy

While much of the North Highlands (28%) is not on the UK gas network, energy for heat and light in urban centres and business parks is affordable and stable. As summarised in figure

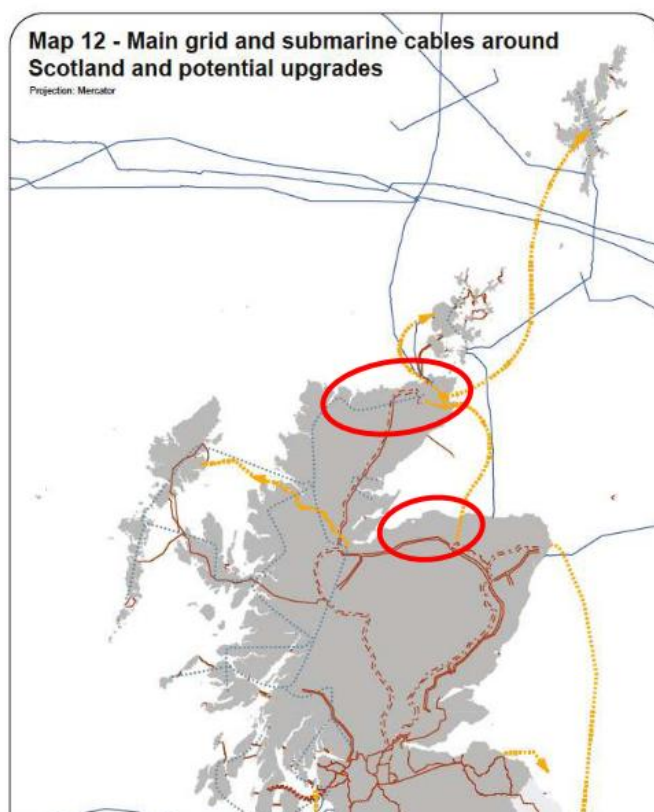


Figure 3.2 Strategic Power and Digital Infrastructure (Including onshoring of sub-sea Power and Data Cables) in the North Highland and Moray Region²²

²² [Marine Scotland Information](#), accessed September 2021

3.2, the region hosts existing and planned landing points of offshore power cables. With the expected coming onstream of offshore and onshore wind farms in the region and plans for the manufacture of hydrogen using renewable sources, and the opportunities of tidal power in the Pentland Firth, the region can be expected to offer a plentiful and expanding supply of renewable energy (wind and tidal) in the medium to long term.

3.4.2 Digital

In the Moray region more than 40,000 homes and businesses have access to the fibre network, making it one of the best-connected local authority areas in the Highlands and Islands region. However, there are still some areas of North Highlands which lack access to superfast broadband or 4G mobile connectivity. Hopefully the government programme R100 will address this.

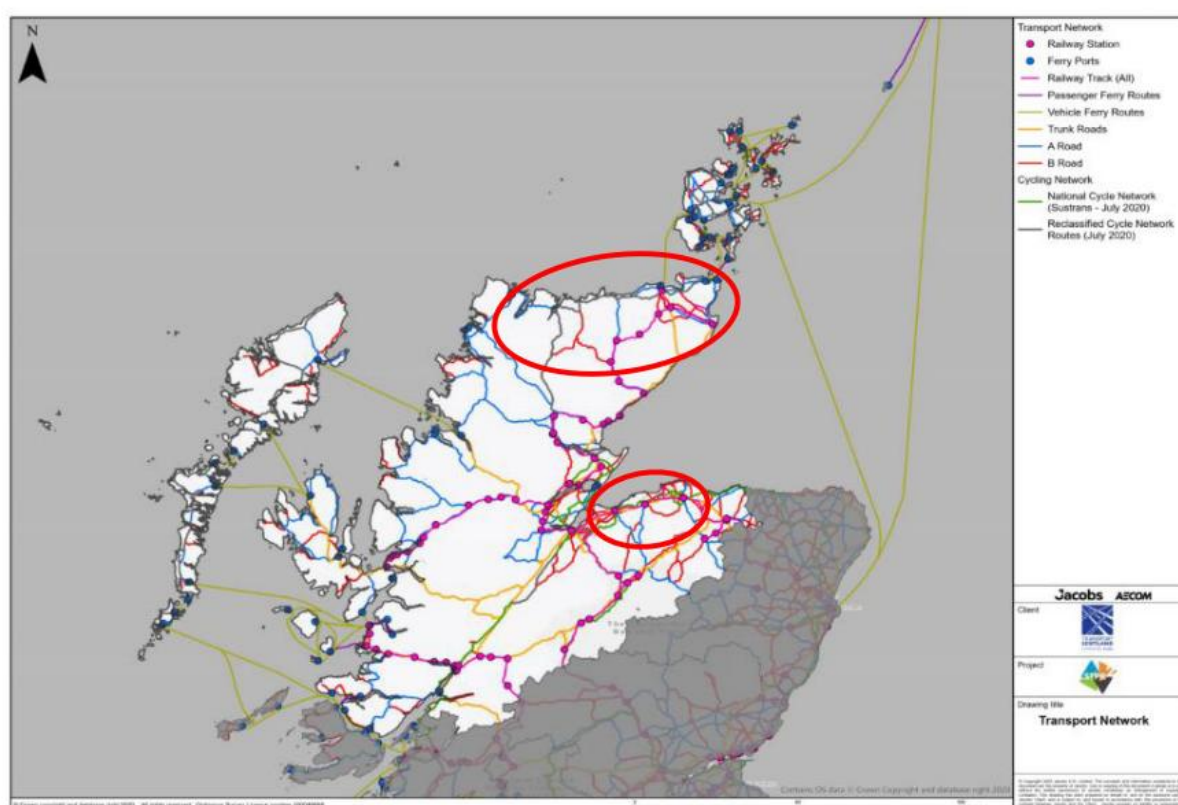
Business facilities are available in North Highland and Moray with gigabit / full fibre connections – in particular Enterprise Scotland Business Park and other serviced sites in the region.

The onshoring of international data cables in the region, in particular the Farice international cable near to Castletown in the inner sound of the Pentland Firth, and potential to connect to the UK digital backbone network also offers the potential for hyper-connectivity businesses in the medium to long term.

3.4.3 Transport

Road and rail links into the North Highland sub region have limited capacity, with commuting from the economic centres in the central belt not currently feasible. Transport links within the Moray region are more efficient, although rapid access to the growing space cluster in Glasgow and other centres in England is challenging due to distance.

Figure 3.3 Transport Links in North Highland and Moray²³



3.4.4 Real Estate and Facilities

Within the North Highland and Moray there are multiple business parks and commercial facilities suitable to host SMEs and startups. Importantly – given the key role for the state support of early-stage companies, Highlands and Islands Enterprise (HIE) the regional development agency, own and operate Enterprise Park, Forres and many sites in the H&I region. Highland and Moray councils also provide advice on commercial property available to buy or lease in the surrounding areas alongside locations suitable for specific industrial use.

Highlands and Islands Enterprise (HIE), working with Highland and Moray Councils, provides support services linking businesses in the region or wishing to locate in the region to premises and business support services, with a team of account managers.

3.4.5 Liveability

The liveability of the North Highland and Moray area is a key factor in attracting talent and investment to the area.

The North Highland and Moray Space Cluster is fortunate enough to be located within some of Scotland's most ecologically diverse terrain, with a range of terrestrial, freshwater and marine habitats. This incredible wealth of ecosystems contributes to a strong flow of natural

²³ [Initial Appraisal: Case for Change Highlands and Islands Region](#)

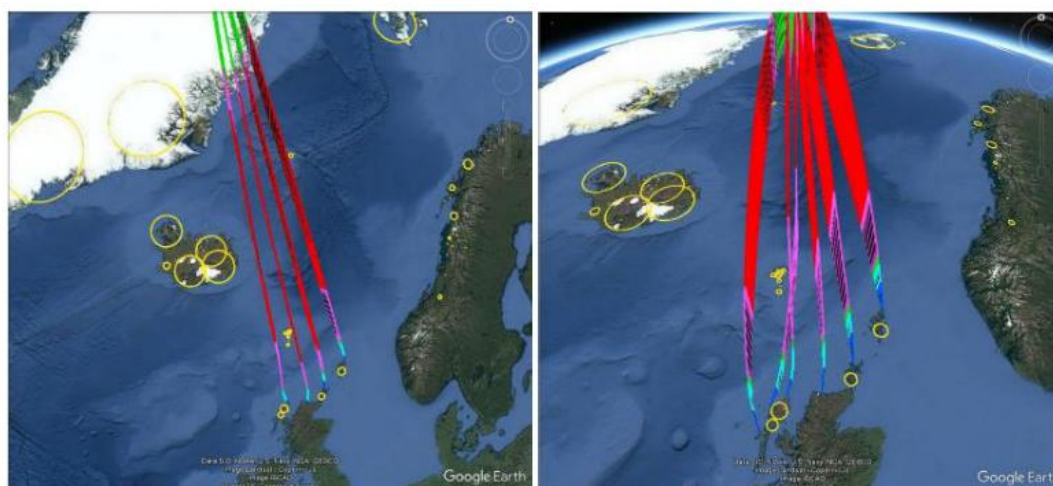
capital in the region, providing direct benefits to those living and working in the surrounding communities. With the landscape giving way to vast recreational activities and giving a passive boost to an individual's wellbeing, time spent within green and blue space in North Highland and Moray makes the region an incredible place to live and work.

Education and healthcare facilities in the North Highlands sub-region are under-capacity and achieving good outcomes for students. However, changes in work patterns with more home working and increased demand for holiday let properties in the UK has placed pressure on the local housing market impacting affordability across both sub-regions. Significant housing developments have been identified in the Moray Local Plan, and current pressure on the housing market may be expected to ease in the medium term as these sites are developed out.

3.4.3 Geography – Space Launch-specific²⁴

North Highland provides launch access to the Polar and Sun-Synchronous orbits due to the trajectories that can be achieved from the sub-region. Each of these orbits are considered a Low Earth Orbit (LEO) and are favoured for earth observation as the orbit passes over the same location at the same local time.

Figure 3.4 Launch trajectories achievable from Northern Scotland



Source: *Sceptre Final Report*, Elecnor Deimos Group, 2017

3.5 Readiness of Local Economy for the Opportunities of space

In support of this strategy, an online survey was addressed to businesses in the Caithness and Moray Chamber areas to understand the reach of their own supply networks, growth plans and awareness of the opportunities of space sector.

The majority of respondents (19 of the 21 responses) supplied one or more of the parallel industries to the space sector – such as renewable energy, defence, nuclear or oil and gas, although none were currently supplying the space sector

²⁴ [Sceptre Final Report 2017](#)

The responses demonstrated the self-sufficiency within the North Highland and Moray businesses with the majority of respondents claiming that on average over 60% of their supply chain is local.

The manufacturing, engineering and designs firms identified that key barriers to their future growth plans were 'Regulation/Red Tape', 'Macro Economic Disruption' and 'Quality of digital infrastructure'.

In terms of space awareness, all respondents expressed interest at the opportunities proposed by Scotland's Space sector. In terms of their SME entering the space market, most respondents answered that seeking networking opportunities would be the best strategy to learn how they can help support the emerging sector. Lastly, the barriers most likely faced by the companies looking to enter the market are, 'Regulation/Red Tape', 'Uncertainty of the market', and 'Supply of Talent and Skills'.

Chapter 4 - Highland & Moray beyond 2021: Towards a Space Cluster

Summary

Strengths

- Prestige – First to launch in the UK?
- Potential cluster nuclei – Forres & Space Hub Sutherland
- Geography – appropriate for polar launch
- Quality of local services, education and environment
- Existing aerospace, advanced engineering supply chain
- Existing non-specialist supply chain
- Local leadership and partnership, planning policy and site readiness

Weaknesses

- Specialist space support services – launch and range control, finance and business services (import / export, health & safety)
- Geography – remote from other clusters, barrier to attracting talent?
- Space not a Moray Growth Deal priority
- No specific comparative advantage for downstream growth
- Local digital connectivity (North Highland)
- Local road transport infrastructure (North Highland)

Opportunities

- Synergies:
 - Existing skills base: Oil and Gas, Nuclear
 - Offshore renewables
 - Food and drink (Moray)
 - Life sciences
 - Defence and aerospace – RAF Lossiemouth, MATIC

- Mid and downstream – offshore renewable / HVDC & data cable landings enable green ultra-high energy need and hyper-connected businesses
- Tourism & visitor economy – North Coast 500
- Synergies with Hydrogen economy, Greenports (Cromarty Firth), wider Scottish Space offer

Threats

- Demographic trends - declining population
- Competition from other small launch sites
- Competition from other UK & Europe space clusters for midstream and downstream growth
- Regulation and policy – terms of TSA, UK and Scottish Government priorities
- Limitations of small launch market and Total Addressable Market
- Bulk of constellation satellite launch is likely captive to heavy launch operators (e.g., Space X) – gap in market for small launch

4.1 Gap analysis

4.1.1 Supply of Services and Skills for Space

The *current capability* of the North Highland and Moray area to meet the needs of the upstream and midstream sector, as set out Chapter two, is provided in table 4.1, and the downstream sector in table 4.2. The two sub-regions – **North Highland** (including Thurso, Dounreay and the launch site on the Moine Peninsula) and **Moray** (comprising the Orbex mission control and launch vehicle facility at Forres, and planned engine testing facility).

Within the table cells coloured red indicates no current provision. Amber indicates that there is some current provision in the local economy area – in terms of at least one existing specialist supplier or three existing suppliers that could potentially convert to supply these services to the space sector. Green indicates existing firms able to supply these specialist services. A qualitative assessment of the potential for North Highland and Moray area to develop a local capability in each line of supply has been conducted based on existing provision, and underlying infrastructure and local skills supply.

An indication of the potential economic value of each line of supply has been derived from the estimated GVA per job (using a proxy sector) compared to the UK / Scotland average – and where the greatest value may be secured for the local economy.

4.1.2 Infrastructure for Space

Table 4.3 provides an overview of the strategic infrastructure required for developing a space cluster – and the current provision in North Highland and Moray, as set out in Chapter two.

4.1.3 Summary

This gap analysis indicates that the North Highland and Moray cluster has current advantages in terms of launch vehicle development and launch operations – with potential for development of midstream applications (ground stations and data centres) in the mid to long run, due to the strategic advantages of the onshoring of HV power lines and international data cables.

Figure 4.1 Upstream and Midstream Segment – Supply and Skills Gap Analysis

Segment	Sub Segment	Supply Need	Existing Supply Chain (SMEs and Skills)					Potential for clustering in North Highlands and Moray	Economic Impact (GVA per job, Multiplier, Effects)
			North Highland		Moray		UK		
			Suppliers	Skills	Suppliers	Skills	Suppliers		
Upstream	Space Systems Manufacturing	R&D – Aerospace						High	High
		R&D – All Sectors						High	High
		Advanced Engineering – Aerospace						High	High
		Advanced Engineering – All Sectors						High	High
		Advanced Manufacturing – Aerospace						High	High
		Advanced Manufacturing – All Sectors						Medium	High
	Launch Operations	Propellant Manufacture and Processing						Medium	Medium
		Launch and Range Control						Medium	High
		Airport Services						High	High
		Specialist Logistics						Medium	Medium
		Payload Integration						High	High
		Business Services						High	Medium
		Tourism and Hospitality						High	Medium
		Estate Management						High	Medium
Upstream / Midstream	Ground Systems	Ground Stations						Medium	High
		Mission Control						High	High
	Satellite Operations	Asset Management (SSA)						Medium	High
		Data Centres						Medium	High

Figure 4.2 Downstream Segment – Supply and Skills Gap Analysis

Segment	Sub Segment	Existing Supply Chain (SMEs and Skills)					Potential for clustering in North Highlands and Moray	Economic Impact (GVA per job, Multiplier, Effects)
		North Highland		Moray		UK		
		Suppliers	Skills	Suppliers	Skills	Suppliers		
Downstream	Satellite Data Intermediary Services						Too early to say	High
	Satellite Data Processing						Too early to say	High
	Satellite Data Applications: R&D						Too early to say	High
	Satellite Data Applications: Manufacturing						Too early to say	High
	Telecoms & Media – Any						Too early to say	High
	Earth Observation (EO) – Any						Too early to say	High
	Satellite Navigation – Any						Too early to say	High

Figure 4.3 Space Sector (all segments) - Infrastructure Gap Analysis

Category	Criteria	North Highland		Moray		North Highland & Moray
		Raiting	Overall Raiting	Raiting	Overall Raiting	Overall Raiting
Energy	How constrained is the current energy network (HV and gas) in its ability to meet the needs of new energy-hungry businesses?	Partially	AMBER	Partially	GREEN	AMBER
	Is there existing or potential to establish energy infrastructure to meet the needs of ultra-high energy-hungry businesses in the area?	Yes		Yes		
Digital	What is the current availability of superfast, ultrafast and full fibre in the area compared to the national (Scotland) average?	Below Average	AMBER	Average	AMBER	AMBER
	How does the Fixed Broadband compare to other proposed vertical launch site council areas (eg Shetland, Comhairle nan Eilean Siar) in Scotland?	Above Average		Above Average		
	Is there good existing mobile data coverage in the area from at least two suppliers (2021 OFCOM data)?	Partially		Yes		
	Does the region have any strategic advantages for the establishment of strategic digital Infrastructure – e.g. proximity to national data backbones or onshoring of international data cables?	Yes		Yes		
Transport	How does the capacity and performance of the highway network serving the area compare to the national (Scotland) average?	Below Average	RED	Average	AMBER	AMBER
	How do the frequency and affordability of the public transport (rail and bus) services serving the area compare to the national (Scotland) average?	Below Average		Average		
	Are other modes of travel - air and sea - available to move people and goods in and out the area?	Yes		Yes		
Real Estate and facilities	Is there an existing supply of flexible and serviced office space, appropriate to the needs of innovative, high-growth firms in the area?	Partially	AMBER	Yes	GREEN	GREEN
	Are (publicly-funded) services available to support inward investment, and to link innovative businesses with places to locate in the area?	Yes		Yes		
Liveability	Local housing supply – how affordable are local house prices compared to national (Scotland) average?	Average	AMBER	Average	AMBER	AMBER
	Local schools and colleges – how do local schools and FE / HE compare to national (Scotland) average for quality of provision?	Average		Above Average		
	Local health and social services – how does the availability of primary and secondary health care and other social services compare to the national / UK average	Average		Above Average		
	Shopping and recreation; ease of access to a variety of retail facilities, cinemas, theatres, sporting facilities and other recreation?	Below Average		Average		
	How does the quality of local amenity (green space) and access to natural environment compare to wider UK?	Good		Good		
Geography – space launch and space data specific	Does the region have an appropriate latitude for LEO launch?	Yes	GREEN	N/A	N/A	GREEN
	Are local residents and businesses positive towards the opportunities of space launch?	Yes		N/A		
	Is land available for locally for safe launch operations (safe distance from built up areas, proximity to the sea)	Yes		N/A		

4.2 Synergies: UK and European network of Space Ports & Centres of Excellence

At time of writing (Summer 2021), Space Hub Sutherland is one of a number of proposed spaceports across the UK – three offering exclusively vertical launch (all in Scotland) and four offering horizontal launch (two in Scotland, one in England and one in Wales).

As a statement of national ambition and reflecting the UK's advantageous northerly and island location on the edge of European landmass, the UK hosts more potential spaceports than any other European nation (seven) – a figure comparable to the entire EU (eight). None of these spaceports are yet operational, and each is at a different stage of maturity.

While estimates for the Total Addressable Market (TAM) for small launch varies, it is likely that the combined offer of these multiple sites will stimulate considerable commercial interest in the upstream market segment – where the North Highland and Moray space cluster has particular advantages. As these space ports are commercial propositions, ultimately the market will decide which progress to launch and long-term viability.

Figure 4.4 Spaceport Landscape in Europe



Source: Space Tec Partners

The national network of **Satellite Applications Centres of Excellence**²⁵, coordinated by the Satellite Applications Catapult and supported by the UK Space Agency, are intended to enable innovative space businesses – across all segments – to Connect Locally, Develop Nationally, Transform Globally.

The network comprises three established Centres of Excellence in England – The North East²⁶, South Coast²⁷ and South West²⁸ – centred around the Main Base of the Satellite Applications Catapult at Harwell, Oxfordshire UK²⁹. The Satellite Applications Catapult and UK Space Agency are also supporting a number of other areas within the UK to develop their space clusters or hubs. These Centres of Excellence offer the opportunity for synergies, particularly in terms of developing **midstream** and **downstream** applications.

The Satellite Applications Catapult together with the UKSA have developed [the Space Enterprise Community](#) (SEC) platform – a free-to-use, online platform, and the virtual front door to the UK space sector. The platform will host live feeds, events, opportunities, groups, and forums, providing many ways for organisations and individuals within the space community to interact and identify opportunities for collaboration. Proactive engagement with the SEC will be an opportunity for the North Highland and Moray Space Cluster to develop a strong and distinctive presence in the UK space sector, promoting collaboration and stimulating inward investment as the cluster evolves.

A particular development initiative that may provide a template for other local space clusters is the **Disruptive Innovation for Space Capability (DISC)** facility³⁰ at Harwell. This hub – providing specialist facilities for space sector SMEs - will offer useful lessons for development of similar facilities as the UK space industry evolves.

²⁵ Catapult, [Centres of Excellence](#), accessed September 2021

²⁶ Catapult, [North East Centre of Excellence](#), accessed September 2021

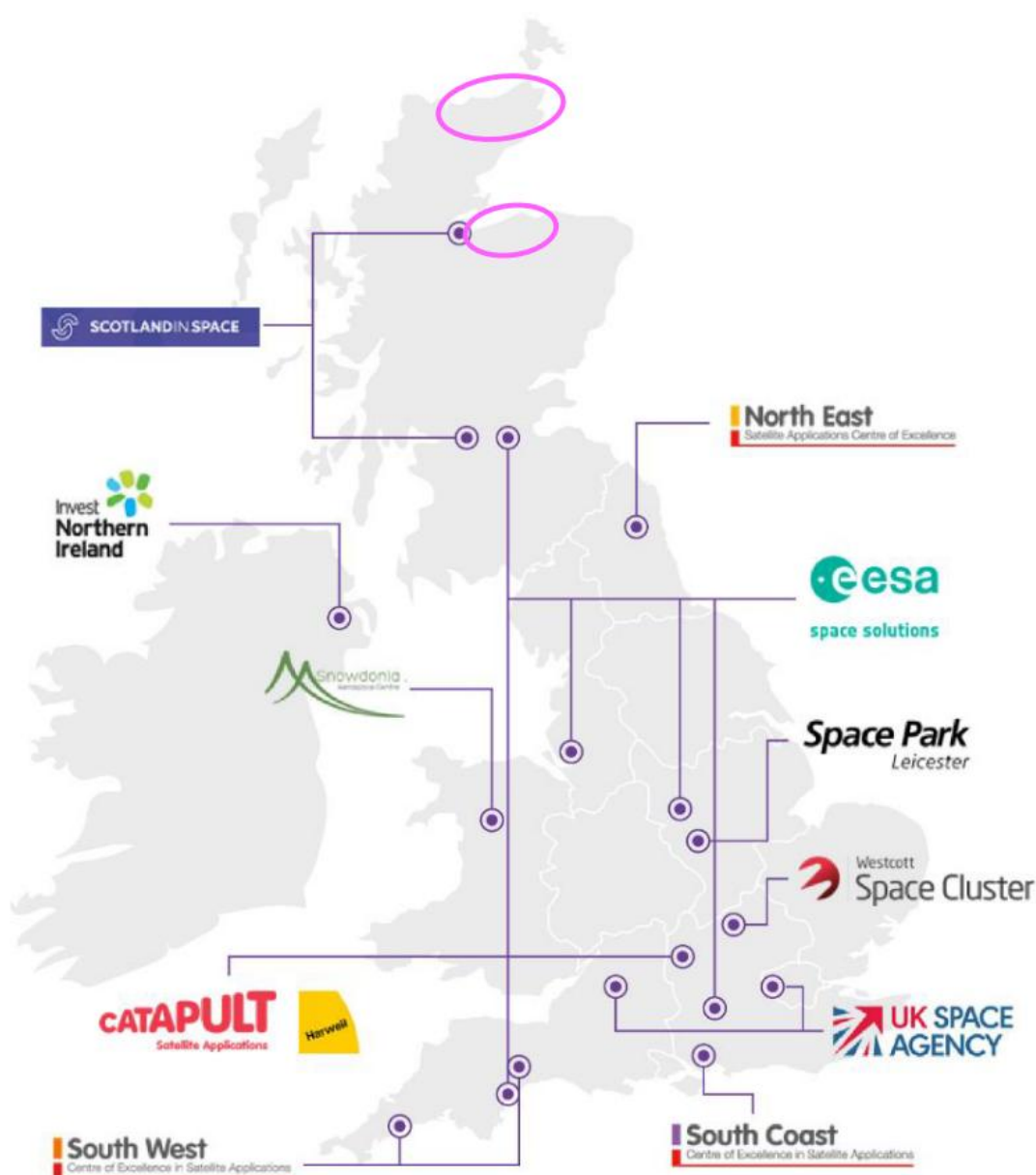
²⁷ Catapult, [South Coast Centre of Excellence](#), accessed September 2021

²⁸ Catapult, [South West Centre of Excellence](#), accessed September 2021

²⁹ [Harwell Space Cluster](#), accessed September 2021

³⁰ Catapult, [Disruptive Innovation for Space](#), accessed September 2021

Figure 4.5 UK Space Network³¹



Similar benefits may also be realised by engaging with the European Space Agency Space Solutions Network³². While the UK may not be able to access the European structural funds, the ESA network provides access to investors and collaborators across Europe – synergies and contacts that may be decisive in attracting firms to a nascent space cluster.

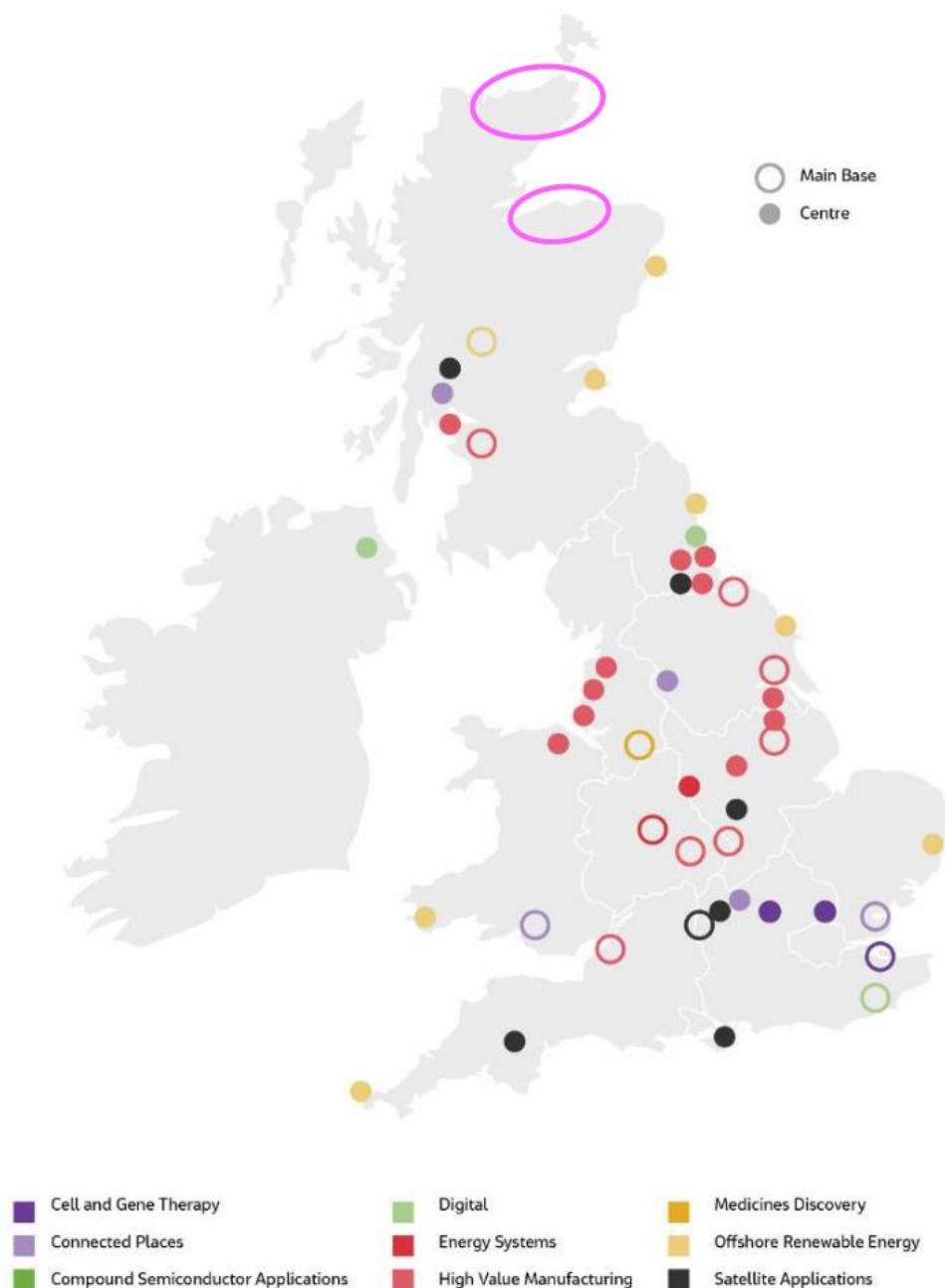
As the space sector overlaps with other sectors – with many firms in the downstream segment offering services horizontally – and developing applications that can be used across the telecommunications, advanced manufacturing and transport sectors and space - there

³¹ Catapult, [Accelerating business growth, stimulating markets](#), accessed September 2021

³² European Space Agency, [ESA Space Solutions](#), accessed September 2021

are also synergies with the wider network of Catapults across the UK. In particular, this includes **Digital**³³, **High Value Manufacturing**³⁴ and **Connected Places**³⁵ Catapults. These are shown in figure 4.6.

Figure 4.6 UK Catapult Network³⁶



³³ [Digital Catapult](#)

³⁴ Catapult, [Manufacturing a Green Recovery](#), accessed September 2021

³⁵ Catapult, [Connected Places Catapult is the UK's innovation accelerator for cities, transport, and places](#), accessed September 2021

³⁶ Catapult, [Accelerating business growth, stimulating markets](#), accessed September 2021

4.3 Synergies: Local Growth Priorities

The current HIE Economic Plan 2019-2022³⁷ prioritises the following sectors:

- Energy
- Tourism
- Food & Drink
- Life Sciences

This is complimented by a programme of investment identified under the Moray Growth Deal³⁸ which prioritises development of high value, innovative industries (in particular aviation and life sciences), and the **Moray 2026 Plan for the Future**³⁹ which identifies **a growing, diverse and sustainable economy** as is the top priority at the heart of the future success of Moray.

Key synergies with the needs of space are summarised in the table below.

Table 4.1 Local economic growth priorities - Synergies with development of a local space cluster

Sector	Synergies
Energy	<ul style="list-style-type: none">▪ Shared supply chain. With Hydrogen economy: gases for launch vehicles, health and safety. With offshore renewables: Shared supply of STEM skills▪ Shared constraints and opportunities, and need for transport (road transport) and energy (distribution) infrastructure improvements to fulfil potential
Tourism	<ul style="list-style-type: none">▪ Space launch and space “brand” as a catalyst for tourism, building on the “North Coast 500” brand▪ Shared constraint, and need for transport (road transport) infrastructure improvements to fulfil potential
Food & Drink	<ul style="list-style-type: none">▪ Shared supply chain and talent – precision engineering, clean facilities needed by both food and drink and Space sector▪ Shared constraint, and need for transport (road transport to efficiently move goods and people into the area and to national and international markets) and energy (distribution) infrastructure improvements to fulfil potential
Life Sciences	<ul style="list-style-type: none">▪ Shared supply chain and talent – precision engineering, STEM skills, clean facilities

³⁷ [Highlands and Islands Enterprise, 2019-2022 Strategy](#)

³⁸ [UK Government confirms £32.5 million investment in Moray Growth Deal](#), August 2020

³⁹ Moray Community Planning Partnership, [Moray 2026 – a plan for the future](#), 2016

Sector	Synergies
	<ul style="list-style-type: none"> ▪ Similar plant and facilities needs – hub space can be dual purposed for life sciences, health care (telemedicine) and satellite applications ▪ Similar finance and funding needs for start-up and scale up innovative businesses. Space, green energy, food tech and have potential to present a coherent and diverse portfolio, focussed in one area, to the VC market ▪ Shared constraints and need for transport (road transport) improvements to fulfil potential

Given the imperative to provide world-class digital connectivity, there is also a key synergy with the community based [Connecting Scotland programme](#) and [the Digital Scotland Superfast broadband](#) programme.

4.4 Synergies: Existing Supply Chain & Talent

North Highland and Moray has a mature supply and skills (talent) supply in the following sectors.

- Oil & gas
- Nuclear
- Defence

Table 4.2 Local economy – Synergies with development of a local space cluster

Sector	Synergies
Oil & Gas	<ul style="list-style-type: none"> ▪ Shared supply chain – specialist logistics, project management, facilities and asset management, health and safety, professional services, manufacturing, component supply (pipework, high purity clean room manufactured components) ▪ Shared talent base – remote asset management, earth observation
Nuclear	<ul style="list-style-type: none"> ▪ Shared supply chain – specialist logistics, project management, facilities and asset management, health and safety, professional services ▪ Shared talent base – STEM and physics/mathematics skills and expertise required for both nuclear and space applications
Defence	<ul style="list-style-type: none"> ▪ Shared supply chain – specialist logistics, facilities management, health and safety, professional services ▪ Specific synergies with upstream and midstream sector - space launch and launch vehicle development, avionics and propulsion

Sector	Synergies
	<p>(engines), project management, air traffic control, specialist rocketry and ballistic skills and technical expertise</p> <ul style="list-style-type: none"> ▪ Shared talent base – Engineering, aviation, air traffic, near earth observation and rocketry systems skills and expertise

4.5 SWOT Analysis

A summary of the strengths, weaknesses, opportunities and threats (SWOT) for developing a North Highland and Moray Space Cluster is provided below.

Table 3. SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Prestige – First to launch into LEO in UK? ▪ Potential cluster nuclei – Forres and Space Hub Sutherland ▪ Geography – ideal for polar launch ▪ Quality of local services, education and environment ▪ Existing aerospace, advanced engineering supply chain ▪ Existing non-specialist supply chain ▪ Local leadership and partnership ▪ Planning Policy and site readiness 	<ul style="list-style-type: none"> ▪ Specialist space launch services – launch and range control ▪ Geography – remote from other clusters, barrier to attracting talent? ▪ Space not a Moray Growth Deal priority ▪ No specific comparative advantage for downstream growth ▪ Local digital connectivity (North Highlands) ▪ Local road transport infrastructure (North Highlands)
Opportunities	Threats
<ul style="list-style-type: none"> ▪ Synergies: <ul style="list-style-type: none"> • Existing skills base: Oil and Gas, Nuclear • Offshore renewables • Food and drink (Moray) • Life sciences • Defence and aerospace – RAF Lossiemouth, MATIC ▪ Mid and downstream – offshore renewable / HVDC & data cable landings enable green ultra-high energy need and hyper-connected businesses ▪ Tourism & visitor economy – North Coast 500 ▪ Synergies with Hydrogen economy, Greenports (Cromarty Firth), wider Scottish Space offer 	<ul style="list-style-type: none"> ▪ Demographic trends - declining population ▪ Competition from other small launch sites ▪ Competition from other UK & Europe space clusters for midstream and downstream growth ▪ Regulation and policy – terms of TSA, UK and Scot Gov priorities? ▪ Limitations of small launch market and Total Addressable Market ▪ Bulk of constellation satellite launch is likely captive to heavy launch operators (e.g. Space X) – gap in market for small launch

Chapter 5 - Space: The 'size of the prize' for North Highland and Moray

5.1 Introduction

Space Hub Sutherland will play a critical role in bringing income and employment to the North Highland and Moray region. It will help to retain highly skilled individuals in the North Highlands and offer opportunities to young people to help stem the flow of depopulation. It is vital to sustain the emerging Moray space cluster as without a space port it is highly likely that existing launch providers will relocate.

Together with the rapid development of the landmark Orbex manufacturing facility at Forres and investments in defence, aerospace and life sciences in Moray, given form and shape by the space cluster development strategy, Space Hub Sutherland, as an iconic local asset, has the potential to catalyse private investment and business growth supporting the UK and Scottish governments ambition for seizing the global opportunity of the space sector.

There are already around 7,700 people working in the Space Sector across Scotland.⁴⁰ This chapter estimates the number of additional jobs and value created from Space Hub Sutherland and potential growth in the wider space sector within the Highlands and Islands region. Investments in the space port will lead to increases in employment beyond those who may be directly employed either building or operating the facility. A global standard approach to estimate the amount of total employment and value that is created through a particular investment is a statistical technique using multipliers. Two types of multipliers are typically calculated: Type 1 calculates the amount of employment created in a supply chain to a particular industry (known as indirect effects) and Type 2 calculates the amount of employment created due to the uplift in spending overall (known as induced effects). The figures calculated are in addition to the direct employment from the construction and operation of the Space Hub Sutherland.

Furthermore, the payloads launched into space by rockets at Space Hub Sutherland will unlock further employment and value in the midstream and downstream parts of the space sector. We have for the first time, made a conservative estimate to the numbers of jobs and value associated with this.

5.2 Assumptions

For the sake of continuity, the Jacobs' economic impact model adopts the same ratios of cost per launch and investment to calculate Gross Value Added and Full Time Equivalent (FTE) jobs as applied within the evidence base for the planning application for the space port.⁴¹ This covers impacts associated with the following activities:

- Construction of the space port
- Spaceport and site management

⁴⁰ [Space Industry in Scotland](#)

⁴¹ Frontline, Economic Impact Assessment of Preferred Option for Space Hub Sutherland (SHS), December 2019

- Launch activities
- Tourism
- Accommodation to support launch activities

However, based on more recent information and studies we have updated assumptions about the launch cadence that is anticipated, the expected numbers of tourists to the site and Orbex's announcements about anticipated employee numbers. Furthermore, we have included construction activities associated with the maintenance of the spaceport facility as well as the original build. The following assumptions have been made for the base-case scenario:

Construction and maintenance of spaceport

- The construction of the spaceport will take 2 years with an investment profile at 10% in Year 1 and 90% in Year 2 (as used in the Frontline report).
- From Year 3 onwards we have assumed a maintenance budget for the space port of 5% of capex costs based on a benchmarking comparator.
- This will provide employment for construction and civil engineer workers during the construction phase and thereafter for site maintenance.

Space port and site management

- The Jacobs' Economic Impact Model retains the assumptions used within the original planning model of 17 FTEs at the space port when it is fully operational with 12 launches per year. For preceding years, FTEs are pro-rated according to the number of launches.
- The operation of the site will provide employment in technical support, site security, administration amongst other roles.

Launch activities

- The first launch from the site will be towards the end of the second year of construction, this will ramp up to 3 launches in the following year, 7 launches in the next year up to a maximum of 12 launches per year from year 5 and beyond. For comparison, RocketLab in New Zealand has successfully launched 21 missions since its first rocket launch in May 2017.⁴²
- The original Frontline economic impact model associates the numbers of employees with the number of planned launches. As not all of the work undertaken at Orbex is directly linked to the Sutherland Space Port facility, we have extended the initial assumptions to account for planned growth publicly announced by Orbex. Orbex have stated that they intend to increase their number of employees in the Highland and Moray region from 90 at the end of 2021 to 400 by 2030.

Visitor numbers

- Visitor numbers including sector and specialist visitors and tourists have been updated based on a study by The Moffat Centre for Travel & Tourism Business Development at

⁴² Rocket Lab, [Completed Missions](#), Accessed September 2021

Glasgow Caledonian University⁴³ who provide anticipated visitor numbers per launch to be as follows. The increase in visitors from year 3 is associated with a proposed introduction of a visitors' centre and incremental improvements in local facilities such as retail and hospitality:

Table 4. Visitor number assumptions

Year of Launch	1	2	3	4
Visitor numbers per launch (midpoint of The Moffat Centre estimate)	442	323	368	368
Number of launches	1	3	7	12
Visitors per annum	442	970	2,578	4,419
Attraction life cycle stage	Growth Novelty Interest	Maturity	Decline	Decline and Stabilisation

Accommodation to support launch activities

- We retain assumptions from the Frontline report that in addition to the local workforce operating the space port, 30 workers will be located temporarily by the space port to support each planned launch and they will stay for an average of 28 nights per launch.
- This will provide an increase in demand for local accommodation, food and drink and entertainment activities close to the Sutherland Space Port and an increase in jobs related to those activities.

5.3 Deadweight, Displacement and Leakage

Jacobs' economic impact model accounts for **deadweight** (the amount of space sector activity that would have been achieved without investment into Space Hub Sutherland), **displacement** (activities which would have existed but are attracted to the Highland and Moray region from elsewhere to the detriment of economic activity in the former location) and **leakage** (where money leaves the area to other locations). For continuity, we have adopted the total deadweight, displacement and leakage GVA figures used within the original Frontline report. These are:

⁴³ Prof John Lennon, Space Hub Sutherland Visitor Forecast Plan, The Moffat Centre for Travel & Tourism Business Development, Glasgow Caledonian University, August 2021

Table 5. Deadweight, Displacement and Leakage assumptions by sector

Sector	Highlands and Islands (%)	Scotland (%)	UK (%)
Construction	15	20	25
Site management	0	0	0
Launch activities	40	25	15
Tourism	50	60	75
Accommodation	50	60	75

Source: Frontline, *Economic Impact Assessment of Preferred Option for Space Hub Sutherland (SHS)*, December 2019

5.4 Multipliers

Again, for the sake of continuity, the Jacobs' economic impact model adopts the same multipliers as applied within the evidence base for the planning application for the space hub. In addition, we have adopted the UK multiplier to account for construction related activities within the Jacobs model. Multipliers used in the model are:

Table 6. Type II (combined indirect and induced) multipliers assumptions

	FTE	GVA
Highlands and Islands		
Space	1.9	1.65
Tourism	1.11	1.22
Construction	1.75	1.88
Scotland		
Space	2.8	2.3
Tourism	1.22	1.44
Construction	1.75	1.88
UK		
Space	2.8	2.3
Tourism	1.22	1.44
Construction	1.75	1.88

5.5 Growth Scenarios and Time Horizon

As set out in the introduction to this report, the space sector is growing steadily but with underlying rapid changes in the types of organisations involved, the implementation of different technologies and the funding being made available. Therefore, in addition to the baseline scenario set out above, we have modelled two different growth scenarios to better understand the uncertainty associated with the growth of the space sector. We identify how changes in the number of launches and visitor numbers may impact on job numbers and value created overall.

Scenario 1 – slower ramp up and fewer launches in the longer run.

For scenario 1, the ramp up in the number of launches is slower and the maximum capacity of rocket launches is 9 per annum. In addition, visitor numbers are reduced to the lower end of the Moffat Centre's estimates. The assumptions are as follows:

Table 7. Visitor number and launch assumptions - scenario 1

Year of launch	1	2	3	4	5	6
Visitor numbers per launch (low point of The Moffat Centre Estimate)	412	303	343	343	343	343
Number of launches	1	2	4	6	8	9
Visitors per annum	412	606	1,372	2,058	2,744	3,087

Scenario 2 – Quicker ramp up of launches and more visitors attracted

For scenario 2 the ramp up to achieve the maximum of 12 launches per year is achieved more quickly and the visitor numbers are increased to the upper end of the Moffat Centre's estimates. The assumptions are as follows:

Table 8. Visitor number and launch assumptions - scenario 2

Year of launch	1	2	3
Visitor numbers per launch (low point of The Moffat Centre Estimate)	472	343	393
Number of launches	1	7	12
Visitors per annum	473	2,401	4,716

5.6 Timelines for modelling

For the baseline and two scenarios employment numbers and value created are estimated over three time horizons:

Short term: 4 years to 2026 (to provide a focus for the growth deal)

Medium term: 9 years to 2030 (to provide a focus that aligns with the UK Space Strategy)

Long term: 29 years to 2050 (to provide a focus that aligns with infrastructure planning at a national level)

5.7 Employment and Gross Value Added

The following figures have been estimated for annual average full time equivalent jobs (rounded to nearest 10). These figures account for the full development lifecycle of Space Hub Sutherland from construction through to operation i.e., to 2026 – the average employment supported by the investment between 2021 and 2026.

Table 9. FTE estimates

	Baseline model			Scenario 1			Scenario 2		
Year	2026	2030	2050	2026	2030	2050	2026	2030	2050
Highlands and Islands	290	390	480	210	280	360	330	410	490
Scotland	470	660	840	330	470	630	550	700	860
United Kingdom	520	730	940	360	520	700	600	760	950

The following figures have been estimated for average annual Gross Value Added (GVA) which is a measure of the value of goods and services produced in an area, industry or sector of an economy. Similar to employment these figures account for the full value created across the entire development lifecycle of Space Hub Sutherland from construction through to operation i.e., to 2026 – the average Gross Value Added created by the investment between 2021 and 2026.

Table 10. GVA estimates

	Baseline model (£m)			Scenario 1 (£m)			Scenario 2 (£m)		
Year	2026	2030	2050	2026	2030	2050	2026	2030	2050
Highlands and Islands	15	22	29	10	16	21	20	25	29
Scotland	23	36	47	14	25	35	31	40	49
United Kingdom	25	40	53	15	28	39	34	45	54

5.8 Estimating the wider value and job impacts unlocked by activities at Space Hub Sutherland for the Space Cluster

Developing the UK's launch capability at Sutherland in combination with a robust cluster strategy brings a multitude of benefits. It will provide vital local economic impacts for the region by offering a range of locally based employment opportunities and the chance to be at the forefront of an exciting emerging sector which will also bring indirect impacts to boost the already thriving tourism economy in the region.

As a highly innovative industry, the space sector encourages a wide range of other activities that can be difficult to forecast. Technologies developed for the space sector have since found many other beneficial uses and commercial opportunities on earth. NASA has tracked more than 2000 spinoffs since 1976 from memory foam to revolutionizing the design of HGVs using aerodynamic research.⁴⁴ Similarly, ESA's Technology Transfer Programme has

⁴⁴ NASA, [Home | NASA Spinoff](#), accessed September 2021

supported over 150 separate technological innovations over the past decade, fostering the creation of around 20 new companies and 2,500 jobs.⁴⁵

Space Hub Sutherland will be a key enabler for the emerging space cluster in the North Highland and Moray region. As the first vertical space launch facility in the UK, it will be able to leverage first-mover advantages. These include developing strong brand recognition, establishing key supply chains, and retaining and growing the existing highly skilled workforce in the North Highland and Moray region. Space Hub Sutherland will also play a critical role in supporting the further development of other space ports across the country by identifying and sharing areas of improvements once the facility is established and operational.

The space cluster in the North Highland and Moray region will provide an opportunity to leverage and grow existing training facilities across the region boosting the economic activities of the University of the Highlands and Islands and other training providers as they develop new courses and facilities to meet emerging skills requirements.

Efforts are currently underway to engage and attract additional companies who are involved in space situational awareness to locate in the Highland and Moray region. Furthermore, companies involved in space applications including defence and earth observation are likely to be attracted to the emerging space cluster.

The approach used for the economic impact model by Frontline for the Space Hub Sutherland investment was to determine the value added and employment created by the establishment and running of the Spaceport and Launch Service Operator. It accounts for upstream activities, the design and build of the spaceport itself, the activities of the launch service operator on that site and the associated indirect and induced impacts. It does not attempt to estimate the further value unlocked by having a spaceport on the midstream and downstream activities of the wider space sector.

It is challenging to put a figure on the extent of opportunities that will be unlocked by Space Hub Sutherland and its associated space cluster. The Jacobs' economic impact model has been extended to account for the value potentially unlocked for the midstream and downstream activities that will be supported by the payloads being launched from the space port. The UK already has a thriving space sector with many midstream and downstream activities already underway despite the lack of a UK based launch facility. Therefore, we have chosen to apply a transparent and conservative approach to model the likely increase in GVA and employment in the midstream and downstream activities derived from the new Sutherland Spaceport facility based on the experience of New Zealand who have developed a similar launch capacity to what is proposed at Sutherland.

In New Zealand upstream activities account for 40% of the GVA of the space sector with midstream and downstream accounting for the remaining 60%. We have assumed that any increase in the upstream activities will have a linear impact on the downstream activities

⁴⁵ European Space Agency, [ESA - Spin-off technologies](#), accessed September 2021

giving a multiplier of 2.49. That is for every £1 of GVA created by upstream activities a further £1.49 is unlocked in the midstream and downstream part of the space sector.

Similarly, for FTEs, 52% of the space sector in New Zealand are employed within upstream activities with midstream and downstream activities accounting for the remaining 48%. We have assumed that any increase in the upstream FTEs will have a linear impact on the downstream FTEs giving a multiplier of 1.91. That is for every 1 new FTE created by upstream activities a 0.91 FTEs are created in the midstream and downstream part of the space sector.

In 2020, it was estimated that the space economy contributed £6.6bn of GVA to the UK's economy and unlocked at least £360bn of GVA by supporting industries that are dependent on satellite services including navigation, meteorology, communications and earth observation.⁴⁶ In our estimates we have identified that by 2030, Space Hub Sutherland will support the following full time equivalent jobs (rounded to 10) and value for upstream, midstream and downstream activities (rounded to nearest £m):

Table 11. Local, regional and national FTE and GVA estimates

	FTE	GVA (£m)
Highlands and Islands	740	56
Scotland	1260	90
United Kingdom	1400	99

⁴⁶ [The Size and Health of the UK Space Industry 2020](#)

Chapter 6 – Space: A Vision for North Highland and Moray

6.1 Vision & Objectives

The space sector is rapidly emerging and evolving. The vision for the North Highland and Moray Space Cluster is, 'By 2026 North Highland and Moray will have established one of the most significant Space Clusters in the UK'.

It is clear to the group who have developed the strategy that time is of the essence, the global space sector is dynamic and many changes are occurring now. This strategy therefore states that it is vital if the vision is to be achieved that action is taken now and that partners who are committed to the success of the cluster work together to achieve the vision.

The objectives in the development of the Space Cluster Strategy discussions with the Steering Group have been to:

- develop plans to help existing businesses in the North Highland and Moray region;
- to support the attraction of relevant companies and organisations into the area;
- develop skills, and academic resources to assist the Space Cluster;
- identify alternative sectors that can use space technology and
- to develop a financial strategy for the sustainable growth of this emerging sector.

The Space Cluster Strategy has focused on opportunities around Upstream including Space System Manufacturing, Launch Operations (LEO only) and Ground Systems; Midstream including Satellite Data Capture and Storage and Downstream including Satellite Applications and User Equipment Manufacturing.

The opportunity for North Highland and Moray has been highlighted in the wider context of Scottish, UK and Global opportunities and these have been sense checked by identifying the needs of the space sector, undertaking an ecosystem audit of the area and performing a gap analysis which has determined a list of recommendations (see section 6.4) and action plan.

It is also envisioned that the development and operation of Space Hub Sutherland will strive to contribute to the global efforts of reducing, mitigating, and adapting to the challenges of our changing climate. The Space Hub itself will ensure operational emissions are accurately accounted for and so to be best incorporated within UK climate targets, specifically the 78% emission reduction target by 2035. With COP26 in November, the climate policy of Space Hub Sutherland must be constantly reviewed and re-aligned with national initiatives and global agreements, this responsibility will fall upon the Local Space Leadership Group.

This strategy and recommendations express the will of the steering group to take action and realise the opportunities that lie before the North Highland and Moray areas in a sustainable manner through to 2030. The steering group also recognise that the Space sector continues to evolve and anticipate that the Cluster will need to be responsive to changes in the industry and academia if it is to optimise the impact it can have both in the area and beyond.

6.2 Action Needed

6.2.1 Business Support

The launch sector in the area

The North Highland and Moray cluster starts with some significant opportunities in the upstream Launch Sector. The presence of the Space Hub Sutherland spaceport in the North of Sutherland, with its ambitions to be the greenest space port in the world, offers an excellent start to vertical launch in the UK as well as a supportive community in the North Highlands that are seeking to make this a real success. In developing this opportunity, the Space Launch Company, Orbex, has demonstrated its early commitment to the area in opening a manufacturing facility in Forres, near to the Highland capital of Inverness in 2019. Since then, Orbex has continued to develop its launch vehicle, Prime, and its presence in the area. Both of these initiatives have seen real progress with a realistic prospect of orbital launch within 2 years of this strategy coming forward.

Given the opportunity that this creates in this area, it is likely that other elements of support for launch and the downstream elements of Space will seek to be near to these facilities and proximity to the main launch location will add to the opportunity for some companies. Future developments should consider the environmental agenda.

By 2030 we would also anticipate that other Launch Service providers will be using the Space Hub Sutherland site for orbital launch. While cadence is currently limited by planning for 12 launches per annum it is likely that initial launch slots will permit launch vehicles of a similar size to the Orbex Prime launcher to use the site. The development of these Launch service providers' presences in the area will also be an opportunity for further jobs and support roles.

Developing a range of centres for excellence

This strategy looks to focus its effort in developing a range of centres that will offer not just a participating contribution to the Space sector in the UK, but to seek real excellence and business success that will encourage further development in the area. It is based on the adage that "nothing succeeds like success".

We see developments around the Launch segment benefiting from the orbital launches that will take place at Space Hub Sutherland. This will see expertise and knowledge be used and grow around the Spaceport. It will see a centre around the immediate vicinity of Melness and Tongue with local people being trained in the operational skills needed to operate a successful Spaceport with those numbers being increased by bringing in skilled and experienced staff particularly in the early stages. As the launch cadence increases, we anticipate that more of these peripatetic staff will chose to base themselves in the area.

We also see that Caithness with its engineering heritage and skilled staff will also grow into a centre for the Launch sector. This is likely to be focused around the towns of Thurso and Wick where the rundown of the nuclear facilities at Dounreay and Vulcan will free up skilled staff who can contribute to wider Space developments.

The development of the Orbex capability in Forres also offers a real opportunity to develop a centre of Space manufacture in Forres. Their growing presence at the Enterprise Park can offer the chance for likeminded companies to locate and grow the sector.

6.2.2 Skills & Education

The development of a skilled workforce is a vital consideration. While the area offers an existing range of skilled workers further activity is required. The UK Space Agency's Space Sector Skills Survey highlighted some key points for the development of requirements for industry.

These included:

- Most space companies are looking to recruit. Of those, most are struggling to find candidates with the right skills and experience. Particular gaps are around software and satellite operations.
- The range of skills needed is very wide, which means there is "no obvious single focus for training that would address a substantial proportion of the recruitment difficulties".
- Retention is also a problem for some, particularly for large companies, mostly because of pay and poaching.
- Most companies do some kind of training, but there are some significant gaps in training provision.
- There is interest in a generic space graduate development programme to address some of these issues.

Therefore by 2030 the area will have focused on providing good training for its people in entering the Space sector through a number of routes. These will include traditional routes such as Modern Apprentices and other engineering graduate routes. The development of the Launch sector will also see a rise in the demand for trained staff in these roles.

The ongoing use of STEM in motivating young people to have an early engagement will continue and will be given an extra impetus by the high profile of local launch and also the ongoing range of global Space activity.

Significant elements of this requirement will involve a wide range of partners supported by the growing presence of the University of the Highlands and Islands in both Moray and North Highland.

Recommendation one: Create specific programmes through universities and supply chain partners to address the science/engineering skills shortages in space industry leveraging nuclear, oil & gas and MOD know-how. (Address early years engagement, Space STEM, technician level training and sector specific qualifications).

Recommendation two: Explore area wide interventions to stimulate downstream growth in the area (70-85% of the market). This would likely need an understanding of market need. While this will involve appropriate connectivity and property it is likely to focus on labour supply and working with academia to deliver a labour pipeline.

Recommendation three: Consider the use of job creation and training fiscal incentives to stimulate employment and how they can focus on the space sector.

6.2.3 Research & Development

The development of innovative solutions is one of the main driving forces in the Space sector. The cluster will work with existing industry partners, academia and innovation agencies and initiatives to develop this important activity within the area. The relationship within the cluster between space specialists and scientific research will be strengthened by the local partnerships with the Environmental Research Institute - University of Highlands and Islands.

Bodies to engage include, University of Highlands and Islands, Scottish Space Academic forum, Northern Innovation Hub, Innovate UK the KTN, UK Space Agency and the Satellite Applications Catapult.

We will follow the Scottish Government approach for innovation through:

- Encouraging more businesses innovation through direct contact with HIE and Business Gateway contacts.
- Using public sector needs to stimulate private sector innovation
- Developing centres of excellence in the sector in the area and
- Make the best use of University knowledge and expertise to provide industry with the best tools to innovate.

Recommendation four: Review options for Accelerator Programmes as an enabler of start-ups and existing tech supply chain to diversify and engage (networking) with the (upstream in first instance) space sector.

6.2.4 Infrastructure

The infrastructure of North Highland and Moray will need to be reviewed to assess and where necessary provide a competitive environment for the development of the Space Cluster.

As noted above this will include social infrastructure as well as more easily identifiable infrastructure that is normally used for commercial developments.

In accordance with the ecological goals outlined within COP26, the protection and restoration of local ecosystems will be of upmost importance within all construction and operational activities of the Space Hub, Cluster and any necessary additional infrastructure.

Specifically of interest to the Cluster includes the following:

- Property audit and site provision – The range and size of properties that can be used in the area for the range of companies interested in the Space sector. We will also assess the range of sites that can be used for future property locations.
- Broadband and connectivity – The roll out of the Next Generation Broadband has done much to enhance the provision of connectivity in large parts of the rural Highlands and Islands. Further work needs to be undertaken to better understand the requirements for the range of Space sector connectivity elements. These include Launch Services, Launch Control, Mission Control, Ground Station and Data Centre connectivity, data analysis and the provision of access to these services for those working from home.
- Better Transport Connections – This includes the potential for rail, road and improved rural air mobility. These can be improved and therefore an early investigation should be carried out. An early example of transport innovation is the establishment of the Sustainable Aviation Test Environment (SATE) within the UKRI Future of Flight programme (trialing of alternatively powered aircraft). Other innovative approaches should be explored.
- Development of rural housing – Many parts of the North Highland and Moray Space cluster rely on a hinterland of rural communities. Those communities have a range of available properties including residential, holiday homes and crofting uses. There is a need to ensure that housing is available for incoming workers and also to provide suitable housing options for those in the area who would wish to live and work in this rural community. A number of initiatives can help with this. The Cluster will enable this to proceed.
- Provision of incubator / spin out space – As noted above it is an important part of Cluster development to encourage and enable spin out opportunities, to facilitate business growth near to the Space Hub Sutherland site and to provide a soft-landing zone for potential inward investors. This will be reviewed and plans developed to bring this forward.
- Development of visitor / education provision – The sector will drive interest in the location that is delivering Launch from the UK. There is a need to consider possible sites and partners for the delivery of an Education / Visitors centre that can tell the story of the Space sector to a wide group of visitors including the evolving STEM cohort.

It is anticipated that each of these areas will be investigated and considered by the Local Space Leadership Group.

Recommendation five: Ensure provision of the necessary residential and business infrastructure and resilience in the area to meet the needs of a growing high-tech data driven space ecosystem.

Recommendation six: Develop an incubation centre (hub) associated with Space Hub Sutherland leveraging existing resources to give growing companies the opportunity to learn from an operational spaceport.

Recommendation seven: Enhance talent attraction capability through focused efforts on promoting the liveability of the area.

6.2.5 Governance (Space Leadership Group)

It is intended that a Space Leadership Group will be formed from interested parties to take forward the Space Cluster strategy and ensure that the benefits are realised in the area.

It is proposed that the Space Leadership Group would meet at least quarterly and would discuss progress and engage with the relevant agencies and authorities to ensure that progress was being made. The Space Leadership Group should decide the structures which will assist in delivering the strategy.

Membership of the Leadership Group would include representatives from Government, local Government, Agencies, Industry, Academia and Community organisations. Given the importance of supporting and developing the community, the Space Leadership Group will seek to work with communities by informing relevant community councils, community liaison groups and other community representatives.

The recommendations mentioned later in this chapter will require the Leadership Group working in parallel and in alignment with the work of others. This is particularly true for recommendations 3, 5 and 7. This would be discussed as an early action for the Leadership Group to agree the engagement with other relevant groups.

Recommendation eight: Create a Local Space Leadership Group to champion the interests of the area and to drive forward the recommendations from the Strategy.

6.3 Funding & Inward Investment

6.3.1 Public Funding

A range of agencies will be involved in the development of the Cluster and discussions will be held with UK and Scottish Governments to best assess how they can assist the Cluster to bring forward benefits. The Cluster will review sources such as UKSA, KTN and other programmes to identify relevant sources. There will be dialogue with other public sources for relevant funding on a project by project basis.

Recommendation nine: Unlock further public and private investment through regional planning initiatives integrating other sectors leveraging a 'Space Growth Deal' akin to the 'Moray Growth Deal'. This needs input from UK and Scottish Government who fund these initiatives.

6.3.2 Private Finance

The Cluster team recognises that public funding cannot be the only source to drive the success of the Cluster. It will therefore look to encourage private investment while creating a competitive environment and adopt an "investor ready" preparation programme. Attention will be given to the evolving Space market and new opportunities that come forward.

Hosting multiple specialist businesses within the cluster itself provides a fantastic opportunity to outline a culture of sustainable business practice. ESG metrics are a global measure of business sustainability and ensuring companies are meeting a suitable average

amongst its peer group would provide the building blocks of this framework. Upholding this good practice in ESG will also ensure that the cluster is a beacon for sustainable investment in the region as well.

There are also opportunities for government to work with private investors in innovative ways, whether through enabling the creation of new investment vehicles or by exploring different approaches for contracting with the companies receiving private investment. This is an area that needs study and a national strategy in its own right.

Recommendation ten: Educate the wider investment community on the benefits and risks of investing in the space industry in the area. Consider an 'Investor Ready' approach to help both the company and the investor.

6.3.3 Inward Investment

The Cluster recognises the benefits to be gained from a positive inward investment programme into the area. It values engagement of and participation with organisations such as the Department for International Trade and Scottish Development International but also recognise the value of working with UKSA, UK Space, the Scottish Space Leadership Council, the Spaceport Alliance and other groupings.

It does believe that there needs to be a specific proactive effort from the Cluster to attract companies to the area. This plan will be drawn up and presented to the Space Leadership Group in 2021. This will build on whatever plans are offered by others.

Recommendation eleven: Create a dedicated structured and resourced effort to attract inward investment (new businesses) to the area through a coordinated and collaborative approach.

Recommendation twelve: Create a shared vision across the private and public sector to realise the benefits locally and regionally through a 'Space Coast 2030' conference.

6.4 Recommendations

No.	Recommendation	Timescale
1	Create specific programmes through universities and supply chain partners to address the science/engineering skills shortages in space industry leveraging nuclear, oil & gas and MOD know-how. (Address early years engagement, Space STEM, technician level training and sector specific qualifications).	4 years
2	Explore area wide interventions to stimulate downstream growth in the area (70-85% of the market). This would likely need an understanding of market need. While this will involve appropriate connectivity and property it is likely to focus on labour supply and working with academia to deliver a labour pipeline.	4 years

No.	Recommendation	Timescale
3	Consider the use of job creation and training fiscal incentives to stimulate employment and how they can focus on the space sector.	4 years
4	Review options for Accelerator Programmes as an enabler of start-ups and existing tech supply chain to diversify and engage (networking) with the (upstream in first instance) space sector.	Within 12 months
5	Ensure provision of the necessary residential and business infrastructure and resilience in the area to meet the needs of a growing high-tech data driven space ecosystem.	5 years
6	Develop an incubation centre (hub) associated with Space Hub Sutherland leveraging existing resources to give growing companies the opportunity to learn from an operational spaceport.	Within 36 months
7	Enhance talent attraction capability through focused efforts on promoting the liveability of the area.	2 years
8	Create a Local Space Leadership Group to champion the interests of the area and to drive forward the recommendations from the Strategy.	Within 3 months
9	Unlock further public and private investment through regional planning initiatives integrating other sectors leveraging a ' Space Growth Deal ' akin to the 'Moray Growth Deal'. This needs input from UK and Scottish Government who fund these initiatives.	Within 24 months
10	Educate the wider investment community on the benefits and risks of investing in the space industry in the area. Consider an ' Investor Ready ' approach to help both the company and investor.	24 – 48 months
11	Create a dedicated structured and resourced effort to attract inward investment (new businesses) to the area through a coordinated and collaborative approach.	Within 6 months
12	Create a shared vision across the private and public sector to realise the benefits locally and regionally through a ' Space Coast 2030 ' conference.	12 months

6.5 Measures of Progress

The Cluster will develop a range of measures to demonstrate progress. These will include activities undertaken by the Cluster but will also measure real achieved progress as well as planned impacts.

A full range of metrics to measure will be presented to the Space Leadership Group this year.



REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE SERVICES COMMITTEE ON 2 MAY 2023

SUBJECT: INFORMATION REPORT: LIST OF PROPERTY TRANSACTIONS CONCLUDED UNDER DELEGATED POWERS

BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT & FINANCE)

1. REASON FOR REPORT

- 1.1 To inform the Committee of property transactions which have been dealt with under delegated powers.
- 1.2 This report is submitted to the Economic Development and Infrastructure Services Committee in terms of Section III F (5) of the Council's Scheme of Administration relating to industrial and commercial development.

2. BACKGROUND

- 2.1 In terms of the Council's Scheme of Delegation, the Head of Housing and Property has delegated authority to grant leases, licenses or other occupation agreements of land and buildings for 25 years or less duration where the initial rent does not exceed £35,000 per annum and sites on long term building leases of up to 125 years duration where the initial rent does not exceed £35,000 per annum.
- 2.2 In terms of the Council's Scheme of Delegation, the Head of Housing and Property has delegated authority to conduct rent reviews and fix new rents.
- 2.3 In terms of the Council's Scheme of Delegation, the Head of Housing and Property has delegated authority to accept the highest offer received for surplus heritable property provided that the highest offer received is for a sum no less than the price at which the property has been offered for sale on the open market.
- 2.4 In terms of the Council's Scheme of Delegation, the Head of Housing and Property has delegated authority to approve the sale of Council property where the purchase price does not exceed £30,000, subject to liaison with appropriate officials of the Council, and the ward members.
- 2.5 In terms of the Council's Scheme of Delegation, the Head of Housing and Property has delegated authority to approve acquisitions of heritable property

up to a value of £50,000 where appropriate provisions have been made in the Capital or Revenue Plan. For acquisitions by lease, this delegation covers property with a rental value of up to £5,000 per annum where appropriate provision has been made in the Capital or Revenue Plan.

3. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

The proposals support the aim of delivering financial stability.

(b) Policy and Legal

None.

(c) Financial Implications

The transactions detailed in **APPENDICES I, II, III and IV** will generate monies to the Council.

Funds for the acquisition of the property detailed in **APPENDIX V** were made from existing provision in the capital plan for the allotments project.

(d) Risk Implications

None.

(e) Staffing Implications

None.

(f) Property

None.

(g) Equalities/Socio Economic Impact

None.

(h) Climate Change and Biodiversity Impacts

None.

(i) Consultations

None.

4. CONCLUSION

4.1 It is recommended that the Committee notes the 11 leases, 15 rent reviews, 2 property disposals, 1 sale of ground and 1 acquisition as set out in APPENDICES I, II, III, IV and V.

Author of Report: Stuart Beveridge, Asset Manager (Commercial Buildings)

Background Papers:

Ref: SPMAN-1285234812-1263

REPORT TO THE ECONOMIC DEVELOPMENT AND INFRASTRUCTURE SERVICES COMMITTEE ON 2 MAY 2023

LIST OF LEASES OF BUILDINGS AND SITES – SUBMITTED FOR NOTING

1. <u>Reference No.</u>	1. <u>Address</u>	1. <u>Building (m²)</u>	1. <u>Date of Entry</u>	<u>Rent</u>	<u>Remarks</u>
2. <u>Officer's Ints</u>	2. <u>Tenant</u>	2. <u>Site (Ha)</u>	2. <u>Review Period</u>		
1. BK/750/91	1. 28 Commercial Road, Buckie	1. -	1. 5/1/23	£31,290 p.a.	Permitted Use: Depot for offshore windfarm with offices & car park.
2. ALBU	2. Ocean Winds UK Ltd (No 07101190)	2. 0.45Ha	2. Annually		
1. BK/750/49	1. Tide Gauge Hut, Buckie Harbour, Buckie	1. -	1. 13/12/22	£345 p.a. for 5 year period	Permitted Use: Placing a tide gauge within hut & access for monitoring/servicing.
2. ALBU	2. Scottish Environmental Protection Agency	2. -	2. None		
1. GEN Street Traders	1. Grant Park Car Park, Victoria Road, Forres	1. -	1. 1/12/22	£165 p.a.	Permitted Use: Catering van concession.
2. CQ	2. Mr W De Oliveira	2. 0.005Ha	2. None		

1. GEN Street Traders	1. Thornhill Playing Fields Car Park, Thornhill Road, Forres	1. -	1. 6/2/23	£1,092	Permitted Use: Catering van concession.
2. CQ	2. Mrs E Ross	2. 0.005Ha	2. None		
1. KE/1/223	1. Unit 3, 4 Westerton Road South, Keith	1. 25sqm	1. 16/2/23	£3,420 p.a.	Permitted Use: Offices.
2. ALBU	2. Marshall Brothers Transport Ltd (SC637484)	2. 0.003Ha	2. 3 years		
1. CL/680/1	1. Old Railway Viaduct, Cullen	1. -	1. 1/4/23	£1	Permitted Use: Permit installation of lighting.
2. ALBU	2. Cullen Christmas Lights Group	2. 0.04Ha	2. None		
1. KE/482/5	1. Strathisla Children's Centre, Keith	1.	1. 2/2/22	Phased rent - £744 p.a. initially.	Permitted Use: Childcare nursery.
2. SB	2. Flexible Childcare Services	2. 0.571Ha	2.		
1. MW/482/9	1. Knockando Primary School Nursery	1. 55sqm	1. 2/8/21	Phased rent - £174 p.a. initially	Permitted Use: Childcare nursery..
2. SB	2. Knockando Playgroup	2.	2.		

1. KE/555/12	1. Pavilion, Seafield Park, Keith	1. 135sqm	1. 14/2/23	£2,000 p.a.	Permitted Use: Workshops & community facility. First 7 years rent free to reflect improvement works being undertaken by the tenant.
2. IAWA	2. Keith & District Men's Shed	2. 0.07Ha	2. 5 years		
1. BK/1/115	1. 15 March Road East, Buckie	1. -	1. 16/2/23	£5,500 p.a.	Permitted Use: Storage facility in association with the tenant's furniture removals business.
2. IAWA	2. Cargill Removals	2. 0.17Ha	2. 3 years		
1. EL/1/222	1. Unit 2, 2 Chanonry Road North, Elgin	1. 25sqm	1. 8/3/23	£3,960 p.a. + VAT	Permitted Use: Office associated with tenant's telecoms business.
2. TIBA	2. WiFi Scotland LLP (SO306648)	2. -	2. 3 years		

APPENDIX II**REPORT TO THE ECONOMIC DEVELOPMENT AND INFRASTRUCTURE SERVICES COMMITTEE ON 2 MAY 2023****LIST OF RENT REVIEWS OF BUILDINGS AND SITES - SUBMITTED FOR NOTING**

1. <u>Ref No.</u> 2. <u>Valuer's Ints.</u>	1. <u>Address</u> 2. <u>Tenant</u>	1. <u>Building (m²)</u> 2. <u>Site (Ha)</u>	1. <u>Date of Entry</u> 2. <u>Review Period Interval</u>	1. <u>Previous Rent</u> 2. <u>New Rent</u>	<u>Remarks</u>
1. DU/1/202 2. ALBU	1. 4 Dufftown Industrial Estate, Dufftown 2. ACEO Ltd	1. 77.6sqm 2. 0.04Ha	1. 18/12/19 2. 3 years	1. £4,950 p.a. 2. £5,250 p.a.	Permitted Use: Grounds maintenance contractor store.
1. KE/3/256 2. ALBU	1. Unit L, Isla Bank Mills, Keith 2. Advanced Electrics Ltd	1. 317.5sqm 2. 0.03Ha	1. 23/12/19 2. 3 years	1. £7,850 p.a. 2. £9,370 p.a.	Permitted Use: General contractors equipment & parts store.
1. BD/1/203 2. ALBU	1. Unit 1 Burghead Harbour, Burghead 2. The Maritime & Coastguard Agency	1. 118sqm 2. 0.012Ha	1. 1/1/17 2. 3 years	1. £7,670 p.a. 2. £8,500 p.a.	Permitted Use: Coastguard Rescue Station & ancillary storage.
1. DU/1/301 2. ALBU	1. 6 Dufftown Industrial Estate, Dufftown 2. Iain Francis MacEachan	1. - 2. 0.32Ha	1. 1/12/12 2. 5 years	1. £5,500 p.a. 2. £6,870 p.a.	Permitted Use: Haulier's yard for vehicle & trailer storage.

1. EL/5/256	1. 9 Perimeter Road, Elgin	1. 214sqm	1. 1/12/01	1. £2,725 p.a.	Permitted Use: To be used in furtherance of the tenant's objects.
2. TIBA	2. Elgin Miniature Rifle Club	2. 0.05Ha	2. 3 years	2. £3,250 p.a.	
1. PK/750/1	1. Seabed, Porknockie Harbour	1. -	1. 1/7/96	1. £475 p.a.	Permitted Use: Pontoon berthing facility.
2. ALBU	2. The Crown Estate Commissioners	2. -	2. 5 years	2. £1,200 p.a.	
1. KE/555/1	1. Keith Golf Course, Keith	1. -	1. 24/5/13	1. £5,040 p.a.	Permitted Use: Use as a Golf Course. Comparable evidence does not support an increase in rental at this time.
2. ALBU	2. Keith Golf Club	2. 22.27Ha	2. 5 years	2. £5,040 p.a.	

1. FR/675/19 2. ALBU	1. Nursery, Bogton Road, Forres 2. Transitions Town Forres Ltd	1. 233.5sqm 2. 1.2Ha	1. 31/3/09 2. 3 years	1. £13,200 p.a. 2. £13,200 p.a.	Permitted Use: Community educational purposes with ancillary offices. Commercial & Agricultural use is strictly prohibited. Nil rental increase due to large part of the valuation relating to the office element which has seen no rental growth along with an additional allowance in the valuation for a lease break option in Landlord's favour.
1. RO/1/101 2. ALBU	1. Site 1 & 2 Station Street, Rothes 2. A Forsyth & Son (Rothes) Ltd	1. - 2. 0.18Ha	1. 1/3/14 2. 5 years	1. £4,150 p.a. 2. £5,150 p.a.	Permitted Use: Fabricators yard & car park.
1. RO/1/202 2. ALBU	1. Unit 1 & 2 Station Street, Rothes 2. Forsyths Ltd	1. 148sqm 2. 0.03Ha	1. 5/1/05 2. 3 years	1. £9,450 p.a. 2. £11,050 p.a.	Permitted Use: Workshop & store in connection with tenants business as engineering company.

1. LO/1/201	1. Unit 1 Coularbank Industrial Estate, Lossiemouth	1. 70.04sqm	1. 21/10/13	1. £5,700 p.a.	Permitted Use: Workshop/store in connection with tenant's joinery business.
2. TIBA	2. Colin Andrew Conti	2. 0.01Ha	2. 3 years	2. £6,100 p.a.	
1. EL/5/272	1. Yard at Rear of Unit F Pinefield Business Centre, Elgin	1. -	1. 1/12/16	1. £300 p.a.	Permitted Use: Storage of skip & materials associated with tenant's bathroom installation business.
2. TIBA	2. Oakwood Bathrooms Ltd (SC503493)	2. -	2. 3 years	2. £350 p.a.	
1. FR/2/202	1. 5 Greshop Road, Forres	1. 132sqm	1. 1/11/19	1. £10,100 p.a.	Permitted Use: Workshop & store for sock production.
2. IAWA	2. Caledonia Hosiery Ltd (SC644882)	2. 0.02Ha	2. 3 years	2. £11,000 p.a.	
1. FR/4/107	1. 12 Waterford Circle, Forres	1. -	1. 1/10/07	1. £3,000 p.a.	Permitted Use: Storage, distribution & ancillary sales of animal feeds or such other uses falling within Class 6 of the Schedule of the Town & Country Planning (Use Classes) (Scotland) Order 1997.
2. IAWA	2. Mark Ferrari Ltd	2. 0.11Ha	2. 5 years	2. £3,575 p.a.	
1. LO/1/211	1. Unit 11 Coularbank Industrial Estate, Lossiemouth	1. 77.11sqm	1. 1/6/01	1. £5,500 p.a.	Permitted Use: Office & workshop for furniture restorer.
2. TIBA	2. Moreno Marchi	2. 0.03Ha	2. 3 years	2. £6,100 p.a.	

REPORT TO THE ECONOMIC DEVELOPMENT AND INFRASTRUCTURE SERVICES COMMITTEE ON 2 MAY 2023**LIST OF PROPERTY DISPOSALS - SUBMITTED FOR NOTING**

<u>Officer Initials</u>	<u>Address</u>	<u>Description</u>	<u>Purchaser</u>	1. <u>Asking Price</u> 2. <u>Highest Offer</u>	<u>Date Sold</u>	<u>Comments</u>
IAWA	Development Land March Road West Buckie	Undeveloped industrial land	Mayne Coaches Ltd	1. N/A 2. £66,925	18/01/2023	The Economic Growth, Housing & Environmental Sustainability Committee on 24 August 2021 agreed to the proposed sale.
IAWA	Fischer Place, Lossiemouth	Amenity Land	Tullochs of Cunnington	1. N/A 2. £116,000	20/03/2023	Servitude right of access to housing development. First of phased payments.

REPORT TO THE ECONOMIC DEVELOPMENT AND INFRASTRUCTURE SERVICES COMMITTEE ON 2 MAY 2023

LIST OF SALES OF GROUND TO ADJOINING PROPRIETORS – SUBMITTED FOR NOTING

<u>Description</u>	<u>Address</u>	<u>Purchaser</u>	<u>Price</u>	<u>Comments</u>
Sale of ground 161sqm	Land adjacent to 41 Dyce Crescent, Findochty	Derek W Taylor	£6,775	Concluded 20/1/23 Obtained Planning Consent Ref: 21/01819/APP Estates Ref: CQ

REPORT TO THE ECONOMIC DEVELOPMENT AND INFRASTRUCTURE SERVICES COMMITTEE ON 2 MAY 2023

LIST OF ACQUISITIONS - SUBMITTED FOR NOTING

<u>Officer Intls</u>	<u>Address</u>	<u>Description</u>	<u>Land Owner</u>	<u>Purchase Price</u>	<u>Comments</u>
SB	Land at Pinefield, Elgin	349sqm of amenity land	Osprey Housing Association	£2,250	Acquired to facilitate access to new allotments.



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 2 MAY 2023**

**SUBJECT: INFORMATION REPORT: SCOTTISH LOCAL AUTHORITIES
ECONOMIC DEVELOPMENT INDICATOR FRAMEWORK
REPORT 2021/22**

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To present committee with an overview of the performance of Moray Council's economic development activity, as documented in the Scottish Local Authorities Economic Development Indicators Framework Report 2021/22. This annual report provides consistent evidence of what local authorities are delivering as economic development agencies.
- 1.2 This report is submitted to Committee in terms of Section III (F) (2) of the Council's Scheme of Administration relating to the exercise of functions that promote economic development.

2. BACKGROUND

- 2.1 The Scottish Local Authorities Economic Development Group (SLAED) is a network of economic development officials from across all 32 Scottish local authorities. SLAED exists to provide a national voice for local economic development in Scotland by linking the work of Scotland's 32 local authorities and bringing a collective influence to bear at national and European levels.
- 2.2 Each year, SLAED publishes an Indicator Framework Report, setting out data and information based on returns submitted by the 32 local authorities. The purpose of the SLAED Indicators Framework is to assist Local Authorities to:
 - Evidence and publicise the contribution that they make to Scotland's economy through their economic development activities; and
 - Provide a basis for collating consistent data which can be used to better understand impact and identify potential areas for improvement.
- 2.3 This report, which covers the 2021/22 financial year, is the 10th annual report and represents a period of significant disruption from COVID-19. During this

period economic activity had slowly began to return to pre-pandemic levels following the national lockdowns. However, a number of entrenched issues affecting the economy were becoming more prevalent. The constriction in the labour market had manifested as a barrier to businesses returning to previous activity levels. Certain sectors were impacted by this more significantly than others, with workers increasingly moving away from industries with lower pay or poorer working conditions. Locally, the hospitality, tourism and manufacturing industries faced significant disruption as a result of this.

- 2.4 There are currently 34 indicators included within the SLAED Indicators Framework and these are classified into five broad categories: Input Indicators, Activity Indicators, Output Indicators, Outcome Indicators and Inclusive Growth Indicators. Council Officers are responsible for submitting an annual return for 9 of the indicators. Data for 18 of the indicators is collected from publicly available sources such as the Office for National Statistics (ONS), NOMIS and the Scottish Government, with and a further seven are collected from other agencies including the Business Gateway National Unit, Scottish Enterprise, Highlands and Islands Enterprise and the Supplier Development Programme (SDP). The full [SLAED Indicator Framework Report](#) is available to view online.
3. An analysis of the local indicators will be expanded upon in the following sections, providing an overview of the performance of Moray's economy. Where relevant and available, comparison with data from previous years and against the Scottish average has been provided.
- 3.1 However, it is important to note that the data presented in the SLAED Indicators Framework is not intended to be used for benchmarking the relative performance of local authorities. The data submitted by Councils is not subject to an auditing process by either SLAED or the Improvement Service. As such, despite efforts to ensure consistency in the returns submitted, some indicators are therefore subject to variation in terms of interpretation at a local level.

4. **INPUT INDICATORS**

4.1 **I1 Economic Development and Tourism Expenditure – Estimated**

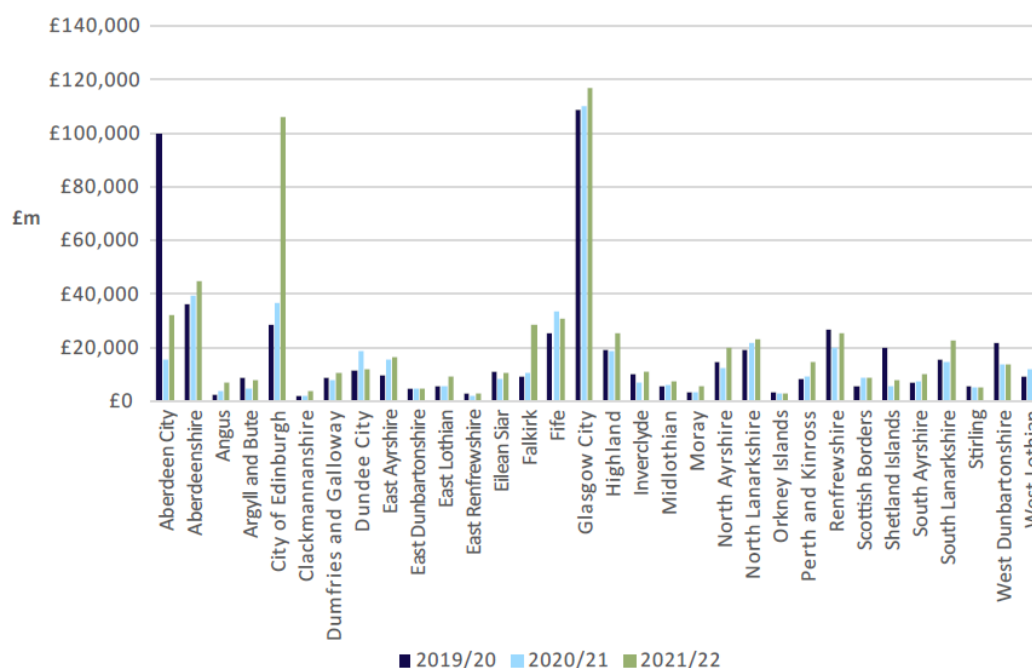
Indicator I1 provides an estimate of the capital and revenue spend of the Council on Economic Development and Tourism activities.

	Moray Council		
	2019/20	2020/21	2021/22
Total expenditure	£3,041,000	£3,267,000	£5,162,000
Capital spend	£567,000	£228,000	£1,263,000
Revenue spend	£2,474,000	£2,999,000	£3,899,000

Over the past three years, the level of investment from the Council in economic development and tourism expenditure has grown steadily. This is highlighted in the above table. This increase has been driven by investment made through the Economic Recovery Plan and increased revenue spend on

economic development staffing associated with the Moray Pathways Employability Hub.

However, spend in Moray has remained broadly consistent as a percentage of the total across Scotland, fluctuating from 0.5% to 1.0% of national expenditure. Overall estimated expenditure by Scottish Councils was over £654m, which was a significant increase on the £480m from the previous year. The graph below highlights the variation in level of expenditure on economic development and tourism activities across Scottish Councils. As shown, Moray still lags behind many other local authorities in terms of investment in economic development activity. However, it is expected that Moray's expenditure as captured by this indicator will increase substantially in future years as delivery of the Moray Growth Deal is accelerated.



4.2 I2 Economic Development Staffing – Estimated

This indicator measures the total number of FTE staff working on the delivery of the Council's economic development services. At a national level there has been a sustained upward trend in the number of economic development staff over the past 5 years. Locally, the table below appears to show a slight reduction in economic development staff when compared with the previous year, however this is in fact a result of Business Gateway staff being counted separately in this report. When these two members of staff are included, the staffing level remains consistent with the previous year at 29.0, and still significantly above pre-pandemic levels.

Year	Moray Council (FTE) Economic Development staff	Scotland (FTE) Economic Development staff
2021/22	27.0	1,427.6
2020/21	29.3	1,353.3
2019/20	24.3	1,259.2

2018/19	24.3	1,300.3
2017/18	24.0	1,280.4

Almost 50% of economic development staff nationally are employed in employability and skills. In Moray the percentage is even higher at 63%. The recruitment of additional keyworkers employed to support delivery at the Moray Pathways Employability Hub is largely responsible for the recent growth in the numbers of local economic development staff. This relates to increased funding levels, while the higher than average percentage of employability staff at 63% reflects the fact that core staffing in economic development is lower than average and is reflected in the teams capacity and resilience.

5. **ACTIVITY INDICATORS**

5.1 **A1 Number of Attendees at Business Gateway Events**

Indicator A1 provides a measure of activity delivered by Business Gateway and counts the number of people that attended Business Gateway events in 2021/22. For the first time, figures for national webinars have been included as these were able to be split out by council. An event is defined as a workshop to develop skills and training for start-up and growth acceleration.

Year	Event Attendees
2021/22	595
2020/21	340
2019/20	250
2018/19	2,269
2017/18	1,599

As a result of the ongoing impacts of Covid-19 restrictions throughout the period, almost all of these events were held online. The gradual recovery from the pandemic, supported locally by the Economic Recovery Plan, helped boost the number of businesses attending events locally from 340 to 595. This represents a 42% year on year increase in attendance locally, compared to just a 25% increase nationally.

Though the number of attendees still appear to be far below the figures from prior to the pandemic, this is largely a result of changes in the way the data was collected from 2019/20 onwards. Alongside this, the transition to online events has also changed the way in which attendees can access Business Gateway support. Businesses can now attend Business Gateway events in any council area, not just the one in which they are registered.

5.2 **A2 Number of Attendees at Business Events provided by the Council**

This indicator measures attendance at one-to-many business events, as opposed to the one-to-one support provided to businesses measured under indicator OP1.

Across Scotland, 5,508 businesses attended these one to many events in 2021/22, which continues the downward trend for this indicator from 8,779 in 2020/21. It is likely this is linked to the growth in Business Gateway event attendance, as neither these nor Supplier Development Programme events are included in this indicator as they are reported under indicators A1 and OP6.

Year	Event Attendees
2021/22	0
2020/21	4,905
2019/20	1,893
2018/19	1,800
2017/18	1,499

In 2020/21, Moray Council had accounted for 55.9% of the total number of events across Scotland, as a result of the Moray Digital Doors Open Day event, which allowed access to local heritage facilities. However, in 2021/22, there were no one-to-many business events delivered by the Council. This was reflected across a number of other local authorities.

5.3 **A3 Number of Companies Registered with Supplier Development Programme**

Indicator A3 provides insight into the number of local businesses that are engaged in public procurement activity, through counting the number of businesses in Moray that are registered with the Supplier Development Programme (SDP).

Year	Companies Registered with SDP
2021/22	143
2020/21	129
2019/20	117
2018/19	60
2017/18	36

Locally, there has been an upward trend in this indicator as more local companies become aware of the opportunities offered by public procurement in supporting business growth and resilience. This is reflected in the national trajectory of this indicator. Though it is worth highlighting that Moray still lags behind all other mainland local authorities in relation to this indicator. Moray enterprises account for 1.43% of the total business population of Scotland, while only 0.73% of the businesses registered with SDP are based in Moray.

The Community Wealth Building (CWB) Strategy, reported separately to this committee, includes a targeted action to boost the number of local businesses registered with SDP to assist them in being tender ready.

6. **OUTPUT INDICATORS**

6.1 **OP1 Number of Businesses Supported by Council Economic Development Activity**

This indicator shows the number of unique businesses which were directly supported on a one to one basis by the council's economic development function, as opposed to those recorded in indicator A2.

Year	Businesses Supported
2021/22	1,847
2020/21	0
2019/20	253
2018/19	13
2017/18	71

In 2021/22, Moray Council supported the highest number of businesses at 1,847, accounting for 12% of support across Scotland. However, Covid-19 financial support provided for 1,740 local businesses was included in the return for this indicator. Outwith this, support was provided for 107 other businesses via economic development staff, including 79 which received funding via the Moray Employer Recruitment Incentive.

6.2 OP2 Number of Business Gateway Support Unique Customer Accounts

This indicator shows the support delivered by Business Gateway through the number of business accounts that have received support. Each account is recorded only once even if support has been provided on multiple occasions. Types of support provided include new account registrations, business start-ups, and enquiries.

Year	Unique Customer Accounts
2021/22	923
2020/21	689
2019/20	746
2018/19	804
2017/18	929

In 2021/22 there a significant increase in the number of businesses supported nationally, bucking the trend from previous years. This was reflected in Moray, where the number of accounts has returned to the level from 5 years previously, following several years of a downward trend in the number of businesses accessing support.

6.3 OP3 Number of Companies Assisted by Scottish Development International

This is a measure of support delivered to local businesses by Scottish Development International (SDI) to provide assistance with export activity. In 2021/22, 978 companies were assisted to export across Scotland. This is a significant decrease on the 1,156 companies supported the previous year, and continues a downward trend in this indicator. It is likely that this is reflective of the additional barriers companies are facing as a result of Brexit. As highlighted in the table below, this trajectory is reflected locally.

Year	Unique Customer Accounts
------	--------------------------

2021/22	20
2020/21	21
2019/20	31
2018/19	32
2017/18	45

To supplement the work of SDI, additional export support was launched as part of the Economic Recovery Plan. This 1-2-1 consultancy provision was designed to help mitigate the impacts of Brexit. The two year programme was delivered via Business Gateway, up to 31st December 2022, with 33.5 days of specialist support delivered to local businesses throughout this time.

6.4 **OP4 Number of Unemployed People that have Participated in Council Funded or Operated Employability Activities**

This is a measure of the total number of people supported via employability activities that were funded and/or operated by councils in 2021/22. The purpose of this indicator is to assist in understanding the response to unemployment and economic inactivity at a local level.

Year	Participants
2021/22	366
2020/21	198
2019/20	480
2018/19	712
2017/18	716

Locally, there was a reversal of the ongoing downward trend against this indicator, with almost twice as many people accessing employability support in 2021/22 as in the previous year. This increase was driven by the launch of the Moray Pathways Hub at the Inkwell, which began operating in May 2021. In Moray, employability support and training provision is coordinated and delivered via the Moray Pathways Local Employability Partnership.

6.5 **OP5 Percentage of Immediately Available Employment Land**

OP5 is a measure of all employment land that is fully serviced and immediately available for business use. The indicator assists in providing an assessment of Council performance in being prepared for supporting new enterprise opportunities, business expansion and attracting inward investment. However, it is important to note that there are concerns about the reliability of the data this indicator presents, due to inconsistencies in the way returns are interpreted across Councils.

Year	Employment Land
2021/22	14.9%
2020/21	34.8%
2019/20	24.2%
2018/19	49.0%

Given the caution referenced above, there are significant variances in the percentage of employment land that is deemed immediately available across

Council areas. The decrease of availability in Moray is a result of construction activity on designated employment land sites. This has resulted in the 14.9% of land deemed immediately available in Moray being slightly below the Scottish average of 26.0%. Plans for development of industrial sites in Speyside and the East of Moray are being progressed as part of the Economic Recovery Plan and work is ongoing to ensure designated sites are deliverable.

6.6 **OP6 Number of Businesses Participating in Supplier Development Programme**

The data used in this indicator is provided directly by the SDP and counts the number of businesses that are actively participating following registration with the programme.

Year	Business Participants
2021/22	5
2020/21	11
2019/20	24
2018/19	24

The downward trend from last year has continued locally, and is also reflected nationally. During this period, the Economic Growth and Regeneration team were experiencing significant workload pressures in processing Covid-19 business support grants. As a result there was a lack of capacity to assist in coordinating and promoting events locally to help engage businesses with SDP. However, 10 local businesses who are registered with SDP did win public contracts during the period. Through the Supplier Development Forum, the SDP is also now more engaged more consistently to assist in the promotion of upcoming contract opportunities.

7. **OUTCOME INDICATORS**

7.1 **OC1 Gross Value Added per Capita**

Gross Value Added (GVA) provides a traditional assessment of the relative economic health and wealth of areas. It measures the value of goods and services produced in an area per head of population, as well as the productivity of businesses and economies. GVA tends to be higher in areas with more business diversity or where there are significant sectors that are highly capital intensive, such as oil and gas.

Year	GVA in Moray	GVA in Scotland
2020	£34,471	£41,581
2019	£36,356	£42,122

In previous years, the data included in this indicator was provided for NUTS3 regions, so reporting for Moray was based on the data for Inverness, Nairn, Moray, Badenoch and Strathspey. However, as of 2019 the data has been broken down by local authority. GVA per capita in Moray continues to remain below the Scottish average, though Moray outperforms many similar sized

local authorities. Both locally and nationally, GVA has fallen below the value of the previous year, which is likely to be reflective of the Covid-19 related restrictions that were in place during 2020.

7.2 OC2 Gross Weekly Earnings

This indicator measures the median gross weekly earnings of full-time employees within Moray, on both a residence-based and workplace-based basis. The residence-based data accounts for people living in Moray, regardless of the council area in which they work. The workplace-based data includes those that work in Moray, regardless of the council area in which they reside. This data can be particularly valuable for measuring the extent to which people living in one council area are reliant on jobs in other areas. It should be noted that the data does not account for the salaries of members of the armed forces or the self-employed.

Residence Based

Year	Moray	Scotland
2022	£598.80	£640.30
2021	£565.50	£619.90
2020	£550.60	£595.00
2019	£561.60	£578.30
2018	£527.20	£562.70

Workforce Based

Year	Moray	Scotland
2022	£619.50	£640.50
2021	£576.20	£620.70
2020	£548.10	£592.20
2019	£570.50	£577.00
2018	£549.50	£563.10

For both measures, the median weekly earnings in Moray are below the Scottish average. While the gap had been narrowing for Moray residents prior to the pandemic, it has since widened. This is despite significant year on year growth in weekly earnings. Weekly pay for Moray residents is the 5th lowest of all Scottish local authorities, reflecting the perception of Moray as a low wage economy. However, when weekly earnings are analysed by workforce, they are over £20 higher than residence based earnings. This may indicate that there are numerous people employed within higher value jobs in Moray living outwith the area and commuting in – or perhaps working remotely.

7.3 OC3 Employment Rate

The employment rate is calculated from the number of people aged 16-64 that were in employment in 2021/22 as a percentage of the total 16-64 population.

Year	Employment Rate in Moray	Employment Rate in Scotland
2021/22	73.6%	73.8%
2020/21	72.7%	72.8%
2019/20	76.4%	74.5%

2018/19	74.4%	74.5%
2017/18	73.8%	74.3%

The employment rate for Moray was almost identical to that of the Scottish average, having increased by 1% from the previous year. Although, both remain below pre-pandemic levels. Prior to the pandemic, the employment rate in Moray had been on an upward trajectory and had exceeded the national average.

The more acute impacts felt upon employment in Moray was likely influenced by the structure of the economy, where Moray has a higher proportion of people employed in the sectors that were most exposed to the effects of social restrictions (manufacturing, construction, retail and wholesale, accommodation and food services, arts, entertainment and recreation), than the national average.

7.4 OC4 New Business Starts per 10,000 Working Age Population

This indicator assists in measuring the level of entrepreneurial activity across Moray. It counts the number of business births per 10,000 of the 16-64 year old population, though this excludes sole traders.

Year	Business Starts in Moray	Business Starts in Scotland
2021	38	54
2020	38	51
2019	45	62
2018	50	59
2017	48	64

The historic trend of Moray having fewer business births than the Scottish average was again reflected in 2021 with the number actually having stagnated locally. Similar to indicator OC3, this perhaps reflect the nature of the Moray economy as being structured around sectors which were particularly vulnerable to the effects of the pandemic.

The Business Grants and Start-up Support provided via the Economic Recovery Plan were targeted towards fledgling businesses to boost business births. We will be able to assess the effectiveness of these initiatives in future years by analysing the trends in this indicator.

7.5 OC5 Business Survival Rate (3 Year)

OC5 measures the sustainability of fledgling business by analysing the number of start-ups in terms of their three-year survival rate, though once again this excludes sole traders.

Period	Moray 3 Year Survival Rate	Scotland 3 Year Survival Rate
2018-2021	65.5%	59.0%
2017-2020	58.7%	55.9%
2016-2019	63.2%	56.5%

2015-2018	63.3%	56.0%
2014-2017	63.0%	60.0%

Despite business birth rates below the national average, Moray businesses return a consistently higher survival rate than for Scotland overall. Despite the unsurprising dip in businesses survival rates in 2020, the 3 year survival rate in Moray is now at the highest level it has been for the past 5 years. In fact, there are only 4 local authorities with a business survival rate higher than Moray's, highlighting the resilience of the local businesses community.

7.6 OC6 Claimants in Receipt of Out-of-Work Benefits

Indicator OC6 is used to measure the percentage of working age people who are unemployed and are claiming either Job Seekers Allowance or Universal Credit. This can be used as an indication of poverty and low income, at both a national and a local level.

Year	Moray Working Age People Claiming Unemployment Benefits	Scotland Working Age People Claiming Unemployment Benefits
2022	3.0%	3.7%
2021	5.1%	6.1%
2020	2.7%	3.3%
2019	2.6%	3.1%
2018	2.0%	2.6%

Following the significant increase in the number of people claiming unemployment benefits in 2021, compared with the prior year, the rate has now fallen back towards the level it was prior to the pandemic. However, despite the 2.1% reduction in the Moray population claiming out of work benefits, it remains slightly above pre-pandemic levels. This is despite the availability of jobs across sectors in what both locally and nationally has been a tight labour market. Initiatives such as the Moray Apprenticeship Strategy are key to growing the local skills base to try and ensure people who are out of work have the opportunity to retrain and re-enter employment.

7.7 OC7 Working Age Population with Low/No Qualifications

This indicator shows the percentage of people aged 16-64 that possess either no formal qualifications, or qualifications at SCQF (Scottish Credit and Qualifications Framework) level 4 or below.

Year	Moray Working Age Population with Low or No Qualifications	Scotland Working Age Population with Low or No Qualifications
2021	6.7%	9.1%
2020	8.5%	9.7%
2019	11.6%	11.6%
2018	11.2%	11.6%
2017	12.2%	10.8%

In Moray, the percentage of people with low or no qualifications has continued on a downward trend, which may reflect a growing number of employers offering opportunities for in work training. The rate in Moray of 6.7% is now significantly below the national average.

7.8 OC8 Town Vacancy Rate

The Town Vacancy Rate provides a measure of vacant retail units in Moray's main town centres (Elgin, Forres, Lossiemouth, Keith, and Buckie) as a percentage of the total number of retail units available. This can be used as an indication of the relative vibrancy of town centres.

Year	Moray Town Centre Vacancy Rate	Scotland Town Centre Vacancy Rate
2021/22	10.6%	12.5%
2020/21	10.9%	9.2%
2019/20	6.9%	11.7%
2018/19	6.9%	10.0%
2017/18	9.9%	11.5%

The vacancy rate in Moray has decreased slightly, after the significant increase resulting from the social restrictions imposed at the height of the pandemic in the previous year. This demonstrates some stability in the town centre businesses who were able to survive the economic shock caused by the pandemic. This is against a backdrop of vacancy rates having grown significantly across Scotland, with the rate in Moray having returned to being below the national average, as it was prior to the pandemic. This may indicate healthy local consumer demand as people have slowly returned to offices for work and pre-pandemic retail habits.

7.9 OC9 Number of Business Gateway start-ups that are Trading

This is a measure of the number of start-up businesses supported by the local Business Gateway branch that have commenced trading, therefore providing an indication of the outcome of this early business support.

Year	Moray Start-Ups that are Trading	Scotland Start-Ups that are Trading
2021/22	120	7,834
2020/21	91	6,117
2019/20	155	8,964
2018/19	120	9,083
2017/18	128	9,129

Like a number of the other indicators linked to entrepreneurial activity, there was a significant decrease in this rate as a result of reduced business activity throughout the early stages of the pandemic. However, the number of business start-ups who go on to trade, has now begun to recover. Locally the rate is still well below the figure from the year immediately prior to the pandemic but is broadly consistent with historical trends.

7.10 OC11 Additional Funding

This indicator has been reframed to assess the value of external funding that the council has been awarded to deliver economic development focussed projects, following submission of an application. It does not include funds allocated with no application process at any stage. Creating successful funding applications requires considerable resource and expertise, therefore provides a measure of a Council's economic development performance.

Year	Moray – Additional Funding	Scotland – Additional Funding
2021/22	£2,914,833	£171,082,842

This indicator previously considered leverage of external funding against the Councils' own contribution, but has been updated for 2021/22, therefore there is no trend data. The funding secured in Moray was awarded through a combination of the European Social Fund, Place Based Investment Programme, Town Centre Regeneration Fund, and Rural Tourism Infrastructure Fund.

7.11 **OC12 Number of Planned Jobs from Completed Inward Investment Projects**

This indicator provides a measure of job creation and job protection through inward investment activity, as a result of support provided through Scottish Development International (SDI). Data for this indicator was supplied by Scottish Enterprise and Highlands and Islands Enterprise.

Year	Moray Planned Jobs	Scotland Planned Jobs
2021/22	0	7,781

Due to changes in staffing and priorities within Scottish Enterprise, the 2021/22 data was not broken down into new and safeguarded jobs, and instead was collected as total overall jobs. As a result, there is no trend data since the indicator is not comparable with previous years. Moray was 1 of 13 Councils to have no planned jobs, the majority of which were also small rural authorities.

7.12 **OC13 Number of Unemployed People that have Progressed to Employment from Participation in Council Funded or Operated Employability Activities**

OC13 tracks the progression of people who have participated in Council employability services and have then successfully moved into employment.

Year	Moray Employment Progression	Scotland Employment Progression
2021/22	88	16,463
2020/21	54	7,271
2019/20	42	11,304
2018/19	62	15,328
2017/18	157	16,469

Nationally, the number of people progressing into employment following participation in Council employability services has rebounded to per-pandemic levels. This is likely to be reflective of the renewed capacity within councils to deliver services as the country emerged from the Covid-19 pandemic.

Employability services in Moray have also increased the number of unemployed people supported back into employment in comparison with the previous year. This is following the launch of new employability services through the Economic Recovery Plan, including the Moray Pathways Hub at the Inkwell. However, there were fewer people who progressed into employment following participation in Council employability services in Moray than in any local authority other than Orkney.

8. INCLUSIVE GROWTH INDICATORS

8.1 IG1 Gross Value Added per hour worked and per job filled

These indicators are recommended for use by the Office for National Statistics (ONS) to measure productivity. There is a time lag in the availability of this data, therefore 2020 is the most up to date data available at time of preparing this report.

	Year	Moray	Scotland
GVA per hour worked	2020	£36.60	£35.80
GVA per job filled	2020	£49,329	£52,869
GVA per hour worked	2019	£33.50	£33.60
GVA per job filled	2019	£49,701	£52,252

There was year on year growth in the GVA per hour worked, with Moray's output growing beyond the Scottish average, as of 2020. However, for GVA per job filled, Moray's output declined, falling further behind the Scottish average. As with the overall GVA measure in indicator OC1, this measure is influenced by Moray's sectoral makeup and the jobs being performed.

8.2 IG2 Underemployment

Underemployment is defined as a person aged 16 and over who is in employment and would like to work longer hours in their existing job, work an additional job, or find a different job with more hours. This data is sourced from the Scottish Government who have changed how it is collected and presented. This has resulted in only two years of trend data being available.

Year	Moray Underemployment	Scotland Underemployment
2020/21	9.3%	8.5%
2019/20	10.4%	6.9%

The limited data demonstrates a downward trend in underemployment locally against an upward trend nationally. However, underemployment in Moray remains above the national average, which may be influenced by the sectoral make-up of the economy and proportion of seasonal work in related to tourism and food and drink. It would be expected that this indicator demonstrates a

reducing trend of underemployment in subsequent years due to the current lack of supply in the labour market.

8.3 IG3 5 year % change in median income vs lowest quintile

IG3 is a crucial indicator in assessing the level of inequality in the Moray economy. It measures the percentage change in gross weekly earnings over a five-year period between earners in the lowest quintile and median earners.

Period	Moray	Scotland
2017-2022	-13.7%	-5.0%
2016-2021	-9.7%	-2.6%
2015-2020	6.1%	-4.3%
2014-2019	6.1%	-4.3%
2013-2018	0.1%	-3.1%

Moray has continued the trend of reducing the inequality gap between median earners and those in the lowest quintile 2017 and 2022. There were only three other local authorities where the gap had narrowed further. However, whilst a positive overall outcome, this may be symptomatic of slow wage growth among median earners.

8.4 IG4 GVA by Key Growth Sector

Indicator IG4 measures the GVA per head for the key growth sectors in Scotland. To calculate the result, the total GVA for the sector is divided by the number of employees in the sector. The key growth sectors are: Food & Drink; Financial & Business Services; Life Sciences; Energy (including renewables); Sustainable Tourism; and Creative Industries (including digital). However, these sectors are currently under review following the publication of Scotland's National Strategy for Economic Transformation (NSET).

Sector	2015	2016	2017	2018	2019
Food and Drink	£80,679	£81,076	£97,164	-	£95,902
Financial & Business Services	£42,024	£46,839	£36,612	£46,300	£52,022
Life Sciences	-	-	-	-	-
Energy	£104,628	£166,688	£198,390	£101,377	£101,035
Sustainable Tourism	£11,116	£18,157	£21,005	£11,526	£18,114
Creative Industries (incl. Digital)	£43,067	£48,727	£50,116	£35,869	-

As referenced against the other GVA indicators, the GVA for each sector will depend on how capital intensive the production process is and the value of the output. The table above therefore highlights which sectors have the highest value added and how that has evolved over time. Please note that there are a number of gaps in this data due to this being disclosive.

8.5 IG5 Percentage of Employees earning less than Living Wage

This indicator measures the proportion of employees who are 18+ that are earning less than the Living Wage. Data was not available for a number of local authorities, including Moray, due to small sample sizes which resulted in data that was not statistically robust.

8.6 IG6 Percentage of Participation in Education, Employment & Training by 16-19 year olds

IG6 provides a measure of the percentage of 16-19 year olds that remain in positive destinations, meaning they are participating in either education, employment or training.

Year	Moray	Scotland
2022	91.6%	92.4%
2021	91.8%	92.2%
2020	93.5%	92.1%
2019	91.3%	91.6%
2018	91.2%	91.8%

For this measure Moray remains slightly below the national average for 2022 and broadly consistent over the period of the previous 5 years. However, this does not necessarily mean that Moray has fewer young people remaining in positive destinations. It may simply be that the cohort not captured are in employment but no longer engaging with the services which record the data. For this reason, it is essential that public services try to retain engagement with as many young people as is possible to provide support services when and where they are required.

8.7 IG7 Percentage of premises unable to access 10Mbit/s broadband

This indicator provides a measure of the percentage of premises which are unable to access 10Mbit/s broadband. It therefore provides a gauge of the local level of digital inclusion, with access to sufficient digital connectivity now essential for a large proportion of employment opportunities due to the increased number of people now remote working.

Year	Moray	Scotland
2022	6.4%	3.7%
2021	7.1%	4.2%
2020	7.0%	4.2%
2019	7.3%	4.8%
2018	9.2%	6.1%

Moray retains a higher proportion of properties without access to sufficient broadband speeds than across Scotland as a whole. This is true of the majority of rural local authorities. The Scottish Government's R100 programme is targeted towards addressing this issue. However, despite the R100 North Lot contract being awarded to BT in December 2020, as yet there have been no properties served locally through the rollout of the main contract, with many not scheduled to be served until 2028. Even then, a number of properties will remain without access to Superfast broadband as

the cost of delivery is deemed too significant. These properties are though eligible to access support via the Scottish Broadband Voucher Scheme. In Moray, a new project has been funded via the UK Shared Prosperity Fund aimed at increasing awareness and uptake of this scheme. It is expected to commence delivery later this year.

8.8 IG8 Percentage of premises able to access Superfast Broadband

Converse to IG7, this indicator reports on the percentage of premises which have access to superfast broadband, which equates to minimum speeds of 30Mbit/s. Again, this provides a measure of digital inclusion, with sufficient connectivity essential for local business and economies to remain competitive.

Year	Moray	Scotland
2022	85.4%	91.0%
2021	84.3%	90.1%
2020	84.6%	93.3%
2019	84.2%	89.6%
2018	83.0%	91.1%

As with the previous indicator, the proportion of properties in Moray able to access superfast broadband remains significantly below the Scottish average. Though this increased by in excess of 1% year on year, following several years of stagnation. The R100 scheme is focussed upon providing full fibre connectivity, ensuring properties can access superfast broadband as a minimum. Therefore this percentage should continue to increase in the years ahead as the network is rolled out.

8.9 IG9 Percentage of Good or Very Good Life Satisfaction

The purpose of this measure is to offer some qualitative context for the other indicators included in the framework. It reflects the increasing focus within Scotland Government towards taking a wellbeing economy approach to economic development. The data for this indicator is gathered via the ONS Wellbeing Survey. As it was a new indicator for 2020/21, there is only 2 years of trend data to present.

Year	Moray	Scotland
2021/22	76.9%	78.0%
2020/21	79.6%	76.3%

The percentage of Moray residents responding to the survey who rated their life satisfaction as either good or very good declined by 3% year on year, with the Scottish average increased. It is possible this could be linked to the levels of fuel poverty found within Moray, during a period where the cost of energy began to increase exponentially. However it is difficult to extrapolate significant meaning from this with only two years data on which to base an analysis.

8.10 IG10 CO2 emissions per capita

This is included in the Indicator Framework Report to account for the increased focus upon improving wellbeing and tackling the climate change emergency. This indicator provides a measure of local authority contributions to national carbon reduction targets.

Year	Moray CO2 per capita	Scotland CO2 per capita
2020	4.8 tCO2	4.6 tCO2
2019	6.5 tCO2	5.7 tCO2

Though Moray has continued to produce a higher level of CO2 emissions per capita than for Scotland as a whole, the gap between the two narrowed in 2020, with Moray very near to the national average. However, both the local and national downward trends in emissions should be viewed with some caution. 2020 covers the period of the two national lockdowns where movement was restricted and production largely halted. It would be expected that emissions are shown to have increased again in subsequent years.

9. **SUMMARY OF IMPLICATIONS**

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Effective monitoring and evaluation of economic activity supports the corporate plan priority of promoting economic development and growth, as well as the LOIP priority of a growing and sustainable economy.

(b) Policy and Legal

There are no policy and legal issues arising directly from this report.

(c) Financial implications

There are no financial implications arising directly from this report.

(d) Risk Implications

There are no risk implications arising directly from this report.

(e) Staffing Implications

There are no additional staffing implications arising directly from this report.

(f) Property

There are no property issues arising directly from this report.

(g) Equalities/Socio Economic Impact

The SLAED Indicator Framework Report provides a suite of data which can be used for monitoring the socio economic health of Moray. A

number of the indicators included offer insight into the extent to which wealth inequalities are reducing and the effectiveness of Council services in supporting this reduction.

(h) Climate Change and Biodiversity Impacts

Indicator IG10 records Co2 emissions per capita, which is a critical performance measure in the Council's transition towards reaching net zero.

(i) Consultations

Depute Chief Executive (Economy, Environment and Finance), the Head of Economic Growth and Development, the Principal Climate Change Officer, the Equal Opportunities Officer and Lissa Rowan (Committee Services Officer) have been consulted and their comments included in the report.

7. CONCLUSION

- 7.1 The 2021/22 SLAED Indicator Framework Report offers an insight into the extent of the economic recovery post-pandemic and the effectiveness of the early measures deployed in Moray as part of the Economic Recovery Plan. While there are economic challenges and undoubted room for improvement across a number of metrics, the overall context should be viewed with some positivity. In terms of our workforce, unemployment remains low, with a lower proportion of benefits claimants in Moray than the national average. Similarly, Moray performs significantly above the national average for the percentage of our workforce that possess qualifications, highlighting positive interventions in previous years to ensure the region has access to skilled labour
- 7.2 However, it is key that the Council continues to invest in economic development to address those metrics where we are performing less admirably. This is essential to ensure we equip our businesses as well as our workforce with the skills and expertise required to remain competitive in the changing economy.
- 7.3 Emerging local initiatives, such as The Moray Growth Deal, will further enhance the economy and will provide new support systems and present new opportunities for emerging and expanding businesses. Indicator Framework Reports from SLAED in subsequent years will help to demonstrate the effectiveness of these initiatives.

Author of Report: Chris Muir, Senior Officer Economic Strategy and Development

Background Papers: [SLAED Indicators Framework Report 2021-22](#)

Ref:

