

City Chambers
DUNDEE
DD1 3BY

4th March, 2022

TO: ALL MEMBERS OF THE TAY
CITIES REGION JOINT COMMITTEE

Dear Sir/Madam

TAY CITIES REGION JOINT COMMITTEE

Will you please attend a MEETING of the **TAY CITIES REGION JOINT COMMITTEE** on Friday, 11th March, 2022 at 10:00am, to be held remotely.

Please submit any apologies to Veronica Thomson, Committee Services Officer on telephone (01382) 434205 or by e-mail at veronica.thomson@dundeecity.gov.uk.

Members of the Press or Public wishing to join the meeting should contact Veronica Thomson, Committee Services Officer on telephone (01382) 434205 or by e-mail at veronica.thomson@dundeecity.gov.uk by **12 noon on 9th March, 2022**

Yours faithfully

ROGER MENNIE

Clerk to the Joint Committee

- 1 **WELCOME AND APOLOGIES**
- 2 **DECLARATION OF INTEREST**
- 3 **MINUTE OF MEETING OF 10TH DECEMBER, 2021 - Page 1**

(Copy enclosed).

- 4 **TAY CITIES REGION DEAL**

(Update by Mo Saunders, Programme Manager, PMO).

5 TCD024 REGIONAL SKILLS & EMPLOYABILITY DEVELOPMENT PROGRAMME OBC FOR APPROVAL - Page 47

(Report No TCRJC3-2022 enclosed and presented by Ronnie Palin, Management Group Sponsor and Programme Lead).

6 TCD025 TAY CITIES ENGINEERING PARTNERSHIP FBC FOR APPROVAL - Page 60

(Report No TCRJC4-2022 enclosed and introduced by Alison Smith, Management Group Sponsor and presentation by Project Lead Jim Brown).

7 TCD007 5G DIGITAL TESTBEDS BJC - Page 75

(Report No TCRJC1-2022 enclosed and presented by Robin Presswood, Management Group Sponsor).

8 TCRD BENEFITS REALISATION PLAN - Page 97

(Report No TCRJC6-2022 enclosed and introduced by Morag Saunders, Tay Cities PMO Programme Manager and presented by Lauren Hollas, Tay Cities Project Manager).

9 TCRD ANNUAL PERFORMANCE REPORT - Page 139

(Report No TCRJC7-2022 enclosed and introduced by Morag Saunders, Tay Cities PMO Programme Manager and presented by Lauren Hollas, Tay Cities Project Manager).

10 TCRD FUTURE PMO OPERATIONAL BUDGET - Page 213

(Report No TCRJC8-2022 enclosed and introduced by Morag Saunders, Tay Cities PMO Programme Manager).

11 CLEAN GROWTH INTRODUCTION & PRESENTATION

(Presentation by Paul Duthie, Scottish Enterprise & Clean Growth Working Group Lead and Michael Wright, Management Group Sponsor).

12 AOCB

13 DATE OF NEXT MEETING

Friday, 17th June 2022, to be held remotely.

At a MEETING of the **TAY CITIES REGION JOINT COMMITTEE** held remotely on Friday, 10th December, 2021.

Present: -

Angus Council

Councillor Bill DUFF
Councillor David FAIRWEATHER
Councillor Angus MACMILLAN DOUGLAS

Dundee City Council

Councillor John ALEXANDER
Councillor Lynne SHORT
Councillor Richard McCREADY

Fife Council

Councillor David ROSS
Councillor Andy HEER
Councillor Karen MARJORAM

Perth & Kinross Council

Councillor Colin STEWART
Councillor John DUFF

Non-Elected Members

Michael WRIGHT, Scottish Enterprise
Gordon MCGUINNESS, Skills Development Scotland
Councillor Andrew PARROTT, TACTRAN
Alison HENDERSON, Dundee and Angus Chamber of Commerce
Hayley MEARNS, Voluntary Action Angus

Also Present

Robin PRESSWOOD, Dundee City Council
Robert EMMOTT, Dundee City Council
Margo WILLIAMSON, Angus Council
Vivian SMITH, Angus Council
Alison SMITH, Angus Council
Keith WINTER, Fife Council
Mark SPEED, TACTRAN
Thomas GLEN, Perth and Kinross Council
David LITTLEJOHN, Perth and Kinross Council
Ronnie PALIN, Skills Development Scotland
Roger MENNIE, Tay Cities Deal Legal Officer
Steve BELL, Tay Cities Deal Comms
Geoff MORRIS, Director of Eden Campus at the University of St Andrews
Alison Smith, Angus Council on behalf of the Heads of Economic Development
Dr Mark GRAHAM, Senior Economist & Consultant for TCRD BRP
Lauren HOLLAS, Tay Cities Deal Project Officer
Clare SLATER, Tay Cities Deal Project Manager
Mo SAUNDERS, Tay Cities Deal Programme Manager

Councillor John ALEXANDER, in the Chair.

I APOLOGIES

Apologies had been intimated from Councillor Tim Brett, Councillor Murray Lyle, Councillor Grant Laing, Greg Colgan and Steve Grimmond.

II CHAIR AND VICE CHAIR

In terms of Clause TWELVE of the Governance Agreement, and Article II of the minute of meeting of this Joint Committee of 18th May, 2018, the Joint Committee were asked to note that Councillor David Fairweather of Angus Council would become Convener in succession to Councillor John Alexander of Dundee City Council. The Joint Committee also agreed to appoint Councillor Murray Lyle, Vice-Convener from Perth and Kinross Council.

The Joint Committee noted the appointments as indicated whereupon the Chair was taken by Councillor Fairweather.

III DECLARATIONS OF INTEREST

There were no Declarations of Interest.

IV MINUTE OF MEETING OF 17TH SEPTEMBER, 2021

The minute of meeting of 17th September, 2021 was submitted and approved.

V TAY CITIES REGION DEAL UPDATE

A presentation by Programme Manager, Mo Saunders, was given to the Joint Committee outlining the current position with regards to the Tay Cities Region Deal.

The updated Business Cases timetable was tabled, along with a timeline for their submission to the Joint Committee for approval. It was reported that slippage had occurred, and that of five projects/programmes originally programmed to be presented at December Joint Committee, only one was being presented. The impact and risk on the Partnership due the 'build up' of activities unable to drawdown was highlighted (due to not having full business case approved, signed legal agreement and approved claim). There would be no drawdown for the Skills Programme for 2021/22 and year 3 projects were still to secure Business Case approval, with any spend being at project owners own risk. It was anticipated that all Year 4 Projects would have their Business Case approvals secured by March 2022.

Thereafter, an overview of the Capital profile was given, highlighting drawdown and spend. It was noted that an underspend of £2.956m in the Capital Programme was currently forecast, which was likely to increase. A forecast of additional expenditure in excess of the approved drawdown allocation was also noted, which would be undertaken at the project holder's own risk. The Programme Management Office were also actively liaising with Projects and their Finance Directors where additional potential eligible acceleration had been identified and were providing regular update reports to the s95 Officer, Finance Directors group and Management Group members to inform year end Programme Management of the profile.

In conclusion, it was noted that a number of projects had indicated a forecast underspend in Year 3 of £2.558m against the Capital Profile awarded at Deal signing. Several projects were seeking awards above their drawdown profiles of between £12.9m and £13.9m, and therefore there was a gap in funding. There were currently only three projects in the revenue profile which allowed for very little programme management across projects. This will continue to be monitored and reported.

The Joint Committee were then given an opportunity to seek clarity on points raised in the presentation after which the Chair thanked Ms Saunders for her presentation on behalf of the Joint Committee.

VI BENEFITS REALISATION PLAN (BRP) PRESENTATION

Dr Mark Graham, Senior Economist & Consultant for TCRD BRP gave a presentation to the Joint Committee on the Benefits Realisation Plan.

Dr Graham gave a brief overview of the BRP, noting that it was the responsibility of the Joint Committee to ensure that this was developed, and would include any benefits anticipated from the Deal. Arrangements would also be made to monitor, track and report these and manage their realisation. The content of the BRP was outlined and actions required to ensure its completion by March 2022 highlighted.

Thereafter the Chair thanked Dr Graham, on behalf of members of the Joint Committee, for his presentation.

VII TAY CITIES REGION DEAL – TCD029 STRETCH DOME SIMULATOR BUSINESS JUSTIFICATION CASE FOR APPROVAL

There was submitted Report No TCRJC15-2021 by Keith Winter, Management Group Sponsor, seeking approval of the Business Justification Case (BJC) for the Stretch Dome Simulator, noting that the Tay Cities Management Group approved the BJC on 28th October, 2021.

A presentation was given to the Joint Committee by Geoff Morris, Director of Eden Campus at the University of St Andrews, to supplement the report, a copy of which is appended to the minute.

The Joint Committee agreed to: -

- (i) Note that the Management Group has approved the BJC for the Stretch Dome Simulator on 28th October, 2021 for recommendation to the Joint Committee;
- (ii) considered the report and the BJC for TCD029 Stretch Dome Simulator, attached at Appendix 2 to the report: and
- (iii) approved the BJC.

VIII TAY CITIES REGION DEAL – ANNUAL ACCOUNTS

There was submitted Report No TCRJC16-2021 by Robert Emmott, s95 Officer, providing an update on Annual Accounts and Audit requirements for the Tay Cities Deal.

The Joint Committee noted the content of the report.

IX TAY CITIES REGIONAL ECONOMIC STRATEGY - ACTION PLAN UPDATE

There was submitted Report No TCRJC17-2021 by Alison Smith, representing the Heads of Economic Development Group, providing an update to the Joint Committee on the progress of delivery of the Action Plan and the proposed reporting mechanism. This was agreed at the Management Group on 25th November, 2021 for presentation to the Joint Committee.

The Joint Committee considered the report and noted the progress reported on the Regional Action Plan (Appendix 1 to the report).

XI AOCB

The Joint Committee noted that there were no other matters which required to be brought to the attention of the Joint Committee.

XII PROPOSED PROGRAMME OF MEETINGS 2022

The Joint Committee approved the undernoted programme of meetings for 2022. All meetings would commence at 10:00am, and held remotely until June 2022: -

Friday, 18th February, 2022, to be held remotely
Friday, 17th June, 2022, remote/venue to be confirmed
Friday, 23rd September, 2022, remote/venue to be confirmed
Friday, 9th December, 2022, remote/venue to be confirmed

It was agreed that further discussions between officers be held regarding the meeting date to be proposed for March 2022.

XIII DATE OF NEXT MEETING

Friday, 18th February, 2022, to be held remotely.

John ALEXANDER, Chair (Articles I and II).

David FAIRWEATHER, Chair (Article III to XIII).

TCRD Benefits Realisation Plan (BRP)

TCRD Joint Committee 10th December 2021

- BRP context & content
- How are we aiming to complete by March 2022

Agenda

BRP Context and Content

BRP Context



- Each regional partnership is required, as a condition of grant, to develop a BRP (as set out in annual Grant Offer Letters issued to all Deals in delivery).
- A BRP details the benefits anticipated from a Deal and the arrangements made to monitor, track, report and manage their realisation.
- It is the responsibility of regional partners to meet any costs associated with BRP development and delivery, including project and programme evaluation.
- In addition, government reserves the right to request further, independent evaluation of Deal progress as appropriate, with any associated costs again to be met by regional partners.

BRP Content



- **Context:** setting out the mission, key objectives and outputs TCRD plans to deliver
- **Target audiences** in terms of who will be the main users of the framework
- **Programme Outputs** deal challenges and how the stated objectives will address these; how projects/programmes will address these each objective; and, any post Deal changes (e.g. Carbon Costs)
- **An overarching theory of change** to define the relationships envisaged, and to be assessed, monitored and evaluated
- **Measurement approaches** in terms of Key Performance Indicators (KPIs) data collection and assessment, monitoring and evaluation and reporting approaches and timescales
- **Governance** in terms of responsibilities for each aspect of delivery and management of benefits realisation



How we aiming to complete by March 2022

Current TCRD position

In place v still to be addressed

In Place

Working draft that covers:

- **Context** – i.e. the aggregate total investment and jobs TCRD is anticipated to deliver
- **Target Audiences** – with whom and when TCRD will report on- going benefits;
- **Outputs** - how programmes/projects are designed to address stated inclusive growth objectives as set out by programmes/projects at Deal signing and in approved business cases;
- **An overarching theory of change** for TCRD.
- **Governance** – in part and PMO taking forward completion.

Still to be addressed?

- Development of template for reporting benefits
- Individual theme logic models
- Resultant output and impact measures that will be adopted
- Measurement approaches and next steps to implementation
- Sign off internally by TCRD, Scottish & UK Governments and Joint Committee

Circa 80% complete in terms of content

Proposed Process and Timescales

Stage	Content	Time
Introduction	BRP Context and Content Project/programme level input required Proposed process and timetable to secure inputs	Today
Detailed Review re Logic Models/ToC content	Confirm approach required by all themes/projects	Week Commencing 13 th December 2021
Measurement Approaches	One to one meetings on a theme by theme basis Thereafter one to one support as required Review and finalise content	Week commencing 10 th January 2021 End of January
Sign Off	Internal Review (End of January) Agree BRP with Governments (early February 2022) Present BRP to Management Group (end February 2022) Approval of BRP at Joint Committee in March 2022	Completion by March 2022
Future Support	Support for all other projects that aren't currently in delivery or due to be in delivery in 2022/23	Post-March 2022

Any Questions?

13



Thank You

Mark Graham



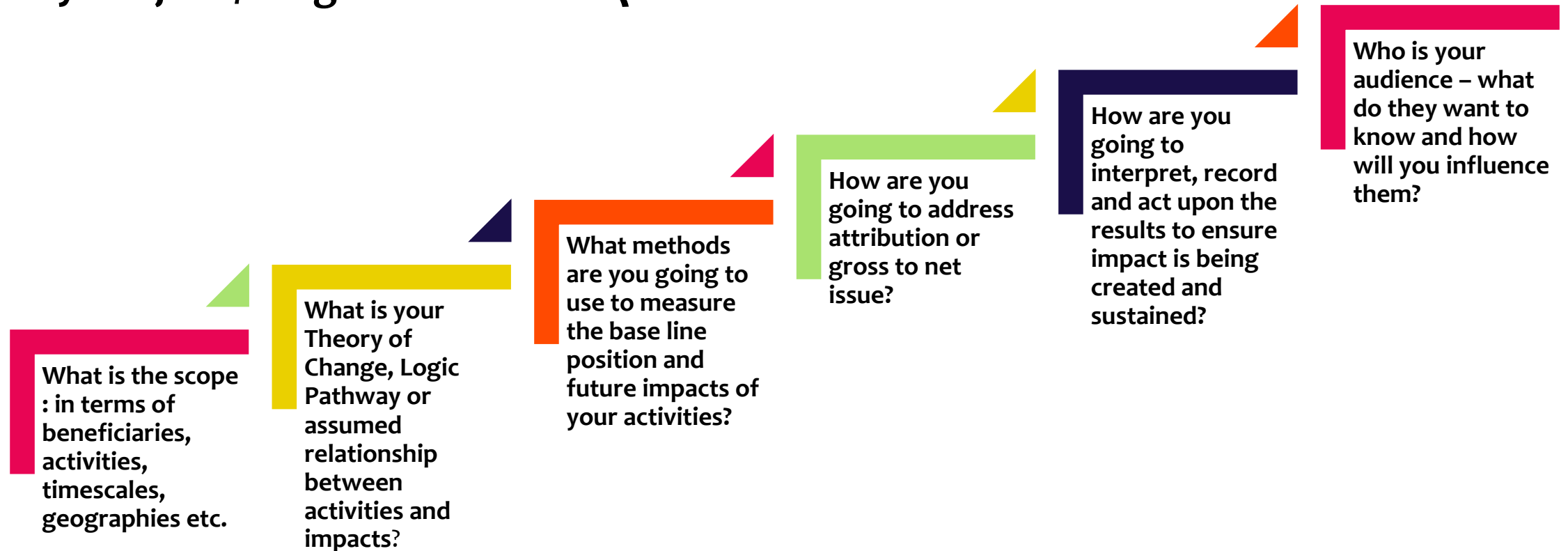
07710 397826



mark.graham@eu.ac.uk



Key Project /Programme Exam Questions



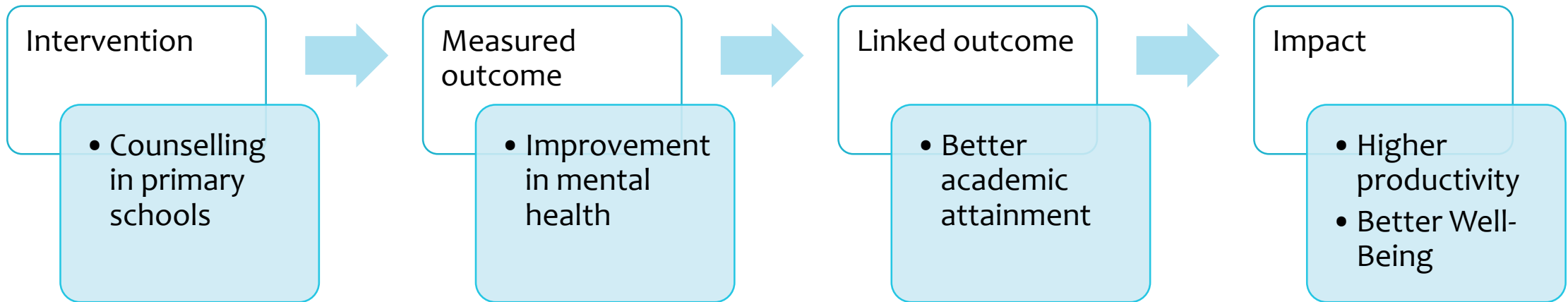
Logic Model /Theory of Change

Government best practice suggests using a Logic Model/ Theory of Change as a framework against which to assess, for any given set of objectives what impacts may be important to subsequently monitor and evaluate.

It is important to stress that development of such models/theories are part of a process from which to inform **what might be** the relationships between interventions and their gross impacts.

They do not “explain” what will happen rather they reflect what is **hoped will happen** (and can thus be used to test if outcomes and impacts are evidenced in the way anticipated).

Initial Logical Links



More detail to be provided in one to one follow ups

Measurement Approaches

What are you going to measure and why in appraising, monitoring, evaluating and managing your projects and programmes?

In order to demonstrate your Logic Model/ ToC is delivering in practice, need to consider:

- What information is required to assess what outputs, outcomes, and impacts might and then are being delivered?
- What arrangements are in place to ensure appropriate baseline information is captured prior to commencing project delivery?
- How will the necessary information be gathered and analysed in a common form?
- What will be monitored, and what will be evaluated?
- Which evaluation techniques are most appropriate in which circumstances?

PMO Presentation Joint Committee

10th December 2021



Business Cases with Joint Committee Approval

21

Project Reference and Name	Approval by Govts	Approval by Joint Committee
TCD014 Eden Campus	03/09/2020	21/08/2020
TCD021 Regional Culture and Tourism Investment Programme	08/04/2020	19/06/2020
TCD021 (a) Hospitalfield	Not required	17/07/2020
TCD016 Growing the Tay Cities Biomedical Cluster	20/11/2020	19/02/2021
TDC012 Angus Fund	24/09/2020	19/02/2021
TCD002 Dundee Airport Investment (Revenue)	12/11/2020	19/02/2021
TCD010 Advanced Plant Growth Centre	10/03/2021	19/03/2021
TCD011 International Barley Hub	10/03/2021	19/03/2021
TCD017 Perth Cultural Transformation (City Hall)	17/02/2021	19/03/2021
TCD021 (b) Discovery Point	Not required	23/04/2021
TCD013 cyberQuarter	24/05/2021	18/06/2021
TCD005 & TCD006 Rural Angus and Rural Perth and Kinross Highspeed Broadband		

Business Cases with Government and Management Group Approval

Project Reference and Name	Approval by Govts	Approval by Management Group
TCD029 Stretch Dome Simulator	26/08/2021	28/10/2001



MG- Consideration by Management Group
JC – Decision by Joint Committee
* With Governments for review & approval

MG- Consideration by Management Group
JC – Decision by Joint Committee
* With Governments for review & approval

Project/Programme	Oct (No JC)	Nov (No JC)	Dec	Jan (No JC)	Feb (JC TBC)	Mar 2022	Apr 2022 (No JC)	May 2022 (No JC)	Jun 2022	
Year 2 (21/22) profiled Projects/Programmes										
TCD002 Dundee Airport Investment Capital – overarching Programme	Moved from September MG then November MG			Programme OBC to MG		Programme OBC to JC	2021/22 YEAR END			
TCD007 5G Digital Testbeds Capital Project	Previous version presented to September JC but will need to present revised version				BJC to JC* TBC (see note)					
TCD008 Low Carbon Transport and Active Travel Hubs Capital Project	Moved from October MG		FBC to MG	FBC to JC						
TCD025 Tay Cities Engineering Partnership Revenue & Capital Project	Moved from September MG		FBC to MG	FBC to JC TBC						
TCD024 Tay Cities Skills and Employability Development Programme Revenue	Moved from August MG				Programme OBC to MG	Programme OBC to JC				
TCD024 Tay Cities Skills and Employability Development Programme - Digital Skills Revenue Project									BJC to MG	
TCD024 Tay Cities Skills and Employability Development Programme - Life Sciences Revenue Project									BJC to MG	
TCD024 Tay Cities Skills and Employability Development Programme - SMEs Revenue Project									OBC to MG	
TCD024 Tay Cities Skills and Employability Development Programme - Hospitality Revenue Project									OBC to MG	

Key : OBC – Outline Business Case
 FBC – Full Business Case
 BJC – Business Justification Case

MG- Consideration by Management Group
 JC – Decision by Joint Committee
 * With Governments for review & approval

Year 3 Business Case Timetable

Estimated volume expected at each meeting

Project/Programme	Oct (No JC)	Nov (No JC)	Dec	Jan (No JC)	Feb (JC TBC)	Mar 2022	Apr 2022 (No JC)	May 2022 (No JC)	Jun 2022
-------------------	----------------	----------------	-----	----------------	-----------------	----------	---------------------	---------------------	----------

Year 3 (22/23) profiled Projects/Programmes

TCD012 Angus Fund - Centre for Agricultural Sustainable Innovation (CASI) Capital Project	Moved from October MG			OBC to MG			FBC to MG		FBC to JC
TCD012 Angus Fund Mercury Drone Port Capital Project		Moved from November MG	BJC to MG		BJC to JC TBC				
TCD023 Aviation Academy for Scotland Capital Project	Moved from November MG. Project have indicated delays in developing OBC							OBC to MG tbc	

Other future year Projects/Programmes – Years 3+

TCD029 Stretch Dome Simulator Capital Project			BJC to JC				2021/22 YEAR END		
TCD018 Pitlochry Festival Theatre Capital Project		Moved from November MG (not priority – year 6 project)		OBC to MG					
IIP Side Package Programme Business Case update			Programme Update to MG			Programme Update to JC			

Note: Phase 2 Skills Projects to be identified and profiled – timetable TBC by Programme Owner.

TCD020 Perth Innovation Highway have indicated they will not be in a position to drawdown in Y3

TCD021 Culture & Tourism Programme has undergone a review and no updates or changes have been identified at this time

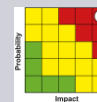


Business Case Headlines

Headlines:

- Slippage has occurred, 5 projects/programmes originally programmed to be presented at December Joint Committee. One being presented.
- Impact and risk on the Partnerships due to 'build up' of activities and projects not being able to drawdown without Full Business Case approval, a signed Legal Agreement and approved Claim by end of Financial Year
- No drawdown now programmed for Skills Programme in 21/22
- Year 3 Projects still to secure Business Case approval. Any spend will be at project owners risk
- All Year 4 Projects should be planning to have their Business Case approvals secured by March 2022

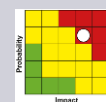
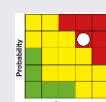


Programme Risk Register

Risk	Impact	Likelihood	Severity	Resolution Plan or Mitigating Action	
Covid-19 impacting on the TCD projects resulting in potential delays and cost increases	5	5	25	<ul style="list-style-type: none"> Regular updating of progress report and monthly financial forecasts, so that project leads can inform PMO of any issue well in advance, and PMO can raise with Government, Thematic Boards, Management Group, Finance Directors Group and Joint Committee as appropriate. Thematic Boards will be engaged with to work with Projects to understand supply chain exposures and contingency plans. Project have been mandated to include Covid-19 Assessments within all Business Cases. Regular review of outputs and timelines for delivery of benefits in light of Covid-19 is being developed. As part of the work to develop the benefits realisation plan this will include a Monitoring and Evaluation Framework and a change management process. PMO engaging with Local PMO network to share intelligence with Projects and Governments. 	
Impacts of Brexit	4	5	20	<ul style="list-style-type: none"> Regular engagement with project leads to highlight any risks well in advance, so that PMO can raise with Government, Thematic Boards, Management Group, Finance Directors Group and Joint Committee as appropriate. PMO Working with Scottish Enterprise (SE) and Projects to understand supply chain exposures and contingency plans. S.E. have shared a Brexit Exposure tool. A request has been made to SE to lead on this area for the partnership. 	
Delays in development and approval of business cases	4	4	16	<ul style="list-style-type: none"> PMO working closely with project leads and policy leads within UKG and SG to support business case development and approval to an agreed timeline. Issues e.g. project capacity & Covid-19 to be raised through governance. Regular programme monitoring and reporting. Continue to spend according to agreed profile. Ongoing programme of events set up with Programme and Project Owners. Regular meetings with years 2, 3 and 4 projects have been set up to keep regular contact with projects. 	

PMO lead Clare Slater, Project Manager

Programme Risk Register

Risk	Impact	Likelihood	Severity	Resolution Plan or Mitigating Action	
PMO Resource and capacity issues	4	4	16	<ul style="list-style-type: none"> The PMO has lost key experienced members of staff in March and July, two new staff joined in January and May 2021. Taking staff time to be trained will put PMO capacity under pressure at year end and for at least 6 months after recruitment. New Project Manager recruitment currently in progress. More permanent contracts being considered in line with other Deal PMO's and partners. Upskilling new staff to uplift PMO capacity. 	
Failure to deliver individual projects within the TCD programme	4	4	16	<ul style="list-style-type: none"> Regular dialogue/reporting around progress takes place between PMO and Project Leads where issues are raised in advance and, if appropriate, escalated to Government, Thematic Boards, Management Group, Finance Directors Group and Joint Committee. Programme Management reporting in place. Management Group and other governance arrangements in place to monitor project development. PMO will escalate any issues relating to individual projects through existing governance arrangements Regular meetings with year 2, 3 and 4 projects have been set up to keep regular contact with projects. 	

PMO lead Clare Slater, Project Manager

Headlines for Year 2

Capital Profile

28

- Awarded Deal Profile at 17th December 2020 - **£31.336m**
- Awarded Accelerated Funding - **£9.0m**
- Transfer of funding from Revenue Profile to Capital Profile - **£0.496m**
- Total Deal Profile Funding in Grant Offer Letter - **£40.832m**
- Forecast Drawdown at 31st October 2021 - **£37.876m**
- Current forecast underspend at year end - **£2.956m**
- Further potential year end underspend has been indicated by some projects - values still to be confirmed



Year 2 2021/22 Capital Drawdown²⁹

Page 1 of 2

CAPITAL Drawdown Monitoring 2021/22 (Year 2) October Monthly Forecast

**Note: profile amend refers to any approved permanent changes to the profile e.g. accelerated funding, transfer of funds from revenue to capital*

Project Name	Deal Profile (£000)	Profile Amend* (£000)	Updated Profile (£000)	Forecast Drawdown (£000)	Current Year Variance (£000)	Comments
TCD014 Eden Campus	6,924	2,000	8,924	8,080	(844)	Reporting a forecast to underclaim of £844k, with an indication from the project owners that this could increase up to £1m , The figures shown include the accelerated award of £2m by Scottish Govt and the Partnership to the project, received in April 2021.
TCD017 Perth Cultural Transformation (City Hall)	4,327	2,000	6,327	6,327	0	Includes accelerated profile of £2m awarded by Scottish Govt and the Partnership to the project, received April 2021. Project have forecast drawdown by the end of Q3 claim. In addition, the project have indicated that they have the potential to accept accelerated funding of a further £936k . It should be noted that this will complete the full drawdown of project funding. The Management Group have agreed to prioritise the project for accelerated funding. Project to confirm position in Q4.
TCD021 Regional Cultural and Tourism Programme	3,651	0	3,651	2,508	(1,143)	Two Projects have FBC approved status – Hospitalfield and Discovery Point. Forecast drawdown shows combined drawdown for both projects. A permanent underspend for the Programme of £1.143m has been confirmed by the Programme Owners . The Regional Culture & Tourism Programme is forecast to underclaim by £1.164m based on forecast underspend from Hospitalfield, below.
TCD021 Regional Cultural and Tourism Programme – Hospitalfield	1,608	0	1,608	1,587	(21)	Project are still indicating a forecast of a £21k underclaim. Slippage in claim due to delay in onsite works for Phase 1 and 2 including Mortuary Chapel, compensated for by advancing elements of Phase 3 and 4 of project.
TCD021 Regional Cultural and Tourism Programme – Discovery Point Transformed	900	0	900	900	0	JC FBC secured with approval for Phase 1 and is currently spending at project risk. The Project have requested an extension (to December 2021) to their current exception for monthly claims.
TCD021 Growing the Tay Cities Biomedical Cluster	3,199	0	3,199	2,351	(848)	Underspend forecast at £848k due to programme scheduling . Project are continuing to investigate opportunities to offset slippage in claim value. This includes potential to claim for £500k of equipment. The project are also seeking confirmation as to whether they can claim for land transfer fees via a change control request to further reduce the underspend, likely to being to zero. This action is currently with the project owner to return.

Year 2 2021/22 Capital Drawdown ³⁰

Page 2 of 2

CAPITAL Drawdown Monitoring 2021/22 (Year 2) October Monthly Forecast

**Note: profile amend refers to any approved permanent changes to the profile e.g. accelerated funding, transfer of funds from revenue to capital*

Project Name	Deal Profile (£000)	Profile Amend* (£000)	Updated Profile (£000)	Forecast Drawdown (£000)	Current Year Variance (£000)	Comments
TCD010 JHI Advanced Plant Growth Centre	0	4,493	4,493	4,493	0	The project owners have submitted a revised forecast to Q2 Quarterly Report return, with a slight advance in expenditure. Forecast includes apportioned expenditure between projects. Project have indicated a potential expenditure over drawdown of £1.302m. The forecast also shows an increase of £468k to Q3 drawdown from Q4 compared to Q2 QR.
TCD011 JHI International Barley Hub	6,250	507	6,757	6,757	0	The project owners have submitted a revised forecast to Q2 Quarterly Report return, with a slight advance in expenditure. Forecast includes apportioned expenditure between projects. Project have indicated a potential expenditure over drawdown of £1.543m
TCD008 Low Carbon and Active Travel Hub	635	0	635	635	0	Project are indicating a possible delay in drawdown into Q1 of Year 3 2022/23, which has not yet been quantified (contract process expected to be completed by the end of November which will inform this figure). The Project Owner is also indicating a delay in spend for phase 2 of the project.. No formal request for a change to the profile has been made by the project to date.
TCD013 cyberQuarter	4,100	0	4,100	4,100	0	Project is forecasting a full drawdown. Project has indicated a potential spend of £437k above allocated drawdown of funding in year 2.
TCD007 5G Digital Testbeds	450	0	450	350	(100)	Project still to secure BJC approval from SG (resubmission pending). BJCv1 has been presented and approved at September JC, subject to Government approval. Further iteration of BJC required so will required to go back to JC. Project is forecasting a £100k underclaim in 2021/22. No formal request for a change to the profile has been made by the project to date.
TCD005/06 Rural Angus and Perth Digital	1,800	0	1,800	1,800	0	Project forecasting full drawdown.
TCD025 Engineering Partnership	0	496	496	496	0	Project have indicated full drawdown but subject to FBC approval by Governments and Joint Committee, which puts the project at risk. FBC still to be submitted for Government review.
Total Capital Drawdown	31,336	9,496	40,832	38,720	(2,956)	Current Forecast underspend of £2.956m. Expected to increase as a number of projects are indicating a potential underspend against drawdown TBC.

Year 2 - Programme Management

Headlines:

- A **£2.956m underspend** in the Capital Programme is currently forecast
- This value is expected to increase as a number of projects have indicated, though not formally forecast underspend
- A table has been produced showing forecast additional expenditure in excess of the approved drawdown allocation, being incurred at the project owners risk
- A confidence rating of how likely the expenditure is to be incurred by the end of the financial year has been made based on delivery and governance



Year 2 - Programme Management Options

Theme/Project	Potential Acceleration	RAG Confidence*		Comment
	£000	D	G	
Culture & Tourism				
TCD017 Perth Cultural Transformation (City Hall)	936			Project are indicating that they will have reached drawdown allocation position by Q3, with an expected spend of £5.776m above allocated award for year 2. Project have £936k remaining in profile, in year 3, and therefore could accelerate up to £936k . This would bring the project to its full drawdown. Management Group agreed in September that this project should be approached for acceleration.
Innovation				
TCD010 Advanced Plant Growth Centre	1,302			Project forecasting expenditure of £1.302m over allocated drawdown. High value project with potential of slippage in quarter 4. PMO recommendation for the Partnership to consider as a Programme Management option, confirming value closer to year end.
TCD011 International Barley Hub	1,545			As above
TCD013 cyberQuarter	437			Project forecasting expenditure of £437k over allocated drawdown. Legal Agreement required to drawdown. Sign off pending. PMO recommendation for the Partnership to consider as a Programme Management option, confirming value closer to year end.
TCD029 Stretch Dome Simulator	300			Currently profiled for Y10 drawdown. Project has been spending at risk and therefore has potential to accelerate subject to Business Case approval. BJC approved by Governments and Management Group. BJC still to be approved by Joint Committee. Programmed to be presented to JC in December.
TCD012 a Angus Fund, Mercury Drone Port Project	117			Management Group agreed in September that this project should be approached for acceleration. Currently profiled for Y3 drawdown. Project spending at risk. This project has a BJC which is aiming to be presented to the February Joint Committee. PMO recommendation for the Partnership to consider as a Programme Management option, confirming value closer to year end.
TCD012 b Angus Fund, Centre for Agricultural Sustainable Innovation (CASI) Project	175			Profiled for Y3 drawdown. The OBC is still being developed. Unlikely to meet the governance requirements for JC approval to enable drawdown in year 2.
TOTAL	4,812			

*RAG CONFIDENCE

D = Delivery

G = Governance

Year 2 - Programme Management

- **£1.236m** has been given a high confidence rating by the PMO
- This leaves a **current £1.729m forecast underspend** against drawdown at year end based on the named underspends that have been reported
- **£3.401m** has potential to be delivered and secure the appropriate governance to drawdown

PMO are actively liaising with Projects and their Finance Directors where additional potential eligible acceleration has been identified and provide regular update reports to the S95 Officer, Finance Directors Group and Management Group members to inform year end Programme Management of the profile



Year 3 Programme Underspends 34

Project	Variation awarded profile	Comment
Skills		
TCD023 Aviation Academy for Scotland	(TBC)	Project have indicated that there will be a 6 month delay in getting their Business Case developed and approved, and are still undergoing conversations about state aid with all Partners involved in the project. They have indicated an underspend, potentially significant, in year 3 but are unable to specify a value at this stage. Project are currently considering the need for a change request in relation to decoupling the project for the Perth and Dundee parts.
Regional Culture and Tourism		
TCD021 Regional Culture and Tourism Investment Programme	(264)	Programme are indicating a forecast permanent underspend of £264k in year 3 as Discovery and Hospitalfield have no drawdown programmed and no other Projects are programmed to drawdown in that year. This is based on the £21k forecast underspend in year 2 by Hospitalfield being requested in year 3 by the project. This would leave £264k available for the Partnership to reallocate.
TCD017 Perth Cultural Transformation (City Hall)	(1,373)	The project were awarded accelerated funding of £737k in year 1 to support the Partnerships management of its year end programme. If, the Project is successful in its forecast accelerated expenditure of £936k in year 2 this will bring the awarded Deal profile to zero. This would leave £1.373m available for the Partnership to reallocate.
Innovation and International		
TCD020 Perth Innovation Highway	(900)	The project has reported a 2 year delay on delivery and so will have a permanent underspend of £900k in year 3 and £990k in year 4. Project to submit a change request. This would leave £900k available for the Partnership to reallocate.
Total Forecast Underspend Against Awarded Funding Profile	(2,558)	Projects have identified a forecast £2.558 million underspend going into year 3.



Projects indicating an 'Ask' in Year 3 ³⁵

(with Joint Committee Business Case approval)

Project	Value of 'Ask' £000	Comment
5G Digital Testbeds	100	Request to accelerate from forecast year 10 underspend placement. Project Forecasting £100k underspend in year 2. Project have indicated that they would like to request funding in year 3 in addition to their year 3 awarded profile.
Eden Campus	844 to 1,000	Request to accelerate from forecast year 10 underspend placement. The project have indicated that this wish to request their forecast underspend of £844k to £1m from year 2 in year 3 in addition to their year 3 awarded profile.
Growing the Tay Cities Biomedical Cluster	0 to 848	Request to accelerate from forecast year 10 underspend placement. Project have indicated a potential underspend in year 2. The project are looking at options to reduce the underspend. However if they cannot, they have indicated that they would like to request the underspend from year 2 in year 3 to account for the additional spend they have forecast for year 3.
Low Carbon Transport & Active Travel Hubs	TBC	Request to accelerate from forecast year 10 underspend placement. Project have indicated a potential underspend in year 2, value TBC by the end of November 2021. The project have indicated that they would like to request their Y2 underspend in year 3, in addition to their year 3 awarded profile.
Advanced Plant Growth Centre	5,838	Funding gap has been identified by the project. Project are currently forecasting spend of £8.136m in Y3. This is £5.838m more than profiled at Deal signing. If awarded acceleration would be taken from the end of the Projects profile (year 9 and year 10)
International Barley Hub	6,112	Funding gap has been identified by the project. Project are currently forecasting spend of £9.723m in Y3. This is £6.112m more than profiled at Deal signing. If awarded acceleration would be taken from the end of the Projects profile (year 7)
Total	12,894 to 13,898	Total does not include TBC value for Low Carbon Transport & Active Travel Hubs.

* Hospitalfield underspend will be reallocated by the Programme Owner from the Regional Culture and Tourism Programme

Year 3 - Programme Management ³⁶

Headlines:

- It is currently forecast that there will be a permanent underspend at the start of year 3 of **£2.558m against the Capital profile awarded at Deal signing.**
- There is a current 'ask' indicated by several projects, in delivery, of between **£12.9m and £13.9m above their awarded drawdown profiles**
- **Gap in funding** awarded and funding being requested of **between £10.4m and £11.4m**



Year 2 2021/22 Revenue Drawdown³⁷

REVENUE Drawdown Monitoring 2020/21 (Year 2) October Monthly Forecast

Project Name	17 th Dec Profile (£000)	2021 Profile Change (£000)	Year 2 Profile (£000)	Forecast Drawdown (£000)	Current Year Variance (£000)	Comments
TCD024 Regional Skills and Employability Programme	1,289	0	1,289	15	(1,289)	<p>Project Owner forecasting a £1.289m underspend. This is a red on the Partnerships Risk Register and work is ongoing to get the Programme OBC to a position that it can be approved and to fully understand the impact on the profile.</p> <p>A standing item on the Thematic Board/ Finance Directors Group and Management Group to review and manage. The SG have confirmed that they expect the profile for the Programme to reflect the profile at Deal signing, although they note the variation.</p> <p>The SG have asked the Programme to confirm if this underspend is permanent.</p>
TCD025 Tay Cities Engineering Partnership	557	(496)	61	61	0	No change. Forecasting full drawdown, but is subject to FBC approval by Governments and Joint Committee
TCD021 Dundee Airport Investment	300	0	300	300	0	Project have drawdown full revenue award .
Total Drawdown	2,146	(496)	1,650	376	(1,274)	Regional Skills and Employability Programme Project owner indicating a forecast underspend of £1.274m

Year 2 Revenue Drawdown 21/22³⁸

Headlines:

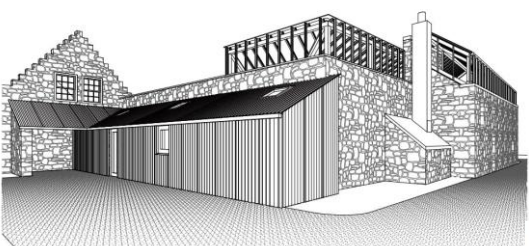
- Grant offer Letter for 21/22 agreed with a total Year 2 **Revenue Profile drawdown of £1.650m**
- There are **only three projects in the revenue profile** which allows for very little programme management across projects
- An **underspend against drawdown profile of £1.289m** has been indicated by TCD024 Regional Skills and Employability Programme Owner.
- Spend by the Skills Programme is dependent on the approval of the Programme OBC and Project business cases.



One Year On



The IBH & APGC Infrastructure – Main Building



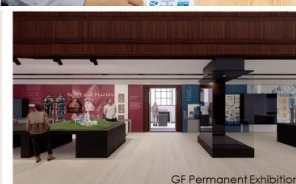
Ground floor – Entrance Hall



abertay.ac.uk



The Vennel



GF Permanent Exhibition



The Study of Nature



1st Floor Temporary Exhibition



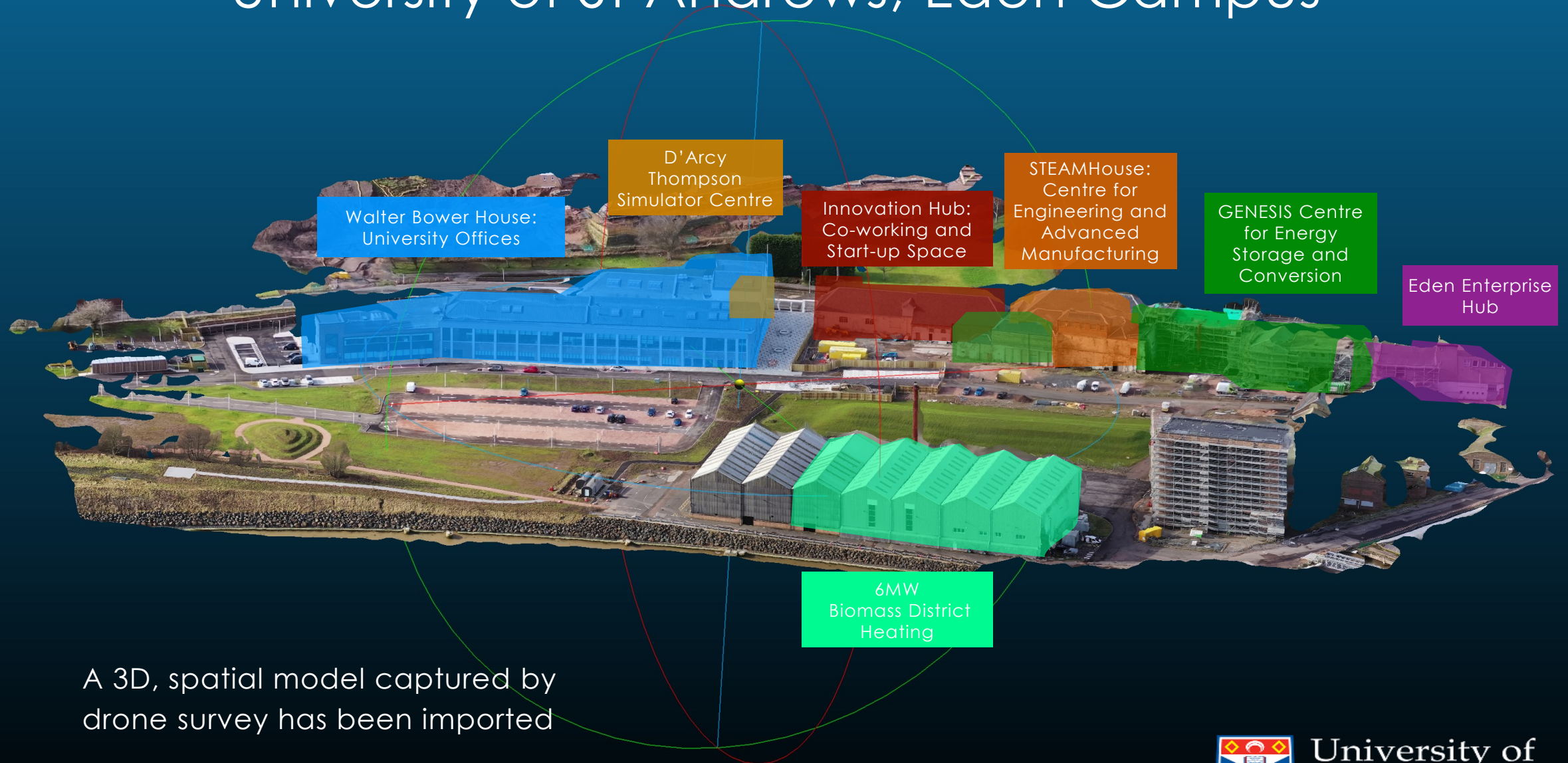
@taycities

www.taycities.co.uk

morag.saunders@taycities.co.uk



University of St Andrews, Eden Campus



A 3D, spatial model captured by drone survey has been imported

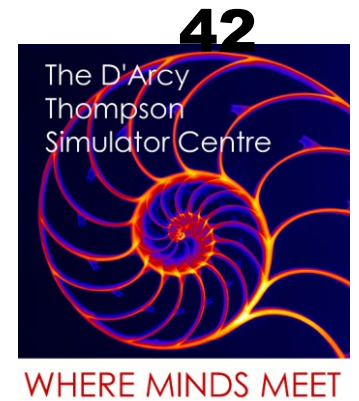


University of
St Andrews

Walter Bower House, Eden Campus



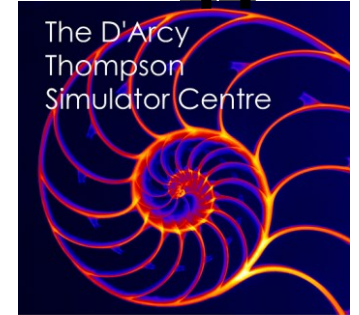
Stretch Dome Simulator, as a demonstrator, installed @ Eden Campus. A 3D, 'digital twin' for 56° N, between 2° W and 4° W – essentially the Tay Cities Region Deal area – in place and operational





St Andrews Smart City Preparation – a digital twin



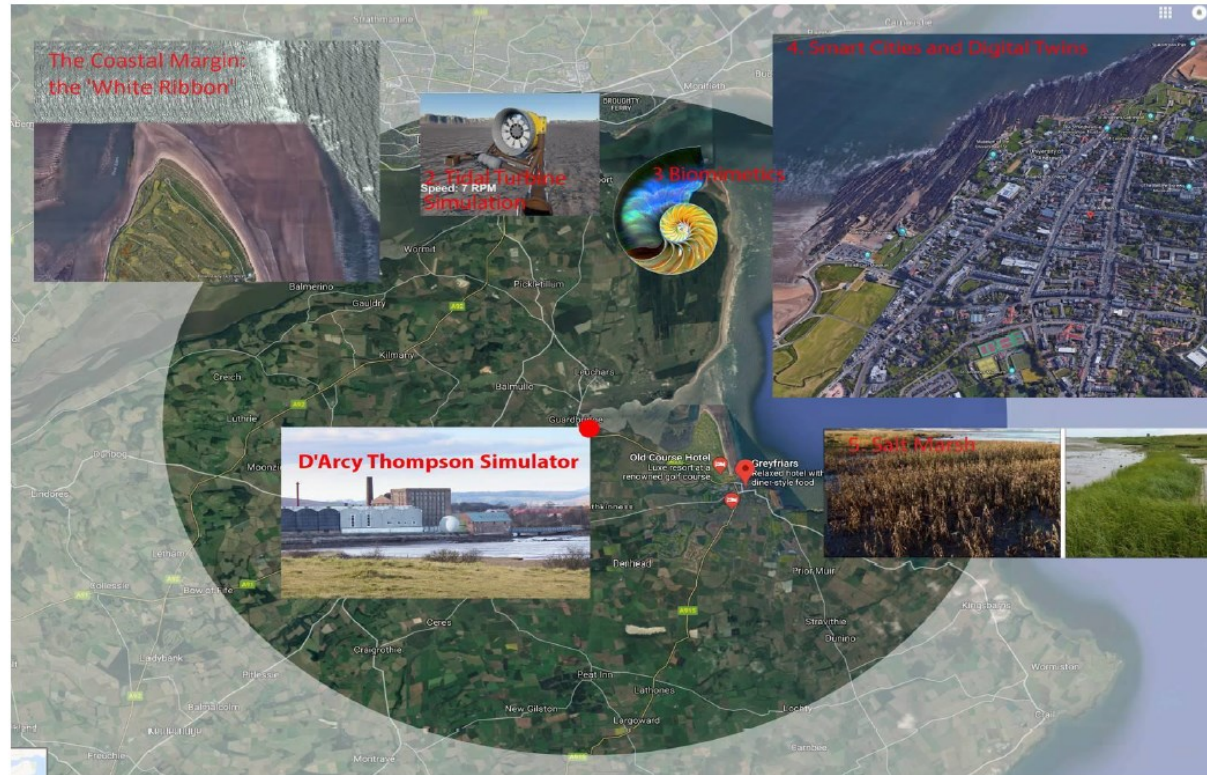


WHERE MINDS MEET



Actively engaged in Research and Collaboration

Marine Biosphere: Coastal Margin, East Coast, North Sea



1 The Coastal Margin: 'the White Ribbon'

An important part of this process is building the physical model, including both topography and bathymetry, for the area. It is anticipated that there will be a patchwork of data and resolutions. One of the key tasks will be to unite both into a unified framework, into which new technology can be virtually prototyped and mathematical modelling can be visualised.

Distillation of potential ideas for projects in the Simulator, following a visit by the University of St Ålesund, early summer 2018

4 Smart Cities & 'Digital Twins': St Andrews

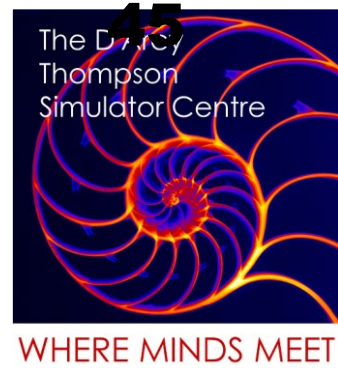
The Memorandum of Understanding (MoU) between the University of St Andrews (UStA) and the Norwegian National Technical University (NTNU) forms an excellent foundation for these coastal towns developing as 'Smart Cities'

A 'Digital Twin' will be developed for both.

5 Salt Marsh

Extensive work has been done restoring the salt marsh in the Eden Estuary. This work will be shown in the simulator, as a pre-cursor for more detailed, follow-on work looking at how to mitigate the impact of a rise in sea level and more severe storm patterns.

Eden Campus as a Test Bed, St Andrews as a Demonstrator

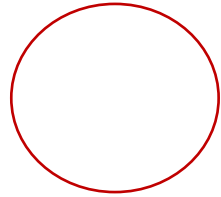


The Simulator Centre is already generating income.

First commercial project (modelling kelp farming techniques) is 50% complete.

Others are in the pipeline:

- *Energy Network for NE Fife, with SPEN*
- *Joint project with Fife Council and SEPA*
- *Analysis and data gathering for St Andrews as a UN SMART City has commenced.*



SIMULATION

*A way of Thinking, every bit as much as a
means of Visualisation*

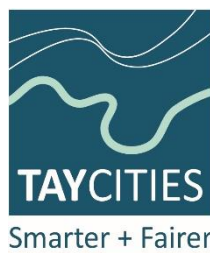
De-risking investment decisions

Modelling & scenario planning

Management dazzler!

December 2021





REPORT TO: TAY CITIES REGION JOINT COMMITTEE – 11 MARCH 2022

REPORT ON: TCD024 REGIONALSKILLS AND EMPLOYABILITY DEVELOPMENT PROGRAMME – PROGRAMME OBC

REPORT BY: RONNIE PALIN, SKILLS DEVELOPMENT SCOTLAND

REPORT NO: TCRJC3-2022

1.0 PURPOSE OF REPORT

- 1.1. This report seeks approval of the Outline Business Case (OBC) for TCD024 Regional Skills and Employability Development Programme.

2.0 RECOMMENDATIONS

- 2.1. The Joint Committee is asked to:
 - a) Consider this report and the Programme OBC for TCD024 Regional Skills & Employability Development Programme, including the BJC for the Programme Manager post, available via Sharefile on request.
 - b) Approve the Programme OBC and Programme Manager BJC (2 approvals).
 - c) Agree the Projects recommended within the OBC.

3.0 INTRODUCTION

- 3.1 The Programme has had to remain flexible under the challenging and changeable landscape of COVID19 and the EU exit. The response to the pandemic has been unprecedented with a combination of fiscal, monetary and macro-prudential measures to maintain cashflow, incomes, wages and employment across the economy, there is still uncertainty as to what the business base will look like as we emerge from lockdown and beyond. In light of this we have been flexible to adapt the Skills and Employability Programme as appropriate.
- 3.2 Much work has been done to establish the first tranche of projects to accompany the Programme OBC. The 5 initial projects include Hospitality training, Digital skills, Life Sciences – Biotechnology and Medical Technology, Supporting SME Skills and the employment of a Skills Programme Manager as a change role to integrate and align employability services across the region.
- 3.3 The Details of the Skills Programme Manager is outlined in Appendix I of the OBC and would seek approval alongside the Programme OBC.

- 3.4 Hospitality training, Digital skills, Life Sciences – Biotechnology and Medical Technology and Supporting SME Skills will require further businesses cases to be brought to the Management group and Joint Committee.
- 3.5 Further projects (the second phase) will be developed in 2022. Projects will need to meet the objectives and outputs set out in the Programme OBC.
- 3.6 The Skills Advisory Board are content that this Programme will meet the targets set out in the Skills and Employability OBC, align with the recent regional Skills Investment Plan and Regional Economic Strategy and provide a sustainable future for Tay Cities citizens.

4.0 DESCRIPTION OF PROJECT

- 4.1 This project was awarded up to £20 million in revenue from the Tay Cities Regional Deal funding in the Heads of Terms Agreement dated 22/11/20 as follows:
- 4.2 ‘the Scottish Government will invest up to £20 million to support delivery of the Tay Cities Skills and Employability Development Programme to deliver Fair Work. The Programme will reduce skills shortages and gaps, and deliver incremental system-wide improvements to ensure Inclusive Growth by boosting the flow of individuals from disadvantaged groups, support reskilling into the career opportunities that will be generated through and as a result of the investment in the Tay Cities Region Deal.’
- 4.3 The Programme is focused not just on delivering short-term projects to reduce skills gaps and shortages and ensure the opportunities generated through investment in the Deal are available to all, but also on leaving a lasting legacy by delivering incremental, system-wide and equitable improvements to ensure Inclusive Growth across the Region. The OBC for the Skills and Employability Programme is presented for approval which if granted will enable the projects to drawn down the allocated funding. Funding is drawn down when the funding project submits a claim for money which has already been spent.
- 4.4 Assuming this is successful all other projects will follow the usual governance approval process.

5.0 FINANCIAL IMPLICATIONS

- 5.1 The agreed profile entering into the Deal is highlighted in **Table 1**. We now highlight a new profile that shows the current underspend in years 2020/21, 2021/22 and 2022/23.
- 5.2 This amounts to £2.688m underspend in 2021/22. All underspend within the Deal Programme is placed in year 10 for Programme Management and reporting purposes. This would leave year 10 spend at £5.026m.
- 5.3 We will continue to accelerate both phase 1 and phase 2 projects and look for opportunities to increase spending from year 6 onwards.
- 5.4 The commitment and continuation of funding to projects will be subject to the approval of detailed project propositions by the Skills Advisory Board, TCRD Management Group and Joint Committee and satisfactory progress will be charted against agreed objectives and targets. All projects will be subject to UK Treasury Green Book guidance.

Table 1: Original spend profile over the life of the Programme (£000)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	
Agreed Profile	0	1,289	2,339	2,339	2,339	2,339	2,339	2,339	2,339	2,338	20.000
New profile	0	0	940	2,339	2,339	2,339	2,339	2,339	2,339	5,026	20.000

N.B. Figures have been rounded, so totals may not sum to £20m. Any changes to the spend profile will be subject to affordability constraints and securing agreement with Scottish Government

6.0 IMPLEMENTATION PLAN

- 6.1 The aim is to improve the effectiveness of the regional labour market by targeting spend on disadvantaged groups, supporting skills needs in key sectors, and reducing barriers to accessing employment. Responsibility for achieving this aim does not rest solely with this Programme but will require engagement across all projects and Programmes within the Deal.
- 6.2 Deal funding will support the Programme's five key themes:
- Regional Leadership & Improvement
 - Understanding Labour Market Needs & Opportunities
 - Matching Needs to Opportunities
 - Targeted Skills Interventions
 - Reducing Barriers to Opportunities.
- 6.3 The Programme has four overarching objectives:
- Increasing the understanding and awareness of job and learning opportunities for our residents;
 - Putting in place the support required to help our more disadvantaged citizens succeed;
 - Opening new and diverse talent pools to businesses and demonstrating the value of inclusive employment practices; and
 - Enhancing the ability of partners to work collaboratively to build a more inclusive, innovative, and future-proofed job market.
- 6.4 The primary outcomes of the Programme will be:
- An incremental reduction in unemployment and economic inactivity amongst Programme beneficiaries across the region;
 - Employers reporting fewer skills shortages and gaps;
 - Individuals able to access the training and employability support they need to succeed within the workplace;
 - A long term legacy of continued improvement in the quality of outcomes for the most disadvantaged people in our region; and
 - Greater diversity of talent within our workforce.
- 6.5 The Milestones, Outcomes and Targets and Risks and Mitigation tables below are from the Implementation Plan.

Milestones

Milestone	Due Date	Status
Programme Strategic Outlines Case approval by Tay Cities Partnership <ul style="list-style-type: none"> - Management Group - Joint Committee 		Complete
Programme Outline Business Case approval by Governments	Jan 22	Complete
Programme Outline Business Case approval by Tay Cities Partnership <ul style="list-style-type: none"> - Management Group - Joint Committee 	Feb 22 March 22	
Approval and start of first phase of projects. Content, outcomes and baselines to be defined in project business cases: <ul style="list-style-type: none"> • Programme manager hosted at Perth and Kinross • Biotech and Med-tech training: deliver training for the industry over the lifetime of the project, growing from 25 being trained in first year. • Hospitality Training: Train 2,000 individuals, resulting in 200 people moving into new roles across the sector with 90% of those achieving Real Living Wage, over the life of the project. • Digital Skills: creating 11 jobs via support for 600 individuals directly and working with 200 organisations across the life of the Programme. • Supporting creating 6 quality jobs SMEs working with 400 businesses and training 500 individuals over the life of project. <p><i>Given additional investments recently announced by both governments to support recovery from Covid and prioritisation of young people, project outcomes in 2022/23 will be revisited as business cases evolve in order to ensure maximum impact and value for money.</i></p>	22/23	Project cases ready to go to SG
Approval and start of second phase of projects. Content and outcomes to be defined in project business cases. Second phase projects – BC approval / delivery as separate milestones	2022/23/24	Not started
Assessment, review and evaluation of projects to ensure they flexibly respond to emerging labour market needs within the City Deal region and deliver specific project aims and objectives detailed within project business cases.	2022/23 and annually thereafter	Not started
Programme Benefits Realisation Plan/Reporting, including timescales for each Project	2022	Initial logic model complete

Outcomes and Targets

Targets	Phase 1 Projects total	Overall Programme total
Total number of beneficiaries	3,100	5,000
Quality and sustainable new job opportunities as a direct result of this Programme	28	50
Beneficiaries supported into sustainable (greater than 13 weeks), secure and quality employment	900	1,350
Businesses directly supported through this Programme	800	1,200
Number of businesses receiving support to 1) improve their understanding of the recruitment needs and challenges they face, and 2) increase their ability to access suitably skilled staff (as measured in the Employer Skills Survey)	600	900
Uplift in skills and employability - additional accredited training and skills improvements	450	675
Development of a pan-regional skills development and employability approach, built on enhanced cooperation, collaboration, and partnership working.	N/A – this will be measured through qualitative impacts (surveys, case studies, evaluation, etc.)	
In increasing workforce representation, the Programme will look to target specific underrepresented groups and those furthest from the labour market:		
Females - 50% of all beneficiaries	1,550	2,500
BME - 4% of all beneficiaries	100	200
Disabled - 10% of beneficiaries	300	500
Sustained increases in recruitment of and employability and skills development opportunities for people from deprived areas (i.e. intervention will target those furthest from the labour market across the region.	500	750
These figures have been arrived at based on the totals of individual projects which will be taken forward under Phase 1.		
N.B. Figures for BME and Disabled beneficiaries are a broad representation of the share of the total regional population with these characteristics. These have been arrived at through use of Annual Population survey data on NOMIS, and in conjunction with key regional partner insight.		
The number of beneficiaries likely to come from deprived areas is based on SIMD data and has been arrived at in discussion with partners.		
It is expected that, given the regional demographics and relative levels of deprivation, there is likely to be a relative geographic concentration of beneficiaries within certain areas of the region		

Key Project Risks and Mitigations

Potential risks and mitigating measures which have been identified are set out in more detail in the table below. This sets out how these Programme and project risks will be managed, and will also be used in, and inform, individual project OBCs.

Risk Impact / Detail	Controls and Mitigating Action
Inability to secure resource for the Programme Manager in a timely fashion. Without a central postholder, the cohesion and collaboration required would not be achieved as effectively or to the same scale – and as such, the Programme and projects would not be as clearly defined (or identifiable as City Deal funded) to beneficiaries.	Recruitment process will be started at the earliest opportunity. This will utilise different mediums of communication as well as explore opportunities for internal recruitment within local authorities.
Lack of buy in from partners in developing a collaborative, regional delivery system. Could result in silo working and delivery resulting in an inconsistent approach to developing a skills and employability ecosystem.	Ensure signed agreement from all partners, clearly setting out their roles and responsibilities. The appointment of a suitably skilled Programme Manager will help mitigate against this, ensuring regular engagement with all partners, and development of an effective, collaborative regional approach. Utilise different mediums of communication to effectively engage partners in different ways.
Lack of buy-in to / poorly attended Skills Advisory Board. Would result in lack of understanding of the deal benefits and delivery of projects across the region.	Secure sign-up to SAB terms of references from all partners for regular engagement, and clearly set out their roles and responsibilities. Frequent engagement between Programme Manager, project leads and SAB members to ensure they are engaged and appraised of all developments.
Potential for actual spend to slip against profiled spend. This would result in lost revenue budget that cannot be claimed back until later in the deal term.	Ongoing engagement between all project leads and key stakeholders. All projects required to complete individual five case OBCs, including robust financial detail outlining spend profile and cost profile. Financial updates will become part of the monitoring and evaluation process. The Programme manager along with the relevant project lead, will escalate significant risks of slippage to the Advisory Board
Potential for projects to be delayed in the development phase, resulting not meeting planned budget profile.	Regular updates are provided at the SAB around the progress of individual projects. If appropriate, these will be escalated to the PMO and TCD management group.
Potential for projects to be delayed in the development phase or not meet the Programme objectives, resulting in not meeting planned budget profile.	A workshop to scope out the next phase of projects is planned late 2021 with a follow up meeting in early 2022. Projects will require OBC for progressing and must meet Programme objectives.
Potential for the Programme to not meet the objectives set out in the OBC. This would impact the TCD and regional by not providing the skills and employability support to individuals across the TCD region.	SAB will develop a monitoring and evaluation process to ensure overall Programme objectives are captured. Projects will be flagged that fail to achieve or contribute to objectives as quickly as possible
Failure to capture the relevant data would result in the Programme not being able to show progress and delivery on objectives, which could delay financial draw down.	Utilise all available data sources e.g. ONS, NOMIS, SDS Data Matrix etc., to ensure baseline is captured appropriately and accurately.

Lack of communication structure is likely to result in duplication of activity, and effort. Partners will seek information at a project, Programme, or City Deal level from multiple sources resulting in inefficiency due to increased meeting time to disseminate information.	Workshop to be set up to map existing skills and employability landscape and ensure gaps are filled. Introduction of the Programme manager should allow greater collaboration and communication across the region.
--	--

N.B. Each risk has been given a score from 1 (lowest score) to 5 (highest score) for both likelihood and impact, and these have then been multiplied to provide an overall score which has been presented in the Table. We have provided the actual score as well as a visual matrix, where the white square indicates the score each individual risk has achieved.

- 6.6 Whilst not anticipated, any variation to the proposed Programme spend will be identified by the Programme Owner who will notify the accountable body via the Tay Cities Deal Programme Management Office (PMO) who will report them to Scottish Government for review. We anticipate that this would only occur in situations where projects are unable to progress at the same speed as the anticipated spend profile shows. This will be mitigated through close working relationships between the Programme Manager, individual project leads, and the Thematic Board to ensure progress is being made, OBCs are developed and approved, and any risks are quickly identified and mitigated against.
- 6.7 Variations in individual projects will be reported to the Skills Advisory Board in the first instance for consideration, before being reported to the accountable body and wider governance structures.

7.0 DECISION PATHWAY

- 7.1 The Programme has met the decision pathway milestones as set out below and the next steps are also indicated.

Decision pathway milestones and planned timeline			
Stage	Milestone	Planned date	Date achieved
OBC	Governments' approval	November 2021	January 2022
	Thematic Board recommendation	19 th November 2021	19 th November 2021
	Management Group approval	24 th February 2022	24 th February 2022
	Joint Committee approval	11 th March 2022	
	Submission of FBC (to PMO who forward to governments)		
FBC	Governments' approval	Not required for a Programme	
	Thematic Board recommendation		
	Management Group recommendation		
	Joint Committee approval		

- 7.2 The OBC for TCD024 Regional Skills and Employability Development Programme is presented for approval which, if granted, will enable the phase 1 projects sitting within the Programme to develop further business cases and present to the TCD Management Group and Joint Committee. Funding will be drawn down when the

projects submit a claim for money which is already been spent following approval of the Project Business Cases.

- 7.3 Should the OBC for the Programme be approved business cases for each project will be brought to the Management Group and Joint Committee.
- 7.4 Work towards phase 2 projects has started. Several workshops for phase 2 projects have completed.

8.0 CONDITIONS

- 8.1 As part of the Government feedback and approval of the Programme OBC and Programme Manager BJC the following conditions were noted:
 - The feedback includes points for project owners to consider when preparing the project business cases.
 - What is the indicative funding allocation to each of the projects outlined in the business case as forming phase 1 of the Programme?
 - Provide an outline of the intended timeline for each of these projects up to Joint Committee approval.
- 8.2 Update on the above conditions:
 - The feedback has been passed to project leads for incorporation and updating the individual businesses cases that will still need to go through the approval process.
 - Detailed funding profiles for each individual project, including quarterly spend over years 22/23 and 23/24 has been provided to the Finance Director group.
 - Detailed timelines of each project through the process have been provided to the management group.
 - Both the timelines and funding profiles have been shared with Governments.

9.0 POLICY IMPLICATIONS

- 9.1 This OBC challenges the current ways of working, in getting people from various groups (and our deprived areas) into employment. As the Fair Work and Equality, Diversity and Inclusivity agendas grow in stature, it is more important than ever to ensure everyone across the region has the benefit to access skills and employability development activity which has the potential to unlock their economic potential.

10.0 CONSULTATIONS

- 10.1 The Skills Advisory Board and TCD management group have approved the presentation of the Programme OBC.
- 10.2 The Scottish Government has been consulted and has participated in the preparation of the OBC for the Programme and it should be noted that the business case is iterative and will continue to evolve, and be reviewed by the Scottish Government, as new projects are introduced.
- 10.3 Scottish Government are committed to working in partnership with Tay Cities as the Programme evolves in the coming months and years.
- 10.4 The following have also approved the presentation of this OBC:

Responsible Finance Officer: The responsibility for finance lies with the organisation leading on each project and an individual signatory will be declared as part of each individual project level business case.

Management Group Sponsor & Programme Lead: Ronnie Palin

11.0 BACKGROUND PAPERS

11.1 None.

Report Author: Ronnie Palin
Title: Regional Skills Planning Lead (SDS)
Email address: ronnie.palin@sds.co.uk

Date: 23/02/2022

APPENDIX 1

Project Information	
Project number	TCD024
Project name	Skills and Employability Development Programme
Project owner	Skills Advisory Board
Responsible Finance Officer	The responsibility for finance lies with the organisation leading on each project and an individual signatory will be declared as part of each individual project level business case
Management Group Sponsor	Skills Development Scotland
Award amount under TCD	£20M
Jobs - target number of jobs to be created	50
Leverage to be achieved	

APPENDIX 2

1. Executive Summary

Our vision is to make the Tay Cities Region¹ one of the most exciting, dynamic and desirable areas of Europe in which to live, work, invest and visit. We are building on the region's rich and varied heritage and history, strong and up-and-coming business sectors including Technology, Manufacturing, Engineering, Life Sciences, Agriculture, Food and Drink, and Tourism, and world-renowned universities.

The Skills and Employability Development Programme ("the Programme") Outline Business Case (OBC) sets out the partnership's proposition to bring about the changes in skills and employability services that will support this vision and make a positive, tangible difference to our citizens, businesses and other stakeholders.

The Programme will make incremental changes to improve the currently complex and weakly-connected regional employability and skills landscape to deliver better outcomes for all, particularly those people facing significant disadvantages to securing and sustaining meaningful, high-quality employment. Up to £20 million City Deal investment available will help develop a new collaborative, pan-regional approach and put necessary interventions in place to drive improved economic performance and inclusion across the region.

The investment will also help drive up skill levels and productivity across the region through developing employment, training, and skills development opportunities. The direct impact of this investment will be an incremental reduction in unemployment and economic inactivity among Programme beneficiaries across the region, employers reporting fewer skills shortages and gaps, and citizens able to access the training and employability support they need to succeed within the workplace.

The real legacy will be the continued improvement in the quality of outcomes for the most disadvantaged people in our region, greater diversity of talent within our workforce, and the reinvigoration of communities across the region.

We envisage that this City Deal funding will support the Programme's five key themes:

- Regional leadership & improvement;
- Understanding labour market needs & opportunities;
- Matching need and opportunity, and reducing barriers to opportunities;
- Targeted skills interventions in key and growth sectors; and
- Targeting significant pockets of need.

This document sets out some additional information about the Programme, the proposed approach and the projects that will be taken forward under the Programme. Given timescales, we propose to take at least a two-phase approach to project development, and only those projects to be taken forward in the first phase have been set out in detail below.

Second phase projects will be developed over the remainder of this and the next financial year, and we anticipate that project delivery of both phase 1 and phase 2 projects will run concurrently. This multi-phase approach means that a second iteration of this Programme OBC will be developed and submitted for approval before Phase 2 projects are progressed. It is possible that there may be further phases beyond Phases 1 and 2; this will be agreed by the Tay Cities Region Deal Management Group, Skills Advisory Board and Scottish

¹ Comprising the areas of Angus, Dundee City, North East Fife and Perth and Kinross. Where publicly available data has been used, we have tried to reflect this definition; however, some datasets are available at the local authority level, and as such, we have had to use data for Fife as a whole instead.

Government should any additional phases be necessary. There will also be regular review of individual projects and the overall Programme to ensure all projects continue to deliver benefits for the region and its population by delivering on the OBC objectives.

In the Strategic Case, we outline the strategic need for the City Deal and how it complements wider regional, Scottish and UK national strategies. It also sets out how the Programme will align and contribute to the various strategic objectives, and how the Programme can contribute to successfully achieving strategic ambitions.

The Economic Case sets out the rationale for Government intervention through this Deal (the market failure), detailed information on the types of projects the funding will be used to support, and why this support and these projects are required.

The Financial Case sets out the anticipated spending profile of the Deal funding over the Programme's lifetime, how this will be managed, and the process for managing any necessary amendments to the spending profile.

The Commercial Case outlines key project information including how they will be delivered and their wider outcomes and outputs at a project, Programme and regional level (where appropriate). This Chapter also includes a risk register which has been developed, setting out the likelihood of risks occurring and the mitigating activity in place.

The Management Case sets out the arrangements for successful Programme delivery, the staffing, management and governance arrangements in place, linkages with other projects and City Deal activity, change management process, and how the Programme will be monitored and evaluated.

Overall, the Programme has been designed to be consistent with current strategies and policies at a UK, Scottish and local level:

- It supports Scotland's Economic Strategy by helping employers access the talented individuals they need, reducing staff turnover and increasing staff skills and productivity;
- It aims to make better use of existing resources, aligning and integrating them in ways that relate to the local infrastructure of support and the opportunities available, and enabling the active management of their performance in a coherent way. Deal funding will therefore focus on developing short and medium-term systemic changes and investments required to drive the creation of a sustainable high-performance service;
- It focuses on preventing long-term unemployment by working with those most at risk, and furthest from the labour market, thereby meeting the Scottish Government's focus on the use of preventative approaches;
- By focusing on equalities and the Fair Work agenda, the Programme will help adults and young people move out of poverty and thus in turn help tackle child poverty;
- It complements and supports the Scottish approach to employability and No One Left Behind² through its focus on those furthest from work and by complementing, integrating and aligning with the activity of Fair Start Scotland³. It does this by:
 - Focusing on those further from work and/or at risk of long-term unemployment;

² No-one Left Behind: Review of Employability Services, 2018; Available at: <https://www.gov.scot/publications/one-left-behind-review-employability-services/>

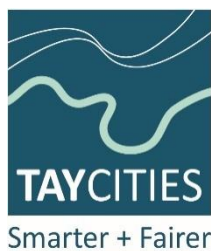
³ Fair Start Scotland; Available at: <https://www.mygov.scot/help-find-job/>

- Creating a clear and coherent strategic employability service for the region. In practice the Tay Cities Region approach will create much more integrated, personalised pathways into and through work for those further from work, and in this way, will provide a clear context for the application of devolved DWP funding in a consortium approach;
 - Improving transitions into work and so reducing the significant proportion who subsequently fall out of work;
 - Ensuring that recruits are supported in work so that they can gain skills and confidence and progress to well paid, secure work.
- It draws on the Skills for Scotland Strategy by incorporating both individuals and employers in the process of addressing skills gaps. The Tay Cities Region Economic Strategy also seeks to improve cross-agency, sectoral and geographical area collaboration to deliver a simple and coherent set of services and ensure a close working relationship between business support and employability and skills support;
 - It strongly links addressing inequalities with economic growth to ensure that all residents in the area can participate in Inclusive growth; and
 - It is committed to working towards a reduction in the region's carbon emissions impact, in line with the Scottish Government's net-zero carbon targets.

A Business Justification Case (BJC) for one of the projects – the creation of the Programme Manager post for the Programme – has been included at **Appendix I**. The postholder will drive the strategic skills & employability agenda across the Tay Cities Region and enable employability and related skills services to work better collectively to realise a more co-ordinated approach to delivery and a more efficient, effective offer to service beneficiaries.

This role will act as senior officer to the Tay Cities Skills & Employability Thematic Board, reporting on a day-to-day basis to the Chair of that board. This board will have strategic oversight of the Tay Cities Regional Skills and Employability Programme, and will ensure robust monitoring, evaluation and benefits realisation approaches are in place for all projects.

The post will drive the strategic agenda and ensure delivery activity remains consistent with the overall Programme business case, the strategic context of the Deal, and with the ambitions of partners, stakeholders and citizens. An important aspect of the role will be building consensus and collaboration across the region's four local authorities and other relevant stakeholders (e.g. FE and HE institutions and local employers) on the future direction and focus of regional skills activity, ensuring this effectively compliments and enhances existing local and national Programmes.



REPORT TO: TAY CITIES REGION DEAL JOINT COMMITTEE – 11 MARCH 2022

REPORT ON: TCD025 TAY CITIES ENGINEERING PARTNERSHIP (TCEP) – FULL BUSINESS CASE FOR APPROVAL

REPORT BY: ALISON SMITH – DIRECTOR OF VIBRANT COMMUNITIES AND SUSTAINABLE GROWTH, ANGUS COUNCIL

REPORT NO: TCRJC4-2022

1. PURPOSE OF REPORT

1.1. The report seeks approval of the Full Business Case (FBC) for TCD025 Tay Cities Engineering Partnership (TCEP).

2. RECOMMENDATIONS

2.1. The Joint Committee is asked to:

- a) Consider this report and the executive summary of the FBC at Appendix 2 (a copy of the FBC is available to the Committee on request).
- b) Note that the Management Group has recommended for approval the FBC for TCD025 Tay Cities Engineering Partnership on 24 February 2022.
- c) Approve the FBC, noting that the conditions contained within the Scottish Government approval have now been addressed.
- d) Note that there is a forecast underspend for 2021/22, which is currently reallocated to 2029/30 as per the Partnership's Deal Programme management.

3. INTRODUCTION

3.1. This project was awarded up to £2million in the Heads of Terms Agreement, dated 22 November 2018. The FBC is presented for approval which if granted will enable the project to draw down the allocated funding. Funding is drawn down when the project submits a claim for money which has already been spent. The key project information is at Appendix 1.

4. DESCRIPTION OF PROJECT IN THE DEAL DOCUMENT

4.1. The Scottish Government will commit up to £2 million to the Tay Cities Engineering Partnership (TCEP), which will drive up the skills and technology base of the sector to make it more competitive in an international marketplace and accelerate the pace of

research and development. It will do this by bringing together the resources of key private and public engineering facilities in a new collaboration.

4.2. TCEP will drive the transformation of manufacturing processes needed to ensure the sector remains competitive, such as the implementation of robotics and artificial intelligence; increased internationalisation; increased productivity; research and development and skills development. It will achieve this by increasing the profile of engineering as a career opportunity, developing training places and providing business support.

4.3. TCEP will:

- a) Create a Mobile Engineering Technology Unit to showcase Engineering and Advanced Manufacturing (EAM) and science, technology, engineering and mathematics (STEM) subjects. This will raise the profile of these subjects, increase careers awareness and address possible negative perceptions. The Unit will be fitted out with robotics and virtual reality technology to create opportunities in EAM and STEM from early years through both primary and secondary schools, into further and higher education and on to the workplace;
- b) Develop new foundation and graduate level apprentice training places to meet skills demand and enhance employability, career development and staff up-skilling;
- c) Develop enhanced up-skilling programmes to meet the emerging requirements of new sectors;
- d) Create an EAM Centre of Excellence equipped with leading industry tools to trial, test and demonstrate new processes and equipment; and
- e) Create a Product Innovation Lab, located within the Aviation Academy for Scotland, to support businesses bringing new products to market. The Lab will offer cost-effective product prototyping and testing, as well as mass production (but at low volumes to suit new products) and specialist incubator and product development support

5. FINANCIAL IMPLICATIONS

5.1. This project is currently profiled to spend a total of £1,401,000 capital and £599,000 revenue from the Tay Cities Deal funding.

5.2. The project is highlighting an underspend in Year 1 (2021/22). As per Partnership guidance the underspend is currently allocated to Year 10. Funding is anticipated to be drawn down as follows:

	Yr1 20/21 £000	Yr2 21/22 £000	Yr 3 22/23 £000	Yr 4 23/24 £000	Yr 5 24/25 £000	Yr 6 25/26 £000	Yr 7 26/27 £000	Yr 8 27/28 £000	Yr 9 28/29 £000	Yr 10 29/30 £000	Total £000
Capital Profile	0	496	334	345	226	0	0	0	0	0	1,401
Revenue Profile	0	61	76	91	198	173	0	0	0	0	599

Combined Profile	0	557	410	436	424	173	0	0	0	0	2,000
Anticipated Draw Down	0	350	410	436	424	173	0	0	0	207	2,000

5.3. The project will lever in additional funding of £973,100.

5.4. Any irrecoverable VAT will be claimed as part of the project costs.

6. IMPLEMENTATION PLAN

6.1. The following tables outline the milestones, outputs, targets and risks as presented in the Implementation Plan.

6.2. The following changes are highlighted from the Implementation Plan:

- a) Delay to due date for some of the Milestones and Outputs and Targets, as identified in the following tables.

6.3. These changes will be reflected in the next annual review of the Implementation Plan.

Milestones

Deliverable	Due Date	New Due Date	Status
Outline Business Case approved by Governments	June 2021		Complete
Outline Business Case approved by the Tay Cities Partnership Management Group	July 2021		Complete
Full Business Case approved by Governments	September 2021		Complete
Full Business Case approved by the Tay Cities Partnership Management Group	September 2021		Complete
Creation of Community Interest Company and Project Manager employed	2020/21	Q1 2022/23	Commenced, note new due date
Engineering Manufacturing Centre of Excellence: Planning consents obtained	2020/21		Complete
Engineering Manufacturing Centre of Excellence: Construction starts on site	2021/22		Complete
Engineering Manufacturing Centre of Excellence: Refurbishment completed	August/ September 2021	Q1 2022/23	Commenced, note new due date
Mobile Engineering Technology Unit purchased	2024/25	2022/23	Ahead of target
Mobile Engineering Technology Unit commissioned and tested	2024/25	2022/23	Ahead of target
Increased quantity & range of machine tool equipment available for use at Dundee & Angus College, Angus Training Group and Perth, University of the Highlands and Islands	2021 - 2023 (Staggered process)		On target, procurement to commence Q4 2021/22,

			subject to FBC approval
Creation of Product Innovation Lab at the Aviation Academy and Creative Exchange Perth	2024/25		Not started
Continue to work with PMO office to monitor Benefits Realisation Plan/reporting	September 2021		Ongoing

Outcomes and Targets

Targets	Baseline	Target Uplift	Date	New Date	Comments
New jobs including construction	n/a	10	2022	2027	Per FBC the new jobs are expected to be delivered in the first five years of the project, therefore date changed to 2027 (Year 5 of the project)
Private sector investment	n/a	£500k	2022		
SMEs supported	n/a	20	2026	2027	Moved forward by one year due to delay in project commencement
Industry specific training courses delivered	8	20	2026	2027	Moved forward by one year due to delay in project commencement
STEM engagement with school children	n/a	10,000	2026	2027	Moved forward by one year due to delay in project commencement
Mobile Engineering Technology Unit visits to 100% of schools in top 20% most deprived areas in Tay Cities Region	n/a	100%	2023	2024	Moved forward by one year due to delay in project commencement

Key Project Risks and Mitigations

Risk	Mitigation
Construction of Centre of Excellence delayed	Advance design works carried out to ensure building warrant obtained in advance.
TCD023 Aviation Academy delayed	Funding for the Product Innovation Lab can be re-allocated to TCEP main project and delivery re-phased.
Construction Risks (namely health and safety risks)	The Estates team within Dundee & Angus College are suitably experienced in this type of refurbishment work and will manage contracts accordingly. A fully developed risk register for the construction works will be developed as part of the Construction, Design and Management Regulations.

Risk	Mitigation
Equipment becomes outdated due to rapid technological change and the partners are unable to offer competitive courses.	The investment over 5 years will ensure that the equipment and machinery are the most up to date for the duration of the project.
The partners fail to agree on the structure of the new entity and their various roles within the project.	The project team has had detailed discussions with support from a legal representative regarding the creation of a Community Interest Company, which will provide governance for the project. The project team has agreed on the entity structure and respective roles of the partners. Provision has been included within the budget to have a dedicated Project Manager.
Demand from the engineering sector declines resulting in weak demand for the provision.	The partners will take a holistic view of engineering, incorporating traditional provision (demand for which is in decline), but also new and growing sectors and occupations, such as digital and robotics, where there is high demand from both trainees and employers.
The engineering sector does not engage or buy in to the partnership's delivery model.	Lessons from other sectors will inform the design of the model. Case study evidence will be developed on the potential impact and benefits to employers as part of the partners' marketing strategy.
Dundee & Angus College and the Engineering Technology Group fail to agree on the shared use of the new demonstration centre within the Engineering and Advanced Manufacturing Centre of Excellence.	Agreement in principle is in place for the configuration of the new demonstration centre. Appropriate management processes will be agreed for the ongoing management of the facility.
Covid-19 impacts	Continuous monitoring of situation across partners to be reviewed at monthly meetings.

7. DECISION PATHWAY

7.1. The project has met the decision pathway milestones as set out below and the next steps are also indicated.

Decision pathway milestones and planned timeline			
Stage	Milestone	Planned date	Date achieved
OBC	Governments' approval	-	30/08/2021
	Thematic Board recommendation	-	21/09/2021
	Management Group approval	-	30/09/2021
	Joint Committee informed	-	10/12/2021
FBC	Submission of FBC (to PMO who forward to governments)	-	1/02/2022

	Governments' approval	-	17/02/2022
	Thematic Board recommendation	-	15/02/2022
	Management Group recommendation	-	24/02/2022
	Joint Committee approval	11/03/2022	

8. CONDITIONS

8.1. The Full Business Case was approved by Scottish Government on 17/02/2022, however the feedback requested some minor changes be made to the Strategic Case. These have now been addressed in the updated Full Business Case being considered. Scottish Government have indicated that they do not require to review a further iteration.

8.2. Feedback also included a note on monitoring and evaluation. To address this condition the Project Owner will continue to develop and deliver monitoring and evaluation arrangements and will report this through the Tay Cities Deal reporting structures accordingly to ensure all benefits of the project are captured.

9. POLICY IMPLICATIONS

9.1. The Full Business Case has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty and Environment.

10. CONSULTATIONS

10.1. The following have approved the presentation of this FBC:

- a) Local Authority Project Management Officer: Mark Davidson
- b) Dundee & Angus College Project Lead: Jim Brown
- c) Responsible Finance Officer: Brian Ferguson – Dundee & Angus College
- d) Management Group Sponsor: Alison Smith – Angus Council

Report author: Mark Davidson

Title: Manager Tay Cities Deal (Angus), Angus Council

Date: 08/02/2022

APPENDIX 1

Project Information	
Project number	TCD025
Project name	Tay Cities Engineering Partnership
Project owner	Dundee & Angus College (Jim Brown)
Project Finance Director	Dundee & Angus College (Brian Ferguson)
Management Group Sponsor	Alison Smith (Angus Council)
Award amount under TCD	Up to £2million
Jobs: Target number of jobs to be created	10 New Jobs
Leverage to be achieved	£973,100

**Project Title:**

The Tay Cities Engineering Partnership

Organisation:

Dundee and Angus College

Extract from Full Business Case (FBC)

Executive Summary

1 INTRODUCTION

The Tay Cities Engineering Partnership (TCEP) will forge new levels of collaboration between industry and education to develop existing expertise, accelerate the pace of research and development (R&D), and crucially, to deliver benefit to businesses and the economy. TCEP brings together the expertise of key private and public engineering facilities across Tayside in a new collaboration that will drive up the skills and technology base of the sector to become more competitive in an international marketplace and to meet the skills demands of new emerging green technologies.

The project was confirmed by Scottish Government within the Deal Documents which were signed by both Scottish & UK Government and partners on the 17th December 2020¹:

The Scottish Government will commit up to £2 million to the Tay Cities Engineering Partnership (TCEP), which will drive up the skills and technology base of the sector to make it more competitive in an international marketplace and accelerate the pace of research and development. It will do this by bringing together the resources of key private and public engineering facilities in a new collaboration.

2 THE STRATEGIC CASE

Manufacturing is a key industry for Scotland. In 2018 it accounted for 55% of Scotland's international exports, 22% of Scotland's sales to the rest of the UK² and invested almost 50% of Scotland's spend on Business Enterprise Research and Development³. Engineering and manufacturing is also an important contributor to the Tayside economy. There were 740 businesses generating around £850 million to the Tayside economy in 2018 (around 14% of Tayside's output in that year).

Over the last couple of years, the economic and business environment has changed significantly, placing more importance on innovation and skills. Developments include:

- A growing need for businesses to adopt new digital technologies, specifically around Industry 4.0, to remain competitive, as smart manufacturing accelerates further
- There is a much greater focus on climate change and the need for governments and businesses to do more to develop renewable sources of energy, cleaner manufacturing and to reach net zero
- The Covid pandemic is changing the way people work and has raised challenges in the reliance on international supply chains – potentially supporting a reshoring of some manufacturing activity

In Tayside, as well as the rest of Scotland, this means huge changes in the skills required of new starters and in upskilling or transitioning workers from more traditional sectors. This brings with it new threats and opportunities for the Engineering and Advanced Manufacturing (EAM) sector and the economy as a whole:

¹ https://www.taycities.co.uk/sites/default/files/tay_cities_deal_doc_feb_8.pdf

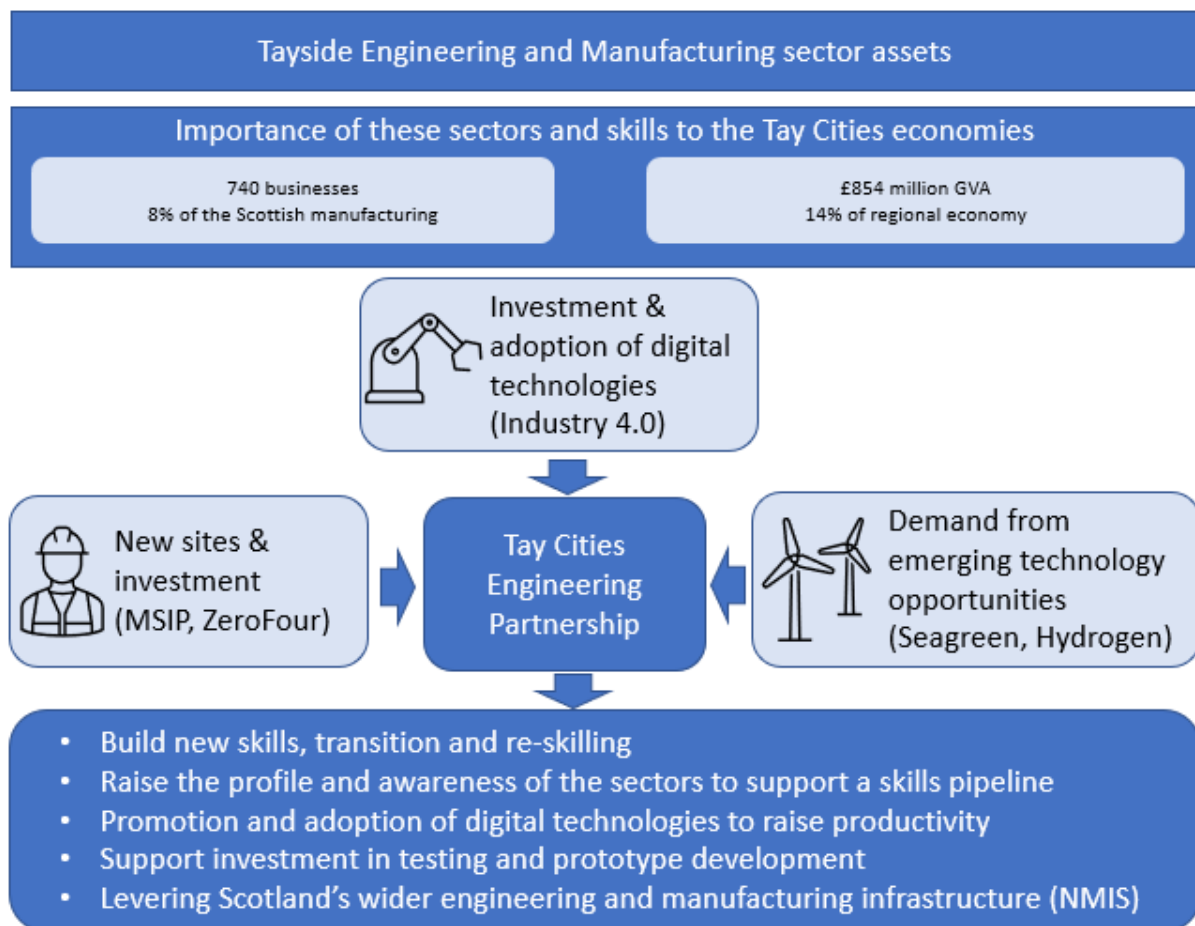
² <https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2020/01/export-statistics-scotland-2018/documents/export-statistics-scotland-2018---visual-summary/export-statistics-scotland-2018---visual-summary/govscot%3Adocument/Export%2BStatistics%2BScotland%2B2018%2B-%2BVisual%2BSummary.pdf>

³ https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2020/03/business-enterprise-research-and-development-2018/documents/berd-2018-visual-summary-pdf/berd-2018-visual-summary-pdf/govscot%3Adocument/BERD_2018_visual_summary_ALL_Feb20.pdf

- **Without action, the EAM sector will continue to contract.** Existing skills and businesses will be lost and there will be fewer opportunities for new younger workers to secure the high value/high wage jobs supported by the sector. The region may lose some of the existing skilled workers.
- **But there are major opportunities.** The huge investments in renewable energy and particularly the renewable projects, including the Seagreen wind farm and the future developments from the forthcoming ScotWind offshore wind leasing announcements, will create new supply chain opportunities in the EAM sector. Demand for skills will also be driven by investments in major new sites such as the Michelin Scotland Innovation Park in Dundee, the Angus Rural Mobility Hub at Brechin and Crown Estate Scotland's 123 acre Zero Four clean growth development site in Montrose.

Tayside has a strong engineering tradition which can be built upon to enable workers to adapt to new technologies, but this will require new investment in the skills required.

Given the risks and opportunities for the sector, the proposals for the TCEP project are now more important than ever. The illustration below shows these opportunities and the proposed role the project would play:



Scottish Enterprise and Angus Council commissioned research on the Tayside EAM sector in 2016 for the Outline Business Case. To update the data for this Full Business Case this research has been updated in 2021. The report provides an updated profile of the sector, identifies the opportunities for growth and gathered updated feedback from businesses.

This research identified:

- Significant levels of replacement demand (e.g. to replace people retiring from the sector) required in the EAM sector over the next 10 years. Delivering the skills to meet this demand will require training

and upskilling to safeguard existing EAM businesses in the region, and more than half will need degree-level qualifications.

- Expansion demand in associated professional services – the forecasts also estimate that there will be 1,000 job openings in the professional, scientific, and technical services from expansion demand over the next decade in Tayside.
- Relatively low levels of investment in R&D. Further investment in R&D is vital to remain competitive and realise the full potential of new and emerging technologies.
- The need for increased collaboration between employers in the EAM industry and local education institutions to ensure the industry has the right supply of people and skills to support future growth.
- The need to respond to the significant new opportunities for the sector in renewable energy, low carbon technologies and the transition to a net-zero economy and safeguarding more of the current EAM workforce in Tayside, by ensuring local firms are fully prepared for the transition to net zero.
- The need to put in place support to ensuring that the Region has the skills to enable businesses to adapt to new digital technologies and Industry 4.0.
- Putting in place the necessary facilities and skills support will increase the likelihood of new businesses moving into the Region. This includes investment at three major new sites:
 - The **Michelin Scotland Innovation Parc (MSIP)** in Dundee is being built on the site of the former Michelin factory which closed in 2018 and aims to become a world leading innovation centre in sustainable mobility and low carbon energy. The MSIP aims to create 850 jobs to replace those previously based at Michelin.
 - The **ZeroFour development in Montrose** being led by Crown Estate Scotland is expected to create 2,000 jobs. The 123 acre mixed-used business park on the site of the former airfield will have a particular focus on renewable energy and the blue economy. Montrose Port has been selected by SSE Renewables as its preferred base for development of the £6 billion Seagreen development off the Angus coast which will become Scotland's biggest offshore wind farm.
 - The **Angus Rural Mobility Hub (ARMH)** at Brechin Business Park is a 25 hectare development. This project will focus on transport opportunities - EV charging infrastructure, business space for sustainable growth, distributed energy generation and storage, clean re-fuelling (biogas and hydrogen) and smart logistics solutions.

TCEP will build on the great tradition of innovation within the Region and will help to deliver that step change required by Industry 4.0 in order to meet the capability needs of the sector and its employers. TCEP will encourage R&D, future proof and safeguard existing jobs (by upskilling the existing workforce) as well as ensuring apprentices gain the enhanced skills required for the future to support/ease the industry's transition to Industry 4.0 and maximise the economic benefit.

TCEP will look to create opportunities to support those transitioning from other sectors (i.e. oil and gas), support and develop the expansion of new sectors (offshore wind, decommissioning, biomedical, agri tech and hydrogen etc.) and will promote the opportunities of a career in engineering. TCEP will look to enhance the local mature workforce by enabling access to formal qualifications and training whilst working or reskilling from another profession.

A number of key businesses and organisations provided support for the TCEP project at the Outline Business Case stage, and a further group offered support as part of the updated work in October 2021. These are set out in Table 1. A selection of letters of support are provided in Appendix 1.

Table 1 Businesses and organisations providing support for TCEP

Outline case support	Additional support secured 2021
<ul style="list-style-type: none"> GA Engineering (Scotland) Ltd, Dundee Innovative Tooling Solutions, Fife Northern Tool & Gear Ltd, Angus Ritchie Implements, Angus Bosch Rexroth, Fife RAM Engineering & Tooling, Angus Reekie Steeltec, Angus Tayside Engineering Network (over 200 employer members) Advanced Forming Research Centre, University of Strathclyde Scottish Enterprise The Science, Engineering & Manufacturing Technologies Alliance (SEMTA) 	<ul style="list-style-type: none"> Matrix International Ltd Pacson Valves Ltd Angus 3D Solutions SP Technology MacIntyre Chocolate Systems Limited AGR Automation Crown Estates Scotland Scottish Manufacturing Advisory Service (SMAS)

Several of the key organisations that would work with the TCEP have provided support, for example **Crown Estate Scotland** have provided a quote saying:

- “**Crown Estate Scotland** supports the goals of the Tay Cities Engineering Partnership and its ambitions for Angus and beyond. Our planned ZeroFour enterprise hub at Montrose and its future occupants will rely upon a skilled workforce and we can see major advantages from having an Engineering and Advanced Manufacturing Centre of Excellence in close proximity.” (Jamie Macfarlane, Built Development Manager, Crown Estate Scotland)

The Scottish Manufacturing Advisory Service (SMAS) provided a letter of support to say:

- “**SMAS** believe the Tay Cities Engineering Partnership project has the potential to be a valuable addition in supporting manufacturing and skills in Angus and Tayside and could complement SMAS’s work as well as other national initiatives. We very much look forward to tracking the progress of this project and seeing it come to fruition.” (Jamie Sansom, SMAS Team Leader)

TCEP has, therefore, identified the following investment, or spending, objectives for the project:

Tay Cities Engineering Partnership	Objectives
1. Create a state-of-the-art centre for training, demonstration, and product prototyping	<ul style="list-style-type: none"> Delivery of 600m² Engineering and Advanced Manufacturing Centre of Excellence in Arbroath by year 2, fully purposed with up-to-date equipment and machinery Delivery of 2 sites at the Product Innovation Lab in Perth
2. Increase productivity in the engineering and manufacturing sector	<ul style="list-style-type: none"> Increase turnover of companies engaging with TCEP by 3% within five years of their engagement Signpost 4 companies to the PIL by year 5
3. Increase the uptake of companies using digital technologies and	<ul style="list-style-type: none"> 20 companies undertaking projects through TCEP by year 5

advanced manufacturing techniques for design, prototyping and POC	<ul style="list-style-type: none"> • 50 companies accessing the demonstrator space at the Centre of Excellence by year 5 • Mobile Engineering Technology Unit accessed by 20 businesses
4. Increased awareness of career and employment opportunities in the engineering and manufacturing sector	<ul style="list-style-type: none"> • The proportion of females accessing engineering related courses will increase by 15% • Mobile Engineering Technology Unit to visit 100% of schools located in the top 20% most deprived areas in the Tay Cities Region by year 3 • Engage with 10,000 school pupils by year 5, including 100% of females in S3
5. Increase in those gaining vocational/non vocational qualification in alignment with industry needs	<ul style="list-style-type: none"> • Deliver 10 industry specific new training courses (delivered by all partners) by year 5 • Increase D&A College part time engineering student numbers to 600 and full-time engineering students to 500 by year 5 • The TCEP will aim to deliver over 10 jobs within the first five years of the project.

3 THE ECONOMIC CASE

Four options were short listed for the project:

1. Option 1: Do nothing
2. Option 2: Education and awareness activities only
3. Option 3: Education and EAM Centre of Excellence only
4. Option 4: Education and awareness activities and EAM Centre of Excellence and Product Innovation Lab (the Preferred Option)

These options were taken forward to the economic appraisal to determine the preferred option.

Option 1, the do-nothing option, results in a total net present benefit of £16.1m over a 15-year time horizon.

Option 2, which delivers increased educational opportunities and industry awareness, results in a total net present benefit of £19.4m over a 15-year time horizon.

Option 3, which consists of the establishment of the EAM Centre of Excellence and increased education provision, results in a total net present benefit of £30.1m over a 15-year time horizon.

Option 4, the full-scale project, generates a total net present benefit of £42.9m over a 15-year time horizon.

The Full-Scale Project remains the preferred option, ranking first in all appraisals – economic, qualitative and risk appraisal. Further the preferred option still incurs the greatest overall net present benefit under all sensitivity analyses.

4 THE COMMERCIAL CASE

The procurement strategy for this project will ensure that value for money is achieved for the Tay Cities Deal. The Board of Directors of a newly formed Community Interest Company (CIC) will have overall responsibility for the project. The procurement strategy will be developed in line with Dundee & Angus College's (D&A College) Procurement Strategy and Financial Regulations and in agreement with the partners and in line with TCEP governance.

The key services that will be delivered by the project are:

- Engineering and Advanced Manufacturing Centre of Excellence
- Mobile Engineering Technology Unit
- Product Innovation Lab
- Cobot demonstration cell and other up to date equipment

5 THE FINANCIAL CASE

The capital part of this project will be funded through a combination of TCD funding, partner contributions and sponsorship income. The revenue costs of the project will be part met by TCD funding, with the remaining costs covered by a combination of partner contributions and income earned by TCEP.

Beyond year 5 it is anticipated that the project will be self-financing. The ongoing costs of the project will be minimised as the project has been structured so that the revenue costs of most elements are funded by the partners. The main costs that remain with TCEP will be covered by revenue generated from commercial training, product commissions and sponsorship.

6 THE MANAGEMENT CASE

Delivery of the TCEP will be driven by all the partners. The project has agreed to establish a new Community Interest Company, and the application process is in the process of being completed. A Board of Directors will be formed to oversee and manage the project and a Project Manager will be recruited who will oversee the day to day operation of TCEP.

7 CARBON IMPACTS

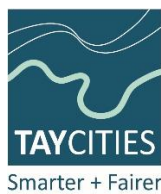
As the lead project partner for the TCEP project, D & A College have committed to the Scottish Colleges' Statement of Commitment on the Climate Emergency and are in the process of developing a Climate Emergency Action Plan that will accord with Scotland's legislated transition to net zero carbon emissions.

D&A College will take on responsibility for the carbon emissions of the TCEP project, which will correspondingly become operationally Net Zero by 2030, in line with the College's target having committed to the Race to Zero.

The potential carbon emissions impact of the TCEP project has been considered as part of the project appraisal. The estimated carbon emissions impact has been calculated and monetised within the Economic Case, with full details included in Section 8.5.

TCEP will work with the Scottish Government to share this best practice and help accelerate the transition to net zero.

ITEM No ...7.....



REPORT TO: TAY CITIES REGION JOINT COMMITTEE

REPORT ON: TCD007 5G DIGITAL TESTBEDS – BUSINESS JUSTIFICATION CASE

REPORT BY: ROBIN PRESSWOOD EXECUTIVE DIRECTOR OF CITY DEVELOPMENT – DUNDEE CITY COUNCIL

REPORT NO: TCRJC1-2022

1 PURPOSE OF REPORT

- 1.1 This report confirms that the Business Justification Case (BJC) for TCD007 5G Digital Testbeds has been approved by both Governments and provides an overview of the amendments that were made at the request of both Governments.
- 1.2 This project was awarded up to £2 million in the Heads of Terms Agreement dated 22 November 2018. The Business Justification Case was approved by the UK and Scottish Governments on the 21 December 2021.
- 1.3 As per the minutes of the Joint Committee on the 17 September 2021 which stated "The Joint Committee agreed to approve the BJC subject to final joint Government approval" the project is, therefore, now approved and can commence drawing down funding through the approved claims process.
- 1.4 The key project information is at Appendix 1.

2 RECOMMENDATION

The Joint Committee is asked to:

- i) Note the BJC for TCD007 5G Digital Testbeds has now been approved by the Scottish and UK Governments, with the agreed amendments set out in the report. (the full BJC is available via Sharefile, on request).
- ii) Remit the Executive Director of City Development, Dundee City Council, to provide periodic briefings to members of the Joint Committee as individual use cases are delivered

3 FINANCIAL IMPLICATIONS

- 3.1 This project is currently profiled to spend up to £2 million capital from the Tay Cities Deal funding. The funding is anticipated to be drawn down as follows:

PROJECT ACTIVITY	2021/ 2022	2022/ 2023	2023/ 2024	2024/ 2025	TOTAL
Project Management	25,000	50,000	50,000	25,000	150,000
Pathfinder Use Cases	425,000	395,000	422,000	58,000	1,300,000
Challenge Fund		275,000	275,000		550,000
TOTAL (Scottish Government Funding through TCD)	450,000	720,000	747,000	83,000	2,000,000
Leverage	270,000	432,000	448,200	49,800	1,200,000

- 3.2 The project will lever in up to £1.2 million in additional funding and/or value in kind from partners participating in the use case trials.
- 3.3 The anticipated drawdown in 2021/22 will be approximately £91k instead of £450k. This includes the agreed budget for an esports use case trial of £85,762 and approximately £5k for use case trial project management by DCC. The budget in the approved BJC includes £150k for project management concerning delivery of the project and use case trials. The schedule of the project from 2021 to 2025 was agreed as part of the development of all named projects in Tay Cities Deal. A budget profile was provided to the PMO as requested in 2020 ahead of development of the project use case trials. Given the schedule that emerged for approval of the BJC including by the Scottish and UK Governments, whilst there was spend 'at risk' on one Pathfinder use case trial (for esports), it was agreed not to proceed with other use case trials until the approval process was completed.

4 DESCRIPTION OF PROJECT IN THE DEAL DOCUMENT

- 4.1 The Tay Cities Deal 5G (TCD007 Digital Testbeds) project was awarded up to £2m in the Tay Cities Deal Heads of Terms as part of the Connected Tay - World Class Digital Infrastructure Theme. The Heads of Terms identified the overall aim of the project is to support the development of 5G testbeds and trials in the Tay Cities region, helping to put it at the forefront of 5G deployment. The funding will be used to work with businesses, academic institution and local communities to develop and demonstrate 5G test cases to develop the potential use of 5G and demonstrate the innovation possible, its potential markets and the appeal of these innovations to regional communities and stakeholders.
- 4.2 **The Project:** based on a model developed by the Department for Culture, Media and Sport (DCMS) the TCD-5G project will utilise the existing 5G Testbed, built on Dundee's waterfront and other infrastructure to deliver a range of innovative use case trials. These include esports, virtual media production, tourism, smart ports/cities agritech and automation/robotics. The aims of the TCD-5G project mirror those of the DCMS' approach to 5G development and deployment in seeking to foster the development of the city region's 5G ecosystem; build the business case for 5G by stimulating development in new projects/sectors and in leading the way in 5G R&D.
- 4.3 **TCD-5G Investment:** the project will see up to £2m invested in a number of use case trials, through a pathfinder programme of pre-identified uses and a future challenge fund programme to enable an evolving approach to further/future collaboration based on identified opportunities/need. Dundee City Council will work in partnership with the

other Tay Cities Deal local authorities, Scottish Futures Trust, the Scottish 5G Connect Hub, Abertay University and other commercial and academic partners to deliver the programme of use case trials.

- 4.4 **Changes in the latest BJC:** following submission of the BJC in September 2021 additional feedback was provided by the Scottish and UK Governments and changes made to the BJC. The revised BJC was resubmitted to the Governments in November 2021 and the BJC was approved in December 2021. There were a number of key areas addressed by the revised BJC. These include:
- a Options Appraisal: the options appraisal for the project was revised to ensure that the options assessed are clear, and the preferred option highlighted.
 - b Objectives, Outcomes and Outputs: clarity was required in the project's key objectives, anticipated outcomes and outputs. Following discussions with the Scottish Government revisions have been made to the objectives, outcomes and outputs of the project. These have been summarised in Table 4.1 of the BJC, which provides SMART outputs and outcomes for each of the key objective areas: Economic Impact; Infrastructure & Ecosystem; Technology & Technical Performance; Innovation; Facilitation; Knowledge Transfer and Social Impact.
 - c Governance: the governance section of the BJC has been revised (pages 42-46) to ensure that further information is provided on the proposed delivery models. This includes clarity on the membership and remit of key governance groups and the make-up of the consortia being developed to deliver use case trials. This update seeks to provide confidence that the proposed delivery approach will be successful.
 - d Use Case Trials: the revised BJC includes a table which outlines the potential use case trials (pathfinders) being developed and the discussions that have taken place with potential partners to date - providing insight into the potential partnerships, benefits and leverage for each use case.
 - e Risks: the revised BJC includes a number of additional risks (and their mitigation) as requested: Industry buy-in; wider funding availability; skills availability and the global shortage of semi-conductors.
- 4.5 **UK Government:** the UK Government had requested some minor additions to the BJC. These have been made.
- a Identify the market failure: sub-optimal provision of 5G technology. Addressed in Section 5.2.
 - b Provide an update (as at December 2021) of any potential COVID related impacts on the delivery of the project. Considered in the Risk Analysis.
 - c Provide a list of other 5G testbeds in the UK and a brief description of each.
 - d Provide a table/chart to differentiate between benefits to the UK and to the local area - added to existing Table 4.1.
- 4.6 **Proposed outcomes:** the project will deliver a range of outcomes including: productivity growth, digital skills, connectivity improvement and promoting the region and Scotland's innovation credentials. The key outcomes include:

- a delivering between 6 and 12 5G use case trials, depending on scale, through a Pathfinder programme and a Challenge Fund;
- b lever in up to £1.2m of funding to match to TCD-5G investment;
- c 2 events hosted through use case trials to raise awareness of the benefits and opportunities of 5G to future economic needs amongst regional stakeholders;
- d publication and dissemination of Use Case trial results to deliver maximum impact, awareness of benefits and applications and stimulate wider application and business development;
- e showcasing the region's digital skills, tech-based companies and academic partners;
- f supporting the development of the S5G Connect Hub for the region, in partnership with Scotland's 5G Centre.
- g attracting investment to the city region - installation of the testbed has already seen one of the Scottish Government's first 5GConnect Hubs being established in Dundee and 2 inward investment enquiries because of the 5G potential in the city.
- h potential to support research bids and collaborations with the universities of Dundee, St Andrews and Abertay.
- i framework for assessing use case trials developed and implemented.
- j project manager/technical expertise recruited to support development of Pathfinder and Challenge Fund approaches; and
- k Board established to support development/use of 5G testbed/uses cases.

5 IMPLEMENTATION PLAN

- 5.1 The outcomes and the outputs of the project were changed when the 5G Use Case Trials project became a separate project from the Rural Broadband project, these agreed changes are reflected here. The key output of the project is knowledge transfer. In alignment with a report on early use case trials for the UK government Department for Culture, Media and Sport (DCMS), the findings are that use case trials produce knowledge and learning and stimulate business engagement rather than jobs in the immediate terms. The anticipated leverage has been adjusted to reflect the potential grant rate that may be applicable to certain partners, particularly SMEs. However, each use case study will be expected to deliver a degree of leverage – whether financial or value in kind.
- 5.2 Being driven by a focus on research and development, the main, direct outputs of the project are in alignment with those delivered by the DCMS 5G use case testbeds and trials programme, of delivering learning, knowledge transfer and business relationships that offer potential for innovative products, processes and services to be developed, stimulate demand for and accelerated roll-out of 5G and resulting economic and social impacts. Outputs at the time of the deal signing were inherited from the Rural Broadband project which the project was separated from post Heads of Terms. Jobs and GVA metrics have been replaced with benefits from business collaboration, business opportunities, growth and consequent job creation that might occur as a project identifies the potential for commercialisation.

5.3 The milestones, outputs and targets, and risks and mitigation set out in the Implementation Plan and reflected in the BJC are set out below.

Milestones

Project Year	Milestone	Description	Start	Completion
2021/2022	BJC	Approval		Nov 2021
2021/2022	Project Board	Partner representatives to be agreed.		Nov 2021
2021/2022	Project Board	Meetings (it should be noted that meetings of stakeholders/ anticipated members of the Project Board have been taking place weekly during 2021).	Dec 2021	
2021/2022	Y1 Pathfinder Use Case Trials	Complete specifications and framework response.		Jan 2022
2021/2022	Y1 Pathfinder Use Case Trials	Approved by Project Board.		Jan 2022
2021/2022	Y1 Pathfinder Use Case Trials	Delivery.	Nov 2021	Mar 2022
2021/2022	Y2 Pathfinder Use Case Trials	Complete specifications and framework response.		Mar 2022
2021/2022	Y2 Pathfinder Use Case Trials	Approved by Project Board.		Mar 2022
2021/2022	Challenge Fund	Complete specifications.		Mar 2022
2021/2022	Challenge Fund	Project Board to agree number of calls.		Mar 2022
2021/2022	Challenge Fund – Call or Call 1 use case trials	Launch and selection.	Oct 2021	Apr 2022
2022/2023	Challenge Fund – Call or Call 1 use case trials	Delivery.	May 2022	Mar 2023
2022/2023	Y2 Pathfinder Use Case Trials	Delivery.		Mar 2023
2022/2023	Y3 Pathfinder Use Case Trials	Complete specifications and framework response.		Sep 2022
2022/2023	Y3 Pathfinder Use Case Trials	Approved by Project Board.		Sep 2023
2023/2024	Y3 Pathfinder Use Case Trials	Delivery.		Mar 2024

Key Project Risks and Mitigations

Risk	Mitigation
Project and Use Case Trial Management: Project Management including management of the technical and technology aspects of use case trials and appropriate testbed and data centre specifications to support trials will be demanding.	Ensuring availability of relevant expertise and technical facilities and mitigation of barriers to testbed build will be a key role of the relevant Project Board: Effective project management is recognised by DCC as being of paramount importance as the project is a new area of operation for the Council. Consequently, plans are being developed to ensure this is a cornerstone of the project.
Technology and Operational Risk	Use case trials will take place across private 5G networks with no public or general access. Access will require to be facilitated by the owner and manager of the initial Dundee testbed and other private testbeds/networks in the region. In addition, each network will be underpinned by appropriate cyber-security measures in consultation with Abertay University and the Scotland 5G Centre. Abertay University is a partner by contract in the initial Dundee testbed.
Physical/Assets – damage / theft	Exterior 5G testbeds, like any asset that is in the public realm, is open to theft or damage. However, the 5G infrastructure being installed for the private Dundee testbed and others in the region is not high profile compared to other street and communications furniture and appliances.
Skills Availability	Enable early identification of skills needed and potential costs/sources as use cases develop. Continue to work with skills initiatives being developed by Dundee Digital Skills Forum, academic partners and TCD projects such as cyberQuarter and Digital Skills.
Global Shortage of Semi-conductors	Maintain research of device availability and consult with expertise, including technical project support. Ensure early ordering of any necessary equipment.

Outcomes and Targets

Targets	Baseline	Target Uplift	Variance	Date	Comment
Leverage of other funding through Tay Cities investment.	GAP	Up to £1.2m		2026	Use case trials will be delivered by private/public consortia. Leverage will be achieved from the private sector.

5.4 It is expected that the rollout and development of 5G connectivity which 5G use case trials may help to catalyse, will generate and stimulate the following mid to longer term impacts for the Tay Cities region across business, institutions and diverse communities:

- a knowledge transfer on engagement with 5G across multiple sectors and verticals to attract potential research and industrial users and policy makers and strengthen the research and innovation landscape in the region and Scotland. The Learning gained from the project will be used to increase knowledge and know-how including through dissemination of findings, leading to the project as a whole impacting on the Tay Cities and Scottish economies by accelerating engagement with 5G and related digital solutions. As a key goal is to show the readiness of 5G in the context of the key strategic sectors being trialled, trials are based on pre-commercial products, processes and services and offer particular scope to enhance these.
- b stimulating creation of jobs attributable to 5G and the wider creative, digital, technology ecosystem exploiting 5G - according to a Deloitte report, 5G will generate between 60,000 and 160,000 jobs so based on the population of the city region within Scotland it is reasonable to assume 10% to 20% of these might happen in the Tay Cities Region
- c economic growth through attracting companies that can benefit from regional expertise and knowledge and 5G research network resources including cloud data and application hosting facilities and generate employment in Tay Cities region - the Deloitte report predicts additional GDP for Scotland of between £6bn and £17bn - again it is assumed that 10% to 20% of this will accrue to the city region. To date Dundee has received 2 inward investment enquiries on the back of the 5G testbed facility being developed.
- d sustainable business growth through companies developing, testing and accelerating delivery of products, applications and innovation including within a closed, managed network environment.
- e growth of talent pool through attraction of skills and engagement with skills development to respond to the opportunities arising from 5G, 5G supply chain and 5G enabled sectors and evidence to support skills development facilities (such as at MSIP).

6 DECISION PATHWAY

6.1 The project has met the decision pathway milestones as set out below.

Decision Pathway Milestones and Planned Timeline			
Stage	Milestone	Planned Date	Achieved Date
BJC	Submission of BJC (to PMO who forward to Government)		9/11/2021
	Governments' Approval	Estimated September/October 2021	21/12/2021

	Thematic Board Recommendation.	26/07/2021	26/07/2021
	Management Group Approval for final version of BJC as approved by both Governments.	26/08/2021	26/08/2021 & 27/01/2022
	Joint Committee Approval for final version of BJC as approved by both Governments.	10/09/2021 & 11/03/2022	Pending

6.2 Outputs at the time of the deal signing were inherited from the Rural Broadband project which the project was separated from post Heads of Terms. Jobs and GVA metrics have been replaced with benefits from business collaboration, business opportunities, growth and consequent job creation that might occur as a project identifies the potential for commercialisation. See section 4.10, Table 4.1 of the BJC for a full list of proposed outcomes.

6.3 Reflecting the separation of the two projects, the following changes to the Implementation Plan are highlighted:

- Jobs - directly created by the project - 0 instead of 20
- GVA - directly created by the project - 0 instead of £116m

7 CONDITIONS

7.1 The Thematic Board has not imposed any conditions but has provided a number of suggestions to assist the project in the development of the original OBC and current BJC.

8 POLICY IMPLICATIONS

8.1 This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty and Environment. This is addressed at page 9 of the BJC and Appendices 1 to 3. An Equalities Impact Assessment has been completed. The project will address inclusivity across four strands:

- a research, development and deployment of use case trials;
- b community and business engagement with use case trials;
- c facilitating access to novel, 5G enabled approaches to learning skills; and
- d raising awareness of career and business pathways relevant to 5G underpinned by STEM skills.

8.2 Given that the project must meet capital eligibility requirements, the project is also engaging with the Tay Cities Deal Regional Skills and Employability Development Programme and will pursue opportunities as above.

9 CONSULTATIONS

9.1 The following have approved the presentation of this BJC:

- a Local Authority Project Management Officers: Diane Milne/Julie Craik;
- b Responsible Finance Officer: Paul Thomson; and

c Management Group Sponsor: Robin Presswood.

10 BACKGROUND PAPERS

10.1 None.

Robin Presswood
Executive Director of City Development

Author: Diane Milne

Dundee City Council
Dundee House
Dundee

RP/DM/KM

25 February 2022

APPENDIX 1

PROJECT INFORMATION		
Project number	TCD007	
Project name	5G Digital Testbeds	
Project owner	Julie Craik	
Project Finance Officer	Paul Thomson	
Management Group Sponsor	Robin Presswood	
Award amount under TCD	£2 million	
Jobs: target number of jobs to be created	0	Please see section 6.2 and 6.3 above
Leverage to be achieved	£1.2 million	

APPENDIX 2

EXECUTIVE SUMMARY (Full BJC available via Sharefile on request)

TCD007 5G Digital Testbeds

2 EXECUTIVE SUMMARY - TAY CITIES DEAL 5G (TCD-5G)

Introduction

The Tay Cities Deal 5G (TCD-5G) project was awarded up to £2M in the Tay Cities Deal as part of the Connected Tay – World Class Digital Infrastructure Theme. The Signed Deal identified the overall aim of the project is to support the development and deployment of 5G use case trials utilising 5G testbeds in the Tay Cities region, helping to put it at the forefront of 5G deployment.

5G Testbeds: 5G testbeds, such as the one constructed in Dundee's waterfront, are fully functional cellular technology facilities to help develop R&D based solutions for testing as an early real-world deployment and can be used to grow market opportunities by showcasing new applications.

The Project: the TCD-5G project will provide funding and technical support to encourage the development of use case trials utilising the Dundee Slessor Gardens and other Tay Cities Region 5G Testbeds. Based on a model developed by the Department for Culture, Media and Sport (DCMS) the TCD-5G project will primarily utilise the existing 5G Testbed, built on Dundee's waterfront and other facilities to deliver a range of innovative use case trials, enabling real-life projects to demonstrate new, or show the application of, 5G products, processes and services across diverse, strategic priority sectors. The aims of the TCD-5G project mirror those of the DCMS' approach to 5G development and deployment in seeking to foster the development of the city region's 5G ecosystem; build the business case for 5G by stimulating development in new projects/sectors and in leading the way in 5G R&D. The project will help to deliver the ambitions outlined in the Scottish Government's 5G Strategy (2019) and Digital Strategy (2021) and help to position the city region and Scotland at the forefront of 5G technology as its applications develop and advance.

TCD-5G Investment: the project will see up to £2M invested in a number of use case trials, through a pathfinder programme of pre-identified uses and a future challenge fund programme to enable an evolving approach to further/future collaboration based on identified opportunities/need. Dundee City Council will work in partnership with the other Tay Cities Deal local authorities, Scottish Futures Trust, the Scottish 5G Connect Hub, Abertay University and other commercial and academic partners to deliver the programme of use case trials.

Case for Change: Dundee's 5G Testbed, along with digital projects funded by the TCD such as Angus Broadband and Perth & Kinross LFFN in addition to TCD-5G will provide the Tay Cities Region with a step-change in its digital infrastructure so that the current and future needs of businesses, organisations and citizens are comprehensively supported. It will see the roll-out of 5G projects accelerated, giving the region a potential competitive advantage in a range of key sectors and ensuring the region does not lag behind others. Dundee is already an attractive location for the Tech sector. Providing world class digital infrastructure here and across the Tay Cities means that full-fibre and 5G rollout will be faster.

Proposed outcomes: the project will deliver a range of outcomes including productivity growth, digital skills, connectivity improvement and promote the region and Scotland's innovation credentials. The key outcomes include delivery of 6 to 12 5G Use Case Trials,

levering in up to £1.2M of funding or Value in Kind to match the TCD-5G investment and raising awareness of 5G as a tool for delivering enhanced products, processes and services.

Further information on the outcomes can be found in section 4.10 Main Benefits

Project Budget: the TCD-5G project will consist of 3 distinct activities: project and technical management; Pathfinder Use Case Trials and Challenge Fund Use Case Trials.

As an indication the £2M allocated to the TCD-5G project will be used to cover capital funding for:

- **Project management costs:** £150K to cover the costs of technical project management and the sourcing of additional expertise. Officers from Dundee City Council will provide support for project management. Project management will consist of both project coordination and technical project management. Project management of the overall project will be delivered by the Project Manager supported by Dundee City Council and technical support will be provided through collaboration with the Scotland 5G Centre and other expertise as appropriate.
- **Pathfinder Projects:** £1.3M to establish, support and deliver the Pathfinder Use Case Trials and to monitor and evaluation the project's impacts.
- **Challenge Fund:** £550,000 to develop, manage and deliver a Challenge Fund to support additional use case trials.

Up to £1.2M of leverage is anticipated, with project partners pledging capital funding or value in kind.

Proposed Pathfinder Projects: the proposed pathfinder projects are listed (in summary) below.

Please see further information at Table 3.1 below including engagement consisting of development of use case trials with Consortium partners

Pathfinder	Key Area & Activity	Potential Partners
Virtual Production	Advanced Communications – Media & Games production	Abertay University; Royal Holloway University; Media Production Company, Manchester; global media company; global digital software company
E-Sports/ Playable City	Advanced Communications – using 5G to stream live e-sports events	NLAE; Dundee City Council; Esports Scotland; AWS
Digital Mobility	Automation - Focus on IoT automated, mobile, robotic EV charging of vehicles	Mob Energy, France; Dundee City Council
Digital Tourism	Advanced Communications – using VR/AR to showcase tourism venues and historic locations.	V&A Dundee; Dundee Industrial Heritage;
Digital Play	Advanced Communications – 5G enabled digital play area on Dundee's waterfront	Abertay University; Dundee City Council;

Smart Port and Smart Sites	IoT/Advanced Communications – focus on remote management of sites e.g., port premises and the development of skills.	Angus Council, Montrose Port Authority; 3DEO; Forth Ports; various port tenant companies
Smart Cities	IoT – using sensors/cameras to collect and analyse data in public spaces	Dundee City Council
Agri-Tech	Advanced Communications – using immersive technology for remote engagement with farms & agriculture	James Hutton Institute

3 PROJECT DESCRIPTION

3.1 Introduction

The role of communications and digital technologies has never been more important, the pandemic has brought this into sharp focus. This encourages all local authorities to build on a wide range of strategies developed by the UK and Scottish Governments with a focus on future proofing our digital infrastructure and digital economy. Digital connectivity is key to delivering on the ambitions for the region, which offers particular strengths across the digital, creative and technology sectors, both for products and services and as enablers for the region's other sectoral strengths.

The TCD-5G project focuses on one key aspect of that digital future – the use of 5G technology to build new products, processes and services that encourage economic growth, address social challenges and provide new opportunities for all citizens.

3.2 Dundee and the Tay Cities Region – A Profile

This overview of the region sets the scene for the policy context and outlines the challenges and opportunities facing the region. This includes key ambitions for the Tay Cities Region in the delivery of inclusive growth, boosting productivity and creating world class connectivity fit for the 21st century.

The Tay Cities Region is a diverse economy comprising of the council areas of Angus, Dundee, Fife and Perth & Kinross and incorporating the cities of Dundee and Perth. Significant economic potential is built around 3 world class universities with over 30,000 students, producing 7000 graduates a year, contemporary colleges with 54,000 students and over 15,000 innovative businesses across diverse sectors from digital to construction and tourism to food and drink. The number of businesses continues to grow, attracted by the skills base, the lower costs of business space, cost of living and the quality of life on offer.

The Tay Cities region has a population of almost 790,000 people, larger than Edinburgh and Glasgow, including a working age population (16-64) of almost 500,000. By 2026, the population is estimated to have grown by just over 2%.

The Tay Cities Region has many drivers of ambition. These include:

- ensuring inclusive growth with an economy that embraces diversity, nurtures talent and capitalises on the youthful population of cities like Dundee;
- developing transport links and digital connectivity;

- a thriving digital and tech cluster that is a trailblazer for technological innovation and change; and
- a clear focus on future ready skills in its universities and colleges and over 2500 STEAM graduates a year.

Fostering key future growth sectors across areas such as digital services, life sciences/health tech, engineering and design, the region is well-placed to enable a new wave of knowledge-based businesses and the TCD-5G project can help to drive this.

3.3 What is 5G – The opportunity/Business Needs

5G is the next generation, or 5th generation of mobile communications and offers more than just faster mobile communication - 5G will utilise entirely new technologies than previous mobile networks and will generate completely new applications and services that will spill over into every facet of our lives and environment. Potentially 5G offers significantly faster, more reliable and increased capacity across the network. 5G can handle applications that require greater bandwidth in a wireless setting such as virtual and augmented reality. It can also support the management of immense data sets such as those generated by Internet of Things (IoT) sensors and cameras to inform business intelligence, decisions and actions which could improve many aspects of daily life. Lower latency (eg minimal delay on transferring data) afforded by 5G means instant or virtually instant response times and therefore the possibility of real time interaction with higher resolution media, visualization, data transmission and artificial intelligence (AI).

Delivering future ready infrastructure such as the testbed and the installation of full fibre to premises (currently being rolled out across Dundee by City Fibre) and the installation of superfast broadband across Perth & Kinross and Angus as part of the TCD Rural Broadband Project will pump prime and lay the groundwork for the roll out of 5G mobile technology. The CD-5G and associated private sector investment will allow this to happen faster than would otherwise be the case.

The development of a 5G testbed and associated use case trials will ensure that businesses, innovators, research institutes, investors and citizens across the region have a greater understanding of the opportunities 5G will bring and are ready to take advantage of the full 5G roll out as it develops. Support from the Tay Cities Deal will allow this to happen faster than would otherwise be the case – providing a competitive advantage in the early stages of 5G technology, roll out and delivery.

At a national level a report by Deloitte for the Scottish Futures Trust (August 2019) highlights the potential impacts of 5G, including economic impacts by 2035 of £17BN in GDP, 160,000 additional jobs and 3000 new businesses. A report by Skills Development Scotland (October 2019) confirmed that the tech sector was one of the fastest growing, contributing £4.9BN to the Scottish economy and supporting almost 100,000 jobs. It also forecast that “the tech sector will be the second fastest growing sector in Scotland between now and 2029, beaten only by childcare services, and is expected to grow one and half times faster than the economy overall.”

3.4 What is TCD-5G – The Opportunity/Business Needs

TCD-5G is about capitalising on the new test bed built in Dundee's central waterfront by building on the model developed by the Department of Culture, Media and Sport (DCMS) as part of their 5G Test Bed and Trials programme which seeks to accelerate the deployment of 5G networks, ensuring that the UK can take early advantage of the applications these networks can enable whilst maximizing the productivity and efficiency benefits to the UK of 5G. This approach sees the implementation of a number of use case trials to drive the UK's engagement in 5G. To date they have over 140 use case trials accelerating 5G adoption in targeted sectors, including agriculture, utilities, automotive, transport and logistics.

The TCD-5G project will utilise the use case models approach to engage with the city region's key sectors and that offer applications and innovations for the Tay Cities region, Scotland and the UK. This will leverage the region's strengths across the creative, digital and technology sectors such as software development, games and cybersecurity and the sectors which these are enabling including life sciences, energy and tourism and grow our track record of innovation. The ambition of the TCD-5G project is to deliver a globally competitive offer encompassing diverse applications for these sectors and use cases that build on opportunities in 5G for areas such as entertainment, immersive experiences, advanced manufacturing and the Internet of Things (IoT).

TCD-5G will play a key role in the region's future digital economy by putting the city on the testbed and trials map in Scotland, the UK and globally. The project will use this opportunity to lay the foundations for embracing 5G as part of the region's digital infrastructure and developing a workforce that is industry ready for disruption from new technologies and helping communities to fully engage with the digital economy.

Case for Change: Dundee's 5G Testbed, along with digital projects funded by the TCD such as TCD-5G and TCD Rural Broadband will provide the Tay Cities Region with a step-change in its digital infrastructure so that the current and future needs of businesses, organisations and citizens are comprehensively supported. It will see the roll-out of 5G projects accelerated, giving the region a potential competitive advantage in a range of key sectors and ensuring the region does not lag behind others and overcoming the sub-optimal provision of 5G. Dundee is already an attractive location for the Tech sector. Providing world class digital infrastructure here and across the Tay Cities means that full-fibre and 5G rollout will be faster.

Global internet traffic and the use of data is growing exponentially and the UK's digital infrastructure must be able to support this rapid increase in traffic, providing coverage with sufficient capacity to ensure that data can flow at the volume, speed and reliability required to meet the demands of modern living. Improved connectivity also increases innovation and productivity across the economy, bringing significant economic rewards. The value of enhanced broadband speeds has been calculated at as much as £17B by 2024. (UK Government Digital Strategy 2017). The installation of 5G and full fibre capacity through the TCD Rural Broadband Project (delivering super-fast broadband in Perth & Kinross and Angus) and the TCD-5G project will see a step-change in the potential for the Tay Cities Region. Supporting regional businesses to develop new 5G products, processes and services early, will ensure competitive advantage going forward.

3.5 TCD-5G: Dundee Test Bed

In 2016 Dundee City Council secured funding through their Growth Accelerator Model programme to develop digital connectivity in the central waterfront area. The focus of this is investment in a 5G Testbed, back-office support from Abertay University and associated free public wi-fi in the city's central waterfront, that will be a focus of the TCD-5G project along with 5G facilities in the city region.

The funding provided for the installation of the infrastructure required to support the development of the test bed, working in partnership with Abertay University and the Scottish Futures Trust to develop the test bed and its use.

The TCD-5G project will initially be based on the testbed in Dundee which incorporates, not only the waterfront testbed but also a co-located edge datacentre at Abertay University (key partners in the testbed and the TCD-5G project). The network will include 4G and 5G New Radio, non-3GPP mmWave and Wi-fi radio access technologies in addition to key 5G core elements such as Mobile Edge Computing, Network Function Virtualisation and Network Slicing. There is the potential to look at utilising the planned testbed in Angus through pursuing all opportunities for collaboration and the exploration of urban and rural challenges and opportunities.

The digital infrastructure will incorporate fibre/backhaul between the radio/5G cell sites and the co-located edge data centre, in addition to the power supply to radio sites and other equipment. The data centre will host core network equipment, network operations and monitoring systems and an internet point of presence/gateway. The data centre will be a key focus and platform for testbed customer applications/use cases and act as a service gateway connecting client and partner networks with the testbed.

The telecommunications layer will comprise the:

- Core network and related software providing the high-capacity communication facilities connecting the primary nodes/network connection points;
- Wired networking equipment such as network switches and routers;
- Wireless networking equipment being 5G small cells and macro-cells;
- Wi-Fi Access Points (APs) and fixed wireless connectivity;
- Network entities/functions serving the testbed;
- Edge computing.

The testbed will also facilitate network access to AI-driven solutions that optimise Access, Transport, Core, Cloud, Edge and Fog resources.

Trials will be executed using technology enablers to support automation as far as possible including cross-domain service orchestrators that enable multi-domain slicing, smart output/indicator visualisation close to real-time analysis, presentation, benchmarking and performance measurement and intent-based APIs to stimulate innovation by and development of new commercial applications.

3.6 TCD-5G Governance and Delivery Model

Governance Approach: Work has been on-going to develop the governance and delivery model and management structure of the use case trials, including prioritisation of the Pathfinder projects and the development of a Framework to ensure appropriate scrutiny and decision making.

Governance: is organised according to the following hierarchy and assumes oversight by the TCD Joint and Management Committees:

- Project Board – consisting of representatives of TCD partner councils, Abertay University. The Scottish Futures Trust and the Scotland 5G Centre exercising oversight of the project;
- Executive Sponsor – fulfilled by the Executive Director of DCC City Development to champion the project;
- Senior Responsible Owner – fulfilled by a representative of DCC; and
- Project Management Team – will report to the Project Board and have responsibilities including project coordination, infrastructure management, technical delivery, reporting and risk management.

Further information is included under Section 8, Governance and Delivery Arrangements

Approach to Delivery: the greatest benefits of 5G will be delivered when key sectors work together and applications are developed that service multiple sectors – “verticals” – where companies use skills and technology from a range of sectors to deliver innovation. The TCD-5G project aims to support this integration and convergence through the delivery of use case trials - through a number of pre-identified Pathfinder Use Case Trials and a 5G Challenge Fund that will ensure a flexible approach to this evolving technology and potential use cases.

This programme seeks to harness the use of 5G technology in sectors where the UK has a competitive advantage. The DCMS chose to develop a use case trials approach as it:

- allows for piloting ways of addressing deployment and technical challenges that will help to establish the conditions under which 5G can be deployed;
- provides environments where UK businesses, including SMES, can test and develop 5G applications, services and products;
- stimulates the development of a strong pipeline of trials from many different future 5G users, learning lessons and driving productivity while helping to build the 5G ecosystem; and
- contributes to economic development in local economies across both urban and rural areas.

It is for these reasons that the TCD-5G project has also chosen to deliver a use case trials-based approach to implementing early stage 5G projects.

Delivery Model: the TCD-5G programme will invest upwards of £1.8M in the development of a range of use case trials, using 2 distinct approaches:

- **Pathfinder Use Case Trials:** working with consortium of partners to develop use cases in identified sectors such as e-sports, digital tourism and smart ports.
- **Challenge Funds:** promoting opportunities for organisations to bid in for funding to support 5G cases in chosen sectors or as an open call to encourage innovative ideas for 5G use

Extensive research has been conducted on UK and global 5G use case trial programmes to inform best practice in development, preliminary/lab-based testing, deployment and delivery.

The proposed annual budget for the project is as follows:

Table 3.1 – Projected Expenditure and Leverage

PROJECT ACTIVITY	2021/2022	2022/2023	2023/2024	2024/2025	TOTAL
Project Management	25,000	50,000	50,000	25,000	150,000
Pathfinder Use Cases	425,000	395,000	422,000	58,000	1,300,000
Challenge Fund		275,000	275,000		550,000
TOTAL	450,000	720,000	747,000	83,000	2,000,000
Leverage (ViK)	270,000	432,000	448,200	49,800	1,200,000

Selection of Pathfinder Use Case Trials: Research was conducted by Dundee City Council in consultation with a wide range of stakeholders across business, academia and the third sector and on behalf of Scottish Futures Trust on sectors of strategic significance for the region to identify Pathfinders and potential partners. As part of formulating and developing Pathfinders, there was an extensive programme of engagement to identify organisations with capacity and interest to engage in the project.

The following potential pathfinder trials are being developed across three key areas: enhanced and advanced communications, Internet of Things and automation (first 3 are priorities for Y1):

Table 3.2 – Pathfinder Use Case Trials

Pathfinder	Key Area	Overview	Vertical Sectors	Development/Engagement
Virtual Production	Advanced Communications	With a focus on media and games production and the convergence between the 2 sectors. The trial aims to deliver a cost-effective, efficient and innovative virtual production process capitalising on the use of 5G through a collaboration between production and games companies – focusing on games production technology and screen pre-production, filming and post-production processes.	Entertainment Economy	Abertay University; Royal Holloway University; Media Production Company, Manchester; global media company; global digital software company
E-Sports/ Playable City	Advanced Communications	Use case trial with a focus on e-sports and games and the use of 5G in streaming events playing into Dundee's strong computer games credentials. This will deliver transferable processes and services demonstrating the potential of 5G to facilitate greater efficiencies in delivery and cost-savings on enabling technology.	Entertainment Tourism Education	NLAE; Dundee City Council; Esports Scotland; AWS
Digital Mobility	Automation	Focus on IoT automated, mobile, robotic EV charging of vehicles	Transportation Logistics	Mob Energy, France; Dundee City Council
Digital Tourism	Advanced Communications	Using VR/AR to showcase tourism venues and historic Dundee, educating on design, culture and heritage. Focus on V&A Dundee & Discovery Point in vicinity of testbed and other attractions in the wider TCD region, developing immersive experiences to showcase visitor attractions and activities. There is significant	Visitor Economy Tourism Education	V&A Dundee; Dundee Industrial Heritage;

		commercialisation potential for this type of application		
Digital Play	Advanced Communications	Development of a new digital playpark in Waterfront Place as a focus for a use case on digital play and engaging young people and children to engage with new ways of learning.	Entertainment Education	Abertay University; Dundee City Council;
Smart Port and Smart Sites	IoT/Advanced Communications	Using AR/VR to enhance port experience and in the remote management of sites e.g., industrial premises management and the development of skills. Initial elements will work with Dundee and Montrose ports and other manufacturing sites to demonstrate efficiencies that can be achieved through a range of environmental and process monitoring and the use of immersive technology for skills training and service delivery.	Transportation Construction Tourism Skills	Angus Council, Montrose Port Authority; 3DEO; Forth Ports; various port tenant companies
Smart Cities	IoT	Using IoT sensors/cameras in public places to monitor, measure, collect & analyse data, identifying potential efficiencies/improvements in areas such as environmental conditions, traffic management, parking.	Transportation Tourism Public Realm Public Services Safety	Dundee City Council
Agri-Tech	Advanced Communications	Using immersive for remote engagement with farms and agriculture and the development of transferable skills and services with commercial potential.	Rural Food production	James Hutton Institute

The project timeline for this work is shown at Table 8.1. An evaluation plan will be in place prior to start of delivery of Year 1 Use Case trials. This will be informed by Deal-wide Benefits Realisation work and associated guidance provided by the Scottish and UK Governments including to the TCD PMO in 2020.

Challenge Fund: alongside the development of Pathfinder use cases, TCD-5G will develop and deliver a challenge fund for delivery in both 2022/23 and 2023/24, totaling £550,000. This will support the development of up to 6 more use case trials which address key strategic priorities for the region. It is hoped that the rapid deployment of some of the pathfinder use cases will demonstrate the potential of the testbed and promote its use to other interested parties – stimulating interest in the challenge funds.

Leveraged Investment: up to £1.2M. This is based on grant funding of 60% from TCD-5G investment with consequent match which is anticipated to be largely Value in Kind including staff time, equipment and other resources and external expertise provided through Consortia partners. Reference is made to Table 3.2 – Overview of Pathfinder Use Case Trials as above.

Objectives: the key objective is to fully demonstrate 5G technologies through the selected Pathfinder and Challenge Fund use case trials that can be commercialised at large scale and highlight the potential for 5G to respond to concurrent or conflicting demands and diverse outcomes on the same infrastructure. Engaging with local companies, academic partners and international, national and regional digital and technology companies will ensure this objective can be achieved.

Evaluation: TCD-5G will devise a full evaluation plan to examine the outcomes and viability of the use cases selected for the trials, addressing factors such as:

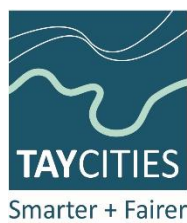
- technical performance as evidence by network service and application output;
- business potential;
- economic impact, including projected markets and revenues;
- the benefits and impacts of the individual trials on the social, equalities and inclusive agenda; and
- user satisfaction in terms of both business intermediaries and end-user markets.

Each use case will also be required to develop an evaluation plan and ensure that outputs/outcomes for each use case trial relate to the overall project's aims, outputs and outcomes.

Marketing, Promotion and Dissemination: key to the development of a successful use case trials model (and in particular the Challenge Fund element) is the marketing and promotion of the benefits and potential of 5G and the opportunities available at the Dundee Testbed through the TCD-5G project.

Working with key partners (Abertay University, Scottish Futures Trust and the SG5G Connect Hub) to develop a marketing, communications and dissemination strategy for the development of 5G in the city, which includes the TCD-5G project. The strategy will ensure that experts, stakeholders and the public are aware of the project – its opportunities, activities and impacts.

The dissemination of the findings of each use case trial and the programme as a whole is another high priority of the project along with finalising an impact report that also considers the relevance of outcomes for social and economic trends as 5G evolves. All partners and participants will contribute to the dissemination activities via the most appropriate routes for their sector or technology. For example, academic partners and research institutes are expected to prioritise journal publications and conference presentations, while it is anticipated that industrial partners will focus more on communications with media, potential users and stakeholders.



REPORT TO: TAY CITIES REGION DEAL JOINT COMMITTEE – 11 MARCH 2022

REPORT ON: TAY CITIES REGION DEAL BENEFITS REALISATION PLAN

REPORT BY: MO SAUNDERS, PMO PROGRAMME MANAGER

REPORT NO: TCRJC6-2022

1. PURPOSE OF REPORT

- 1.1. This report seeks the approval of the Tay Cities Region Deal Joint Committee for the Benefits Realisation Plan, noting that Management Group approved the Plan on 24th February 2022.
- 1.2. It should be noted that the UK Government and Scottish Government have both indicated that they are content with the principles and overall approach to monitoring and evaluation for the Tay Cities Region Deal, as set out in the Benefits Realisation Plan. The Scottish Government have requested clarification on a few points of detail, and further discussions are underway about associated amendments. These are likely to be relatively minor and will not affect the overall intention or design of the Plan.

2. RECOMMENDATIONS

- 2.1. The Joint Committee is asked to consider this report and:
 - a) Agree the approach set out in the Benefits Realisation Plan (Appendix 2) for ongoing monitoring and evaluation of the Deal and its Programmes/Projects;
 - b) Note the timescales for further development of the Plan and core components;
 - c) Approve the Benefits Realisation Plan, subject to relatively minor further amendments and final agreement from the Scottish Government; and
 - d) Remit final sign-off of the Benefits Realisation Plan to be delegated to the Management Group during the pre-election period.

3. SUMMARY OF THE BENEFITS REALISATION PLAN

3.1. Introduction

- 3.1.1. As part of the Grant Offer Letter for the Tay Cities Deal, dated 30 June 2021, a number of conditions have been set including a requirement to develop a Benefits Realisation Plan (BRP), which should complement the Annual Performance Report. The Grant Offer Letter stipulates the following conditions:

- Annually (31st March) - an Annual Performance Report based on the previous year's activity (at both Programme and Project level) to include:
 - an updated Benefits Realisation Plan detailing the realisation of benefits across the Programme, bringing focus and alignment to wider regional cohesion and economic development benefits achieved by utilising partner resources.
 - This report will form the basis of the Annual Conversation and should follow the annual report template.
- 3.1.2. Benefits Realisation is a term that refers to the Deal's approach to monitoring and evaluation.
- 3.1.3. The primary objectives of the BRP, as outlined in the guidance issued by the Scottish Government (Appendix 1), are to:
 - Demonstrate - for the benefit of local, regional and national stakeholders - the outputs, outcomes, and impacts realised as a result of Deal investments in projects;
 - Identify, collate, and explain the collective benefits of the Deal as a whole, which may be wider than individual project outputs, outcomes, and impacts;
 - Provide accountability for both government and partner investment;
 - Enhance the operational effectiveness of existing projects; and
 - Improve potential future initiatives through the capture, dissemination, and application of learning.
- 3.1.4. The BRP will demonstrate cross-cutting links with other areas of work within the Deal including the Implementation Plan and its annual review, the Inclusive Growth Agenda, Clean Growth, Community Wealth Building including community benefits and will support the delivery of the Monitoring and Evaluation of the Deal. The Plan will also seek to capture the Change Control process.
- 3.1.5. At Deal Signing, all named Programmes and Projects committed to a number of outputs, including those relating to jobs and leverage. This will be the starting point of reporting, and additional outputs as committed to in approved business cases will also be reported against.
- 3.2. **Approach**
 - 3.2.1. The approach taken to develop the Tay Cities Regional Deal BRP has been informed by other Deal's approaches, namely the Edinburgh & South East City Region Deal, Ayrshire Growth Deal and Borderlands.
 - 3.2.2. It was agreed with the Scottish Government that our first Plan, to be developed by 31st March 2022, would set out the principles and our approach to monitoring and evaluation; further development and capturing data will then be actioned over the coming year.
 - 3.2.3. Dr Mark Graham, who assisted the Edinburgh Deal to develop their BRP has been appointed as a consultant to support the Tay Cities Region Deal.
 - 3.2.4. To date, various parts have been drafted including the following:

- a) Definitions Guidance: this builds on the agreed set of Definitions all named Programmes and Projects used to outline their outputs at Deal Signing. This is not definitive and will evolve.
 - b) Monitoring and Evaluating Approach: which sets out the role of the Partnership, PMO and Programme/Project Owners.
 - c) Logic Chain Model template: this is the first step in all Programmes/Projects being able to capture the outputs, outcomes and impacts they anticipate as a result of the Project. it's important that this is in place before reporting on outputs can commence.
 - d) Reporting template.
- 3.2.5. A number of workshops have also been held with Programmes/Projects in delivery or due to be in delivery in the next financial year to ask them to contribute to the definitions guidance, confirm their outputs at Deal Signing by completing a Logic Chain Model and identify future support needed.
- 3.2.6. It should be noted that there is currently varying statuses of Logic Chain Models. Many projects have not yet developed one, whilst others have demonstrated significant development towards a project-level Benefits Realisation Plan. The HE/FE sector is the area in which the PMO are noting significant development towards this to date.
- 3.2.7. The Tay Cities Region Deal approach to monitoring and evaluation is set out in Appendix 2.

3.3. **Next Steps**

- 3.3.1. Following approval of Benefits Realisation Plan which sets out the approach, the PMO will further refine the Plan to allow for capturing of reporting on a 6-monthly basis (via the Implementation Plan Annual Review) and at the end of March each year. The definitions guidance will be further considered to take account of project comments; the National PMO Networking Group will also continue to liaise with both the UK and Scottish Governments to agree a national set of definitions to guide projects currently in delivery and support those who are yet to develop their business cases. It is also anticipated that further workshops will be held with projects that are not due to drawdown funding until 2023+ to engage with them early to develop their Logic Chain Model.
- 3.3.2. By June 2022, the following actions are committed to:
- a) Review all returned Logic Chain Models;
 - b) Begin work with all year 3 + Programmes and Projects to develop their Logic Chain Models;
 - c) Review and update the Definitions Guidance – this includes capturing any new information relating to carbon management, if available via the Scottish Government;
 - d) Pilot the reporting template with volunteer project(s); and

- e) Undertaking an annual review of the Implementation Plan to align it with the Benefits Realisation Plan.

4. CONSULTATIONS

- 4.1. In addition to being shared with both Governments the BRP has been shared with the following parts of the Partnership for their input and comments:
 - BRP Review Panel
 - Extended LA PMO
 - Thematic Boards.
 - HE/FE Forum
 - Finance Directors Group

Report author: Lauren Hollas
Title: Tay Cities Project Manager
Email address: Lauren.Hollas@taycities.co.uk
Phone number: 07881008024

Date: 01/02/2022

SCOTTISH CITY REGION AND REGIONAL GROWTH DEALS

BENEFITS REALISATION PLANS

GUIDANCE FOR REGIONAL PARTNERSHIPS

1. Introduction

- 1.1. City Region and Growth Deals are long term, strategic investment programmes that aim to accelerate inclusive economic growth and increase relative equity within regions. This is achieved through the delivery of individual projects and programmes¹, typically over a 10 to 20-year period, that are collectively bound together by unifying regional strategies.
- 1.2. Each regional partnership is required, as a condition of grant², to develop a Benefits Realisation Plan (BRP). This informal guidance note sets out the principles of BRP development in the Deals context. It is not intended to act as an exhaustive list of requirements, nor does it supersede the Magenta Book, government's standard guidance on evaluation. Rather, it raises issues and poses questions that regional partners may wish to consider as they develop a BRP most appropriate to their own local circumstances.

2. Purpose and principles of Deal Benefits Realisation Plans

- 2.1. The primary objectives of City Region and Growth Deal BRPs are to:
 - Demonstrate - for the benefit of local, regional and national stakeholders - the outputs, outcomes, and impacts realised as a result of Deal investments in projects;
 - Identify, collate, and explain the collective benefits of the Deal as a whole, which may be wider than individual project outputs, outcomes, and impacts;
 - Provide accountability for both government and partner investment;
 - Enhance the operational effectiveness of existing projects; and
 - Improve potential future initiatives through the capture, dissemination, and application of learning.
- 2.2. Government recognises that Deals are diverse and designed to respond to the unique challenges and opportunities facing each region's economy. However, the following principles should underpin the approach to BRP development for all Deals.

¹ Henceforth the term 'projects' is used as shorthand to refer to projects and programmes within Deals.

² The requirement to develop a BRP is set out in annual Grant Offer Letters issued to all Deals in delivery.

- All monitoring and evaluation activity should be proportionate to utility, spend, and risk. Large, novel, and/or contentious projects - as well as those for which the most significant outputs and outcomes are not quantifiable - are most likely to benefit from detailed evaluation.
 - If regional partners are unsure as to what may constitute a proportionate approach, they should first develop options – including associated advantages, disadvantages, and costs – before discussing with government.
 - Existing datasets should be used wherever possible, in order to drive maximise efficiency in reporting and minimise the associated burden on project owners. The requirement for any new data collection should ideally be identified at the outset of Deal delivery, and be driven by a clear need to enhance or update information already available.
 - Accountabilities and responsibilities for each aspect of BRP development and delivery should be defined. That is, for each action (e.g. data collection, evaluation design and delivery, etc.) it should be clear who will undertake it and when, as well as how it will be reported.
 - Common definitions and reporting cycles should be established across all projects as far as practicable, to ensure Deal-level reporting is as robust and consistent as possible. For example, it is important to ensure all projects are using the same definitions of key metrics such as jobs created, matched and leveraged funding, etc. Government also strongly supports cooperation and coordination between regional Programme Management Offices wherever possible, in order to aid Scotland-wide analysis.
 - Government recognises that Deals are long term investments and that evaluations cannot usefully be conducted until sufficient progress has been made on delivery. However, it is important to articulate a robust and holistic approach to evaluation at the outset, in order to ensure appropriate baseline information is captured at both the project and Deal level.
- 2.3. It is the responsibility of regional partners to meet any costs associated with BRP development and delivery, including project and programme evaluation. In addition, government reserves the right to request further, independent evaluation of Deal progress as appropriate, with any associated costs to be met by regional partners.
- 2.4. Government recognises that BRPs will evolve over time as projects develop and the detailed outputs, outcomes, and impacts of each become clear. However, regional partners should agree their overarching strategy for benefits realisation – particularly any standardisation of metrics, and approach to baselining – as soon as possible, and ideally before any projects enter delivery. This will help ensure consistency and clarity is built into the process for all project owners from the outset.

3. Content and structure

- 3.1. It is for regional partners to determine the overall structure of their BRP. However, as a minimum government expects the following information to be captured:
- Deal overview, including key inputs, outputs, outcomes and impacts;

- Target audiences;
- Programme-level theory of change (logic model), demonstrating the expected causal relationship between inputs, outputs, outcomes, and impacts;
- Approach to measurement, evaluation, and baselining; and
- Governance and oversight arrangements.

3.2. Each of these areas is discussed in more detail below.

Deal overview

- 3.3. A short summary of the Deal should be provided, including key themes and investment priorities. It may be helpful to provide a breakdown of government and regional partner funding commitments by theme/project as appropriate.
- 3.4. This section should also clearly summarise key Deal-level commitments as described in Heads of Terms/Full Deal documentation. This will vary considerably between Deals but may include:
- Number of jobs to be created/protected;
 - Evidenced contributions to inclusive growth and/or sustainability (e.g. carbon reduction);
 - Cultural participation;
 - Regional economic impact; and
 - Wider impacts (e.g. on place making, regional partnership working, etc).
- For the purposes of the Scottish Government in particular it would also be helpful to describe, in narrative or tabular form, how the Deal contributes to the overarching objectives of the National Performance Framework, for example on improving equality and eliminating discrimination, and meeting any targets relating to the reduction of greenhouse gas emissions.

Target audiences

- 3.5. The development of BRPs should be shaped by the likely needs and requirements of the target audience(s). Regional partners should therefore consider the following questions:
- Who is likely to be interested in the BRP and its findings?
 - How have they been involved in its development?
 - How will they be kept informed of progress?

Theory of change

- 3.6. The theory of change³ for each individual project within a given Deal is captured in the associated business case.
- 3.7. For the purposes of the BRP, a theory of change for the Deal as a whole should be developed. This should summarise how key inputs, activities, and outputs will enable regional partners to meet their commitments to outcomes and impacts, as set out in Heads of Terms/Full Deal documentation.

³ Further information on how to develop an effective theory of change can be found in the [Magenta Book](#) (Chapter 2).

Approach to measurement, evaluation, and baselining

3.8. The theory of change should establish the assumed causal relationships between the Deal's inputs, outputs, outcomes, and impacts. In order to demonstrate this theory is delivering in practice, regional partners should consider the following questions:

- What information is required from each project owner to demonstrate Deal-level outputs, outcomes, and impacts are being delivered?
- How will the necessary information be gathered and analysed? Are standard forms required?
- What will be monitored, and what will be evaluated?
- Which evaluation techniques are most appropriate in which circumstances?
- What arrangements are in place to ensure appropriate baseline information is captured prior to commencing project delivery?

Governance and oversight arrangements

3.9. It is essential to be clear from the outset who is responsible for developing and overseeing implementation of the BRP, and how progress will be reported to identified target audiences. Key questions to consider include:

- Who is responsible for writing the BRP itself?
- How often will it be updated, and by whom?
- How will it interact with the Deal's existing governance structures? Will a new group/board be created to drive progress, or will responsibility fall to an existing forum?
- How will monitoring and evaluation activity be resourced by project owners and/or the partnership as a whole?

Last updated: November 2020

Draft Tay Cities Region Deal Benefits Realisation

Version 3.0
February 2022

“The ultimate aim of the Deal is to enhance the lives of the region’s residents. The partners are clear that for the regional economy to thrive we must increase economic participation, reduce inequalities, and attract and retain talent”.

Contents

1. Introduction	4
1.1. Purpose	4
2. Strategic Context and Objectives.....	5
2.1. Deal Overview	5
2.2. Inclusive Growth Challenges.....	5
2.3. Benefits Realisation Plan Audiences.....	6
2.4. Programme Theory of Change.....	7
3. Reporting Roles and Responsibilities.....	12
3.1. Roles	12
3.2. Reporting	13
4. Monitoring Approach	14
4.1. Purpose of Monitoring.....	14
4.2. Baseline Information & Gaps	14
4.3. Outputs, Outcomes & Impacts	14
4.4. Definitions.....	15
4.5. Carbon Management	16
4.6. Risks.....	16
5. Evaluation	18
5.1. Project Evaluation.....	18
5.2. Strategic Added Value	18
6. Change Control.....	20
6.1. Change and Change Control	20
6.2. Tay Cities Region Deal Change Control Process.....	20
7. Appendix A: How Tay Cities Regional Deal Projects and Programmes address TCRD's Inclusive Growth Objectives	21
8. Appendix B – Tay Cities Region Deal: Outputs, Outcomes and Impacts Guidance & Definitions	25
8.1. Tay Cities Outputs Definitions at Deal Signing	25
8.2. Definitions Guidance.....	26
9. Appendix C: Tay Cities Region Deal Change Control Process	30
10. Appendix D: Reporting Template	34

1. Introduction

1.1. Purpose

- 1.1.1. The purpose of this Benefits Realisation Plan (BRP) is to demonstrate, to our local, regional and national stakeholders, how we will capture the outputs, outcomes, and impacts resulting from Tay Cities Region Deal investments. It is the Partnership's approach to monitoring and evaluation.
- 1.1.2. The Benefits Realisation Plan will:
 - Identify, collate and explain the collective benefits of the Deal as a whole;
 - Outline the processes followed by the Tay Cities Partnership to maintain a regular record of project delivery;
 - Provide a framework for constructive evaluations of projects; and,
 - Act as a guide for the Project/Programme/Fund Owners for monitoring and evaluation.
- 1.1.3. This Plan, therefore, sets out our approach to:
 - Project monitoring and reporting, including definitions guidance; and
 - Both the Deal Programme and project evaluation.
- 1.1.4. Updates to the Benefits Realisation Plan will be reviewed annually as part of the Annual Conversation.

2. Strategic Context and Objectives

2.1. Deal Overview

2.1.1. The Scottish Government and UK Government will each invest up to £150 million in the Tay Cities Region Deal (the Deal). This investment has the potential to secure over 6,000 jobs and lever in £400 million of investment over 15 years. It will enable the region to:



- **Empower and promote inclusion** - by ensuring that local people have the skills they need to succeed in the modern workplace and that growth is inclusive;



- **Innovate and internationalise** - by developing globally recognised clusters of academic and business excellence; and,



- **Connect** - by improving physical and digital infrastructure.

2.1.2. Table One sets out both the Government and Partners investment commitments, split by the themes in the Deal.

Table One: Total Anticipated Deal Contributions

Tay Cities Theme	Governments (£m)	Partners (£m)	Leveraged (£m)	Total (£m)
Skills	30.1	-	0.5	30.6
Innovation	188.2	27	305	520.2
Culture & Tourism	49.7	15	39	103.7
Digital	4.0	-	6	10
Transport	28	7	0.5	35.5
Total	300	49	351	700

2.2. Inclusive Growth Challenges

2.2.1. In broad terms four interlinked challenges were identified, as detailed in the Deal Document:¹

- Weak Productivity and Slower Growth
- Skills, Health Outcomes and Earnings
- Low Income
- Need for Sustainable Places

¹ https://www.taycities.co.uk/sites/default/files/tay_cities_deal_doc_feb_8.pdf

- 2.2.2. Appendix A provides more detail on the alignment of each of these themes with the three inclusive growth objectives that the Tay Cities Region Deal aims to contribute to.

2.3. Benefits Realisation Plan Audiences

- 2.3.1. The list below outlines the audiences who may wish to use or have an interest in the outputs of the monitoring and evaluation approaches proposed within this Plan. They include:
- **The general public:** in terms of understanding the impacts of the Deal, how best they and their communities might directly engage with and benefit from relevant Programmes as well as what progress has been made to securing the Deal objectives;
 - **UK & Scottish Governments as well as the Scottish City Region and Growth Deals Delivery Board** - to enable them to monitor and review progress of the delivery of the Tay Cities Region Deal outcomes and impacts, and learn lessons to inform future policy delivery;
 - **Accountable Body/Auditors:** to consider achievements and understand what evidence is available and how it is collected;
 - **Tay Cities Region Joint Committee** - in their role as the primary decision-making body for the Deal overseeing investment and approving all relevant business cases;
 - **Tay Cities Management Group** - as this Group is tasked to: support the Joint Committee in the delivery of the Deal, ensuring that it is aligned towards achieving its inclusive growth ambitions; monitor delivery of milestones (including benefits realisation); and, identify priorities and develop solutions to maximise private sector investment in the Tay Cities region;
 - **Finance Directors Group** - that supports both the Management Group and Joint Committee in overseeing the Deal's finances; ensures that the Deal funds are being spent as set out in the Financial Plan (and therefore the consequent outputs anticipated under this Plan are likely to be delivered); and, considers quarterly financial reports, and escalate any risks to the Management Group;
 - **Heads of Economic Development** – across the four Councils that, amongst other roles, are tasked to provide support and challenge to projects within the Deal and can support the review of business cases and provide advice as required. They also lead for the partnership on the delivery of Inclusive Growth and the Regional Economic Strategy Action Plan;
 - **Tay Cities Region Enterprise Forum (TCREF)** - from a business and third sector perspective this forum will provide knowledge and expertise to the Joint Committee and Management Group to assist them in implementing the Deal and achieve the benefits committed to;
 - **Tay Cities Region Higher Education/Further Education Forum (HE/FE Forum)** – which, from an education sector perspective, will adopt the same roles as the TCREF above; and,

- **The Five Thematic Boards** - given their role to develop and maintain oversight of projects across the five Deal themes and, in particular, reviewing and assessing business cases (and any requests for change to approved projects) and leading and maximising collaboration (and benefits realisation) across other Deal themes and other regional stakeholders.

2.4. Programme Theory of Change

2.4.1. All of the Programmes, Fund and Projects, as a result of the work initiated by this Plan:

- Are in the process of developing their individual Logic Chain Models; and,
- Given the above, will provide the PMO, using the reporting template at Appendix D, with information in relation to the outputs, outcomes and impact measures they will use and timetables over which they will report these measures.

2.4.2. Prior to the completion of this work - and for the purposes of this Plan – an indicative initial high-level Logic Model has been developed, as outlined at Table Two. This version will be updated as individual Logic Chain Models come forward.

2.4.3. As illustrated, Table Three provides a broad overview of:

- The **inputs and activities** identified within the Deal;
- Main **beneficiary groups/conditions** (in terms for example of the Region's residents and environment) that will be impacted by these activities;
- Short term **direct outputs** that will result within these groups/conditions on completion and operation of Programme facilities and interventions;
- A range of **intermediate** medium-term impact indicators of relevance to each project that they will seek to capture, against agreed baselines and outcomes; and,
- A **minimum number** of long-term impacts that focus, at an overall level, upon the sustainable benefits of the Deal in terms of:
 - Economic growth, including sustainable employment growth and increases in investment and associated returns;
 - How the above is aligned to and supports the delivery of the Deal's inclusive growth objectives; and,
 - The associated developments that might be linked to the Tay Cities Region Deal, over and above those initially identified under the capital and revenue expenditure across the Deal.

Table Two: Draft Deal Programme Logic Model

Programme	Input (£m)	Activities	Main Beneficiary Groups	Short Term Outputs	Medium Term Impacts	Longer Term Impacts
Skills	30.6	Programmes targeting skills development for other Tay Cities Region Deal projects and reskilling in the region's and Scotland's aviation & engineering sectors	(Targeted promotion of support activities to) priority resident groups and local companies	Uptake of support programmes Programme completion rates	Job levels maintained and created as committed to at Deal Signing Reduced percentage of skills programme employees in the Region who are paid less than Real Living Wage ²	Sills Programme Employment levels maintained Align Programme beneficiary Real Living Wage proportion with the Scottish average
Innovation	520.2	Development of a range of bio-medical, food, environmental, cybersecurity, and legal sector focused facilities	Construction and supply chain Relevant sectors Tay region residents	Construction and Supply Chain jobs Community Benefits Site Occupancy & Service take up	Job levels created Student wage uplifts	Sustained employment/wage rate uplifts.

² There are various methods that could be adopted – depending on individual project circumstances – to evidence that relevant employees have moved from being paid less than RLW to achieving RLW as a result of participating in Deal skills programmes. The actual methods adopted will be agreed as and when projects are implemented.

			Students	Student/ Start-ups take up Minimised whole life carbon costs	Research & Adoption uplifts and other Investment secured New theme supported SMEs/Start-Ups Student wage uplifts Knock on or wider falls in carbon emissions ³	Returns on Investment Inward Investment Increased knock on or wider falls in carbon emissions
Culture & Tourism	103.7	Development of seven tourism & culture projects to enhance the offer and reputation of the Region as a visitor destination	Construction and supply chain Tourism and Culture sectors	Construction and supply chain jobs Community Benefits Domestic & Foreign Visitors/day visitor uplifts	Job levels created Investment secured Regional Economic Multiplier effects of wider visitor spend	Sustained theme related employment Returns on investment

³ e.g. lower carbon emissions from food production due to adoption of research & development outcomes arising from the Innovation theme.

				(Relevant) Site Occupancy		
				Minimised whole life carbon costs		
Digital	10	Development of High Speed Broadband & 5G Test beds to enhance access in rural areas with little or no current connectivity	Construction and supply chain Users	Construction and supply chain jobs Community Benefits Infrastructure in place Minimised whole life carbon costs	Job levels created Investment secured Improved Connectivity Wider user benefits ⁴	Sustained theme related employment Associated (user) productivity uplifts Inward Investment
Transport	35.5	Perth Bus & Rail Interchange, Low Carbon and Active Travel hubs and Dundee Airport improvements	Construction and supply chain Users	Construction and supply chain jobs Community Benefits Infrastructure in place	Transport benefit improvements (e.g. safety, journey times, modal split, air quality, reduced emissions)	Sustained transport benefit improvements Business/tourism employment

⁴ By redressing the imbalances caused in rural areas by reduced or non-connectivity. For example, the inability to access online services causing high levels of loneliness and isolation; community safety; Emergency Services having poor access to mobile networks; and tourism destinations and events not being able to offer connectivity that visitors expect.

				<p>Minimised project related whole life carbon costs</p> <p>User modal shifts</p> <p>Increased airline passengers</p>	<p>(Air use related) Business time savings</p> <p>(Air use) Net tourism impacts</p>	Inward Investment
--	--	--	--	---	---	-------------------

3. Reporting Roles and Responsibilities

3.1. Roles

3.1.1. In reporting outputs and impacts, the Partnership is committed to:

- Adhering to the overarching principles of Government best practice in project and programme delivery;
- Selecting appropriate monitoring and evaluation approaches to best measure progress in meeting the inclusive growth objectives and impacts associated with the Deal;
- Regularly updating this Plan and associated reporting protocols; and,
- Adopting other new measures that will help assess and support the better management of Deal activities and impacts.

3.1.2. Consequently, the Partnership have - over the 15-year lifetime of the Tay Cities Region Deal – committed to:

- Delivery objectives and associated performance indicators will consistently be aligned to the stated output and impact objectives, as set out in the Deal Document and agreed at Deal Signing;
- Monitoring and evaluation will be used to confirm that: the benefits associated with these outputs can be realised; risks of non-delivery can, where appropriate, be managed;
- Governance, management frameworks and monitoring and evaluation approaches are proportionate and appropriate to the work and levels of prevailing risk associated with each related Programme, Fund and Project delivery;
- Accountabilities and responsibilities are defined, mutually consistent and traceable across all levels of management as summarised in the previous section and set out in the Deal Document;
- Sharing, monitoring and evaluation approaches, resources and good practice will across the Partnership and with the Government will help to minimise the costs associated with monitoring and evaluation, while also aiming to maximise future benefits particularly across Programme interdependencies. This will include:
 - Adopting common data sets, definitions and reporting cycles to allow comparisons to be drawn between Programmes, Funds and Projects, and, where appropriate, Deal Programme level; and,
 - Using existing data sources and streamlining any new data collection as much as possible.
- The suitability of selected indicators, outputs and outcomes will be subject to ongoing review in the light of alternative data sources/approaches to measurement becoming available.

3.2. Reporting

- 3.2.1. There is a current established quarterly reporting regime in place for the Partnership. All of the Programmes, Fund and Projects have been asked to show the delivery of their outputs, outcomes and impacts split on a 6-monthly basis, in September and March. This is to enable to Partnership to align the reporting with the Annual Performance Report that has been set by Governments. From April 2022, this reporting regime will start to integrate the Benefits Realisation reporting requirements.
- 3.2.2. Quarterly performance meetings, between the PMO and Government representatives, cover project progress by exception, financial monitoring, and performance, including monitoring and evaluation. An overall Programme Risk Register and Performance Monitoring Report with any recommendations will then be considered by Thematic Boards, Management Group and the Joint Committee.
- 3.2.3. This will allow updates on progress towards outputs and benefits to be highlighted in the Annual Performance Report and Implementation Plan to assess on an ongoing basis how much impact the Deal is having on agreed inclusive economic growth outcomes.

4. Monitoring Approach

4.1. Purpose of Monitoring

- 4.1.1. The monitoring and reporting of benefits associated with the Deal's Programmes, Fund and Projects is required to ensure effective management of the Tay Cities Region Deal. This will enable progress on the delivery of outputs and targets to be reported to all partners and the Governments.

4.2. Baseline Information & Gaps

- 4.2.1. To support reporting, Programmes, Fund and Projects will provide baseline data. This will be used to demonstrate uplift and change. Any gaps in baseline data, outputs and targets, will need to be highlighted and addressed through future Benefits Realisation reporting, including where a project has indicated data is still to be confirmed.
- 4.2.2. It is also expected that progress towards establishing a target where there is a current gap should be demonstrated. This includes agreeing any revised baseline position, using the change control process, to take account of the impacts of COVID, Brexit or other unforeseen external factors post Business Case approval.

4.3. Outputs, Outcomes & Impacts

- 4.3.1. The funding committed to the Deal by the UK & Scottish Governments will lead to the overall Deal outcomes of over 6,000 jobs and securing £400m of leverage. The Tay Cities Region Deal approach to Benefits Realisation will ensure that the direct links between these programmes and projects outputs and the Deal outcomes can be captured.
- 4.3.2. Programmes and projects will be required to report against agreed outputs, outcomes and impacts that were committed to at Deal Signing and in approved business cases. Project owners, and the relevant Director of Finance for the project, will also confirm annually that the outputs, outcomes and impacts reported align with agreed commitments (including any approved changes relative to the original business case) within the most recent Benefits Realisation report and Implementation Plan.
- 4.3.3. As part of the initial reporting process, programmes and projects will be asked to profile their outputs, outcomes and impacts so that the timescales for benefits realisation can be understood.
- 4.3.4. To ensure consistent reporting across the Deal a:
 - **Guidance document** (Appendix B) has been developed outlining definitions of project and programme outputs, outcomes and impacts at Deal Signing. This will be further developed in line with updates to the Plan; and a,
 - **Reporting template**, for use by all programmes and projects, has also been developed (Appendix D) in order to ensure agreed outputs, outcomes and impacts can be consistently reported and progress compared across projects, themes and the overall Deal.

- 4.3.5. Given the above, Figure One below provides a high-level summary of the outputs indicators that are likely to be adopted against the five Deal themes relative to the output, outcome and impact indicators identified in the definitions document, as shared prior to Deal Signing noting that this is only a representation of programmes and projects currently in delivery or due to be in the 2022/23 financial year.
- 4.3.6. The Partnership are committed to updating this summary to map the outputs against the five Deal themes in line with the timescales for the Implementation Plan Annual Review.

Figure One: Tay Cities Region Deal Outputs, Outcomes and Impacts

Indicator	Skills	Innovation	Culture & Tourism	Digital	Transport
New jobs					
Construction jobs					
Jobs protected					
Journey time savings					
Development space unlocked					
Training places					
Visitors					
Start-Ups					
SME's supported					
Private sector investment					
Leverage: (including LA, HE/FE, Private Sector and any other leverage)					

4.4. Definitions

- 4.4.1. As shown in Appendix B, a set of definitions for outputs were agreed ahead of Deal Signing to support the establishment of two of the key outcomes for the Deal; to secure over 6,000 jobs and lever in £400m investment. However, it is recognised that there are a number of outputs that projects have or will commit to that are not captured by these definitions. Similarly, the methodology for calculating information to support reporting against outputs, outcomes and impacts as well as evidence for capturing data is not currently captured in this definitions list.
- 4.4.2. To be able to provide a more complete guidance note on outputs, outcomes and impacts definitions, The Partnership is committed to ensuring these are captured and reviewed, with input from programme and project owners, to provide guidance for programme and projects later in the Deal when developing their business cases and for reporting purposes.
- 4.4.3. The definitions guidance will be updated in line with the Implementation Plan annual review.

4.5. Carbon Management

- 4.5.1. On 18th August 2021, the Scottish Government issued guidance relating to carbon assessment and management on behalf of both Governments. This was developed to meet Scotland's net zero whole life carbon emissions trajectory by 2045. Within the guidance, a set of carbon definitions were defined to support reporting. These are set out in Appendix B. The Deal is awaiting training from the Scottish Government to facilitate an understanding of the whole life carbon cost implications of all projects across the Deal. This will support Programmes, Fund and Projects to implement the guidance.
- 4.5.2. Through conversations with the Scottish Government, the following is understood and will be accounted for as the Benefits Realisation Plan evolves:
- a) All City Region and Growth Deal projects will be assessed to determine carbon impacts;
 - b) For programmes and projects still to develop a business case, the whole life carbon costs within the economic case section of the business case will be required to be assessed and options considered to understand the impact;
 - c) Further guidance and training will be provided from February 2022 to support individuals in developing business cases;
 - d) For those projects that are approved, it is not expected that retrospective assessments will be required. However, Projects should be able to demonstrate their understanding of the carbon emissions impact of their project by utilising the Scottish City & Regional Growth Deals Guidance Categorisation Form; and,
 - e) Where appropriate, advice and support will be provided by the PMO, or by the Scottish Government's Sustainable Development Manager. This will be in the form of training and support sessions, for example.

4.6. Risks

- 4.6.1. As part of workshops held with all year 1, 2 and 3 programmes/projects for the Tay Cities Region Deal in January 2022, a number of risks were highlighted:
- **Inflationary impacts**, in part as a result of Brexit and Covid, on construction costs, including materials, supply chains and labour supply. This is being reported as having a potential impact on the delivery of outputs;
 - **Changes to baseline data**, reportedly as a result of Brexit and Covid implications, which may have an impact to the overall commitments. In particular, this to date has been reported by those projects within the Culture & Tourism theme;
 - Reporting benefits, and on-going evaluation, to be **proportionate** to the organisations reporting and scale of the project; and,
 - **Resource and capacity** issues to undertake long-term monitoring and evaluation. This includes ensuring that projects appoint a lead officer to

continue this role, if roles change, as agreed when all programmes/projects signed up to the Deal.

- 4.6.2. These risks have been shared with the Management Group and Thematic Boards. These risks will be continued to be understood as logic chain models and business cases are developed. Any update to the risks will be provided as part of future Benefits Realisation Plan updates.

5. Evaluation

5.1. Project Evaluation

- 5.1.1. Understanding the impact of the Deal beyond the delivery of the direct outputs and outcomes set out in the Grant Funding Agreements is an important part of achieving the aspiration of the Deal. Projects, programmes and the overall Deal will all be part of the approach to evaluation.
- 5.1.2. All projects are expected to provide a final report evaluating the performance against agreed baselines and subsequent outputs and outcomes. Suggested approaches that could be adopted to such evaluations are provided in the Guidance document. Over the next year the PMO will establish which approach is likely to be practical and proportionate at a project level and how and when to adopt this approach. The outcomes of these discussions will be reported in the next iteration of this Plan.
- 5.1.3. All parts of the Deal Partnership will be provided with resultant evaluation reports, and will be invited to provide comment, where appropriate. As highlighted above, the Annual Performance Report will be an opportunity to demonstrate wider impacts of the Projects at annual milestones.

5.2. Strategic Added Value

- 5.2.1. Finally, in order to explicitly monitor and evaluate the additionality of partnership working relationships and outcomes the PMO proposes, as illustrated in Table Three, adopting the Edinburgh and South East of Scotland City Regional Deal scoring system, which will involve Programme leads assigning a score based on what they feel the realistic “partnership” ambition for any project is likely to entail.

Table Three: Strategic Added Value (SAV) Scoring System

SAV Score	Description
1 (Low)	There are opportunities to generate additional benefits through links with one or two other Deal themes.
	Partnership working with wider stakeholders (e.g. private/third sectors) to add value to the proposal has not been thoroughly considered, but may be possible, and should be explored further.
	Only one or two “Inclusive growth” measures could be incorporated into the delivery of the project.
2 (Medium)	There are opportunities to generate additional benefits through links with three other Deal themes.
	Partnership working with wider stakeholders, e.g. private/third sector to add value has been factored into the business case to some extent, but there are opportunities to enhance this to further add value.
	Two or three “inclusive growth” measures can be incorporated into the delivery of the project.
3. (High)	There are opportunities to generate additional benefits through links with four or five Deal themes.
	Partnership working with wider stakeholders, e.g. private/third sector is already taking place and strategic added value effects are clear.
	Three, four or five ““inclusive growth” measures are incorporated into the delivery of the project.

- 5.2.2. In addition – **where a ranking of 3 is agreed** – the PMO proposes, as illustrated in Table Four below, to capture the “Strategic Added Value” benefits of such new partnership arrangements across five dimensions.

Table Four: Potential Strategic Added Value Elements of the Deal

Definition	Examples
Strategic leadership & catalyst: Articulating and communicating Regional development needs, opportunities and solutions to partners and stakeholders in the Region and elsewhere.	Creating confidence in the prospects for economic growth and in the capacity of partners and stakeholders to realise the potential for growth and improved performance.
Strategic influence: Carrying out or stimulating activity that defines the distinctive roles of partners, gets them to commit to shared strategic objectives and to behave and allocate their funds accordingly.	Generating cross-Regional partnerships of mutual benefit to the growth prospects of each participating area. Achieving alignment and inter-locking of the priorities and investment plans of the Deal and other partners.
Leverage: Providing financial and other incentives to mobilise partner and stakeholder resources – equipment, people as well as funding.	Levered funding and other resources from partners and stakeholders in support of Deal objectives.
Synergy: Using organisational capacity, knowledge and expertise to improve information exchange and knowledge transfer and coordination and/or integration of the design and delivery of interventions between partners.	Reduced duplication of service provision from Regional partners – e.g. in business development support. Scaling up of projects and programmes to beneficial levels that achieve scale economies and provide for critical mass in securing benefits.
Engagement: Setting up the mechanisms and incentives for more effective and deliberative engagement of stakeholders in the design and delivery of Regional and sub-Regional priorities and themes.	Introducing quality and innovation in Deal interventions through the transfer of good practice, the development and use of benchmarks and the adoption of new processes.

6. Change Control

6.1. Change and Change Control

6.1.1. The APMG⁵ managing benefits guide identifies five main sources and/or outcomes of change that can negatively affect benefit delivery, all of which are potentially pertinent to the Deal. There are:

1. Forecasting failure: for example, benefits are not identified or are overestimated;
2. Delivery failure: i.e. the failure to deliver a project with the planned functionality or on time, so impacting on the scale and timing of benefits realisation;
3. Business and behavioural change failure: i.e. the business and behavioural changes on which benefits realisation is dependent do not occur or are poorly scheduled causing delays in benefits realisation;
4. Benefits management failure: in relation to capturing and leveraging emergent benefits and mitigating dis-benefits; and,
5. Value for money failure: the benefits are realised but at excessive cost.

6.1.2. For change control to be effective benefits must be measurable and link outputs to strategic goals. If such benefit measures are in place: “change control ensures only beneficial or necessary changes to the baseline are implemented”⁶.

6.2. Tay Cities Region Deal Change Control Process

6.2.1. The Tay Cities Region Deal Change Control Process has been developed and agreed by the Governments and Partnerships and is detailed at Appendix C.

⁵ <https://apmg-international.com>

⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746400/Project_Delivery_Standard_1.2.pdf

7. Appendix A: How Tay Cities Regional Deal Projects and Programmes address TCRD's Inclusive Growth Objectives

7.1. Table Five below provides, by the Deal themes, the:

- Alignment of each of these themes with the three inclusive growth objectives that the Tay Cities Region Deal aims to contribute to for an *Inclusive Tay*, *Innovative*, *International Tay* and *Connected Tay*; and,
- Projects under each theme, with a brief description of each project's activities and aim.

Table Five: Deal Themes & Objectives

Programme	Stated Objectives
Skills	<p>Under the Deal objective of an <i>Inclusive Tay</i> this theme comprises three projects, namely the:</p> <ul style="list-style-type: none"> • Regional Skills and Employability Development Programme: working with all other Deal projects the aim of this programme is to drive inclusive, sustainable economic growth across the region by equipping local people with the skills they need to succeed in the regional labour market; • Aviation Academy for Scotland: will reskill the region's and wider Scottish aviation workforce to take advantage of new employment opportunities created through the introduction of clean technologies and transition to low carbon aviation; and, • Tay Cities Engineering Partnership (TCEP): a joint public private partnership, involving existing and new facilities, the TCEP will increase the profile of engineering as a career opportunity by developing training places and providing business support, to regional and Scottish engineering and manufacturing companies.
Innovative, International	<p>To meet the Deal objective of an <i>Innovative, International Tay</i>, this theme covers a diverse range of eleven initiatives, including the:</p> <ul style="list-style-type: none"> • Growing the Tay Cities Biomedical Cluster: based at the University of Dundee's School of Life Sciences new technologies will be developed to provide investment opportunities to create new spin-out companies and attract industrial partners to co-locate at the University; • International Barley Hub (IBH): based at the James Hutton Institute the aim of the IBH will be to advance research in the production of barley – to meet the dual needs of producing more with less emissions – by establishing a

	<p>world-leading research facility for barley science, bringing together industry, dedicated facilities and world class scientists;</p> <ul style="list-style-type: none"> • Advanced Plant Growth Centre (APGC): also based at the James Hutton Institute, the APGC will focus on plant and crop research and innovation and adoption by industry, which will in turn increase the commercial, economic and environmental benefits of agriculture and the food and drink sector; • Angus Fund: will invest in projects across Angus to contribute to the development and implementation of innovative, clean technologies to reduce the region's carbon footprint; • cyberQuarter: focused on Abertay University, this is an academic-industrial partnership designed to establish the region as a centre of best practice in applied research and development and knowledge exchange in cybersecurity across other institutions and stakeholders in the region; • Just Tech: this project will involve building and operating the world's first Institute for Innovation in Forensic Science at the University of Dundee with engagement with commercial companies and with the development of appropriate skills pipelines; • Perth Innovation Highway: as part of opening up 10 hectares of land for business development, at the planned Perth Eco Innovation Park, this project will include a freight and logistics centre to reduce lorry movements into the city centre; an active travel hub offering a range of different travel options; and, renewable energy sources for transport and properties; • Studio Dundee: a new business incubation and co-working space for the design and creative sector; • Advanced Manufacturing Programme: involving a programme of investment that will focus on securing long-term sustainable jobs, particularly in the growing renewable energy and decommissioning industries; • Eden Campus: involves repurposing a 32.5-acre brownfield site into a Centre of Excellence in Low Carbon and Renewable Energy innovation to provide a location for innovators from academia, industry and technology to collaborate and trial new technologies and networks; • Stretch Dome Simulator: is an integrated simulation and visualisation suite that can be used to test research and innovation into, for example: climate change; coastal ecology; underwater acoustics; low carbon and new materials; and,
--	---

	<ul style="list-style-type: none"> • Project Beacon: an advanced plastics recycling facility capable of treating all waste plastic types and achieving a minimum 90% recovery and recycling rate.
Culture & Tourism	<p>Under the objective of <i>an Innovative, International Tay</i> seven projects are included in this theme:</p> <ul style="list-style-type: none"> • Regional Culture & Tourism Investment Programme: will fund projects that make a significant contribution to the cultural landscape of the region, enhancing employment and education opportunities in the region's its creative industries and year-round attractiveness as "a destination of choice"; • Pitlochry Festival Theatre: involving upgrades to the current venue to significantly develop capacity and consequently deliver high quality cultural activities and education opportunities for the region; • Perth Cultural Transformation: will involve the repurposing of Perth City Hall, currently on the Buildings at Risk Register, into a new museum attraction of international significance; • Innerpeffray Library: with Deal investment helping to secure the long-term future of the library through upgrades to education and visitor facilities; • Crieff International Highland Centre: bringing together all aspects of traditional Highland Games the Centre will provide a large multi-use space with changing facilities, a gym, music and dance studios and meeting rooms. The Centre will also run certified courses available to UK and international participants; and, • Aero Space Kinross: will involve the development and operation of Scotland's largest fixed visitor dome planetarium exploring the universe through modern and interactive tools and technologies.
Digital	<p>Under the <i>Connected Tay</i> Deal objective this theme comprises:</p> <ul style="list-style-type: none"> • Rural Angus and Rural Perth and Kinross - High Speed Broadband: enhancing digital connectivity in rural areas across Angus, Perth and Kinross; and, • 5G Digital Testbeds: including a data centre, fibre and transmitters to test applications as varied as transport information, mobile gaming or measuring civic space usage;
Transport	<p>Under <i>Connected Tay</i> objective, this theme involves:</p>

- | | |
|--|--|
| | <ul style="list-style-type: none">• Low Carbon Transport & Active Travel Hubs, Perth: including a Low Carbon Transport Hub for solar energy generation and battery storage to provide sustainable electric vehicle (EV) charging; the Perth Active Travel Hub to transform the City Centre bus interchange into a pedestrian area with facilities to store, charge and hire bikes; and, Perth Hydrogen - a hydrogen fuelling station on the motorway network near Perth;• Perth Bus & Rail Interchange: to support the redevelopment of Perth's Bus and Railway Stations and enhance the use and benefits of public transport usage; and,• Dundee Airport involving the development of new route opportunities, enhancing links with other UK airports and potentially European hubs. |
|--|--|

8. Appendix B – Tay Cities Region Deal: Outputs, Outcomes and Impacts Guidance & Definitions

8.1. Tay Cities Outputs Definitions at Deal Signing

8.1.1. Prior to Deal Signing in December 2020, a set of outputs & definitions, as set out in Table Six, were agreed by both Governments and the Partnership and shared with all named Programmes, Fund and Projects to support them in developing their own outputs. At the time, each owner was asked to consider and provide figures, where appropriate, at the SOC stage recognising that not all of the outputs were relevant. From this exercise, the Heads of Terms were developed and included the commitment to over 6,000 jobs and £400m leverage.

Table Six – Deal Signing Outputs Definitions

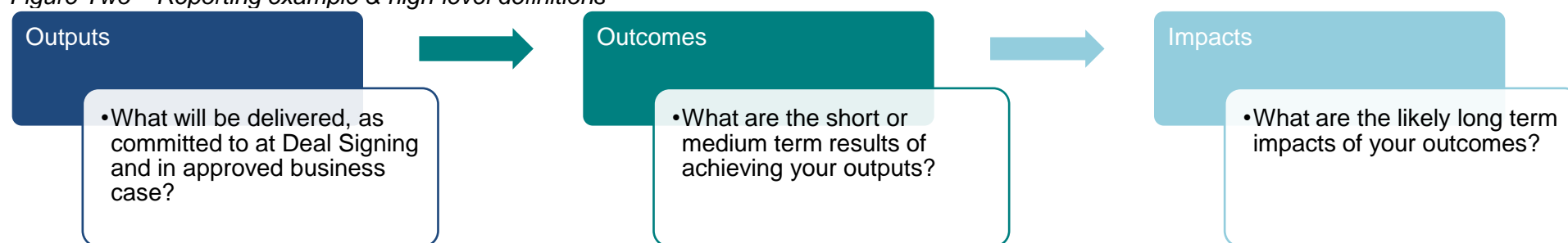
Output	Definition
New Jobs	New, FTE, permanent, paid job created as a result of the project
Construction Jobs	New, FTE, permanent, paid job created with construction sector partners as a result of the project (including apprenticeships)
Jobs Protected	FTE, permanent, paid job retained in the organisation/sector as a result of the project (including apprenticeships)
Journey Time Savings	Improvement in journey times (minutes) between point A and point B as a result of the project
Development Space Unlocked	Additional space (m ²) created as a result of the project
Training Places	Number of additional training places created as a result of the project (excluding apprenticeships)
Visitors	Number of visitors attracted to the project
Start-Ups	The number of new businesses created as a result of the project
SME's Supported	The number of business (with no more than 250 employees) supported by project activity
Private Sector Investment	Funding from non-public sector sources
Leverage	Leverage is defined as any funding/contribution to total project costs excluding Tay Cities Deal funding and unrecoverable VAT.
<ul style="list-style-type: none"> • LA leverage • HE/FE Leverage • Private Sector Leverage • Any other leverage 	<ul style="list-style-type: none"> Funding/Contribution secured from Local Authority partners Funding/Contribution from HE/FE partners to the project Funding Contribution from Private Sector partners Funding/Contribution from any other parties to the project.

- 8.1.2. In developing business cases, Programmes, Fund and Projects may commit to additional outputs. The Partnership is committed to ensuring these are captured, along with definitions, to guide others when developing their business cases in line with the Implementation Plan annual review.
- 8.1.3. It is recognised that for those with approved business cases to date the approach to defining outputs may not fully capture the definitions set out within the update guidance note as it is. This is accepted, and where this applies, owners will be asked to set this out in their Logic Chain Model.

8.2. Definitions Guidance

- 8.2.1. To help with benefits reporting, a guidance note will be developed to provide support when considering outputs, outcome and impacts. The PMO will continue to liaise with the National PMO Networking Group to develop a set out definitions guidance, to support all Deals.
- 8.2.2. The list provided will not be exhaustive: additional project specific outputs, outcomes and impacts, as agreed at Deal Signing and in approved Full Business Cases, should be considered and reported where appropriate. Figure Two provides a high-level summary of what to report against outputs, outcomes and impacts.

Figure Two – Reporting example & high-level definitions



8.3. Carbon & Environmental Definitions

8.3.1. As noted in Section 4 of the Plan, the Scottish Government issued guidance, on behalf of both Governments, relating to carbon management in August 2021. Within the guidance, a set of carbon definitions were defined to support reporting. These are set out below in Table Seven. However, we are awaiting training from Scottish Government to facilitate an understanding of the whole life carbon cost implications of all projects across the Deal.

8.3.2. In addition, it is a requirement that all projects must complete Appendix A of the Scottish City Region and Growth Deals Carbon Guidance so that the Governments are able to understand the likely impact of each project in relation to carbon impacts.

Table Seven: Carbon & Environmental Outputs

Outputs	Definition	Evidence
1. What are the embodied carbon emissions resulting from the project? (tonnes CO2e)	Embodied carbon is the total greenhouse gas emissions (often simplified to “carbon”) generated to produce a built asset, excluding operational emissions. CO2e is shorthand for carbon dioxide equivalents, the standard unit in carbon accounting to quantify greenhouse gas emissions. Embodied carbon includes emissions caused by extraction, manufacture/processing, transportation and assembly of every product and element in an asset. In some cases, depending on the boundary of an assessment, it may also include the maintenance, replacement, deconstruction, disposal and end-of-life aspects of the materials and systems that make up the asset. Suitably authoritative carbon factor sources should be used in embodied carbon calculations, e.g. ICE Carbon Inventory, Environmental Product Declarations (EPDs), CESSM4, etc.	The level of evidence detail will depend on the phase of the project. At concept stage an estimate based on major project elements (e.g. steel, concrete, floor area, etc.) will suffice. As a bill of quantities develops, so will the embodied carbon estimate. Evidence will be in the form of a simple calculation with clear workings and assumptions that should be broadly as accurate as the associated cost estimate.
2. How have embodied carbon emissions been minimised?	A description of the techniques used to arrive at the embodied carbon figure.	Evidence could include referring to the carbon management process used (e.g. PAS 2080, RICS Whole Life Carbon Assessment for the Built Environment, BREEAM, etc.) and associated procurement mechanisms to minimise carbon. Evidence could also include the use of low carbon materials or construction techniques with associated estimated carbon

savings. Circular economy contributions, including waste minimisation and materials re-use, should be included here.

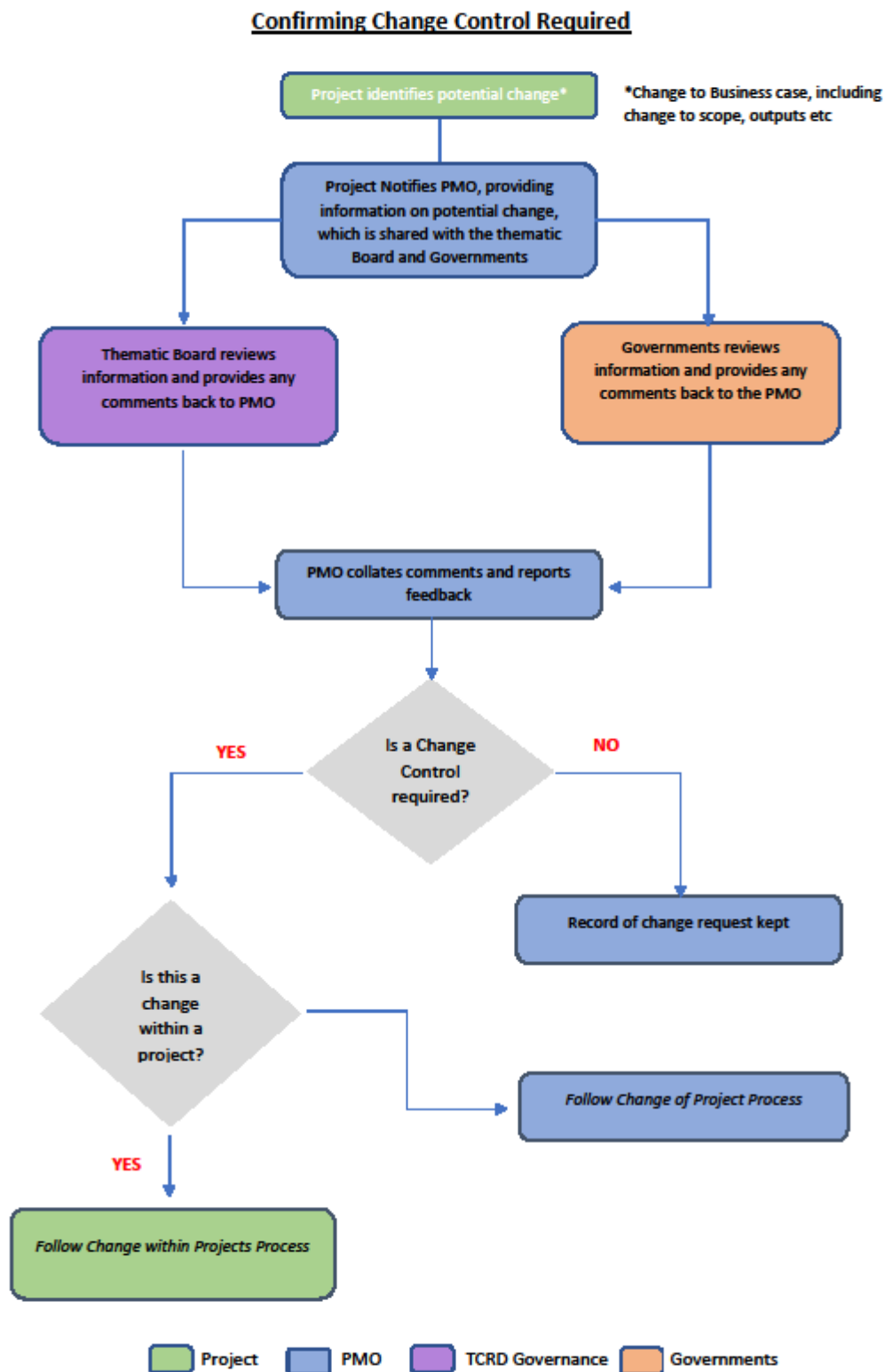
3. What are the annual operational carbon emissions resulting from the project? (tonnes CO ₂ e/year)	Operational carbon emissions result from the operation of a built asset. This includes carbon emissions associated with heating, hot water, cooling, ventilation, and lighting systems, as well as those associated with cooking, equipment, and lifts (i.e. both regulated and unregulated energy uses).	Predicted or actual data should be provided in relation to energy use, using best practice carbon conversion factors, e.g. the BEIS Greenhouse Gas Reporting factors or local equivalents where relevant.
4. How have operational carbon emissions been minimised?	A description of the techniques used to arrive at the operational carbon figure.	Evidence could include referring to the carbon management process used (e.g. PAS 2080, RICS Whole Life Carbon Assessment for the Built Environment, BREEAM, etc.). Evidence could also include the use of renewable energy technologies or low carbon heating systems.
5. What are the estimated whole life carbon emissions resulting from the project over its design life? (tonnes CO ₂ e)	Whole life carbon is the sum of a project's embodied carbon and operational carbon over a specified period, e.g. its design life or 60 years	Evidence would be a calculation showing the sum of the embodied and operational carbon values.
6. What whole life carbon savings are estimated compared to a 'business as usual' approach to project design and construction? (tonnes CO ₂ e)	Savings can only be demonstrated against a legitimate carbon baseline, i.e. what carbon emissions would have resulted from the project had active carbon reduction measures not been in place.	Justification of the carbon resulting from the business as usual scenario, then a calculation showing the difference between this value and the project's whole life carbon emissions.

7. How will the project become operationally net zero carbon by 2045?	A net zero asset may be defined as one that achieves a level of energy performance in line with national climate change targets that does not burn fossil fuels and that is 100% powered by renewable energy. Net zero is essentially the achievement of a balance of zero greenhouse gas emissions by taking actions to remove the same quantity of greenhouse gases from the atmosphere as all of the activities under consideration generate.	Evidence could include an outline description of how the project will feasibly decarbonise over time, e.g. by introducing new renewable technologies or following electricity grid decarbonisation (if the asset is powered only by electricity). Potential barriers to achieving net zero (e.g. financial, technological, skills, etc.) should be highlighted here.
8. How has the project contributed to a more environmentally sustainable transport network?	An important gauge in the environmental sustainability of a transport network is the carbon emissions it generates. Carbon emissions quantification usually requires traffic modelling, although this may not always be necessary, depending on the project.	Evidence will be project-dependent, from a qualitative description for negligible carbon impact projects, to quantification based on traffic modelling for potentially significant carbon impact projects (e.g. sizable roads projects).
9. Detail how the project has contributed to any other areas of environmental sustainability, e.g. mitigating pollution, dealing with contamination, enhancing biodiversity, etc.	Environmental sustainability here is distinct from social or economic sustainability, which are covered by separate outputs.	Summary bullet points will suffice here. Evidence could include reference to an Environmental Impact Assessment (EIA) report or BREEAM certification if available. Other contributions towards environmental sustainability should also be highlighted here.

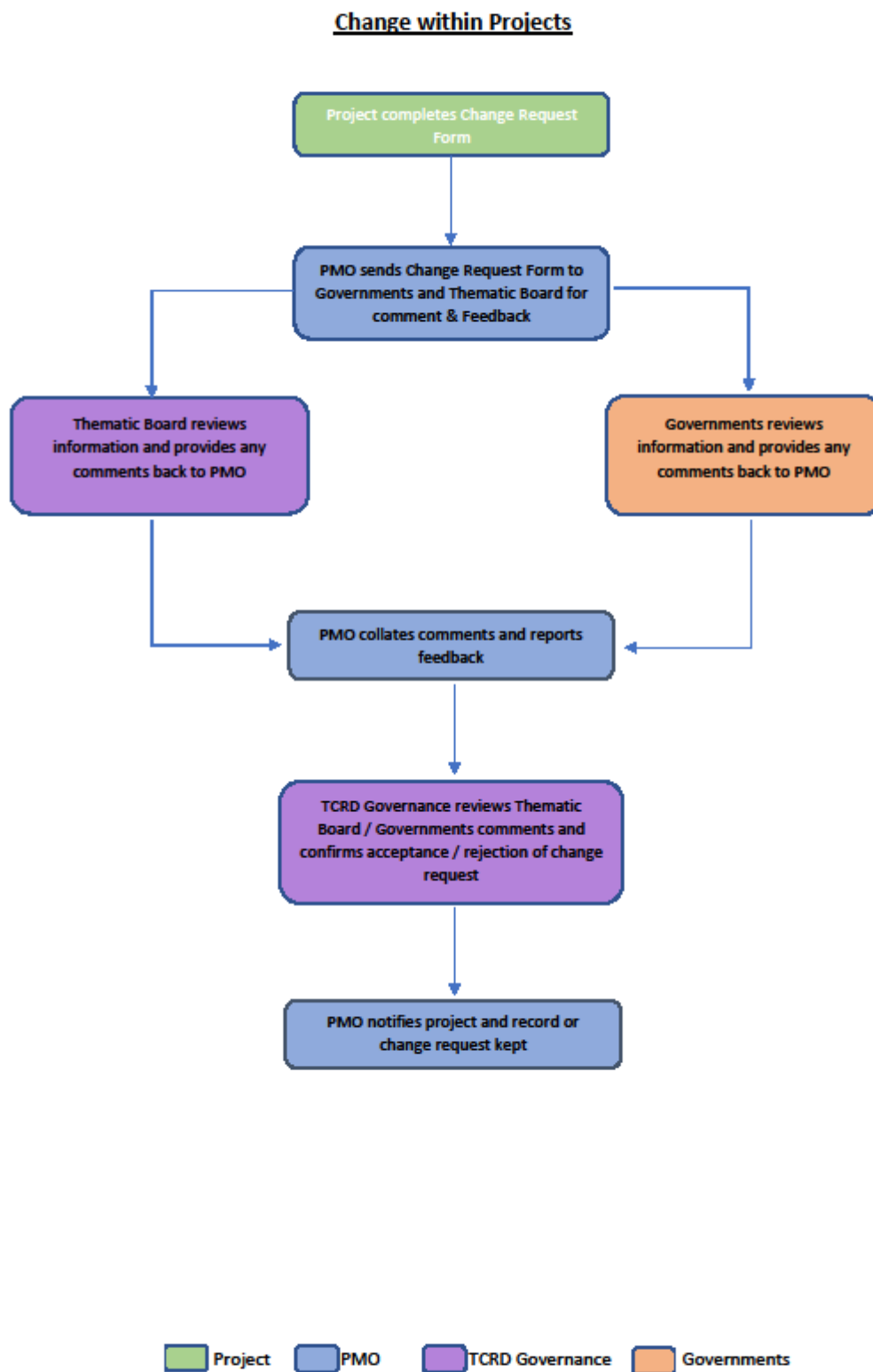
9. Appendix C: Tay Cities Region Deal Change Control Process

- 9.1. When a Project or Partnership identifies a potential project change, the project should provide information to the PMO to be forwarded to both the Thematic Board and Governments for review and comment. This will confirm if a change request is required from the project (See flow chart at Appendix A1).
- 9.2. Potential changes That could be identified by a project are those which would alter to any degree the terms of the agreements previously struck between UK and Scottish Governments and local partners. Such agreements are variously described within the terms of the Heads of Terms, the Full Deal, the terms of approved Business Cases, and the terms of the Grant Offer. For example, this could relate to scope, outputs or permanent underspend within a given financial year (See flow chart at Appendix A2).
- 9.3. If the potential change is a change within a project, then the project will complete a change request and provide to the PMO, who will forward to the Thematic Board and Governments for review and Comment.
- 9.4. Any feedback from the Thematic Board and Governments will be collate and presented to the Management Group for consideration along with the Change Request.
- 9.5. Where it is highlighted that a project is no longer considered viable or value for money, either by the project itself, or by the Partnership, then this should be reported to the PMO to initiate discussion with Governments. This would involve a discussion around the parameters of any replacement projects that could be brought forward by the partnership and would take account of the strategic priorities of both the Governments and Partnership at the time (See flow chart at Appendix A3).
- 9.6. Based on the parameters agreed with the Governments, the appropriate Thematic Board will be asked to review and propose alternative projects. Noting that the Governments may also suggest a replacement project.
- 9.7. The PMO and Governments will discuss and agree a proposed approach based on the recommendation from the Thematic Board, and will be subject to ministerial approval.
- 9.8. Following ministerial approval, the proposed replacement project(s) will then be presented to Management Group and Joint Committee for discussion and approval.
- 9.9. A change Log will be used to capture any potential project changes and the outcomes of any submitted Change Request.
- 9.10. It is recommended that the Change Control Process is reviewed annually to ensure that it is still fit for purpose.

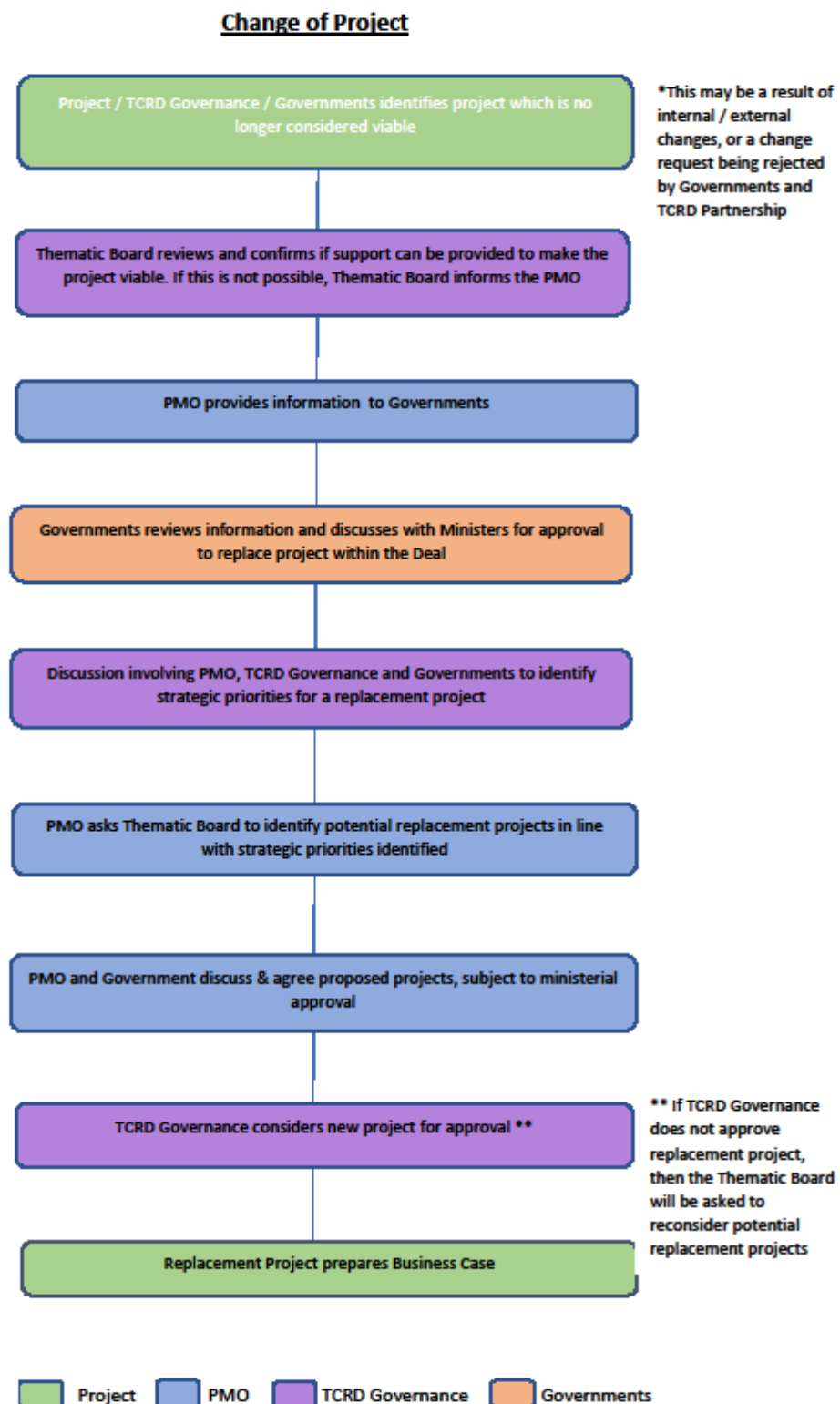
Appendix C: Tay Cities Region Deal Change Control Process – Appendix A1



Appendix C: Tay Cities Region Deal Change Control Process – Appendix A2

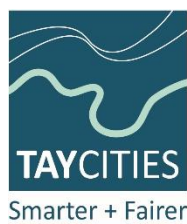


Appendix C: Tay Cities Region Deal Change Control Process – Appendix A3



10. Appendix D: Reporting Template

[illegible][illegible]



REPORT TO: TAY CITIES REGION DEAL JOINT COMMITTEE

REPORT ON: TCRD ANNUAL PERFORMANCE REPORT

REPORT BY: MO SAUNDERS, PMO PROGRAMME MANAGER

REPORT NO: TCRJC7-2022

1. PURPOSE OF REPORT

- 1.1. This report seeks to update the Joint Committee on the final Annual Performance Report (Appendix 1) and seek approval, prior to submission to the Governments by 31st March 2022 for public viewing.

2. RECOMMENDATIONS

- 2.1. The Joint Committee is asked to consider this report and:
 - a. Approve the final Annual Performance Report for submission to Governments and publication at the end of March 2022.

3. BACKGROUND

- 3.1. The Grant Offer Letter sets out a number of governance and reporting requirements for the Tay Cities Partnership. This includes a commitment for an Annual Performance Report. The commitment states:

Annually – an Annual Performance Report based on the previous year's activity (at both Programme and Project level. This report will form the basis of the Annual Conversation and should follow the annual report template.

- 3.2. In agreement with both the UK and Scottish Government, a draft Annual Performance Report was shared on 15th December 2021. Both Governments were very complimentary on the content and presentation of the Annual Report prepared by the Partnership. This informed the Annual Conversation, which took place on 10th February 2022.
- 3.3. No amendments have been required following the Annual Conversation. A number of minor changes to aid clarity have been identified by the PMO and Governments. The attached report includes these changes.
- 3.4. The Annual Performance Report for the Tay Cities Region Deal covers the period starting in Q3 2020 to the end of Q2 2021 showing progress with the Programme as a whole and those projects in delivery. This reporting period will continue for each subsequent Annual Performance Report unless the Governments agree for it to change to an annual reporting period in line with the financial year.

4. CONSULTATIONS

- 4.1. The Annual Performance Report has been developed with input from the projects and all parts of the Tay Cities Region Governance including, the including extended Local Authority PMOs, Finance Directors Group, Thematic Board chairs, the HE/FE Forum, Heads of Economic Development, the PR & Comms Group, Jamie Bell on behalf of the Enterprise Forum and the Management Group. Comments from both Governments have also been taken in to account.
- 4.2. The Management Group have approved the final Annual Performance Report for presentation to the Joint Committee.

Report author: Clare Slater
Title: Tay Cities Tay Cities Project Manager
Email address: clare.slater@taycities.co.uk

Date: 21/02/2021

Tay Cities Region Deal

Annual Performance Report 17th December 2020 - 30th September 2021





Executive Summary	4
An Introduction from the Chairman of the Joint Committee	9
Cities Region Deal Overview	11
Overview of City Region Deal	12
Geographical Overview	14
Financial Statement	15
Key Headlines	16
Governance and Accountability	21
Governance Structure	22
Regional Collaboration	22
City of Culture 2025	23
Tay Cities Communications & Press	25
The Deal	27
An Empowered & Inclusive Tay	31
- Skills	31
An Innovative, International Tay	32
- Innovative & International	32
- Culture & Tourism	51
A Connected Tay	61
- Transport	61
- Digital	64
Year Ahead	67
Upcoming Milestones	67
Business Cases & Project Delivery	68
Benefits Realisation Plan	69
Regional Collaboration	69
Key Challenges	69
Programme Management Office	71



Executive Summary



Deal signed by the partnership and both governments. A commitment from the Governments of **£300m** of Investment and a commitment from the partnership to secure over **6,000 jobs** and to lever in **£400m** of investment.



£35m of Government Investment released.



Up to the end of September 2021, **£191.3m** of funding was approved for investment by Joint Committee over the 10 year programme. This equates to almost 2/3 of the Deal.



Angus Fund Programme totalling **£26.5m** approved to enable increased productivity in Angus through the implementation of innovative, clean technologies.



Confirmation that the Stone of Destiny will become the centrepiece of the new museum at the refurbished Perth City Hall.



cyberQuarter announces the creation of 30 new jobs as a result of the cybersecurity arm of NHS Scotland becoming the first tenants of the cyberQuarter hub.



Groundbreaking ceremony at the James Hutton Institute signalling start of construction works on the Advanced Plant Growth Centre and International Barley Hub.



Regional Culture & Tourism Investment Programme business case approved, totalling up to £37m, to build and strengthen the culture & tourism opportunities in the Tay Cities region. So far, two projects, Hospitalfield and Discovery Point Transformed have been approved and are at implementation stage.



£600k investment at Dundee Airport has resulted in a new Public Service Obligation route between Dundee and London City Airport.



Enhanced digital connectivity in rural areas across the region underway, following the commitment of up to £2m approved in June 2021, in Perth and Kinross and Angus.

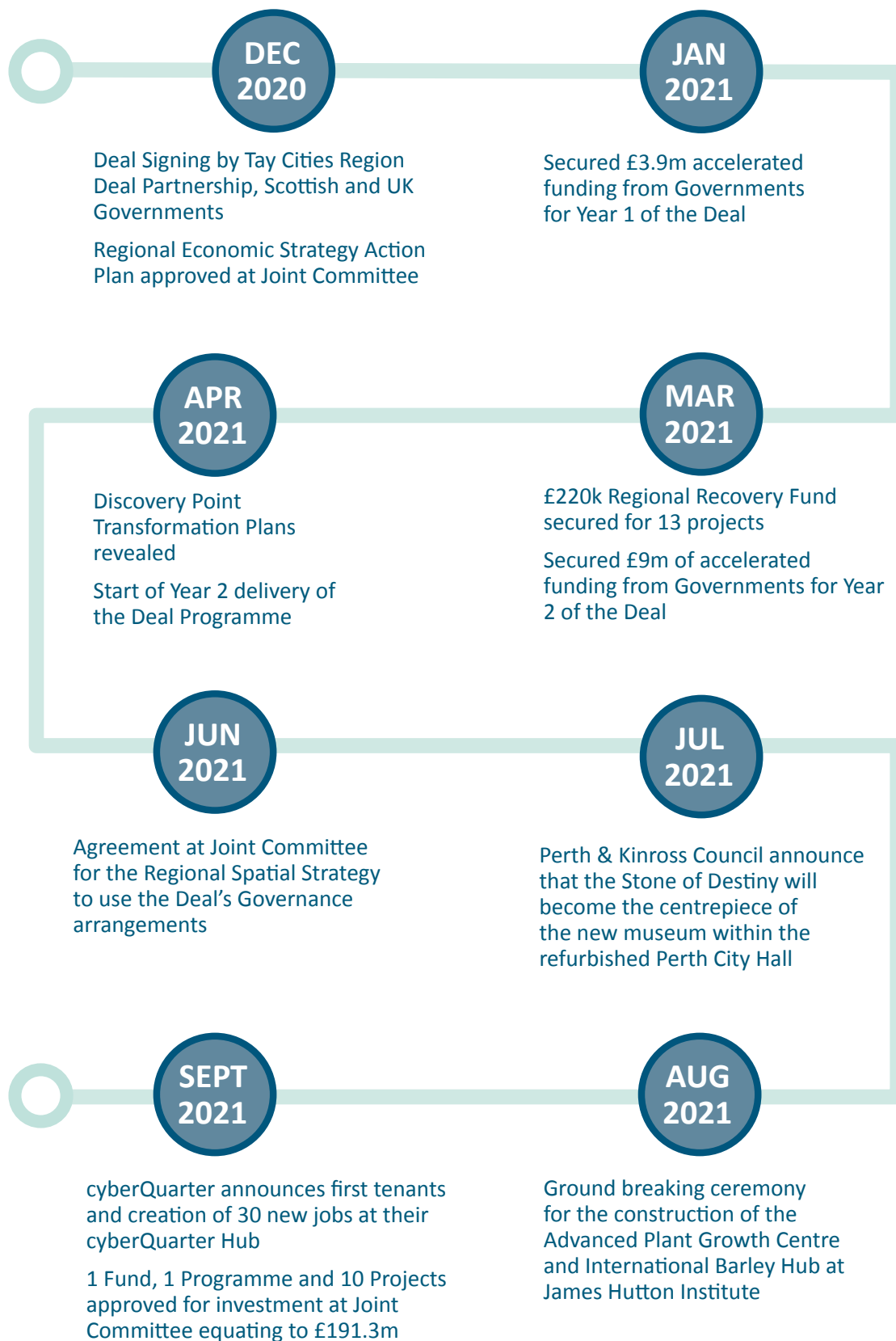


Up to £26.5m committed to and approved to repurpose a 32.5 acre brownfield site into a Centre of Excellence in Low Carbon and Renewable Energy innovation by the University of St Andrews.



Full business case for up to £25m approved for the Growing the Tay Cities Biomedical Cluster project to enable the project to build on the region's existing life sciences, drug discovery and medical technologies reputation at the University of Dundee.

Summary Timeline



How we will do it

An Empowered and Inclusive Tay



Providing fair opportunities, upskilling, productivity and competitiveness.

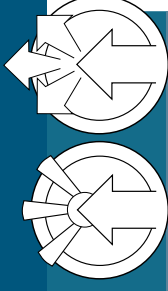
The Projects

- Tay Cities Engineering Partnership (£2m)
- Aviation Academy (£8.1m)

The Programme

- Regional Skills & Employability Development Programme (£20m)

An Innovative and International Tay



Increasing research and development opportunities both regionally and globally. Creating opportunities within hospitality, tourism and improving our quality of life, lifestyle and environment.

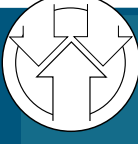
The Projects

- International Barley Hub (£35m)
- Advanced Plant Growth Centre (£27m)
- Eden Campus (£26.5m)
- Growing Tay Cities Biomedical Projects Cluster (£25m)
- cyberQuarter (£11.7m)
- Just Tech (£15m)
- Advanced Manufacturing (£8m)
- Studio Dundee (£3m)
- Angus Fund (£26.5m)
- Project Beacon (£5.2m)
- Perth Innovation Highway (£5m)
- Stretch Dome Simulator (£300k)
- Perth Cultural Transformation (£10m)
- Innerpeffray Library (£100k)
- Crieff International Highland Centre (£1m)
- Aero Space Kinross (£1.6m)

The Programme

- Regional Culture & Tourism Investment Programme (£37m)
 - Pitlochry Festival Theatre (£10m of the £37m Programme)
 - Hospitalfield (£2.5m of the remaining £27m Programme)
 - Discovery Point Transformed (£5.5m of the remaining £27m Programme)

A Connected Tay



Includes public transport and digital connectivity.

The Projects

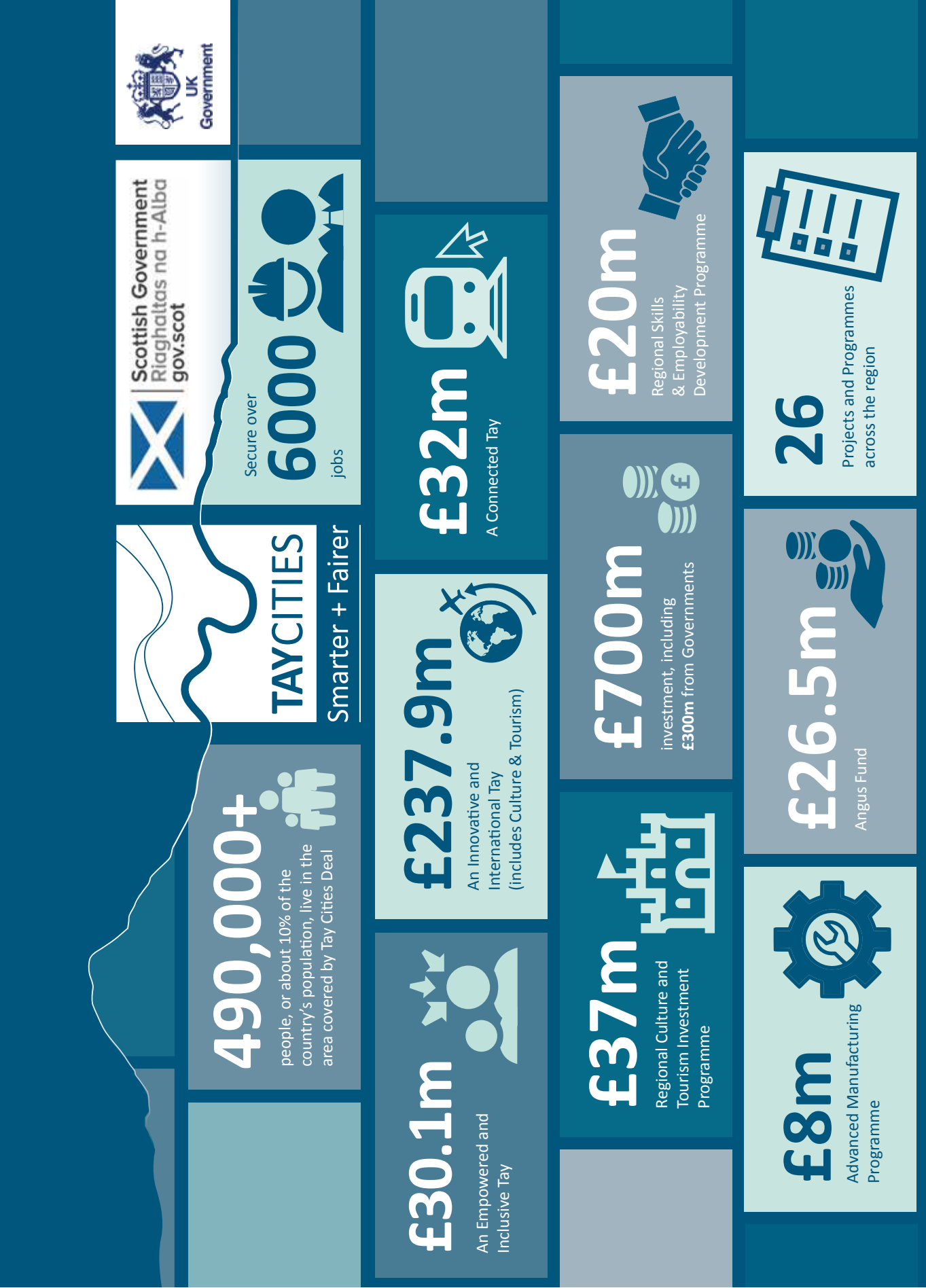
- Perth Bus & Rail Interchange (£15m)
- Dundee Airport Investment (£9.5m)
- Low Carbon Transport & Active Travel Hub (£3.5m)

Digital Connectivity Projects

- 5G Testbeds (£2m)
- Angus and Perth & Kinross Rural Digital Projects (£2m)

Why we are doing it

Tay Cities Region Deal... smarter, fairer by working together to enhance and improve the lives of its citizens.



Introduction





*Councillor Alexander, Dundee City Council
(Joint Committee Chair 2021) and
Cllr Fairweather, Angus Council
(Joint Committee Chair 2022)*

A Joint Introduction from the 2021 and 2022 Chairs of the Joint Committee

What has been achieved in the 9 short months since the Tay Cities Region Deal was signed would be impressive in the best of times. And it is even more so when you consider it is being delivered against the backdrop of a pandemic which has posed the biggest challenge to our society since the Second World War.

That early success is down to the way that all involved - partners from the four local authorities, the higher and further education sector, business sector, third sector interface bodies, Scottish Enterprise and Skills Development Scotland – have worked with the UK and Scottish Government to deliver on our shared vision for the Deal.

As the ink dried on the Deal document back in December 2020, projects and programmes sprung into life. At the time of writing, 10 projects, one programme and one fund have already received full Government and Joint Committee business case approval.

These are high-profile, job creating schemes: Eden Campus, the Regional Culture & Tourism Investment Programme, Hospitalfield, Growing the Tay Cities Biomedical Cluster, the Angus Fund, Dundee Airport Investment, Advanced Plant Growth Centre, International Barley Hub, Perth Cultural Transformation, Discovery Point, cyberQuarter and Rural Angus and Rural Perth and Kinross High Speed Broadband.

Approval of these programmes and projects sees the beginning of a commitment to innovate and internationalise with global recognition at a regional level, to connect the region through improved physical and digital infrastructure, promote inclusive growth and enhance the region's world-class cultural assets.

Since the Deal was confirmed, it has secured acceleration of funding of up to £4m in 2020/21 and £5m in 2021/22 to date, with the opportunity to bring forward even more of the scheduled funding before the end of the financial year.

This has led to the acceleration of inclusive growth targets, job creation and regional investment, and to date can account for more than £35m release of Government investment from the full £300m Deal.

In addition to the Deal, 13 projects were able to secure a share of £220k from the Scottish Government's Regional Recovery Fund, enabling those projects to accelerate city region investment in response to Covid-19.

For the people of the Tay Cities Region, all of this hectic activity over the past year means that the 10-year Deal is already starting to deliver what it promised – jobs, skills development, better infrastructure and more. While there is a long way to go, we are confident that we are on the right path to creating a smarter and fairer region.

In the months and years ahead, we look forward to seeing more projects develop and enter into the delivery phase, continuing to demonstrate this Deal's potential to deliver inclusive and sustainable economic growth.



The Tay Cities Region Deal
will support business growth,
develop innovative technologies,
enhance productivity, develop
skills and create jobs.



Cities Region Deal Overview



Cities Region Deal Overview

The Tay Cities Region Deal was signed on 17th December 2020 by the Tay Cities Partnership and both Governments. The Deal is a combined investment of £300m from the Scottish and UK Governments over the coming 10 years to deliver benefits over the next 15 years.



The Tay Cities Region Deal was signed on 17th December 2020 by:



Top Row L – R: Iain Stewart MP (Parliamentary Under Secretary of State for Scotland, UK Government), Ellis Watson (Chair of Tay Cities Region Enterprise Forum), Cllr David Fairweather (Leader of Angus Council), Cllr David Ross (Chair of Tay Cities Region Joint Committee), Cllr Karen Marjoram (Representing the North East Fife Area Committee for Fife Council).

Bottom Row L – R: Mr Michael Matheson MSP (Cabinet Secretary for Transport, Infrastructure and Connectivity, Scottish Government), Professor Nigel Seaton (Chair of Tay Cities Region HE/FE Forum), Cllr Murray Lyle (Leader of Perth & Kinross Council), Cllr John Alexander (Leader of Dundee City Council).

The Tay Cities Region Deal¹ will support business growth, develop innovative technologies, enhance productivity, develop skills, and create jobs. Over its lifetime, from Deal Signing in December 2020 to 2035, the City Deal will deliver 2 key outcomes: securing over 6,000 jobs and lever in over £400m of investment.

¹ <https://www.taycities.co.uk/publications>

The Deal follows the Regional Economic Strategy themes of;



Empower and promote inclusion – by ensuring that local people have the skills they need to succeed in the modern workplace and growth is inclusive, with a Government investment of up to £30.1m;



Innovate and internationalise – by developing globally recognised clusters of academic and business excellence, with a Government investment of up to £237.9m; and



Connect – by improving physical and digital infrastructure, with a Government investment of up to £32m.

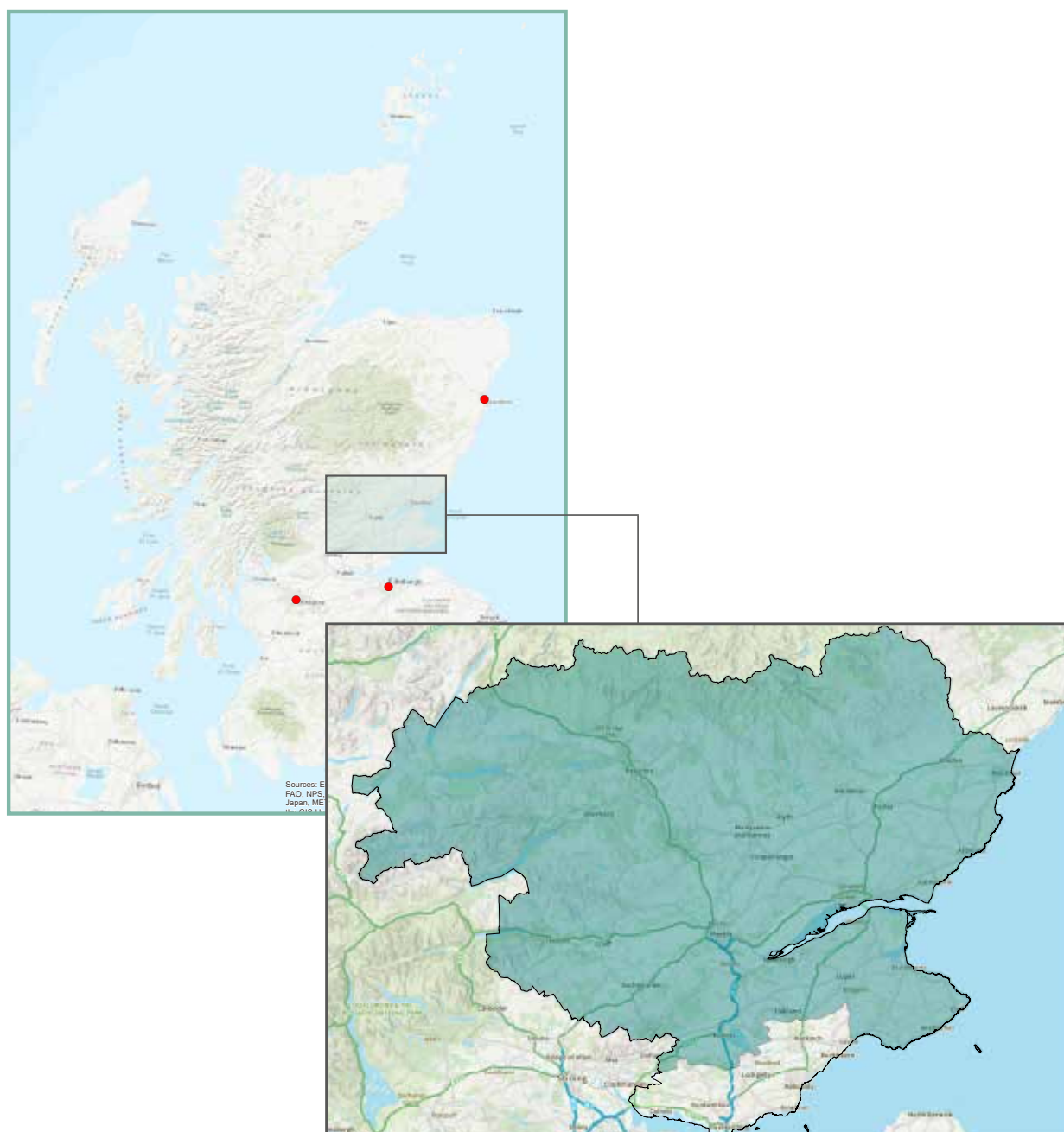
The Tay Cities Region Deal is comprised of a number of local and regional partners. These include:

- Local Authorities – Angus Council, Dundee City Council, Fife Council and Perth & Kinross Council
- Higher Education and Further Education sector
- The business sectors
- Regional third sector interface bodies
- Scottish Enterprise
- Skills Development Scotland
- Tactran
- VisitScotland

Geographical Overview

The map below shows the geographical area of the four Local Authorities within the Deal: Angus, Dundee City, Fife and Perth and Kinross. Noting that only North Fife is included within the Deal, with the remainder of Fife within the Edinburgh and South East City Region Deal. More information on where the projects are located can be found on the Deal's interactive map² on www.taycities.co.uk

Diagram 1



² <https://www.taycities.co.uk/publications>

Financial Statement



Financial Statement

The full investment from Governments for the Regional Culture & Tourism Investment Programme includes Hospitalfield, Discovery Point Transformed and Pitlochry Festival Theatre.

A summary of the Deal investment is shown below in Table 1.

Table 1: Tay Cities Region Deal Financial Summary

Tay Cities Region Deal Thematic Board	Programme/ Project	Scottish Government Investment (£000)	UK Government Investment (£000)	Partner Investment (£000)	Total Investment (£000)
An Empowered and Inclusive Tay					
Skills	Regional Skills and Employability Development Programme	20,000	0	0	20,000
	Tay Cities Engineering Partnership	2,000	0	500	2,500
	Aviation Academy for Scotland	0	8,100	0	8,100
An Innovative, International Tay					
Innovative, International	Growing the Tay Cities Biomedical Cluster	25,000	0	119,099	144,099
	International Barley Hub	15,000	20,000	0	35,000
	Advanced Plant Growth Centre	2,000	25,000	0	27,000
	Angus Fund	0	26,500	38,900	65,400
	cyberQuarter	6,000	5,700	5,024	16,724
	Just Tech	0	15,000	0	15,000
	Perth Innovation Highway	0	5,000	17,242	22,242
	Studio Dundee	3,000	0	21,000	24,000
	Advanced Manufacturing Programme	8,000	0	8,000	16,000
	Eden Campus	2,000	24,500	110,394	136,894
	Stretch Dome Simulator	0	300	0	300
	Project Beacon	0	5,200	12,425	17,625
Culture & Tourism	Regional Culture & Tourism Investment Programme ³	19,000	0	19,000	38,000
	Regional Culture and Tourism Investment Programme - Hospitalfield	5,500	0	5,500	11,000
	Regional Culture and Tourism Investment Programme – Discovery Point Transformed	2,500	0	2,500	2,500
	Pitlochry Festival Theatre	10,000	0	10,000	20,000
	Perth Cultural Transformation	0	10,000	15,217	25,217
	Innerpeffray Library	0	100	0	100
	Crieff International Highland Centre	0	1,000	660	1,660
	Aero Space Kinross	0	1,600	1,285	2,885

³ The full investment from Governments for the Regional Culture & Tourism Investment Programme includes Hospitalfield, Discovery Point Transformed and Pitlochry Festival Theatre. Therefore, the figure does not include Hospitalfield, Discovery Point Transformed and Pitlochry Festival Theatre as these are shown separately.

A Connected Tay					
Digital	Rural Angus and Rural Perth and Kinross Highspeed Broadband	0	2,000	5,980	7,980
	5G Digital Testbeds	2,000	0	0	2,000
Transport	Low Carbon Transport & Active Travel Hubs	3,500	0	6,874	10,374
	Dundee Airport Investment	9,500	0	400	9,900
	Perth Bus & Rail Interchange	15,000	0	0	15,000
ALL	TOTAL	150,000	150,000	400,000	700,000

At Heads of Terms, £300k was awarded to the Regional Transport Model, while this is no longer shown within the Deal profile, the work has been completed and was presented to the Tay Cities Management Group in August 2021.

Since Deal signing in Dec 2020, a significant amount of funding has been able to be released to the end of this reporting period. Table 2, on page 18, summarises the financial statement up to the end of Q2 2021.

Key Headlines

- Since the Deal Signing, £35m of funding has been released.
- In its first year of delivery 20/21 and up to the end of September 2021, the Joint Committee approved £191.3m of its awarded funding; this includes £145.8m of funding for projects and an additional £45.5m of funding for programmes / fund which are waiting for projects to be developed. This equates to 2/3 of the overall Deal funding.
- To the end of September 2021, the Partnership has secured acceleration of up to £12.9m of Government funding against its awarded profiles at Deal signing (£3.9m in 20/21 and £9m in 21/22).

Table 2: Summary of claims made to the end of September 2021

Tay Cities Region Deal Thematic Board	Programme/Project	Total Government Investment over Period of the Deal (£000)	Q3 2020 to Q2 2021 funding released (£000)
An Empowered and Inclusive Tay			
Skills	Regional Skills and Employability Development Programme	20,000	0
	Tay Cities Engineering Partnership	2,000	0
	Aviation Academy for Scotland	8,100	0
An Innovative, International Tay			
Innovative, International	Growing the Tay Cities Biomedical Cluster	25,000	911
	International Barley Hub	35,000	2,511
	Advanced Plant Growth Centre	27,000	2,844
	Angus Fund	26,500	0
	cyberQuarter	11,700	288
	Just Tech	15,000	0
	Perth Innovation Highway	5,000	0
	Studio Dundee	3,000	0
	Advanced Manufacturing Programme	8,000	0
	Eden Campus	26,500	14,462
	Stretch Dome Simulator	300	0
	Project Beacon	5,200	0
Culture & Tourism	Regional Culture & Tourism Investment Programme ⁴	19,000	0
	Regional Culture and Tourism Investment Programme - Hospitalfield	5,500	1,684
	Regional Culture and Tourism Investment Programme – Discovery Point Transformed	2,500	693
	Pitlochry Festival Theatre	10,000	0
	Perth Cultural Transformation	10,000	7,190
	Innerpeffray Library	100	0
	Crieff International Highland Centre	1,000	0
	Aero Space Kinross	1,600	0

⁴ The full investment from Governments for the Regional Culture & Tourism Investment Programme includes Hospitalfield, Discovery Point Transformed and Pitlochry Festival Theatre. Therefore, the figure does not include Hospitalfield, Discovery Point Transformed and Pitlochry Festival Theatre as these are shown separately.

A Connected Tay			
Digital	Rural Angus and Rural Perth and Kinross Highspeed Broadband	1,800	282
	5G Digital Testbeds	2,000	0
Transport	Low Carbon Transport & Active Travel Hubs	3,500	0
	Dundee Airport Investment	9,500	600
	Perth Bus & Rail Interchange	15,000	0
ALL	TOTAL	300,000	35,005



The partners have developed a new collaborative model to deliver improved outcomes for everyone living and working in the region.



The background of the page features a low-angle shot of several tall, dark, angular structures against a clear blue sky. These structures resemble stylized trees or modern architectural elements, with sharp, triangular tops and thin, vertical stems. The perspective creates a sense of height and upward movement.

Governance and Accountability

Governance and Accountability

Governance Structure

The Tay Cities Region Deal partners work collaboratively with both the UK and Scottish Governments as well as regional partners, including representation from private and third sector organisations. The Deal's governance arrangements enable decisions to be taken in an open and transparent way, in one place, for the whole of the Tay Cities region. The Joint Committee established by local authority partners in 2017, is the ultimate regional decision making body for the Deal. It also has a wider role to lead regional collaboration more broadly.

The Joint Committee is supported by a number of bodies which are summarised in Diagram 2 on page 24. More information on the governance structure and its bodies can be found in the Deal document⁵. The overarching governance structure, as well as the terms of reference, membership, and chairing arrangements for each body will be reviewed annually.

Key changes since Deal Signing:

- The role of the Enterprise Forum as the Region's 'voice for the private sector' is currently undergoing a review and refresh to take account of the changing economic context and to ensure it continues to input and add value to the delivery of the Tay Cities Region Deal, and importantly to the Region's wider economic development. A new Terms of Reference will be considered by the Enterprise Forum.
- Inclusion of the Regional Spatial Strategy, allowing development of the strategy to be considered within the existing governance structure. This was approved by Joint Committee on 18th June 2021.
- The Governance Structure now includes a representative from Visit Scotland for the Culture & Tourism Board and Scottish Enterprise for the Digital Board. This differs from the Deal Document. A review of Board membership is being undertaken and will be reflected in the final draft of the Annual Performance Report, subject to Partnership and Government agreement.

Regional Collaboration

The governance structure for the Deal lends itself to support discussions relating to regional work, and to date has allowed for key decision making relating to various collaborative, regional activities. For example, in March 2021 the Management Group agreed that the Regional Spatial Strategy and its development would be considered within the existing governance structure of the Tay Cities Deal, although it would remain the role of the Local Authorities to coordinate the Regional Spatial Strategy. This approach will generate additional opportunities for collaborative working and the opportunity for the Strategy to integrate strategic land use, economic development and transportation matters.

Furthermore, since the approval of the Deal's Heads of Terms in November 2018, partners have worked together to plan the acceleration of regional growth including a refresh of the Regional Economic Strategy. This work will continue during and beyond the Deal. The Regional Economic Strategy was approved at Joint Committee in December 2020 and now provides action plan updates to Management Group and Joint Committee quarterly.

The Governance in place allows for other regional collaboration work, including updates on the clean growth agenda, enterprise and business developments, and transport planning opportunities. As a Partnership, having this governance arrangement provides scrutiny and management of the delivery of projects and will ensure that the Deal remains on track with delivering outcomes and benefits for the region.

⁵ <https://www.taycities.co.uk/publications>



City of Culture 2025

The Tay Cities Region was longlisted for the 2025 City of Culture title, following the submission of an Expression of Interest in August. Angus Council, Dundee City Council, Fife Council and Perth & Kinross Council worked in partnership on the bid, together with regional cultural trusts Leisure & Culture Dundee, ANGUSalive, OnFife and the culture trusts of Perth & Kinross.

The joint bid for City of Culture 2025 builds on the regional economic and cultural development being spurred on by the Tay Cities Region Deal and seeks to recognise that the region is home to world class cultural attractions including V&A Dundee, Pitlochry Festival Theatre and Arbroath Abbey. It will also see the creation of a new museum at the Perth City Hall, due to be the home of the Stone of Destiny, restoration of Hospitalfield House as a cultural attraction in Arbroath and the development of the Eden Project in Dundee.

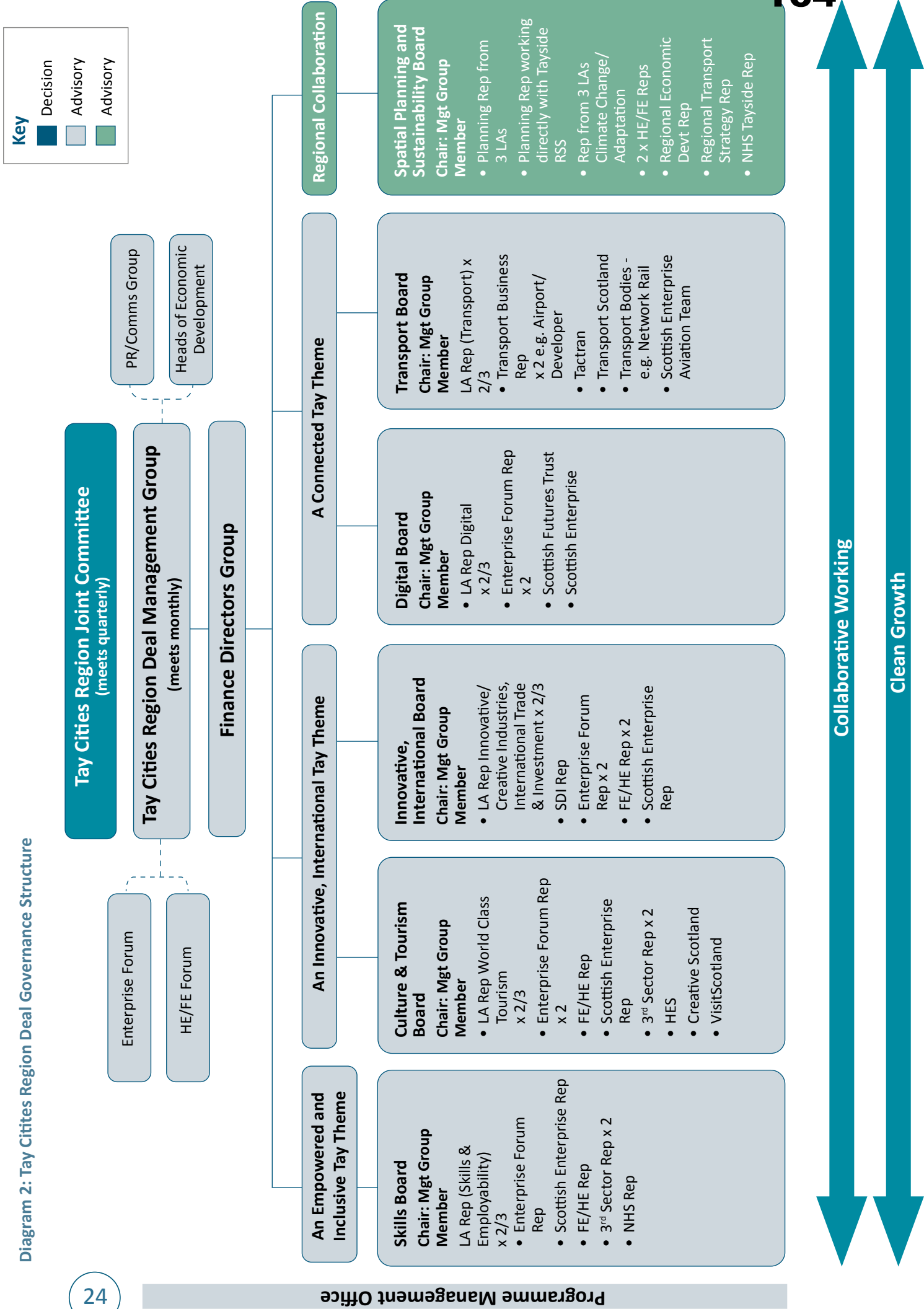
Whilst the bid was unsuccessful this time, the joint bid for City of Culture demonstrates strong and effective regional collaboration, not only for the Tay Cities Region Deal but holistically for development within the region.

National PMO Networking Group

The Tay Cities Region Project Management Office leads and provides the secretariat for a National PMO Networking Group, which includes representation from Regional and Growth Deals from across the UK. The group aims to share best practice and exchange guidance, use the platform for presentations from various organisations and utilise the knowledge of its members to start sub-groups specific to enhancing City & Growth Deals.



Diagram 2: Tay Cities Region Deal Governance Structure



Communication & Press



Tay Cities Communications & Press

There has been significant press coverage and good news stories relating to the Tay Cities Region Deal to date, supported by an active Communications & PR Group. The Group is comprised of representatives from the PMO, UK and Scottish Governments, universities and colleges central to the Deal and local authorities.

To assist with all communication and press opportunities, the Partnership have developed a protocol for all Programmes and Projects to use as guidance for any upcoming releases. The Tay Cities Deal Communications Protocol, as agreed at Deal Signing, has a commitment to be refreshed annually.



The Deal



The Deal

This section of the annual performance report summarises the projects that have entered into the implementation stage following full Government and Joint Committee approval, up to and including September 2021. The projects are categorised by Tay Cities Region Deal themes and are aligned to the Implementation Plan, with any updates to milestones and risks highlighted.

Monthly forecasting and quarterly performance reports are prepared by the PMO with input from projects throughout the year and shared with Governments and Management Group.

Status of Programmes and Projects

The Deal is comprised of 22 named Projects, 3 Programmes and 1 Fund. Within the Programmes and Fund, there will be additional projects emerging as the Deal progresses. To the end of September, 2 projects have been approved by the Partnership within the Regional Culture & Tourism Investment Programme; Hospitalfield and Discovery Point Transformed. The table below shows an overview of the status of the Programmes and Projects up to the end of September 2021.

Programme/Project	Location	(Expected) Full Business Case Approval	Stage
An Empowered and Inclusive Tay			
Regional Skills and Employability Development Programme	Regional	December 2021	Define
Tay Cities Engineering Partnership	Regional	February 2022	Define
Aviation Academy for Scotland	Regional	September 2022	Define
An Innovative, International Tay			
Growing the Tay Cities Biomedical Cluster	Dundee	19 February 2021	Implement
International Barley Hub	Perth & Kinross	19 March 2021	Implement
Advanced Plant Growth Centre	Perth & Kinross	19 March 2021	Implement
Angus Fund	Angus	19 February 2021	Implement
cyberQuarter	Dundee	18 June 2021	Implement
Just Tech	Dundee	2024/25	Define
Perth Innovation Highway	Perth & Kinross	TBC	Define
Studio Dundee	Dundee	2023/24	Define
Advanced Manufacturing Programme	Regional	2023/24	Define
Eden Campus	Fife	21 August 2020	Implement
Stretch Dome Simulator	Fife	December 2021	Define
Project Beacon	Perth & Kinross	2025/26	Define

Programme/Project	Location	(Expected) Full Business Case Approval	Stage
Regional Culture & Tourism Investment Programme	Regional	19 June 2020	Define
Regional Culture and Tourism Investment Programme - Hospitalfield	Angus	17 July 2020	Implement (phase 1)
Regional Culture and Tourism Investment Programme – Discovery Point Transformed	Dundee	23 April 2021	Implement (phase 1)
Pitlochry Festival Theatre	Perth & Kinross	2022/23	Define
Perth Cultural Transformation	Perth & Kinross	19 March 2021	Implement
Innerpeffray Library	Perth & Kinross	2028/29	Define
Crieff International Highland Centre	Perth & Kinross	2028/29	Define
Aero Space Kinross	Perth & Kinross	2022/23	Define
A Connected Tay			
Rural Angus and Rural Perth and Kinross Highspeed	Angus and Perth & Kinross	18 June 2021	Implement
5G Digital Testbeds	Regional	December 2021	Define
Low Carbon Transport & Active Travel Hubs	Perth & Kinross	December 2021	Define
Dundee Airport Investment	Dundee	19 February 2021 (revenue)	Implement (revenue)
		March 2022 (capital)	Define
Perth Bus & Rail Interchange	Perth & Kinross	2025/26	Define

Stage no.	Definition
1. Define	Business case being developed, and not yet approved by Joint Committee
2. Implement	Business case has been approved by Joint Committee, and is being implemented. In a capital project, this may be construction; for skills projects this may be establishing/delivering a course
3. Deliver	Project is in place and monitoring and evaluation is in framework to assess if it is achieving its objectives.
4. Legacy	Project has resulted in mainstreaming or improvements to business as usual (impact) that is generated beyond the funded period

The projects which have received Full Business Case approval from Joint Committee and were at the Implement stage during the reporting period are listed below;

- Growing the Tay Cities Biomedical Cluster
- International Barley Hub
- Advanced Plant Growth Centre
- Angus Fund
- cyberQuarter
- Eden Campus
- Hospitalfield
- Discovery Point Transformed
- Perth Cultural Transformation
- Rural Angus and Rural Perth and Kinross Highspeed Broadband
- Dundee Airport Investment (Revenue)

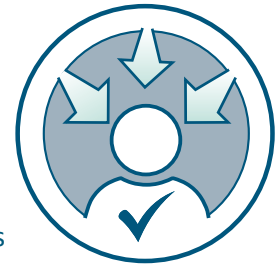
The following information provides a snapshot of progress throughout the year and are shown by Tay Cities Region Deal theme.

An Empowered & Inclusive Tay

Skills

Within the Skills theme there is 1 Programme, the Regional Skills and Employability Development Programme, and 2 Projects; Tay Cities Engineering Partnership and Aviation Academy for Scotland.

Both Projects are expected to be approved and at the implement stage in 2022/23, and the Programme is intended to be approved to allow Phase 1 of the Regional Skills and Employability Development Programme projects to be at implement stage.



£20m

Regional Skills
& Employability
Development Programme



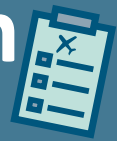
£2m

Tay Cities
Engineering Partnership



£8.1m

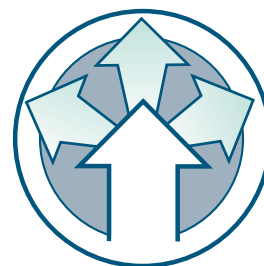
Aviation Academy



An Innovative, International Tay

Innovative & International

Within the Innovative and International theme there is 1 Programme, the Advanced Manufacturing Programme, 1 Fund, the Angus Fund, and 10 Projects; Growing the Tay Cities Biomedical Cluster, International Barley Hub, Advanced Plant Growth Centre, cyberQuarter, Just Tech, Perth Innovation Highway, Studio Dundee, Eden Campus, Stretch Dome Simulator and Project Beacon.



£188.2m

An Innovative and International Tay



Growing the Tay Cities Biomedical Cluster, International Barley Hub, Advanced Plant Growth Centre, cyberQuarter and Eden Campus have all received Full Business Case approval. There are no Angus Fund projects in delivery as part of the reporting period for this annual performance report, however 2 projects are expected to be approved and in delivery 2022/23.

£25m

Growing the Tay Cities Biomedical Cluster



Growing the Tay Cities Biomedical Cluster

Programme Owner	University of Dundee
Enabling the region to...	Innovate and Internationalise
Thematic Board	Innovative, International

Project Description

The Scottish Government will commit up to £25 million to Growing the Tay Cities Biomedical Cluster. The project will build on the region's existing life sciences reputation, including drug discovery and medical technologies. It will attract inward investment in new life sciences companies and increase industrial engagement.

The project consists of an Innovation Hub to provide laboratory and office space to enable new companies specialising in life sciences to grow, and a Medical Technologies innovation centre which will be refurbished to create spaces (and associated offices) with the specialist equipment needed to demonstrate medical devices.

New technologies developed in this unique environment will provide a pipeline of investment opportunities to create new spin-out companies which can then access the Innovation Hub. It will also attract industrial partners to co-locate in the University and develop their research and development potential by accessing the facilities and highly specialised medical technology it will be equipped with.



Photo © Oberlanders Architects

Headline Achievements

The Project received Full Business Case approval from the Joint Committee on 19th February 2021. To date, the Project has achieved the following:

- £1m in leveraged funding secured from the Wolfson Foundation (a charity which aims to improve the civic health of society) in support of the fit-out costs of the Innovation Hub;
- Subsequent to the completion of a feasibility study, approximately £1m in funding to be invested by the University of Dundee to allow a ground source heat pump to be incorporated within the Innovation Hub - this will provide low carbon heating and cooling;
- In collaboration with the contractor, development of a model to evidence inclusive growth and community benefits during the construction phase;
- Submission of planning permission for the Innovation Hub, the MedTech innovation centre, and extension of the Thiel cadaveric facility;
- Completion of Stage 3 Design for the Innovation Hub and the Thiel cadaveric facility.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Commencement of construction/fit out works:	February 2022
MedTech Pipeline:	June 2022
• Thiel Cadaver Facility Extension (CAHID)	March 2022
• MedTech R&D Unit Refurbishment (Wilson House).	
Tay Cities Innovation Hub	
Completion of construction/fit out works:	August 2022
MedTech Pipeline:	January 2023
• Thiel Cadaver Facility Extension (CAHID)	November 2023
• MedTech R&D Unit Refurbishment (Wilson House)	
Tay Cities Innovation Hub	

Key Risks

Risk	Mitigation
Costs due to ground conditions - Innovation Hub Development	Additional abnormal ground conditions may be discovered when excavations are carried out post-site start - estimated to mainly be in Q1, Q2 and Q3 of 2022/23 financial year. Significant contingencies have been identified to cover such unforeseen costs.
Escalating construction and refurbishment costs lead to enforced “cost cutting”, stalling the project or reducing the quality of the Hub and MedTech pipeline.	Iterative design review and cost checks are being developed throughout project. Robust management and change control processes are embedded and communicated. University of Dundee has an excellent track record of managing capital projects to time and on budget.
The impact of the COVID-19 pandemic and the impact of Brexit on the construction industry in the UK has been substantial, with major disruption to supply chains, labour resourcing and other issues. One issue that is likely to endure for some time is reduced labour resources and access to sites and, for indoor construction works, it is foreseeable that sites in Scotland will be subject to ongoing restrictions or limits, even as the country comes out of lockdown and post-rollout of the vaccine. Outdoor works are unlikely to be constrained to an equivalent degree. With large quantities of building materials currently imported and exported from the EU, parties will need to take into consideration the additional costs from duties, or the possibility that there might be limits on quantities of goods imported into the UK.	Constant review by the project team of changing Government guidance and the changing impacts of Brexit, and anticipating any likely impacts on the respective programmes as early as possible. Significant contingencies have been identified in each of the respective projects to cover unforeseen costs.


Case Study

The Stage 3 Design for the Tay Cities Innovation Hub was completed in September 2021. This involved detailed briefing workshops held by the project team to develop the design of the rooms and to outline the interior design approach. The aim was to achieve a building to support the incubation and scale up of life sciences companies in a high quality environment that balances buildability with a high efficiency envelope in order to make the incorporated ground source heat pump cost effective as a sustainable source of heat and cooling. The project also secured a pledge of £1million from the Wolfson Foundation in June 2021 towards fit out costs.





£35m
International
Barley Hub



International Barley Hub

Programme Owner	The James Hutton Institute
Enabling the region to...	Innovate and Internationalise
Thematic Board	Innovative, International

Project Description

The UK Government will commit up to £20 million and the Scottish Government will commit up to £15 million to the creation of an International Barley Hub at the James Hutton Institute. Barley is indispensable to the Scottish and UK economies, being vital to the distilling, brewing and food industries. It also has the potential for emerging uses in the health, chemical and energy sectors. However, future barley supply is increasingly uncertain due to the impact of climate change, developing worldwide demand, evolving pest and disease risks and pressure on managing soil health to enable crops to grow.

The IBH will establish a world-leading research facility for barley science, bringing together industry, dedicated facilities and world class scientists. It will:

- expand the scale and excellence of barley research and innovation, operating across a broad spectrum of disciplines;
- provide state of the art research equipment on site and at industry partners premises;
- have the capability to support work from the molecular, to the field level;
- increase the translation and application of this research around the globe;
- support a “Barley Cluster” of related processing, innovation and product interests; and
- develop a supporting skills and knowledge programme.

The International Barley Hub has been developed in parallel with the proposal for the Advanced Plant Growth Centre and at the request of the Approval Authorities these have been maintained as separate business case documents, although they ultimately result in the same physical infrastructure investment.



The James
Hutton
Institute

Headline Achievements

The Project received Full Business Case approval from the Joint Committee on 19th March 2021. The approval was subject to the following conditions:

- An ongoing commitment by the partnership to seek acceleration of funding in Years 1 to 5 to enable the earlier delivery of the James Hutton Institute projects.
- The order of project drawdown and delivery may change as business cases develop.
- There will be ongoing monitoring of the programme including the active management of any reported underspend on drawdown through bringing forward projects which can demonstrate spend and have an approved Full Business Case in place. Where spend has occurred, at the project owners own risk, which exceeds the partnerships drawdown profile, active dialogue with Governments will be held to identify if there are any opportunities through other City Deal reported underspends to bring forward earlier additional funds from within the wider Tay Cities programme.

To date, the Project has achieved the following:

- Secured the land transfer.
- Full planning permission has been granted for the first phase of the development – poly tunnel relocation, new entrance road, Farm Hub and Barley Field Research Centre.
- Ground breaking event for key stakeholders and Government representatives was held on the 26 August 2021.
- The construction has been completed for the poly tunnels and new entrance road with groundworks now underway for the other aspects.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Construction section 2a – Construction of a Barley Field Research Centre (replacement building R - farm side aspects of IBH research) 2b - Construction of Integrated Field Facilities (IFF)	31 March 2022
Construction section 3 – Phased demolition works to clear the site for the IBH/APGC building	24 January 2022

Key Risks

Risk	Mitigation
Failure of income generation strategy	Competitive grant availability to be monitored and a strategy for engaging early with major funders developed through a dedicated business development team.
Construction inflation is higher than included in the Full Business Case.	Use of a recognised Construction Industry inflation index in the Business Case. Procurement Strategy to use fixed price contract. Recent developments in the supply chain, May 2021, have indicated there will be significant cost inflation for a wide range of raw materials including steel, wood and concrete.
Covid 19 & Brexit impacts	The result of the pandemic may still result in the delayed delivery of some aspects of the projects, inflationary costs remain uncertain and supply chains may still be at risk despite the easing of restrictions. Key Brexit related issues include: Plant variety licensing; Regulatory Framework; Currency volatility impacts the cost of CE facilities priced from the EU; Construction contracts now commonly exclude liability for costs and delay associated with Brexit.

Case Study

The International Barley Hub and Advanced Plant Growth Centre projects at the James Hutton Institute marked the commencement of the works on site formally with a breaking-ground ceremony at the campus, led by both Mairi Gougeon MSP, Cabinet Secretary for Rural Affairs and Islands and Iain Stewart MP, Under Secretary of State for Scotland.

The event was held on 26th August and was attended by project stakeholders, supporters and politicians, past and present, who have played a key role in the success of International Barley Hub and Advanced Plant Growth Centre through the Tay Cities Deal.

Following the formal breaking ground, guests were invited to explore the site, including the Intelligent Growth Solutions vertical farm to hear more about how the construction will develop the wider IBH and APGC projects.





Advanced Plant Growth Centre	
Programme Owner	The James Hutton Institute
Enabling the region to...	Innovate and Internationalise
Thematic Board	Innovative, International

Project Description

The UK Government will commit up to £25 million and the Scottish Government will commit up to £2 million to the creation of the Advanced Plant Growth Centre at the James Hutton Institute. It will build on existing expertise to deliver a cutting-edge plant research facility bringing together industry, advanced technology and world class scientists. The Centre embodies the idea of Agriculture 4.0, a green revolution with science and technology at its heart, with the aim of feeding future populations.

The Advanced Plant Growth Centre will be at the heart of plant and crop research and innovation in the Tay Cities region. It will develop the underpinning science and translate that science into industry, which will in turn increase the commercial, economic and environmental benefits of agriculture and the food and drink sector. The APGC will integrate:

- a plant characterisation facility, which uses imaging to quickly understand (before harvest) how crops respond and perform in different environments;
- post-harvest storage facilities;
- vertical growth facilities; and
- next-generation controlled environments which can simulate any current or future environment anywhere in the world (for example, increased greenhouse gases) to test the effect on crops.



Headline Achievements

The Project received Full Business Case approval from the Joint Committee on 19th March 2021. The approval was subject to the following conditions:

- An ongoing commitment by the partnership to seek acceleration of funding in Years 1 to 5 to enable the earlier delivery of the James Hutton Institute projects.
- The order of project drawdown and delivery may change as business cases develop.
- There will be ongoing monitoring of the programme including the active management of any reported underspend on drawdown through bringing forward projects which can demonstrate spend and have an approved Full Business Case in place. Where spend has occurred, at the project owners own risk, which exceeds the partnerships drawdown profile, active dialogue with Governments will be held to identify if there are any opportunities through other City Deal reported underspends to bring forward earlier additional funds from within the wider Tay Cities programme.

To date, the Project has achieved the following:

- Full planning permission has been granted for the first phase of the development – poly tunnel relocation, new entrance road, Farm Hub and Barley Field Research Centre.
- Ground breaking event for key stakeholders and Government representatives was held on the 26 August 2021.
- The construction has been completed for the poly tunnels and new entrance road with groundworks now underway for the other aspects.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Construction section 2a – Construction of a Barley Field Research Centre (replacement building R - farm side aspects of International Barley Hub research) 2b - Construction of Integrated Field Facilities (IFF)	31 March 2022
Construction section 3 – Phased demolition works to clear the site for the International Barley Hub/Advanced Plant Growth Centre building	24 January 2022

Key Risks

Risk	Mitigation
Failure of income generation strategy	Competitive grant availability to be monitored and a strategy for engaging early with major funders developed through a dedicated business development team.
Archaeological investigations	Archaeological survey for section 1 (access road) complete and report produced allow road construction to commence. Archaeological investigations are still underway for section 2 (IFF site) and agreement in place for phased release to co-incide with construction activity. These investigations are currently anticipated to continue to Christmas '21 due to the additional finds that have been uncovered.
Construction inflation is higher than included in the Full Business Case.	Use of a recognised Construction Industry inflation index in the Business Case. Procurement Strategy to use fixed price contract. Recent developments in the supply chain, May 2021, have indicated there will be significant cost inflation for a wide range of raw materials including steel, wood and concrete.



Covid 19 & Brexit impacts	<p>The result of the pandemic may still result in the delayed delivery of some aspects of the projects, inflationary costs remain uncertain and supply chains may still be at risk despite the easing of restrictions.</p> <p>Key Brexit related issues include: Plant variety licensing; Regulatory Framework; Currency volatility impacts the cost of CE facilities priced from the EU; Construction contracts now commonly exclude liability for costs and delay associated with Brexit.</p>
---------------------------	---

Case Study

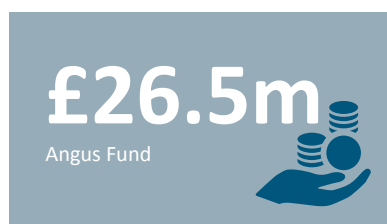
The project established several collaborative projects with others in the industry for the Advanced Plant Growth Centre. These included, but are not restricted to:

- Developing smart propagation for soft fruit crops: Innovate UK.
- Hydrobubbles to Boost Plant Growth Through Captured Carbon Utilisation. Innovate UK
- Hybrid Advanced Research Vertical-Farming Environment Systems and Technology (HARVEST). Eureka/Innovate UK
- Controlled environment agriculture Heirloom Optimisation & Pathogen Control for Seeds (CHOPS). Innovate UK.
- Production Optimisation Learning Engineering Autonomous Framework System (PROLEAFS). Innovate UK,
- COVID-19: Food and Nutrition Security during and after the COVID-19 Pandemic. ESRC

HARVEST presented an opportunity for the Advanced Plant Growth Centre to work with companies and industries in Singapore to deliver solutions to their problem of limited food security and the aim to produce 30% of their food by 2030 on a limited geographical footprint. In addition, the Centre was able to undertake research in to the benefits of vertical farming under normal conditions but particularly in pandemic situations like COVID-19.



Photo © Oberlanders Architects



Angus Fund	
Programme Owner	Angus Council
Enabling the region to...	Innovate and Internationalise
Thematic Board	Innovative, International

Fund Description

The UK Government will commit up to £26.5million to the Angus Fund. The Angus Fund will help achieve an investment balance across the region by investing in projects across Angus to be developed collaboratively with Angus Council and other local partners as part of the Deal.

The purpose is to increase productivity through clean growth, protecting places for future generations to live, work, and visit. The Angus Fund will contribute to the development and implementation of innovative, clean technologies, which will also significantly reduce the region's carbon footprint; contributing to national reductions in carbon use.

To deliver this purpose the Fund will support three connected components, namely:

- clean growth;
- low carbon; and
- agricultural technology.

The investment has been provisionally divided between six projects to support these themes, including:

1. Centre for Agricultural Sustainable Innovation
2. Mercury Drone Ports
3. Connecting Montrose
4. Clean Growth Business Park
5. Low Carbon Housing
6. Low Carbon Transport

The Angus Fund will be used to stimulate The Mercury Programme, which is Angus Council's visionary £1 billion partnership programme between government, public, private and community sectors.

Individual project business cases will be developed for each of the projects that comprise the Angus Fund. It should be noted that the Angus Fund has been approved for delivery but the individual projects that comprise it will drawdown from the agreed profile in year 3 (2022/23).



Headline Achievements

The Angus Fund OBC received full approval from the Joint Committee on 19th February 2021. To date, the Project has achieved the following:

- Angus Council has accelerated the Mercury Drone Ports project in advance of the business case due to the interest in this new innovative technology. Drone trial flights are due to start in 2022.
- Angus Council has purchased a building to host the CASI HQ in advance of the Business Case approvals to assist the project partners.
- Angus Council and Crown Estate Scotland are developing a Minute of Understanding for the Zero Four Montrose project.
- Angus Council and Dalhousie Estate are developing a Minute of Understanding for the Angus Rural Mobility Hub, Brechin project.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Business Justification Case for Mercury Drone Port approved by the Joint Committee	Q4 2021
Full Business Case for Agri Tech (CASI) approved by the Joint Committee	Spring 2022
Fund Benefits Realisation Plan/reporting, including timescales for Projects	Align with PMO Benefits Realisation Plan (2022)

Key Risks

Risk	Mitigation
Projects are unable to achieve match funding	Competitive grant availability to be monitored and a strategy for engaging early with major funders developed through a dedicated business development team.
Businesses fail to engage	Regular engagement to ensure projects developed in a transparent and inclusive way.
Brexit impact	All of the projects will be at risk from the Impact of Brexit, these will continue to be identified as the Business Case's developed

Case Study

Angus wants to create the first Drone port in Scotland and the Mercury Drone Ports project has gathered significant interest to date from several sectors including windfarm operators, delivery companies and healthcare services. Some of the work is already underway for this project.

It will develop the airspace infrastructure in conjunction with the CAA for drone flights beyond the visual line of sight as well as use cases for drone flights.

As this new technology develops, the Drone Port and creation of airspace infrastructure is attractive to drone companies and pilots who wish to test new drones, develop parcel delivery and service the offshore sectors.

These “use cases” support the development of the Business Case, as well as demonstrating to the drone sector and other businesses that Angus can be a leader in drone technology and associated benefits. It will also help in developing public acceptance of the technology

The flight paths for the drones will focus on the themes of the Mercury Programme in particular the Agri Tech element, Angus Council services, NHS deliveries and development of deliveries within a rural location.





cyberQuarter	
Programme Owner	Abertay University
Enabling the region to...	Innovate and Internationalise
Thematic Board	Innovative, International

Project Description

cyberQuarter is funded by both the UK and Scottish Government. The Scottish Government have committed up to £6m and the UK Government up to £5.7m.

cyberQuarter is an academic-industrial partnership designed to establish the Tay Cities region as a centre of best practise in applied research and development and knowledge exchange in cybersecurity. It will exploit Abertay University's distinctive ethical hacking and offensive cybersecurity knowledge.'

cyberQuarter will deliver:

- collaborative research and development with the cybersecurity industry to develop solutions that will improve cybersecurity amongst small and medium sized businesses
- develop ethical hacking and offensive security activities to upskill workers and tackle local and national skills shortages
- support businesses to raise awareness of cybersecurity risks and increase the adoption of new products and services to become more cyber resilient; and
- deliver jobs growth in cybersecurity firms, from start-ups to large corporations, as new products and services are developed and commercialised.



Headline Achievements

The Project received Full Business Case approval from the Joint Committee on 18th June 2021. To date, the Project has achieved the following:

- Construction activity for the physical cyberQuarter hub is now underway, refurbishing Abertay University's Annie Lamont Building. The building has been renamed in honour of Annie Keir Lamont, a Dundee activist and graduate of Abertay's predecessor institution, Dundee Technical Institute, who studied magnetism and electricity, and telegraphy and telephony in 1903/04.
- Secured additional revenue funding from Scottish Enterprise and the Scottish Government Cyber Resilience to support business development activity for the cyberQuarter
- Confirmed the first tenant for the cyberQuarter, bringing NHS NSS cyber security operations centre of excellence to the Tay Cities region – securing the health of Scotland's citizens- and attracting 30 jobs
- Recruited the first Business Development Manager, using their experience as an Abertay University Ethical Hacking graduate and as a cyber security engineer to engage with industry and bring them into the cyberQuarter community.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Construction on site	2021/22
Construction completed	2021/22
CyberQuarter occupied	2022/23

Key Risks

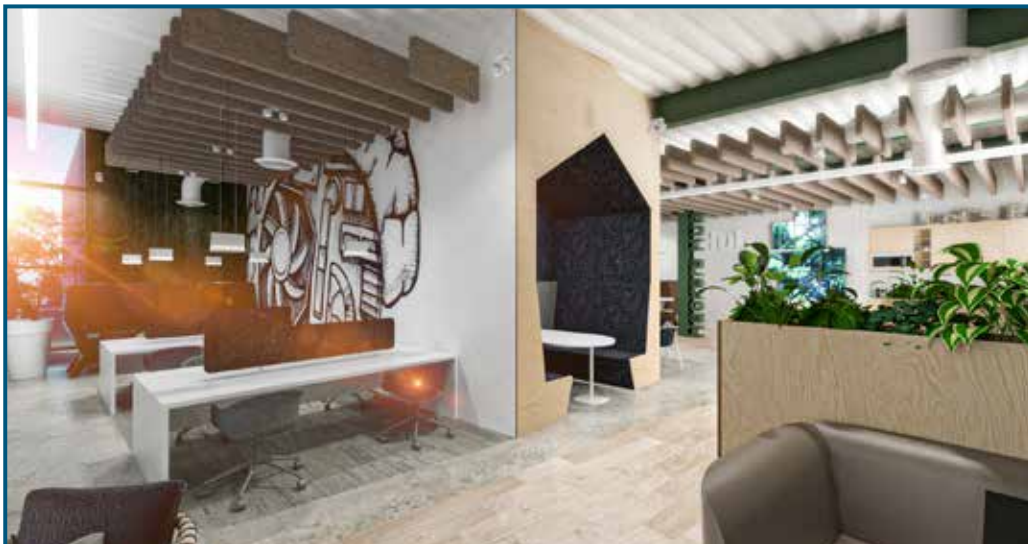
Risk	Mitigation
The cybersecurity industry does not grow as expected, domestically or globally.	The University will develop an Industry Engagement Strategy for the cyberQuarter, working with the Scottish Business Resilience Centre and other regional partners. The University has appointed a Business Development Manager who will dedicate 100% of their time to the project for 2 years.



Cluster companies find it difficult to attract staff	Work with the partners in the Regional Employability & Skills Programme to provide labour market insight on vacancies and skills gaps, to jointly develop education and training to tackle these. Increasing provision of cyber security courses in the region – HNC and HND in Cybersecurity available at FE colleges and National Progression Awards at SCQF level 4, 5 and 6 are available in some secondary schools. Abertay University will offer a BSc (Hons) degree in Cyber Security in addition to its existing BSc (Hons) in Ethical Hacking from September 2021.
Covid & Brexit impacts	Construction partner McLaughlin & Harvey will continue to monitor the current and developing impact that both Brexit and COVID 19 is having on the construction industry. This will ensure that proposed tender offers and programmes are based on accurate forecasts

Case Study

The cyber security arm of NHS Scotland will create 30 new jobs in Dundee after being confirmed as the first tenant at Abertay University's cyberQuarter. NHS NSS (National Services Scotland) will provide cybersecurity operations to cover all of Scotland's health services. This will bring an opportunity to harness technology to transform healthcare services or the way in which they are delivered. As part of their tenancy, NHS NSS will invite Abertay cybersecurity students to gain work experience alongside their staff.



£26.5m

Eden Campus



Eden Campus

Programme Owner	University of St Andrews
Enabling the region to...	Innovate and Internationalise
Thematic Board	Innovative, International

Project Description

The UK Government will commit up to £24.5 million and the Scottish Government will commit up to £2 million to the development of Eden Campus by the University of St Andrews. This project aims to repurpose a 32.5-acre brownfield site into a Centre of Excellence in Low Carbon and Renewable Energy innovation. It will provide a location for innovators from academia, industry and technology to collaborate and trial new technologies and networks.

Eden Campus will bring industry alongside academic expertise from around the world and is central to the University of St Andrews' strategy to become the UK's first energy carbon neutral university. The campus will contribute to national and international ambitions for carbon reduction, while simultaneously driving employment, training, and apprenticeships in the low carbon sector.

The funding will enable the development of three interconnected components:

- an **Enterprise Hub** to support the start-up and growth of new and emerging companies focused on low carbon innovation. It will incorporate a combined incubator and accelerator facility which will offer companies space and business support services.
- The **GENESIS Centre**, a new research and development facility focused on the storage and conversion of energy. The Centre will provide a space for companies to access academic and industrial expertise, develop and test innovative new approaches to low carbon energy systems, engage with other companies, and build business-to-business collaborations.
- An **upgrade of the power supply** to the Eden Campus (and North East Fife), including a smart energy primary sub-station. This will be capable of importing and exporting power from traditional and renewable sources. It will be an active part of electricity grid management for Fife. It will help demonstrate innovative services and products, enabled by new technology and data to offer efficient, collaborative and inclusive energy solutions, capable of scaling up for national use to meet the drive for low carbon power.



Headline Achievements

The Project received Full Business Case approval from the Joint Committee on 21st August 2020. To date, the Project has achieved the following:

- Currently, there are six live projects all contributing towards the vision for Eden Campus. They span the three support areas: Power, Genesis and Enterprise.
- An Entrepreneurship Centre has been established that will provide a pipeline of prospective tenants to TCD-funded buildings.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Start construction of Phase 2 of Enterprise Hub	2022
Start construction of Genesis buildings	2022
Benefits Realisation Plan/reporting	2022 onwards

Key Risks

Risk	Mitigation
Covid- 19 impacts to development projects from resource issues of materials and staffing to site closures with construction sector lock downs.	<p>The project will ensure that there is contingency planning in place and a multi-disciplinary team approach with contractors to minimise impacts throughout the design & build stages of projects.</p> <p>During construction, specific COVID risk assessments will be in place to ensure appropriate mitigations (where possible) of any COVID lock downs or localised COVID isolations will be identified and implemented.</p> <p>The University's Programme Board and individual Project Boards closely monitor the escalating costs and time delays currently evident in the construction and other sectors. Delivery of the projects continues as planned but we have to factor in current tensions in the market.</p>
Brexit impacts negatively on ability to continue to attract the best academics from Europe and secure the best price for materials and services in development of the Campus.	<p>The key risks associated with Brexit were divested amongst topic specific risks on the corporate risk register for the project in order to embed those within the new 'business as usual' reality. This will enable the project to anticipate, plan and mitigate against those risks to the University and Eden Campus in a more agile way. With regard to construction projects the main mitigation is to ensure early engagement with contractors and where lead times of materials are constrained, to place orders as early as possible to secure price and delivery.</p>

Case Study

During 2021, Eden Campus moved several steps closer to a target of carbon net zero. This is a significant pre-cursor to the University's overall goal of being carbon net zero by 2035. The Campus has a dedicated electrical supply from ground mounted solar PV and will continue to install further roof-mounted solar, and demonstrate and utilise new flexible solar systems during 2022. In addition, 20 EV charging points have been installed and a further 20 are planned for 2023.

The Campus is also home to the award-winning biomass district heat network which is now being extended to heat existing and new buildings on the Campus from the beginning of 2022.

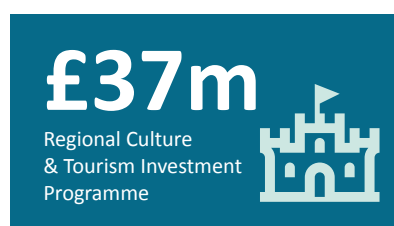
The benefit of sustainable heat and power when combined with the low carbon industry club, the installation of advanced fuel cell facilities and innovative ways of capturing and re-using CO₂ will make Eden Campus carbon zero by 2030.



Culture & Tourism

Within the Culture & Tourism theme there is 1 Programme, the Regional Culture and Tourism Investment Programme, and 4 Projects; Perth Cultural Transformation, Innerpeffray Library, Crieff International Highland Centre and Aero Space Kinross.

Within the Regional Culture and Tourism Investment Programme, there are currently 2 projects which have received Full Business Case approval; Hospitalfield and Discovery Point Transformed. The Perth Cultural Transformation Project has also received Full Business Case approval.



Regional Culture & Tourism Investment Programme

Programme Owner	Angus & Dundee City Councils
Enabling the region to...	Innovate and Internationalise
Thematic Board	Culture & Tourism

Programme Description

The Scottish Government will commit up to £37m to the creation of a Culture and Tourism programme that will invest in key economic assets in the sector. This is compiled of a £27m investment in a Regional Culture & Tourism Investment Programme and a £10m investment in a named project; Pitlochry Festival Theatre.

The overarching objective of the Programme is to contribute to a wider Tay Cities ambition to be a highly desirable place to live, work, visit and invest in. It aims to do this by building on and strengthening the region's existing culture and tourism offering, to deliver a world class region with world class culture and visitor experiences.

The Programme will be managed and delivered collaboratively by a partnership between the four Tay Cities local authorities, Scottish Enterprise, Creative Scotland, Historic Environment Scotland, and VisitScotland, with the support of the Scottish and UK Governments.

Within the £27m Regional Culture & Tourism Investment Programme, 2 projects have been identified for delivery. These are Hospitalfield and Discovery Point Transformed, which have received Full Business Case approval and are in delivery. There is a commitment to review the regional Culture & Tourism Investment Programme annually to allow identification and development of the next tranche of projects.



Headline Achievements

- The Regional Culture & Tourism Investment Programme OBC received full approval from Joint Committee on 19th June 2020.
- To date, 2 projects have been approved within the Programme
- Both Hospitalfield and Discovery Point Transformed are now on site delivering phase 1 of their projects
- The Programme has carried out a review of the individual projects to consider whether any changes to phasing or prioritisation are required. At this time the Thematic Board has agreed that no changes are needed.

Key Milestones & Progress

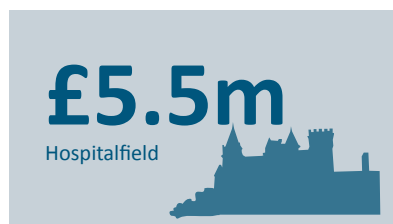
In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Completion of Phase 1 of first tranche of Projects	2022/23
Review and refresh of Programme to allow identification of second tranche of projects.	2022/23

Key Risks

Risk	Mitigation
Construction inflation is higher than included in the Full Business Case.	Use of a recognised Construction Industry inflation index in the Business Case and procurement Strategy to use fixed price contract will help to manage this risk.
Projects no longer sustainable due to the impact of Covid-19 on the tourism sector.	All projects are required to set out in their business cases how they are tackling the impact of Covid 19. The programme will be under continual review.
Oversubscription of the Programme	The Programme is £10m oversubscribed. Projects have been advised of this and overall allocations will be reduced through annual review of the Programme.





Hospitalfield	
Programme Owner	Hospitalfield
Enabling the region to...	Innovate and Internationalise
Thematic Board	Culture & Tourism

Project Description

Hospitalfield was awarded an investment of up to £5.5m to support a visionary redevelopment plan for Hospitalfield House as part of the Regional Culture & Tourism Investment Programme. It aims to see Hospitalfield fully restored and accessible to the public. The Trust plans to restore and add to the residential, studio and visitor facilities at Hospitalfield to create a world-class cultural facility that is financially sustainable, and able to make a significant and long-term impact on the local, regional and national economies.

The five year capital investment programme will be delivered in three phases:

- Phase 1 – Restoration of the existing accommodation, Artist Studios and the Garden, Fernery and Café and creation of new visitor accommodation
- Phase 2 – Restoration of the Mortuary Chapel
- Phase 3 – Restoration of the House and heritage collections and development of a new reception building, study centre, shop and gallery exhibition space.

Headline Achievements

The project received Full Business Case Approval from the Joint Committee on 17th July 2020, with the following conditions:

- Drawdown is subject to the Full Deal being agreed to and signed by the Tay Cities Deal partnership which include the profiled spend (condition met);
- Drawdown is subject to confirmation that State Aid rules are met (condition met); and,
- Any future funding from the Tay Cities Deal is subject to the project securing 50% match funding.

To date, the project has achieved the following:

- The Trust is developing the project as a 3 phase project and the whole of phase 1 is now completed
- Phase 1 'The garden and garden buildings' opened to the public in May 2021 and is already becoming a popular destination for visitors.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Phase 2 – Mortuary Chapel	2021/22
Phase 3 – The House, the Visitor Experience and the Collections	2022/23

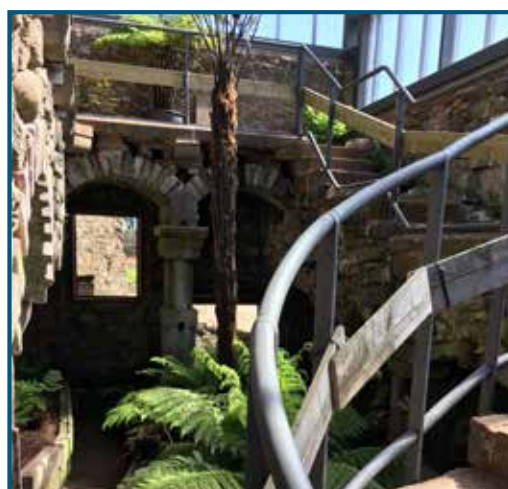
Key Risks

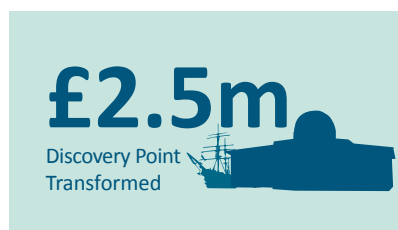
Risk	Mitigation
Any aspect of the capital programmes exceeds the available funding.	The design team includes an experienced quantity surveyor. All costs plans are carefully estimated with adequate general contingencies and contingencies for inflation.
Covid 19 & Brexit impacts	<p>Immediate impacts identified as:</p> <ul style="list-style-type: none"> time delays due to market uncertainty and public funders such as HES are delaying their decision making for capital awards. The Project's fundraising strategy is dependent on public sources of funding for certain elements of the matched funding. <p>There was an increase in the cost of materials and labour supply as a result of the Covid shut down and impacts since Brexit with an impact to Phase 1 of the project. The Hospitalfield Board will continue to work within the constraints of funding available and develop the project accordingly within the available budget.</p>

Case Study

In May 2021 the Garden and Garden Buildings at Hospitalfield opened to the public with much press and profile around it. In the run up to this opening the equivalent of 4 full time jobs were created to support the launch of this new destination in Angus, including a new chef, café manager and other café and hospitality staff. Hospitalfield has also developed a programme of events which encourages visitors to spend time learning about the history of the site, it extends dwell time and encourages return visits to Hospitalfield and the wider region.

For example, Hospitalfield launched a new publication in June 2021, 'In the Garden at Hospitalfield' by artist and illustrator Laura Darling, who has been running the Drawing School at Hospitalfield. The Drawing School is a programme of work that Hospitalfield has been committed to over three years and that grows the sense of Hospitalfield as a local research building on its history as the early 20th century art school.





Discovery Point Transformed	
Programme Owner	Dundee Heritage Trust
Enabling the region to...	Innovate and Internationalise
Thematic Board	Culture & Tourism

Project Description

The Partnership has committed up to £2.5m for Discovery Point Transformed, as part of the Regional Culture & Tourism Investment Programme. The Project will create four major attractions, delivering a major upgrade of the museum, as well as protecting and restoring the unique heritage of the RRS Discovery, enhancing overall visitor facilities and opening up new opportunities for community engagement and learning.

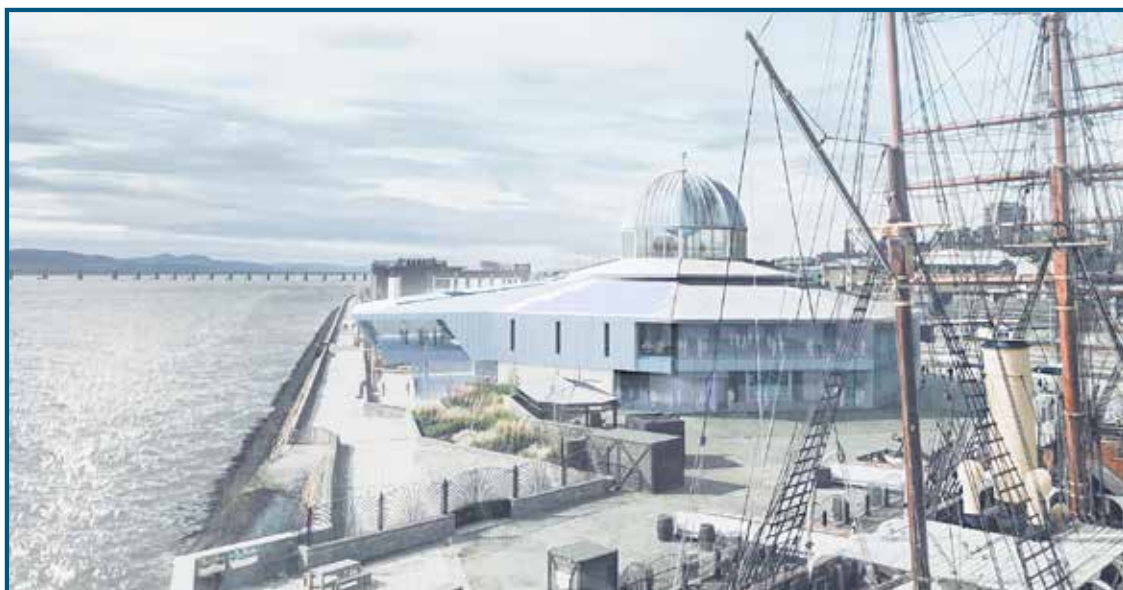
The five key components of the project are:

- **Climate Change Gallery:** A new visitor attraction, highlighting the international significance of the RRS Discovery and its expeditions, and the connections to the major global issues of climate change and the ocean environment.
- **The Dundee Dome Experience:** Public access will be available for the first time to the top of the Discovery Point Dome offering 360° panoramic views of the city, waterfront and River Tay.
- **Protection of our core heritage asset, the historic RRS Discovery:** Essential conservation work will be carried out throughout the ship, with new public spaces being opened up and additional interpretation installed to complement the developments within the Discovery Point museum.
- **A new gallery for temporary and special exhibitions:** This will allow Discovery Point to host a greater range of temporary exhibitions, either developed in-house or touring exhibitions and the potential to host larger scale 'blockbusters' exhibitions.
- **A new permanent gallery and the refurbishment of existing galleries.**

The funding will also enable the development of a new river-facing flexible events space/café/destination restaurant; expanded and enhanced conference and event facilities; a redesigned entrance and reception area; environmental improvements to meet low carbon targets and a comprehensive programme of community learning and engagement activities.

The project will be delivered in two distinct phases:

- **Phase 1:** Enabling works to create the Dundee Dome Experience and the enabling floor infills for the climate change gallery, to be completed by March 2022.
- **Phase 2:** Installation of the climate change gallery, the building of the waterfront events space/café/restaurant, further gallery/conference space developments, conservation works to RRS Discovery and the environmental works to the Discovery Point building, planned for 2023/25.



Headline Achievements

The project received Full Business Case approval from the joint committee on 23rd April 2021, with the following conditions:

- The remaining match funding is in place (additional £1.6m); and
- The total overall project costs have been secured.

To date, the project has achieved the following:

- Floor infills completed in preparation for the Phase 2 Climate Change gallery;
- Construction work started on creating the Dundee Dome Experience, with additional progress on interpretation design including appointment of AV contractors and the purchase and delivery of the centrepiece Gaia globe artwork;
- Significant progress with match funding for the project, with more than half of the £12m raised with contributions from the National Lottery Heritage Fund and the National Heritage Memorial Fund;
- The Scottish Power Foundation, one of the funders of the Dundee Dome Experience, awarded Dundee Heritage Trust its national Community Engagement Award for project partners in September 2021.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Phase 1 – Enabling Works – design, procurement, construction	March 2022

Key Risks

Risk	Mitigation
Unproven technology may not work	Whilst proven technology will be the default position for the project, as the project have stated in the approved FBC there may be opportunities to trial new environmental technology. The risk of this will be reviewed on a case by case basis, and would require CEO and Board review and approval.
Project cost overruns and inflation	<p>The provisional budget has been prepared by an experienced quantify surveyor and includes industry standard contingencies for risks and inflation.</p> <p>The project has obtained a fixed price contract with a contractor for Phase 1 and will seek opportunities to enter into a similar contract for Phase 2. Any increase in costs will see standard value engineering techniques employed to ensure the project is reengineered to be deliverable within budget</p> <p>Change control procedures will be put in place and the process of issuing change orders will be carefully controlled.</p> <p>A degree of Brexit related cost increases is already included in assumptions, but if further exceptional inflationary pressures are experienced and this results in project costs for Phase 2 being higher than the current estimate, then additional fundraising may be required.</p>
Covid impacts leading to an ongoing reduction in visitor numbers, particularly from overseas	<p>The new offers that will be delivered through Discovery Point Transformed will make this tourist attraction more attractive to visitors.</p> <p>Market changes however may not fully recover in a post-Covid environment including conferences and events business and the risk of this will be monitored over time as Covid restrictions ease.</p>

Case Study

Dundee Heritage Trust, project lead for the Discovery Point Transformed project, received the Community Engagement Award at the 2021 Scottish Power Foundation Awards. The Scottish Power Foundation is one of the main funders of the Dundee Dome Experience, the first phase of the Discovery Point redevelopment. This Award recognises the Trust's work in engaging with local communities to share the industrial and social heritage of Dundee through an inclusive and varied programme of activities at both Discovery Point and Verdant Works museums. The Tay Cities Region Funding in support of Discovery Point Transformed will help develop new opportunities for wider engagement with local people and visitors to the city, further enhancing the region's culture and tourism economy.

The Dundee Dome Experience will also feature as a centrepiece a limited edition of the Gaia globe artwork by Luke Jerram, recently seen on display at the COP26 climate summit in Glasgow.





Perth Cultural Transformation	
Programme Owner	Perth and Kinross Council
Enabling the region to...	Innovate and Internationalise
Thematic Board	Culture & Tourism

Project Description

The UK Government will commit up to £10m, the investment will bring Perth City Hall, a Grade B listed building in the original medieval heart of the city, back to life. It will repurpose a deteriorating heritage asset, currently on the Buildings at Risk Register, into a new museum attraction of international significance. Perth City Hall will showcase Perth's ancient roots through museum collections which have National Recognition Status. City Hall will become a major cultural venue; a significant addition to the world class offer of the Tay Cities region and a source of civic and community pride, as it was when first built over a hundred years ago. City Hall will also tell the story of the Stone of Destiny, quarried in Perthshire and used to crown every Scottish monarch at Moot Hill in Scone, just outside Perth.

Headline Achievements

The Project received Full Business Case approval from the Joint Committee on 19th March 2021. To date, the projects has achieved the following:

- Archaeology completed in main hall (see case study)
- The Project has been offered and accepted an opportunity to receive accelerated funding of £2m in April 2021.
- The Project has made significant progress towards completing the building works.



Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

Milestone	Due Date
Building Completion	Q4 2022/Q1 2023

Key Risks

Risk	Mitigation
Unforeseen site issues resulting in programme delays, increased project costs and increase in project scope.	Surveys completed and site issues taken account of. Use of appropriate contingencies to manage delays, increased costs and increases in project scope.
Archaeological remains or items of interest discovered during construction phase.	Review of current archaeological record and early engagement of archaeologist. Archaeologists appointed for watching brief over site surveys and main works
Covid 19 & Brexit impacts	Impacts of Brexit and Covid 19 may affect how the new attraction is to be constructed, including in a timely manner, and operated. The impacts will be reviewed by independent consultants to prepare the City Hall project to adapt to new requirements for cultural venue opening.

Case Study

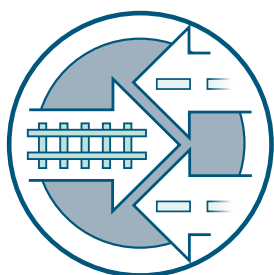
As part of the planning consent, the Project undertook an archaeology watching brief over any excavations and groundwork. During the strip out of the main hall to prepare for piling, obstructions were uncovered, and an archaeological investigation was completed. The remains are thought to be sandstone foundations of mediaeval buildings and a medieval courtyard which would have stood close to the original City Hall. All findings were recorded by Alder archaeology who will also publish the findings.

This is not uncommon in Perth City centre and it is expected that there may be more discoveries outside the building when the public realm part of the project starts.

Whilst this resulted in some delays to the construction work, the piling work is now completed and the steelwork for the new entrance vennel is almost complete. Through close working with the archaeologists, main contractor and client these, important findings have been recorded whilst minimising the impact on the main project.



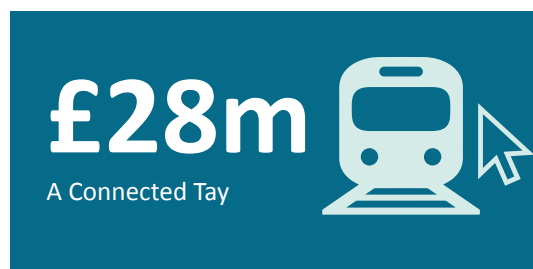
A Connected Tay



Transport

Within the Transport theme there are 3 projects; Low Carbon Transport & Active Travel Hubs, Dundee Airport Investment and Perth Bus & Rail Interchange.

The Dundee Airport Investment Project has received Business Justification Case approval for revenue expenditure. Low Carbon Transport & Active Travel Hubs are expected to be approved and in delivery in the last quarter of 2021/22.



Dundee Airport Investment

Programme Owner	Dundee City Council
Enabling the region to...	Connect
Thematic Board	Transport

Project Description

The Scottish Government will commit up to £9.5 million to the development of Dundee Airport, which is licensed for scheduled, private and charter operators. This investment will support the development of new route opportunities, enhancing links with other UK airports and potentially European hubs. These links will ensure the Airport can contribute effectively to the region's wider connectivity requirements, a key enabler of sustainable economic growth.

The Deal will also support further capital investment in the Airport, potentially including air traffic management infrastructure as well as modifications to the terminal building and airfield.

To date, the revenue element of the project has been approved to secure the Public Service Obligation which will deliver a new route from Dundee Airport to London City.



Headline Achievements

The revenue part of the Project received Business Justification Case approval from the Joint Committee on 19th February 2021. The project has a number of achievements to date, including:

- Dundee has seen the route to London City established, alongside an additional route to Belfast City. More recently, the airline operating the route has announced that a service to Sumburgh will commence in May 2022, subject to extension of the PSO contract.
- Work is on-going with HIAL to identify potential investment in developing the airport's key infrastructure.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021 and relate to the project as a whole, capturing both revenue and capital activity.

Milestone	Due Date
Evidence of passenger growth to support Development of Full Business Case	As part of Programme OBC submission (see below)
Programme (phase 1 & 2) Outline Business Case approval	First iteration target submission by end Q2 2021, with further iterations following Government feedback

Key Risks

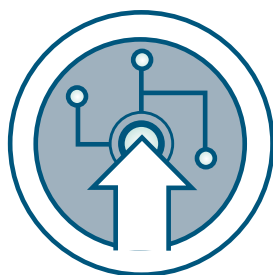
Risk	Mitigation
Failure to attract new routes.	Early and sustained engagement with potential route operators.
Passenger numbers fail to grow	Given the issues of Covid-19 there is a risk that the growth in passenger numbers is not achieved in the first 2 years. Continued monitoring of passenger numbers, support for route marketing and a potential extension to the Public Service Obligation will be considered.
Covid-19 impacts	The impact of Covid-19 on the aviation sector has been significant. The extent to which passenger numbers recover is uncertain. Engagement with airlines and Government to better understand issue and enable response, including route marketing and engagement with business.
Net zero commitments	Engage with airlines to support the early adoption of measures that decarbonise aviation.



Case Study

The project has seen a new Public Service Obligation route being delivered by LoganAir between Dundee airport and London City. It has also enabled a route between Dundee and Belfast City to be established, with a route to Sumburgh also proposed to be added in May 2022.





Digital

Within the Digital theme there are 2 Projects; Rural Angus and Rural Perth and Kinross Highspeed Broadband and 5G Digital Testbeds.

The Rural Angus and Rural Perth and Kinross Highspeed Broadband project has received

Full Business Case approval and the 5G Digital Testbeds project is expected to be approved and in delivery in the last quarter of 2021/22.

£3.8m

Digital Connectivity projects.

£2m

Rural Angus and
Rural Perth & Kinross
High Speed Broadband



Rural Angus & Rural Perth and Kinross High Speed Broadband

Programme Owner	Angus Council & Perth and Kinross Council
Enabling the region to...	Connect
Thematic Board	Digital

Project Description

The UK Government will commit up to £2 million to developing Rural Angus and Rural Perth and Kinross High Speed Broadband. These projects will enhance digital connectivity in rural areas across the region, and will be enhanced by match funding from the UK Government Local Full Fibre Network programme.

Up to £1 million is committed to the Rural Angus project, which will focus on creating a solution to provide remote and rural properties with full fibre and high-quality wireless connectivity.

Up to £1 million is committed to the Rural Perth and Kinross project, which will – in Perth - re-use and extend existing fibre broadband between Perth city centre and a new residential development to the west of Perth. Remaining funding will connect over one hundred rural sites, including rural schools, libraries and museums to gigabit capable connectivity.

Headline Achievements

The Project received Full Business Case approval from the Joint Committee on 18th June 2021. To date, the projects has achieved the following:

- 34 premises in Perth connected to full fibre by Neos Networks by the end of July 2021, two months ahead of schedule
- 140 premises in rural Angus and rural Perth & Kinross connected to full fibre by BT with only 15 premises remaining to be connected by early November
- For the Angus wireless project, plans have progressed for the deployment of wireless at 24 farms and other rural sites.

Key Milestones & Progress

In order to achieve the aims for the project, the next milestones to support its delivery and their status are set out below. The milestones are reflected in the Tay Cities Region Deal Implementation Plan annual review completed in June 2021.

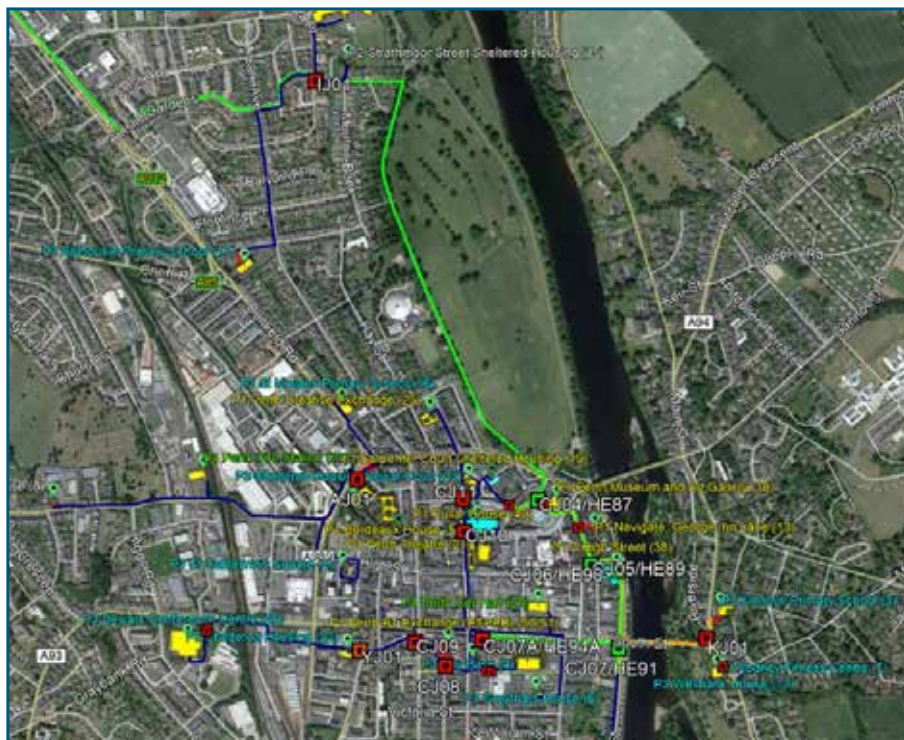
Milestone	Due Date
LFFN Project Completed	November 2021
Angus Wireless project Completed	March 2022
Benefits Realisation Plan/reporting	2021/22

Key Risks

Risk	Mitigation
Procurement process will impact on delivery timescales	Utilise Dynamic Purchasing System (DPS) for Gigabit Capable Infrastructure from Crown Commercial Services working as a framework with suppliers already approved to shorten procurement process. Prioritisation of sites and phasing of project delivery to ensure that DCMS funding is spent by the 30 Sept 2021 deadline (now extended to 12 Nov 2021) and TCD funding can be used on a slightly longer timescale.
Covid-19 impacts	Covid-19 impacts on construction have been mitigated through safe working practices of both operators, particularly on school sites where after and out of hours working is conducted and PPE is used as a matter of course on all sites.
Brexit impacts	The impacts of Brexit are mitigated through the working practices of the contractors in terms of labour and materials resourcing. Full fibre networks will make the Tay Cities area more competitive economically.

The first part of the full fibre network for the Tay Cities connects three of Perth & Kinross Council's key Council data centres and 31 public buildings and community establishments within Perth, as shown in the image. It was completed two months ahead of the scheduled completion date of the end of September 2021 by Neos Networks.

Now the network is fully installed and ready for operations, Neos Network will continue to help maintain this network for the next 20 years, under IRU agreements between the Council and the company.



Year Ahead

Upcoming Milestones

Over the coming year, the Tay Cities Region Deal is committed to various activities relating to the Deal and regional collaboration work. The milestones and key dates are set out below.

Milestones	Target Date
PR & Comms Protocol annual refresh	November 2021
Submission of draft Annual Performance Report following approval by Tay Cities Partnership	December 2021
Regional Economic Strategy Action Plan update	December 2021
New Joint Committee Chair & Vice Chair appointed	December 2021
Benefits Realisation Plan Developed by the end of March 2022	March 2022
Final Annual Performance Report complete following the Annual Conversation	March 2022
Year 2 Programmes and Projects full business case approval by Joint Committee, including: <ul style="list-style-type: none"> - Regional Skills & Employability Development Programme - Regional Skills & Employability Development Projects - Tay Cities Engineering Partnership - 5G Digital Testbeds - Low Carbon Transport and Active Travel Hubs 	March 2022
Refresh of Enterprise Forum	April 2022
Implementation Plan Annual Review	June 2022
Regional Spatial Strategy Review	TBC
Clean Growth Action Plan update - completion of mapping project and launch of the portal	September 2022
Audited Financial Statement and Accounts annual review and update	September 2022
Review of the Governance Structure, Terms of Reference, Membership & Chaining Arrangements for each Governance body annually	Q2 2022/23
Year 3 Programmes and Projects full business case approval by Joint Committee, including: <ul style="list-style-type: none"> - Aviation Academy for Scotland - Angus Fund – CASI Project - Angus Fund – Mercury Drone Port Project - Angus Fund – Rural Mobility Project - Regional Culture & Tourism Programme – Phase 2 Projects 	2022/23

Business Cases & Project Delivery

As the Deal approaches the final quarters of the 2021/22 financial year and its third year of delivery since the Deal was signed, a number of projects will be coming forward to progress their business cases for approval to deliver. The table below outlines the business cases expected to seek Government and Partnership approval between Q2 2021 and Q2 2022.

Descriptions of each project can be found in the Deal Document⁶.

Project	First year of funding drawdown	Status
5G Digital Testbeds	2021/22	Awaiting Government approval of BJC
Low Carbon & Active Travel Hubs	2021/22	Awaiting Government approval of BJC
Tay Cities Engineering Partnership	2021/22	Awaiting Government approval of BJC
Stretch Dome Simulator	2029/30, but accepted accelerated funding to 2021/22	BJC approved by Governments; Partnership approval pending
Regional Skills & Employability Development Programme	2021/22	Awaiting Government approval of Programme OBC
Regional Skills & Employability Development Programme – Digital Skills project	2021/22	Business case in development
Regional Skills & Employability Development Programme – Life Sciences project	2021/22	Business case in development
Regional Skills & Employability Development Programme – Hospitality project	2021/22	Business case in development
Regional Skills & Employability Development Programme – Programme Manager project	2021/22	Awaiting Government approval of BJC (included in Programme OBC)
Perth Innovation Highway	2022/23	Business case in development. Expecting a 2 year delay
Aviation Academy for Scotland	2022/23	Business case in development. Expecting a 6 month delay
Angus Fund – CASI Project	2022/23	Business case in development
Angus Fund – Mercury Drone Port Project	2022/23	Business case in development
Angus Fund – Rural Mobility Hub Project	2022/23	To be developed
Regional Culture & Tourism Programme – Phase 2 Projects	2022/23	To be developed

⁶ <https://www.taycities.co.uk/publications>

Benefits Realisation Plan

Key to the Tay Cities Region Deal is ongoing monitoring and evaluation, which will be progressed as part of the Benefits Realisation Plan. The development of a Tay Cities Benefits Realisation Plan has been informed by the work of the PMO Networking Group's *benefits realisation* sub-group.

Taking account of the Deal's outcomes to secure over 6,000 jobs and lever in £400m of investment, the Plan will set out how the Partnership will measure, monitor and evaluate the associated benefits committed to as part of the Deal as a whole and at project level.

As of 30 September 2021, the Plan is in its early stages of development. With the support of a consultant, analysis and data exchange of existing monitoring information and workshops with projects will be held from October 2021 onwards, with an aim to having a Plan in place for the 2022/23 financial year.

Regional Collaboration

In the next year, the following Regional Collaboration opportunities are likely to emerge;

- Sharing of approach and best practice amongst partners on emerging policies including Community Wealth Building.
- Continuing commitment to deliver business engagement jointly including the Tay Cities Business Barometer, a regular survey of the business community across the wider area, and also Tay Cities Business Month.
- Continued involvement in the Economic Development Practitioners group. This was formed during the pandemic and shared key information & business intelligence providing alignment on administration of business support grants.
- Continuing commitment to deliver Regional Economic Forum and provide oversight of the Regional Economic Strategy.
- Continue to monitor and report on the Tay Cities Regional Economic Strategy Action Plan. The Action Plan was reviewed and revised in light of the COVID-19 pandemic, with the Action Plan being further refined to consider emerging priorities from national and regional strategies and COVID-19 recovery plans. The revised Action Plan will be presented to Joint Committee in December 2020.

Key Challenges

There are a number of key challenges facing the Deal in the coming months. These include:

- Continuing to assess the short, medium and long term risks associated with the impacts of the COVID-19 pandemic.
- An understanding of the wider impacts Brexit has had for projects entering in to delivery including availability of materials, construction costs and labour shortages. Projects due to enter into delivery further down the line may need to consider the scope of the project, accounting for these impacts. Associated inflation at a programme level will also need to be monitored.
- The Scottish Government released Carbon Management Guidance in August 2021. Projects will need to ensure that this is addressed in business cases going forward and how carbon impacts are monitored and evaluated will need to be considered as part of Benefits Realisation planning.
- Greater emphasis on Fair Work. The Scottish Government are consulting on Fair Work from October – December 2021.
- Ensuring timely approval of full business cases for the remaining year 2 profiled projects as well as year 3 projects.

- A shift in the skills and employability environment from local, to a more regional and strategic level to account for the fact that the region has entered into growth mode.
- Continued collaborative working to ensure full drawdown of funding in future years, accounting for the challenges facing the Deal as a result of the COVID-19 pandemic and Brexit.

Programme Management Office

Programme Management Office

Tay Cities Region Deal Programme Manager:
Morag Saunders
Email: morag.saunders@taycities.co.uk

Tay Cities Region Deal Project Manager:
Clare Slater
Email: clare.slater@taycities.co.uk

Tay Cities Region Deal Project Manager:
Lauren Hollas
Email: lauren.hollas@taycities.co.uk

Tay Cities Region Deal Finance
Mark Mitchell
Email: mark.mitchell@dundeecity.gov.uk

Local Authority Extended Programme Management Officers

The Local Authority Extended Programme Management Officer support the Tay Cities Programme Management Office.

Angus Projects

Mark Davidson, Manager – Tay Cities Deal (Angus)
Angus Council
Email: DavidsonMA@angus.gov.uk
Keira Malkowska, Angus Council
Email: MalkowskaK@angus.gov.uk

Perth & Kinross Projects

Alison Seggie, Service Manager
Perth & Kinross Council
Email: alseggie@pkc.gov.uk

Scottish Enterprise

Louise Tobin
Email: Louise.Tobin@scotent.co.uk

Dundee Projects

Rory Young, Team Leader (Business Development)
Email: rory.young@dundeecity.gov.uk

Fife Projects

Morag Millar, Strategic Growth & City Deals
Programme Manager
Fife Council
Email: morag.millar@fife.gov.uk

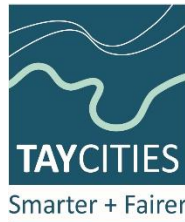
Further Information

Tay Cities Region Deal Website: <https://www.taycities.co.uk/>

Tay Cities Publications, including the Deal Document and regional strategies/plans:
<https://www.taycities.co.uk/publications>

Tay Cities Joint Committee Papers: <https://www.taycities.co.uk/joint-committee>





REPORT TO: TAY CITIES REGION DEAL JOINT COMMITTEE – 11 MARCH 2022

REPORT ON: PROGRAMME MANAGEMENT OFFICE REVENUE (PMO)
OPERATIONAL BUDGET 2022/23 AND PROVISIONAL BUDGET
2023/24 AND 2024/25

REPORT BY: MO SAUNDERS, PMO PROGRAMME MANAGER

REPORT NO: TCRJC8-2022

1.0 PURPOSE OF REPORT

- 1.1. The purpose of this report is to seek approval from the Joint Committee, following Management Group's recommendation, of the Programme Management Office (PMO) agreed operational budget for 2022/23 and provisional operational budget for 2023/24 and 2024/25.

2.0 RECOMMENDATIONS

- 2.1 The Joint Committee is asked to approve the following:
- a) the 2022/23 Revenue Budget for the Tay Cities Region Project Management Office (PMO) as detailed in Appendix A.
 - b) the provisional budgets for 2023/24 and 2024/25.

3.0 FINANCIAL IMPLICATIONS

- 3.1 The four constituent Councils and the HE/FE institutions are required to budget for the 2022/23 contributions to the Tay Cities Region Project Management Office (PMO).
- 3.2 The Partnership is also being asked to consider and agree the provisional 2023/24 and 2024/25 budgets so they can plan and manage their contributions.
- 3.3 A report will be brought back to the Management Group in March setting out a revised structure. It will also look to address the permanency of the current temporary posts. The figures in this report are based on the current approved PMO structure. Sufficient funds are in place through the agreed carryover.

4.0 BACKGROUND

- 4.1 The budget is funded by contributions from the four Local Authorities and the HE/FE Forum community. The funding contributions reflect the re-calculated values due to the commitment from the HE/FE sector, in 2020, to support the PMO.
- 4.2 On the 19th March 2021 Report No TCRJC5-2021 was submitted and presented by the Tay Cities Regional Deal S95 Officer. The report sought the Joint Committee's approval for the Tay Cities Region 2021/22 Revenue Budget and Provisional Revenue Budgets for 2022/23 and 2023/24.

- 4.3 This report is seeking Joint Committee approval on the 2022/23 Revenue Budget, of £343,086 set out in Appendix A. Also included in Appendix A is an indicative Revenue Budget for 2023/24 and 2024/25. These budgets include provision national pay awards and inflation.
- 4.4 At the Management Group meeting on the 28th May 2020, the Group approved the creation of 2 temporary posts within the PMO. On the 26th August 2021, the Management Group approved the extension of the current and future temporary posts to a period of up to 4 years.
- 4.5 The forecast cost of these posts in 2022/23 is £96,099, 2023/24 £98,777 and 2024/25 £104,192. All temporary posts are contracted until the 10th January 2025.
- 4.6 These are being funded from both the Partnerships agreed reserve and by 'ringfenced' funding from the PMO Consultancy Budget. Should any of the funds not be required this will be reported and highlighted to the Management Group. The anticipated balance carried forward at 31st March 2022 is forecast to be £165,480.

5.0 CONCLUSION

- 5.1 The 2022/23 Revenue Budget is enclosed in order that the Joint Committee can consider and approve the Budget and agree the 2022/23 recoveries from the four constituent Councils and other Partners.

6.0 POLICY IMPLICATIONS

- 6.1 This report has been screened for any policy implications in respect of Sustainability, Strategic Environmental Assessment, Anti-Poverty, Equality Impact Assessment and Risk Management.
- 6.2 The budgets included in this report are dependent on partners paying their contribution.

Report author: Mark Mitchell
 Title: PMO Finance
 Email address: mark.mitchell@dundeecity.gov.uk
 Phone number: 01382 307915

Date: 21st February
 2022

APPENDIX A

TAY CITIES DEAL PMO REVENUE BUDGET 2022/23 & PROVISIONAL BUDGET 2023/24 AND 2024/25

	2021-2022 Proposed Revenue Budget £	2022-2023 Provisional Revenue Budget £	2023-24 Provisional Revenue Budget £	2024-25 Provisional Revenue Budget £
Staff Costs				
Gross Pay	157,896	162,555	167,185	173,146
Superannuation	26,842	27,770	28,168	29,631
National Insurance	17,066	17,740	17,957	18,917
Agency Worker	-	-	-	-
Training and Other Staff Costs	2,000	2,000	2,000	2,000
Total Staff Costs	203,804	210,065	215,310	223,694
Property Costs				
Rent	7,490	7,490	7,490	7,490
Supplies and Services				
Printing	500	500	500	500
Stationery	250	250	250	250
Photocopying	500	500	500	500
Computer Consumables	250	250	250	250
Computer Hardware	600	600	600	600
Postages	250	250	250	250
Telephones	500	500	500	500
Hospitality/Venue Hire	250	250	250	250
External Audit Fees	0	0	0	0
Supplies and Services Total	3,100	3,100	3,100	3,100
Transport Costs				
Car Allowances	1,250	1,250	1,250	1,250
Other Transport Costs	750	750	750	750
Transport Costs Total	2,000	2,000	2,000	2,000
Third Party Payments				
External Consultants	80,000	80,000	80,000	80,000
Support Services - Recharges (DCC)	39,638	40,431	41,240	41,240
Gross Expenditure	336,032	343,086	349,140	357,524
Income - Contributions				
Dundee City Council - maximum contribution	(46,935)	(47,942)	(48,807)	(50,005)
Perth & Kinross Council - maximum contribution	(46,935)	(47,942)	(48,807)	(50,005)
Angus Council - maximum contribution	(46,935)	(47,942)	(48,807)	(50,005)
Fife Council - maximum contribution	(23,466)	(23,972)	(24,404)	(25,002)
James Hutton Institute	(67,763)	(69,218)	(70,467)	(72,196)
University of Dundee	(43,718)	(44,657)	(45,462)	(46,578)
University of St Andrews	(28,963)	(29,585)	(30,119)	(30,858)
Abertay University	(12,788)	(13,062)	(13,298)	(13,624)
University of the Highlands and Islands	(8,853)	(9,043)	(9,206)	(9,432)
Dundee & Angus College	(2,186)	(2,233)	(2,273)	(2,329)
Contribution from DCC - Property Costs	(7,490)	(7,490)	(7,490)	(7,490)
Total Income	(336,032)	(343,086)	(349,140)	(357,524)
Net Expenditure	0	0	0	0