

To: Leadership Board

On: 20 February 2019

Report by: Chief Executive

Heading: Glasgow Airport Investment Area Full Business Case and update on AMIDS

1. Summary

- 1.1 This report is to update the Board on the next steps for the Glasgow Airport Investment Area (GAIA) Project including approval to submit the Full Business Case which provides the enabling infrastructure for the development of the Advanced Manufacturing Innovation District Scotland (AMIDS).
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2. Recommendations

2.1 Leadership Board is asked to:

- i) approve the submission of the Glasgow Airport Investment Area Full Business Case to the Glasgow City Region Chief Executives Group for approval subject to the Tender for the GAIA Construction contract being considered and approved by the Finance, Resources and Customer Services Policy Board.
- ii) authorise the Chief Executive to insert into the Glasgow Airport Investment Area Full Business Case the final contract award sum (subject to approval by the Finance, Resource and Customer Services Policy Board) and to make such minor changes to the FBC that may be requested by the City Deal Programme Management Office (PMO) prior to submission to the City Region Chief Executives
- iii) note the potential for the successful delivery of AMIDS in collaboration with our partners to maximise the benefits for Renfrewshire and the City Region.

3. The Glasgow Airport Investment Area Project (City Deal)

- 3.1 The Glasgow Airport Investment Area (GAIA) project comprises the realignment of Abbotsinch Road between Arran Avenue and Greenock Road / Inchinnan Road; a new bridge across the White Cart and improved facilities for cyclists and pedestrians, all aimed at improving connections between the Westway, Inchinnan and Airport Business Parks and as an enabler for the delivery of a world class business and commercial offering located around the airport. The GAIA project includes the provision of cycling infrastructure including a new pedestrian and cycling bridge over the Black Cart water.
- 3.2 GAIA provides the enabling infrastructure for the Advanced Manufacturing Innovation District Scotland (AMIDS) which will house both the new National Manufacturing Institute Scotland (NMIS) and the Medicines Manufacturing Innovation Centre (UK) (MMIC). Members will recall this was previously reported to this board on 20 June 2018.
- 3.3 Planning consent for the main GAIA infrastructure contract was granted on 7 November 2017 under reference 17/0485/PP.
- 3.4 All objections to the Compulsory Purchase Order have been withdrawn and confirmation is expected from Scottish Ministers shortly. Final tenders for the construction works are due to be returned in early February 2019 and, subject to tender evaluation and confirmation of the CPO, will be presented to the Finance, Resources and Customer Services Policy Board on 27 March 2019 for consideration and, subject to approval, construction works are due to commence on site in summer 2019.
- 3.5 The Assurance Framework (AF) that governs City Deal sets out the process that requires to be followed for the preparation, submission and approval of Business Cases for City Deal Infrastructure Projects. Three stages of Business Cases are required by the AF:
- Strategic Business Case (SBC)
 - Outline Business Case (OBC)
 - Full Business Case (FBC)
- 3.6 Subject to Board approval, the Glasgow Airport Investment Area Full Business Case (FBC) (attached in Appendix 1) is scheduled to be presented to the City Region Chief Executives Group meeting on 28 March 2019 for approval to proceed to draw down grant funding to implement and complete the elements of the project set out in the FBC. This is a requirement in line with the City Region City Deal governance.
- 3.7 City Deal Business Cases will be assessed and scrutinised by a central independent assessment team located within the PMO. This team will make recommendations for decision on the Business Cases to the City Deal Chief Executives Group.

- 3.8 Under the AF, each stage of the Business Case requires to be approved by the member authority before being submitted to the Glasgow City Region PMO for appraisal and subsequent approval.
- 4. Advanced Manufacturing Innovation District (AMIDS)**
- 4.1 Significant work has been undertaken to develop the proposition for, and take forward the creation of, the Advanced Manufacturing Innovation District Scotland (AMIDS), centred on the Netherton Farm site. This has included work to create a high profile for AMIDS which has seen AMIDS showcased at a number of high profile national and international investor events and feature in a number of national investment prospectuses. This is already bringing significant international profile to AMIDS and Renfrewshire.
- 4.2 AMIDS comprises the Netherton Farm site (in Council ownership) and both Inchinnan and Westway Business Parks. The enabling infrastructure for AMIDS is being provided through the GAIA project. AMIDS will be anchored by the new National Manufacturing Institute Scotland (NMIS) and the Medicines Manufacturing Innovation Centre (UK) (MMIC) both of which will be located on the Netherton Farm site. The decision to locate these two new national innovation centres here demonstrates the strong manufacturing, locational and skills strengths that Renfrewshire offers.
- 4.3 AMIDS will capitalise on the advanced engineering and manufacturing expertise that exists across multiple technologies in both industry and academia in Renfrewshire and Scotland and will further strengthen that capability to create competitive advantage for existing and new companies to remain globally competitive, and drive inclusive, sustainable growth in the Scottish economy. The development of AMIDS has the potential to create thousands of new jobs in Renfrewshire, if managed well and with active support and cooperation of all partners.
- 4.4 The City Deal team is continuing to work closely with key partners, including Scottish Government and Scottish Enterprise, to take forward the development and delivery of AMIDS. Terms of Reference to deliver AMIDS in partnership over the next ten years has now been agreed and signed between the Council, Scottish Enterprise and Scottish Government and work will continue to develop the optimum delivery model for AMIDS and to maximise the opportunities that this will create for Renfrewshire and the City Region. Members will be kept updated as work on AMIDS progresses.
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Implications of the Report

1. **Financial** – There are significant financial implications arising from the Council's participation in City Deal. These are set out in detail in section 6.13 of the report approved by Council on 14 August 2014. The GAIA project budget confirmed at the OBC stage following detailed cost estimates remains at GAIA (£39.1m).

2. **HR & Organisational Development** - none

3. **Community/Council Planning** –

- *Our Renfrewshire is thriving* – The AMIDS development will facilitate new development opportunities and business growth with both projects improving educational and health opportunities for people within the local communities as well as aiding employees to access these major existing and new employment centres.
- *Our Renfrewshire is well* - The new safer walking and cycling infrastructure will help encourage active travel by children and young people, as well as adults.
- *Reshaping our place, our economy and our future* - The completed GAIA and CWRR infrastructure will provide connectivity and access to new and existing jobs for people in our communities. During the project construction period hundreds of new jobs will be created and as a result of new business creation it is estimated that thousands of additional new permanent jobs will be created.
- *Tackling inequality, ensuring opportunities for all* – the successful labour market programmes have targeted hard to reach citizens.
- *Creating a sustainable Renfrewshire for all to enjoy* - The completed infrastructure will include segregated provision for walking and cycling. It will also enable improved public transport links.
- *Working together to improve outcomes* - Officers are working closely with Scottish Government and Scottish Enterprise and other partners to take forward the delivery of NMIS which will anchor the AMIDS development.

4. **Legal** - none

5. **Property/Assets** – land acquisition as set out in this report

6. **Information Technology** - none

7. **Equality & Human Rights** -

- (a) The Recommendations contained within this report have been assessed in relation to their impact on equalities and human rights. No negative impacts on equality groups or potential for infringement of individuals' human rights have been identified arising from the recommendations contained in the report because it is for noting only. If required following implementation, the actual impact of the recommendations and the mitigating actions will be reviewed and monitored, and the results of the assessment will be published on the Council's website.

8. **Health & Safety** - none

9. **Procurement** – the GAIA Project tenders will be taken to FRPB for approval
 10. **Risk** – Project specific and Programme level risk registers have been established. These will be kept under regular review and reported to the Council's internal City Deal Programme Board.
 11. **Privacy Impact** - none
 12. **COSLA Policy Position** – not applicable
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List of Background Papers

none

SMcF/BW
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APPENDIX 1 – Glasgow Airport Investment Area Full Business Case



GLASGOW CITY REGION CITY DEAL



GLASGOW AIRPORT INVESTMENT AREA PROJECT Full Business Case v 1.0

presented by



Version	Description	Date	Author	Approved
1.0	Version for RC Leadership Board	February 2019	City Deal Project Team	SMcF

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1 EXECUTIVE SUMMARY

In December 2016, Version 1.0 of the OBC was approved by the GCR City Deal Cabinet. Part 2 Section 3.2.1 of the Assurance Framework notes that, *“A Business Case is a dynamic document that evolves over the lifecycle of a project. All projects must be driven by a Business Case which identifies the rationale for the project and is regularly updated at key stages of the project.”*

Between January 2018 and October 2018, the Outline Business Case was updated to include additional information which became available during the project progression. The updated OBC was also reviewed by consultants (Ekos) appointed by the PMO to assess its effectiveness in relation to HM Treasury Green Book Guidance. In December 2018 the augmented OBC (v 2.4) was approved by the GCR City Deal Cabinet.

This Full Business Case (Rev 1.0) develops the approved OBC (v2.4) following the procurement process necessary to deliver the relevant physical interventions, set out in this FBC, outlined and approved within the OBC.

1.1 Strategic Need for the Project

The industrial heritage of Renfrewshire has left large areas of derelict and underused land. Attempts to regenerate such sites have proved challenging due to the poor infrastructure connections between these areas, the wider community, key facilities and strategic networks. This challenge together with the overall poor environmental quality of these areas, has contributed to low market interest in development, with their preference being for investment in areas with lower risk. There are a number of areas within Renfrewshire with deep-seated poverty and deprivation, and where people suffer significantly worse outcomes in terms of health, well-being, employment prospects, security and quality of life compared to other areas. Across Renfrewshire it is estimated that 7000 children (21%) are living in poverty.

Renfrewshire has a number of assets which could attract businesses and major private investment to the area, which, with other supporting interventions, would generate the economic conditions to improve the conditions and opportunities for individuals in the area. These assets include its workforce, its range and choice of properties and locations, and its strong reputation for learning and innovation. Although strategically well located, a number of barriers exist for economic growth in the area and the projects being progressed within the City Deal agreement directly tackle these barriers.

The Glasgow Airport Investment Area (GAIA) is identified as a Strategic Economic Investment Location in the Glasgow and Clyde Valley Strategic Development Plan *Clydeplan* 2017. GAIA presents a major opportunity to create a world class business and commercial offering around the airport, which is one of the biggest employers in the area, with nearly 10 million passengers per annum. The airport is a key component of the City Region's and Scotland's economic infrastructure and has been identified as a key driver of the City Region economy. It is the City Region gateway for International travel. GAIA is in close proximity to the M8 motorway as well as key locations with considerable potential for economic growth such as the Airport, Westway and Inchinnan Business Parks, Paisley and Renfrew town centres and the University of the West of Scotland and West College Scotland campuses.

The area contains a plentiful supply of vacant and underused land with considerable potential for delivering a powerhouse for economic growth around the airport, in line with the successful model implemented in Manchester. However, there are a number of existing barriers to growth and connectivity that are hindering the realisation of the potential of the Glasgow Airport Investment Area vision and that of the overall project area. These include poor access to, and between, potential development sites and an inferior environmental quality. Moreover, further airport development and growth requires relocation of hangar and related space to enable service related elements to be expanded closer to the main terminal and other facilities. Linked to implementation of the GAIA infrastructure, the release of land at Netherton Farm will also enable this.

Delivery of the various infrastructure elements of this project will act as a catalyst for the development of the Glasgow Airport Investment Area, providing considerably enhanced connectivity to and between the existing business parks and key economic development sites clustered around the Airport, it will also improve access across the Cart Corridor, whilst also enabling the continued growth and expansion of Glasgow Airport as a key gateway for business and tourists.

The GAIA project responds to identified issues, each of which directly link to agreed GCR Infrastructure aims:

- The need to improve access to vacant land to stimulate employment based investment around Glasgow Airport.
- The need to improve connections between the employment centres in the North Paisley, Renfrew and Inchinnan area, including across the White Cart river, to improve their interaction and effectiveness.
- The need to improve the environmental quality of the area to stimulate high quality investment.

A range of options have been considered to inform the selection of the preferred City Deal project interventions. These options have been appraised against a range of factors to determine the likelihood of each option unlocking the area's development potential and creating GVA, with additional consideration given to potential wider regeneration benefits and the disconnection between areas around the North Paisley, Renfrew, Inchinnan area and across the White Cart river.

- Option 1 - Do nothing
- Option 2 - Do minimum : Minimal Realignment of Abbotsinch Road
- Option 3 – Realign of Abbotsinch Road to suit masterplan development
- Option 4 - Realign of Abbotsinch Road to suit masterplan development plus the inclusion of a spur road and new bridge over the White Cart River
- Option 5 – Realign of Abbotsinch Road to suit masterplan development plus the inclusion of a spur road and new bridge over the White Cart River plus the inclusion of a new bridge over the White Cart River in the Paisley Harbour area with associated access infrastructure
- Option 6 – Realign of Abbotsinch Road to suit masterplan development plus the inclusion of a spur road and new bridge over the White Cart River including walking, cycling and public transport link
- Option 7 - Realign of Abbotsinch Road to suit masterplan development plus the inclusion of a spur road and new bridge over the White Cart River including walking, cycling and public transport link complete with utilities and other servicing infrastructure provided to allow “shovel ready” sites for potential development.

This project, by delivering a marked improvement in connectivity through infrastructure investment, will drive change in the area and provide significant additional economic activity and GVA. The announcement by Scottish Government in mid-2017, confirming the location of the Lightweight Manufacturing Centre (LMC) at Westway and subsequently that the National Manufacturing Institute Scotland (NMIS) (December 2017) and the Medicines Manufacturing Innovation Centre (MMIC) (June 2018) will be located at GAIA, demonstrates that the vision for development is beginning to be realised. The infrastructure underpins these initiatives. Indeed, the proposed GAIA City Deal project has been a key element in the decision to locate NMIS and MMIC in the area. Work is already underway to ensure that these investments act as a catalyst for the delivery of Scotland's advanced manufacturing district at GAIA – the “Advanced Manufacturing Innovation District Scotland” (AMIDS).

GAIA infrastructure has also been instrumental in helping generate recent investor and occupier interest at Westway. While to date this interest has been primarily related to logistics and distribution operators and M8 proximity, moving forward GAIA and the establishment of AMIDS are intended to build the area's profile as a centre for higher value manufacturing and related business.

As part of the GAIA project development planning applications were sought for the infrastructure works included in the project. In November 2017, consent was obtained for the primary elements of the project, including all those required to permit the progression of NMIS. In August 2018, planning consent was granted for the cycle / pedestrian bridge over the Black Cart river and adjacent elements of cycle infrastructure.

1.2 Options Appraised

For the Strategic Business Case, an initial and high level desk based qualitative assessment of infrastructure interventions, which could potentially achieve the project and wider City Deal objectives, identified options to be considered further at Outline Business Case stage.

The Outline Business Case further developed and assessed the options identified at SBC stage in greater detail, taking into consideration the likely environmental, engineering, economics, traffic effects and relative value for money of alternative proposals, with the aim of identifying preferred options for each infrastructure intervention and finalising the scope of the project, within the overall available City deal funding envelope.

1.3 Proposed Solution

Within the Outline Business Case, the options were appraised based on research and investigation of physical, technical, and environmental aspects as well as incorporation of elements noted by stakeholders and the public. This process identified Option 6 as the preferred option to address the project and the wider City Deal objectives.

Option 6 (the preferred option) includes the following core elements:

- Realignment of Abbotsinch Road (Option A02), with the final alignment developed in consultation with the project Masterplanning Consultant, the Lead Consultant and key stakeholders.
- A new bridge over the White Cart Water between Wright Street and Abbotsinch Road.
- A new segregated off-road cycleway (Option I04 - to the south of Greenock Road) between Inchinnan Business Park and the Rolling Lift (Bascule) Bridge at Inchinnan Road.

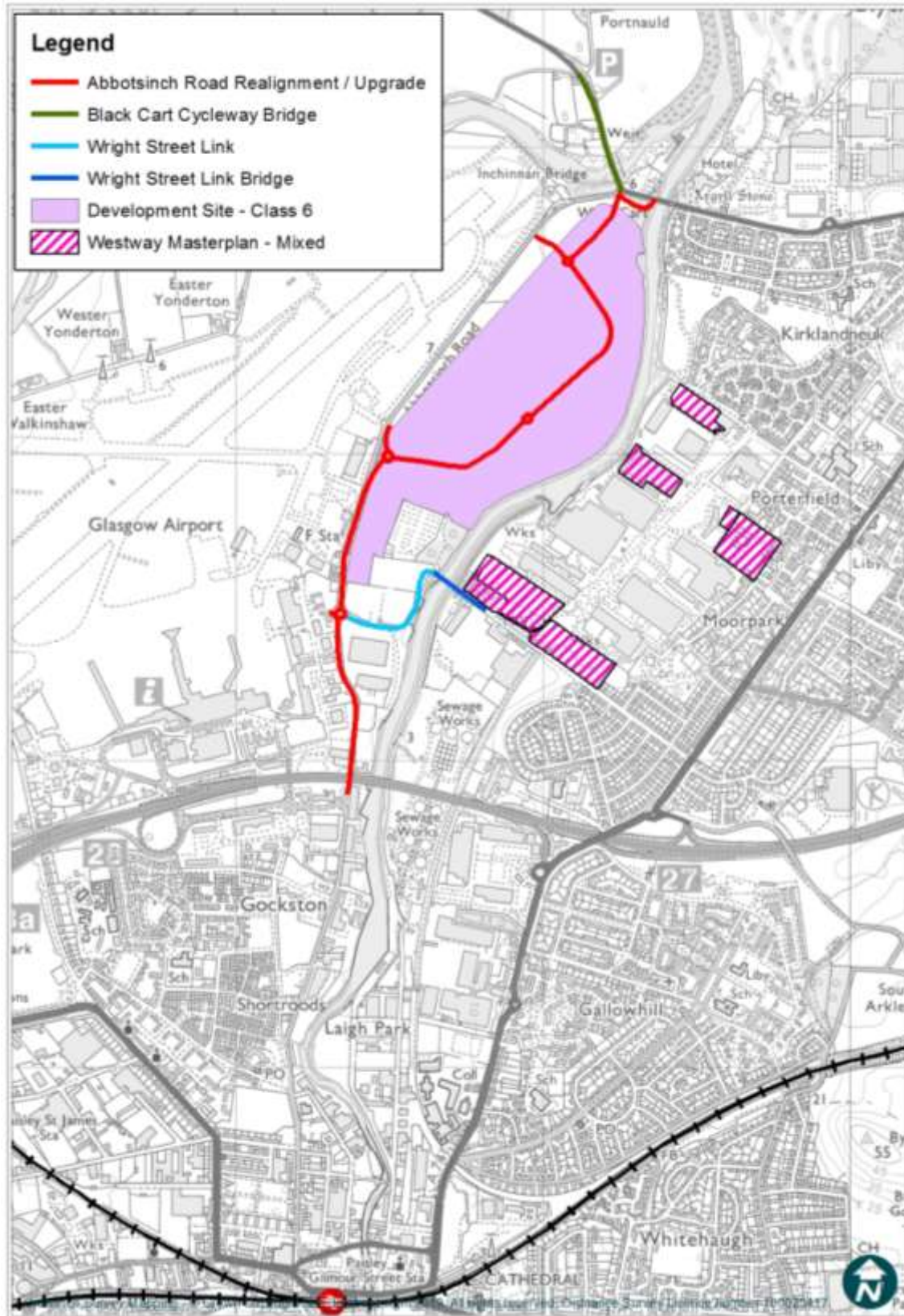


Figure 1.3.A - Indicative Overview of GAIA Project

During development of the preferred option and progression of the statutory consents and land acquisition, additional feedback from local landowners and elected members, led to reconsideration of the segregated cycleway planned to link the Black Cart Cycle bridge with Inchinnan business park. A revised proposal for this section of the project, which entails the cycle route extending from the north side of the new cycle bridge, to a new Toucan crossing on Greenock Road, and linking to existing infrastructure on the north side

of Greenock Road has been developed. This change in design does not adversely impact any of the project outcomes in either benefit delivery or economic output. Core servicing elements to facilitate the delivery of NMIS and MMIC have also been developed in consultation with the partners for these national developments.

Following a detailed procurement exercise and subject to approval of this Full Business Case, it is anticipated that construction will start during May 2019 with the infrastructure interventions completed and operational by December 2020.

1.4 Forecast Costs

The current project cost is £TBCmillion. These costs are based on the final tendered costs together with all other project related costs which are detailed in section 7.4. Provision for quantified risk and general contingency equating to £TBCm has been included based on the assessed residual risk associated with the project and replaces the optimism bias provision which was included in the OBC estimates. The phasing of the project expenditure is set out in more detail in Appendix C and in Section 7 of this FBC.

The current funding sources for the project costs of £40.651million are £39.049million, from the City Deal Fund (86/14 split grant and member authority contribution) and £1.603m from secured third party contributions. Financial aspects are more fully described within Section 7.

In order to progress the compilation of this Full Business Case, approval was received from Cabinet in December 2016 to progress further expenditure up to £6.640m (further to previously approved expenditure of £2.72m to OBC submission) to support the delivery of enabling works in relation to service diversions, land acquisition, tender design, external consultancies and internal design and management costs (total £9.360m by Full Business Case submission). To ensure Green Book compliance an augmented OBC (v 2.4) was approved by CEG in November 2018 and Cabinet in December 2018. The augmented OBC made no change in the overall projected expenditure to FBC submission stage, however the breakdown by cost element did change from the original OBC approved in December 2016. This FBC now seeks approval for the balance of the GCR City Deal funding of £29.688m to commence and complete the construction and delivery of the project. This approval with the secured 3rd party funding will provide the total funding for the project expenditure of £40.651m.

Following the procurement exercise and finalisation of land acquisition and other project aspects, full details of the projected cost breakdown are detailed in Section 7 (Table 7.4.1) of this FBC.

1.5 Contingency Plan

In the absence of this City Deal project being delivered, Renfrewshire Council will continue to work closely with all key public and private sector partners and agencies to attempt to ensure that some degree of development and regeneration momentum is built up and maintained for the key strategic development sites identified as benefiting from this project in the Glasgow Airport Investment Area.

However, given the development history in the area and the need for certain interventions to allow for necessary development, together with the legacy of vacant, underused and stalled sites, it is unlikely that, in the absence of this project, the vision for the area will be realised. Notwithstanding this, without the City Deal funding, the Council would utilise the full range of planning, policy and strategy levers at its disposal to attempt to deliver economic growth for the project area, including seeking sources of external funding to deliver elements of the project and other complementary projects, such sources of funding are however limited and their delivery unpredictable. Such an approach, though important, is therefore highly unlikely to deliver the number of high value jobs, businesses and sustainable community developments that will be attracted through the City Deal investment. Nor will such an approach deliver NMIS nor MMIC within the timescale required by those initiatives, or achieve the wider vision for the area, as the Advanced Manufacturing Innovation District Scotland (AMIDS).

1.6 Proposed Team and Project Management Arrangements

In addition to the overall City Deal governance arrangements, Renfrewshire Council has developed and implemented a robust internal governance structure for the management and oversight of the City Deal projects within Renfrewshire. A City Deal Programme Board has been established, chaired by the Chief Executive, and attended by relevant Directors and Heads of Service. A dedicated City Deal Project Team has been set up by the Council to manage the delivery of the projects within Renfrewshire, under a City Deal Project Director. A dedicated Project Manager has been appointed to manage the delivery of this project, supported by the City Deal project team and by the wider Council virtual team.

1.7 Project Contribution to the City Deal Economic Case

The project directly contributes to the economic outcomes of the GCR City Deal by delivering a significant uplift in GVA at programme level, as calculated by consultants KPMG on behalf of the GCR City Deal Cabinet, as set out in the Programme Business Case. As part of the overall City Deal programme, the project will also deliver net additional employment, private sector investment and net additional tax revenues.

The project enables a range of benefits through improved infrastructure and better connections between businesses and communities, as well as improved access to undeveloped land assets. In addition to the infrastructure delivered, the potential projected benefits include:

Development benefits

- Vacant and derelict land brought back into use (hectares) 59.6 ha (total development land)
- Land remediated (hectares) 11.4 ha
- Industrial Space 88,270 sqm
- Office Space 35,011 sqm
- Food and Drink Space 1,760 sqm

Private Sector Investment

- £122.9 million (non-discounted)

Jobs Created

- 635 net direct construction jobs, of which 160 are estimated to be created from the construction of the project and 475 from the construction of development enabled or accelerated by the project,
- 1,755 net direct operational jobs within the City Region.

The project will also provide a more efficient and better connected transport system, improving the mobility and opportunities for the area's workforce and enhance the attractiveness of the area to inward investment.

As set out earlier GAIA infrastructure is fundamental to the delivery of within the GCR of the National Manufacturing Institute Scotland (NMIS) and the Medicines Manufacturing Innovation Centre (MMIC) which will provide the catalyst for the new Advanced Manufacturing Innovation District Scotland (AMIDS).

1.8 Value for Money

The project can clearly demonstrate value for money on a number of levels, mainly in terms of the increased private sector investment, including associated jobs, that will follow on from the planned infrastructure and environmental improvements. Despite the GAIA project being aimed at providing better transport connectivity within a localised area, and as such would not normally be subject to a traditional Transport Economic Evaluation (TEE), a detailed traffic modelling exercise has been undertaken to assess the positive transport impacts and benefits that the project will deliver, both on its own and in conjunction with

the complementary Clyde Waterfront and Renfrew Riverside (CWRR) project. This together with improvements in travel time reliability, improved connectivity between key destinations and local communities, improved links to public transport routes and potential to encourage a modal shift away from cars to public and active travel options make a strong case for value for money from this project.

Calculation of GVA was undertaken at a programme level on behalf of the GCRCB Cabinet. Work undertaken at a project level, to examine the potential GVA of the project, ignoring links to other interventions and complementary projects, indicates total net direct GVA of £498.9million as a consequence of the resulting development following completion of the project. This estimate of GVA is based on a relatively modest assessment of outcomes from the project.

1.9 Business Case Appraisal Criteria

The PMO Business Case Appraisal Criteria states that 'Business Cases will be appraised in relation to the extent to which all requirements have been fully achieved. This FBC has been structured to specifically address the appraisal criteria as set out in the Assurance Framework and the additional programme economic case questions taken from the latest Business Case Appraisal Template.

To aid the review of this document against the particular requirements set out in the Assurance Framework and appraisal template, Table 1.9-1 below provides the locations within this FBC, where each of the business case requirements is addressed.

Table 1.9-1- Business Case Requirement references

Business case section	Sub-section	Business case requirements – appraisal questions	Location of Information within the Business Case
1. Strategic case	1.1 Strategic Need	1.1.1 Has the problem, and the need that will be met by the project, been clearly described, quantified (where relevant) and evidenced? Does this first section in the BC give enough information and evidence to establish the strategic need for intervention?	Section 3.2
		1.1.2 Does the upfront section in the FBC identify the total project costs – specifically showing total CD/ MA costs (86/14%) and how much of this is needed to develop the project to the next BC stage?	Executive Summary, Section 1.4
		1.1.3 Is there a clear description of the market failure(s), including how the project will address the root cause rather than the symptoms of the MF?	Section 3.2.3
		1.1.4 Has the rationale for the intervention/for new investment by the public sector been clearly articulated?	Section 3.2.4
		1.1.5 Based on strategic need, has the case for why the project is needed now been provided?	Section 3.2.5
		1.1.6 Has the consequence of not delivering the project i.e. policy off/ counterfactual case been explained?	Section 3.2.6
	1.2 Strategic And Policy Context For The Project and Contribution to the City Deal	1.2.1 How has the fit with UK, Scottish, Regional and Local policy been demonstrated? Does this describe how the project contributes to the policy aims rather than simply list the policy objectives? Are all relevant policy/ strategy docs covered relating to the identified needs (Qs1.1) and the project interventions (Qs1.5)	Section 3.3 Table 3.3.1
		1.2.2 How has the fit with the strategic objectives of the City Deal Programme been demonstrated e.g. will the project support the development of key growth centres, strategic employment sites, creation or maintenance of economically important routes? Does this describe how the project contributes to CD Programme aims?	Section 3.3.1
	1.3 Project Objectives	1.3.1 Has a clear description of the project and its objectives been provided?	Section 3.6.1

Business case section	Sub-section	Business case requirements – appraisal questions	Location of Information within the Business Case
		1.3.2 Have SMART objectives been provided (Specific, Measurable, Achievable, Realistic, Time-related)? Are these clearly presented in tabular form for each objective?	Section 3.6.1
	1.4 Existing Arrangements	1.4.1 Have existing arrangements including those which currently deliver comparable outputs been outlined? Does this relate to the objectives listed at Q1.3.2?	Section 3.4
	1.5 Project Summary	1.5.1 Has a clear description of what the project will deliver been provided? Does this include description of what City Deal funding will be spent on and what is expected of others?	Section 3.7
		1.5.2 Has a clear explanation of how the project differs to any current interventions/existing arrangements (as defined at Q1.4.1) been provided?	Section 3.4
		1.5.3 Has a clear description of how the project will be implemented including what the money will be spent on, been provided?	Section 3.7.4 Appendix G
		1.5.4 Has a clear case been made for how the project addresses all the areas of need as described at Q1.1.1?	Section 3.5 Section 3.7
		1.5.5 Has a clear description of what constitutes success been provided? Does this include Critical Success Factors against which options can be appraised?	Section 3.8
		1.5.6 Has any evidence demonstrating the success from similar projects been provided (including monitoring and evaluation evidence, lessons learned or pilots) and how have these lessons been incorporated into the project? If not, why not?	Section 3.9
	1.6 Dependencies and Constraints	1.6.1 Have all relevant internal factors on which the successful delivery of this project are dependant been identified? How will they be managed?	Section 3.10
		1.6.2 Have all relevant external factors on which the successful delivery of this project are dependant been identified? How will they be managed?	Section 3.10
		1.6.3 Have all relevant factors that place demands on the project (constraints) been identified? How will they be managed?	Section 3.10
	1.7 Stakeholders	1.7.1 Have the main stakeholder groups and their contribution or interest in the project been identified?	Section 3.12.1
		1.7.2 Is there a description of whether the project will create benefits/ dis-benefits for stakeholders, and how?	Section 3.12.1
		1.7.3 Have conflicts between stakeholder groups and their demands been identified? How will they be managed?	Section 3.12.1
	1.8 Risk	1.8.1 Is there robust analysis of the potential risks that might arise? How were the risks identified and appraised?	Section 3.13
		1.8.2 Has a detailed risk management plan been developed for all elements of risk – is it robust and up-to-date? Has it been developed in line with the Assurance Framework and is a copy appended?	Section 3.13 App D
		1.8.3 Have relevant internal risks been identified in risk register? Are the key internal risks summarised in the BC?	Section 3.13 App D
		1.8.4 Have relevant external risks been identified in risk register? Are the key external risks summarised in the FBC?	Section 3.13 Appendix D
		1.8.5 Have all risks been included, appraised and scored on the project risk register with appropriate mitigating actions? Financial/ economic/ legal/ reputational/ planning/ etc	Section 3.13 Appendix D

Business case section	Sub-section	Business case requirements – appraisal questions	Location of Information within the Business Case
		1.8.6 Does the project create any new risks, or increase risks, for the City Deal Programme? If so, have these been identified, fully appraised with mitigating actions, and incorporated into the Risk Register?	Section 3.13 Appendix D
2. Economic Case	2.1 List of options	2.1.1 Is there a reasonable range of options covering what/ when/ who/ how/ where? Has there been any change since SBC? Is there a long-list and clear rationale for selection to a short-list for detailed appraisal?	Sections 4.4
		2.1.2 How were the short-listed options selected and appraised? Who was involved, what was the process?	Section 5.2
		2.1.3 Did options definition include analysis of potential alternatives around scope, procurement, service delivery, implementation and funding?	Section 4.4
		2.1.4 Have the alternative options been costed – capital and revenue for direct public costs, and capital for direct follow-on investment?	Section 5.3
	2.2 Additionality	2.2.1 Have deadweight, displacement, leakage and substitution effects been identified at the Member Authority, City Region and Scotland levels for each of the short-listed options? Have the assumptions for the values used been presented – are these realistic?	Appendix N
		2.2.2 Does the analysis of additionality present a robust case on the need for public sector intervention? Has consideration been given to the amount of activity/ outcomes that would happen without the project – does this link with Q1.1.5?	Section 5.2 Appendix G2
	2.3 Benefits	2.3.1 Have gross and net benefits for each of the short-listed options been identified and quantified at the Member Authority, City Region and Scotland level? What dis-benefits will arise, and can these been mitigated?	Section 5.2 Section 5.3
		2.3.2 Have the wider qualitative benefits and dis-benefits arising from each option been listed and clearly described? Does this include all relevant items?	Section 4.3 Section 5.2
		2.3.3 How have qualitative benefits been assessed e.g. using a weighting and scoring approach?	Appendix B2
		2.3.4 Has the timescale for the realisation of benefits/ dis-benefits been provided?	Appendix B2
		2.3.5 Does the text clearly describe the assumptions used in calculating benefits/ dis-benefits?	Appendix B2
		2.3.6 Are there any distributional/ equity factors for benefits that will impact on selection of the preferred option? Are these critical in the decision on preferred option?	Section 5.6
		2.3.7 Have clear measurement, monitoring and evaluation plans been identified to track the delivery of each stated benefit? Is this taken forward to Qs5.7?	Appendix B1 – B3
		2.3.8 Is there clarity on which benefits will be generated as a direct result of City Deal project investment, and those that are generated as a direct result of subsequent action by others e.g. follow-on private or public sector investment?	Section 5.3

Business case section	Sub-section	Business case requirements – appraisal questions	Location of Information within the Business Case
	2.4 Cost / Benefit Analysis	2.4.1 Are all costs (specifically capital and revenue costs) and benefits quantified ¹ and if not has this been justified? Are these presented as gross and net costs/ benefits over the time period that they will arise and also as discounted totals?	Section 5.3
		2.4.2 Is there a robust and consistent approach to appraising Cost-Benefit outcome – using net results with NPV calculated correctly (including discounting at 3.5%) – for each option?	Section 5.3
		2.4.3. Has Value for Money (VfM) been appropriately presented using (as a minimum) the following ratios: <ul style="list-style-type: none"> - NPV of: net economic benefits divided by the total economic costs (public and private) - NPV of: net economic benefits divided by the total public costs – capital and revenue 	Section 5.3
	2.5 Options appraisal	2.5.1 Have all potential options been compared using a SWOT (or STAG, or other robust approach) analysis? Is this consistent for each option, and robust?	Section 4.3
		2.5.2 Does the analysis include clear scoring of options – quantifiable/ qualitative benefits, contribution to objectives, CSFs, key risks, impacts, etc? Does this include valuation of the net benefits and costs associated with each option?	Section 4.4
		2.5.3 How has ruling out of options been justified – is this clear and robust?	Section 5.3
	2.6 Preferred option	2.6.1 Has evidence been provided demonstrating that the preferred option achieves all project objectives?	Section 4.5
		2.6.2 What evidence has been provided demonstrating that the preferred option provides the best Value for Money? If not, do un-quantified and/ or distributional benefits (as presented at Q2.3.2 and Q2.3.6) justify the higher cost and/ or lower benefits?	Section 5.3
	2.7 Sensitivity and risk profile	2.7.1 Has appropriate sensitivity analysis been completed, including worst case scenario? Is there a clear rationale for the upper/ lower range used for sensitivity, or if arbitrary values have been used is this justified?	Section 5.6
		2.7.2 Has the MA given appropriate consideration to the need for switching values analysis where projects carry high risk of not achieving stated benefits (i.e. assumptions behind the economic appraisal are not robust or carry high level of risk), high optimism bias rate needed for cost, and/ or where the Benefit to Cost Ratio (BCR) is close to 1:1?	Section 5.6
		2.7.3 Linked to results at Qs1.6 and Qs1.8, have all <u>economic</u> risks, constraints and dependencies been identified, managed and allocated in the risk register, and are the key economic risks listed in FBC, with mitigating actions?	Appendix D
		2.7.4 Is there a clear description of, and allowance taken for, optimism bias (for costs and benefits) and has it been aligned with the overall risk of the project? How have optimism bias factors	Section 5.3

¹ Including: correct discount rate; figures in real terms/constant prices at base year, sunk costs excluded; opportunity costs of already-owned assets included; residual values included; double counting avoided; transfer costs / benefits excluded; uses only economic resource costs (payment good/service); Financing items/sources excluded; second round effects included (e.g. only genuine job creation); Tax/subsidy treatment must be non-distorting between options.

Business case section	Sub-section	Business case requirements – appraisal questions	Location of Information within the Business Case
3. Commercial Case		been calculated, and has this changed since OBC as more detail on the project is known? Is further change expected?	
		2.7.5 Are all relevant wider positive and negative impacts presented and assessed e.g. sustainability, competition, regulatory impact?	Appendix D
		2.7.6 On completion of sensitivity analysis, is there final confirmation that the preferred option remains preferred, and all relevant risks and sensitivities are understood and clearly articulated?	Section 5.6
	3.1 Commercial Aspects	3.1.1 How does the preferred option address the needs of all parties and project partners – the Member Authority, the City Deal, other direct funders, and wider project partners (including those that are expected to deliver activity or outcomes as a result of City Deal investment)?	Section 6.1
		3.1.2 Have funding options been outlined and fully considered for the preferred option? Have appropriate alternative funding sources been explored and included/ discounted, if not why not?	Section 6.5
		3.1.3 If appropriate, have alternative arrangements been identified where any required follow-on private/ public sector funding does not occur at the required time? Is there a description of the extent to which the project benefits/ outcomes (as described at Q2.3.8) are dependent on this private sector investment?	Section 6.2
		3.1.4 What is the commercial demand for the outputs generated by the project e.g. if CD investment is for infrastructure that will release/ improve land for development, what is the evidence of demand for this land?	Section 3.7.2
		3.1.5 Where payments are to be made to external parties (including consultants/ contractors/ developers), what are the planned payment processes, and are they clearly described?	Appendix H
	3.2 Procurement Strategy	3.2.1 What is the procurement strategy, has it been clearly articulated in the FBC and is the procurement process in line with relevant regulations? Does this section clearly describe what will be procured, by who, when, and how?	Appendix H
		3.2.2 What is the justification for the proposed procurement approach?	Section 9.1
		3.2.3 Has the body (or bodies) which will manage and deliver the project been clearly identified? If this is not the member authority, how will the MA retain control of contract finance, quality, timescales, etc?	Appendix 9.1
		3.2.4 What is the evidence demonstrating that the delivery body, and the key staff within that body, have the relevant skills and capacity for procurement?	Section 9.1
		3.2.5 What evidence has been provided demonstrating that the delivery body is the most effective body to deliver the project?	Section 9.5.2
		3.2.6 Relevant to the level of investment being made, how robust are the proposed contracting arrangements?	Appendix H
		3.2.7 If the project involves grant to a third party, how will the MA ensure that the project delivers outcomes on time, at scale, to quality, etc?	N/A
		3.2.8 Have clear contractual key milestones and delivery dates been provided?	Appendix H

Business case section	Sub-section	Business case requirements – appraisal questions	Location of Information within the Business Case
		3.2.9 Linked to the results at Qs1.8, have all commercial risks been identified, managed and allocated in the risk register, and are all the key commercial risks listed here, with mitigating actions?	Section 9.5.3 Appendix D
4. Financial Case	4.1 Financial appraisal	4.1.1 Is there a clear description of project costs (split by individual element, including work to complete the project to FBC) and project funders – phased over the delivery timescale? Does this clearly identify the direct City Deal costs (split 86% / 14%), other direct public sector costs and direct follow-on investment needed to achieve the benefits presented at Qs2.3?	Section 7.1 – 7.4
		4.1.2 Will all project benefits be achieved with the project costs listed at Q4.1.1, or is there a need for additional follow-on investment at a later date to deliver the benefits (e.g. property development)?	Section 5.3
		4.1.3 Has evidence been provided demonstrating that full budget funding has been secured and budgeted for by all parties – the Member Authority, other direct project funders, other follow-on investment? Does this clearly show the 86% / 14% split in direct costs?	N/A
		4.1.4 Have appropriate benefit and monitoring evaluation costs been described and quantified, covering the full City Deal period to 2035?	Section 7.4
		4.1.5 Have the impacts on Member Authority income/expenditure a/c and on balance sheet been provided if applicable? Does this specifically include ongoing revenue costs to MA or other public sector organisation?	Section 7.7
		4.1.6 How have potential cost over runs been considered and provided for? Have these been appropriately tested in the Sensitivity Appraisal, and included in the Risk Register? Have financial risks been identified, managed and allocated?	Section 7.9
		4.1.7 How will VAT will be treated? Is there a description in FBC of applicable VAT risks, and if so are they included in the Risk Register?	Section 7.9
		4.1.8 Have any guarantees been provided, or financial agreements made? Does this cover direct project funding or follow-on investment? Are these guarantees from the Member Authority to third party, or vice-versa? How substantial are these agreements, and to what extent is the project's success dependent on these guarantees?	Section 7.9
		4.1.9 Linked to results at Qs1.8, have all relevant financial risks been identified, managed and allocated in the risk register, and are the key financial risks presented here, with clear mitigating actions?	Section 7.9
6. Management Case	6.1 Project Roles	6.1.1 Have project roles and responsibilities been clearly stated? Is it clearly demonstrated that the team members have appropriate skills and experience to manage, deliver and oversee the project?	Section 9.2 Appendix E
	6.2 Project governance Structures	6.2.1 Have project roles and responsibilities been clearly stated in relation to approval processes within the Member Authority? Linked to financial and procurement topics, does the analysis include relevant consideration of governance upwards (to PMO and Governments) and also downward below MA to project delivery?	Section 9.2 & 9.3
		6.2.2 Have robust project management arrangements been clearly stated in relation to the operational delivery and future management of the completed project within the Member Authority?	Appendix F Appendix G1

Business case section	Sub-section	Business case requirements – appraisal questions	Location of Information within the Business Case
		6.2.3 If the project involves creation of a new asset, is there a description of how governance be transferred to operational use?	Section 6.5
		6.2.4 Who will manage the delivery and monitoring/ evaluation of project benefits (including community benefits)?	Section 9.8
	6.3 Community Benefits	6.3.1 Have community benefits through procurement been identified? How will they be procured and delivered, and over what timescale? How will benefits be monitored over the long-term? Who will be responsible for achieving target benefits?	Section 9.8
	6.4 Other Legal matters	6.4.1 Have other legal matters been clearly considered as appropriate, including: <ul style="list-style-type: none"> State Aid – does this include impact on third parties at the Programme level? Compulsory Purchase Orders (CPOs) LA powers / Government powers STAG / TAUS / Planning / Crown Land Ownership Environmental Impacts Equality Impacts as per the Equality Act 2010 	Section 9.7 Appendix D
	6.5 Project Schedule	6.5.1 Has a detailed project schedule been provided, showing key dates for start/ completion of each task and covering all project elements?	Appendix I
		6.5.2 Are there clear delivery dates and detailed milestones for the overall project, and any sub-elements?	Appendix I
	6.6 Sustainability case	6.6.1 Does the sustainability case assess whether proposals are sustainable and do they contribute to the wider sustainability agenda?	Section 8
		6.6.2 Does the BC present robust consideration of sustainability from perspectives of – environmental, financial, economic, social factors?	Section 8
		6.6.3 Is there a project- or site-specific Environmental Impact Appraisal – is it recent and robust? If no EIA (or it is dated) what is the justification?	Section 8.9
	6.7 Project Monitoring	6.7.1 How will be the project be monitored and evaluated? What are the project monitoring arrangements and have they been clearly set out in the FBC (who, when, how and costs)?	Section 9.8
		6.7.2 Is the M&E Plan in line with the Assurance Framework, is it fully costed, and is it appended?	Sections 9.8
		6.7.3 Do proposals for monitoring covering the full period of benefits realisation, or to Programme completion in 2035?	Appendix B
		6.7.4 Who is responsible for project monitoring and evaluation after the physical project works are complete? Is the cost of future M&E presented, and is it robust?	Section 6.4 Section 7.4 Appendix B

2 INTRODUCTION

2.1 Context

This document presents the Full Business Case (FBC) for the Glasgow Airport Investment Area project (GAIA), being delivered as part of the Glasgow City Region City Deal Infrastructure Programme. This vital project will provide essential infrastructure that will enable the development of the regionally important Glasgow Airport Investment Area (GAIA). The development of GAIA has been a long standing policy aim of both Renfrewshire Council and the Glasgow & Clyde Valley Strategic Development Plan *Clydeplan* 2017. GAIA will support the vision for sustainable economic growth and development in the area around Glasgow Airport, one of the Glasgow City Region's key economic assets, through the creation of a world class business and commercial offering.

The Glasgow Airport Investment Area has the potential to become the powerhouse of economic growth for Renfrewshire and the Glasgow City Region, building on the key existing business, manufacturing and transport strengths that the area has to offer. GAIA includes the areas covered by the airport masterplan and the adjacent business and manufacturing centres (including Inchinnan and Westway Business Parks).

The work of the City Deal team and the GAIA Steering Group to promote GAIA resulted in the announcement in December 2017 by Scottish Government, that the National Manufacturing Institute Scotland (NMIS), will be located at the GAIA Netherton Farm site. This was followed by the announcement that the UK Medicines Manufacturing Innovation Centre (MMIC) will also be located at this site. Work is continuing with partners to build on NMIS and MMIC as a catalyst for development of a new advanced manufacturing innovation district, the Advanced Manufacturing Innovation District Scotland (AMIDS) in the GAIA project area. The ambition of partners is that this new district will deliver up to 10,000 new jobs.

To contribute to realising that potential, the GAIA City Deal project will deliver infrastructure and environmental improvements aimed at;

- creating increased opportunities for new and existing businesses by opening up and improving access to economic development locations adjacent to Glasgow Airport
- facilitating the continued growth and expansion of the airport as a major employment centre and transport gateway for the City Region
- improving access to former industrial land which is currently underused or unused
- better connecting businesses to their labour market, and
- creating the opportunities for increased economic density in the area

The proposed infrastructure improvements set out in this FBC include; the realignment of Abbotsinch Road, including improvements to the A8 junction; a new road bridge across the White Cart; and improved facilities for public transport, cyclists and pedestrians. Figure 2.1.A below provides an indicative overview of the basic infrastructure proposals. More detail is provided on the infrastructure provisions in the following sections of this FBC.

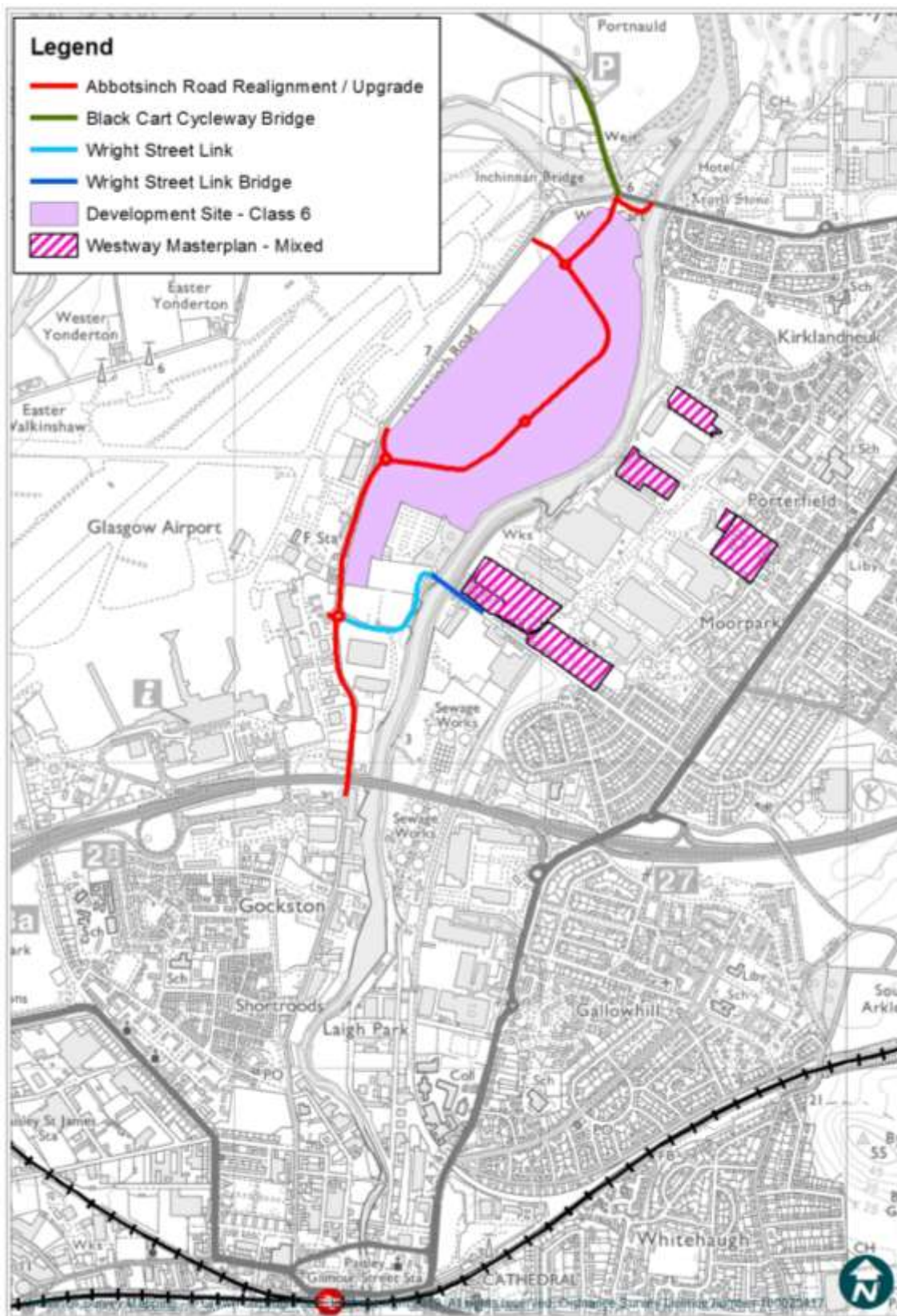


Figure 2.1.A - Indicative Overview of GAIA Project

As well as enabling the continued growth and expansion of both the Airport and surrounding businesses, this investment in infrastructure will act as a catalyst for new employment opportunities for residents in Renfrewshire and across the wider City Region and will help to make Renfrewshire a more attractive, vibrant and sustainable place to live and work.

The announcement by Scottish Government in mid-2017, confirming the location of the Lightweight Manufacturing Centre (LMC) at Westway and subsequently in December 2017 that the National Manufacturing Institute Scotland (NMIS) will be located at GAIA, demonstrates that the vision for development potential is being realised and the GAIA infrastructure is needed to deliver these initiatives. Indeed, the GAIA City Deal project was a key element in the decision to locate NMIS at GAIA. Work is already underway to ensure that NMIS acts as a catalyst for the delivery of Scotland's advanced manufacturing district at GAIA – the “Advanced Manufacturing Innovation District Scotland” (AMIDS). In June 2018, Netherton Farm was selected as the location for the UK's Medicine's Manufacturing Innovation Centre (MMIC). The proposed delivery of GAIA infrastructure and NMIS's location were critical factors in this decision.

Commenting on Inchinnan's selection as the location for NMIS, First Minister Nicola Sturgeon highlighted the importance of the locational advantages of the area, “Inchinnan provides a gateway to the world through proximity to the airport and revives Scotland's proud tradition of manufacturing and engineering”.

The GAIA project sits adjacent to and has very strong synergies with the Clyde Waterfront and Renfrew Riverside (CWRR) and Airport Access City Deal projects. Economic modelling undertaken as part of the Glasgow City Region (GCR) City Deal has confirmed that both individually and cumulatively, these projects have the potential to contribute significantly to the acceleration of economic growth in the City Region. As such Renfrewshire Council has been allocated funding from the GCR City Deal Infrastructure Fund to deliver these projects and ensure that local areas and the wider City Region benefit from the improved connectivity and development opportunities. Detailed information and analysis is provided throughout this FBC. This chapter provides a brief introduction to core background information and a timeline of key events from 2003 to 2016. The background section within this Chapter covers:

- GCR City Deal;
- City Deal Reporting Process;
- City Deal Business Case Appraisal Process;
- Timeline
- Origin and Background
- Remaining Structure of the FBC

2.2 City Deal Background

The GCR City Deal includes an Infrastructure Fund for a £1.13 billion programme aimed at supporting new growth in the regional economy, which is expected to:

- Deliver £2.2 billion of net additional GVA per annum;
- Create 29,000 new jobs throughout the City Region;
- Improve employment opportunities for people in each council by increasing accessibility to an average of 45,000 jobs in each council area;
- Create approximately 15,000 construction jobs

The City Deal investment will directly deliver infrastructure which will

- Improve transport networks across the Glasgow and Clyde valley;
- Improve access to key development and regeneration sites;
- provide opportunities for improved public transport.

Further information on the GCRCD infrastructure projects, targets, funding mechanism, application process and governance are provided in the GCRCD Assurance Framework and the GCRCD Programme Business Case.

2.3 City Deal Reporting Process

The GCR City Deal Assurance Framework requires City Deal Member Authorities to progress through a three stage Business Case process. This is made up of the following distinct stages:

- Strategic Business Case (SBC);
- Outline Business Case (OBC);
- Full Business Case (FBC).

This document is the Project's Full Business Case (FBC) which builds on the information provided within the GAIA project's OBC (v2.4), which was approved by the GCR City Deal Cabinet in December 2018. This FBC refines the information provided within the OBC based on the outcome of a procurement process for the relevant elements of the physical interventions set out in this FBC which were approved in the OBC. The approved OBC built on further research, investigation and design on the project, addresses issues identified in the SBC, and identified specific details of the refined project including the most effective options which will deliver the project outcomes and optimise Value for Money (VfM). The FBC includes information on: the project's estimated costs against financial provision; environmental sustainability; and outlines the project Sourcing Strategy, together with the management arrangements in place to successfully deliver the project.

In December 2016, Version 1.0 of this OBC was approved by the GCR City Deal Cabinet. Part 2 Section 3.2.1 of the Assurance Framework notes that, *"A Business Case is a dynamic document that evolves over the lifecycle of a project. All projects must be driven by a Business Case which identifies the rationale for the project and is regularly updated at key stages of the project."*

In December 2018, Version 2.4 of the OBC (augmented OBC for 'Green Book compliance') was approved by the GCR City Deal Cabinet. This FBC updates information within the previously approved OBC document, using additional information provided following the procurement process outlined in the OBC.

2.4 City Deal Business Case Appraisal Criteria

The FBC follows the Business Case Guidance and template structure set out in the GCRCD Assurance Framework. The GCRCD business case appraisal criteria is grouped into defined sections and sub-sections. The Table within the Executive Summary of this FBC notes each criteria and records where in this document the matter is addressed.

2.5 Timeline

Table 2.5-1 provides a timeline of key events from circa 2003 -2016 which have resulted in the creation of this FBC.

Table 2.5-1 - Timeline of key events

Time Period	Event
2003	Publication of "The Future of Air Transport" White Paper setting out requiring airport to publish masterplans setting out their proposals for development
2006	Airport publishes its first Masterplan in response to the "The Future of Air Transport" White Paper
2007	Renfrewshire LTS notes requirement for improved walking and cycling facilities
2009	NPF 2 identifies Glasgow Airport as a National Development Site
2011	Glasgow Airport publishes its Masterplan for development up to 2040

2012	Glasgow & Clyde Valley Strategic Development Plan identifies Glasgow Airport Investment Zone as a Strategic Economic Investment Location & Strategic Transport Hub
2013	Publication of "Strategic Investment Framework" report by Ekos on behalf of the "International Investment Quarter" Working Group.
2014	Renfrewshire LDP; <ul style="list-style-type: none"> • recommends new crossing over White Cart Water at Wright Street (Westway Business Park) • notes requirement to realign Abbotsinch Road • recommends enhancement of Airport to Paisley Town Centre transport corridor • identifies Westway Business Park and Glasgow Airport as Strategic Economic Investment Locations
2014	City Deal Agreement ranks GAIA project as 11th in the City Deal infrastructure project list in terms of GVA
June 2015	GAIA Strategic Business Case approved by Cabinet
Sept 2015	Appointment of Lead Consultants for the GAIA project
June 2016	Establishment of GAIA Steering Group
December 2016	OBC v 1.0 approved by GCRCD Cabinet
November 2017	Planning Consent granted for principle aspects of GAIA Project
December 2017	Scottish Government announce location of National Manufacturing Institute Scotland at GAIA.
January 2018	OBC updated to reflect most recent information in accordance with clause 3.2.1, Part 2 of Assurance Framework.
Aug – Oct 2018	OBC updated to reflect current status of project and ensure Green Book Compliance.
Dec 2018	OBC v 2.4 approved by GCRCD Cabinet
June 2018	Announcement that the UK Medicines Manufacturing Innovation Centre (MMIC) will be located at GAIA.

2.6 Origin and Background of Proposal

The infrastructure proposed for delivery as part of the Glasgow Airport Investment Area project (GAIA) has been identified within various National, Regional and Local policy and strategy documents as being necessary the Glasgow Airport Investment Area, including the continued development and growth of Glasgow Airport as a key gateway for business and tourist access to the Glasgow City Region and the West of Scotland.

The infrastructure will act as a catalyst for the development of the whole Glasgow Airport Investment Area as a world class business location, with attendant growth in GVA for Renfrewshire and the City Region.

The case for the realignment of Abbotsinch Road was set out in the Glasgow Airport Masterplan, published in 2011, which outlined proposals for taking forward developments associated with the Airport and the investment area.

A recommendation for a new bridge across the White Cart Water linking Wright Street in Renfrew within Abbotsinch Road formed part of Renfrewshire Council's 2014 Local Development Plan. It is aimed at opening up and improving access from the strategic road network, the Glasgow Airport complex and the wider Glasgow Airport Investment Area to currently vacant and poorly connected sites on both sides of Wright Street.

A bridge at this location will enhance the attractiveness of the currently vacant sites to developers and will help to ensure that the Westway Industrial Park continues to thrive and expand as a major business and

industrial location, helping it deliver the objectives set out in its 2007 & 2011 Masterplans, including the refurbishment of existing industrial and warehousing units, the construction of new build industrial / warehousing / business units; residential development (up to 125 homes); a restaurant facility; improvements to the internal landscaping and road layout; and formation of new car and lorry parking.

The new bridge will divert HGV's away from residential streets to the North of the Westway Industrial Park and also offer a step-change in accessibility to the Glasgow Airport Investment Area from communities on the East of the White Cart Water for active travel and other public transport measures.

Although planning consent is in place for a private version of the bridge at Wright Street, its delivery has been hampered by the need to resolve a number of issues associated with its relationship to the surrounding road network and the need to deliver other elements of road improvements. Renfrewshire's City Deal projects affords the opportunity to resolve these issues in a planned, strategic and holistic approach as part of an overall development strategy and expand the bridge function to include wider public accessibility and environmental benefits.

As work on developing the core original GAIA City Deal project progressed, the opportunity was identified to add value by opening up the White Cart Corridor south of the M8 for further economic development and to make the Investment Area an even more attractive business location. Potential interventions identified included measures such as a new 'Gateway Route' between Paisley and the Airport and a new bridge across the White Cart Water between Inchinnan Road and Harbour Road, which would assist in opening up and improving access to isolated areas of underused and vacant land and better connect businesses. The development of this corridor has been a long term aspiration of Renfrewshire Council as part of its planning and economic development strategy, as evidenced by the 2006 Paisley Harbour Study. While not part of this project, it remains an aspiration of the Council to deliver improvements in this corridor, to complement and add value to the Airport Investment Area.

Despite the Glasgow Airport Investment Area being relatively compact and close to Paisley, Renfrew and several smaller settlements, connectivity is poor, with walking and cycling infrastructure particularly limited, fragmented and of variable quality. Existing river crossings suitable for active travel are located approximately 4km apart and suffer from significant congestion at peak periods. This leads to a perception of isolation between Paisley/Renfrew and the airport and surrounding business areas which if not addressed, will limit the opportunities for growth in active travel and result in greater car use and increased congestion.

To help realise the areas potential, the GAIA project aims to deliver new and improved facilities for cyclists and pedestrians, including segregated and shared cycleway / footways which will link to the new active travel routes being delivered by both the GAIA and CWRR projects and Renfrewshire Council as part of their wider Active Travel Strategy.

This investment in active travel infrastructure presents a once in a generation opportunity to transform the environment for active travel across Renfrewshire by providing new, direct, convenient and safe links that will encourage more people to cycle and walk.

The project development for GAIA that has been undertaken since the inception of City Deal has been successful in securing the location of the National Manufacturing Institute Scotland (NMIS) and the UK's Medicines Manufacturing Innovation Centre (MMIC) at GAIA, leveraging in over £120m of new investment to the City Region, and in the development, in a partnership between the Council, Scottish Government and Scottish Enterprise, of the Advanced Manufacturing Innovation District Scotland (AMIDS) centered on GAIA.

2.7 Remaining Structure of the FBC

Following this introduction the remainder of the FBC is structured as follows:

- Chapter 3: The Strategic Case;

- Chapter 4: Options Appraisal;
- Chapter 5: The Economic Case;
- Chapter 6: The Commercial Case;
- Chapter 7: The Financial Case;
- Chapter 8: The Sustainability Case; and
- Chapter 9: The Management Case (Project Governance and Management).

3 THE STRATEGIC CASE

3.1 Introduction

This section outlines the strategic need for the project, its key features and how it fits with the aims and objectives of the City Deal. The process for implementation is also explained.

The Strategic Case for this project was demonstrated in the June 2015 Strategic Business Case (SBC), which was approved by the GCR Cabinet on 23 June 2015. The PMO appraisal of the SBC showed full compliance in all elements of the strategic case with the exception of minor issues in relation to 2.5 objectives, 2.7 Stakeholder Conflicts and 2.8 Benefits (in relation to monitoring and evaluation only). These issues have been addressed in the OBC.

The Strategic Case for the project that was set out in the SBC was updated, where appropriate, to take account of developments in the policy landscape and socioeconomic baseline between June 2015 and December 2018, when an augmented OBC was approved by Cabinet. Updates include additional information within the emerging Glasgow and Clyde Valley City Region Strategic Development Plan 2016 (*Clydeplan*) and other new/updated policies and strategies.

3.2 Strategic Need

Market failure is described as a situation whereby the allocation of goods and services is not efficient, i.e. an alternative outcome exists where one group of market players can be made better off without making another group of market players worse off. The Green Book describes market failure as a situation “where the market mechanism alone cannot achieve economic efficiency”.²

With a risk that development may be attracted to land outside their ownerships, individual owners have been unwilling to fund the infrastructure in isolation – these “positive externalities” are having a negative impact upon investment within the GAIA. As property developers’ profits will not reflect these wider intangible benefits they are not taken into account when making investment decisions.

In the absence of strategic funding for the required infrastructure, they have also been unable to combine to provide it. The cost of site infrastructure and addressing adverse ground conditions in some areas has further constrained an integrated solution.

Airports are considered critical City Region infrastructure providing extensive communication and market connectivity nationally and internationally. As Manchester and Birmingham demonstrate, they are also increasingly a focus for sector and commercial development. The Glasgow Airport Investment Area (GAIA) interventions (i.e. road alignment works, new pedestrian/cycle routes, river crossing and public realm improvements) are designed to deliver an integrated road and supporting infrastructure across un/under-used areas in and neighbouring the Airport, and the Inchinnan and Westway Business Parks.³ This will enable development of a coherent focus for advanced manufacturing and commercial activity benefitting from the airport’s regional, national and international connections and driving benefits across the City Region and Scotland.

The delivery of GAIA infrastructure is needed now to help position the airport and the surrounding area as an internationally-competitive location for advanced manufacturing and airport-related commercial activity. It will also link with other City Deal projects and other interventions to help mitigate widening socio-economic disparities between Renfrewshire and neighbouring areas.

Since its announcement, the area has been repositioned as the Advanced Manufacturing Innovation District Scotland (AMIDS). The prospective design and delivery of GAIA infrastructure has been a critical

² The Green Book: Central Government Guidance on Appraisal And Evaluation, HM Treasury, 2018. p.13.

³ GAIA is outlined in the Glasgow and Clyde Valley Strategic Development Plan, *Clydeplan* 2017, and encompasses the Inchinnan and Westway business parks.

factor in the subsequent decisions by the Scottish Government to locate the National Manufacturing Institute Scotland at the GAIA Netherton Farm site, and of the Centre for Process Innovation, a UK institution, to house the UK's Medicine's Manufacturing Innovation Centre (MMIC) at this site.

3.2.1 Socio-economic Baseline

This section summarises of the socio-economic baseline, with further detail, tables and figures contained in Appendix M.

The socio-economic trends experienced by Renfrewshire in many ways mirror those faced in Glasgow and across Scotland:⁴

- These areas exhibit similar occupational profiles and qualification attainment, indicating a high skilled resident workforce.
- Unemployment, viewed through the proxy of the Jobseekers Allowance claimant rate, is similar in Renfrewshire and Glasgow (2.1% and 2.2% respectively).

However, Renfrewshire diverges from Glasgow in terms of access to employment:

- Renfrewshire exhibits relatively poor access to, and availability of, employment opportunities with a significantly lower job density (0.8) than Glasgow (1.05).⁵
- More people leave Renfrewshire to work elsewhere (32,676) than travel to it (31,998), whereas Glasgow's workday population increases by over 115,000.⁶
- Renfrewshire residents attain lower mean and median earnings.

This factor partially explains the projected acute decline in the area's working age population (-11% by 2036). Such a demographic shift will have far reaching consequences for the local authority if left unaddressed.

Renfrewshire's business and employment base is heavily influenced by its advanced manufacturing and engineering sectors. Manufacturing accounts for 10.8% (9,000) of area employment with key employers including Rolls Royce, Vascutek, Thermo Fisher and the Advanced Forming Research Centre (AFRC), all based at Inchinnan Business Park.

The synergy between manufacturing, construction and chemical sciences provides a basis for cross sector collaboration and engagement with academic partners in the area such as the AFRC and the LMC. Evidence of this includes collaborative product development work between Rolls Royce and the AFRC as well as developing businesses across the City Region and the west of Scotland. The location of NMIS and MMIC is based on this relationship and is intended to further deepen its benefits.

3.2.2 Infrastructure Issues in the Investment Area

The opportunity for economic growth in the project area is constrained by a number of physical barriers and pre-existing conditions which are hindering the potential for growth in both the local and regional economy. Poor environmental quality between Paisley and Glasgow Airport along the White Cart corridor and inadequate transport access to Inchinnan and Westway Business Parks and other key economic sites act as barriers to further growth.

A number of initiatives, including previous masterplanning strategies by the Airport, Westway, and Renfrewshire Council,



Figure 3-1 - Disused footbridge across the White Cart Water

⁴ Glasgow refers to the local authority Glasgow City.

⁵ Job Density, NOMIS, 2018.

⁶ Location of usual residence and place of work by method of travel to work, NOMIS, 2015.

have been developed over time aimed at stimulating economic growth centred around the airport. These studies, which include the Glasgow Airport Masterplan (2011); The International Investment Quarter Study (November 2013) and the Westway Masterplan Study (2006) all explored the potential for manufacturing on and around the GAIA site. None of these proposals have, as yet, materialised however. Studies undertaken as part of the GAIA project have noted traffic constraints around the area, particularly at the Inchinnan Road / Greenock Road junction, to the north of the GAIA site. Traffic modelling indicates that without the interventions proposed as part of this project and the Clyde Waterfront Road Regeneration (CWRR) project, the existing road network would be unable to cope with future traffic flows as a consequence of LDP development⁷ alone. Paragraph 12.7.31 of the GAIA Environmental Statement Volume 3 Chapter 12 (refer Appendix O), notes “in the LDP scenario the [A8 Abbotsinch Rd / Greenock Rd] junction is significantly congested.”

Further, utility capacity constraints in the area, particularly at Netherton Farm, require investment to provide routes and increased accessibility to services before any development can happen. Discussions with utility providers has identified that: water mains of sufficient capacity to service manufacturing uses at Netherton Farm would require to be brought from north of the Black Cart, requiring a pipe bridge or tunnelled solution; electricity supplies for manufacturing uses at Netherton Farm would require a high voltage supply to a new primary station, which is then distributed to a number of local transformers; gas supplies will require significant upsizing to supply the potential development at Netherton farm. While the private and public sector have identified the potential for development in this area, it is anticipated that none will occur until the infrastructure challenges identified are addressed in some measure. As will be discussed in further detail under the market failure section, if left to the private sector, it is likely that development of the area would be fragmented and piecemeal.

To enable Glasgow Airport to improve terminal facilities, other airport facilities require to be moved from around the terminal area to free up space. However, the existing Abbotsinch Road, currently sits adjacent to the eastern boundary of the airport, limiting the options for relocation of these ancillary uses. The opportunity to move Abbotsinch Road and enable relocation of airplane maintenance facilities, will provide potential for the airport to expand that offering and to improve the terminal facilities and scale.

Walking and cycling infrastructure is limited and fragmented. In particular the lack of crossings over the White Cart Water limits accessibility between the Westway Business Park, the Airport Business Park, Inchinnan and the Airport itself. While effective links between employment areas are frustrated without this infrastructure, linkages from these places to nearby residential areas are also poor. Taken together, this leads to a perception of isolation between Paisley/Renfrew and the airport and surrounding business areas.

The lack of appropriate Active Travel Network infrastructure in the area of Glasgow Airport, Westway, Inchinnan and Netherton Farm, including cycle friendly connections between these strategic centres, reduces the travel options for employees and the marketability of employment opportunities in the area. In addition, the lack of such infrastructure limits the potential modal shift towards more sustainable transport.

⁷ Traffic and transport analysis of the Renfrewshire LDP was undertaken by Systra.

There has been limited investment in recent years in improving the area's environmental quality. Despite investment being scheduled to continue over the next few years, most notably by Renfrewshire Council in Paisley Town Centre, outcomes of stakeholder and public engagement identified that, the perception of the general area as a good place to do business continues to be hampered by a legacy of run down sites and poor environmental quality.

Whilst at a strategic level the area would appear to benefit from a combination of air, road, rail and river connectivity, particular transport issues prevent the economic potential of the area from being realised. The transportation connectivity of the area is substandard. Access to and between the Inchinnan and Westway business parks and the Netherton Farm area designated for development is inefficient. These areas are relatively close, yet difficult to traverse due to the lack of crossings over the White Cart and the constraints at Inchinnan Road / Greenock Road junction.



Figure 3-2 - Constraints and poor active travel links at Inchinnan

Further Inchinnan Business Park is in practical terms, only accessible by car at present, with poor public transport and active travel links (see figure 3-2 above). As businesses in that area seek to improve the options for travel to work, cycle links are poor, with the need for cyclists to share the A8 with vehicular traffic. This not only creates unsafe situations, but also hinders traffic flow along that corridor, further exacerbating the poor infrastructure links between Inchinnan Business park and the other employment centres in the area.

The main access to Westway Business Park is from Porterfield Road, Renfrew, a road fronted by residential property and a school. The current route to this access, via Junction 27 of the M8, is not ideally suitable for HGVs. The business park is also currently isolated from the rest of the Glasgow Airport Investment Area by the White Cart river. Despite a number of recent initiatives, the current access arrangements continue to hamper development of this major industrial and business location and adjacent development sites.

3.2.3 Market Failure in the Investment Area

Market failure is described as a situation whereby the allocation of goods and services is not efficient, i.e. an alternative outcome exists where one group of market players can be made better off without making another group of market players worse off. The Green Book describes market failure as a situation “*where the market has not and cannot of itself be expected to deliver an efficient outcome; the intervention that is contemplated will seek to redress this*”.

The infrastructure interventions proposed in the GAIA project, i.e. road alignment works, new pedestrian/cycle routes, river crossing and public realm improvements, show characteristics of pure public goods, namely:

- **Non-excludability:** the benefits derived from the proposed infrastructure interventions will not be confined solely to those funding them. Although the benefits to private sector developers will be captured in part by increased property and site values, it is likely the more significant benefits from the comprehensive regeneration initiated by the intervention will be enjoyed more broadly across the area and beyond (i.e. including the non-payers which results in a free-riding problem).
- **Non-rival consumption:** the marginal cost of an extra person using the proposed GAIA infrastructure will be zero, i.e. its use by one person or group does not restrict its use by other users.

Non-excludability and non-rival consumption jointly create a disincentive for the private sector to cover the full cost of GAIA infrastructure interventions due to the potential free-rider problem, i.e. non-payers enjoying the benefits of the proposed interventions without bearing any financial costs. Therefore, public sector intervention is required to bridge the funding gap to develop public goods.

As a result of the cost of implementing infrastructure that will unlock key sites and better connect sites, together with market conditions that have pertained since 2008, particularly in relation to uses that will substantially increase GVA, the market has been unable to bring forward development across the area. The aspirations to promote and develop GAIA have been longstanding but there has been an inability to date for the private and public sector to bring forward the necessary infrastructure. With City Deal funding used to complete the infrastructure interventions that will unlock sites and better connect businesses, the barriers to development and the attendant economic growth will be overcome.

In order to realise the potential for development resulting from these infrastructure interventions, it will be necessary to attract private investment in both existing and new commercial opportunities. Such investment will only be achieved if private organisations recognise the development potential as financially sustainable, with good investment return. To do so, developers must be satisfied that sufficient market demand exists for the development type to be provided.

Market demand for commercial property largely depends on the perception of business owners about the likely level of market demand in the area, the availability of a suitably qualified workforce and the transport connectivity for its workforce, suppliers and customers. It is clear from the baseline assessment that the investment site at hand is surrounded by a suitable workforce from both Renfrewshire and the wider City Region. However, the main GAIA Site – Netherton Farm – suffers from poor local connectivity and an already constrained network.

As an initial investigation to progress development of the GAIA project a Land Use Study was commissioned via Colliers International. This study explored potential gaps in market demand within the local and wider area and constraints currently hindering investment. The outcomes of the study noted that the strategic location of the opportunity (adjacent to Glasgow Airport, the M8 and existing business parks) provided the potential to create an “international investment and development cluster”. The study also noted the lack of infrastructure links between each business area and the poor environmental quality and appearance of the area as detrimental to future investment. In particular, the lack of direct links between businesses east and west of the White Cart; the congested road junction at Abbotsinch Rd / Greenock Rd; lack of utility provision at Netherton Farm; poor visual and landscaped environment generally has contributed to no progression of the major development opportunity at Netherton Farm.

Despite areas such as Inchinnan Business Park performing well in recent years, having registered 100% occupancy for the past five years,⁸ vacant areas remain where new investment or expansion may be accommodated. Development of the park has stalled since 2010 and there is no central co-ordinating body with the capital funds or strategic direction which could deliver the efficient outcomes proposed by the GAIA project. However, recent announcements by Vascutek⁹ and the AFRC¹⁰ suggest this is changing, as public-sector commitment to the GAIA project has sparked investor interest. The press release for AFRC expansion specifically references the NMIS investment and the importance of clustering manufacturing R&D with industry.

⁸ Costar Properties, 2018.

⁹ <https://www.bbc.co.uk/news/uk-scotland-scotland-business-43031421>

¹⁰ <https://www.strath.ac.uk/research/advancedformingresearchcentre/news/strathclydesecures165mformajornewadvancedengineeringfacility/>



Figure 3-3 - Westway Dock

The situation differs to the east of the White Cart. In March 2018, developer and asset manager Canmoor acquired the Westway site for £40 million outlining “substantial investment” plans.¹¹ In June 2018 Canmoor secured their first new occupier, the AMG Group taking 113,000 sq. ft of space to establish a new distribution centre.¹²

This acquisition however was influenced by the announcement of the Glasgow City Region City Deal and the momentum generated subsequently. In its press releases, Canmoor made specific reference to NMIS and the Wright Street Bridge.

Discussions with the Westway operators, and the owners of Glasgow Airport have identified that neither party has any short-medium term plans to invest in enhancing the surface access infrastructure, and in the absence of City Deal funding the challenges and constraints will persist.

The market has therefore failed to provide the integrated transport infrastructure needed to encourage improved integration with airport activity, its connection to markets, and further growth in the investment area. The constrained junction at Greenock Rd / Inchinnan Road, the constraints in service utility capacity and routes to the site all act as challenges which make the investment potential in the area too costly and challenging for the private sector. The challenges associated with the Netherton Farm development site necessitate costly and difficult engineering works. Existing arrangements such as the Glasgow Airport Masterplan and supporting strategic bodies such as Scottish Enterprise, have thus far not been able to deliver the strategic and holistic approach that is required to realise the full economic potential of the GAIA project. The market failures mentioned above, and market demand evidenced, show that development of the area is likely to be fragmented and at a slow rate.

The Glasgow Airport masterplan (2011) noted the need for the relocation of Abbotsinch Road, to enable the eastern airside boundary to be moved. However, since this would require the purchase of a significant land holding (150 acres) which far exceeds the land needed to move the road, followed by the relocation of a public road and the necessary significant works to the Greenock Road / Inchinnan Road junction, which included alteration of a Grade A listed structure, makes this proposal too costly and challenging to deliver as a private investment. The opportunity exists however for the Public Sector (through City Deal) to make these changes and gain not only economic improvements at Glasgow Airport but also new investment on Netherton Farm and improvements to other existing employment areas.

¹¹ Scottish Construction Now. Canmoor snaps up Westway Park in Glasgow from administrators. Available at: <https://www.scottishconstructionnow.com/24997/canmoor-snaps-westway-park-glasgow-administrators/#>

¹² Costar. Canmoor lands major Scottish distribution hub letting, 2018. Available at: <http://www.costar.co.uk/en/assets/news/2018/June/Canmoor-lands-major-Scottish-distribution-hub-letting/>

As noted earlier, the lack of a collaborative approach between the owners of the various Parks, the Airport and others has to date restricted the extent to which an integrated solution can be developed and delivered. It is clear that none of the individual owners are willing to commit the required funds while the prospect of other sites benefitting disproportionately from such investment remains. Despite longstanding aspirations to promote and develop the GAIA, the market has been unable to bring forward the necessary infrastructure.

Without strategic public investment, this position will be reinforced as the area's environment and transport infrastructure will continue to deteriorate without intervention. The perceived remoteness of the area will become more firmly established and living and working in Renfrewshire will become less attractive. Private sector agents will be less likely to intervene.

Since the introduction of the GAIA project, and the resulting announcements of the location of NMIS and MMIC within the GAIA area (Netherton Farm), pro-active interest has been expressed by multi-national manufacturing companies in locating at the site. Currently Renfrewshire Council, as owners of Netherton Farm, together with Scottish Enterprise, are in discussion with a number of organisations regarding the potential for investment on Netherton Farm, to create manufacturing facilities. This demonstrates that the investment planned as part of GAIA is the catalyst which was required to unlock the demand which exists.

Renfrewshire Council is well placed to oversee this project but requires external funding to deliver the most efficient infrastructure solution for the area.

3.2.4 The Rationale for the Intervention

This project seeks to open up and improve access to economic development locations around Glasgow Airport within the Glasgow Airport Investment Area. This will facilitate the development of the cluster of Strategic Economic Investment Locations identified by the Glasgow and Clyde Valley Strategic Development Plan *Clydeplan* 2017 and the Renfrewshire Local Development Plan. In addition, it will encourage the airport's growth and expansion as envisaged by the Glasgow Airport Masterplan. It will help build economic density in the area around the airport, building on the key existing business, manufacturing and transport strengths the area has to offer.

The Glasgow Airport Investment Area has been a long-standing aspiration at both local and regional level, as evidenced by its inclusion in both the *Clydeplan* and the Renfrewshire LDP. A previous study undertaken in 2013 by Ekos Consultants, commissioned jointly by Renfrewshire Council, Scottish Enterprise, Glasgow City Council and Glasgow Airport, investigated the potential contribution of the Airport Investment Area to the local and regional economy and concluded that *"the airport investment area has the potential to deliver major employment and economic value at local, regional and national levels, over the next 20 years. The [Plan] outlines the potential for the [Quarter] to make a major economic contribution with an estimated 10,000 net additional jobs and £680m annual GVA for Scotland."*

As part of the project development process, a masterplan for the investment area has been developed in conjunction with key stakeholders, including the airport. This masterplan is helping to inform the ongoing work to develop, market and deliver the investment area vision.

A GAIA Steering Group was also established in June 2016, with membership from Renfrewshire Council, Glasgow City Council, Scottish Enterprise, Glasgow & Renfrewshire Chambers of Commerce and Strathclyde University, aimed at helping drive the vision for, and the development and promotion of, the Glasgow Airport Investment Area.

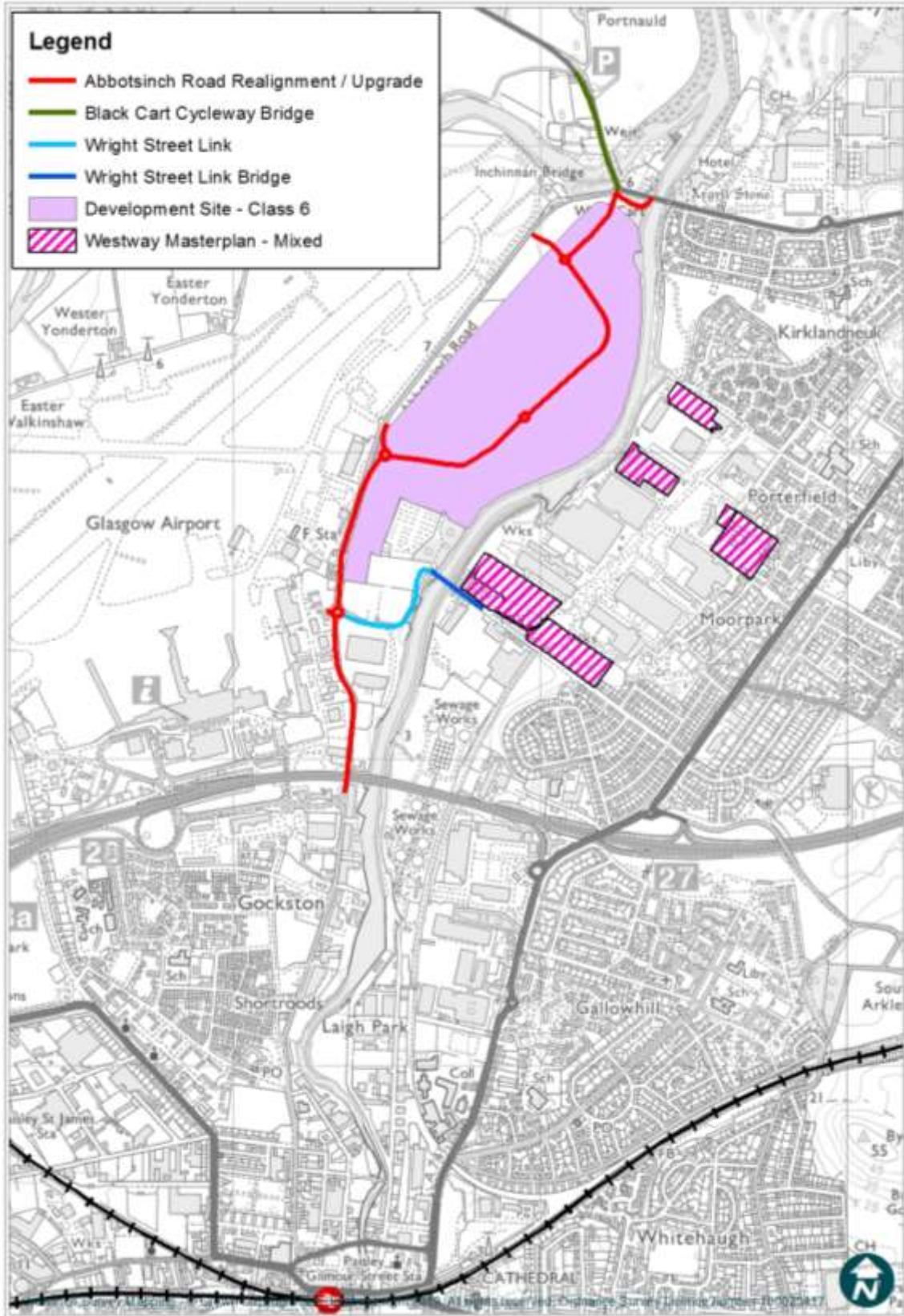


Figure 3-4 - GAIA Projects and Development Sites

The infrastructure delivered through City Deal will provide a significant improvement in accessibility and connectivity to and between key development sites in the project area as well as facilitating the growth and development of Glasgow Airport and Inchinnan and Westway Business Parks, together with the delivery of enhanced productivity and therefore additional GVA growth from existing sites.

The work of the City Deal team and the GAIA Steering Group, to promote the opportunities and potential of GAIA, has resulted in the announcement in December 2017 by Scottish Government, that the National Manufacturing Institute Scotland (NMIS), will be located at GAIA. This was followed by the announcement that the new UK Medicines Manufacturing Innovation Centre (MMIC) would also be located at the site. In parallel with this, work is ongoing with partners to build on NMIS as a catalyst for development of a new advanced manufacturing district, the Advanced Manufacturing Innovation District Scotland (AMIDS). Terms of Reference for the development of AMIDS have been signed between the Council, Scottish Government and Scottish Enterprise. The ambition of partners is that this new district could deliver up to 10,000 new jobs.

The planned development of the Airport, the promotion of the Glasgow Airport Investment Area as a key strategic investment area, the development of NMIS, MMIC and AMIDS, together with the stimulation of currently stalled private investment in vacant sites and in the Westway and Inchinnan Business Parks, will provide a major opportunity to drive economic growth in the whole area. The investment in public infrastructure is essential to ensure that these opportunities can be realised for Renfrewshire.

The Cart Corridor contains areas of underused and vacant land, the development of which has been historically hampered by poor accessibility. The new City Deal infrastructure will act as a catalyst to promote the opening up of this corridor as an attractive key development location. Although not being delivered as part of this City Deal project, the Council will seek opportunities to deliver complementary infrastructure to promote development in the Cart corridor south of the M8 and in to north Paisley. Discussions are underway on potential mechanisms for this and a planning framework is being developed for the area between Paisley town centre and the GAIA area.

It is also worth noting that the project builds on and is complementary to the other City Deal infrastructure projects in Renfrewshire. These include Renfrewshire Council's Clyde Waterfront & Renfrew Riverside project (CWRR) and the Airport Access project being taken forward jointly by Renfrewshire Council and Glasgow City Council. This project will link with the CWRR project, providing a new transport corridor between the M8, the Airport and the north bank of the River Clyde, and onward connections to Glasgow Clyde Waterfront, ensuring that maximum value is extracted from economic and development opportunities across the City Region particularly within the wider Airport and Clyde Corridor zones.

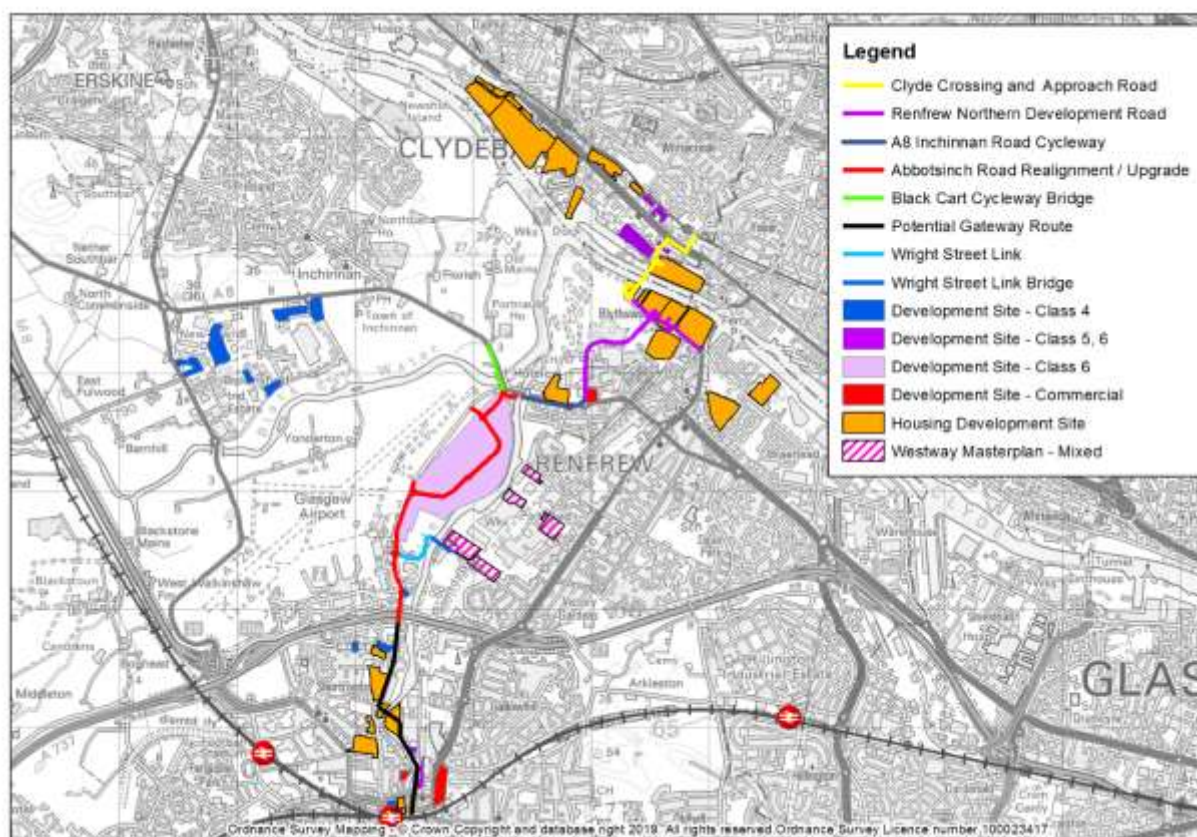


Figure 3-5 - City Deal infrastructure projects & potential development sites in Renfrewshire

The combined infrastructure interventions across the City Deal projects will also provide enhanced connectivity and access to employment opportunities for communities either side of the River Clyde and across the conurbation, taking advantage of the overall improved economic conditions afforded by the City Deal programme.

The active travel measures incorporated into the project, together with opportunities afforded to public transport, will encourage modal shift away from car based transport, not just for investment area employees and customers, but across Renfrewshire and into South West Glasgow. The active travel measures being developed for the project are part of an integrated approach to active travel across Renfrewshire to ensure that a holistic network is developed that will deliver a real step change in active travel opportunities across the area and provide realistic opportunities for local employees to access the GAIA employment sites by modes other than private car.

Other infrastructure interventions that would provide improved links to Paisley and Renfrew will, in addition to promoting development in the river corridor, provide links between the business and manufacturing areas around the airport and from NMIS / MMIC / AMIDS to the commercial and residential areas of Paisley and Renfrew. This will help to deliver a more sustainable and attractive living and working environment for the investment area. The overall ambition for the area links to Renfrewshire's Paisley Town Centre Action Plan, which aims to deliver a programme of change to make the town centre a much more attractive residential, commercial and educational centre.

3.2.5 Why the Project is Needed Now

The socio-economic conditions present in Renfrewshire and adjacent areas demonstrate that positive intervention is required. The divide between conditions present in this area and others in the City Region, and beyond, will continue to increase if intervention does not occur, as other areas improve at accelerating rates, with the gap likely to be more difficult to close as time progresses.

Although there has been a limited degree of success in promoting development and growth in the area of the project in recent years, success has been hampered by the infrastructure and transport connectivity deficits that exist. To date neither the private sector (for the reasons noted in previous sections) nor public sector has been in a position to bring forward the infrastructure investment necessary to realise the GAIA vision. While there has been some sector-specific public sector investment (including the Advanced Forming Research centre at Inchinnan in 2009), the Council has lacked the funds, or approvals, required to commit the necessary infrastructure investment. Without the strategic land holdings needed, it has been unable to take a lead in providing certain elements of infrastructure (such as river crossings). Following the approval of the initial OBC¹³, the Council purchased Netherton Farm on 1 November 2017. It is now better placed to drive this infrastructure delivery.

The City Deal Project as proposed will directly meet a number of needs both specific to the locality and across the wider City Region that the market and private sector has been unable to deliver. These needs include:

- Development of the Glasgow Airport Investment Area/AMIDS, including Inchinnan, Westway and new key economic development sites;
- Provide the infrastructure required to deliver the National Manufacturing Institute Scotland (NMIS) and the Medicines Manufacturing Innovation Centre (MMIC)
- Accommodation and facilitation of airport growth and expansion
- Improved transport connections between key development sites and locales
- Improved Environmental Quality

The project will act as a catalyst for the development of the Glasgow Airport Investment Area/AMIDS, taking advantage of the significant opportunities presented to develop a world class business location around the airport, with attendant growth in GVA for the region. As set out earlier, the GAIA City Deal proposals and land assembly has already resulted in the decision to locate NMIS and MMIC at GAIA. The GAIA project is fundamental to the delivery of NMIS and MMIC and needs to be delivered now to accommodate the delivery timescales for these national developments.

Delivery of the various infrastructure elements of the project will also enable the continued development and expansion of Glasgow Airport as a key inbound gateway for the business and tourist market to the Glasgow City Region and the West of Scotland. In May of 2016, the Airport reported that it had attracted more than nine million passengers over a rolling 12-month period for the first time in its history. The rolling 12-month figure in August 2018 was 9.171M, an increase of 9.17% over the previous 12 month period, with domestic and international traffic growing by 8.3% and 6.3% respectively. In January 2018, the Airport reported 9.9M passengers had passed through Glasgow Airport during 2017, representing an annual increase of 5.8% and a key milestone for the business.

There are currently over 30 airlines serving over 100 destinations, both domestic and international, serving many key markets of importance to the City Region's economy. The airport is predicting continued growth in passenger and aircraft movements, with a strategic vision to grow to 16.8million passengers by 2040.

These predicted growth figures, while welcome, present a number of additional external challenges such as transport network performance and surface access strategy. However, there are also a number of opportunities such as improved connectivity and competitiveness. The continued ability of the airport to accommodate the predicted growth in traffic is important to the City Region due to the attendant boost to the economy, including growth in employment at the airport.

¹³ OBC v1.0 approved December 2016

The realignment of Abbotsinch Road will facilitate the development strategy set out in the Airport Masterplan and play a key role in enabling the Airport to accommodate future growth and changes in aircraft requirements. Various options have been previously explored to deliver this realignment, linked to the development of the Glasgow Airport Investment Area and to junction improvements at the A8 crossings of the White and Black Cart, but to date these have not been delivered. As the previous owner of Netherton Farm was only willing to contemplate a comprehensive sale of the 150-acre site, the parcel of land required by the airport to accommodate traffic growth was not hitherto available to it. In addition, the Airports owners would then be required to realign Abbotsinch Road in order to accommodate relocated maintenance operations far enough away from the main runway. In summary, the scale of work required, and additional land was viewed to be disproportionate to the businesses needs and not pursued.

Renfrewshire Council acquired the Netherton Farm site in November 2017 following approval of the OBC (v1.0). Its sole ownership enables coordinated development of the Glasgow Airport Investment Area through the ability to drive the project using City Region Deal capital backing. The realignment of Abbotsinch Road delivered by City Deal capital investment will, in addition to facilitating the airport development, accommodate the formation of GAIA/AMIDS, NMIS, MMIC and accelerate the development of nearby employment sites (Figure 3-6 below).



Figure 3-6 - GAIA North Masterplan showing realigned Abbotsinch Road & development site

The realigned road will also link with the proposed new bridge at Wright Street (see Figure 3-7 below) adjacent to the Westway Business Park, providing improved access to this major facility and also to nearby stalled development plots. Access to a bridge across the White Cart is important to the development and growth of Westway Industrial Park as set out in their Masterplan. Delivery of this masterplan could result in an additional 1500 jobs and ensure that it continues to thrive and expand as major manufacturing base for the key high value oil, gas, power and renewable energy sectors. The new bridge will also help take HGV traffic from the existing Porterfield Road access, which has residential frontage and will also offer improved accessibility to the airport from the east of the White Cart for active travel and other public transport measures.

Although planning consent is in place for a private version of the bridge, its delivery has been hampered by the need to resolve a number of issues associated with its relationship to the surrounding road network,

ancillary airport facilities and the need to deliver other elements of road improvements. In addition, a private bridge would only provide access to the Westway site and not allow for wider connectivity to other development sites, active travel and public transport opportunities.

City Deal affords the opportunity to resolve all of these issues in a planned approach and ensure that an overall development strategy is put in place that builds upon discrete developments in an integrated manner.

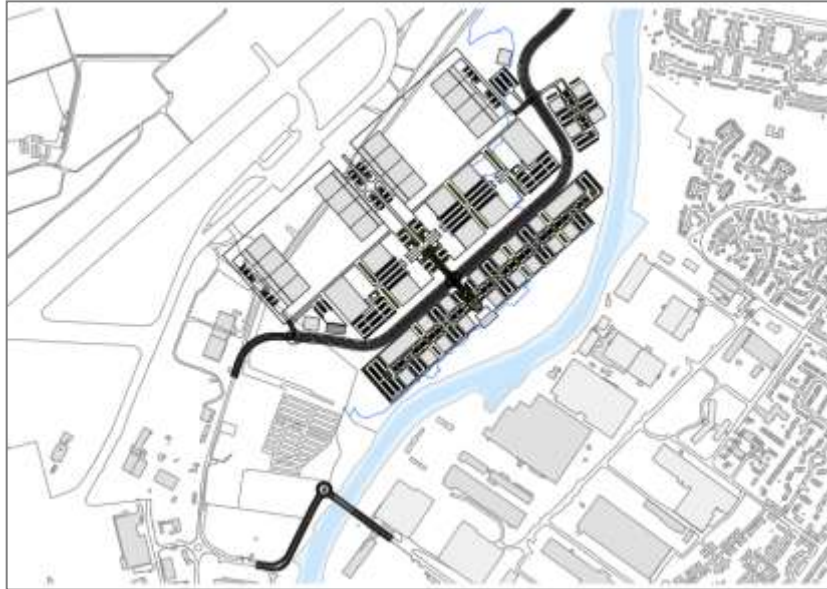


Figure 3-7 - GAIA North Masterplan showing Wright Street Bridge

The realigned road will also link with the junction improvements on the A8 at the crossings of the White and Black cart, connecting in to the improved links to Inchinnan Business Park, helping with the continued successful growth of this facility. These will also connect to the Renfrew North Development Road, which will be delivered through the complementary CWRR City Deal project to promote a corridor of growth between the airport and the Renfrew Riverside/Glasgow Waterfront City Deal growth areas.

Further south, additional infrastructure along the White Cart Corridor, south of the M8, linking to the GAIA City Deal project investments, would assist in helping to promote development in this area that is currently hampered by the connectivity deficits and poor environmental quality. Although not part of the original core City Deal project, work was undertaken as part of the project development process to investigate improvements in this area that would add value to the GAIA Project and deliver enhanced overall economic and regeneration benefits, building on the City Deal investment. Measures considered included proposed environmental improvements, and a new bridge near to Paisley Harbour to provide better connection between Paisley and the airport to help catalyse regeneration of this area, which has the potential to become a very attractive waterfront location for residential, business and leisure developments, such as shown in figure 3-8 below. Improvements to the Cart Corridor have been a long term aspiration of Renfrewshire Council as part of its planning and economic development strategy and previous masterplans have been prepared for the area. The City Deal project provides more focus and impetus for the development of this corridor and the work undertaken will provide a template for future development to provide the opportunity to deliver the improvements to this area, building upon other Council initiatives such as the Paisley Town Centre Action Plan. Although not being delivered as part of this City Deal project, the Council will seek opportunities to deliver complementary infrastructure, such as the Gateway Route and Cart bridge, to promote development in the Cart corridor south of the M8.

Importantly, the Scottish Government decision in December 2017, to locate NMIS on the GAIA Netherton Farm development site, followed by the decision to locate MMIC here, was based on the availability of the Netherton Farm site and the delivery of the GAIA City Deal infrastructure. Construction of NMIS, MMIC, within the timescales both projects are working to (operational by Q1 2021), and the wider AMIDS requires

the GAIA City Deal project to progress at pace, demonstrating the clear need for the project to proceed now.



Figure 3-8 - GAIA South Masterplan showing the possible new bridge and adjacent development sites

3.2.6 Counterfactual

The table below presents a short comparison of the counterfactual situation against that of the suggested GAIA project.

Table 3-1 – Counterfactual Short Comparison

	Counterfactual	GAIA Project
Netherton Farm	Remains undeveloped and a lost economic opportunity	Fully developed site home to national assets such as NMIS, MMIC and AMIDS.
	Remains as a single carriageway road with unsafe active travel arrangements	Full realigned and developed road with integrated active travel infrastructure
	Unserviced site with constrained utilities capacity	Serviced site with pump primed development opportunities
Glasgow Airport	Constrained expansion	Relocation and expansion of maintenance operations, allowing for the wider expansion of the airport.
	Future transport issues because of network capacity	Eased network capacity as a result of junction improvements and enhanced local access
Westway	Continued development of the park but likely at a slower rate than anticipated because of constrained site infrastructure	More attractive site with the ability to develop faster as a result of enhanced local connections
Inchinnan	Continued expansion of sites which have been announced (FutureForge) but likely slow down to past levels of development as a result of public infrastructure not being delivered.	Continued expansion of sites which have been announced, but with greater interest in surrounding vacant sites due to the advanced manufacturing clustering effect

History shows that the private sector has been unable to respond to the challenges faced within this area. In the absence of the proposed infrastructure measures, the vision for the Glasgow Airport Investment Area will remain unfulfilled. In turn this means that the anticipated GVA contribution that this project brings to the City Deal programme will not be realised. Furthermore, the National Manufacturing Institute Scotland, which Scottish Government announced will be located at GAIA, the UK's Medicines Manufacturing Innovation Centre which is proposed adjacent, together with the wider AMIDS, all require the infrastructure proposed within this project to be delivered at pace.

Additionally, the continued development and growth of Glasgow Airport may be compromised in the absence of the integrated solution to the public infrastructure issues that is provided by this City Deal project.

The full potential of the currently stalled private sector investment in the Westway Business Park and adjacent development sites also risks being unrealised if the proposed new bridge across the White Cart, linking with the Glasgow Airport Investment Area, is not delivered.

Development of areas of underused and derelict land in the White Cart corridor will continue to stall and there is a risk that the perception of isolation between Renfrew, Paisley and the Airport Investment Area will hamper delivery of the maximum outputs from current and planned public and private sector investments in the area. In addition, the benefits through improved measures for active travel, including modal shift, may not be realised. The potential to link the Glasgow Airport Investment Area with the wider Clyde Corridor developments will also not be realised.

The outputs from the traffic modelling undertaken to date also suggest that without the transport interventions proposed as part of this project and the CWRR project, that the existing road network would be unable to cope with future traffic flows as a consequence of LDP development.

Consequently, the opportunity for employment generation and reduction in existing disparity across Renfrewshire, will be reliant on market forces. With the development opportunities being in their existing poor environmental condition and poorly connected, these will remain as a perceived high risk, with development and consequential growth unlikely to occur.

In the absence of City Deal funding for the GAIA Project, it will not be possible to deliver NMIS, MMIC or the wider AMIDS.

In summary, in the absence of City Deal funding for the GAIA project the following activity will be either stalled or restricted:

- NMIS, MMIC or the wider AMIDS would not come forward in Renfrewshire, resulting in the inability for Scotland to cluster existing and inward investing advanced manufacturing businesses and industry support;
- Under the counterfactual scenario, it is reasonable to assume that Canmoor will invest at Westway to attract further occupiers such as the AMG Group. However, in the absence of GAIA, the commitment is likely to be less substantial than previously alluded to¹⁴

3.3 Strategic and Policy Context for the Project

3.3.1 Strategic Fit with City Deal Objectives

The City Deal aims to close the economic “output gap” of the Glasgow City Region with top performing European Cities and ensure economic growth benefits all residents. At the outset, the objective of the GCR

¹⁴<https://www.scottishconstructionnow.com/24997/canmoor-snaps-westway-park-glasgow-administrators/>

City Deal was to raise productivity and economic output across the city region by investing in economic infrastructure.

Recognising that many types of infrastructure have the potential to improve economic outcomes, GCR set a wide scope for the type of projects for the Infrastructure Fund, including:

- Regional transport improvements
- Site remediation and access for housing and commercial space
- Riverside and ocean terminal investments
- Public realm enhancements

The Infrastructure Fund also set minimum outcomes for delivering improvements in employment accessibility for the city region's most deprived communities.

The GAIA project was selected due to its ability to significantly and directly contribute to the objectives of the GCR City Deal. It has been developed to align fully with these objectives and to maximise the potential for economic growth through the promotion of key development and regeneration sites in the project area, supporting the delivery of an improved transport network, improving the environment and assisting in delivering maximum growth in GVA across the City Region.

3.3.2 Strategic Fit with UK Policy

It is the UK Government's declared aim to ensure that the UK can succeed in the global economy. It plans to stimulate economic growth through a series of measures set out in its 'Plan for Growth' programme of reforms for removing barriers to growth. In addition to investments in technology, access to finance, and boosting exports, infrastructure investment forms an essential part of the UK Government's growth strategy. For example, in HM Treasury's *'Investing in Britain's Future'* report the Government announced a pipeline of infrastructure projects worth over £100 billion by 2020.

It is also worth noting the way in which the project will assist in development of Glasgow Airport in line with the vision set out in *"Future of Air Traffic White Paper 2003"*, which set out a number of recommendations based on enhance airport capacity and improved transport connections.

The delivery of NMIS and AMIDS is consistent with the UK Government's Industrial Strategy (Nov 2017)

3.3.3 Strategic Fit with Scottish Government Policy

Scotland's Planning Policy (SPP) "focuses plan making, planning decisions and development design on the Scottish Government's Purpose of creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth." This City Deal project aligns with the SPP by directly contributing to the 4 outcomes of the SPP by creating: a successful sustainable place, through creation of opportunities for regeneration; a low carbon place, by reducing travel journey times and increased opportunity for public and active travel; a natural resilient place, by linking areas of leisure, open space, water frontage and the communities who would wish to use them; a more connected place, by linking disengaged communities, businesses and the facilities which support them.

Scotland's Third *National Planning Framework (NPF3)* sets the spatial expression of the Scottish Government's Economic Strategy and of its plans for infrastructure investment, together with its ambition to create great places that support sustainable economic growth across the Country.

The City Deal programme and this project sit well with the spatial strategy set out in NPF3 and with the 4 key vision themes in the framework (Scotland will be a "successful, sustainable place/ low carbon place/ a natural resilient place / a connected place"). NPF3 notes the importance of the Glasgow & Clyde Valley Region to the Scottish Economy and through City Deal the council is driving the potential for employment and economic development.

Section 5 of NPF3 notes the importance of Glasgow Airport as a national development and a gateway location for investment, including business related development around the airport (refer to Item 10 of Annex A to NPF3).

The *Strategic Transport Projects Review (STPR)* notes the importance of connectivity and the role that transport infrastructure investment can play in maximising potential and reducing disparities. The improved connections across the White Cart and linkage of this project to the Clyde Waterfront and Renfrew Riverside project will facilitate economic development and unlock opportunities in areas which will generate employment options and improve social conditions.

The *Infrastructure Investment Plan (IIP)* sets out the Government's priorities and aims for major infrastructure investment. By improving connections across the White Cart; providing improved facilities for public transport, cycling and walking, increasing modal shift and generating employment opportunities, this project aligns with the Scottish Governments four priorities. The priorities are stated as; delivering economic growth, managing transition to low carbon, supporting delivery of efficient public services and supporting employment opportunity.

This project, through delivery of an improved transport network, active travel network and a denser economic mass, will help to achieve the 3 strategic outcomes set out in Scotland's *National Transport Strategy (NTS)* (improved journey times; reduced carbon emissions; improved quality of alternative transport modes). The NTS was 'refreshed' in 2016 but retained the same strategic outcomes.

The City Deal programme and this project, with their emphasis on stimulating economic growth, are also well aligned with the Scottish Government's *Economic Strategy* which aims to stimulate economic activity and investment across all of Scotland's communities, with its actions to accelerate economic recovery and provide jobs in key sectors with particular opportunities for growth. The *Economic Strategy* reaffirms the Scottish Government's commitment to creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. It sets out an overarching framework for achieving the two mutually supportive goals of increasing competitiveness and tackling inequality in Scotland. It forms the strategic plan for existing and all future Scottish Government policy and prioritises boosting investment and innovation, supporting inclusive growth and maintaining our focus on increasing internationalisation.

Specifically, it states "The Glasgow and Clyde Valley City Deal demonstrates both the use of innovative financing, and our approach to delivering more powers to local communities."

Scottish Government's policy agenda for cities was set out in Scotland's Cities: Delivering for Scotland (2011):

"This Agenda for Cities sets out the vital contribution that Scotland's major population centres can make in delivering the aspirations of the Government Economic Strategy. This shared agenda focuses on growth and opportunity - concentrating on developing and promoting the key assets of our cities and their regions to attract investment, stimulate economic activity and create jobs."

In March 2016, the Scottish Government updated its "Agenda for Cities" and stated "Our vision, set out in 2011, when we published the Agenda for Cities remains true."

Clearly, the GCR City Deal, and this project, will help to deliver on the objectives of the Agenda for Cities.

The development of NMIS / AMIDS is aligned to the Scottish Government's / Scottish Enterprise's Manufacturing Action Plan (MAP) – August 2016.

3.3.4 Strategic Fit with Regional Policy

The Glasgow & Clyde Valley Strategic Development Plan *Clydeplan* 2017 (SDP) sets out the spatial development strategy for the region. This project is being developed to reflect the SDP's spatial development strategy and support its spatial vision and strategy. The project will support the 4 planning outcomes of the spatial development strategy of the SDP. Glasgow Airport Investment Area is identified as

a Strategic Economic Investment Location (SEIL) in the SDP and the project is seen as a major enabler for delivery of the vision for the airport investment area. Clydebank Riverside is also identified as a SEIL and Clyde Waterfront – now referenced as “Greater Clyde Enterprise Area” - is identified as a SEIL and a core component of the spatial development strategy and a strategic development priority. Although this project does not provide a direct physical link to the Waterfront or to the Clydebank Riverside zones, because of its close proximity to these areas, it still has the potential, when taken together with other complementary City Deal projects, to assist in the development of these areas and to share the economic advantages delivered to these areas as envisaged through the GCRCD. It is also worth noting that the project, through delivery of enhanced greenspace and active travel measures will assist in delivery of the SDP’s vision for the green network and for sustainable transport.

The SDP 2017 recognises the numerous challenges faced within the City Region for Economic Growth, with Policy 3 providing support for the City Deal projects. The importance of the SEIL at Glasgow Airport in accessing “UK, European and Global markets” is recognised, as is the synergy with the complementary City Deal project at Clyde Waterfront and Renfrew Riverside in providing improved transport connections with the wider City Region. The strategic connection of all of these areas through this City Deal project is reinforced through SDP 2017.

SPT’s Regional Transport Strategy (RTS) identifies four key transport outcomes across the SPT area. Close liaison takes place between the Council and SPT on delivery against these objectives, monitored through a Single Outcome Agreement with SPT. The RTS aims to deliver improvements in: reliable travel/ improved connectivity / access for all / reduced emissions. With the provision of new bridge crossings linking communities and businesses, together with improved transport options, the project aligns with these aims.

3.3.5 Strategic Fit with Local Policy

The Renfrewshire Local Development Plan 2014 (LDP) sets out the spatial strategy that will facilitate investment and guide the future use of land in Renfrewshire. The LDP makes specific reference to the importance of the Glasgow Airport Investment Area and of the Cart Corridor. Glasgow Airport, Inchinnan Business Park and Westway Industrial Park are all listed in the LDP as important economic investment locations for Renfrewshire, with mention made of the transport deficits that are hindering their development. This project supports these elements of the LDP and helps address the transport deficits referred to. A review of the Renfrewshire LDP is underway and a main Issues Report has been published based on several rounds of public consultation. This report notes the strategic importance of the City Deal projects in Renfrewshire and will seek to support the development opportunities which will be generated through their successful completion



Renfrewshire Better Council Plan and Tackling Poverty Commission Report 2015 notes that the life expectancy for Renfrewshire residents is slightly lower than the national level, and significant health issues have arisen as a result of relatively high levels of alcohol and drug abuse, obesity and smoking - particularly within the most deprived Council areas.

Child poverty in Renfrewshire is estimated to be 21% with more than 7,000 children living in poverty. There are a number of areas in Renfrewshire with deep-seated poverty and deprivation, and where people suffer significantly worse outcomes in terms of their health and wellbeing, employment prospects, security and quality of life compared to more affluent areas. The long term economic benefits arising from delivering this City Deal project will help towards the Council and City Deal goal of improving the lives of residents and lifting children out of poverty through employment and training opportunities for their parents.

The Renfrewshire Council Local Transport Strategy (LTS) sets 5 key objectives, to:

- Regenerate the local economy

- Extend opportunities for all
- Ensure a healthy and sustainable environment
- Improve community safety and security and increase connectivity between settlements and services
- Encourage integration of services and an integrated approach by public bodies whilst achieving best value

This project will deliver against these aims by providing opportunity for economic regeneration, extending access to opportunities across the city region, and improving connectivity while endeavouring to enhance the environment in the project area. The LTS recognises the absence of good walking and cycling connections between the Airport, Paisley and on to Renfrew and Inchinnan and promotes an action to improve these links. This project will help to address this action through its active travel elements, which will also build on the desired outputs and outcomes that are set out in the Council's Outdoor Access Strategy and Core Path Plan. In addition the Renfrewshire Cycling Strategy (2016 – 2025) seeks to encourage and enable wider use of cycling as a travel option for commuting and leisure. The strategy identifies new cycle link opportunities and builds on existing routes, core paths and also the works included within this and other City Deal projects. Active travel routes planned as part of GAIA link directly to outcomes included in the Cycling Strategy.

The LTS is currently being refreshed, picking up changes in local and regional conditions since its launch in 2007. The refresh will include recognition of the City Deal projects and other strategies and plans to ensure a coherent and beneficial transport strategy within Renfrewshire.

The Renfrewshire Council Plan 2017: '*Thriving People, Connected Communities*' is Renfrewshire Council's plan for action and improvement for 2017-2022. The plan sets out the Council's approach to delivering a better future for all Renfrewshire residents. This includes supporting and growing businesses and creating jobs which are vital to both the economic and social wellbeing of Renfrewshire. The Council approach includes measures to support their local people and businesses and to bring new investment to the area. A key strand in the overall approach is to deliver a step change in economic regeneration. The proposals set out in the plan, recognise existing organisations and businesses in the local area which aid economic delivery, aims to support their continuing growth and also identify and support growth in new sectors which provide employment and training for more people. The proposals include:

- Deliver the three City Deal projects in Renfrewshire, including Glasgow Airport Investment Area.
- Continue to invest in infrastructure to support growth – from road and rail links, to bridges, cycle and pedestrian routes.
- Support growth activity in relation to emerging manufacturing, digital, culture and food industries locally.

The GAIA City Deal project will directly help to support these aims.

In June 2016, Renfrewshire Council published a consultation draft for a new '*Renfrewshire Economic Framework*'. This set out a vision for Renfrewshire as a '*fairer, more inclusive place where all our people, communities and businesses thrive*'. The framework sets out 10 near term strategic goals, which the GAIA project will play a role in achieving. Amongst these goals are:

- Accelerating development of the Glasgow Airport Investment Area
- Strengthening transport infrastructure
- Connecting with the Glasgow City Region

The framework also has as one of its key milestones: 'We will formalise existing stakeholder engagement arrangements by creating a Steering Group to drive forward the Glasgow Airport Investment Area by December 2016'. As noted earlier in his business case, the GAIA Steering Group was established in June 2016, with membership from Renfrewshire Council, Glasgow City Council, Scottish Enterprise, Glasgow & Renfrewshire Chambers of Commerce and Strathclyde University. This steering group helped drive the vision for, and the development and promotion of, the Glasgow Airport Investment Area. As noted earlier a key outcome from this work, was the announcement in December 2017 of the National Manufacturing Institute Scotland being located at GAIA, which will act as a catalyst for the development of the new Advanced Manufacturing Innovation District Scotland (AMIDS).

Another strategic goal of the economic framework was to develop an action plan for Paisley Town Centre and in September 2016 the draft '*Paisley Town Centre – Action Plan 2016 – 2026*' was published for consultation. This action plan sets out a vision for Paisley Town Centre and defines a number of 'activity areas' and established 'key connection' corridors. The project will also help to deliver on the aims of the town centre action plan by assisting in developing the cart corridor and providing improved economic conditions for Paisley.

3.3.6 Summary of GAIA alignment with Policies

Table 3.3-1 below provides a summary of the contribution GAIA provides in achieving the vision, strategies, and outcomes of Policies relevant to the project area.

Table 3.3-1 - Summary of GAIA alignment with Policies

National Policy	Policy Vision / Strategy / Outcomes	Project contribution to Policy Vision / Strategy / Outcomes
Scottish Planning Policy (SPP)	<ul style="list-style-type: none"> Sustainable Low Carbon Natural, Resilient More connected 	Reduced travel times, reduced congestion, improved access to public transport, more reliable public transport, new and better linked active travel infrastructure.
Scotland's Third National Planning Framework (NPF3)	Glasgow Airport – National Development & gateway for investment	Improves connectivity and development potential around Glasgow Airport
Strategic Transport Projects Review (STPR)	Importance of transport infrastructure in maximising potential and reducing disparity.	Improved connectivity to Renfrew, Paisley Inchninn and increases employment potential reducing disparity.
Infrastructure Investment Plan (IIP)	<ul style="list-style-type: none"> Drive economic Growth Transit to Low Carbon Deliver efficient public service Support employment opportunity 	Improving: connections to Renfrew, Paisley and Inchninn; public transport options and opportunity; increasing modal shift, generating economic development opportunity, and improving links to centres of employment.
National Transport Strategy (NTS)	<ul style="list-style-type: none"> Improved Journey Times Reduced Carbon Emissions Improved alternative transport modes 	Delivers against 5 Strategic Outcomes: connecting businesses to markets; expands resident opportunities; improves access to health and leisure facilities; increased active travel options; enhanced public transport options; reduced journey times.
Scottish Economic Strategy	Accelerate economic recovery and provide increased employment opportunity.	Links communities to centres of employment, businesses to customers and suppliers, accesses development opportunities, improves development potential on vacant sites.

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UK Industrial Strategy	<ul style="list-style-type: none"> The world's most advanced economy Good jobs and greater earning power for all Major upgrade to UK infrastructure Best place to start and grow business Prosperous communities. 	Improves connectivity and development potential around Glasgow Airport, creating opportunity for NMIS / AMID
Scottish Manufacturing Action Plan	<p>Eight point strategy:</p> <p>Leadership; Skills; Circular Economy; Energy efficiency & Decarbonisation; Competitive infrastructure; SMART Manufacturing; Supply Chain Capability; Technology & Innovation.</p>	Improves connectivity and development potential around Glasgow Airport, creating opportunity for NMIS / AMID
Regional Policy	Policy Vision / Strategy / Outcomes	Project contribution to Policy Vision / Strategy / Outcomes
Glasgow & Clyde Valley Strategic Development Plan 2017	<ul style="list-style-type: none"> Centres Economy Low Carbon Infrastructure Place making Regeneration 	Creating development opportunity and improved links to SEIL at GAIA; New and better linked active travel routes; reduced journey times, Opening links to vacant derelict land.
Regional Transport Strategy (RTS)	<ul style="list-style-type: none"> Reliable Travel Improved Connectivity Access for all Reduced Emissions 	New and improved link between communities; improved transport options, commercial and retail areas; improved links to existing business areas for a wider catchment area
Local Policy	Policy Vision / Strategy / Outcomes	Project contribution to Policy Vision / Strategy / Outcomes
Renfrewshire Local Development Plan 2014 (LDP)	<ul style="list-style-type: none"> Better connectivity to benefit employment areas. GAIA economic investment centres. Economic importance of Inchinnan, Westway, Glasgow Airport 	Improve connectivity between and to key employment areas; provision of infrastructure which facilitates the progression of new employment centre.
Renfrewshire Better Council Plan 2017 and Tackling Poverty Commission Report 2015,	<ul style="list-style-type: none"> Deliver City Deal projects, improve economic conditions, encourage new employment sectors and job opportunities. Improving the lives of residents and lifting children out of poverty. 	<p>GAIA is City Deal project.</p> <p>Improved accessibility to employment opportunities at existing and new locations in Renfrewshire.</p> <p>Deliver infrastructure for new employment sector (NMIS)</p> <p>Increased employment opportunities across differing sectors improves living conditions for families.</p>
Renfrewshire Council Local Transport Strategy (LTS)	<ul style="list-style-type: none"> Regenerate local economy Extend opportunities for all Ensure a healthy and sustainable environment Improve community safety and security and increase connectivity between settlements and services Encourage integration of services and an integrated approach by 	Improved accessibility to employment opportunities; better link businesses to suppliers and customer; significant active travel infrastructure linked to key points in area; improved public transport opportunities, accessibility and extent.

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	public bodies whilst achieving best value	
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3.4 Existing Arrangements

In November 2017, planning permission was granted, by Renfrewshire Council for the infrastructure associated with the Glasgow Airport Investment Area project (GAIA). In December 2017, Scottish Government announced the investment of circa £60m in addition to the infrastructure works proposed with this project, to create the new National Manufacturing Institute Scotland (NMIS), which will anchor the new Advanced Manufacturing Innovation District Scotland (AMIDS), on the Netherton Farm site accessed by the GAIA project. Currently the land proposed for NMIS has no suitable infrastructure to access or service the area. It is also separated from the Westway Business Park, by the White Cart River. Westway is the location for the Lightweight Manufacturing Centre (LMC), the first phase of NMIS and a specialist centre to develop new manufacturing processes for lightweight materials. As NMIS will be the centre which will drive forward the innovations delivered by LMC, a physical link between these two facilities is clearly of importance. This link will also allow Westway to be physically connected to, and be an integral part of, AMIDS. The new UK Medicines Manufacturing InnovationCentre (MMIC) will also be located on the Netherton Farm site.

There are currently no existing arrangements that will deliver the full scope of investments, outputs and outcomes proposed by this City Deal project, as set out in this business case, nor any which will deliver the infrastructure required to deliver NMIS / MMIC / AMIDS, or to link it to LMC. Existing arrangements are limited to a small number of interventions, outlined below. These arrangements/proposals will provide limited scope towards delivering on the City Deal objectives, or will remain undelivered until the infrastructure proposed as part of City Deal is implemented. The City Deal investments will kick start, build upon and complement existing arrangements, improving their sustainability, rather than duplicating them. The City Deal investments will connect these existing initiatives and developments in a planned way to ensure that the benefits from these components is maximised and ensure the delivery of NMIS / MMIC / AMIDS.

3.4.1 The Glasgow Airport Masterplan (2011)

The Masterplan (see Figure 3.4.A below) sets out the Airport's vision to continue to develop the airport as an asset of strategic national importance in a sustainable and responsible manner. While the airport will continue to work to deliver its vision, there are a number of constraints that are likely to inhibit the full realisation of the potential of the airport. This City Deal project (and complementary projects) will assist in addressing these issues.

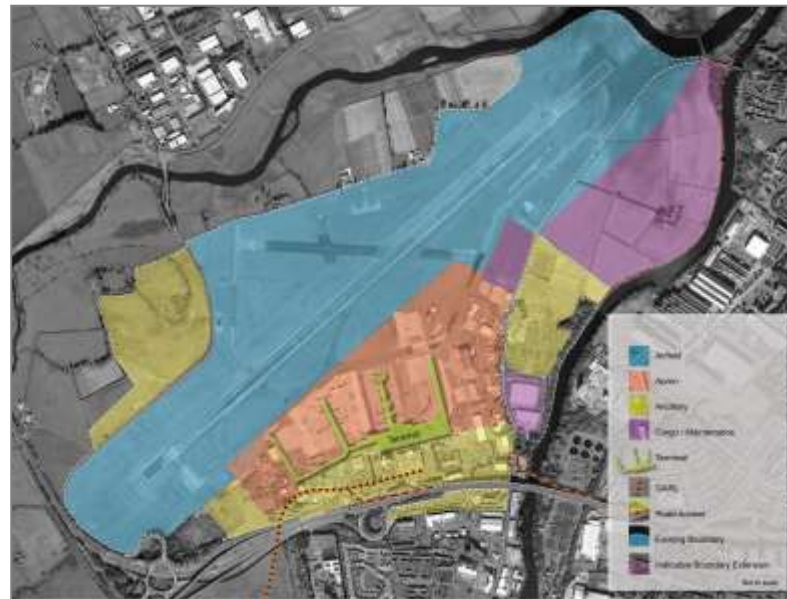


Figure 3.4.A - Glasgow Airport Masterplan

3.4.2 Glasgow Airport Investment Area

A number of studies, including a recent evaluation undertaken by Ekos Ltd on behalf of Renfrewshire Council, Scottish Enterprise, Glasgow City Council and Glasgow Airport, have highlighted the potential for the Airport Area to become a major strategic economic investment area and driver for economic growth. However, development of the area has become stalled and City Deal provides the opportunity to galvanise the public and private sector stakeholders to work together to develop a new approach to delivering on this. Only through the GAIA City Deal project will the delivery of NMIS / MMIC / AMIDS be secured.

3.4.3 Westway Industrial Park

The industrial/business park continues to provide a well used facility for a variety of business and industrial uses, including businesses at the forefront of the energy, transport and renewable energy sectors.



Figure 3.4.B - Westway Masterplan

There have been a number of recent public and private sector investments in the business park, including the new dock facility, funded by Scottish Enterprise. The owners have articulated a clear vision for future

development but are constrained by existing access arrangements that hinder taking forward these development opportunities that have the potential to deliver up to 1500 new jobs.

Whilst important in their own right, the existing arrangements will not on their own address the significant issues and build on the opportunities that exist in the key strategic site centred on Glasgow Airport, in a coherent and planned investment programme. Delivery of the project described in this Business Case will create new public infrastructure, which will leverage private sector investment into resulting development opportunities, which otherwise would not be forthcoming.

As outlined earlier, the interventions also build upon complementary City Deal projects, including the Clyde Waterfront & Renfrew Riverside project (CWRR), the Airport Access Project (AAP) and GCC's Clyde Waterfront & West End Innovation Quarter project. The City Deal proposal is a unique opportunity to set in place a governance, investment and benefits implementation strategy that will bring together existing government policy, council wide strategies, private sector investment plans and smaller scale interventions across the project area to deliver the City Deal objectives across the wider area and help fulfil the Council's strategic vision for this area of Renfrewshire and the overall vision for the Glasgow City Region. The connection of Westway to NMIS / AMIDS through the GAIA project will allow Westway to become an integral part of AMIDS.

3.5 Logic Model

A Logic Model has been developed to help define the potential impact of the project (project inputs-outputs-outcomes-impacts).

Figure 3-3 - Logic Model

Strategic Need	Input	Output/Deliverables	Anticipated Outcome	Anticipated Impact
Poor access and transport connectivity between existing and new key development sites: <ul style="list-style-type: none"> - Limits growth and development opportunities - Access arrangements to Westway Business Park is not ideally suitable for HGVs. 	The GAIA project will improve the transport and access infrastructure surrounding proposed developments and existing sites.	A new bridge across the White Cart Water at Wright Street, connecting into the realigned Abbotsinch Road and linking key development sites on the East of the White Cart with those on the West. Realignment of Abbotsinch Road and capacity improvements to the existing A8 junction. Improved connections between key development sites, the Airport Complex and the strategic road network	Reduced journey times to Glasgow Airport, Westway Business Park, and the surrounding area and eased congestion on these routes. Access points to new and existing development suites are more suitable for HGVs.	Accessing employment opportunities via the new network will be easier and less time consuming, making Renfrewshire a more attractive place to live and work. Higher levels of economic growth and development will be encouraged in the proposed and existing sites

Strategic Need	Input	Output/Deliverables	Anticipated Outcome	Anticipated Impact
Physical constraints to Airport growth and expansion <ul style="list-style-type: none"> - Undeveloped land to the east of the Airport represents an opportunity for expansion yet Airport boundary does not yet extend over this. - Glasgow Airport is a major driver of economic growth. Its ability to drive sector benefits is limited by the lack of integrated infrastructure 	GAIA will enable expansion opportunities adjacent to Glasgow Airport.	Realignment of Abbotsinch Road will facilitate the potential construction of airport support infrastructure.	<p>Eastward expansion of the Airport will be facilitated.</p> <p>Disruption to the operations of the Airport will be minimised.</p>	<p>Glasgow Airport will expand physically and contribute more to economic growth and employment opportunities in the area.</p> <p>Capacity of Glasgow Airport will increase strengthening the Glasgow Airport Investment Area as a key strategic business location.</p>
Utilities network at capacity, creating a barrier to site development.	The GAIA project will deliver public utilities to the Netherton Farm site via the new footbridge across the Black Cart water.	Water infrastructure delivered via a new cycle and pedestrian links between the northern end of the realigned Abbotsinch Road and Inchinnan Business Park.	Safer active travel links between Inchinnan and Westway business parks, the proposed development, and the rest of Renfrewshire.	<p>Establishment of airport-based sector hubs in advanced manufacturing and other markets.</p> <p>Reduced perceptions of remoteness by investors and employees and customers.</p> <p>Modal shift encouraged due to new active travel routes.</p>

3.6 Project Objectives & Contribution to the City Deal

3.6.1 Objectives

The objective of the Glasgow City Region City Deal (GCRCD) is to drive economic growth throughout the Region, by improving opportunities for business growth, private sector investment and improving infrastructure links between communities and centres of employment, health, education and leisure. While the principle driver of the City Deal programme is economic growth, within GAIA this is particularly focussed on areas where there is potential to increase the potential for greater employment opportunity in existing and new business sectors.

GCRCD also has programmes specifically targeted at employment and innovation.

The Outcomes anticipated from the GCRCD include:

- Permanent uplift in GVA to the City Region of £2.2billion per annum (4.4%)
- 29,000 permanent additional jobs (15,000 jobs during construction)

- Unlock £3.3billion of private sector investment
- Improved employment opportunities across the Region with an average of 45,000 accessible jobs in each Council Area
- Supporting innovation and labour market programmes ensure other sustained benefits

Renfrewshire Council has three projects within the GCRCD and the anticipated outcomes within from these projects include:

- 11,000 permanent jobs (1,400 jobs during construction)
- Improved access to jobs in neighbouring areas
- 140ha vacant and derelict land brought back to use
- 30ha of new industrial, storage distribution and office space
- 2000 new homes (including 100+affordable homes)

To contribute to the overall economic growth targeted by the GCRCD, the strategic aim of this City Deal project is to provide additional economic growth, in terms of GVA, in the Glasgow City Region by promoting the Glasgow Airport Investment Area as a strategic economic investment location and as the location for NMIS / / MMIC / AMIDS. This will attract inward investment from both expansion and development of existing locations by current key stakeholders and by facilitating the regeneration of the White Cart corridor as an attractive riverside and urban area that attracts and supports private sector investment in high value new and improved industrial, commercial, business and residential opportunities. The physical works (more fully outlined in Section 3.7) included in GAIA and the project objectives, therefore, directly align with the strategic objectives of the GCRCD.

This additional GVA will be provided through delivery against the following key objectives:

- To maximise the potential of the Glasgow Airport Investment Area as a key strategic business location and centre for economic growth, exploiting clustering opportunities and economic density. (The ability to market the prospective delivery of GAIA infrastructure has had a significant impact. Since the approval of the December 2016 OBC, sites enabled by GAIA have been selected as the locations for the National Manufacturing Institute Scotland (NMIS), the Lightweight Manufacturing Centre (both Scottish Government) and the UK's Medicines Manufacturing Innovation Centre (MMIC). NMIS and MMIC will be accessed by the realigned Abbotsinch Road ,
- To take advantage of the opportunities provided by the Glasgow Airport Investment Area and the proximity to major development sites along the river corridor to maximise the potential for regeneration in the area through the delivery and monitoring of a focussed economic development strategy
- To facilitate the development and expansion of Glasgow International Airport as a key national development and gateway location for investment in line with national planning policy and the Glasgow Airport Masterplan.
- To ensure that the infrastructure interventions build upon current investments in Inchinnan Business Park and Westway Business Park to maximise economic development opportunities.
- To assist in promoting the unlocking of the development potential and attract private investment in vacant and underused sites within the Cart Corridor for employment and development opportunities
- To create construction and operational jobs both during the infrastructure delivery and beyond

These objectives align well with those of the overarching City Deal programme, which are focused on increasing employment and the productivity of the City Region, delivering sustainable economic growth while ensuring that benefits of the economic growth flow to less advantaged communities. Areas within influence of the project are known to be recognised within the Scottish Index of Multiple Deprivation (SIMD). The GAIA project will improve the aspects which positively influence SIMD.

The objectives set out above, were articulated in the Strategic Business Case (SBC), and, at that stage were intended to take into account the strategic aims of the project and the desired outcomes identified at that stage of the project development. As stated in the approved OBC, these objectives were subsequently reviewed and refined as the project development progressed to ensure a clear focus on realistic delivery of achievable quantified benefits and outputs, with clear timescales set for the delivery of the benefits. The updated SMART objectives are set out in Table 3.6-1 below.

Detailed information on the benefits (direct and indirect outputs) which will be realised at a project level are detailed in Appendix B.

The infrastructure investments delivered through this project will directly improve the environment, stimulating private sector investment which will be the catalyst for market driven commercial development.

This project has strong synergy with a range of existing and planned interventions locally as well as the two other Renfrewshire City Deal projects at Clyde Waterfront & Renfrew Riverside and the Airport Access Projects. The integrated transport network improvements created by this project together with the planned improvements from the other projects, such as the road/bridge enhancements delivered by the CWRR project, will collectively improve connectivity, aid access and reduce congestion in currently constrained areas across the project area. These changes will improve the environment and connectivity of strategic development areas and currently vacant or underused opportunities, encouraging private investment. The synergy is particularly strong with the Regional City Deal Airport Access Project, which aims to provide a link between the Airport and Glasgow Central Station, helping to deliver further connectivity improvements to the Glasgow Airport Investment Area.

The new bridge over the White Cart at Wright Street will offer alternative routes for travel across the river, which currently acts as a barrier between businesses and communities, and provide enhanced active travel opportunities for significant population areas and better linking them to major employment centres.

The positive links existing between the Renfrewshire projects and Glasgow City Council's Clyde Waterfront & West End Innovation Quarter project build on the individual benefits derived from each project. Together these will create a corridor of growth east from Glasgow Airport to Renfrew and eastwards to Glasgow city centre. The project team will therefore work collaboratively with the project teams delivering these other projects to ensure the benefits to be realised from individual projects are fully explored and maximised in relation to each other. The project team will also collaborate with the eight partner authorities delivering the overall City Deal programme to deliver a consistent approach that will add value across the individual City Deal projects.

Table 3.6-1 - SMART Project Objectives

Objective	Specific	Measurable	Achievable	Relevant	Timed
To maximise the potential of the Glasgow Airport Investment Area as a key strategic business location and centre for economic growth, exploiting clustering opportunities and economic density.	<p>Objective will address current constraints on expansion and growth of airport by facilitating the extension of the airport boundary eastwards.</p> <p>Improvements in connectivity delivered by the GAIA project (and the complementary CWRR project) will better link communities in Renfrewshire and the wider City Region with the Airport Investment Area.</p> <p>A Renfrewshire Investment Prospectus and a GAIA Investment Prospectus will be developed to market & promote GAIA and its connectivity to the wider City Region will be compiled.</p> <p>An overarching Economic Framework for Renfrewshire and a Marketing Strategy for Renfrewshire will be developed.</p> <p>A GAIA Steering Group will be established to assist in promoting the development and delivery of GAIA.</p> <p>Delivery of NMIS & MMIC by 2025.</p>	<p>The physical interventions include the realignment of Abbotsinch Road and capacity improvements to the existing A8 junction. The new alignment of Abbotsinch Road will also facilitate the potential construction of airport support infrastructure / services and the creation of a new high quality business / commercial centre.</p> <p>The development resulting will be recorded through a benefits realisation monitoring process and comparable with the outcomes noted in Appendix B</p> <p>Refer to Appendix B for measurable items and timescales.</p>	<p>The interventions accord with National, Regional and Local Policies.</p> <p>The interventions are deliverable in conjunction with relevant stakeholders who have been engaged in the progression of this project.</p> <p>The development which will result has been assessed against planning policies and research on potential market response following the successful intervention.</p> <p>The development of the Investment Prospectus for both Renfrewshire and GAIA are key strands of the Benefits Realisation Strategy and responsibility has been assigned.</p> <p>The Economic Framework and the Marketing Strategy are being developed and are currently in draft form.</p>	<p>The infrastructure proposed directly addresses the current constraints which have the potential to limit airport growth and expansion and delivery of the Investment Area.</p> <p>The Investment Prospectus, Economic Framework, Marketing Strategy and GAIA Steering Group are directly relevant to the promotion of GAIA and Renfrewshire as a place to do business, within the overarching context of the City Region.</p>	<p>Physical interventions complete by 2020 with following development in accordance with Appendix B, complete by 2035</p> <p>Renfrewshire & GAIA Investment Prospectus to be completed by 2017.</p> <p>Renfrewshire Economic Framework (currently in draft form) to be completed by 2017.</p> <p>Renfrewshire Marketing Strategy (currently in draft form) to be completed by mid-2017.</p> <p>GAIA Steering Group was established in June 2016.</p>
To ensure that the infrastructure interventions build upon current investments in Inchinnan Business Park and Westway Business Park to maximise economic development opportunities.	<p>The objective will lead to improved connections between key development sites, the Airport Complex and the strategic road network.</p> <p>A Renfrewshire Investment Prospectus and a GAIA Investment Prospectus will be developed to market & promote GAIA and its connectivity to the</p>	<p>The physical interventions include a new bridge across the White Cart Water at Wright Street, connecting into the realigned Abbotsinch Road and linking key development sites on the East of the White Cart with those on the West.</p> <p>The development resulting will be recorded through a benefits realisation monitoring process</p>	<p>The interventions are deliverable in conjunction with relevant stakeholder consultation.</p> <p>The development which will result has been assessed against planning policies and research on potential market response following the successful intervention.</p>	<p>The proposed interventions are identified in the Westway Masterplan and supported within the Renfrewshire LDP.</p> <p>The Investment Prospectus, Economic Framework, Marketing Strategy and GAIA Steering Group will assist in helping existing and new businesses to promote development proposals.</p>	<p>Physical interventions complete by 2020 with following development in accordance with Appendix B complete by 2035</p> <p>Renfrewshire & GAIA Investment Prospectus to be completed by 2017.</p>

Objective	Specific	Measurable	Achievable	Relevant	Timed
	<p>wider City Region will be compiled.</p> <p>An overarching Economic Framework for Renfrewshire and a Marketing Strategy for Renfrewshire will be developed.</p> <p>A GAIA Steering Group will be established to assist in promoting the development and delivery of GAIA.</p> <p>Pro-active engagement with relevant businesses, developers and landowners to identify and facilitate opportunities for economic development.</p> <p>Development of the vacant BOCM site next to the White Cart bridge</p>	<p>and comparable with the outcomes noted in Appendix B.</p> <p>Refer to Appendix B for measurable items and timescales.</p>	<p>The development of the Investment Prospectus for both Renfrewshire GAIA are key strands of the Benefits Realisation Strategy and responsibility has been assigned.</p> <p>The Economic Framework and the Marketing Strategy are being developed and are currently in draft form.</p> <p>Engagement with relevant stakeholders is an ongoing action and is set out as a workstream in the Benefits Realisation Strategy. Consideration will be given to expanding the GAIA Steering Group to include relevant parties.</p>	<p>Pro-active engagement with relevant developers and landowners will ensure that the project takes account of plans and aspirations for business growth and expansion and that other support from the Council can be provided where relevant/appropriate.</p>	<p>Renfrewshire Economic Framework (currently in draft form) to be completed by 2017.</p> <p>Renfrewshire Marketing Strategy (currently in draft form) to be completed by mid-2017.</p> <p>GAIA Steering Group was established in June 2016.</p> <p>Engagement with relevant businesses, developers and landowners has been ongoing since 2016 and will continue through the life of City Deal.</p>
<p>To facilitate the development and expansion of Glasgow International Airport as a key national development and gateway location for investment in line with national planning policy and the Glasgow Airport Masterplan.</p>	<p>Objective will address current constraints on expansion and growth of airport by facilitating the extension of the airport boundary eastwards.</p> <p>Improvements in connectivity delivered by the GAIA project (and the complementary CWRR project) will better link communities in Renfrewshire and the wider City Region with the Airport.</p> <p>Development of up to 3 new hangers to the west of Abbotsinch Road by 2044</p>	<p>The physical interventions include the realignment of Abbotsinch Road and capacity improvements to the existing A8 junction. The new alignment of Abbotsinch Road will also facilitate the potential construction of airport support infrastructure / services and the creation of a new high quality business / commercial centre in a key development site.</p> <p>The development resulting will be recorded through a benefits realisation monitoring process and comparable with the outcomes noted in Appendix B.</p> <p>Refer to Appendix B for measurable items and timescales.</p>	<p>The interventions accord with National, Regional and Local Policies.</p> <p>The interventions are deliverable in conjunction with relevant stakeholders who have been engaged in the progression of this project.</p> <p>The development which will result has been assessed against planning policies and research on potential market response following the successful intervention.</p>	<p>The infrastructure proposed directly addresses the current constraints which have the potential to limit airport growth and expansion and help promote delivery of the Airport Investment Area.</p>	<p>Physical interventions complete by 2020 with following development in accordance with Appendix B, complete by 2035</p>

Objective	Specific	Measurable	Achievable	Relevant	Timed
To unlock the development potential and attract private investment in vacant and underused sites along the Cart Corridor for employment and development opportunities	<p>Objective will address current constraints to growth by improving local connectivity and improving the environment, making it more attractive for development.</p> <p>The physical interventions will be designed and constructed to accommodate adjacent development proposals where known and to enable effective and efficient subsequent development in accordance with planning policy, where no defined plans are present.</p> <p>125,00 sqm of commercial development space by 2044</p>	<p>The physical interventions include a new bridge across the White Cart Water.</p> <p>The development resulting will be recorded through a benefits realisation monitoring process and comparable with the outcomes noted in Appendix B</p> <p>Refer to Appendix B for measurable items and timescales.</p>	<p>Large scale land use study and subsequent masterplanning exercise will examine all potential opportunities to maximise the development potential in the area.</p>	<p>The infrastructure proposed directly addresses the current constraints which have prevented private sector intervention in the area.</p>	<p>Physical interventions complete by 2020 with following development in accordance with Appendix B complete by 2035.</p> <p>Land Use Study completed in early 2016.</p> <p>Masterplanning study to be completed by late 2016.</p>
To take advantage of the opportunities provided by the Glasgow Airport Investment Area and the proximity to major development sites along the river corridor to maximise the potential for regeneration in the area through the delivery and monitoring of a focussed economic development strategy	<p>The objective will lead to improved connections between key development sites, the Airport Complex and the strategic road network.</p> <p>A Renfrewshire Investment Prospectus and a GAIA Investment Prospectus will be developed to market & promote GAIA and its connectivity to the wider City Region will be compiled.</p> <p>An overarching Economic Framework for Renfrewshire and a Marketing Strategy for Renfrewshire will be developed.</p> <p>A GAIA Steering Group will be established to assist in promoting the development and delivery of GAIA.</p> <p>Development of the Black Cart and White Cart bridges by 2022.</p>	<p>The development resulting will be recorded through a benefits realisation monitoring process and comparable with the outcomes noted in Appendix B.</p> <p>Refer to Appendix B for measurable items and timescales.</p>	<p>The interventions are deliverable in conjunction with relevant stakeholder consultation.</p> <p>The development which will result has been assessed against planning policies and research on potential market response following the successful intervention.</p> <p>The development of the Investment Prospectus for both Renfrewshire and GAIA are key strands of the Benefits Realisation Strategy and responsibility has been assigned.</p> <p>The Economic Framework and the Marketing Strategy are being developed and are currently in draft form.</p>	<p>The Investment Prospectus, Economic Framework, Marketing Strategy and GAIA Steering Group will assist in helping existing and new businesses to promote development proposals.</p>	<p>Physical interventions complete by 2020 with following development in accordance with Appendix B complete by 2035</p> <p>Renfrewshire & GAIA Investment Prospectus to be completed by 2017.</p> <p>Renfrewshire Economic Framework (currently in draft form) to be completed by 2017.</p> <p>Renfrewshire Marketing Strategy (currently in draft form) to be completed by mid-2017.</p>

Objective	Specific	Measurable	Achievable	Relevant	Timed
To create construction and operational jobs both during the infrastructure delivery and beyond	<p>The design and construction process will require specialist services to be procured.</p> <p>The subsequent development will result in further construction jobs and also in specific areas, operational jobs.</p> <p><u>Creation of up to 1,755 gross operational jobs by 2044</u></p>	<p>Measurable by the scale of business (jobs, floor area, GVA).</p> <p>Measurable by construction jobs created through infrastructure delivery.</p> <p>Refer to Appendix B for measurable items and timescales.</p>	<p>The delivery of the intervention will ensure the objective is achieved.</p>	<p>Supports stimulation of employment potential, business growth and increase in GVA.</p>	<p>Physical interventions complete by 2020 with following development in accordance with Appendix B complete by 2035</p>

3.7 Project Scope

3.7.1 Project Deliverables

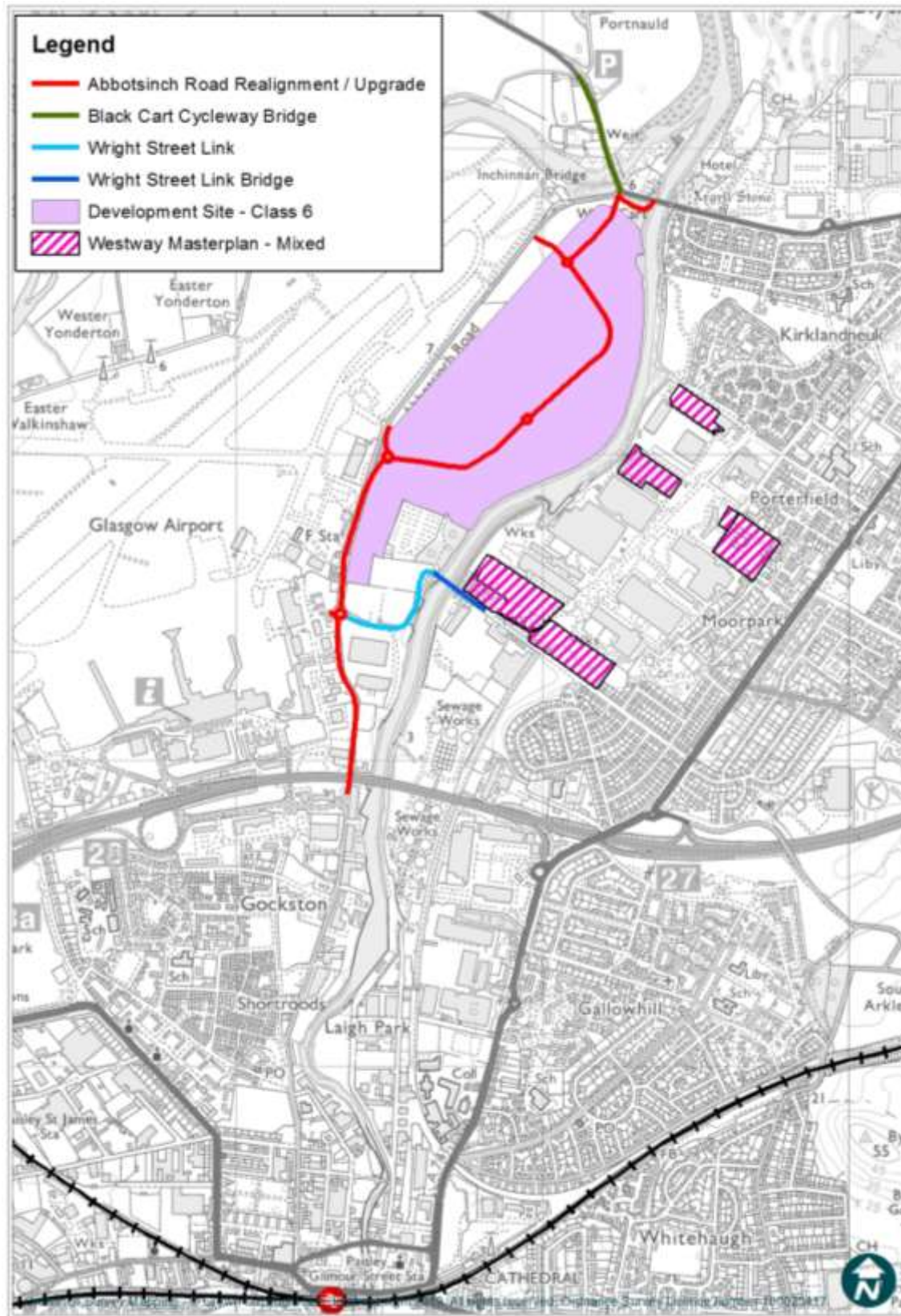


Figure 3.7.A - City Deal infrastructure projects & potential development sites in Renfrewshire

The project will be made up of a number of infrastructure interventions specifically designed to address the constraints and barriers to growth in the local area and to address wider connectivity issues. The major elements of the project will comprise:

Challenges or Market Failure	Project Deliverables
Enable the expansion of Glasgow Airport and the development of the Netherton Farm Site.	Realignment of Abbotsinch Road between a point north of Arran Avenue and the existing A8 Inchinnan Road to the west of the Bascule bridge, with the new alignment designed to open up a key development site for commercial development and enable the realisation of the Airport's Masterplan.
Relieve existing and predicted network pressure in and around key development sites and business parks.	New junctions at either end of the realigned Abbotsinch Road to link with the existing road network, to alleviate current traffic constraints identified by the transport study for the GAIA project and improve potential for investment. (Refer to Appendix O)
A previous application by the past owners of Westway failed to materialise as agreement couldn't be reached between the owners and the Airport. Westway commercial traffic is currently travelling through a housing estate to connect with the M8 and the park is not easily accessible from the Airport.	A collaborative approach led by the Public Sector to bring together key parcels of development land and private sector partners. A new public bridge across the White Cart linking Wright Street and the adjacent development areas on the East of the river with the realigned Abbotsinch Road, providing improved connectivity between Westway Industrial Park, the Airport complex and the road network, and providing new and improved active travel opportunities, improving potential for investment in business areas east of the White Cart.
Active travel infrastructure is a public good and is subject to non-rival consumption. The resulting effect is that the private sector is unwilling to fund it. The private sector won't fund the utilities infrastructure,	New cycle and pedestrian links along the realigned Abbotsinch Road and linked across the Black Cart to enable improved links to Inchinnan Business Park aimed at encouraging modal shift, relieving constraints to the road network, created by cyclists and improving safety for employees travelling between Inchinnan, GAIA and Westway. The Cycle bridge over the Black Cart which is part of this infrastructure will create an effective route for utility infrastructure serving the GAIA site
Existing active travel connections in the investment area are unsafe and in poor condition.	Appropriate Green Network enhancements centred on the development of a strategic linear route linking the key business areas at and around the Glasgow Airport Investment Area building on the existing greenspace network providing more pedestrian and cycle friendly connections between strategic centres, improving the travel options for employees and marketability of employment opportunities in the area. In addition, the provision of an enhanced active travel network is expected to drive a modal shift towards more sustainable transport.

FULL BUSINESS CASE

Additional land remediation and servicing costs at and around Netherton Farm, for the private sector are likely to stall investment decisions. Netherton farm has remained as a SEIL but with no development for a significant period due partly to this constraint.	Appropriate environmental measures (including SUDS provision) and flood mitigation measures adjacent to the White Cart Water and the development site at the realigned Abbotsinch Road, with appropriate servicing provisions creating an attractive waterfront location that will act as a catalyst for private sector investment and remove barriers for private sector investment.
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The direct project benefits from these physical interventions, are noted within Section 5. The location of each project element is shown at Figure 3.7 A above.

The project will be designed, where appropriate, in accordance with the following technical standards:

- The Design Manual for Roads and Bridges (DMRB)
- The Specification for Highway Works (SHW)
- Renfrewshire Council's Guidelines for Development Roads
- Designing Streets
- Cycling by Design
- SUDS for Roads
- Relevant Local Transport Notes
- Other relevant technical standards and guidance notes

3.7.2 Follow on Activity

The City Deal investment will enable the public sector to deliver the infrastructure needed to overcome the market failures and address the challenges faced by the investment area. Once delivered, the infrastructure will facilitate development of NMIS and MMIC and enable progression of the AMIDS. The attraction of these anchor tenants has prompted early discussion with a number of manufacturing organisations, all at varying stages, which will potentially deliver high value manufacturing jobs to GAIA/AMIDS. It is expected that in addition to these anchor tenants, further private sector development in the local area will be stimulated as a result of the industry clustering effect. Specifically, it is anticipated that direct follow on activity will take place in Westway and Inchinnan business parks, over and above already committed developments.

Based on the outcomes of the Colliers Land Use Study (noted earlier) a masterplan study was undertaken to explore uses and development densities at Netherton Farm. While this demonstrated potential for significant development a pragmatic and conservative approach has been taken to the delivered development when accessing economic potential and checking the value for money outcomes for the preferred option,

The anticipated follow on activity includes:

- Vacant and derelict land brought back into use - 59.6 ha (total development land)
- Land remediated - 11.4 ha
- Industrial Space – 88,270 sqm
- Office Space – 35,011 sqm
- Food and Drink Space – 1,760 sqm

Private Sector Investment

- £122.9 million (non-discounted)

Jobs Created

- 635 net direct construction jobs, 160 are estimated to be from the construction of the project and 475 from construction on development sites enabled or accelerated by the project,
- 1,755 net direct operational jobs within the City Region.

3.7.3 Difference from Existing Arrangements

As described earlier, Refer Section 3.4, the existing arrangements present constraints and barriers to growth in the local area and the project will assist in addressing wider connectivity issues. The project will directly address many of these barriers and assist in addressing wider connectivity issues, as well as providing opportunities for the adjacent communities to gain from the project benefits, noted within Section 5. There are no current interventions or existing arrangements that deliver anything comparable to those that will be delivered by this project. While public and private stakeholders have expressed support for the project, individual organisations have been unable to commit the capital resource necessary from within their existing budgets: for the private sector, investment is disincentivised where there may be a prospect of other site owners benefitting disproportionately; while limited public sector resources mitigate against Council and other commitment.

3.7.4 Project Implementation

The project will be implemented, using the principles of PRINCE 2 and in accordance with a detailed Project Initiation Document (PID)¹⁵ (see Appendix F) which has been developed as part of the project governance arrangements and approved by Renfrewshire Council's City Deal Programme Board.

A dedicated City Deal Project Team has been established within Renfrewshire Council to manage the development and delivery of the City Deal projects. This team is supported by the wider Council 'virtual team', providing the necessary inputs on matters such as development planning, benefits realisation, transportation planning, economic development & regeneration, asset management and the labour market projects. The project team have been liaising with key partners in this project, including the Airport, Westway and the GAIA Steering Group, and will continue to expand stakeholder engagement as the project develops. Recently, Terms of Reference have been agreed between the Council, Scottish Government and Scottish Enterprise to drive forward the delivery of AMIDS, with an AMIDS Programme Delivery Board and an AMIDS Workstream Delivery Group established to take forward partnership working on the delivery and implementation of the AMIDS vision. An AMIDS Stakeholder Group has also been established, bringing together other key stakeholders. The Council, through the City Deal Team, is also actively engaged in the delivery of NMIS and MMIC.

Implementation will proceed with the full collaboration of these and other partners to ensure proposals fully align with their own aspirations to ensure that the additional GVA delivered by this and other City Deal projects is maximised.

A programme of stakeholder engagement has extended through the statutory processes and will continue to the commencement of construction. Further information on stakeholder engagement is set out in Section 3.11.

To help ensure that the economic benefits are maximised by the physical interventions, a Land Use Study was completed in November 2015 which assessed the development opportunities which could benefit from the project. This study was tested through a Masterplan Study to check development potential in line with the high quality environment desired.

¹⁵ 'Glasgow Airport Investment Area Project Initiation Document (PID) v1.0', approved Dec 2015.

The output from the Masterplan study, which was informed by the land use study, together with stakeholder consultation, assisted the infrastructure design by setting alignments and standards which would permit the most effective follow on development (see Figure 3.7.B below).

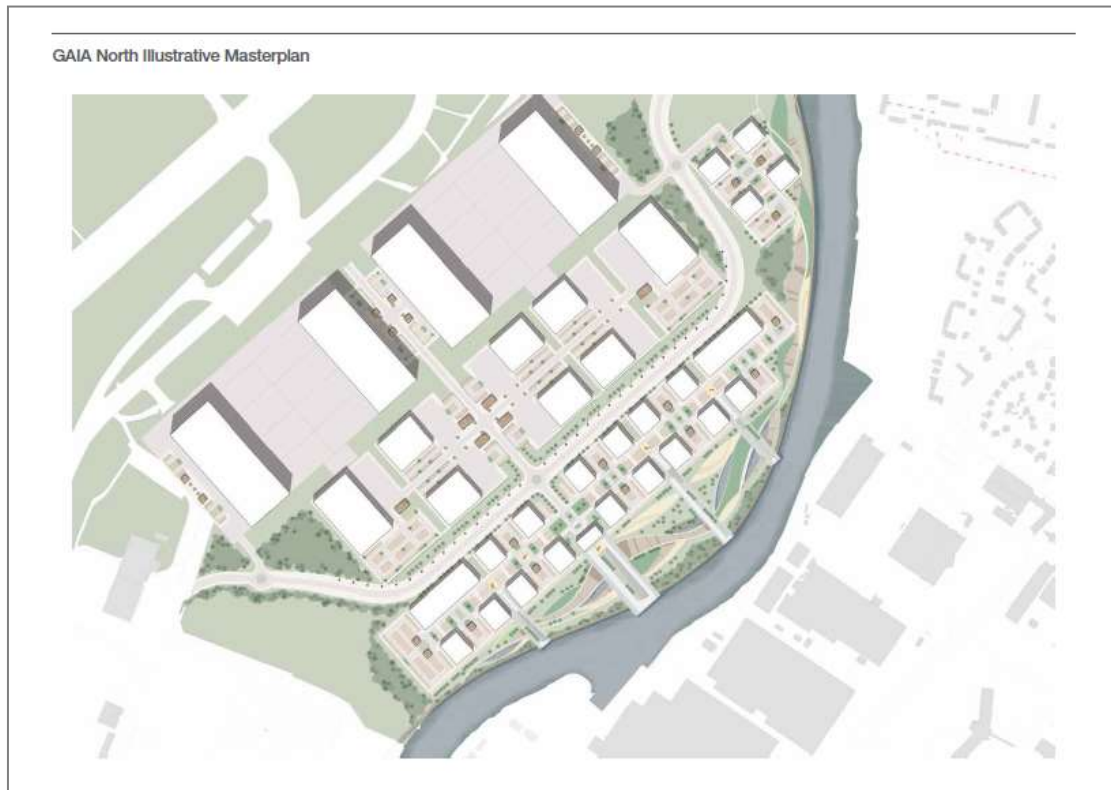


Figure 3.7.B - GAIA North Draft Illustrative Masterplan

A Sourcing Strategy was prepared by the Project Team which aligned to the City Region Procurement and Community Benefits Strategy. This provides information on the procurement of the Lead Consultant and other external support and outlines the process to develop a Contract Strategy for the procurement of the Works.

The Lead Consultant, together with sub-consultants and other specialist advisors, has developed the preliminary designs, to inform the development of the approved Outline Business Case and to enable statutory applications and specimen design and contract documents for the Works contract(s) to be progressed. The Lead Consultant also developed the requirements for a separate ground investigation contract to aid the design development process.

Contracts were procured for topographic surveys for this project and the Clyde Waterfront / Renfrew Riverside Project and also a traffic modelling contract for the three Renfrewshire Council City Deal projects, linking in, where appropriate, with modelling work undertaken as part of the Strategic Assessment Framework cumulative assessment exercise being managed by the City Deal Transport Appraisal Group.

Detail on the procurement process followed is given within section 9.5.1.

3.7.5 Economic Benefits

In addition to the delivery of the physical infrastructure interventions, it is essential that there is a focus on, and strategy for, ensuring that the maximum economic benefits are realised from the project. This is essential both at a project level and at the City Deal programme level as although authorities are responsible for the delivery of their individual projects, the success of City Deal is measured on the economic benefits across the City Region as a whole.

The Renfrewshire project team is working with partners both within and out with the Council to develop a clear strategy for implementation, monitoring and recording the economic benefits delivered from this Project. This information will feed into the overall economic monitoring of the City Deal programme.

To drive the delivery of the economic growth and regeneration in the area, the Council has established an Economic Regeneration team under a dedicated Head of Regeneration. The City Deal project team are working closely with the Regeneration Team and the Council's Marketing Team to ensure the required economic benefits to be delivered from this project and the wider City Deal programme are achieved. A dedicated Benefits Realisation Officer has been appointed to the team to monitor the progression of the Benefits Realisation Strategy, outputs and outcomes.

To assist in driving the realisation of benefits, an overarching Economic Framework for Renfrewshire and a Marketing Strategy for Renfrewshire are being developed. A City Deal Benefits Realisation Strategy has been developed, with a dedicated City Deal Benefits Realisation Officer post created. The Council has worked with partners to market widely the AMIDS proposition. This has seen AMIDS feature in the DiT's UK Investment Prospectus, in the Scottish Cities Alliance Investment Prospectus and in the Invest in Scotland Capital Investment Portfolio and in AMIDS being showcase by Scottish Enterprise at a number of investor events. AMIDS will be a key feature in the 'Scotland Pavilion' programme at MPIM 2019.

3.8 Critical Success Factors

Critical Success Factors (CSFs) are specific criteria used at the long-list stage to make strategic choices about options. They support an assessment of how well an option is likely to succeed across the 5 dimensions of a business case and deliver SMART objectives.

The key objectives and critical success factors (CSFs) for GAIA, have been defined to ensure the development meets ambitions for achieving: technological; economic; social and environmental sustainability.

The critical success factors are used to assess GAIA's ability to deliver against its objectives; the ability to provide value for money (i.e. a Benefit Cost Ratio (BCR) of 1); ability to secure funding (affordability); and its deliverability .

The following factors are considered crucial to the success of the GAIA Project:

- **Strategic Fit:** GAIA is required to deliver on the Project Objectives established, and is strongly aligned with national, regional and local policy objectives. GAIA is focussed on maximizing economic growth to the Glasgow Airport Investment Area, the Inchinnan and Westway business parks, and Netherton farm at the same time addressing wider connectivity issues.

Central to these policy objectives is the delivery of Scottish Government-supported investment in innovative manufacturing, led by the Manufacturing Action Plan for Scotland (MAP). GAIA is required to deliver infrastructure which supports NMIS, AMIDS, and the LMC and the project will specifically deliver the actions within the MAP for Scotland. It is also required for delivery of the UK-funded MMIC, an investment decision driven by the quality characteristics and opportunities offered by the GAIA.

- **Delivering Value for Money:** The relative costs for each option have been considered against their ability to deliver value for money. The GAIA project will deliver value for the public purse at a total capital cost of £39.1million, with forecast returns of £494m in Gross Value Added (GVA) over 25 years, generating a BCR of 12.6.
- **Affordability:** To advance GAIA through the necessary assurance process and construction, funding must be secured. The affordability of each option has been considered against its ability to deliver against wider objectives. Successful delivery of GAIA will mean delivering the project within the agreed £39.1m capital budget.
- **Deliverability:** The extent to which each of the options can be delivered and where the responsibility for implementation lies is considered. Successful delivery of the GAIA will mean

delivering the infrastructure works on time, enabling private sector development as early as possible and sooner than otherwise would be possible.

Long list options are considered against these factors in the Economic Case.

GAIA is one of many interdependent City Deal projects. City Deal success will be judged on the aggregated delivery of these benefits across the City Region as a whole and so also depends on the success of the eight partner authorities in delivering their elements of the City Deal programme.

As set out earlier, a City Deal Benefits Realisation Strategy has been developed for the Renfrewshire City Deal projects and approved by the Council's City Deal Programme Board, with a dedicated Benefits Realisation Officer appointed. The Strategy includes a monitoring regime as part of the project evaluation process. Interim targets set for delivery of the physical infrastructure projects, are supplemented by a clear focus on delivery of economic growth and jobs to ensure that the long term vision of City Deal is embedded in all stages of project development and delivery.

The measurement of success for the overall City Region will, of course, apply at a City Region programme level reflecting the unique joint nature of the City Deal programme, and this will be informed by the work of the Independent Commission on Urban Growth and the National Panel and through the Programme Business Case. As and when further criteria are developed, including for the Gateway Reviews, these will be taken in to account as part of the project monitoring and evaluation process. Renfrewshire will participate fully with the PMO and the eight partner authorities to ensure the joint success of the City Deal is achieved.

At individual project level, successful completion will create jobs and provide additional increased GVA which exceeds the predicted project objectives. This will be achieved by appropriate development, set within what will be a vibrant, environmentally sustainable and visually pleasing waterfront setting where there currently exists vacant and underused land all along the Cart corridor.

Improved travel options and increasing use of public and sustainable travel options throughout Renfrewshire and wider afield will result in increased employment opportunities.

Improved infrastructure that helps to facilitate reliable public transport services will assist in revitalisation across a wider area due to the linkages and opportunities provided by the infrastructure interventions in this project.

Connections through Renfrewshire to Glasgow Airport including sustainable active travel routes will also improve connections to the area from Glasgow and West Dunbartonshire, enhanced further by the delivery of the related Clyde Waterfront and Renfrew Riverside Project and Airport Access Project.

The additional employment opportunities created by the commercial investment following the infrastructure delivery will assist in reducing the current wealth disparity prevalent throughout Renfrewshire and result in an improvement in the areas in Renfrewshire noted in the Scottish Index of Multiple Deprivation (SMD) figures.

3.9 Previous Success & Lessons Learned

The City Deal project team is composed of members with experience gained on other major infrastructure projects in the Glasgow City Region area, as well as significant structures. These include a number of major infrastructure projects such as the M74 Completion and the East End Regeneration Route. These projects identified that transportation infrastructure and economic regeneration, must be taken forward in parallel from the project initiation stage in order to have successful outcomes.

The establishment of the GAIA Steering Group, consisting of representatives from Glasgow Airport; Scottish Enterprise; Strathclyde University; Chambers of Commerce; Glasgow City Council; Renfrewshire Council; gives the project team access to individuals and organisations with appropriate experience in the successful delivery of similar projects, and opportunity to benefit from lessons learned on such projects. This has been further developed through the formation of the AMIDS Programme Delivery Board, the AMIDS Workstream Delivery Group and the AMIDS Stakeholder Group, where experience from previous successes and lessons learned are shared amongst partners.

The merit of having a Benefits Realisation Strategy covering both transportation and economic regeneration at an early stage of the project allows good baseline information to be collected and appropriate monitoring and reporting regimes to be put in place for evaluation of the economic benefits realisation. This recording, monitoring and evaluation process is already underway on this project.

There is today a very visible sign in the east end of Glasgow of huge recent development having taken place both for business, housing and facilities for the 2014 Commonwealth Games and through the Clyde Gateway, all of which were anticipated and built in to the delivery planning process for the infrastructure projects. Successful projects to improve connectivity between communities and businesses, and to create opportunities for new business sectors, can be demonstrated throughout Britain and beyond. The project team have built relationships and engaged with teams who delivered similar projects in Sheffield and Manchester. The method of delivery and lessons learned on these projects, is being used in this City Deal project within Renfrewshire. Collaborative working groups with major stakeholders and partners have also been formed to add to the knowledge base and experience available to the project team. This approach has already been successful in securing NMIS and MMIC at the GAIA site and is being carried forward in to the delivery of AMIDS.

On the Renfrewshire Council City Deal projects there are separate but linked project teams for the infrastructure projects and also for regeneration. This structure has allowed existing condition data (e.g. air quality, traffic conditions, environmental conditions, travel time data etc) to be recorded for post project comparison and evaluation.

As this project is part of the wider City Deal collaboration, lessons are being shared with the eight participating Authorities to ensure best practice and continuity of approach at all times.

3.10 Dependencies and Constraints

The delivery of the GAIA Project is subject to a set of internal and external dependencies and constraints. The definition of each of these is shown in Table 3.10-1 below.

Although there are various parts of this project which are independent and could be constructed without any dependency on other parts, they are inter-related as the overall benefits realisation and potential increase in GVA require the core original City Deal project to be delivered in order for the benefits to be fully realised. These interdependencies were explored as part of the options appraisal process to ensure that the emerging preferred options delivered the greatest combined positive impacts within the available City Deal funding envelope. The overall benefits from the GAIA Project will be maximised through the successful delivery of the complementary CWRR project and AAP project.

Table 3.10-1 - Dependencies and Constraints Definitions

	Definition	Example
Internal Dependencies	Internal dependencies are factors which enable the delivery of GAIA.	e.g. funding
External Dependencies	External dependencies are factors which enable the delivery of GAIA.	e.g. third-party resourcing
Internal Constraints	Internal constraints are factors which restrict the delivering of GAIA.	e.g. staff skills
External Constraints	External constraints are factors which restrict the delivering of GAIA,	e.g. political support

There are a number of internal and external factors on which the successful delivery of the project is dependant. These dependencies are outlined below in Table 3.10-2.

Table 3.10-2 - Key Dependencies

Key Internal Dependencies	Lead Responsibility
Approval of the Full Business Case timeously by the Council's Leadership Board and GCV CEG to enable the Project to progress to programme	RC City Deal Team
Robust project management and cost control/cost management at all stages of development/delivery are essential to ensure that project costs do not exceed the available City Deal funding allocation	RC City Deal Team
Ensure the availability of appropriate internal resources at all times as required to suit the City Deal programme	RC City Deal Team
Ensuring appropriate resources are put in place to successfully monitor and deliver the requirements of the Benefits Realisation strategy	RC Economic Regeneration Team, RC City Deal Team & RC Marketing Team
Monitoring the progress and delivery of the complementary Clyde Waterfront & Renfrew Riverside (CWRR) project to enhance the overall delivery of Benefits Realisation to the connecting areas	RC City Deal & Economic Regeneration Team
Ensure the co-ordination with the City Deal projects/programme of the planning and delivery of relevant other RC plans, strategies and interventions.	RC City Deal Team & RC Co-ordination Group
Ensure appropriate consideration and progression of strategies to permit suitable investor interest and delivery of development which will bring the anticipated project benefits.	RC Economic Regeneration Team, RC City Deal Team & RC Marketing Team
Key External Dependencies	Lead Responsibility
Planning to ensure availability of appropriate resources for professional services and contractors to suit project programme	RC City Deal Team
Land acquisition/assembly requirements are to be robustly developed at an early stage and kept under review as design progresses to ensure agreement of accommodation works prior to contract tender. Deployment of a suitable resource for the acquisition / CPO process, with early engagement of owners/lease holders, where appropriate.	RC City Deal Team & RC Economic Regeneration Team
In conjunction with Key Stakeholders, identification and agreement on a deliverable scheme which maximises the City Deal aspirations and provides infrastructure which improves connectivity to key sites and stimulates investment which enables economic growth.	RC City Deal Team & RC Economic Regeneration Team
In conjunction with Key Stakeholders, identify and agree, locations and routes for service media, which minimise adverse impacts and ensures deliverability of maximum project outcomes.	RC City Deal Team

To take advantage of the opportunities provided by the Glasgow Airport Investment Area and the proximity to major development sites along the river corridor (NMIS, MMIC, AMIDS and LMC) to maximise the potential for regeneration in the area through the delivery and monitoring of a focussed economic development strategy	RC City Deal Team
Planning and progressing the Statutory Approvals process timeously to meet programme requirements	RC City Deal Team
Planning and scoping the procurement of the construction contract to ensure the outcome is within the required budget envelope and timeframe	RC City Deal Team & RC Corporate Procurement Unit
Ensure the delivery of the GAIA City Deal project is aligned with the delivery programme for NMIS, MMIC and the realisation of the wider AMIDS	RC City Deal team; RC Head of regeneration; GAIA Steering Group; NMIS WSDG AMIDS WSDG
Robustly monitoring the construction operations to ensure completion is within budget and on time	RC City Deal Team
Benefits Realisation is underpinned by the creation and retention of jobs in new and existing businesses and other follow on benefits for example economic regeneration which includes enhancements to housing and other amenities within the Glasgow City Region	RC Economic Regeneration Team & RC Marketing Team

There are a number of constraints which are being addressed during development of the project. These are shown in Table 3.10-3 below.

Table 3.10-3 - Key Constraints

Project Constraints	Lead Responsibility
Agreement being reached with Glasgow Airport on the land boundary required to suit the Airport future development plans in the area adjacent to any realigned Abbotsinch Road	RC City Deal Team
Agreement being reached with Westway Business Park owners and other key stakeholders on the location of the new bridge at Wright Street and associated road infrastructure connecting with a realigned Abbotsinch Road	RC City Deal Team
Existing land development proposals and designations	RC City Deal Team & RC Development Management Team
Tie in of new roads to existing road network including remote junctions	RC City Deal Team
Tie in of new cycle routes to existing and proposed ones	RC City Deal Team

Public transport requirements	RC City Deal Team
Interface with tidal flood plain	RC City Deal Team
Project benefits require suitable service media being available at GAIA.	RC City Deal Team
Diversion, protection of existing utility infrastructure,	RC City Deal Team
Maintaining operational efficiency of existing businesses and suitable access to other facilities and land holdings, in the area of the project during and post-construction.	RC City Deal Team

3.11 Stakeholders

The successful delivery of the Glasgow Airport Investment Area Project is the responsibility of Renfrewshire Council and the project is located within Renfrewshire Council boundaries. There are, however, a number of key stakeholders involved, with whom the Council is working with closely, and will continue to work with, throughout the planning, delivery and post implementation phases of the project until the project benefits are fully realised.

The delivery of NMIS and the wider AMIDS requires close liaison with a number of partners, including through the AMIDS and NMIS governance structures and groups. This close partnership working has secured GAIA as the location for NMIS and MMIC and for this to be the catalyst for the wider AMIDS.

Dialogue on options, effects and implications of the project proposals has also been undertaken with statutory consultees to minimise the potential for any objections during the Statutory Process and to ensure the most effective and efficient outcomes. Other stakeholders include key users in relation to accessibility, walking, cycling and public transport associated active travel. Engagement with other transport bodies such as Transport Scotland to review any potential impact on the M8, which is about a mile away, and with Glasgow Airport in relation to potential impacts on the Airport's road network, took place through the traffic modelling exercise and will continue, as required.

To ensure a wider public awareness of the project and to enable public opinion to be gathered, a series of well publicised and well attended joint Public Exhibitions (CWRR & GAIA) and presentations were held in May/June 2016. Further public engagement was undertaken in December 2016 and statutory consultation in advance of submitting a planning application, in May 2017. The community engagement prior to the submission of planning applications included the events listed in Table 3.11-1 below.

Table 3.11-1 - Community Engagement Events

Public Exhibitions	Community Council Presentations	Local Committees / Area Partnerships	Elected Member Presentations
Renfrew Town Hall 17th May 2016	Paisley North Community Council 12th April 2016	Paisley North Local Area Committee 12th May 2016	Renfrewshire Council 1st April 2016
Paisley Town Hall 18th May 2016	Inchinnan Community Council 3rd May 2016	Renfrew & Gallowhill Local Area Committee 10th May 2016	Glasgow City Council 25th August 2016
Intu Braehead 19th May 2016	Renfrew Community Council 3rd May 2016	Houston, Crosslee, Riverside & Erskine Local Area Committee 25th May 2016	West Dunbartonshire Council 27th April 2016
St Margaret of Scotland Hospice, Clydebank 16th June 2016	Clydebank East Community Council 6th June 2016	Garscadden & Scotstounhill Partnership 15th June 2016	Renfrewshire Council 29th March 2017
Yoker Community Campus 21st June 2016	Renfrew Community Council 2nd May 2017 Inchinnan Community Council 4th April 2017		West Dunbartonshire Council 3rd April 2017
Renfrew Town Hall 8th May 2017	Paisley North Community Council 11th April 2017		
Paisley Town Hall 9th May 2017	Clydebank East Community Council 3rd April 2017		
Clydebank Town Hall 10th May 2017	Yoker Community Council 3rd April 2017		
Yoker Community Campus 11th May 2017			

The approach to engagement is based on The National Standards for Community Engagement, 2005, PAN3/2010 and is designed to facilitate the early identification of issues, concerns and suggestions from elected members, members of the public in the local community and other interested groups, as well as facilitating buy-in to the implementation of the projects. It is also designed with the aim of developing and maintaining relationships, building on the initial phase through knowledge, understanding, acceptance and eventually advocacy.

Attendance at these engagement events was recorded together with feedback on the project outcomes and options presented. Analysis of this information notes that over 1500 people were directly engaged at this point in the project. Over 560 feedback forms were returned.



Figure 3.11.A - Attendees at Public Exhibition at Paisley Town Hall

The analysis records that 94% of those who expressed an opinion felt that GAIA would have positive outcomes for the area.



Figure 3.11.B - Infographic of Public Engagement Outcomes

Pro-active engagement with stakeholders, landowners, communities, businesses and early dialogue with Statutory Consultees has allowed a clear understanding of the key requirements and influences of the project for each group. This process has enabled consideration of options and solutions seeking to minimise dis-benefits against maximising outcomes.

The Council has worked closely with the key stakeholders and the Masterplanner to identify the optimum route for the realigned Abbotsinch Road and the airport has been involved in the development of the overall masterplan for the area to ensure that the project proposals are aligned to the airport's own development proposals. This close collaboration on the project will continue, including through the AMIDS and NMIS governance structures and groups.



Figure 3.11.C - Aerial view of Glasgow Airport and GAIA Area

Westway, through the development of a masterplan, has proposals to further develop their site which becomes more achievable with a new road connection from the realigned Abbotsinch Road. The Council has been liaising with the owners of Westway Business Park and Glasgow Airport, to identify the optimum crossing point of the White Cart river in order to ensure that the connection is co-ordinated with the realigned Abbotsinch Road and to ensure the public crossing point is the optimum solution in terms of the plans of the Airport, Westway and the Council. This dialogue has resulted in agreement between the parties on infrastructure locations.



Figure 3.11.D - Image from Westway Masterplan

Detailed discussions have taken place with Glasgow Airport and Westway over the relationship between the Wright Street bridge and the Airport's land holdings and potential impacts on the airport's road network. These discussions, including discussions at a senior level, assisted in working towards resolutions to any potential conflicts and agreement on a location for the bridge and associated road connections.

The project team has been party to establishing the GAIA Steering Group. This Group, with representatives from: Glasgow Airport; Strathclyde University; Scottish Enterprise; Glasgow City Council & Renfrewshire Council worked together to help ensure that forward business planning can be aligned with the plans for delivery of the City Deal infrastructure. This Group was key to the delivery of the Lightweight Manufacturing Centre within Westway and the National Manufacturing Institute Scotland located on land accessed by the GAIA project and the vision for the wider Advanced Manufacturing Innovation District. The relationships have evolved through the development of the AMIDS and NMIS governance structures and groups.

No other conflicts with stakeholders have been identified at this stage with or between stakeholders. A summary of key stakeholders and extent of engagement is contained within Appendix A.

A detailed report of the methods and outcomes from all stakeholder engagement is maintained by the Lead Consultant. This document ensures that all feedback comment and information gathered is taken cognisance of while developing the project.

During progression of the project design, representatives from the Council's Civil Contingencies teams, Fire Services and the Police, who are aware of the project, have also been consulted in detail to ensure the completed project accords with such aspects. This dialogue will continue through the construction stages of the project.

3.12 Benefits

This project offers a clear and measurable ability to contribute to the objectives of the City Deal programme to drive additional economic growth across the City Region by enabling and supporting the expansion of high value business and industry within the Glasgow Airport Investment Area, including developments in the areas around Glasgow Airport, Westway Business Park and Inchinnan.

This project has been through a process of evaluation at City Region level and has been ranked 11th out of the 20 projects selected. It will make a vital contribution to the overall City Deal programme. In addition, during the progression of the project, Peter Brett Associates were commissioned to examine the project level GVA, based on GAIA as a standalone project. That analysis (refer Section 5) noted that the project has the potential to create a total net direct GVA of £498.9 million, based on a scenario with modest assumptions.

To enable the determination of the project specific benefits which would be derived, the team considered the potential development on sites where access, environmental conditions or economic environment would be improved by the project. On areas where access was directly improved, a masterplan study, undertaken in parallel with discussions with stakeholders and statutory authorities, provided the potential uses and development densities on those land parcels. Where economic or environmental conditions for a site were improved by the project, information gathered from studies of the relevant LDP's and discussions with stakeholders and land agents were used to assess the potential acceleration of development on those land parcels. This evaluation provided a range of uses and development numbers across the project area.

The resulting development figures, assessed as benefits from the GAIA project, were then assessed using standard construction indices (BCIS cost per sqm) to determine the associated private sector investment. Appendix G2 provides a spreadsheet summary of the development figures. Section 5 describes the financial aspects of the economic outcomes derived from GAIA.

Peter Brett Associates were also commissioned to examine the economic outcomes from the GAIA project. This evaluation (see section 5) used industry best practice and included evaluation of a range of factors which would have a bearing on the number of jobs which could be delivered as a consequence of the GAIA project as a standalone project. Factors which were included in this process were: deadweight; leakage; displacement and multiplier.

The project will be the catalyst for transformational change in currently underused, vacant and derelict land, attracting private investment in new and existing commercial and residential developments, bringing many and varied benefits to the area and providing the required GVA contribution to the City Region programme. Key private sector stakeholders including Westway and Glasgow Airport will benefit from higher rental and buildout rates. Public sector bodies will benefit from increased tax revenues from higher levels of economic activity and GVA. Further, community groups and users will benefit from the regeneration associated with this.

Improvements to the infrastructure, including capacity improvements at the A8 Abbotsinch Road Junction and the links to the infrastructure improvements delivered by the CWRR project will improve connectivity across the area

The additional opportunities for public transport and active travel options provided by the project will result in positive effects on transport economics as well as carbon use and improvements in environmental quality. The consequential improvement in air quality and new active travel infrastructure will also enhance health standards in the local area. Environmental and accessibility factors will benefit both the private sector stakeholders on site and the local residents of the area.

To drive the delivery of the economic growth and regeneration in the area, Renfrewshire Council has established an Economic Regeneration team and a dedicated Head of Regeneration. The City Deal project team are working closely with the Regeneration Team and the Council's Marketing Team to ensure the required economic benefits to be delivered from this project and the wider City Deal programme are achieved.

To assist in driving the realisation of benefits, and help deliver transformational economic change for Renfrewshire within the context of the Glasgow City Region, an overarching '*Economic Framework for Renfrewshire*' and a '*Marketing Strategy for Renfrewshire*' have been developed, with both currently published in draft form and being consulted on.

A Renfrewshire City Deal Benefits Realisation Strategy (BRS), included within Appendix G1, has been developed and a dedicated City Deal Benefits Realisation Officer appointed. The Strategy includes a monitoring regime as part of the project evaluation process. Interim targets set for delivery of the physical infrastructure projects, are supplemented by a clear focus on delivery of economic growth and jobs to ensure that the long term vision of City Deal is embedded in all stages of project development and delivery.

The strategy contains a number of actions, including developing a 'Renfrewshire Investment Prospectus' and a 'GAIA Investment Prospectus' to market & promote GAIA and its connectivity to the wider City Region.

The project team have been successfully working with Scottish Enterprise in getting the GAIA/AMIDS development included in the DIT's UK Investment Portfolio, which was launched at MPIM 2018. Work on this has continued and, in addition, AMIDS now features in the Scottish Cities Alliance Investment Prospectus, in the Invest in Scotland Capital Investment Portfolio and has been showcased by Scottish Enterprise at a number of investor events. AMIDS will be a key feature in the 'Scotland Pavilion' programme at MPIM 2019.

To provide a focus for the economic developments to be delivered through GAIA, a land use study and masterplan study have been undertaken, building on the masterplans previously prepared by the Airport and by Westway.

A GAIA Steering Group was established in June 2016, with membership from Renfrewshire Council, Glasgow City Council, Scottish Enterprise, Glasgow Chamber of Commerce and Renfrewshire Chamber of Commerce. The Steering Group, ensured that there was a clear focus on delivering the vision for GAIA and assist in promoting the development and delivery of GAIA. This, together with the Council's collaborative approach to working with other stakeholders and partners, has been instrumental in securing the location of the new National Manufacturing Institute Scotland (NMIS) (announced by Scottish Government in December 2017) and the Medicines Manufacturing Innovation Centre (MMIC) on the key GAIA site. Following on from this, Terms of Reference have been agreed between the Council, Scottish Government and Scottish Enterprise to drive forward the delivery of the vision for AMIDS, with a number of support groups in place, including an AMIDS Stakeholder Group. The Council is also working closely with the NMIS and MMIC teams on delivery of these projects.

The economic, physical and social output level benefits associated with this project, and that will be monitored, are detailed in Appendix B1 and in the Benefits Realisation table attached in Appendix B2. The initial assumptions have been developed through a bottom up approach derived from a robust review of all available information on the ability of the project to unlock the regeneration potential of the project area and bring forward development of stalled sites and vacant, underused and derelict land. The anticipated benefits set out in Appendix B include:

Development benefits

- Vacant and derelict land brought back into use - 59.6 ha (total development land)
- Land remediated - 11.4 ha
- Industrial Space – 88,270 sqm
- Office Space – 35,011 sqm
- Food and Drink Space – 1,760 sqm

Private Sector Investment

- £122.9 million (non-discounted)

Jobs Created

- 635 net direct construction jobs, of which 160 are estimated to be created from the construction of the project and 475 from the construction of the development sites enabled or accelerated by the project,
- 1,755 net direct operational jobs within the City Region.

As set out earlier, the Netherton Farm site will be the location for the new NMIS and MMIC. This together with LMC, located at Westway, will act as the catalyst for the development of the Advanced Manufacturing Innovation District – Scotland (AMIDS). The ambition of the partners is that AMIDS will deliver up to 10,000 jobs and help develop and secure the future of Scotland's vital manufacturing sector.

3.12.1 Disbenefits, Conflicts and Mitigation

While it is expected that the GAIA project will deliver benefits for each stakeholder group, there may be potential disbenefits which will need to be minimised or mitigated. Construction and subsequent increased traffic along and across the White Cart may lead to higher pollution rates. This would disbenefit conservation-orientated stakeholders including Scottish National Heritage and Marine Scotland. Further the river bed is owned by Crown Estates. As noted above, these impacts may be outweighed by increased use of active travel modes.

The potential for the project to negatively affect the M8, operated by Transport Scotland, and Glasgow Airport's road network has been examined in detail during the traffic modelling study. This study has confirmed that there is no negative impact as a consequences of the project, which cannot be mitigated.

It is expected that during the construction period, traffic on the local road network will increase due to the presence of construction vehicles. This disbenefit to local residents will be minimised by specifying operating hours and vehicle routes for site access to reduce disruption.

Conflicts may arise between Renfrewshire Council and Canmoor, the owners of Westway Business Park, as the two stakeholders will both be offering commercial and industrial floorspace to private sector businesses. However, the GAIA project is complementary to Westway's business plan, and the takeover of Westway was motivated by the planned intervention in the GAIA. To prevent any conflicts, Canmoor will continue to be actively engaged in the GAIA project and are represented on the AMIDS Stakeholder Group.

Conflicts may also arise between private sector stakeholders and public sector bodies. Many public sector stakeholders (including Historic Environment Scotland; Scottish Natural Heritage; Marine Scotland; the Forestry Commission) are concerned with the environmental impact of the GAIA project, whereas businesses may be expected to seek to maximise the potential floorspace of the development. Any conflicts arising from these stakeholder groups are being managed through active involvement of all concerned parties.

Stakeholder	Benefits	Disbenefits	Mitigation
Glasgow Airport	Opening up of land for eastward expansion. Increased business in the local area. More active travel links and improved accessibility	Short term disruption to the Airport's road network due to increased construction traffic.	Advance notice of timings of construction period and routes affected. Continued engagement during project delivery to ensure complementary business plans.
Canmoor (Westway Business Park Owners)	Clustering impact of new businesses at Netherton	Increased competition for industrial and commercial floorspace	Continued engagement during project delivery to

Stakeholder	Benefits	Disbenefits	Mitigation
	<p>Farm, particularly advanced manufacturing.</p> <p>Decreased perceptions of isolation resulting from improved accessibility across the White Cart.</p> <p>Land value improvements.</p>	<p>due to new sites enabled by the GAIA project.</p>	<p>ensure complementary business plans.</p>
Renfrew Chamber of Commerce	<p>Potential for more members as businesses are attracted to the region</p>		
Utilities Companies (all potentially affected)	<p>Increased demand for utilities from new businesses.</p> <p>Energy consumption particularly high for desired manufacturing uses.</p>	<p>Infrastructure may be required to accommodate additional demand at cost to utilities providers.</p>	<p>Integrated utilities infrastructure included in site plans.</p>
Scottish Enterprise	<p>Contributes to SE objectives regarding Scotland's manufacturing sector.</p>	<p>May drive investment away from the AFRC, a SE funded project nearby.</p>	<p>Involvement in planning stage to ensure reduction in use conflict and integration of AFRC into AMIDS. Fully engaged through AMIDS governance structures to ensure complementarity</p>
SEPA	<p>Flood mitigation measures.</p>	<p>Potential for wastewater runoff during construction and operation of sites into the White Cart.</p>	<p>Appropriate waste water management protocols during construction and operation agreed with SEPA in advance.</p>
Crown Estates	<p>Increased land value along the White Cart, the bed of which is owned by Crown Estates.</p>	<p>Potential for increased pollution to river and banks due to construction and increased traffic.</p>	<p>Requirement of private contractors to produce Environmental Management Plans and Waste Management Plans.</p>

Stakeholder	Benefits	Disbenefits	Mitigation
Historic Environment Scotland	Strategic outcomes will result in greater visitors to local cultural assets.	Potential disruption to nearby cultural assets including the A listed Inchinnan Rolling Lift Bridge and the Scheduled Monument at All Hallows Church, Inchinnan.	Consultation and involvement during project delivery.
West of Scotland Archaeology Service	Historic locations on the site could be enhanced by provision of information to visitors.	Potential disruption to archaeological resources.	Avoidance and design iteration where practicable and otherwise through appropriate investigation and recording of sites
Marine Scotland	TBC	Potential for increased pollution to river and banks due to construction and increased traffic.	Marine Scotland have screened that the development has the potential to impact upon the marine environment and therefore it also falls under the Marine Works (Environmental Impact Assessment) Regulations 2007 (MW EIA Regulations).
Forestry Commission	TBC	Design plans may impact on Ancient Woodlands, Native and Semi-Native woodlands, SSSI (Black Cart), Local Nature Conservation Sites and Tree Preservation Orders	Further consultation will take place once areas of woodland loss are known
Transport Scotland	Improved transport accessibility in line with TS objectives	Potential disruption to nearby M8.	Traffic modelling review of potential disruption proves no detrimental impact which can not be mitigated.

Stakeholder	Benefits	Disbenefits	Mitigation
SPT	Improved transport accessibility in line with SPT objectives	May dissuade public investment into other transport projects with a greater strategic fit with SPT objectives	Continued engagement with the partner about the best approach to transport delivery in Renfrewshire.
Local Residents	Positive economic impact to local area.	Local traffic disruption from the construction of the infrastructure and associated development sites	Continued engagement in community engagement and consultation events. Traffic modelling review of potential disruption in process.
Community Planning Partnership	Will assist/accelerate regeneration of the area.	Low participation rates may result in a poor fit to the need of community organisations.	Proactive engagement with Renfrewshire CPP.
Community Councils	Improvements to the environmental quality through new green networks between the site and Paisley Town Centre.	Prior opposition to housing development may indicate dis-benefit from development of commercial uses associated with GAIA.	Involvement of Community Councils generally, and Inchinnan CC in particular.
Sustrans	Provision of active travel routes between key employment sites.	Improved road infrastructure may encourage uptake of car use.	Provision of attractive active travel networks
Cycling Scotland	Development of active travel routes. Will complement existing and recently upgraded Glasgow Airport cycle routes.	Potential threat of severance of communities from the infrastructure	Engagement with community organisations
Glasgow & Clyde Valley Green Network Partnership	Development of active travel routes in line with Glasgow & Clyde Valley Green Network Partnership objectives	Loss of vacant land which could have been assigned for greening.	Provision of green space and public realm.

3.13 Risk

Risk Management on the project is being carried out in accordance with Para 5.3 of the Assurance Framework Part 3 document and the overarching GCR City Deal Risk & Issues Management Strategy. The Project Team ensure that the Risk Register is kept up to date with monthly risk review meetings. Monitoring and review is carried out in accordance with the Assurance Framework and the Council's procedures and included in the Project Status Report to the PMO on a 4 weekly basis. In addition, the full Risk Register (see Appendix D) is submitted to the PMO on a quarterly basis / as required.

Table 3.13-1 below sets out the key risks to the delivery of the GAIA Project (as at February 2019). These are the summary risks. A full risk register, setting out in full the current risks, is attached in Appendix D, complete with risk references, risk owner, status, description, control actions, impact, probability and rank.

The Project Team retains responsibility for fully assisting, cooperating and collaborating with the PMO and the eight City Deal partner authorities in relation to mitigating any programme risks relating to the Infrastructure Fund.

The Project Team is also responsible on behalf of Renfrewshire Council for ensuring that this and the other City Deal projects for which they are responsible are undertaken in full compliance with the requirements of the Assurance Framework and any subsequent directions from Cabinet.

There are currently 43 open risks recorded within the project Risk Register, contained within Appendix D. Regular monitoring of the project through progress meetings, peer group reviews, risk workshops and maintenance of issue logs and risk registers enable the risks to be regularly assessed for the project and appropriate mitigating action taken in accordance with the City Deal Risk Management Strategy, refer to Appendix J.

The risk register has maintained the initial impact and probability of each identified risk as static. Depending on the changing circumstance around the impact and probability of the identified risk, in some cases the residual risk is noted as higher than that assessed at the time of identifying the risk. This open process assures a realistic view is taken of each risk and suitable monitoring of the effectiveness of mitigation is maintained.

A primary risk for this project is the ability to deliver within cost and programme. Regular reviews of project costs are undertaken, covering forecast construction costs, land costs, anticipated cost inflation, professional fees, investigation costs, in-house costs and third party cost. These reviews are completed in parallel with reviews of programme as impacted by changes in process, governance or other influences. Consideration of Optimism Bias levels (appropriate to the stage and knowledge of project information) has been given throughout project development. The schedule showing the assessment of Optimism Bias at OBC stage is contained at Appendix K. At FBC stage, with a fixed price tender, OB has been replaced by appropriate QRA and contingency allowances.

The risk to the Programme of GAIA not progressing or achieving all its outcomes, is also a key risk being monitored. GAIA already has committed investment from third parties which will deliver target benefits (NMIS, MMIC). A fundamental risk to the project is that the follow-on space fails to be delivered by the private sector, frustrating establishment of a high value manufacturing cluster. Failure to deliver these benefits will be a risk to gateway reviews, outcomes and, as a consequence, programme funding. Regular project updates, changes, agreement on mitigation etc are included within the Programme governance arrangements and the overall impacts of project changes monitored by PMO and reported to cabinet at regular intervals.

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3.13-1 - Key Project Risks

Ref	Type	Risks	Mitigation
GAIA008b	Emerging	Potential disruption to local residents & businesses due to construction contract.	<ul style="list-style-type: none"> Contractual requirements in place to minimise disruptions. Good public engagement & proactive communications from Council & Contractor
GAIA015a	Internal	Statutory Processes cause delay, amended design or construction process.	<ul style="list-style-type: none"> Planning application and marine licence applications secured. Application for alterations to listed structure (Masonry Arch Bridge @ White Cart) submitted. GAIA main and Black Cart cycleway CPO submitted – no objections, CPO to be confirmed.
GAIA016	External	Land assembly issues delay delivery programme.	<ul style="list-style-type: none"> Land acquisition strategy compiled & approved Core GAIA site acquired. GAIA main and Black Cart cycleway CPOs submitted – no outstanding objections, CPOs to be confirmed. CPO process in parallel with voluntary discussions.
GAIA019	External	Lack of agreement or co-ordination with key stakeholder's disruption and delays to the project. Risk to overall delivery of the RC City Deal programme and financial impact.	<ul style="list-style-type: none"> Working groups established Agreements in principle with all but one key stakeholders. Ongoing engagement with all stakeholders
GAIA020	External	Failure to agree legal terms with third party and other stakeholders relating to project results in delay to project and financial implications to budget	<ul style="list-style-type: none"> Agreements in principle with all but one key stakeholders. Ongoing engagement with all stakeholders
GAIA024	Emerging	Perceived inadequate communication on project	<ul style="list-style-type: none"> Good public engagement & proactive communications from Council & Contractor
GAIA027	External	Lack of utility capacity prejudices development	<ul style="list-style-type: none"> Early and ongoing engagement with utilities. Short and long term utility strategies developed.

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GAIA037	External	Risk of cable diversion programme for high voltage cable disrupts construction programme and leads to delay and/or extra cost to project.	<ul style="list-style-type: none"> Contractor will be required to reach agreement with Scottish Power.
GAIA041	Extrenal	GAIA infrastructure programme impacts development (incl. delay of road construction, access to utilities, number of contractors working concurrently)	<ul style="list-style-type: none"> Land made available for GAIA contract limited to allow provision for NMIS and MMIC construction. Requirement to provide and maintain construction routes included in GAIA contract.

4 OPTIONS APPRAISAL

4.1 Introduction

This section demonstrates how options were identified, considered and comparatively evaluated assessing their potential contribution to the objectives and value for money criteria. The evaluation process included technical assessment processes: review of strategy, policy, physical and environmental constraints, as well as transport modelling and consultation with stakeholders and the public.

Options for delivery of the physical intervention: procurement route; phasing; funding sources are included within other sections of this Business case.

4.2 Programme Level Appraisal

At the City Deal Programme Level, a strategic SWOT and cost-benefit analysis, carried out by external consultants, formed the basis of the options appraisal for the grouped City Deal projects, of which the GAIA project was one. The grouped options were appraised primarily against the ability to unlock the region's development potential and create GVA, with additional consideration given to potential wider regeneration benefits. More information on this process was set out in Section 4 of the GAIA Strategic Business Case.

The GAIA project ranked 11th in the City Deal infrastructure project list in terms of GVA, delivering £118m of GVA towards to overall City Deal programme GVA of £2.2billion uplift across the City Region. More information on this is set out in section 2.2.

4.3 Qualitative Appraisal and SWOT analysis of Options undertaken for the SBC

The Programme Level assessment was followed by an initial and high-level desk based assessment to consider interventions that would could best address the areas development constraints; ranging from doing nothing; through to individual interventions which may facilitate some degree of change or unlock individual sites; to full intervention with more radical infrastructure solutions (such as increasing connectivity through provision of two new bridges over the White Cart river).

The initial assessment comprised qualitative appraisal, SWOT analysis of the options and consideration of the relative cost and benefit of each. The options considered are listed below;

Option 1: Do nothing

This option assumes no additional capital investment is available for infrastructure works aimed at increasing GVA generating activity.

Option 2: Minimal Realignment of Abbotsinch Road

This option assumes only a minimal realignment and upgrade of the current Abbotsinch Road with no further capital investment for infrastructure works.

Option 3: Realign Abbotsinch Road further east

This option considers the potential for GVA growth resulting from a relocation of Abbotsinch Road further to the east with no further capital investment for infrastructure works.

Option 4: Option 3 plus the inclusion of a spur road and new bridge over the White Cart River

This option assumes in addition to option 3, a new spur road is constructed from the newly aligned Abbotsinch Road along with an access bridge across the White Cart River to connect with Wright Street and the Westway Business Park.

Option 5: Option 4 plus the inclusion of a new bridge over the White Cart River in the Paisley Harbour area with associated access infrastructure

This option assumes in addition to Option 4, further improvements are made in extending connectivity between the Airport Investment Area and Paisley, via the Paisley Harbour area, including a new bridge over the White Cart River. As set out earlier, this option extends the scope of the original core City Deal GAIA project that was modelled in the Infrastructure Fund programme assembly process. It looks to add value to the core project by better connecting Paisley to the Investment Area and seeking to open up the south Cart corridor.

Option 6: Improvements to walking and cycling links (in conjunction with either Options 4 or Option 5 above)

The benefits of further linkages and accessibility to surrounding areas are assumed in addition to options 4 and 5, including walking, cycling and public transport links along with other connectivity improvements such as a possible new roundabout / bridge work at existing bridges on Abbotsinch Road.

Option 7: Other associated site servicing improvements (in conjunction with Options 4, 5 and 6 above). This option assumes that utilities and other servicing infrastructure is provided to provide specific “shovel ready” sites for potential development.

The methodology used and the results of the appraisal, assessment of Relative Value for Money, and SWOT analysis are set out in Table 4.3-1 below. The assessment concluded that Options 6 and 7 provide the area with the greatest connectivity for road traffic, cycling and walking together with the greatest opportunity for economic regeneration both for new and by expansion of existing developments. However, options 6 and 7 would be subject to consideration of affordability within the overall City Deal funding envelope.

Further to the outcome of this initial assessment and further to dialogue and discussions with stakeholders with consideration to affordability issues, it was concluded that the version of Option 6 that incorporated the Option 4 elements provided the greatest potential to deliver against the project core objectives and the overall objectives of City Deal within the available City Deal funding envelope, with the inclusion of site servicing opportunities and other enhancements to maximise the opportunities from NMIS and MMIC subject to affordability considerations.

Table 4.3-1 - Results from initial qualitative appraisal and SWOT analysis

Initial Option	Strength	Weakness	Opportunity	Threat	Relative Value for Money
Option 1: Do Nothing / Do Minimum	Low cost / Low risk Option.	Targeted GVA growth unlikely to be delivered. Limited planned public and private sector interventions unlikely to deliver significantly improved outcomes.	Resources assigned to GAIA project could be directed to other interventions.	No improvement to economic conditions locally. Constrained opportunity in comparison to other areas exacerbates condition which results in declining condition, due to risk of movement of business away from area. Potential diminution of economic potential within other areas, due to continuing constraint in connectivity.	Zero Cost, Zero Benefit Relative VfM Ranking: 6
Option 2: Minimal Realignment of Abbotsinch Road	Minimal investment with limited risk. Limited impact on neighbouring properties.	No improvement in connectivity across River Cart. Constrains development potential for major Employers e.g. Airport, Westway and other sites and existing businesses on both side of the river. GVA in local and region area limited due to lack of wider connectivity. Constrains the potential for modal shift.	Facilitates the bringing forward of key development sites consistent with the LDP and Airport Masterplan – to a limited degree. Improved access to development sites and existing businesses on West side of the river.	Development opportunities seen as limited by market and take longer to achieve. Other areas with fewer constraints have accelerated growth, increasing differential in wealth and poverty. Growth of the Airport, Westway and other businesses both sides of the river are constrained due to poor connectivity. Constrained opportunity in comparison to other areas exacerbates condition which results in declining condition, due to movement of business away from area. Potential diminution of economic potential within other areas, due to continuing constraint in connectivity. Conflicting views of businesses on development strategy for the area. Potential routes close to areas of potentially contaminated land and SINC.	Minimal Cost, Very low benefit Relative VfM Ranking: 5

Initial Option	Strength	Weakness	Opportunity	Threat	Relative Value for Money
Option 3: Realign Abbotsinch Road further into Development Site	Minimal investment with limited risk. Limited impact on neighbouring properties. Enhanced growth / opportunities in development site consistent with Airport Masterplan.	No improvement in connectivity across River Cart. Constrains development potential for major Employers e.g. Airport, Westway and other sites and existing businesses on both side of the river. GVA in local and region area limited due to lack of wider connectivity. Constrains the potential for modal shift.	Improved access to development sites and existing businesses on West side of the river. Better facilitates the bringing forward of key development site consistent with LDP and Airport Masterplan. Improved potential for GVA uplift in Renfrewshire.	Development opportunities created are seen as limited by market and take longer to achieve. Other areas with fewer constraints have accelerated growth, increasing differential in wealth and poverty. Constrained opportunity in comparison to other areas exacerbates condition which results in declining condition, due to movement of business away from area. Potential diminution of economic potential within other areas, due to continuing constraint in connectivity. Conflicting / disparate views of businesses on development strategy for the area. Potential routes close to areas of potentially contaminated land and SINC. Alignment options constrained by flood levels. Possible State Aid legislation implications	Medium Cost, limited benefit Relative VfM Ranking:3
Option 4: Realign Abbotsinch Road further into Development Site plus the inclusion of a spur road and new bridge over the White Cart River	Enhanced growth / opportunities in development site consistent with Airport Masterplan. Good potential for GVA uplift in Renfrewshire & Clyde Valley area. Improved connectivity over River Cart. Opens up further commercial sites for development by	Increased cost More stakeholder and possibly conflicting interests.	Improved access to development sites and existing businesses on both sides of the river. Improved access to strategic road network & Airport complex for GAIA businesses. Better facilitates the bringing forward of key development site consistent with LDP and Airport Masterplan.	Conflicting / disparate views of businesses on development strategy for the area. Potential routes close to areas of potentially contaminated land and SINC. Possible State Aid legislation implications	Medium Cost, strong benefit Relative VfM Ranking: 2

Initial Option	Strength	Weakness	Opportunity	Threat	Relative Value for Money
	<p>improving connectivity from the Westway site to the main roads infrastructure, the nearby M8 motorway and the airport complex.</p> <p>Significant improvements to the amenity of the residential areas adjoining the Westway site by removing heavy vehicles from the nearby residential streets.</p> <p>Delivers the original core City Deal GAIA project elements.</p> <p>Better connectivity for active travel measures between population and employment centres.</p>				
<p>Option 5: Option 4 plus the inclusion of a new bridge over the White Cart River in the Paisley Harbour area with associated access infrastructure</p>	<p>Enhanced growth / opportunities in development site consistent with Airport Masterplan.</p> <p>Enhanced potential for GVA uplift in Renfrewshire & Clyde Valley area.</p> <p>Improved connectivity over length of River</p>	<p>Increased cost</p> <p>More stakeholders and possibly conflicting interests.</p> <p>The additional elements over and above Option 4 are not included in the original core City Deal GAIA project</p>	<p>Makes Cart Corridor a more attractive investment location. Better facilitates the bringing forward of key development site consistent with LDP and Airport Masterplan.</p> <p>Improved access to development sites and existing businesses on both sides of the river.</p>	<p>Conflicting / disparate views of businesses on development strategy for the area.</p> <p>Likely route close to areas of potentially contaminated land and SINC.</p> <p>Possible State Aid legislation implications</p> <p>The additional costs for the elements out with the original core City Deal GAIA project are likely to be unaffordable within the overall City Deal funding envelope</p>	<p>High Cost, Considerable benefit</p> <p>Relative VfM Ranking: 4</p>

Initial Option	Strength	Weakness	Opportunity	Threat	Relative Value for Money
	<p>Cart. Between Bascule Bridge & Paisley.</p> <p>Improved connectivity and environmental condition for Abercorn Industrial Estate.</p> <p>Opens up further commercial sites for development by improving connectivity from the Westway site to the main roads infrastructure, the nearby M8 motorway and the airport complex.</p> <p>Significant improvements to the amenity of the residential areas adjoining the Westway site by removing heavy vehicles from the nearby residential streets.</p> <p>Better connectivity for active travel measures between population and employment centres.</p>		<p>Improved access to strategic road network & Airport complex for GAIA businesses & businesses at Abercorn Industrial Estate.</p> <p>Opportunity to improve connection with & linkage to Paisley by providing new "gateway" via Abercorn St.</p> <p>Opportunity to connect Inchinnan Road & Renfrew Road, providing relief to one-way system and improving resilience of road network.</p> <p>Traffic reduction in Love Street residential area.</p>		
Option 6: Option 4 or Option 5 plus improvements to walking and cycling links	<p>Enhanced growth / opportunities in development site consistent with Airport Masterplan.</p>	<p>Increased cost</p> <p>More stakeholders and possibly conflicting interests.</p>	<p>Makes Cart Corridor a more attractive investment location.</p> <p>Better facilitates the bringing forward of key development site</p>	<p>Conflicting / disparate views of businesses on development strategy for the area.</p> <p>Likely route close to areas of potentially contaminated land and SINC.</p>	<p>Option 4 + active travel</p>

Initial Option	Strength	Weakness	Opportunity	Threat	Relative Value for Money
	<p>Enhanced potential for GVA uplift in Renfrewshire & Clyde Valley area.</p> <p>Improved connectivity over length of River Cart. Between Bascule Bridge & Paisley.</p> <p>Improved connectivity and environmental condition for Abercorn Industrial Estate.</p> <p>Opens up further commercial sites for development by improving connectivity from the Westway site to the main roads infrastructure, the nearby M8 motorway and the airport complex.</p> <p>Significant improvements to the amenity of the residential areas adjoining the Westway site by removing heavy vehicles from the nearby residential streets.</p> <p>Step change in connectivity for active travel measures between population</p>	<p>The Option 5 'additional' elements are not included in the original core City Deal GAIA project and were not modelled as part of the programme assembly process</p>	<p>consistent with LDP and Airport Masterplan.</p> <p>Improved access to development sites and existing businesses on both sides of the river.</p> <p>Improved access to strategic road network & Airport complex for GAIA businesses & businesses at Abercorn Industrial Estate.</p> <p>Opportunity to improve connection with & linkage to Paisley by providing new "gateway" via Abercorn St.</p> <p>Opportunity to connect Inchinnan Road & Renfrew Road, providing relief to one-way system and improving resilience of road network.</p> <p>Traffic reduction in Love Street residential area.</p> <p>Linkage with other cycle routes including potential Renfrew – Paisley route</p>	<p>Possible State Aid legislation implications</p> <p>The additional costs for the Option 5 elements out with the original core City Deal GAIA project are likely to be unaffordable within the overall City Deal funding envelope</p>	<p>Medium Cost, considerable benefit</p> <p>Relative VfM Ranking: 1</p> <p>Option 5 + active travel</p> <p>Considerable Cost, considerable benefit</p> <p>Relative VfM Ranking: 4</p>

Initial Option	Strength	Weakness	Opportunity	Threat	Relative Value for Money
	and employment centres.				
Option7: Option 6 plus site specific provision of site servicing/utilities.	<p>Enhanced growth and development opportunities for Airport in line with their 2011 Masterplan.</p> <p>Enhanced potential for GVA uplift in Renfrewshire & Clyde Valley area.</p> <p>Improved connectivity over length of River Cart. Between Bascule Bridge & Paisley.</p> <p>Improved connectivity and environmental condition for Abercorn Industrial Estate.</p> <p>Opens up further commercial sites for development by improving connectivity from the Westway site to the main roads infrastructure, the nearby M8 motorway and the airport complex.</p> <p>Significant improvements to the amenity of the residential areas adjoining the Westway site by removing heavy</p>	<p>Additional increases to costs</p> <p>More stakeholders and possibly conflicting interests.</p> <p>Service provision may not match developers needs.</p>	<p>Makes Cart Corridor a more attractive investment location.</p> <p>Better facilitates (over and above Option 6) the bringing forward of key development site consistent with LDP and Airport Masterplan.</p> <p>Improved access to development sites and existing businesses on both sides of the river.</p> <p>Improved access to strategic road network & Airport complex for GAIA businesses & businesses at Abercorn Industrial Estate.</p> <p>Opportunity to improve connection with & linkage to Paisley by providing new "gateway" via Abercorn St.</p> <p>Opportunity to connect Inchinnan Road & Renfrew Road, providing relief to one-way system and improving resilience of road network.</p> <p>Traffic reduction in Love Street residential area.</p> <p>Linkage with other cycle routes including potential Renfrew – Paisley route</p>	<p>Conflicting / disparate views of businesses on development strategy for the area.</p> <p>Likely route close to areas of potentially contaminated land and SINC.</p> <p>Possible State Aid legislation implications</p> <p>Costs potentially out with available City Deal project funding</p>	<p>Option 4 + active travel + services</p> <p>High Cost, considerable benefit</p> <p>Relative VfM Ranking: 3</p> <p>Option 5 + active travel + services</p> <p>Considerable Cost, considerable benefit</p> <p>Relative VfM Ranking: 4</p>

Initial Option	Strength	Weakness	Opportunity	Threat	Relative Value for Money
	<p>vehicles from the nearby residential streets.</p> <p>Step change in connectivity for active travel measures between population and employment centres.</p> <p>Creates “shovel ready” development plots, minimising timescales and risk for developer, potentially leading to quicker realisation of growth potential.</p>				

4.4 Strategic Options framework considerations

The following table considers the scope, solution, delivery, implementation and potential funding routes for each intervention.

Table 4.4-1 Strategic Options Framework

Choices in the Strategic Options Framework Filter (Green Book):

Scope	Geography: Deliver infrastructure across the GAIA	Geography: Deliver infrastructure works at Westway	Geography: Deliver infrastructure works at Inchinnan	Geography: Deliver infrastructure works at Netherton
Solution*	RC direct build: possible issue with state aid and market competition	RC procure individual contracts: market competition, but loss of efficiency	RC procure joint contract for all elements: market preference	Other partner procures for RC: <u>no clear benefit,</u> <u>increases</u> <u>management time</u>
Delivery	Direct build by RC: retain control	RC funds other party to build: loss of control	JV with landowners: significantly increases time/ risk, does not	Other public lead: not obvious alternative to lead
Implementation	Single phase now: major disruption over a (relatively) short period but maximises economic benefits	Single phase but postpone: delays development and achievement of benefits	Phased but start now: increase length of disruption, but some benefits from early activity, will increase cost to deliver	Phased but postpone: increases length of disruption from works, delays development activity and benefits, will increase delivery cost
Funding	City Deal + RC: clear additionality and opportunity	All RC: substitution from other planned activity	Other public: no alternative source found	Private: won't fund — infrastructure is found

* Appendix L provides more detail on the preferred scope of activity

4.5 Critical Success Factors

The long list of options are now considered against their ability to meet each of the critical success factors, namely:

- Strategic fit with Project Objectives
- Provides Value for Money;
- Ability to secure funding (Affordability); and
- Logic, practicality and the ability to deliver (Deliverability).

Each of the long list options has been scored from 1-10 against the CSFs: a value of 1 = Does not achieve CSF and a value of 10 = Successfully achieves CSF. The Options are then ranked from 1-10, based on the CSF score achieved, where 1st is the highest achieving Option.

Table 4.5-1 – CSF Scoring

Option	1	2	3	4	5	6	7
Option Capital Cost (£m)	0	17.02	23.24	35.13	58.94	39.13	52.92
Strategic fit	0	7	7	8	3	10	10
Provides Value for Money	10	7	6	8	7	8	7
Ability to secure funding (Affordability)	10	9	9	8	6	8	6
Practical & Deliverable	10	9	9	9	9	8	8
Total	30	32	31	33	25	34	31
Rank	6th	3rd	4th =	2nd	7th	1st	4th =

Based on the detailed consideration of transport engineering factors, SWOT analysis, comparison of relative Value for Money and evaluation of the options generated, the options identified as best meeting the project aims and objectives, delivering the intended benefits, being affordable and providing value for money whilst minimising risk and uncertainty are;

Option 1 - the counterfactual situation, the direction in which the immediate area is likely to take with no related intervention by the public sector;

Option 2 - Upgrade and minor road realignment of Abbotsinch Road.;

Option 4 - Realign Abbotsinch Road to approximately the mid-point in Netherton Farm; New road and bridge across the White Cart, lining Arran Avenue to Wright Street. (Wright Street Bridge);

Option 6 - Central realignment of Abbotsinch Road; New road and bridge across the White Cart, linking Arran Avenue to Wright Street. (Wright Street Bridge); Improved cycle links adjacent to all new infrastructure and extended to Inchinnan Business Park and west side of Bascule Bridge; Initial site servicing and other enhancements, subject to affordability.

Below we have provided further assessment against each option's expected contribution to delivering against the project and wider GCR City Deal programme objectives. Each option is awarded either no result (no contribution) or between one and three ticks depending on the scale of contribution.

Contribution to Objectives

Objective	Option 1	Option 2	Option 4	Option 6
To maximise the potential of the Glasgow Airport Investment Area as a key strategic business location and centre for economic growth, exploiting clustering opportunities and economic density.		√	√√	√√√
To ensure that the infrastructure interventions build upon current investments in Inchinnan Business Park and Westway Business Park to maximise economic development opportunities.		√√	√√	√√√
To facilitate the development and expansion of Glasgow		√	√√√	√√√

Objective	Option 1	Option 2	Option 4	Option 6
International Airport as a key national development and gateway location for investment in line with national planning policy and the Glasgow Airport Masterplan.				
To unlock the development potential and attract private investment in vacant and underused sites along the Cart Corridor for employment and development opportunities	√	√√	√√	√√√
To take advantage of the opportunities provided by the Glasgow Airport Investment Area and the proximity to major development sites along the river corridor to maximise the potential for regeneration in the area through the delivery and monitoring of a focussed economic development strategy	√	√	√√	√√√
To create construction and operational jobs both during the infrastructure delivery and beyond		√	√√	√√√

4.6 Project Technical Evaluation

The current constraints which exist in the local area and which restrict economic growth, and the improving of the conditions for growth, are discussed earlier in this FBC. To provide more focus in the options appraisal and to assist in identifying the options that would deliver the greatest benefits against the overarching project objectives (set out in Section 3.5) and to enable a technical evaluation of the project options, these objectives were reviewed, refined and sub-divided in to the following sub-categories:-

- Local (project specific)
- Masterplanning
- Sustainability, and
- Transport Planning

The evaluation of these technical aspects are described within Appendix L.

5 THE ECONOMIC CASE

5.1 Introduction

The project is aimed primarily at stimulating additional economic activity by unlocking key development sites, removing physical impediments to development and improving connectivity across the Glasgow Airport Investment Area. This will be achieved through the delivery of a mixture of improving accessibility to sites, better connecting existing and potential business and industrial sites and improving connectivity to the road network across the area, together with improving the environment and amenity of the area to create a positive and attractive environment for development.

The need to unlock key commercial sites, and better connect existing and proposed commercial and residential locations, is required due to a combination of market failure and the existing physical separation between existing businesses.

5.2 Short List of Options

The qualitative assessment in the preceding chapter was followed by a bespoke objective-based option assessment process that considered the likely environmental, engineering, economics and traffic effects of alternative proposals, with the aim of identifying preferred options of each infrastructure intervention and finalising the scope of the project (see Appendix L). The approach taken will ensure that the options progressed best meet the project aims and objectives, deliver the intended benefits, including the modelled City Deal programme benefits, and provide value for money whilst minimising risk and uncertainty, all within the available City Deal funding envelope.

The GAIA project is intended to provide new infrastructure that promotes and supports existing and new economic development areas and is therefore not considered to be a conventional transport project per se. As such, it is considered that a Design Manual for Roads and Bridges (DMRB) type approach to options appraisal is not wholly appropriate for this exercise. However, the methodology adopted for options appraisal does follow the broad principles of the DMRB: Volume 5 Assessment and Preparation of Road Schemes, Section 1 Assessment of Road Schemes. It also follows the broad principles of STAG (Scottish Transport Appraisal Guidelines), in terms of understanding the transport challenges, issues and opportunities

The development of a Masterplan for GAIA has been identified as a key factor in achieving the City Deal objectives and as such master planning considerations form a key part of the assessment process. This involved specialist Master planners, the Lead Consultants, the Project Team and other key stakeholders in the iterative assessment process.

The options generation and assessment process utilised workshops, desk-based assessment, stakeholder consultation and site walkovers throughout the development process which comprised main 3 main stages:

- Confirmation and refinement of Project Objectives.
- Corridor Assessment – Identification and appraisal of potential routes and bridge crossing locations, including connections with the existing transport network, assessed against project objective and environmental considerations;
- Route Development – Development and appraisal of routes within the selected corridors assessed against engineering, environmental and traffic and economic criteria, leading to selection of preferred options.

This provided further detail of the specific requirements of the shortlisted options and the scale of enabled floorspace under each.

The shortlisted options include the following:

Table 5.2-1 - Shortlist of options

Options	Short List of Options
1	This option represents the counterfactual situation, the direction in which the immediate area is likely to take with no related intervention by the public sector.
2	Upgrade and minor road realignment of Abbotsinch Road.
4	Realign Abbotsinch Road to approximately the mid-point in Netherton Farm. New road and bridge across the White Cart, lining Arran Avenue to Wright Street. (Wright Street Bridge)
6	Central realignment of Abbotsinch Road New road and bridge across the White Cart, linking Arran Avenue to Wright Street. (Wright Street Bridge) Improved cycle links adjacent to all new infrastructure and extended to Inchinnan Business Park and west side of Bascule Bridge. Initial site servicing and other enhancements, subject to affordability

Option 1 – Counterfactual

This option considers what is likely to happen in the GAIA project area without additional City Deal capital investment in infrastructure and other works. In other words, this option represents the counterfactual case and will form the basis of the assessment of Value for Money of other short-listed options.

In the absence of intervention to improve GAIA connectivity (and specifically the realignment of Abbotsinch Road through Netherton Farm) investments such as NMIS or MMIC would not be able to happen in the area. These projects are predicated on the infrastructure which enables Netherton Farm to be developed – the realigned Abbotsinch Road. As demonstrated in the Strategic Case, the market has failed to provide such infrastructure. In the absence of intervention Netherton Farm would remain undeveloped – no new developments will be constructed on the site. This will restrict improvements in local economic conditions as presented in the Socio-economic Baseline.

In the absence of intervention, Inchinnan Business Park is unlikely to witness significant additional development. Despite high occupancy over the past 5 years, there has been little new development since 2010. The park's relatively isolated location, the absence of a coordinated approach to integrated infrastructure development, and unwillingness of private developers to invest in supporting infrastructure, compounds the market failure constraining the economic development of the area.

However, over the course of 25 years (business case analysis period) it is reasonable to suggest that some development may take place at Inchinnan. In the last 25 years 6 new properties have been constructed with a total rentable area of 79,218 sq.m.¹⁶ (as listed in). The development of rentable floorspace at Inchinnan Business Park is also shown in **Figure 5.1**.

¹⁶ CoStar September 2018

FULL BUSINESS CASE

Table 5.2-2 - Inchinnan Business Park Development 1993-2018

Building Address	Building Name	Land Area (AC)	Rentable Building Area (m ²)	Last Sale Price (£)	Year Built
7A-7B Cartside Ave	-	-	1,618	732,000	2010
5 Inchinnan Dr	-	-	13,033	-	2006
Inchinnan Dr	Rolls Royce Plc.	33	50,350	55,000,000	2004
Cartside Ave	Maritime Court	-	1,554	-	2002
30 Fountain Cres	-	11.25	6,358	2,000,000	2000
30-32 Fountain Dr	-	6.905	6,307	2,800,000	1996

Source: CoStar 2018

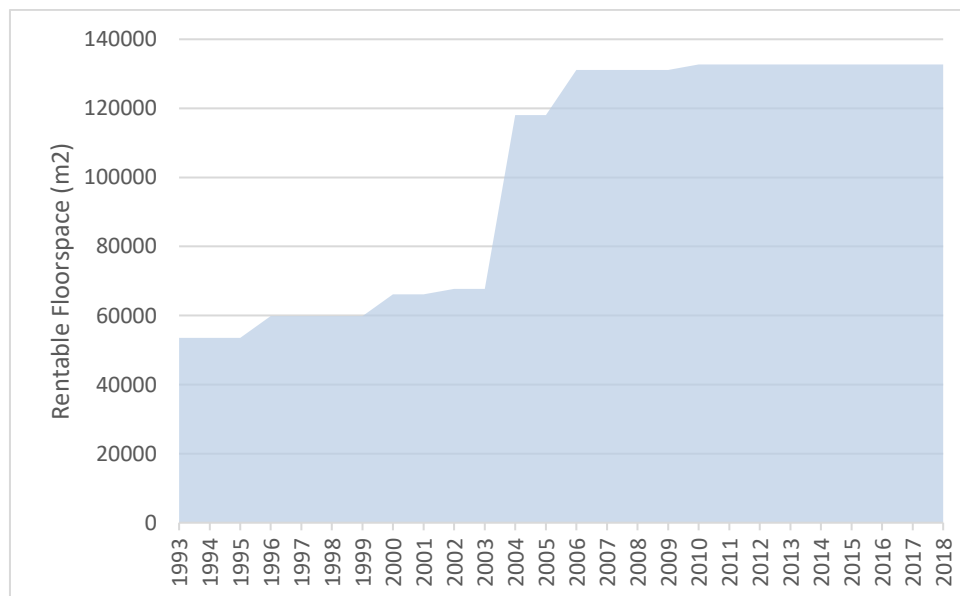


Figure 5.1: Development of Inchinnan Business Park 1993-2018

Source: CoStar 2018

As shown in Table 5.2-2 above, most of constructed space (50,349 m² or 64%) is the Rolls Royce Plant which opened in 2004. Were the company to consolidate its operations e.g. because of Brexit, a lack of investment in the areas connectivity would have a negative impact on Inchinnan's attractiveness, potentially

leaving the site susceptible to closure, in favour of more attractive and better-connected locations in Europe.¹⁷

Excluding the Rolls Royce plant, in the last 25 years, 5 new buildings were constructed, creating a total floor space of 28,869m², with the last building completed in 2010. Arguably, economic conditions between 2000 and 2006 were more favorable, when 5 out of the 7 properties were built, indicating that development of the site has remained weak since the economic crash in 2008.

Inchinnan Business Park is home to the Advanced Forming and Research Centre (AFRC), a high value manufacturing center operated by the University of Strathclyde. Established in 2009 the AFRC employs 133 staff and is set to contribute significantly to the development of the AIMDS.

In 2017 it was announced that the AFRC had secured £13.4m in funding for High Integrity Validated Engineering Space (HIVES), to be known as the “Future Forge”. To accommodate this facility the AFRC will be extended, providing an additional 34 jobs.¹⁸ The FutureForge facility is funded by the UK Aerospace Research and Technology Programme (delivered by the Department for Business, Energy and Industrial Strategy, Innovate UK and the Aerospace Technology Institute), Scottish Enterprise and the AFRC’s High Value Manufacturing (HVM) Catapult funding.

It is clear that there is a mix of industry, governmental and private sector support for the expansion of the AFRC, following the announcement of City Deal funding for supporting infrastructure in the surrounding area. Although it has not been stated that the FutureForge is conditional on GAIA infrastructure, recent press releases make references to its links with NMIS and the importance of establishing a centre for cutting-edge manufacturing technology in the region.¹⁹

The nearby Westway Business Park has been performing significantly worse than Inchinnan Business Park in recent years. In 2016 the park fell into administration. However, in March 2018 the developer and asset manager Canmoor acquired the Westway site for £40 million and has outlined “substantial investment” plans, directly influenced by the GAIA announcement.²⁰ In June 2018 Canmoor secured their first new occupier, the AMG Group (retail – sportswear), who will be taking on 10,498m² of space to establish a new distribution centre.²¹

Canmoor made specific reference to NMIS and the Wright Street Bridge in its press release.²² Whilst the acquisition was not conditional on funding approval for the GAIA Project, it again indicates the influence of public sector commitment to the project on investment decisions.

Under the counterfactual scenario, it is reasonable to assume that Canmoor will invest at Westway to attract further occupiers such as the AMG Group. However, in the absence of GAIA, the commitment is likely to be less substantial than previously alluded to. Moreover, development is likely to be more heavily related to its access to the M8 rather than the operational synergies with manufacturing industry. Relatively low value uses, including logistics and distribution are therefore more likely to be future occupiers under this scenario.

¹⁷ See: Rolls-Royce considers 'technical' Brexit switch, Sky News, 2018. Available at: <https://news.sky.com/story/rolls-royce-considers-technical-brexit-switch-11344422>

¹⁸ Minutes of the Scottish Enterprise Board Held In Glasgow On 24 February 2017
<https://www.scottish-enterprise.com/media/1824/board-minutes-24-feb-2017.pdf>

¹⁹ <https://www.strath.ac.uk/research/advancedformingresearchcentre/news/strathclydesecures165mformajornewadvancedengineeringfacility/>

²⁰ Scottish Construction Now. Canmoor snaps up Westway Park in Glasgow from administrators. Available at: <https://www.scottishconstructionnow.com/24997/canmoor-snaps-westway-park-glasgow-administrators/>

²¹ Costar. Canmoor lands major Scottish distribution hub letting, 2018. Available at: <http://www.costar.co.uk/en/assets/news/2018/June/Canmoor-lands-major-Scottish-distribution-hub-letting/>

²² <https://www.scottishconstructionnow.com/24997/canmoor-snaps-westway-park-glasgow-administrators/>

In respect of the former BOCM site on the east bank of the White Cart River, it is anticipated that some 200 residential units may be built on the site based on the Planning Permission in Principle applications (09/0514 and subsequent extension applications 13/0514 and 16/0083) for residential development. However, recent discussions with the owner have shown a willingness to submit a change of use on the site to Class 5/6 in line with ambitions set out in the GAIA project and the proximity of the site to the proposed Wright Street bridge.

Glasgow Airports position under a counterfactual situation indicates that Netherton Farm is likely to remain undeveloped. The site is included in the Airport masterplan and the plan notes the Airport's desire to expand its maintenance operations. However, expansion of the terminal space is viewed as a priority and whilst the airport has had the opportunity to purchase the site, land costs, the required road realignment (public infrastructure), and the presence of vacant commercial space within the airport, indicate it is unlikely to consider wider infrastructure development across the GAIA area.

High level economic effects include:

- The absence of supporting infrastructure would prevent the economic development of the local area. The lost opportunity would result in key developments such as NMIS and MMIC being attracted elsewhere, effectively preventing the development of AMIDS. The objective to develop an airport-based manufacturing and commercial cluster would be stymied.
- Inchinnan's historic rate of development would not be accelerated and occupancy may reduce. Continued lack of investment in the areas connecting infrastructure will reduce its attractiveness to new investment, potentially resulting in job losses to areas with better airport and strategic connectivity;
- Additional investment at Westway could be threatened, as a lack of public sector infrastructure commitment may put into question the viability of additional commercial sites;
- The former BOCM site would remain as a residential development opportunity. The latest PPiP extension (16/0083 – 2016) and discussions with the sites owners, indicate that the site will remain as a residential opportunity unless GAIA is delivered (with limited prospects of implementation given its location and the availability of residential development opportunities elsewhere); and
- Glasgow Airports unwillingness to drive the development would result in the Netherton Farm site remaining vacant for the foreseeable future.

Option 2 – Do Minimum

Relative to the counterfactual, a minimal intervention would see a slight realignment and upgrade of Abbotsinch Road to the east with no junction works in the infrastructure considerations above. There would be no bridge or active travel infrastructure under this option. Netherton Farm would be enabled for use to a limited degree, but development of the site would take place over a longer period and be limited to the expansion of aircraft maintenance operations.

No provision has been made under this option for active travel, potentially leaving water infrastructure provision as a barrier to development of Netherton Farm (the proposed Black Cart crossing would also provide a relatively straightforward conduit for water main access).

With current water infrastructure at capacity, it is expected that the delivery of additional sites would take longer as developers would be expected to fund infrastructure extensions to their operations

Development of the Netherton site would be restricted to hangar construction only, enabling the augmentation of Glasgow Airports maintenance division, additional aircraft maintenance support, releasing the required space for expansion of the airport's terminal.

Land to the east of the upgraded and realigned road would be enabled for development, but the intervention would fall short of the expectation and requirements of AMIDS, resulting in the loss of key anchor operators such as the MMIC and NMIS. The knock-on effect would be the same as under Option 1, with the relocation of key national assets and the ability to develop an international advanced manufacturing cluster at Glasgow Airport restricted.

Poor connectivity around Inchinnan would continue to constrain the development of vacant sites, with development rates expected to remain largely unchanged. Developments such as the Future Forge extension to the AFRC would continue to provide economic benefit to the local area, but the addition to the centre is limited to 34 additional high value jobs.

The minimal intervention includes road works only. The lack of active travel infrastructure could be seen as a hindrance for businesses in the area, resulting in both safety concerns for employees and frustration at the lack of active travel options.

It is anticipated that the development potential of Westway would be damaged as a result of the minimal intervention. The minimal road realignment may enable some development of the better-connected sites on the east side of the river in the long term, albeit at longer timescale and following development to the west of the White Cart. The lack of cross river infrastructure will continue to isolate the site from direct airport access, potentially limiting the “substantial” investment commitment from Canmoor in the area.

High level economic effects include:

- Increased development potential of Netherton Farm, with the majority of the space being used for Airport maintenance expansion and some additional commercial sites revolving around manufacturing/distribution;
- Loss of MMIC, NMIS and AMIDS from a lack of infrastructure investment, restricting development of a major manufacturing cluster in Renfrewshire;
- Damage to the growth ambitions of Westway, as sites come online to the west of the White Cart with better connectivity and access to Glasgow Airport;
- No change to Inchinnan from the counterfactual situation, with the development rate likely to remain the same; and
- Lack of active travel infrastructure, creating a disincentive for local employees to switch to cleaner modes of transport.

Option 4 – Road Realignment plus Bridge Infrastructure

Intervention by way of Option 4 would deliver the more significant road alignment, together with the Wright Street road bridge.

While Netherton Farm may be developed, it is likely that this would be at a much slower rate. NMIS and MMIC are Government initiatives. While site selection was subject to the ability to deliver strategic water infrastructure within defined timescales, it is nonetheless likely that a more expensive solution would require to be funded by the Council (or others) to enable their location.

Glasgow Airport, as per Option 2, would be able to develop the hangar space required to augment their maintenance division, attract further aircraft maintenance support, and expand the main terminal.

Westway would benefit greatly from the construction of the Wright Street bridge, allowing for a direct connection from the business park to the airport. The cross-river infrastructure would likely give sufficient confidence to Canmoor to continue their investment plans in the site, generating further employment opportunities for the local area.

Furthermore, the introduction of the road bridge could trigger a change of use (in planning terms) at the former BCOM site from residential to commercial use, aligning the site with the vision of AMIDS, stimulating further economic growth in the local area.

In respect of Inchinnan Business Park, this option makes provision for the upgrade of the A8 junction, improving the connectivity of the site. Given the arrival of AMIDS under this intervention, it is likely that remaining pockets of land would be developed, encouraged by the clustering effect of manufacturing businesses and strategic industry specialists such as MMIC, NMIS and the LMC.

High level economic effects include:

- Full development of Netherton Farm, but at a slower rate in comparison to Option 4 due to water infrastructure and other restrictions;
- Enhanced connectivity to Westway, stimulating greater interest in the site and improving operational connections to the Airport and the wider area;
- Increased development at the Inchinnan Business Park, with pockets of remaining land developed on the back of AMIDS;
- Change in use of the former BOCM site from residential to commercial, increasing employment opportunities within Renfrewshire and the wider City Region; and
- A continued lack of active travel infrastructure, creating a disincentive for local employees to switch to cleaner modes of transport, and potentially limiting ease of access to Renfrew, Paisley and other centres for AMIDS workers.

Option 6 – Road Realignment plus Bridge and Active Travel Infrastructure

This option delivers the full infrastructure requirements of the GAIA as outlined in the masterplan. The intervention realigns Abbotsinch Road to the preferred engineering solution (A02) with associated junction improvements. In addition, the option provides cross river infrastructure in the form of the Wright Street Road Bridge and the Black Cart cycle / foot bridge, with the latter enabling the most efficient method of water mains connection to Netherton Farm. Option 4 also delivers improved cycle links adjacent to all new infrastructure, extended to Inchinnan Business Park and the west side of the Bascule Bridge.

Intervention at this level will provide the necessary infrastructure requirements for the proposed advanced manufacturing sites, MMIC, NMIS, and the LMC. These operations are designed to stimulate cluster development around them. Some such as MMIC have already attracted industry occupiers (in this case Astra Zeneca and GSK) and the operator is understood to be seeking further space to accommodate future expansion. These projects will be delivered without delay and stimulate other related investment in high value manufacturing. In addition to this space, the eastward expansion of Glasgow Airport will be enabled, and mixed use commercial sites developed.

The construction of the Wright Street bridge will extend GAIA benefits more effectively to Westway Business Park and its delivery will confirm the confidence of operators Canmoor. As in Option 4, anticipated effects from this option include further investment from Canmoor; the change of proposed use of the former BCOM site; and the creation of employment opportunities at an accelerated rate.

The construction of a cycle / footbridge over the Black Cart, adjacent to Inchinnan Road, will alleviate longstanding access issues concerning Inchinnan Business Park – currently only accessible via car. This will complement the improved accessibility generated under Option 4, and, alongside focussed AMIDS marketing (as well as that of the various manufacturing institutes) can be expected to increase take up of undeveloped land. In addition, the integration of active travel infrastructure will create a safer working environment, encouraging modal shift, and improving the marketing attractiveness of the site.

Improved connections between GAIA - AMIDS, the AFRC at Inchinnan, and any potential advanced manufacturing developments at Westway, will increase clustering impacts and reinforce the rationale for further private sector investment in the manufacturing industry on all three of these sites.

The cycle / footbridge will enable the most efficient method of bringing mains water infrastructure to the Netherton Farm site. This, together with other initial servicing, will reduce the initial sunk cost for private developers and for utilities companies.

High level economic benefits include:

- Full and accelerated development of the Netherton Farm site, including NMIS & MMIC;
- Enhanced connectivity to Westway, stimulating greater interest in the site
- Increased development of the Inchinnan Business Park, with pockets of remaining land developed on the back of AMIDS;

- Change in use of the former BOCM Paul site from residential to commercial, increasing the employment opportunities within Renfrewshire and the wider City Region;
- Integrated active travel infrastructure, adding to the attractiveness of locating within the GAIA and facilitating a shift in modal transport.

5.3 Project Impact Assessment

Headline Impacts

The principal purpose of the GAIA capital investment is to provide an enabled and accessible platform for development of an airport-related cluster of economic activity (advanced manufacturing and commercial). Development of a more efficient and better-connected transport system will improve mobility and opportunities for the local workforce, while also enhancing the attractiveness of the area to inward investment.

The direct deliverables (outputs) from the project are set out below:

- Road Network (New) **2.1km**
- Road Network (Enhanced) **0.52km**
- Walkway (New) **6.33km**
- Cycle Track (new) **8.07km**
- Road Bridge (New) **1No (80m)**
- Cycle / Footbridge **1 No. (100 m)**
- Junction Upgrade **1No**
- Junctions (New) **3 No.**
- Bus Route (New) **0km** (potential for this element subject to operator agreement)

While the overall benefits from the City Deal programme must be calculated at the programme level, to allow for factors such as external influences and relocation of benefits, displacement etc, it is important that the anticipated project level benefits are understood and recorded. This will permit appropriate monitoring and revaluation at future points in the project cycle.

To provide an assessment of the potential impacts of the GAIA project, the Council commissioned a study to research land use adjacent to and as a result of the GAIA project. This was supplemented by Master planning to ensure that development densities, infrastructure alignments and appropriate facilitation of following development, was an integral part of the intended interventions. In addition, the influence of GAIA on accelerating or bring forward under used land was assessed using the outcomes from a land use study commissioned as part of the project development. Appendix G2 contains the calculation of development which is expected as a result from the satisfactory completion of the GAIA project. This information, was used by consultant's PBA to estimate the economic outcomes which would result from such development. PBA's evaluation of the jobs created and economic outcomes (GVA) is contained in Section 5 – Economic Case of this Business Case.

The work undertaken to date has indicated the development potential associated with the infrastructure delivered through the GAIA project. This is set out in Appendix B and includes:

Development benefits

- Vacant and derelict land brought back into use (hectares) 59.6 ha (total development land)

- Land remediated (hectares) 11.4 ha
- Industrial Space – 88,270 sqm
- Office Space – 35,011 sqm
- Food and Drink Space – 1,760 sqm

Private Sector Investment

- £122.9 million (non-discounted)

Jobs Created

- 635 net direct construction jobs, of which 160 are estimated to be created from the construction of the project and 475 from the construction of the development sites enabled or accelerated by the project,
- 1,755 net direct operational jobs within the City Region.

As set out earlier, the Netherton Farm site will be the location for NMIS. This together with LMC, located at Westway, will act as the catalyst for the development of the Advanced Manufacturing Innovation District – Scotland and has been a clear influence on the locational decision for the MMIC.

Economic Model

An economic impact model has been prepared to assess the level of potential employment and GVA created by the project under each of the short-listed options over a period of 25 years. Where applicable, costs and benefits of the project have been discounted in line with best practice guidance at a rate of 3.5% a year to reflect the 25-year analysis period (2019 – 2044). The adopted approach is in line with the principles outlined in HM Treasury's Green Book²³, and the Additionality & Economic Impact Assessment Guidance Note²⁴ Scottish Enterprise. The model has assessed:

- Construction effects: employment and GVA²⁵ from the infrastructure construction phase of the project and the expected construction of follow on development sites;
- Operational effects: employment and GVA from the operational phases of development sites facilitated or accelerated by the project.

To comply with best practice, anticipated construction and operational effects have been adjusted for additionality factors. Appropriate economic appraisal guidance²⁶ and understanding of the local area's socio-economic characteristics has been used to estimate values for leakage, displacement, and multipliers (Construction and Operational Additionality tables can be found in Appendix N):

- Deadweight – the proportion of benefits that would have happened regardless of intervention. Note, Option 1 represents this counterfactual position;
- Leakage - the proportion of employment opportunities accessed by people living outside the local area;
- Displacement – the proportion of the project's benefits accounted for by a reduction in benefits elsewhere; and

²³ The Green Book: Appraisal and Evaluation in Central Government, HM Treasury, 2018.

²⁴ Additionality & Economic Impact Assessment Guidance Note, Scottish Enterprise, 2008.

²⁵ Gross Value Added (GVA) is a measure of the value of goods and services produced in an area.

²⁶ The Green Book: Appraisal and Evaluation in Central Government, HM Treasury, 2018

- Multipliers – to estimate further economic activity associated with additional income and supplier purchases (i.e. indirect and induced expenditure).

The impacts are detailed at three spatial levels:

- Renfrewshire;
- City Region and;
- Scotland.

Infrastructure Construction Impact Assessment

The estimated total non-discounted capital expenditure required to deliver the infrastructure improvements under each intervention is shown in **Table 5.3-1**.

To assess the impact of each intervention over a 25 year period, the total discounted capital and revenue expenditure of each intervention is divided what it takes to support one construction worker for one year known as the turnover per employee.

Revenue has been calculated as:

- Maintenance costs equivalent to 0.5% of the capital cost starting annually 5 years following construction;
- Operational costs equivalent to 1% of the maintenance costs occurring annually after construction is finalised.

Given the scale and engineering required, it is appropriate to incorporate a measure of Optimism Bias²⁷. At this stage, a maximum of 15% has been applied²⁸. All costs and benefits are discounted at the standard 3.5% rate as per HM Treasury guidance²⁹. (Table 5.3-2)

Table 5.3-1 – Non-Discounted Capital Costs

Non-Discounted Capital and Revenue Inc OB				
	Total	Capital	Revenue	OB (%)
Option 1				0%
Option 2	18.6	17.0	1.6	15%
Option 4	37.5	35.1	2.3	15%
Option 6	41.7	39.1	2.6	15%

Table 5.3-2 – Discounted Public Sector Investment (Capital and Revenue Inc. OB)

Discounted Public Sector Investment Inc. OB			
	Total	Capital	Revenue
Option 1	-	-	-

²⁷ Green Book Guidance – Mott McDonald analysis 2015

²⁸ Cost estimates have been produced by the Lead Design and Cost Consultant, Sweco, in consultation with Renfrewshire Council.

²⁹ Homes and Communities Agency Guidance (2015) – Social Time Preference Rate

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Discounted Public Sector Investment Inc. OB			
	Total	Capital	Revenue
Option 2	17.4	16.5	0.9
Option 4	35.2	34.0	1.2
Option 6	39.1	37.8	1.3

Table 5.3-3 – Turnover per Construction Employee

	Turnover per employee (2018)
Infrastructure	£226,045
Development	£237,114

As discussed above, only a proportion of gross construction employment will go to residents of the Renfrewshire Council area, or indeed the City region. Table 5.3-4 summarises the additionality assumptions used to convert gross construction employment effects to net direct construction effects (i.e. factoring in leakage, displacement, and multipliers).

Table 5.3-4 – Construction Additionality Factors

Additionality Factor	Renfrewshire	City Region	Scotland
Leakage	40% (Renfrewshire has some 5,000 constructions employees; therefore, it is assumed that most of construction workers will come from within the local authority area)	25% (More than one in three construction workers in Scotland are based in the Clyde Valley area suggesting that leakage of construction jobs outside Clyde Valley is likely to be limited)	10% (A proportion of construction jobs could be absorbed outside Scotland due to best value procurement or specialist skills requirements)
Displacement	10% (In light of the high level of construction labour available in Renfrewshire, the level of displacement is assumed to be low)	30% (GAIA and development construction may involve construction workers forgoing other construction activities at a regional level)	45% (Due to the attraction of other opportunities, increased competition at Scotland level it is likely to involve construction workers forgoing other construction activities)
Multiplier	1.41 (60% of City Region multiplier)	1.68 (80% of national multiplier)	1.85 (Type II Scottish multiplier for the construction industry)

The number of gross infrastructure jobs supported as a result of each intervention is shown in the table below. Gross employment has been calculated using the non-discounted public-sector capital and revenue cost.

Table 5.3-5 – Gross Infrastructure Construction Jobs

Gross Infrastructure Jobs		
	Capital Expenditure Employment	Revenue Expenditure Employment (Per Annum) *
Option 1	-	-
Option 2	80	-
Option 4	160	-
Option 6	180	-

*equivalent to 1 employee supported over the appraisal period

Additionality factors for the construction industry found in Appendix N are applied to the gross number of infrastructure jobs. The net infrastructure employment supported by each intervention is detailed in the table below.

Table 5.3-6 – Net Direct Infrastructure Construction Jobs

Net Direct Infrastructure Construction Jobs			
	Renfrewshire	City Region	Scotland
Option 1	-	-	-
Option 2	60	70	75
Option 4	125	145	150
Option 6	135	160	165

Net employment is factored by the GVA per construction³⁰ worker for each spatial area, as summarised in Table 5.3-7.

Table 5.3-7 – GVA per Infrastructure Construction Employee (2018)

GVA per Infrastructure Construction Employee (2018)			
	Renfrewshire	City Region	Scotland
Infrastructure Construction (£)	75,222	76,702	77,882

The following tables present the gross infrastructure GVA and the discounted net direct GVA generated as a result of each intervention.

³⁰ Scottish Government GVA per Local Authority Tables – 2017 (Updated to 2018 prices)

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Table 5.3-8 – Gross Infrastructure Construction GVA (£m)

Gross Infrastructure Construction GVA (£m)			
	Renfrewshire	City Region	Scotland
Option 1	-	-	-
Option 2	4.7	5.5	5.8
Option 4	9.5	11.2	11.8
Option 6	10.5	12.5	13.1

Table 5.3-9 – Net Direct Infrastructure Construction GVA (£m)

Net Direct Infrastructure Construction GVA (£m)			
	Renfrewshire	City Region	Scotland
Option 1	-	-	-
Option 2	4.4	5.2	5.5
Option 4	8.9	10.5	11.1
Option 6	9.9	11.7	12.3

As shown in the tables above, 160 net direct jobs are supported as a result of intervention by way of Option 4. This helps to stimulate £11.7m in discounted GVA at the City Region level by 2044.

Development Construction Impact Assessment

As with any infrastructure activity, the construction phase of the project can only deliver temporary outcomes. The lasting economic impacts from this project will stem from the development of mainly commercial/industrial sites enabled or accelerated as a result of improved accessibility created by the project.

Within these areas of accessible development, a schedule of sites facilitated by the project have been identified. This has been informed by the GAIA masterplan area schedule developed by 5Plus Architects. A breakdown of the sites by anticipated use can be found in Table 5.3-10. This is presented as the Gross External Area (GEA) to calculate construction costs.

Table 5.3-10 – Development Sites by Use – sqm – BCIS Costs

Development Sites (GEA sqm)					BCIS Costs
Option	1	2	4	6	£/m ²
Class 3 Food & Drink	-	-	1,760	1,760	2,247
Class 4 Business	-	8,971	35,011	35,011	1,549
Class 5 General Industry	-	25,204	82,867	88,270	733

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Development Sites (GEA sqm)					BCIS Costs
Option	1	2	4	6	£/m ²
Class 9 Residential	22,400	-	-	-	1,095
Total	22,400	34,176	119,638	125,042	

As per the counterfactual set out in the strategic case, Option 1 has an element of residential built out.

The GEA of each site is multiplied by the average build cost of each use in Renfrewshire. This is derived from the Build Cost Information Service (BCIS), September 2018. Private sector investment is presented in Table 5.3-11.

Table 5.3-11 –Private Sector Investment (£m)

Total Private Sector Investment (£m)		
	Discounted	Non - Discounted
Option 1	16.8	24.5
Option 2	18.5	32.4
Option 4	73.2	118.9
Option 6	80.4	122.9

The number of Gross Development Construction jobs is calculated by dividing the non-discounted private sector investment, by the average turnover per development construction employee (Table 5.3-12).

Table 5.3-12 – Gross Development Construction Jobs

	Gross Jobs
Option 1	110
Option 2	140
Option 4	520
Option 6	540

Table 5.3-13 – Net Direct Development Construction Jobs

Net Direct Development Construction Jobs			
	Renfrewshire	City Region	Scotland
Option 1	80	95	100
Option 2	110	125	130
Option 4	395	460	475
Option 6	410	475	490

Table 5.3-14 –Gross Development Construction GVA (£m)

Gross Development Construction GVA (£m)			
	Renfrewshire	City Region	Scotland
Option 1	6.0	6.5	6.9
Option 2	7.9	8.6	9.1
Option 4	28.9	31.7	33.6
Option 6	29.9	32.7	34.7

With water infrastructure at capacity and no public sector intervention under Option 4 to increase it, Option 4 delivery is prolonged. The effect of this is shown in the net direct GVA results below.

Table 5.3-15 – Net Direct Development Construction GVA (£m)

Net Direct Development Construction GVA (£m)			
	Renfrewshire	City Region	Scotland
Option 1	4.1	4.5	4.7
Option 2	4.5	4.9	5.2
Option 4	17.8	19.5	20.7
Option 6	19.5	21.4	22.7

Construction of enabled development supports up to 475 net direct jobs in the City Region, generating some £21.4m in discounted GVA by 2044.

Operational Impact Assessment

The long-term impact of each intervention is calculated from the operational aspects of each of the anticipated development sites.

To measure this impact, employment densities³¹ have been applied to enabled development floorspace to generate employment outputs.

Given the manufacturing/maintenance characteristics of the commercial sites, a coefficient of 85% of the GEA has been used to calculate the Net Internal Floorspace (NIA)³². To accurately represent the gradual occupation of each site, an occupancy rate has been applied at 1-year lag to construction. Individual occupancy rates for each site can be found in Appendix G2.

³¹ Based on the HCA Employment Densities Guide: 3rd Edition, 2015.

³² Based on the HCA Employment Densities Guide: 3rd Edition, 2015

A breakdown of the enabled development floorspace (NIA) can be found in the table below along with the employment density assumptions for different uses.

Table 5.3-16 – Floorspace & Employment Densities

	Option				Employment Densities
	1	2	4	6	FTE/sqm
Class 3 Food & Drink	-	-	1,496	1,496	20
Class 4 Business	-	7,626	29,760	29,760	12
Class 5 General Industry	-	21,424	70,437	75,030	150
Total	-	29,049	101,693	106,285	

The above table is then used to calculate gross operational employment, as in Table 5.3-17 below.

Table 5.3-17 – Gross Operational Jobs

	Gross Jobs
Option 1	-
Option 2	605
Option 4	2,130
Option 6	2,180

The additionality factors applied to the gross employment to reflect the leakage, displacement and industry multipliers used at each geography are indicated at Appendix N. Note, the deadweight is Option 1.

Table 5.3-18 – Net Direct Operational Jobs

Net Direct Operational Jobs			
	Renfrewshire	City Region	Scotland
Option 1	-	-	-
Option 2	470	485	440
Option 4	1,665	1,710	1,555
Option 6	1,710	1,755	1,595

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Table 5.3-19 – Gross Operational GVA (£m)

Gross Operational GVA (£m)			
	Renfrewshire	City Region	Scotland
Option 1	-	-	-
Option 2	161.6	183.8	208.5
Option 4	647.4	732.3	834.9
Option 6	768.6	865.5	992.8

Table 5.3-20 – Net Direct Operational GVA (£m)

Net Direct Operational GVA (£m)			
	Renfrewshire	City Region	Scotland
Option 1	-	-	-
Option 2	81.5	92.8	105.1
Option 4	339.3	383.2	438.0
Option 6	413.9	465.8	534.8

In the absence of effective active travel connections and the ability to more cost effectively deliver required utilities infrastructure to Netherton Farm (i.e. via the Black Cart cycle / footbridge), opportunities will be brought forward more slowly due both to increased cost of servicing, connectivity between sites across AMIDS, and accessibility to local labour. As a result, development and employment is accelerated under Option 6 relative to Option 4.

Option 6 supports the employment of up to 1,755 employees, generating £465.8m in discounted GVA by 2044 in the City Region.

Total GVA Impact

This sums GVA derived from infrastructure construction, follow on development construction, and the operation of those developments. Total gross and discounted GVA is presented in the tables below.

Table 5.3-21 – Total Gross GVA (£m)

Total Gross Direct GVA			
	Renfrewshire	City Region	Scotland
Option 1	6.0	6.5	6.9
Option 2	174.2	197.9	223.4
Option 4	685.8	775.2	880.3
Option 6	809.0	910.7	1,040.6

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Table 5.3-22 – Total Net Direct GVA (£m)

Total Net Direct Discounted GVA			
	Renfrewshire	City Region	Scotland
Option 1	4.1	4.5	4.7
Option 2	90.4	102.9	115.8
Option 4	366.0	413.2	469.8
Option 6	443.3	498.9	569.8

As Option 1 represents the counterfactual situation (i.e. deadweight), it is deducted from the other interventions to derive total net additional GVA. This shows the direct impact of each intervention relative to the counterfactual.

Table 5.3-23 – Total Net Additional Discounted GVA (£m)

Additional NPV GVA			
	Renfrewshire	City Region	Scotland
Option 2	86.3	98.4	111.1
Option 4	361.9	408.7	465.1
Option 6	439.2	494.4	565.1

Option 6 generates the highest GVA at each of the spatial levels, generating £494.4m in additional GVA to the City Region, some £85.7m higher than Option 4 by 2044.

Value for Money

The table below presents the cost per job calculation, showing the cost of each additional permanent job under each option to the public sector. The result is presented at the City Region level.

Table 5.3-24 – Cost per job (City Region)

Cost Per Job (City Region)			
	Cost (£m)	Additional Jobs	Cost Per Job (£)
Option 2	17.0	485	35,092
Option 4	35.1	1,710	20,545
Option 6	39.1	1,755	22,295

Given the scale of public sector investment required to overcome the market failure, it is prudent to present an analysis on the relative value for money of each short-listed option. The table below shows the Benefit Cost Ratio (BCR) of each option. This is first presented as the Public Sector BCR, showing the return on investment for each £1 of public money spent. The public & private sector BCR is then presented showing the overall cost to the economy (i.e. adding private sector investment related to each option). Note this is provided at the City Region level. Figures have been discounted at the standard rate i.e. Present Value.

FULL BUSINESS CASE

Table 5.3-25 – Benefit Cost Ratios

City Region			
	PV Costs	PV GVA	BCR
Public Sector Only			
Option 1	-	4.5	-
		PV Net Additional GVA	
Option 2	17.4	98.4	5.7
Option 4	35.2	408.7	11.6
Option 6	39.1	494.4	12.6
Public and Private Sector			
Option 1	16.8	4.5	0.3
		PV Net Additional GVA	
Option 2	35.9	98.4	2.7
Option 4	108.4	408.7	3.8
Option 6	119.5	494.4	4.1

Option 6 returns the highest BCR of the intervention options against both public and public/ private ratios.

5.4 Transport Economics

The infrastructure associated with the City Deal GAIA project is aimed at providing better connectivity to and between existing and new development sites within a localised area. As such, the transport infrastructure would not normally be viewed as a ‘transport’ type scheme, subject to a traditional Transport Economic Evaluation (TEE).

Notwithstanding this, detailed transport modelling was undertaken as part of the option appraisal process, with the modelling considering the impact of the GAIA project elements on their own and also the cumulative impact of the GAIA and CWRR projects.

Although not part of the preferred option being taken forward in the GAIA City Deal project, analysis of the GAIA south Gateway route on its own, excluding the realigned Abbotsinch Road & Wright St bridges, which would not significantly affect traffic flows, provided an exceptionally high benefit to cost ratio, well in excess of normally acceptable levels.

When linked with the CWRR project, the improvements in travel time reliability, improved connectivity between key destinations and local communities, improved links to public transport routes and potential to encourage a modal shift away from cars to public and active travel options demonstrates that the GAIA project will have an overall positive benefit on the transport network in the area, making a strong case for the projects value for money.

Existing Congestion Relief

The active travel measures that will be delivered through the project will provide opportunities for modal shift away from car-based transport and add to the traffic and congestion relief and also to the overall sustainable transport and carbon reduction agenda, with attendant benefits overall for air quality and environmental conditions.

Through the traffic modeling exercise, the new Wright Street Bridge is estimated to remove a large percentage of heavy goods vehicles accessing the Westway Business Park from the current Porterfield Road access. Except for Westway, Porterfield Road is essentially an access to residential sites, contains

considerable residential frontage and a primary school. Removing HGVs from this road will result in a much safer and more pleasant residential setting and significantly reduce the accident risk to school children.

5.5 Value for Money – Wider Impacts

The delivery of the GAIA project will improve connectivity across the local area, and when taken together with the CWRR, will extend that positive impact across the City Region. This change will improve the market catchment area for undeveloped and underused sites across a wide geographical area, extending to both sides of the White Cart. While some development parcels and businesses, given time, may be able to expand without the planned intervention, the increased connectivity and market access and profile available to them following the completion of the project, will accelerate the potential for growth and by consequence increase land values, business opportunity and thereby economic growth.

The infrastructure interventions: new roads; bridge works; pedestrian and cycle paths, cross a variety of land parcels in differing ownership and condition and differing levels of accessibility and connectivity deficits. Traditional methods of seeking private sector contribution for the scheme would result in a fragmented and extended long term approach. This would prevent any potential increase in economic growth in the local area and City Region from being realised until after the private sector responded to the existing land opportunities. As the development sites are both difficult and costly to take forward, the potential for that position to be attained is difficult to predict and may arguably never be reached.

Stakeholder consultation has identified stalled development proposals and those on indeterminate programmes, which will be accelerated following the completion of the project. Specific plans by Westway and Glasgow Airport are examples. Other opportunities will be promoted by Renfrewshire Council as the project progresses, through the City Deal Benefits Realisation Strategy.

Improved travel options and increasing use of public and sustainable travel options throughout Renfrewshire and wider afield, including those achieved through the delivery of other City Deal interventions at the Clyde Waterfront & Renfrew Riverside project and the Airport Access Projects, will result in increased employment opportunities throughout the surrounding area due to the improved connectivity provided by the new infrastructure. Connections through Renfrewshire to Glasgow Airport including sustainable active travel routes, will also improve connections to the area from Glasgow and West Dunbartonshire.

As set out earlier, the key GAIA site will be the location for the new NMIS. This together with LMC, located at Westway, will act as the catalyst for the development of the Advanced Manufacturing Innovation District – Scotland. NMIS is a Scotland wide initiative and measures are being put in place through the AMIDS Delivery Group, to ensure that the whole of Scotland and a wide variety of Scotland's manufacturing sectors and academic institutes will be linked to, and benefit from, NMIS. This approach has resulted in the announcement to also locate MMIC at the GAIA site.

A key aspect of the economic case for this project is the proximity of the area to Glasgow International Airport, Westway and Inchinnan Business Parks, AFRC, Renfrew and Paisley Town Centres, West College Scotland (Paisley Campus) and the University of West of Scotland and other services such as the main rail line into Glasgow. The construction of this infrastructure will bring considerable benefits to the local economy in terms of employment opportunities in the supply chain associated with a project of this scale. The NMIS, MMIC and AMIDS developments, noted earlier, will benefit manufacturing businesses across the entire City Region.

The new Wright Street Bridge affords the opportunity for a new public transport route, providing a more direct route linking Erskine and Inchinnan to Renfrew and beyond. All of this will assist in the revitalisation of existing businesses in the area, with these businesses helped to grow as a result of the linkages and opportunities provided by the project.

The additional employment opportunities arising from new business development and the greater opportunities afforded by improved connectivity, will assist in reducing the current wealth disparity

throughout Renfrewshire, and the wider City Region, and result in an improvement in the areas noted in the Scottish Index of Multiple Deprivation (SMD) figures.

The benefits derived from the economic stimulus that the project will deliver, through the improved connectivity, development site accessibility, improvements in public transport use and the consequential economic growth, further demonstrate the value for money of this project.

5.6 Distributional impacts and benefits

As presented in the BCR, the preferred option delivers a good value for money for the public purse and creates a range of on-site opportunities. As described in the socio-economic baseline analysis (Appendix M), the performance of Renfrewshire's economy has been inconsistent and there exists pockets of deprivation. The GAIA project creates an opportunity to make a major shift in the accessibility of well paid employment opportunities. Whilst not forming the basis for selection for the preferred option, it is nonetheless important to recognise the wider contribution.

The following analysis presents a situation whereby the cost of delivering the project increases to a level that would derive a BCR of less than 1 (Switching value).

Table 5.6-1 shows that the cost of the preferred option would have to increase by 1,304% to derive a BCR of less than 1.

Table 5.6-1 – Switching Value

City Region			
	PV Costs	GVA	BCR
Public Sector Only			
Option 1	-	4.5	
		PV Net Additional GVA	
Option 2	17.4	98.4	5.7
Option 4	35.2	408.7	11.6
Option 6	549.1	494.4	0.9
Public and Private Sector			
Option 1	16.8	5.5	0.3
		PV Net Additional GVA	
Option 2	35.9	98.4	2.7
Option 4	108.4	408.7	3.8
Option 6	629.5	494.4	0.8

Further sensitivity testing is presented in Table 5.6-2 below. The analysis shows a reduction in the scale of benefit (GVA) by 50%. In this scenario, the counterfactual has a slightly better BCR than the preferred option (Option 6) after the private sector investment is added. However, Option 6 still produces a strong BCR and the additional jobs and GVA under Option 6 far outweigh those generated under Option 1.

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Table 5.6-2 – Sensitivity Analysis – 50% Benefit Reduction

City Region			
	PV Costs	GVA	BCR
Public Sector Only			
Option 1	-	2.0	-
		PV Net Additional GVA	
Option 2	17.4	49.2	2.8
Option 4	35.2	204.4	5.8
Option 6	39.1	247.2	6.3
Public and Private Sector			
Option 1	16.8	49.0	2.9
		PV Net Additional GVA	
Option 2	35.9	49.2	1.4
Option 4	108.4	204.4	1.9
Option 6	119.5	247.2	2.1

Economic Risks

The main economic risk to GAIA arises from a failure to deliver the anticipated benefits, in extending higher value economic activity across the City Region and encouraging accelerated development on sites historically subject to long-term market failure.

Details of specific economic, political and financial risks can be found in the Risk Register (see Appendix D). High level risks that could affect the anticipated benefits of each intervention include:

- Economic uncertainty caused by the UK's exit from the EU (Brexit) and;
- Macroeconomic changes such as inflation, interest rates and exposure to changes in exchange rate, putting a hold on private sector investment decisions;

The above risks are out with the project teams control and are a standard risk faced by the City Deal programme as a whole, however, benefits will be monitored, and expectations realigned as political/macroeconomic situations become clearer in the coming year. The risk register indicates the potential to accelerate infrastructure development before Brexit in order to entice accelerated private capital investment.

The risk analysis did not reveal a high risk of GAIA failing to achieve its stated benefits. Optimism bias has been applied along with all other necessary compliant impact metrics to ensure the BCR is robust.

Further Considerations

When considering the benefits derived from this project, it is important to note the synergies between the GAIA project and the CWRR (which ranked first in terms of GVA delivery from the overall programme assembly process) and Airport Access project. Collectively, these projects, with their linked and significant improvements in connectivity have enormous potential to deliver benefits to the local and City Region economies through improving the mobility of the local workforce, increased employment opportunities in the supply chain, and enhanced attractiveness of the local area for investment. As the GAIA project prioritised in 11th place overall in the Program level City Region wide exercise it is therefore essential to the programme that the project is successfully implemented and this GVA monitored and realised.

Confirmation of the Preferred Option

After performing the sensitivity analysis, it can be confirmed that Option 6 remains as the preferred intervention. It generates the highest BCR and considerably higher benefits in comparison to Options 4, 2 and 1. Option 6 also contributes to each of the project objectives as outlined in the Strategic Case at section 3.6.

Table 5.6-3 – Preferred Option Results

Preferred Option Results – Option 6 Relative to Option 1						
	2019	2024	2029	2034	2039	2044
Cumulative discounted Public-Sector Investment (£m)	19.6	37.8	37.8	38.2	38.7	39.1
Infrastructure						
Cumulative gross jobs	90	180	180	180	180	180
Cumulative net jobs	80	160	160	160	160	160
GVA (£m)	5.8	11.3	11.3	11.4	11.6	11.7
Development Construction						
Cumulative net direct private sector investment (£m) - Option 4	-	8.7	45.4	71.1	76.5	80.4
Cumulative net direct private sector investment (£m) - Option 1	-	-	11.4	16.8	16.8	16.8
Cumulative net additional private sector investment (£m)	-	8.70	34.00	54.30	59.70	63.60
Cumulative gross direct enabled jobs - Option 4	-	45	270	415	500	540
Cumulative gross direct enabled jobs - Option 1	-	-	70	110	110	110
Cumulative net additional gross enabled jobs	-	45	200	305	390	430
Cumulative net direct enabled jobs - Option 4	-	40	235	365	440	475

Preferred Option Results – Option 6 Relative to Option 1						
	2019	2024	2029	2034	2039	2044
Cumulative net direct enabled jobs - Option 1	-	-	65	95	95	95
Cumulative net additional net jobs	-	40	170	270	345	380
Cumulative net direct GVA (£m) - Option 4	-	2.3	12.1	17.0	20.4	21.4
Cumulative net direct GVA (£m) - Option 1	-	-	3.0	4.5	4.5	4.5
Cumulative net additional GVA (£m)	-	2.30	9.10	12.50	15.90	16.90

Preferred Option Results – Option 6 Relative to Option 1						
	2019	2024	2029	2034	2039	2044
Operation						
Cumulative gross direct enabled jobs - Option 4	-	55	845	2,010	2,080	2,180
Cumulative gross direct enabled jobs - Option 1	-	-	-	-	-	-
Cumulative net additional gross enabled jobs	-	55	845	2,010	2,080	2,180
Cumulative net direct enabled jobs - Option 4	-	45	680	1,510	1,555	1,755
Cumulative net direct enabled jobs - Option 1	-	-	-	-	-	-
Cumulative net additional net jobs	-	45	680	1,510	1,555	1,755
Cumulative net direct GVA (£m) - Option 4	-	3.4	46.3	193.3	348.6	465.8
Cumulative net direct GVA (£m) - Option 1	-	-	-	-	-	-
Cumulative net additional GVA (£m)	-	3.4	46.3	193.3	348.6	465.8
Total NPV GVA						
Total net NPV GVA (£m) Option 4	5.8	17.0	69.7	221.7	380.6	498.9

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Preferred Option Results – Option 6 Relative to Option 1						
	2019	2024	2029	2034	2039	2044
Total net NPV GVA (£m) Option 1	-	-	3.0	4.5	4.5	4.5
Total net additional NPV GVA (£m)	5.8	17.0	66.7	217.2	376.1	494.4

6 THE COMMERCIAL CASE

6.1 Introduction

This Chapter sets out the commercial case for delivery of the Glasgow Airport Investment Area project.

Identities of key partners in the delivery process and specific challenges and risks are also noted.

As noted earlier in this document, the preferred option meets the needs of partners and stakeholders. The table below summarises how this is achieved in each case.

Partner	Addressing Needs
Renfrewshire Council	<p>The preferred option supports the RCs economic strategy and contributes to the following wider policy priorities:</p> <ul style="list-style-type: none"> • Development of the Glasgow Airport Investment Area, including Inchinnan, Westway and new key economic development sites; • Provide the infrastructure required to facilitate known investments by others which will create employment potential, skills development and educational opportunity (incl the National Manufacturing Institute Scotland, Medicines Manufacturing Innovation Centre) • Accommodation and facilitation of airport growth and expansion • Improved transport connections between key development sites and locales • Improved Environmental Quality
Glasgow City Region City Deal Cabinet	<p>The preferred option supports the City Deal objectives through improving infrastructure, promoting growth in innovation, improving connectivity and enabling sustainable economic growth.</p>
ONE Scotland partners	<p>The preferred option will support development of a strategic priority (Glasgow Airport) and provide the required infrastructure works that will support development of numerous strategic AMIDS projects including NMIS, LMC, MMIC.</p>
Glasgow Airport	<p>The preferred option enables the continuing development of Glasgow Airport masterplan in recognition of the strategic importance of the airport and facilitates investment around the airport aiding continuing growth and employment opportunities.</p>
University of Strathclyde	<p>The preferred option enables the investment at NMIS, improved links for AFRC at Inchinnan and improved links for LMC to the AMIDS opportunities.</p>
Private Sector Land Owners	<p>The preferred option will address the needs of various private sector landowners, opening up sites to development, including but not restricted to;</p> <ul style="list-style-type: none"> • Westway • Former BOCM site, Wright Street • Netherton farm • Inchinnan Business Park • Glasgow Airport Business Park

Partner	Addressing Needs
Local Communities	<p>The preferred option will help support the creation of new high value employment opportunities, make improvements to the environmental quality through new green networks between the site and Paisley TC. The resulting investment in skills training at NMIS, enabled by the GAIA project will allow upskilling of local residents to access the employment opportunities that will develop.</p> <p>Local communities have been engaged in a series of community engagement and consultation events.</p>
Advanced manufacturing businesses	<p>The preferred option will build on the existing research and innovation assets in the local area to create a 'centre of excellence' for Advanced Manufacturing – co-location and supply chain development opportunities, developing a critical mass of expertise and activity</p>
Statutory Bodies – Transport Scotland, SPT, SEPA	<p>The preferred option will address the needs of various transport bodies through;</p> <ul style="list-style-type: none"> • encouraging active travel will reduce congestion, reduce journey times and improve air quality. • Reduced journey times and congestion • Flood mitigation measures
Cyclists – both leisure and commuter	<p>The preferred option will support the provision of enhanced, safe to use cycling infrastructure between key employment sites</p>

6.2 Delivery Specification

Renfrewshire Council are responsible for the delivery of this project, which is primarily roads and bridge infrastructure. While the developments which will follow the successful delivery of the GAIA project, will result in the benefits anticipated, the physical development is not part of this project nor the FBC.

There are, therefore, limited risks and challenges associated with the project that could be attributed to commercial bodies. A continuous review of the needs and programmes for following development is undertaken, to ensure that any risks or issues which would delay those developments is managed and where necessary mitigation actioned.

It is recognised that the delivery of the following development is essential to the delivery of the anticipated benefits. It is for that reason that the project team have compiled a Benefits Realisation Strategy (see Appendix G), which includes the establishment of the GAIA Steering Group, and the AMIDS Project Delivery Board, which is now active. The successful operation of the GAIA Steering Group has already seen the announcement of the National Manufacturing Institute Scotland, and the Medicines Manufacturing Innovation Centre being located at GAIA, as well as the Lightweight Manufacturing Centre being located immediately adjacent. In addition there is international interest in the location for manufacturing purposes in the area accessed by the GAIA project. In this context, therefore the commercial risks of elements beyond the project are being effectively managed and, through successful progression, being reduced.

Close consultation and programme coordination with key public and private sector stakeholders and developers will continue to be carried out to ensure the project is delivered without conflict with other construction or related operations in the project area.

The project is being managed using the principles of PRINCE2. A Project Initiation Document (PID)³³, contained within Appendix F, has been compiled and approved setting out the key gateways and responsibilities for all associated with the project. The PID has been approved by the Programme Board in accordance with the appropriate governance within Renfrewshire Council.

Renfrewshire Council project team will liaise with affected parties as required to ensure the delivery model being followed for this project, remains the most effective.

6.3 Project Delivery – Direct Deliverables

Within Renfrewshire Council, there is oversight from Chief Executive Service within the Council to ensure that the development of each of the project components and other complementary City Deal projects properly address any interdependencies which may exist. This extends to establishment of an RC Coordination Group, which meets monthly to review and agree the way forward on any overlap between the City Deal projects and other projects or dependencies. Much of the project is predicated on achieving and maintaining good working relationships with key stakeholders and focus is maintained on this aspect by the project team, through workshops, regular dialogue and information sharing.

A suitably resourced and experienced dedicated project team, previously involved in major roads, transportation and other infrastructure projects from inception to construction, has been put in place to deliver the project and to work closely with key stakeholders. This team has been supplemented by external specialist consultants, where required, to ensure the project delivery specifically addresses the requirements of City Deal objectives, the Council and key stakeholders, while resolving challenges in parallel with maximising outcomes from opportunities.

Regular interaction of the Project Team with stakeholders will ensure that the project is delivered without conflict while achieving the project outputs and outcomes described.

To establish the most appropriate procurement, process a number of activities has been undertaken;

- The Project Team and Sweco participated in several procurement workshops to define and capture the objectives and priorities of the procurement for the design and construction works for GAIA project.
- The outcomes of the procurement workshop pointed to merits in considering the procurement of the bridge elements and the road elements as a contract which could be procured as a traditional construction only contract with design being completed in advance by the Council's lead designers Sweco under their current appointment. To investigate this further a question on the preference of contractors with regards to this was included in the market engagement questionnaire issued out with the PIN. A final decision on this was taken following the event and in-depth discussions with interested tier one contractors.
- To confirm assumptions made and objectives and priorities agreed at the workshops, a Prior Information Notice (PIN) was published in November 2016 inviting contractors to respond to a market research questionnaire prepared and issued by the Council.
- Following the return of completed questionnaires from interested contractors, the Council set up a market engagement event with input from Sweco, held in January 2017, for all interested contractors to attend.
- The event lasted two days and consisted of a communal project update session on the first morning for all interested contractors and one-to-one discussions, in the afternoon and second day, with tier one contractors who had expressed strong interest in the GAIA project through the market engagement questionnaires. The feedback gained from the questionnaires and discussed during the discussions helped inform the Council's sourcing strategy for this project.

³³ 'Glasgow Airport Investment Area Project Initiation Document (PID) v1.0', approved Dec 2015.

- The market engagement event was open to all contractors that expressed an interest via the PIN and all the materials presented at the event are publicly accessible and available on the Renfrewshire Council City Deal website.
- Contractors that attended and engaged with the Project Team and Sweco at the market engagement event intimated their preference would be for a Design and Construct contract for all elements of the GAIA project (bridges and roads) to be procured as one work package due to the improved opportunity for influence over cost engineering; efficiency of scale; programme certainty; de-risking of project interfaces.
- Consideration of contract forms by the design team in parallel with market input indicated NEC 4 standard form of contract. This option allows the most effective delivery of the project for the Client based on the fixed budget available, while creating effective competition in the procurement process and the incentive for value engineering during contract delivery.

As a result of internal consideration following market engagement, workshops with the design team and reviews against risk and constraints, and implications of appropriate legislation, the following Procurement process was followed:

- The value of the proposed design and construction works contract is above the EU Procurement threshold for Works.
- The opportunity was advertised in the Official Journal of the European Union
- The procurement was conducted using the Competitive Procedure with Negotiation.
- The Design and construction works for GAIA was presented to the market as one procurement/contract.
- As the works are taking place in and around the White Cart and Black Cart, the impact of the works on the ecosystem in the area must be considered and monitored through the contract period. To support this at the design development stage, Sweco appointed an ecologist to carry out investigations and site surveys. The outcomes of these studies was incorporated in the contracts issued.
- The Procurement process included details on the minimum requirements for the tender, selection criteria and award criteria. Following its release in June 2017, an NEC4 with additional "Z" clauses for the GAIA project was used.
- Following receipt of planning consent for the project, the procurement process (PQQ) commenced in October 2017.

The Procurement Process delivered the following outcomes:

- The open market PQQ exercise resulted in 9 submissions from contracting organisations.
- Following evaluation of the 9 submitted responses, 6 contracting organisations were invited to tender.
- In July 2018, at the closing date for submissions, 5 contracting organisations had provided responses to the invitation to tender.
- Evaluation of the 5 submissions was undertaken in accordance with the procedures previously set.
- Two meetings with representatives of each tendering organisation allowed exchange over areas for engineering efficiencies to be incorporated within the contractor's design proposals to aid development of an updated tender scope.
- The updated Scope was issued to the 5 contracting organisations in November 2018 with 3 submissions returned in February 2019.
- The 3 submissions were evaluated in accordance with the previously agreed procedures and the most economically advantageous tender identified.

Further detail on the procurement strategy, the processes and consideration undertaken to establish the most effective procurement route is shown within Appendix H.

The infrastructure delivered will be adopted as public asset on completion. This includes:

- Road Network (New) **2.1km**
- Road Network (Enhanced) **0.52km**
- Walkway (New) **6.33km**
- Cycle Track (new) **8.07km**
- Road Bridge (New) **1No (80m)**
- Cycle / Footbridge **1 No. (100 m)**
- Junction Upgrade **1No**
- Junctions (New) **3 No.**
- Bus Route (New) **0km** (potential for this element subject to operator agreement)

6.4 Project Delivery – Indirect Deliverables

The project will support the development of new and stalled sites and promote growth and expansion of existing and new businesses as detailed within 3.7 – Project Scope. City Deal infrastructure will enable the realisation of wider benefits by addressing the market failure noted within section 3.2.3; and acting as a catalyst for further private sector investment in commercial opportunities.

The presence of private sector masterplans and planning applications, for areas of vacant and underused land in the project area, and the outcome of dialogue with key land owners on currently disconnected business areas confirms the potential for realisation of the benefits listed in this Business Case. These strategic private investment plans, which have not yet been delivered due to the current lack of business connectivity, include:

- A planning consent, linked to a site wide masterplan, for additional business space and infrastructure improvements (Planning Ref 10/0914/PP).
- An Outline planning consent for residential development south of Wright Street (Planning Ref 13/0154/PP)
- Glasgow Airports masterplan showing additional Airport facilities east of the existing site boundary.

Detailed discussions with landowners, developers and businesses during development of the GAIA project, confirmed that the project would improve connectivity, increase access to current vacant land, to such a degree that these unrealised opportunities would become attractive for private investment. It is recognised that a pro-active planning policy, an “open for business” attitude from Development Control and facilitation of links between the developers and land owners will be required from the Member Authority. All of this is enshrined in the ethos of the City Deal agreement which seeks to attract and develop economic growth and will be of particular importance if the private sector response is slower than anticipated following completion of construction of the project. If the market response is slower than anticipated, pro-active marketing initiatives of the available opportunities, programmes of “public” marketing highlighting the local advantages for residents and communities in these key areas and enhanced developer and land owner engagement, to progress development will be undertaken. The Regeneration Team and the Benefits Realisation Officer will monitor these aspects taking action where required reporting need for action through the Renfrewshire Council Programme board as necessary. However, the evidence of investment for National Manufacturing Institute Scotland and the Medicines Manufacturing Innovation Centre, indicates that the pro-active approach being taken by the project team and partners is already providing tangible results.

The strategy for the delivery of wider benefits has been compiled and articulated in Renfrewshire Council's City Deal Benefits Realisation Strategy (see Appendix G). As set out in Section 3 of this FBC, this strategy is aligned with a number of other Council initiatives to provide transformational change in economic conditions across Renfrewshire, within the context of the Glasgow City Region. To ensure that the following development facilitated by GAIA, accords with the wider aspirations, a masterplan process was used to inform the location, scale, and form of the infrastructure delivered through the GAIA project. This exercise not only ensured that benefits achieved by the public-sector investment available through the GCRCD, can be maximised, it enabled evaluation of the potential benefits (noted within Appendix B) which would follow GAIA.

The strategy adopted by the Council and with partners through the GAIA Steering Group and NMIS Delivery Group, has already resulted in the decision to locate NMIS on the key GAIA site and the development of the proposals for the wider AMIDS. Indirect deliverables are therefore already in the process of being achieved. Terms of Reference have been agreed between the Council, Scottish Government and Scottish Enterprise to drive the delivery of the AMIDS vision, with governance structures and support groups in place for this and this will help drive the delivery of the project outcomes.

6.5 Funding Options and Payments Arrangements

As noted earlier, alternative routes for funding of the GAIA project, have been explored and discounted. These included:

- Private sector and landowner contribution – the significant cost of the infrastructure to access and enable the development opportunities, together with the long term investment required to fully develop the potential outcomes, is greater than any private organisation would contribute. This is demonstrated by the market failure to deliver the opportunity to date.
- One Scotland Partners – the infrastructure adjustments required are significant and will facilitate all of the potential development in the GAIA area. No one development opportunity could develop a business case which could justify the entire cost of the GAIA project.
- Other external funding opportunities. – No suitable funds were identified which would permit the advanced investment in major infrastructure to facilitate future private sector investment, which at the time was not identified.

The recent announcements of development for LMC, NMIS and MMIC justify the approach taken via the City Deal Infrastructure Fund, to invest in the infrastructure and environment to facilitate development and disseminate the vision for this advanced manufacturing area.

The project costs are funded by the City Deal Grant and Renfrewshire Council contribution as set out in the City Deal Agreement, with details of the specific contributions noted in Section 7- Financial Case of this Outline Business Case.

Due to the scale of expenditure required to deliver this project, which contributes significantly to the targeted outcomes of the City Region member authorities, it is not possible to fund from existing Renfrewshire Council capital programme. There are no other known funds which can contribute to the degree required.

Such is the potential for transformational change to the attitude and use of active travel options, resulting from the combination of the GAIA and CWRR City Deal projects in Renfrewshire, that external funding of £0.079m has been secured from Sustrans Community Links Fund towards the design of active travel routes within the GAIA project. Additional funding was also provided to design active travel on CWRR. There is potential for further funding for active travel elements of the project, subject to approval by Sustrans of a grant application in later rounds of the Community Links Fund. As this fund requires confirmation of periods for spend, such an application cannot be submitted until later in the project programme. Due to the uncertainty of approval of this additional funding, which will compete with other projects in that period of Community Links Fund, no assumption of further funding has currently been incorporated into the financial appraisal for the project.

No further external contributions are being relied upon for delivery of the core project.

The Council's long term financial plan recognises the ongoing commitment to future capital projects, including the City Deal projects. Revenue costs for the management and maintenance of the new infrastructure created will be met from the appropriate Council's Service revenue budgets.

Payments made to external parties for assets (e.g. land) or services (e.g. fees) or works (e.g. investigations, construction) required as part of the project are being undertaken in full compliance with Renfrewshire Council's Financial Regulations.

The Financial Case of this document sets out the funding allocation against the City Deal Infrastructure Fund. Expenditure will be managed against the City Deal Assurance Framework and Renfrewshire Council Standing Instructions. Expenditure has been updated within this FBC for the GAIA Project. Approved expenditure will be used for:

- Land assembly
- Consultancy Fees in the development of specimen designs and contract tender documents.
- Cost for investigations on ground conditions, habitat, traffic etc.
- Management & Internal costs.
- Utility & Services Costs.
- Construction costs for the Direct Deliverables on the GAIA project.

6.6 Risk Allocation and Transfer

The risks associated with delivery of the project and outcomes, at a high level, is allocated to the Council as appropriate via the governance and reporting structure referred to in sections 9.1 and 9.2. At project level, risk has been allocated to the Council or to a third party by way of contracts and other legal agreements. Risk Registers have been prepared for the project as part of the Outline Business Case and a copy of the Project Risk Register is attached in Appendix D.

A regular review and update of risks is undertaken in liaison with stakeholders and design consultants with the Risk Register reviewed monthly, as a minimum, and reported to the Programme Board on a regular basis.

The share and appropriate allocation of risks will continue through the project and particularly during compilation of the construction tender documentation. The current and proposed allocation of risk is described within Table 6.6-1 below.

Table 6.6-1 - Risk Allocation

Risk Identified	Retained within Member authority	Shared with External Party	Transferred to external Party
Resource	✓		
Specimen Design	✓		
Detailed Design & Build		✓	
Operation	✓		
Technology	✓		
Regulation	✓		
Contractor Default	✓		
Political	✓		

6.7 Roles

Named individuals associated with each role required to ensure delivery of this project are detailed within the PRINCE2 PID Document (see Appendix F). A summary of the key individuals is noted within Table 6.7-1 below.

Table 6.7-1 - Key project roles summary

Role	Individual	Designation	Expertise and Skills
Senior Responsible Officer	Sandra Black	Chief Executive	Experience of large scale budgetary control and management. Knowledge of Local Government Governance.
Project Sponsor	Steve McFadden	City Deal Project Director	Experience of large scale infrastructure projects, budgetary control and management. Knowledge of Local Government Governance
Project Depute Director	Barbara Walker	City Deal Depute Project Director	Experience of legal aspects for large scale infrastructure project contracts and Land acquisitions, Knowledge of Local Government Governance
Project Manager	Alan Anderson	GAIA Project Manager	Experience of large scale infrastructure projects, multi-disciplined team management.
Project Team Core Officers	Claire Crosby Kevin Waters	Finance Manger Programme Manager	Experience on projects of similar scale and complexity. Experience within range of tasks required.

7 THE FINANCIAL CASE

7.1 Introduction

This chapter sets out the Financial case for the delivery of the Glasgow Airport Investment Area project. The purpose is to demonstrate the affordability of the proposal, the associated funding arrangements and the technical accounting arrangements (value for money is analysed in the economic case in Section 5). The estimated costs and the associated projected expenditure profile are also presented in this chapter. This chapter will review:

- 7.2 Overall Project Approval
- 7.3 Project Funding
- 7.4 Summary of Project Costs
- 7.5 Phasing of Project Expenditure
- 7.6 Expenditure on Assets Not Council Owned
- 7.7 Ongoing Revenue Implications
- 7.8 Main Financial Dependencies
- 7.9 Financial Risks

7.2 Overall Project Approval

The project costs at FBC is £TBCm¹ and is detailed in Appendix C. This is an increase from the estimated position at OBC and reflects works, outwith the core project, to be delivered via the contract which are funded from 3rd Party Contributions to maximise the developments arising from the NMIS and MMIC projects. These FBC costs are a decrease to the approved baseline costs that were included in the initial list of projects agreed and approved by the UK and Scottish Governments and the City Deal Member Authorities. This decrease reflected the £12.346m virement to the Clyde Waterfront and Renfrew Riverside project approved by Cabinet in December 2016. This is partially offset by a £1.603m increase to reflect 3rd Party funding which has been levered into the project. The combined position is also detailed in Table 7.2-1 below.

Table 7.2-1 - Project Overall Costs

Project	Initial City Deal Estimates	OBC Estimates	Current Position	Change
	£m	£m	£m	£m
Clyde Waterfront & Renfrew Riverside	78.290	90.680	90.680	12.390
Glasgow Airport Investment Area	51.395	39.127	TBC	TBC
TOTAL	129.685	129.807	90.680	TBC
Funding Sources				
City Deal Grant Funding	111.942	111.942	111.942	-
Renfrewshire Council Funding - City Deal	17.743	17.743	17.743	-
Other Funding:				-
3rd Party Contributions		0.122	1.647	1.647
TOTAL	129.685	129.807	131.332	1.647

¹ Project costs anticipated to be within available funding for the project to £40.651m with final tender price and associated contingency provision to be confirmed on completion of tender evaluation.

Initial capital cost estimates at the Strategic Business Case stage forecast capital cost of £51.395m. Following the approval to proceed to Outline Business Case, the Lead Consultant continued to undertake work on the preparation of robust cost estimates developed on a consistent basis with the application and appropriate provision of risk, optimism bias and contingency levels to provide mitigation against the risks associated with the programme, section 7.4 provides detail on the basis of these allowances.

The revised cost estimates provided by the Lead Consultant at OBC based on the preferred option, resulted in an estimated total capital cost of the project to be £39.127m. The pre tender estimates maintained the total capital cost of the project at £39.127m with appropriate allowances for optimism bias (11.12%) and inflation up to Q3 2019 (13.6%) based on BCIS General Civil Engineering cost indices and forecasts provided for.

The final tendered position forecasts a total outturn cost of **£TBCm**. A breakdown of these costs is provided in section 7.3 with further information on costs detailed in Appendix C section 1.

7.3 Project Funding

The project costs based on final tender for GAIA main and the funding sources for the project are set out in Table 7.3-1 for this project. Formal approval to vire funding between the two projects (within the overall cost envelope of the combined projects) was approved by GCRC Cabinet on 12 December 2016.

While an increase in the project cost has been recorded between OBC and FBC stage the costs noted within this FBC reflect the additional information and detail available for the financial appraisal of the project with the increased costs being funded from 3rd party contributions.

Table 7.3-1 - Funding Sources

	Total Cost	Grant Funded	Council Contribution	Third Party	Total Funding
	£m	£m	£m	£m	£m
Original Project Budget	51.395	44.363	7.032	-	51.395
Add: Third Party Contributions (Sustrans design)	0.079			0.079	0.079
Less: Virement to CWRR (retaining 86/14 split)	12.346	10.657	1.689		12.346
Project Cost/Funding at OBC	39.127	33.706	5.343	0.079	39.127
Add: Third Party Contributions (additional since OBC)				1.525	1.525
Project Cost/Funding at FBC1	39.127	33.706	5.343	1.603	40.651

The project will be majority funded through capital investment committed by the GCR City Deal to support the delivery of 20 infrastructure projects, including GAIA, maintaining the 86/14 split of Grant to Council Contribution.

Renfrewshire Council's contribution has been allowed for through normal financial planning processes and incorporated within the Council's financial planning model. The position is regularly reviewed and discussed with expert Treasury advisors.

Funding of £0.079m was received from Sustrans Community Links Fund during 2016/17 towards design costs for active travel routes within the project. This was match funded from within the overall project budget. Further Sustrans funding may be forthcoming subject to a successful application to Sustrans and available funding in 2019/20 and discussions are ongoing with Sustrans on this. No assumption of this further funding has currently been incorporated into the funding package. Any such additional funding would be utilised to further develop the GAIA/AMIDS site to maximise the economic growth potential of the area and the City Deal outcomes.

Further financial contributions have been agreed in principal with external partners for the delivery of specific work packages within the contract, outwith the core GAIA scope, which will assist in delivering an enhanced final scope of work to facilitate the delivery of NMIS and MMIC within their timescales and to maximise the City Deal outcomes. These contributions are accounted for in the additional third-party contributions presented in tables 7.2-1 and 7.3-1 above. Delivery of the base project does not rely on any external funding, with this additional funding enhancing the project scope to facilitate the optimum delivery model for NMIS and MMIC.

To enable the evidence of costs incurred in relation to external funding (including Sustrans) accurate records have and will continue to be maintained, with invoices from external parties (if relevant) specifically documented to enable recording and audit. Draw down of funds from external parties will be undertaken in accordance with the agreement reached with these parties and Renfrewshire Council governance procedures.

Previous approvals granted at SBC & OBC stages gave approval to expend in total up to £9.360m by Full Business Case submission. This FBC now requests funding approval of the balance of GCR City Deal funding of £29.688m to commence and complete the construction and delivery of the project. This will result in an overall approval to expend £ 39.049m of City Deal funding on the project and with the secured 3rd party funding of £1.603m will be a total funded expenditure of £40.651m as set out in table 7.3-2 below.

A large element of the previous approval at OBC related to the acquisition and assembly for delivery of the project elements, totalling up to £4.6m, subject to conclusion of land assembly processes. Land assembly has continued through a parallel approach of voluntary acquisition and CPO, with the key development site acquired. The CPO process is nearing conclusion, with any objections withdrawn, with final confirmation of the main CPO expected imminently and voluntary acquisition continuing. Confirmation of the main CPO will be in place prior to award of contract.

Table 7.3-2 - Funding approval requested

Cost Element	Funding Approved (SBC)	Funding Approved (OBC)	TOTAL Funding Approved to OBC Stage	GCR City Deal Funding Sought at FBC1	Total GCR City Deal Funding	3rd Party Funded	Total Funding
	£m	£m	£m	£m	£m	£m	£m
Construction			-	TBC	TBC	1.178	TBC
Land Assembly		4.236	4.236	0.341	4.577		4.577
Internal Council & Management Fees	0.359	0.483	0.842	0.854	1.696		1.696
External Consultancy	2.287	1.795	4.082	1.358	5.440	0.079	5.519
Other 3rd Party Costs		0.067	0.067	1.721	1.788	0.347	2.135
Other Costs	0.073	0.060	0.133	0.225	0.358		0.358
Contingency			-	TBC	TBC		TBC
TOTAL	2.720	6.640	9.360	29.688	39.048	1.603	40.651

7.4 Summary of Project Costs

The project costs, based on final tender submission are set out in Appendix C and summarised in Table 7.4-1 below.

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Table 7.4-1 - Summary of Project Costs

Cost Element	FBC
	Cost (£m)
Construction Costs	TBC
<i>Adjusted Tender Cost</i>	TBC
Land Assembly	4.577
<i>Land Acquisition</i>	4.123
<i>Legal costs, LBTT and other professional fees</i>	0.454
Internal Council & Management Fees	1.696
Land Remediation	<i>inc</i>
External Consultants Costs	5.519
<i>External Consultants Design Costs (Civil Structural)</i>	3.506
<i>Supervision Costs</i>	0.878
<i>Ground Investigation & Surveys</i>	0.689
<i>Other Consultancy Costs</i>	0.446
3rd Party Costs	2.135
<i>3rd Party Costs - Utility Diversions</i>	1.508
<i>3rd Party Costs - New supplies</i>	0.472
<i>3rd Party Costs - Advanced works</i>	0.130
<i>3rd Party Costs - Demolitions</i>	0.018
<i>3rd Party Costs - Other</i>	0.007
Other Costs	0.358
<i>Other Costs - PMO (recoverable)</i>	0.304
<i>Other Costs - Public Consultation</i>	0.024
<i>Other Costs - Project Evaluation</i>	0.030
Contingency	TBC
<i>Quantified Risk Assessment</i>	TBC
<i>General Contingency</i>	TBC
TOTAL	TBC
<i>Final tender cost and appropriate level of contingency anticipated to be within the available resources of £40.651m</i>	

These costs are based on the final tendered cost together with all other project related costs at outlined in the table 7.4-1 above. Provision for quantified risk assessment (QRA) and general contingency equating to £tbcn has been included based on the assessed residual risk associated with the project and replaces the optimism bias provision included at the OBC cost estimates. These costs are also detailed in section 3 of appendix C to this report.

The OBC estimates included an optimism bias adjustment in accordance with the HM Treasury guidance (Green Book guidance and supplementary Guidance to The Green Book). The adjustment factor applied was derived from the Scottish Transport Appraisal Guidance (STAG) based upon a stage 2 scheme development. An uplift of 11.12% of the base construction costs was applied, based on consideration of the stage of development of the project and the associated risks. OB has been reduced to 0% following the fixed price final tender and replaced with an appropriate quantified risk assessment (QRA) and contingency provision which is considered appropriate for the project, equating to £tbcn and is included in the contingency provision cost outlined in Table 7.4-1.

Within the Economic case section of this Full Business Case however, costs used to assess value for money (VFM) use current prices.

The costs for undertaking monitoring and evaluation work for the project are included in the internal Council costs for the project and these extend to the end of the project, with a specific allowance included in Table 4.1. To ensure delivery, monitoring and evaluation of the benefits from the end of the project to Gateway 3 (2029) the costs for landowner and development liaison, marketing where required and the Benefits Realisation Officer will be met from Council resources, through the Council's Regeneration & Economic Development Team. These Monitoring and Evaluation costs (full time member of staff; oversight and management by Head of Regeneration; administrative support etc), are shared across the three City Deal projects within Renfrewshire, the cost accountable to GAIA is circa £20,000 per annum. These are covered directly from Council Resources. A dedicated Benefits Realisation Officer (BRO) is in post as part of the City Deal team. Working in accordance with the Benefits Realisation Strategy the BRO will maintain a monitoring role of delivered benefits and develop a post project evaluation plan.

7.5 Phasing of Project Expenditure

The overall project will be delivered between 2015 and 2024 with main construction expenditure planned to take place over the period Q2 2019 to Q4 2020. The anticipated phasing of (capital) expenditure is detailed Appendix C and outlined in the Table 7.5-1 below, based on the current key milestone dates for the project.

Table 7.5-1 - Phasing of Expenditure

Cost Element	Actual Outturn	Forecast Expenditure					TOTAL
	to 31/03/18	18/19	19/20	20/21	21/22	22/23 to 25/26	
	£m	£m	£m	£m	£m	£m	
Construction Costs		-	TBC	TBC	TBC	TBC	TBC
Land Assembly	2.690	0.050	1.370	0.467	-	-	4.577
Internal Council & Management Fees	0.638	0.284	0.241	0.216	0.135	0.182	1.696
Land Remediation							-
External Consultants Costs	3.578	0.539	0.798	0.484	0.080	0.040	5.519
3rd Party Costs	0.041	0.060	1.521	0.513	-	-	2.135
Other Costs	0.111	0.029	0.030	0.062	0.031	0.095	0.358
Contingency			TBC	TBC	TBC	TBC	TBC
TOTAL	7.058	0.962	TBC	TBC	TBC	TBC	TBC

The key milestone dates which the phasing is based on is for the main contract to commence in Q2 2019 with completion by Q4 2020. The remaining land assembly costs will be incurred during 2019/20 following confirmation of the CPO process and general vesting principals have been applied to the cash flow to account for this.

Based on the grant distribution as set out in the Assurance Framework, with regional projects ranking first in terms of grant distribution each year, there are periods of time in which the Council will be required to temporary cash-flow expenditure above the Council Contribution (14%) on the project over a short-term period. The impact of this has been forecast and will continue to be assessed and adjusted where required based upon this programme and the wider GCR City Deal programme which may impact available funding. This forecasting has been incorporated into the Council's Treasury Management strategy and will remain a focal point in current and future Treasury Management decisions. This position is regularly reviewed and updated.

7.6 Expenditure on Assets Not Council Owned

All assets included in the GAIA project will be owned and adopted by the Council. There will be no expenditure on assets not Council owned, it is not therefore anticipated at this stage that there will be any requirement for third party guarantees.

7.7 Ongoing Revenue Implications

Discussions on revenue implications have taken place with the Council's Director of Finance & Resources and their future impact will be incorporated into the Council's financial planning. The new and realigned

road, cycleways, footpaths and bridge infrastructure will be adopted and maintained by Renfrewshire Council's Environment & Infrastructure Services upon completion. Liaison with this operational team has been a fundamental part of the project development, to ensure overall operational efficiency. Further the Director of RC's Environment & Infrastructure Services is a member of the GAIA project Programme Board, which reviews the project status on a monthly basis.

An assessment of annual ongoing revenue cost for the new and enhanced infrastructure has been undertaken. This revenue assessment has taken cognisance of the increased extent of infrastructure and the additional requirements imposed by the new bridges, delivered as part of the project. The final structural design - which will be refined based on the outcomes of the Design & Build tender process and statutory consents - will enable accurate on-going revenue and life-cycle maintenance cost to be more accurately defined.

At this stage, consideration of on-going revenue cost implications has been undertaken and included within the economic evaluation of the options considered. As the realigned Abbotsinch Road replaces an existing road, there will be a net-zero impact on revenue/maintenance costs. There will be limited costs associated with inspections of the new bridges but these will be absorbed in the staff costs for the ongoing inspection programme. Given the nature of the new bridges and the 120year design life, no ongoing maintenance costs are anticipated in the medium to long term (up to 40 years). On this basis, it is estimated that there will be a negligible impact on the Council's revenue budget

The revenue costs associated with the wider AMIDS development areas enabled by the GAIA project will be borne by the developers and tenants within the developed areas. The management process for maintenance is yet to be finalised, however the evolved model for this process will not increase the financial burden or risk on either the GAIA project or Renfrewshire council.

The cost associated with the Benefits Realisation Officer, already appointed and embedded within the RC City Deal Team are included within the costs noted in this Section of the document.

All new assets generated from this investment will be owned by the Council and will be reflected in the Council's balance sheet. These assets will be held in the Asset Register and will be revalued and depreciated in line with Council policy and Accounting Standards. The debt charges associated with the Council's borrowing requirement on the project have been reflected within the Council's overall debt forecasts and incorporated into the Council's overall financial planning and budget setting process.

7.8 Main Financial Dependencies

The delivery of the project is dependent on the City Deal grant funding consisting of the City Deal Grant (86%) and the Council Contribution (14%). As outlined in section 7.3 the Council Contribution has been allowed for through normal financial planning processes and has been fully incorporated within the Council's financial planning model.

The benefits realised from the City Deal investment delivering the GAIA project, may be dependent on additional financial funding. NMIS, MMIC and LMC have been announced by Scottish Government as being located at GAIA. While not funded by City Deal these facilities will require external funding to ensure delivery and funding packages are in place for the NMIS & MMIC developments. The City Deal team will maintain contact with the delivery teams for NMIS, MMIC and LMC to ensure any information required for the necessary financial input is provided where possible. Any works which will be funded from the 3rd Party Contributions and which are reliant on additional funding will be subject to the agreements which are being developed with the public sector agencies responsible for NMIS and MMIC and will be in place prior to such funding being expended.

All financial dependencies will be kept under review.

7.9 Financial Risks

Table 7.9-1 below outlines the high key Financial Risks within the project. Detailed Risk Registers, which include financial risks, have been developed and are kept under regular review, a copy of the current register is enclosed within Appendix D.

The regular financial appraisal of the project using the increasing availability of information on technical aspects; stakeholder's requirements; operational aspects and design specification, has enabled an increasing confidence in the project costs. This regular review together with appropriate application of Optimism Bias at the appropriate stages (also reviewed considering technical information and stakeholder needs) is an effective approach to the management of financial risks in the project.

This approach identified project cost differences between those available at SBC stage and the OBC/FBC, thus providing confidence that the detailed nature of information scrutiny is being reflected in financial appraisals.

The project costs provided are exclusive of VAT on the assessment that VAT is recoverable. It is recognised that the Council will incur VAT on the acquisition of land (where opted to tax), the construction costs and other associated project related costs. However, based on ongoing advice from specialist advisors appointed early in the process to consider the tax implications for the project aspects (KPMG), the advice is that the Council should be able to fully recover these costs. Section 33 of the VAT Act 1994 provides for the refund of VAT to local authorities where VAT is incurred during non-business activities. In the event VAT is not recoverable under Section 33, it is understood that this should be recoverable where the Council makes a taxable supply on the VAT it incurs that relates to any exempt supplies (its exempt input VAT) is below the prescribed de minimis limit to allow full VAT recovery. Expert advice has been received in relation to a number of VAT related issues on the project and the opinion is as works are of a non-business activity these should be recoverable through the Section 33 process. The Council will continue to engage on VAT advice throughout the project, as necessary.

There are currently 42 open risks recorded within the Project Risk Register of which 11 open risks are designated as Financial risks. All risks are monitored, and appropriate mitigating action taken in accordance with the City Deal Risk Management Strategy. All risks and mitigation are fully detailed in the project Risk Register in Appendix D.

The table below summaries the key risks for the project with potential significant financial implications along with the mitigating action and current residual risk ranking. A number of these risk whilst not designated as specific financial risk in the risk register have potential financial consequence for the project. A detailed quantified risk assessment has been undertaken and appropriate provision built into the project contingency costs as outlined in table 7.4-1.

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Table 7.9-1 - Key Financial Risks

Ref	Risk Item	Mitigation
GAIA016	Land assembly issues cause delays in delivery in the programme and/or increase to project costs (delayed confirmation of CPO)	Extensive dialogue with affected parties resulting in objection to CPO being withdrawn/no objection. Liason with TS over CPO confirmation timescale. Phased access to land incorporated within the contract. Assessment of the impact of additional delay has been assessed with provision included in the quantified risk assessment (QRA) included within the contingency provision. . Probability reduced from 5 to 3 (phased access in contract) and Impact reduced from 4 to 3 (unlikely that all land will not be acquired as required).
GAIA030	Project is started but is not completed in accordance with the grant agreement and therefore spend incurred on this project would not be eligible for City Deal grant and Council would be accountable for the project	Robust project management and reporting controls allied to early and continued stakeholder engagement. Compliance with Assurance Framework and Grant conditions. Final tenders within available project funding with appropriate QRA and general contingency allowed for.
GAIA032b	Changes in exposure to unrecoverable VAT. Financial uncertainty and potential pressure on budget due to increased cost.	Continued engagement with the appointed expert Tax Advisor and regularly review VAT implications within contracts and potential land acquisition agreements. Continued liasion with RC Director of Finance/Corporate Finance team on any potential exposure and options for mitigating the risk (i.e. opt to tax land) or for managing associated additional costs. The Council's overall VAT position inclusive of the partial exemption position has been recently reviewed and will be kept under review.
GAIA037	Risk of cable diversion programme for high voltage cable disrupts construction programme leads to delay and/or extra cost	Consultation with SPEN during project development of tender period. Appropriate conditions incorporated in contract.
GAIA042	Contract variations lead to cost increases beyond accepted tender value.	Detailed quantified risk assessment undertaken and appropriate QRA included in the project contingency provision.
GAIA043a	Contractor performance impacts project completion, leads to delay and/or extra costs	Robust project management within inhouse and Professional services for appropriate site supervision appointed with specific expertise and knowledge of project. Regular meetings and performance review and evaluation. Conditions of contract provide protection to Council and allow option to terminate.
GAIA043b	Contractor Failure leading to delay and/or increased costs.	Maintain close working relationship with contractor, highlighting any issues early and agree remedy within contract. Performance bonds/retention contractual conditions.
GAIA044	Availability of City Deal Grant if failure occurs at a City Deal level within the gateway review process which may result in a potential grant shortfall and a requirement for an increased Council contribution	Assurance framework and governance arrangements at City Deal level

8 THE SUSTAINABILITY CASE

8.1 Introduction

The environmental and social sustainability of **GAIA** have been considered in the development of the project.

The environmental Sustainability Case assesses the environmental viability proposals for the project, noting the sustainability approach taken within the project itself and noting the wider positive sustainable outcomes and long term sustainability of the project outcomes delivered by the project. The approach taken to target effective carbon reduction within the direct deliverables is also included within this section of the Outline Business Case.

An Environmental Impact Assessment has been undertaken, and was submitted with the detailed planning application for the project.

Sustainability has been, and will continue to be, given full consideration in the development and delivery of this City Deal project. Environment is one of the 5 key themes in Renfrewshire Council's Local Development Plan (LDP) which aims to promote sustainable patterns of development that contribute towards minimising carbon and greenhouse gas emissions and facilitate adaptation to the likely effects of climate change. Other policies in the LDP, linked with a number of other Council policies, work together to support the principles of sustainability and environmental protection and enhancement. This project will be developed in full alignment with these policies and with the wider national and international principles of sustainability. Environmental sustainability is an integral part of the project and all relevant aspects will be fully considered in parallel with the project development process. Some of the key issues that will be addressed in the project design and delivery are set out below.

8.2 Strategic Environmental Assessment

The City Deal Infrastructure Fund is a financial programme enabling a range of interventions which will generate and facilitate economic growth:

"The Glasgow and Clyde Valley Infrastructure Fund seeks to incentivise local leaders in Glasgow and Clyde Valley to prioritise and invest in an infrastructure programme that delivers the greatest economic impact for the local, Scottish and UK economies. UK Government and Scottish Government funding will be unlocked in five-year funding blocks, to an agreed funding profile, to support the delivery of the infrastructure investment programme".

"Over a 20 year period (commencing in 2015/16) the UK and Scottish Government will each provide £500 million of capital funding, in a manner that is consistent with HM Treasury rules for managing the public finances. Local authorities in Glasgow and the Clyde Valley will also contribute a minimum of £130 million over this period. UK Government and Scottish Government funding will be paid as annual grants, in line with an agreed funding profile over a 20 year period. An annual grant offer letter will set out the conditions of the grant for that year, which will include conditions of its use."

An initial SEA of the City Deal programme of projects was undertaken in preparation of the Clydeplan SDP Proposed Plan and are included as part of the Renfrewshire Council Local Development Plan (2016) SEA.

The completed project Environmental Impact Assessment considers the individual GAIA project and cumulative CWRR and GAIA project effects.

8.3 Environmental Risk Management

Environmental risk management is an integral part of project development, design and delivery, taking into account issues such as air quality, noise pollution, light pollution, waste and recycling. Construction contracts will include requirements for Environmental Management Plans (EMPs) and Waste Management

Plans (WMPs). However, the project also presents a number of environmental opportunities and it is important that there is also a clear focus on making the most of these. A number of specific environmental risks and opportunities have been identified throughout each stage of project development and these will continue to be given further consideration as the project is taken forward. Environmental risk will be captured in the project risk register, with opportunities captured on an opportunities log. Both will be subject to regular reviews to ensure that all risks and opportunities are identified and that appropriate strategies are developed to mitigate risks and maximise opportunities.

A full Environmental Impact Assessment of the project was undertaken and an Environmental Statement prepared and submitted as part of the planning application documentation.

8.4 Resilience

The project, along with other City Deal projects, seeks to build on making better use of the denser urban environment for business activity, linked to better connectivity between people and places. The project will seek to maximise the density of opportunities and interconnection by promoting less carbon intensive travel modes such as public transport, walking and cycling. The project will also seek to enhance the green space network in the project area and promote best practice use of rainfall management systems, including SUDS measures and other design features.



The project design seeks to improve the resilience of the area to climate change and to develop a holistic approach to environmental and place management. Where development sites associated with the project are in close proximity to the White Cart, flood assessments will be undertaken where necessary to consider any pertinent issues ensure that development sites are not at risk or that development of the sites does not increase the risk of flooding elsewhere. Flood protection measures incorporated in the project are designed using best practice while taking a holistic approach to resilience.

The additional road crossing of the White Cart will bring added resilience to the commercial transport network. The project also creates stronger and newer links between businesses, communities, facilities and places of employment and education. These connections increase the opportunities for people and businesses within these communities providing long term improvements.

8.5 Greener Place Making

The project design will seek to maximise opportunities to enhance the environmental quality of the project area. Opportunities exist within the project to make much better use of the White Cart as a green corridor, with opportunities for wider local greenspace enhancements, and to link this with active travel opportunities to development sites. The project will also bring areas of brownfield land back into productive use, with opportunities for environmental enhancements and greater biodiversity. By taking a primary masterplanning approach to the project to inform the infrastructure alignments, the team have been able to maximise the inclusion of integrated green space and



visual links between the resulting development, effective open space and the waterfront. The Masterplan will be used as a development guide by Renfrewshire Council Planning Department to encourage quality environmental outcomes from developers taking up the opportunities created.

8.6 Active and Low Carbon Travel

One of the aims of the project is to encourage a move towards greater use of active travel measures and a mode shift away from the unnecessary use of private car travel. The infrastructure investments aim to maximise use of existing sites and to develop underused sites and vacant land to provide a denser and more productive use of well-connected sites. The project will deliver specific new active travel links and will look to connect up these new routes with existing and planned Active travel routes (e.g. NCR 7, Renfrewshire core paths, proposed Renfrew to Paisley Cycle route) in order to provide a more integrated active travel network in the area, including the potential for linkages with active travel measures being provided through adjacent City Deal projects (e.g. Renfrew Riverside and Glasgow Waterfront). This approach will help ensure that appropriate links are included to each of these other interventions, resulting in a holistic active travel network well beyond the perimeter of the project.

8.7 Biodiversity

The White Cart is an important wildlife corridor and provides an important habitat linkage. Significant opportunities exist to enhance the biodiversity potential of the corridor and link this to other greenspace areas. As part of the project development process, detailed ecological surveys completed as part of the EIA ensure that there is a full understanding of the existing baseline position. This project will be developed to protect existing habitats and ecosystems and will seek to build upon this baseline to enhance the biodiversity potential of the project area.

- Bat roosts have not been identified within the project area, however three species of bats were recorded as being active within the site area. In accordance with good practice further surveys will be undertaken prior to construction start. The project design and construction programme recognises these constraints.
- Great Crested Newts are not understood to be in the project area following confirmation by Scottish Natural Heritage.
- Studies for Invasive Non-Native Species has been undertaken and their presence in areas and implications for the project is fully understood and included within costs and programmes.
- Otter surveys have been completed and four resting places (one holt, three hovers) were recorded. Further studies will be undertaken in advance of construction works.
- A Barn Owl was identified during surveys. An alternative roosts will be provided prior to any demolition works on site.
- Water Voles have not been encountered during surveys.
- Badger surveys are complete and no presence was detected.
- No fish surveys have been requested by the key agencies. Detailed environmental impact prevention proposals relating to the construction process will be developed in conjunction with the appropriate authorities, particularly in relation to the Black Cart bridge.
- Whooper swans are known to us the fields adjacent to the Black Cart. The detailed project design will ensure appropriate measures and programming for works in this area, acknowledges the presence of this important species.

The masterplanning approach described above results in linked corridors of enhanced habitat and the reclamation of currently derelict land, will result in greater biodiversity across the area.

8.8 Sustainability of Outcomes

The project seeks to deliver key infrastructure which will improve the connectivity between business communities, improve access to unused and underused land, enable development for employment uses and ease access to employment, as well as increasing opportunities for active travel.

The principle aims of the GAIA project and the GCR City Deal in general is to create an environment where access to employment opportunities increases, specifically for local residents who are currently constrained from such opportunities. As noted with Section 3 and Section 5, the GAIA project provides a direct link

between areas of low employment with new and existing business centres and increases the potential for local businesses to grow. Within AMIDS (facilitated by the GAIA) the inclusion of a Scottish Government joint funded manufacturing skills academy provides further opportunity for local residents to gain access to skills which will aid employment opportunity.

The GAIA project therefore provides the infrastructure which will enable the development of a cyclical local economy consisting of residential communities, linked to skills learning, employment and resulting economic growth and local wealth which leads to local requirement for homes.

The socio-economic sustainability is further demonstrated by the input obtained from land owners, businesses and developers operating within the project area. This input, received as part of socio-economic studies (for the complementary CWRR project) have confirmed the project will address the current needs in the area and stimulate economic growth and development progression which will gather momentum and further increase the economy of the local and wider area.

8.9 Evaluation

A range of environmental surveys were completed as part of the Environmental Impact Assessment (EIA). The EIA and Environmental Statement (ES), considers the potential environmental benefits and dis-benefits that may arise as a result of the project across the full range of criteria. Importantly, the project seeks to deliver environmental enhancements and, where required, any mitigation measures are set out in the ES and will be implemented through the relevant stages of project delivery.

Following appropriate Screening, Marine Scotland requested a Marine Licences for works within the White Cart and Black Cart. All potential impacts upon environment (marine and terrestrial) were therefore covered within the project specimen design and contracts. Marine licence applications have been submitted to Marine Scotland for specific aspects (Headwalls, Bridge Supports). Approval of these licences is anticipated prior to Full Business Case. Contract documents take into account all necessary restrictions during the execution of the works to ensure that appropriate control measures are in place to minimise any potential negative impacts and the documents also ensure that mitigation measures required through the ES are fully set out for implementation. Construction contracts include requirements for Environmental Management Plans (EMPs) and Waste Management Plans (WMPs).

Appropriate environmental monitoring will be put in place during construction of the infrastructure works. Post construction monitoring may also be undertaken to measure any habitat and biodiversity enhancements and other environmental improvements

8.10 Smart City Systems

The project design incorporates elements which could be managed through a Smart City infrastructure methodology. Dialogue between neighbouring member authorities has taken place to explore efficiencies of resource and scale which could potentially be shared through a Smart City approach. Aspects include the use of digital media to promote use of public transport and active travel measures to encourage modal shift, better use of real time traffic and public transport information, together with building upon the work that is being undertaken under the Glasgow Smart City Pilot (Future City Glasgow).

During project development , Renfrewshire Council undertook work to better understand the potential demand and opportunities associated with Big Data and other Smart Technologies. The City Deal team will continue to build on this information as the project continues to develop. Work has also been undertaken to look to future proof the project area through the DCMS LFFN process.

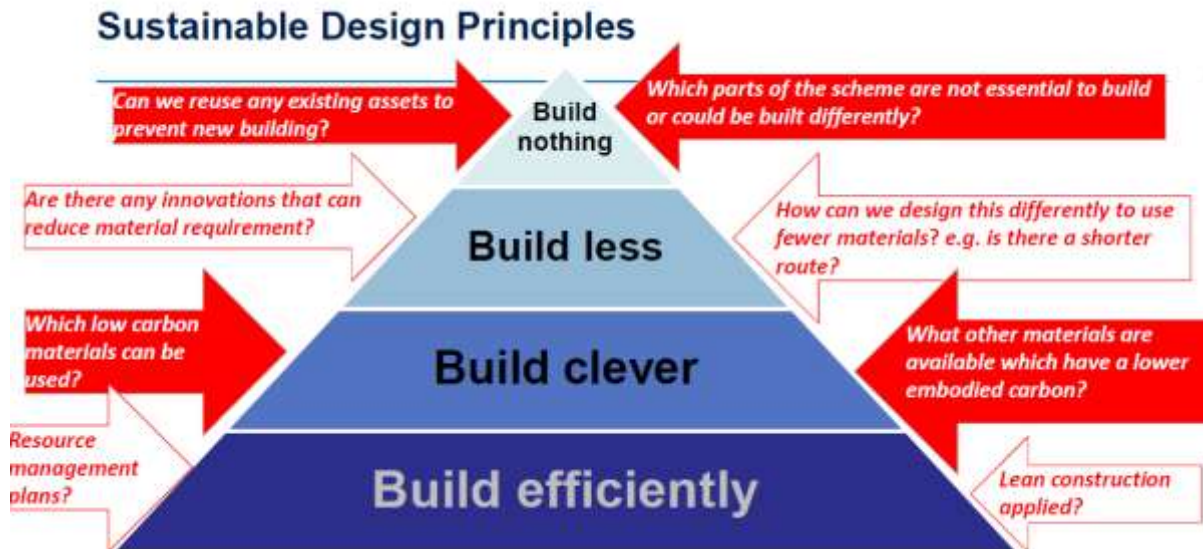
8.11 Carbon Management

The Project Team is committed to the most sustainable approach and delivery of the project. PAS 2080 Carbon Management in Infrastructure is being referenced by the Project Team in developing the designs.

To that end the Project Team has identified a range of Sustainability objectives aligned to Carbon Management in the development, construction and life of the direct deliverables. This process will continue

through the project and be incorporated within construction contracts to ensure the most effective outcomes in regard to Carbon management.

The state of the art measures adopted in the design of this project in relation to embedding low carbon principles in to the design and delivery have been already recognised with the project winning the 'Low Carbon Leader' award at the prestigious 2018 New Civil Engineer Awards.



As part of the development of the AMIDS proposition, the project team has been working with partners and stakeholders to investigate options for a low carbon district energy centre to serve the AMIDS area. Following completion of a feasibility study, the project team is working with Scottish Government's Low Carbon Infrastructure Transition Programme (LCITP) to develop a comprehensive technical and commercial solution for an on-site energy centre.

9 THE MANAGEMENT CASE (PROJECT GOVERNANCE AND MANAGEMENT)

9.1 Chapter Overview

This chapter sets out the project governance and management structure for the GAIA project. The section discusses

- Project roles
- Project governance structure
- Project schedule
- Risk management
- Project monitoring and evaluation

Governance of two of the Renfrewshire City Deal Projects, including this project, is taking place both at a local level and through the overall City Deal Governance requirements as outlined in the Assurance Framework. The third Renfrewshire project (the Airport Access project) is jointly delivered by both Renfrewshire and Glasgow City Councils and separate dedicated joint governance procedures have been set up for that project.

A suitably skilled and resourced project team has been assembled through a robust recruitment process utilising internal and external appointments to ensure the necessary skills and experience are available within the core team to deliver this project.

9.2 Project Roles

The management structure for the Renfrewshire Council City Deal Project Team has been put in place and approved at the City Deal Programme Board in accordance with the internal governance arrangements.

To progress the delivery of the GAIA Project and the other City Deal projects in Renfrewshire, a dedicated Project Team has been established. Figure 9.2.A notes the structure of this dedicated team and details the roles within the Council Core Project Team and the key roles of Senior Responsible Officer, Project Sponsor and Project Manager in the structure. A detailed responsibility outline for each of the Senior Responsible Officer, Project Sponsor and Project Manager are attached in Appendix E. The core Project Team is supplemented as required by specialist resource within the Council's virtual team and by external advisers including specialist consultants procured to assess options and take forward design of the project.

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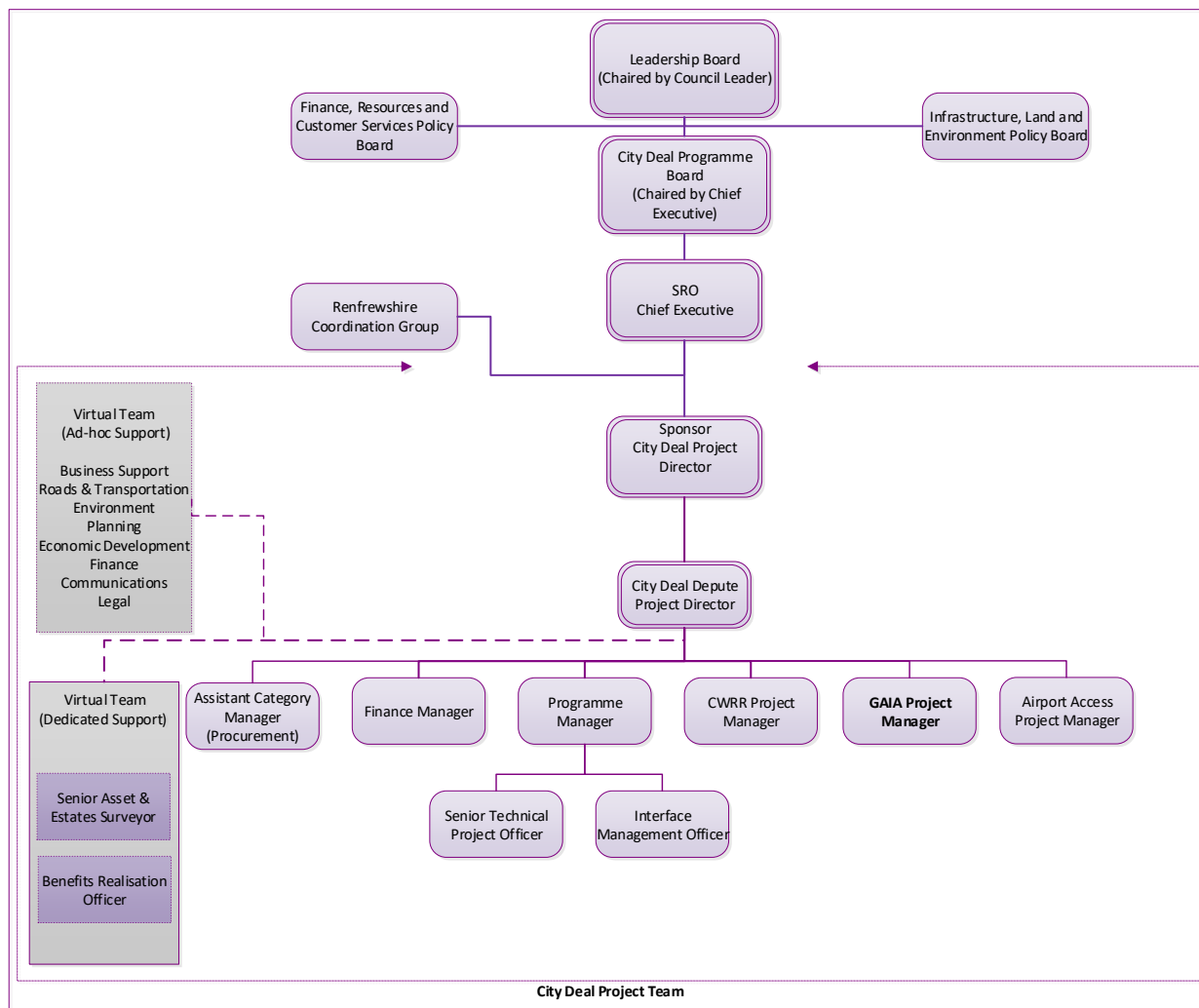


Figure 9.2.A - Staff Organisational Chart – Glasgow Airport Investment Area

Table 9.2-1 - Staff Organisational Roles

Role	Responsibility	Named Team Member	Expertise and Skills
Senior Responsible Officer (SRO)	Overall Accountability and ultimately responsible for delivery of the project. Required to ensure project focused on delivery of objectives.	Sandra Black Chief Executive	Experience of large scale budgetary control and management. Knowledge of Local Government Governance.
Project Sponsor (PS)	Accountable to SRO, responsible for driving project to programme time scales.	Steve McFadden RC City Deal Project Director	Experience of large scale infrastructure projects, budgetary control and management.

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Role	Responsibility	Named Team Member	Expertise and Skills
			Knowledge of Local Government Governance
Project Manager (PM)	Daily management of project, reporting to the PS. Responsible for leading and directing the extended project team, advisors and designers.	Alan Anderson GAIA Project Manager	Experience of large scale infrastructure projects, multi-disciplined team management.
Project Team (PT)	Execute tasks, and produce deliverables required by the Project Plan.	Core Team Appointed consultants incl: Sweco; SIAS; 5 Plus Architects. Internal Virtual Team	Experience on projects of similar scale and complexity. Experience within range of tasks required.
Benefits Realisation Officer (BRO)	Liaise with teams promoting opportunities resulting from the project and record indirect delivered outcomes.	Appointed RC Officer.	Experience in planning policy and records.

9.3 Project Governance Structure

Renfrewshire Council has put in place a governance structure for City Deal to ensure robust monitoring of the Infrastructure and Labour Market Projects including this project. Details of this structure are shown below. The Project Team report to the City Deal Programme Board which is chaired by the Chief Executive and includes the Director of Finance and Resources and the Director of Environment and Communities, as well as the Head of Corporate Governance and is attended by the City Deal Project Director and Depute and other attendees and advisers as required by the Programme Board. The Programme Board in turn reports into the Council's Leadership Board who scrutinises, oversees and authorises the progress of the Project. Following these checks, papers progress for approval through the City Deal Cabinet. Figure 9.3.A below details this governance structure.

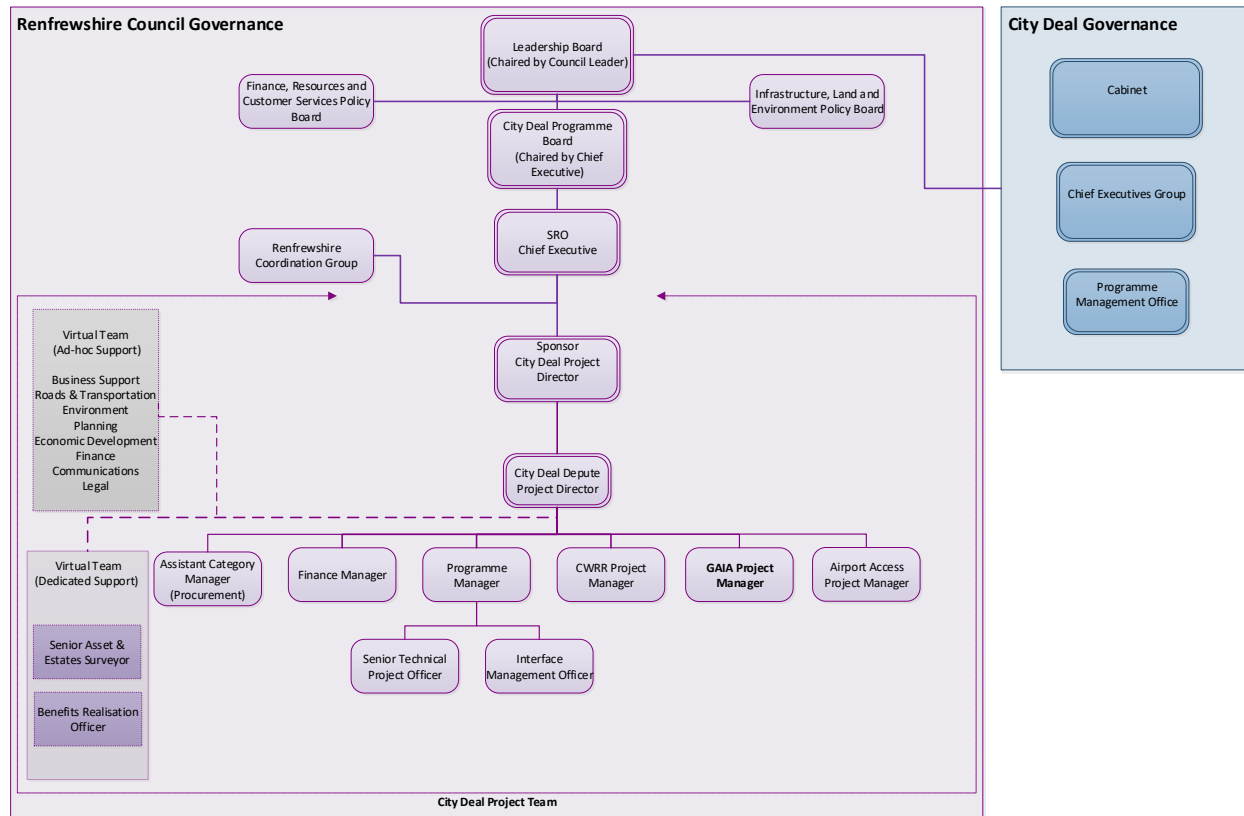


Figure 9.3.A - Renfrewshire Council City Deal Governance Chart

The roles and responsibilities of all team members, supporting staff, consultants and senior officers in the delivery of the project are defined within the Project Initiation Document (PID), approved by the Programme Board as part of the PRINCE2 management process being followed. The Project PID also defines the limits of tolerance for each member within the structure relating to changes in programme, cost and scope together with processes for escalation of issues for resolution.

External consultants, with suitable experience have been procured through an OJEU procurement process, are being managed on a daily basis by a dedicated project manager, appointed by Renfrewshire Council. This PM will (as defined in the PID) have authority to authorise change controls up to £25,000 or 1 month on programme. The City Deal Director will have ability to approve change of up to 2 months, with change incurring costs up to £100,000. All project costs and programme updates will be presented to RC Programme Board and City Deal PMO monthly.

All of the infrastructure completed by this project, including the bridges, will become an adopted asset of Renfrewshire Council. Responsibility for operation and maintenance of these completed works will be held by the Dept. of Environmental & Community Resources. As noted at Section 6, within Renfrewshire Council. There is oversight from Chief Executive Services within the Council to ensure that the development of each of the project components and other complementary City Deal projects, properly address any interdependencies which may exist. This extends to inclusion of the Director of Environmental & Infrastructure Services on the Programme Board and the establishment of a RC Coordination Group, which meets monthly to review and agree the way forward on any overlap between the City Deal projects and other projects or dependencies. This Co-Ordination Group is also attended by a representative of the Environmental & Community Resources team.

This management process ensures that the key stakeholders, who will acquire responsibility for operation and maintenance of the completed project, are involved in and aware of, all key decisions during progression of the project.

9.4 City Deal Programme Governance Arrangements

In addition the overall City Deal governance arrangements and approvals processes are set out in the City Deal and in the Assurance Framework. Figure 9.4.A below shows the arrangements agreed by both the UK and Scottish governments and the eight member authorities. This sets out the progression and reporting of the individual projects to the independent Programme Management Officer in Glasgow, through the Chief Executive's Group to the Cabinet (which is the ultimate decision making body for the City Deal). The Cabinet links directly with both the UK and Scottish governments and in addition will be advised on the monitoring and evaluation of the success of the City Deal programme by the Independent Commission on Urban Growth and the National Panel. In performing its role, the Cabinet will consult with the Glasgow and Clyde Valley Economic Leadership Board. As part of the implementation of this project by Renfrewshire Council, all guidance issued by these groups through the PMO, and through updates to the Assurance Framework and Programme Business Case, will be acted upon and where required taken into account in future iterations of this Business Case.

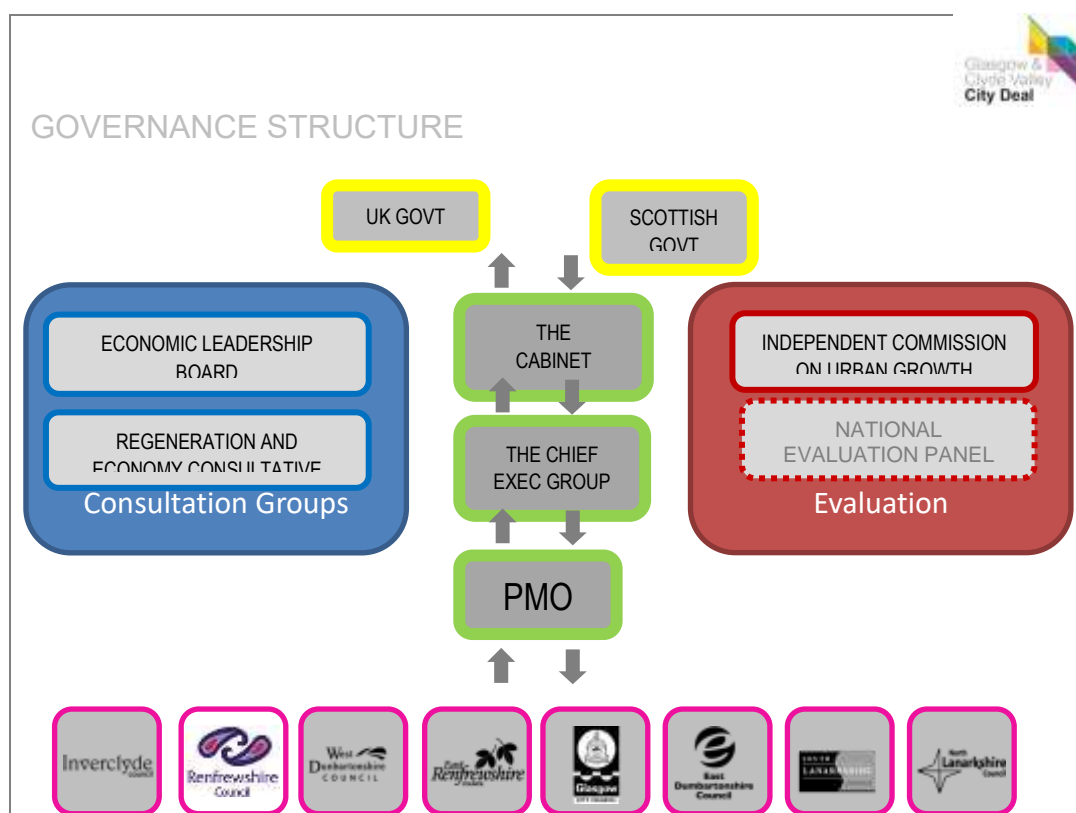


Figure 9.4.A - City Deal Programme Governance Chart

9.5 Procurement and Community Benefits Strategy

9.5.1 Procurement Strategy

A Sourcing Strategy for this Project, consistent with the City Region Procurement Strategy, has been prepared by the Project Team in conjunction with Renfrewshire Council's Corporate Procurement Unit. The sourcing strategy is included within Appendix H.

The Sourcing Strategy sets out how the procurement strategy for the various contracts required to deliver this Project is being devised, including proposed procurement method, contract objectives, contract strategy, procurement timeline, sustainability test and community benefits. It details the market analysis undertaken to date, the options under consideration and the proposed plan and methodology being considered through the next stage of project development. The Sourcing Strategy will be updated to reflect the outcomes of the next stage of project development which includes further market analysis and engagement.

- A Lead Consultant contract was awarded in October 2015 and was conducted as an over threshold contract for Services using the Restricted Procedure.
- Other specialist contracts have been placed in order to support the development of this project. These are detailed in section 2.1 of the Sourcing Strategy.

The procurement process it is intended to adopt for the construction of this Project is being developed as follows:

- The procurement route for the construction contract for the GAIA project will be design and construct procurement route with the project having been progressed to a “Specimen Design” stage; Works contract procurement will not commence until after receipt of planning consent for the principle elements of the project, thereby providing a degree of certainty of the project.
- Further analysis and market engagement was undertaken to confirm this is the most effective approach;
- The construction contract is over threshold in terms of the Public Contracts (Scotland) Regulations and so this procurement will be conducted as Competitive Procedure with Negotiation for Works.;
- Terms and conditions utilised, with suitable Client amendments to reflect appropriate risk positions, will be NEC4, Option A.;
- Contracts will be evaluated on the basis of the Most Economical Advantageous Tender;
- The award criteria will be set following further analysis;
- The minimum weighting attributed to community benefits and fair working practices will be in compliance with the City Region Procurement Strategy and the City Region Community Benefits Strategy;

The Project will be delivered and managed by Renfrewshire Council. A bespoke Contract Strategy will be developed for the construction contract in accordance with the Sourcing Strategy. All contract opportunities will be advertised via the GCR City Deal Portal on the Public Contracts Scotland website.

9.5.2 Justification for the Proposed Approach

The Renfrewshire Council project team has been formed of individuals who have experience in both significant public and private sector complex projects, with similar challenges and constraints to the GAIA project. The use of an internal team with direct links to the RC teams who will be responsible for operation and maintenance of the physical infrastructure and also to the economic regeneration specialists who will seek to drive later private sector investment, will maintain clear dialogue, a consistent approach and effective project momentum. The internal team will also be aware of benefits anticipated and those realised, through close liaison with other internal teams. This will ensure that the benefits from the project are maximised at all times.

The principle stakeholders for the project are Renfrewshire Council; Glasgow Airport; Westway Business Park. Both SPT and Transport Scotland are interested parties, who will be able to aid delivery of the project. When considering the most appropriate party to lead the project delivery, it is noted that the intervention will be a local infrastructure project. Despite having technical and managerial experience in such projects, Transport Scotland would be able to provide greater involvement if the project involved the strategic network. SPT have a portion of funds available through the GCR City Deal and are progressing projects in parallel with GAIA. SPT expertise however, does not align with the project needs of GAIA. Glasgow Airport, while a key stakeholder have a primary focus of driving air related business. This may conflict at times with the stated aims of GAIA. It is not considered appropriate therefor to task Glasgow Airport with leading the project.

Since: all the infrastructure associated with the GAIA project is contained within Renfrewshire; it has specific synergies with the adjacent Clyde Waterfront and Renfrew Riverside project; and there is a suitably experienced project team, it is considered that Renfrewshire Council is the most appropriate party to lead the delivery of GAIA. As noted in Section 3.7.2 the project team, who have gathered significant experience in major contract procurement will utilise this knowledge and experience throughout this project. In addition access to public sector teams in other areas who have delivered projects of similar scale and scope will aid the lessons learnt opportunities on this project. In view of this, it is considered that the Council is best placed to act as delivery agent for this project.

Suitably experienced and qualified consultants have been appointed to provide advice and design input as required. This team has been compiled through appropriate procurement processes, aligned to the City Deal Procurement Strategy and the Renfrewshire Council standing instructions. This team has included:

- Lead Consultant – Sweco – Responsible for co-ordination and compilation of all technical elements of the project, including applications for all necessary statutory consents and construction contracts. Sweco have sub- consultant advice to cover aspects including environmental aspects; archeology; mechanical and electrical engineering.
- Traffic Modelling - Systra – Responsible for measuring and modelling traffic impacts associated with the project and determining mitigation for issues.
- Masterplanners- 5 Plus Architects – considering how private sector development will respond to the planned intervention, to enable evaluation and selection of the most appropriate infrastructure designs and locations, to maximise outcomes.

Further information including details of the project elements and procurement appraisal process including justification for the proposed approach is set out in the Sourcing Strategy, contained in Appendix H.

9.5.3 Contracting Arrangements

Details of proposed contracting arrangements are set out in the Sourcing Strategy. ³⁴. This strategy has been informed through: experience of the project team; dialogue with other bodies throughout Britain who have successfully delivered projects of similar scale and scope; engagement with the contracting market through information events, feedback sessions and one to one dialogue.

The key Risks associated with the Procurement process are reviewed regularly and appropriate mitigation actioned to reduce, where possible, the implications of the risk on the project outcomes. The key risks and mitigations for the procurement process, extracted from the full risk register are noted in Table 9.5-1.

Table 9.5-1 - Key risks and mitigations for the procurement process

Risk Ref	Risk Description	Mitigating Control Action
GAIA007b	Failure to agree acceptable & affordable terms with tenderers / contractor during CPN process due to a number of uncertainties.	Final tender returns received - all within affordability envelope.
GAIA016	Land assembly issues delay delivery programme.	Phased land access in GAIA contract. Core GAIA site acquired.

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		GAIA main and Black Cart cycleway CPOs submitted – no outstanding objections, CPOs to be confirmed. CPO process in parallel with voluntary discussions.
GAIA037	Risk of cable diversion programme for high voltage cable disrupts construction programme.	Contractor to agree protection with SPEN.
GAIA042	Contract cost increase beyond approved tender value due to compensation events etc.	Quantified Risk Assessment prepared identifying potential 'non costed' events (compensation events). QRA total included in contingency allowance
GAIA043	Contractor performance and/or failure impacts project completion.	Quality of contractors assessed at tender stage including financial stability. Contract protection through performance bonds etc Experienced Site supervision team appointed with knowledge of project. Ongoing close working relationships with contractor to highlight any issues early and agree remedy within contract.

9.5.4 Key Procurement Milestones and Delivery Dates

The project aspects noted below are the key milestones within the project. A detailed Project Plan (attached within Appendix I) is in place. This will be kept updated as the project develops and any resultant changes to programme will be highlighted through the appropriate governance procedures.

The following dates will be subject to review and refinement as the project develops.

- Programme Scope and Programme Agreed - June 2015
- Commencement of Procurement of Professional Services - June 2015
- Traffic Modelling Consultant appointed - July 2015
- Lead Consultant Appointed - September 2015
- Environmental surveys commenced - Winter 15/16
- Topographic Surveys commenced - June 2016
- Masterplanning complete - October 2016
- Ground Investigation - December 2016
- Commencement of Statutory Process (Planning, CPO, etc.) - May 2017
- Submission of OBC v 1.0 - October 2016
- Approval of OBC v 1.0 - December 2016

- | | |
|--|-----------------|
| • Planning Approval of Principle GAIA Elements | - November 2017 |
| • Completion of Statutory Process | - Q4 2018 |
| • Construction Contract Tender | - Q2 2019 |
| • Submission of FBC | - Q1 2019 |
| • Construction Start | - Q2 2019 |
| • Construction Completion | - Q4 2020 |

9.5.5 Community Benefits

A City Deal Community Benefits Strategy has been approved by the GCR Cabinet and all Renfrewshire Council City Deal procurement processes will comply with this and seek to maximise community benefits. Monitoring of community benefit outcomes will be undertaken as part of specific contract management processes and reported to the PMO as part of the contract reporting obligations.

Additionally Renfrewshire Council has been at the forefront of delivering community benefits through procurement of works contracts and has an award winning policy in relation to the delivery of Community Benefits through the procurement process. This policy aligns with the approved GCR Strategy and stipulates that a minimum weighting at tender assessment be allocated to the provision of tangible, specific and quantifiable community benefits in all works, infrastructure and related projects.

In accordance with the City Deal Community Benefit Strategy, as part of the tendering process, Renfrewshire Council will agree a target number of community benefits to be sought from the design and construction works for GAIA contract. Prior to publication, evaluation of the quantum and type of benefits will be determined, however a minimum of 180 community benefit points will be sought, with these proportioned and targeted at employment and recruitment opportunities. The specific number of points and targets will be confirmed as part of the award criteria in a detailed contract strategy prior to tender issue.

The City Deal team also works closely with the Council's Community Benefits Forum. This Forum consists of members from different departments of the Council and organisations in Renfrewshire that gain from the delivery of community benefits and can help support suppliers and contractors to the Council realise their community benefit commitments.

In advance of the tender for the design and construction works for GAIA being published, the City Deal team will liaise with the Community Benefit Forum to better understand what opportunities can be realistically targeted and which outputs best align to the nature of the GAIA contract. As part of this, the City Deal team will arrange workshops with appropriate local community groups/ social enterprises/ local businesses and members of the Community Benefits Forum to updated them about the GAIA project, opportunities it presents for community benefits and how they can gain from that process.

It is intended that the City Deal project team hold an Open Session during the tender period at which tenderers participating in the procurement, can meet and discuss the community benefits targeted and make direct contract with members of the Community Benefits Forum. This process will allow tenderers to form links with members and gain advice on what resources and support are available locally to help them realise the commitments they propose as part of the tender. This early engagement is intended to encourage Tenderers to commit to benefits that best suit the needs of the local area and can be effectively delivered during the contract period.

9.6 Risk Management

Risk Management will be undertaken in a manner that complies with the requirements of the Assurance Framework and the City Deal Risk & Issues Management Strategy³⁵ issued by the PMO, refer to Appendix J.

The Project Manager is responsible for the compilation and maintenance of a register of risks associated with the project. This register is reviewed and updated on four weekly intervals as a minimum. The risk register records the probability and impact in the event of any risk occurring and detail planned mitigation measures associated with that risk. The format of the register is as required by the Assurance Framework documentation.

All risks, be they programme or project level risks, are identified within the project risk register. Project Manager's liaise across projects to ensure risks across the programme are being identified, evaluated and controlled in a transparent, consistent and systematic manner.

All risks are categorised to identify the associated impact (i.e. Financial, Programme, Reputation). In addition the risks are identified as:

- The emerging risks, for example a change in scope or technology;
- The internal risks, for example available resource and dependencies;
- The external risk, for example changes in the financial markets, future demand risk;

to enable identification within business case documentation.

Project risks are identified through the Project reports. Should there be any change in a project risk, during a reporting period which exceeds the agreed PM's management authority, this is elevated to the appropriate level and Programme Board authority for action as required.

The current revision of the risk register is contained within Appendix D.

9.7 Other Legal Matters for Consideration

There are a number of legal issues which require to be taken into consideration when developing the project. These are detailed below and reflected in the risk register.

9.7.1 State Aid

State aid can occur whenever public resources are used to provide assistance that gives an advantage over others. There are four key tests which need to be considered in order to establish whether a project contains State aid. These tests are cumulative and all four must be met for State aid to be present. It should be noted that State Aid does not apply either to works to the public good or works to Council owned land provided that any sale is at market value.

The State Aid position in relation to this Project has been reviewed and advice obtained from external legal advisers.

Consideration has been given to whether or not construction of a public bridge over the White Cart at Wright Street results in a state aid by conferring a selective advantage to any specific undertakings. This bridge is freely and openly accessible and used free of charge by anyone, in a non-discriminatory manner therefore Test 3 is not met and Renfrewshire Council have concluded that construction of this bridge will not confer a selective advantage to any specific undertaking.

³⁵ 'Glasgow & Clyde Valley City Deal Risk Management Strategy V1.0' approved by City Deal Cabinet August 2015.

The realignment of Abbotsinch Road and surrounding proposed development highlights a potential state aid risk to specific undertakings and this will be reviewed and structured in such a manner as to be state aid compliant.

The purchase of land for future development may include land being set aside for future airport use and contributions to future maintenance of airport roads. The nature of any arrangement between Renfrewshire Council and Glasgow Airport is currently under discussion and has not been finalised and will be structured to ensure compliance with state aid rules. Renfrewshire Council will seek further legal advice on any arrangement at the appropriate time.

This position will be monitored and reviewed again prior to FBC.

9.7.2 Competition

No competition law issues have been identified in relation to this Project. This will be reviewed again prior to FBC.

9.7.3 Other Consents

The project lies entirely within the boundaries of Renfrewshire Council and necessary statutory approvals will be sought from Renfrewshire, as planning authority.

Planning Permission has been granted for all elements of the project. Despite the project being a “Local Application” in scale, the Project Team elected to undertake a period of prior engagement with the public and stakeholders.

A Controlled Activities Regulations Licence (“CAR”) is likely to be required for elements of the project. This licence is of a technical nature and depends on the precise designs proposed and it is likely this will be a requirement for the Contractor to obtain.

A Harbour Revision Order is required to permit construction of the new bridge across the White Cart. This application was compiled and submitted to Transport Scotland in May 2018. This Order has now been confirmed..

A number of roads and traffic orders are likely to be required in connection with the project. This will include stopping up orders, redetermination orders and traffic regulation orders., Following discussions with the appropriate team in Renfrewshire Council, the relevant orders have been drafted to enable these orders to be implemented on completion of the construction phase.

9.7.4 Third Party Arrangements

As part of the development process the Project Team have been liaising with affected parties to ensure they are kept up to date and have the ability to feed into the process where relevant. This work will continue into the next phase of the project. There may be a requirement, in some circumstances to protect Council and other interests, for third party agreements to reflect the outcomes of some of this process.

9.7.5 Legal Challenge

It is recognised that any objection or challenge to statutory processes may cause a delay to Project delivery. To mitigate this risk a number of events have been and will continue to be held to provide information and opportunities for public engagement to allow stakeholders and the general public to contribute to, and comment on, the various options and the emerging designs.

9.7.6 Land purchase

There is a requirement for land purchase to progress this project. Negotiations with affected landowners are being progressed with a view to voluntary land acquisition being achieved and the Council have also promoted Compulsory Purchase Orders the Roads (Scotland) Act 1984.

This parallel approach is supported by Scottish Government policy on making compulsory purchase orders (Circular 6/2011 Compulsory Purchase Orders) which provides that “in larger schemes with multiple interests it may be effective and avoid delays for the authority to decide at an early stage to make a compulsory purchase order to acquire the whole site “ (Paragraph 8).

The council have appointed external legal advisers to provide advice and assistance in this process.

The CPO process is reaching its conclusion, with final order confirmation in hand in advance of construction access.

9.7.7 Environmental Impact

Environmental Impacts will be monitored and mitigated through various measures as outlined in the Sustainability Case. An Environmental Impact Assessment for the project has been carried out. An EIA was also undertaken for the complementary CWRR City Deal project. Work was also undertaken, as appropriate, to ensure that, where necessary and in consultation with the planning authority and relevant statutory consultees, the combined environmental impacts of the two Renfrewshire Council city Deal projects were considered and reflected in an additional environmental assessment document.

Marine Licences were also requested by Marine Scotland for aspects of the works within the White Cart and Black Cart. All potential impacts upon environment (marine and terrestrial) were therefore covered within the EIA that was submitted to support all three planning applications and marine licence applications.

9.7.8 Equality and Human Rights

Throughout the project development stage any potential equality impacts will be considered but is it not envisaged at this stage that the proposed scheme will have any negative impacts on equality groups or create any potential for infringement of individuals' human rights. An Equality Impact Assessment has been undertaken for the project.

9.8 Project Monitoring and Evaluation

The Project Monitoring by both the Project Team and the PMO will be carried out in accordance with the Assurance Framework documentation which will ensure that project management and governance is being used which is consistent, robust, efficient and effective in the delivery and management of the project. The Project Status Report detailed in the Assurance Framework Part 3 is being used to carry out project monitoring during the project delivery phase. It will provide an auditable record of project progress and compliance with the terms of the grant agreements which are entered into by the Council. It will include a project milestone plan and a record of milestones which can be used for scrutiny and analysis using the Red /Amber/Green (RAG) system.

The Project Status Report will be submitted as an approved document by the Council on a 4 weekly basis to the PMO and will include information such as project details and description, progress and key milestones, benefits and economic evaluation, financial information including contingency, change control, top project risks, project issues, interdependencies, contract claims along with any other relevant information.

In addition each benefit detailed in the Benefits Realisation Profile as outlined in Appendix B2 will be monitored bi-monthly using the methodology in the Individual Benefit Tracking Template Appendix B3.

Appendix G sets out the process which will be followed in evaluating and monitoring benefits which result from the project and Appendix E and Appendix F notes the roles and responsibilities of each party in the delivery, monitoring and evaluation of benefits, including that the Senior Responsible Owner holds responsibility for delivery of the noted benefits.

The economic and regeneration benefits and monitoring of this investment is critical. The project will be embedded within Chief Executive Services. A Benefits Realisation Strategy has been developed, together with other initiatives by the Council to promote economic regeneration (refer to Section 3). The Council's Head of Regeneration works closely with the Project Team and the Council's Marketing team to drive the delivery and monitoring of benefits and in identifying key success criteria and ensuring evidence is provided to quantify the realisation of GVA benefits. A dedicated Benefits Realisation Officer has been appointed to monitor the benefits delivery

The Project Team are responsible on behalf of Renfrewshire Council in participating fully in the Gateway Review process as required by the Assurance Framework. The Project Team will work closely with the PMO and the eight City Deal partner authorities in ensuring a collective approach and successful completion of the Gateway Reviews.

A review of the Project Objectives will also be carried out in order to check that they are being realised and a report will be sent to suit the PMO timescales.

There are a number of key monitoring tasks which the project team will carry out on a regular basis in order to ensure that robust project team monitoring is being undertaken and accurate Project Status Reports are prepared as detailed below:

- Risk Register will be kept up to date.
- Issue Management will be reviewed.
- Escalation and Reporting and Tolerances will be considered.
- Inter / Dependencies will be assessed
- Financial Control and Contingency management will be carried out
- Change Control will be assessed
- Lessons Learned will be reviewed
- Failure to comply with terms of Grant Agreement will be checked
- Grant Disbursement Arrangements will be monitored

There will also be quarterly project reports submitted to the PMO covering such matters as:

- Project Risk Register
- Project Issues Register
- Inter / Dependency Register

The costs for undertaking the monitoring and evaluation work for the project are included in the internal Council costs for the project (shown within Section 7) and these extend to the end of the project. To ensure delivery, monitoring and evaluation of the benefits from the end of the project to Gateway 4 (2035) the costs for landowner and developer liaison, marketing where required and the Benefits Realisation Officer will be met from Council resources, through the Council's regeneration and economic Development team. A dedicated Benefits Realisation Officer (BRO) is in post, as part of the City Deal team. Working in accordance with the Benefits Realisation Strategy (refer Appendix G) the BRO will maintain a monitor of delivered benefits and develop a post project evaluation plan. The Senior Responsible Officer holds ultimate responsibility for the delivery of all project benefits associated with this project including community benefits achieved during delivery of the project.

Stakeholder Group	Contribution	Expectation/ Demand	Engagement to date	Interest in Project	Areas of Interest/ Benefit / Dis-benefit
Local Authorities					
Renfrewshire Council	Consultee & Stakeholder	Involvement / Involvement	Detailed ongoing	Land owner, Statutory Authority, Member Authority.	Land impacts, Impacts on traffic, planning influence, economic outcomes. . Minor localised Dis-benefits (traffic) but major Benefits (Economic)
City Deal Bodies					
Cabinet, Chief Executive's Group	Attendee	Involvement / Collaborative	Ongoing	Governance Body	Economic Outcomes, Programme & Finance
Private Sector					
Glasgow Airport	Stakeholder	Involvement / Involvement	Detailed ongoing	Land Owner	Land Impacts Benefits (Economic)
Westway BP Owners	Stakeholder	Involvement / Involvement	Detailed ongoing	Land Owner	Land Impacts Benefits (Economic)
Renfrew Chamber of Commerce	Consultee	Involvement / Collaborative	Kept updated	Business community	Economic Outcomes Benefits (Economic)
Utilities Companies (all potentially affected)	Consultee	Involvement / Collaborative	Detailed ongoing	Statutory Utility Provider	Technical Aspects Benefits (protected infrastructure)
Other Public Sector Bodies					
Other Public Sector Bodies					
Scottish Government,	Consultee & Stakeholder	Involvement / liaison	Through Cabinet NMIS Delivery Group	NMIS / AMIDS	Scotland's manufacturing Sector & Skills Development Benefits (economic)
Police Scotland	Consultee	Involvement / tbc	None, too early		Benefits improved access to local areas. Dis-benefits (additional local gathering point)

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Scottish Enterprise	Consultee & Stakeholder	Involvement Collaborative /	Kept updated through GAIA Steering Group	NMIS / AMIDS	Scotland's Manufacturing Sector Benefits (economic)
SEPA	Consultee	Involvement liaison /	Detailed ongoing	Stat' Consultee	Technical Aspects Benefits (land remediation)
Crown Estates	Consultee	Involvement Collaborative /	Detailed ongoing	Land Owner	Land Impacts Benefits (Economic)
Scottish Natural Heritage	Consultee	Involvement liaison /	Detailed ongoing	Stat' Consultee	Technical Aspects Neutral
Historic Environment Scotland	Consultee	Involvement liaison /	Detailed ongoing	Stat' Consultee	Technical Aspects Neutral
West of Scotland Archaeology Service	Consultee	Involvement liaison /	Kept updated	Stat' Consultee	Technical Aspects Benefits: Increased Knowledge if local historical context.
Marine Scotland	Consultee	Involvement liaison /	Kept updated	Stat' Consultee	Technical Aspects Neutral
Civil Aviation Authority	Consultee	Involvement liaison /	Kept updated	Stat' Consultee	Technical Aspects Neutral
Forestry Commission	Consultee	Involvement liaison /	Kept updated	Stat' Consultee	Technical Aspects Neutral
Transport Bodies					
Transport Scotland	Consultee	Involvement Collaborative /	Detailed ongoing	Stat' Consultee	Technical Aspects Neutral
SPT	Consultee	Liaison Collaborative /	Kept updated	Stat' Consultee	Technical Aspects Benefits (Economic)
Community Groups and Users					
Community Planning Partnership	Consultee	Involvement Collaborative /	Kept updated	Local residents	Technical Aspects, Economic Outcomes Benefits (Economic)
Community Councils	Consultee	Involvement liaison /	Kept updated	Local residents	Technical Aspects, Economic Outcomes Benefits (Economic)

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Sustrans	Consultee	Involvement / liaison	Detailed ongoing	Consultee & potential part funder	Technical Aspects, Economic Outcomes Benefits: Increased active travel infrastructure.
Cycling Scotland	Consultee	Involvement / liaison	Kept updated	Consultee	Technical Aspects Benefits: Increased active travel infrastructure.
Glasgow & Clyde Valley Green Network Partnership	Consultee	Involvement / liaison	Kept updated	Interested party	Technical Aspects Benefit (improved access to amenity space, improved sustainable development)
British Horse Society	Consultee	Involvement / liaison		Consultee	Technical Aspects Benefit (improved links to core paths)
Renfrewshire Local Access Panel	Consultee	Involvement / liaison	Kept updated	Consultee	Technical Aspects Benefit (improved links to core paths)

Appendix B Project Benefits

Appendix B1 Economic, Physical & Social Benefits at Output Level

Development benefits

- Vacant and derelict land brought back into use (hectares) 59.6 ha (total development land)
- Land remediated (hectares) 11.4 ha
- Industrial Space – 88,270 sqm
- Office Space – 35,011 sqm
- Food and Drink Space – 1,760 sqm

Private Sector Investment

- £122.9 million (non-discounted)

Jobs Created

- 635 net direct construction jobs, of which 160 are estimated to be created from the construction of the project and 475 from the construction of the development sites enabled or accelerated by the project,
- 1,755 net direct operational jobs within the City Region.

Utility benefits

- Electricity cables new (m) – N/A
- Electricity cables upgraded (m) – N/A
- New/enhanced sewage network –N/A
- Water mains – N/A

Communications benefits

FULL BUSINESS CASE

- Number of households benefiting from new broadband – N/A
- Number of households benefiting from upgraded broadband – N/A
- Number of businesses benefiting from new broadband – N/A
- Number of businesses benefiting from upgraded broadband – N/A

Transport:

This project will provide significant connectivity benefits for businesses within the vicinity of the Glasgow Airport Investment Area. The nature of the infrastructure that will be delivered by the project is such that, although there will be connectivity improvements and limited congestion relief on certain routes within the zone of influence, the quantification of journey time savings and related issues are more of a qualitative nature rather than quantitative

- Journey time
- Journey time reliability
- Traffic flows
- Speed
- PT Patronage
- Walking / Cycling
- Mode share
- Accidents
- Frequency
- Catchment area served
- Access to employment

- Population changes

Employment benefits:

An estimate of the total jobs that will be created is provided. Further details of specific employment benefits will be estimated with the development of the detailed benefits strategy and will be provided in future iterations of the business case

- 635 net direct construction jobs, of which 160 are estimated to be created from the construction of the project and 475 from the construction of the development sites enabled or accelerated by the project,
- 1,755 net direct operational jobs within the City Region.
- Sector created TBC within FBC
- Number of New Entrant Trainee places created (this should be subset of total jobs created) to be confirmed within FBC
- Number of Apprenticeships created (this should be subset of total jobs created) to be confirmed within FBC
- Total jobs safeguarded (this related to existing jobs which have been safeguarded and does not include Total jobs created) to be confirmed within FBC

Training and skills benefits:

This project will provide opportunities for training and skills benefits. This will be further developed through the benefits realisation strategy, informed by the outcome of the masterplanning study and ongoing dialogue with stakeholders, through the GAIA Steering Group.

- Number of qualifications gained to be confirmed within FBC
- Number of project participants assisted into employment to be confirmed within FBC
- Number of project participants assisted into training to be confirmed within FBC
- Number of project participants assisted into further education to be confirmed within FBC
- Number of project participants assisted into volunteering to be confirmed within FBC

Environmental benefits:

This project will provide significant environmental benefits. The exact quantum will be developed through the detailed design of the project to be confirmed within FBC

- Greenspace created (hectares)
- Greenspace enhanced (hectares)
- Land decontaminated (hectares)
- Wildflower area created (hectares)
- Area of land protected flood (hectares)
- Households protected from floods
- Sustainable Urban Drainage System created (sqm)
- Noise prevention
- Waste - Construction materials recycled (tonnage)
- Waste - Construction material diverted from landfill
- Energy generation per year through solar panels (kilowatts)
- Energy metrics

Housing benefits

- Number of dwelling created - 0 units
- Number of affordable homes - 0 units
- Number of social housing units – 0 units

Community benefits

Community Benefits are embedded in the City Deal and the Renfrewshire Council Procurement Strategy. A number of Community Benefits have been achieved to date through the consultancy contracts let. Construction contracts will contain requirements for mandatory community benefits.

Business benefits:

This project will provide significant business benefits, as set out in this OBC. The quantum will be further developed through the benefits realisation strategy, informed by the outcome of the masterplanning study and ongoing dialogue with stakeholders, including through the GAIA Steering Group.

Financial benefits:

This project will provide significant financial benefits. The quantum will be further developed through the benefits realisation strategy, informed by the outcome of the masterplanning study and ongoing dialogue with stakeholders, including through the GAIA Steering Group.

Appendix B2 BENEFITS REALISATION PROFILE

	Description of benefit to be achieved (using standardised output descriptions where relevant)	Quantity of outputs to be achieved during project life cycle	Date when outputs to be achieved / realised in full	Outputs to be achieved by May 2019 (Gateway 1)	Outputs to be achieved by May 2024 (Gateway 2)	Outputs to be achieved by May 2029 (Gateway 3)	Assumptions
Infrastructure benefits							
Benefit 1	Vacant and derelict land brought back into use (hectares)	59.6ha	Over a 20 year period	0 ha	13.75 ha	21.42 ha	24.43 ha post 2029.

Benefit 2	Land remediated (hectares)	11.4 ha	Over a 20 year period	0 ha	2.67 ha	1.86 ha	6.87 ha post 2029. Assumes that land will be remediated during development
Benefit 3	Industrial/manufacturing new (sqm)	88,270 sqm	Over a 20 year period	0 ha	13,954sqm	36,373 sqm	88,270 sqm post 2029 The phasing of the development will depend on the market for the use.
Benefit 4	Office space (sqm)	35,011 sqm	Over a 20 year period	0	0 sqm	20,279 sqm	35,011 sqm post 2029 Includes all class 4 floorspace (office, light industrial and R&D)
Benefit 5	Food and drink space new (sqm)	1,760 sqm	Over a 20 year period	0	0 sqm	1,320 sqm	1,760 sqm post 2029
Utility benefits							
Benefit 6	N/A						
Communications benefits							

Benefit 7	N/A						
Transport benefits							
Benefit 8	TBC						
Employment benefits							
Benefit 9	Total gross Construction Jobs Created	720 Gross Construction Jobs	Over a 25 year Period	90	225	450	720 jobs post 2029
Benefit 10	Total gross jobs created	2,180 Gross Operational jobs	Over a 25 year period	0	55	845	2,180 gross jobs post 2029. Assumes all of the land will be developed and assumptions have been made regarding jobs per sqm densities. Note, this is a cumulative effect, do not add the gateway results together
Benefit 11	Sector created	TBC					
Benefit 12	Occupational	TBC					

FULL BUSINESS CASE

Benefit 13	Number of New Entrant Trainee places created (this should be subset of total jobs created)	TBC					
Benefit 14	Number of Apprenticeships created (this should be subset of total jobs created)	TBC					
Benefit 15	Total jobs safeguarded (this related to existing jobs which have been safeguarded and does not include Total jobs created)	TBC					
Training and Skills benefits							
Benefit 16	TBC						
Environmental benefits							
Benefit 17	TBC						
Housing benefits							

Benefit 18	Number of dwellings created (includes affordable)	0	Over 20 year period	0	0	0	
Benefit 19	Number of affordable / social homes	0	Over 20 year period	0	0	0	
Community benefits							
Benefit 20	N/A						
Business benefits							
Benefit 21	TBC						
Financial benefits							
Benefit 22	TBC						

Dis Benefits

	Description	Assumptions	Mitigation Plan
Dis-benefit 1	Environmental impact.	Potential adverse environmental impacts during and following	Construction contracts will include requirements for Environmental Management Plans (EMPs) and Waste Management Plans (WMPs).

FULL BUSINESS CASE

		construction, linked to ecology, noise, air quality.	Environmental risk will be captured in the project risk register, opportunities for environmental improvements will be captured on an opportunities log.
Dis-benefit 2	M8 disruption.	Increased traffic to the site post-construction has the potential to negatively impact the M8, which is a mile away.	Ongoing review of any potential disbenefits through traffic modelling will continue as required.
Dis-benefit 3	Construction traffic.	Short term disruption to traffic as roads and bridge are constructed.	Specification of operating hours and vehicle routes for site access to reduce disruption.
Dis-benefit 4	Disruption to other sites.	GAIA Project may have potential adverse impact on other firms offering commercial and industrial floorspace due to increased local supply.	Continued active involvement of operators of nearby sites (i.e. Westway) to ensure GAIA complements existing business plans.

Appendix B3 Individual Benefit Tracking Template

Benefit 1: Vacant and derelict land brought back into use	
Benefit Management	
The person/role accountable for ensuring benefit happens – Benefit Owner	Stephen McFadden – Project Director – City Deal
The person/role accountable for ensuring benefit is tracked – Benefit Owner	Euan Shearer – Benefits Realisation Officer
Benefit Description	
Description of targeted benefit/output (quantified where possible/ relevant)	59.6ha of previously vacant and derelict land brought back into use. Uses can include commercial, housing or public realm improvements
Intended beneficiaries:	
- <i>Business</i>	New business development opportunities & associated supplier impacts for existing business base
- <i>Residents</i>	Employment opportunities and new houses
- <i>Community</i>	Indirect benefits – construction employment locally, Community Benefits
Benefit Realisation Timescale	
Overall outputs targeted and time when expected to have occurred	59.6 ha post 2029
Outputs to be achieved by May 2019 (Gateway 1)	0 ha
Outputs to be achieved by May 2024 (Gateway 2)	13.75 ha
Outputs to be achieved by May 2029 (Gateway 3)	21.42 ha
Benefits post 2029	24.43 ha
Benefit Tracking/ Monitoring and Evaluation	

Methodological Statement of how the benefit realisation will be measured	Will be measured via consultation with Strategy and Place team who compile the annual Renfrewshire Vacant and Derelict land report.
Measurement Frequency	Annually
Benefits Contributions and Dependencies	
Other benefits to which this contributes	Benefit 3 – Industrial/manufacturing distribution Benefit 4 – Office Space Benefit 5 – Food and drink space Benefit 10 – Total jobs created
City Deal Objective supported	GVA growth, improved employment opportunities net additional employment, levered private sector investment.
Dependencies	Commercial property development market, agreement of a deliverable scheme
Risk of non-achievement	RC

Benefit 2: Land remediated

Benefit Management	
The person/role accountable for ensuring benefit happens – Benefit Owner	Stephen McFadden – Project Director – City Deal
The person/role accountable for ensuring benefit is tracked – Benefit Owner	Euan Shearer – Benefits Realisation Officer
Benefit Description	
Description of targeted benefit/output (quantified where possible/ relevant)	11.4ha land remediated. Uses can include commercial, or public realm improvements
Intended beneficiaries:	
- <i>Business</i>	New business development opportunities & associated supplier impacts for existing business base
- <i>Residents</i>	Employment opportunities
- <i>Community</i>	Indirect benefits – construction employment locally, Community Benefits
Benefit Realisation Timescale	

Overall outputs targeted and time when expected to have occurred	11.4 ha post 2029
Outputs to be achieved by May 2019 (Gateway 1)	0 ha
Outputs to be achieved by May 2024 (Gateway 2)	2.67 ha
Outputs to be achieved by May 2029 (Gateway 3)	1.86 ha
Benefits post 2029	6.87 ha
Benefit Tracking/ Monitoring and Evaluation	
Methodological Statement of how the benefit realisation will be measured	Will be measured via consultation with developers
Measurement Frequency	Ongoing
Benefits Contributions and Dependencies	
Other benefits to which this contributes	Benefit 3 – Industrial/manufacturing distribution Benefit 4 – Office Space Benefit 5 – Food and drink space
City Deal Objective supported	GVA growth, improved employment opportunities net additional employment, levered private sector investment.
Dependencies	Commercial property development market, agreement of a deliverable scheme
Risk of non-achievement	RC

Benefit 3: Industrial/Manufacturing distribution new (sqm)

Benefit Management	
The person/role accountable for ensuring benefit happens – Benefit Owner	Stephen McFadden – Project Director – City Deal
The person/role accountable for ensuring benefit is tracked – Benefit Owner	Euan Shearer – Benefits Realisation Officer
Benefit Description	

Description of targeted benefit/output (quantified where possible/ relevant)	Indirect benefit – 88,270 sqm of new industrial/manufacturing floorspace created as a result of City Deal intervention
Intended beneficiaries:	
- <i>Business</i>	New business development opportunities & associated supplier impacts for existing business base
- <i>Residents</i>	Employment opportunities
- <i>Community</i>	Indirect benefits – construction employment locally, Community Benefits NDR revenue to support national services
Benefit Realisation Timescale	
Overall outputs targeted and time when expected to have occurred	88,270 sqm post 2029
Outputs to be achieved by May 2019 (Gateway 1)	0 sqm
Outputs to be achieved by May 2024 (Gateway 2)	13,954sqm
Outputs to be achieved by May 2029 (Gateway 3)	36,373 sqm
Benefits post 2029	88,270 sqm post 2029 The phasing of the development will depend on the market for the use.
Benefit Tracking/ Monitoring and Evaluation	
Methodological Statement of how the benefit realisation will be measured	Will be measured via site visits, ongoing view of building standards completion records, consultation with developers, review of RC Strategy and Place's Annual Commercial Completions Tracker
Measurement Frequency	Ongoing
Benefits Contributions and Dependencies	
Other benefits to which this contributes	Benefit 10 – Total jobs created
City Deal Objective supported	GVA growth, improved employment opportunities net additional employment, levered private sector investment.
Dependencies	Commercial property development market, agreement of a deliverable scheme

Risk of non-achievement	RC
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Benefit 4: Office space (sqm)	
Benefit Management	
The person/role accountable for ensuring benefit happens – Benefit Owner	Stephen McFadden – Project Director – City Deal
The person/role accountable for ensuring benefit is tracked – Benefit Owner	Euan Shearer – Benefits Realisation Officer
Benefit Description	
Description of targeted benefit/output (quantified where possible/ relevant)	Indirect benefit – 35,011sqm of enhanced industrial/storage floorspace created as a result of City Deal intervention
Intended beneficiaries:	
- <i>Business</i>	New business development opportunities & associated supplier impacts for existing business base
- <i>Residents</i>	Employment opportunities
- <i>Community</i>	Indirect benefits – construction employment locally, Community Benefits NDR revenue to support national services
Benefit Realisation Timescale	
Overall outputs targeted and time when expected to have occurred	35,011 sqm by 2029
Outputs to be achieved by May 2019 (Gateway 1)	0 sqm
Outputs to be achieved by May 2024 (Gateway 2)	0 sqm
Outputs to be achieved by May 2029 (Gateway 3)	20,279 sqm
Benefits post 2029	35,011 sqm post 2029
Benefit Tracking/ Monitoring and Evaluation	

Methodological Statement of how the benefit realisation will be measured	Will be measured via site visits, ongoing view of building standards completion records, consultation with developers, review of RC Strategy and Place's Annual Commercial Completions Tracker
Measurement Frequency	Ongoing
Benefits Contributions and Dependencies	
Other benefits to which this contributes	Benefit 10 – Total jobs created
City Deal Objective supported	GVA growth, improved employment opportunities net additional employment, levered private sector investment.
Dependencies	Commercial property development market, agreement of a deliverable scheme
Risk of non-achievement	RC

Benefit 5: Food and drink space new (sqm)

Benefit Management	
The person/role accountable for ensuring benefit happens – Benefit Owner	Stephen McFadden – Project Director – City Deal
The person/role accountable for ensuring benefit is tracked – Benefit Owner	Euan Shearer – Benefits Realisation Officer
Benefit Description	
Description of targeted benefit/output (quantified where possible/ relevant)	Indirect benefit – 1,760 sqm of food and drink commercial floorspace created as a result of City Deal intervention
Intended beneficiaries:	
- <i>Business</i>	New business development opportunities & associated supplier impacts for existing business base
- <i>Residents</i>	Employment opportunities
- <i>Community</i>	Indirect benefits – construction employment locally, Community Benefits NDR revenue to support national services
Benefit Realisation Timescale	
Overall outputs targeted and time when expected to have occurred	1,760 sqm post 2024

Outputs to be achieved by May 2019 (Gateway 1)	0 sqm
Outputs to be achieved by May 2024 (Gateway 2)	0 sqm
Outputs to be achieved by May 2029 (Gateway 3)	1,320 sqm
Benefits post 2029	1,760 sqm
Benefit Tracking/ Monitoring and Evaluation	
Methodological Statement of how the benefit realisation will be measured	Will be measured via site visits, ongoing view of building standards completion records, consultation with developers, review of RC Strategy and Place's Annual Commercial Completions Tracker
Measurement Frequency	Ongoing
Benefits Contributions and Dependencies	
Other benefits to which this contributes	Benefit 10 – Total jobs created
City Deal Objective supported	GVA growth, improved employment opportunities net additional employment, levered private sector investment.
Dependencies	Commercial property development market, agreement of a deliverable scheme
Risk of non-achievement	RC

Benefit 6: Utility benefits

Benefit Description	
N/A	

Benefit 7: Communications benefits

Benefit Description	
N/A	

Benefit 8: Transport benefits

Benefit Description	
TBC	

Benefit 9: Total gross construction jobs created

Benefit Management	
The person/role accountable for ensuring benefit happens – Benefit Owner	Stephen McFadden – Project Director – City Deal
The person/role accountable for ensuring benefit is tracked – Benefit Owner	Euan Shearer – Benefits Realisation Officer
Benefit Description	
Description of targeted benefit/output (quantified where possible/ relevant)	Gross Construction Jobs – 720
Intended beneficiaries:	
- <i>Business</i>	Associated business contracts & supplier impacts
- <i>Residents</i>	GCR construction employment opportunities
- <i>Community</i>	Indirect benefits – construction employment locally, Community Benefits
Benefit Realisation Timescale	
Overall outputs targeted and time when expected to have occurred	720 post 2029
Outputs to be achieved by May 2019 (Gateway 1)	90
Outputs to be achieved by May 2024 (Gateway 2)	225

Outputs to be achieved by May 2029 (Gateway 3)	450
Benefits post 2029	720 jobs post 2029
Benefit Tracking/ Monitoring and Evaluation	
Methodological Statement of how the benefit realisation will be measured	Gross Construction Jobs are measured via construction completion figures within a defined period and assumed construction expenditure.
Measurement Frequency	Annually
Benefits Contributions and Dependencies	
Other benefits to which this contributes	Benefit 3 – Industrial/manufacturing distribution Benefit 4 – Office Space Benefit 5 – Food and drink space
City Deal Objective supported	Business & GVA growth, net additional employment, levered private sector investment & NDR. .
Dependencies	Commercial property development market
Risk of non-achievement	RC

Benefit 10: Total gross operational jobs	
Benefit Management	
The person/role accountable for ensuring benefit happens – Benefit Owner	Stephen McFadden – Project Director – City Deal
The person/role accountable for ensuring benefit is tracked – Benefit Owner	Euan Shearer – Benefits Realisation Officer
Benefit Description	
Description of targeted benefit/output (quantified where possible/ relevant)	2,180 Gross Operational jobs
Intended beneficiaries:	
- <i>Business</i>	Business development opportunities & associated supplier impacts for existing business base
- <i>Residents</i>	Employment opportunities

- <i>Community</i>	Community Benefits Council Tax revenue
Benefit Realisation Timescale	
Overall outputs targeted and time when expected to have occurred	2,180 Gross Operational jobs post 2029
Outputs to be achieved by May 2019 (Gateway 1)	0
Outputs to be achieved by May 2024 (Gateway 2)	55
Outputs to be achieved by May 2029 (Gateway 3)	845
Benefits post 2029	2,180 post 2029
Benefit Tracking/ Monitoring and Evaluation	
Methodological Statement of how the benefit realisation will be measured	FTEs will be calculated based on future floorspace developed & use of employment density ratios. See Economic Case
Measurement Frequency	Annually
Benefits Contributions and Dependencies	
Other benefits to which this contributes	Benefit 3 – Industrial/manufacturing distribution Benefit 4 – Office Space Benefit 5 – Food and drink space
City Deal Objective supported	Business & GVA growth, net additional employment, levered private sector investment & NDR. .
Dependencies	Commercial property development market, agreement of a deliverable scheme.
Risk of non-achievement	RC

Benefit 11: Sector created

Benefit Description	
TBC	

Benefit 12: Occupational

Benefit Description	
TBC	

Benefit 13: Number of New Entrant Trainee places created

Benefit Description	
TBC	

Benefit 14: Number of Apprenticeships created

Benefit Description	
TBC	

Benefit 15: Total jobs safeguarded

Benefit Description	
TBC	

Benefit 16: Training and Skills benefits

Benefit Description	
TBC	

Benefit 17: Environmental benefits

Benefit Description	
TBC	

Benefit 18: Number of dwellings created (includes affordable)

Benefit Management	
The person/role accountable for ensuring benefit happens – Benefit Owner	Stephen McFadden – Project Director – City Deal
The person/role accountable for ensuring benefit is tracked – Benefit Owner	Euan Shearer – Benefits Realisation Officer
Benefit Description	
Description of targeted benefit/output (quantified where possible/ relevant)	0 new homes
Intended beneficiaries:	
- <i>Business</i>	Associated indirect expenditure from new residents, supplier benefits
- <i>Residents</i>	Meet local and regional housing demand needs
- <i>Community</i>	Meet local and regional housing demand needs
Benefit Realisation Timescale	
Overall outputs targeted and time when expected to have occurred	0 by 2029
Outputs to be achieved by May 2019 (Gateway 1)	0
Outputs to be achieved by May 2024 (Gateway 2)	0
Outputs to be achieved by May 2029 (Gateway 3)	0
Benefit Tracking/ Monitoring and Evaluation	
Methodological Statement of how the benefit realisation will be measured	Review of annual Renfrewshire Housing Audit Council Tax will be routinely assessed by RC Revenue team as new housing units become occupied
Measurement Frequency	Annually
Benefits Contributions and Dependencies	
Other benefits to which this contributes	Benefit 1: Vacant and derelict land brought back into use

FULL BUSINESS CASE

	Benefit 2: Land remediated
City Deal Objective supported	Indirectly – housing supports wider GCR City Deal working age population growth requirements.
Dependencies	Private sector housing investment and housing completion rates.
Risk of non-achievement	RC

Benefit 20: Community benefits

Benefit Description	
TBC	

Benefit 21: Business benefits

Benefit Description	
TBC	

Benefit 22: Financial benefits

Benefit Description	
TBC	

1. Overall Project Approval (clause7.1)		
	£000	Third Party incl in Approval £000
Approved Baseline Project Cost (Per City Deal Formal Approval)	51,395	-
Cabinet Virement Approvals*	(12,346)	-
3 rd Party Funding	1,603	
Revised Approved Project Cost	40,651	1,603
Current Project Estimate	TBC	
<i>*Approval of virement to CWRR project approved by cabinet 12 December 2016</i>		
2. Project Funding (clause 7.2)		
	£000	
Council Funding	5,342	
Third Party Contributions (additional to section 1 above)	1,603	
Amount to be funded from City Deal Grant	33,706	
Total Funding	40,651	
3. Summary of Project Costs (clause7.3)		
	£000	
Feasibility Costs	inc	
Construction	TBC	
Land Acquisition	4,577	
Equipment	Inc	
Land Remediation	Inc	
Internal Council Management and Design Fees	1,696	
External Consultants costs	5,519	
Other Third Party Costs	2,135	
Other Costs	358	
Contingency	TBC	
	TBC	

Phasing of Project Expenditure

4. (clause 7.4)

Year	£000
1 2015/16	646
2 2016/17	1,982
3 2017/18	4,430
4 2018/19	962
5 2019/20	TBC
6 2020/21	TBC
7 2021/22	TBC
8 2022/23	TBC
9 2023/24	TBC
10 2024/25	TBC
Later Yrs	
Total	TBC

Expenditure on Assets not Council Owned

5. (clause 7.5)

	£000
Estimated Expenditure on Assets not Council Owned	n/a
Detail of Owners of these Assets :	
-	

6. Ongoing Revenue Implications (clause 7.6)

	£000
Full Year Revenue Implications	<u>see section 7.6</u>
First Year revenue implications	See section 7.6
Revenue Funding Source :	See section 7.6

Main Financial Dependencies

7. (clause 7.7)

see section 7.7

Main Financial Risks

8. (clause 7.8)

See clause
7.8

Please refer to the separate document titled 'FBC - GAIA project v1.0 - Appendix D Risk Register'.

SENIOR RESPONSIBLE OFFICER – ROLE PROFILE

1. Ensure strategic fit of the project(s) objectives and intended benefits.
2. Ensure that the project(s) delivers its objectives and intended benefits.
3. Own the project Business Case(s), ensuring continued strategic alignment.
4. Own the project(s) organisation structure.
5. Act as a point of escalation and resolve issues.
6. Monitor and control progress and delivery at a strategic level.
7. Ensure the project(s) is subject to review at appropriate stages.
8. Formally closing the project(s) and signing off upon completion of objectives and planning for post-completion benefits realisation.

PROJECT SPONSOR – ROLE PROFILE

As the individual with overall accountability for the delivery of a project, the Sponsor's role is:

1. To define the strategic and operational requirements of a project.
2. To provide the interface between project ownership and delivery.
3. To have ownership of the project Business Case and sign off any specification of works as being accurate and complete prior to implementation.
4. To ensure appropriate resource and expertise is available to deliver the project and ensure that there are appropriate governance structures in place.
5. To ensure appropriate project management processes are in place.
6. To ensure the on-going viability and delivery and of project objectives, deliverables and benefits.
7. To incorporate review processes as necessary to ensure the project is controlled.
8. To ensure that project risks are determined and managed.
9. To ensure that the project budget is managed, including any risk allowance.
10. To receive and review regular detailed progress reports on the project, including risk, budget control, change and project management.
11. To act as a point of escalation and assist the Project Manager in the resolution of issues.
12. To ensure the Project Manager receives decisions and information on time.
13. To ensure a mechanism is established to ensure regular dialogue with partners to promote project solving, team working and risk sharing.

PROJECT MANAGER – ROLE PROFILE

1. To lead and manage the project and its delivery on behalf of the Project Sponsor.
2. To act as a single point of contact for the day-to-day management of the project.
3. Responsible for the delivery of project objectives, deliverables and benefits, on behalf of the Project Sponsor.
4. To ensure appropriate project management processes are in place.
5. To manage the resources and expertise within the Project Team to deliver the project.
6. To manage the performance of the Project Team.
7. To manage stakeholders.
8. To develop and maintain a detailed project plan.
9. To manage project deliverables in line with the project plan.
10. To co-ordinate the activities of the Project Team.
11. To monitor and manage the change control process and control approved changes.
12. To determine and manage project risks.
13. To manage the project budget, including any risk allowance.
14. To monitor, evaluate and control the progress and delivery of the project.
15. To manage project scope and change control and escalating issues where necessary.
16. To provide regular progress reports to the Project Sponsor.
17. To record and manage project issues and escalate where necessary.
18. To assist the Project Team in the resolution of problems on behalf of the Project Sponsor.
19. To establish a mechanism to ensure regular dialogue with Project Team to promote project solving, team working and risk sharing.
20. To provide support to the Project Sponsor.

Appendix FGAIA Project Initiation Document (PID)

Please refer to the separate document titled 'FBC - GAIA project v1.0 - Appendix F GAIA PID v1.1'.

Appendix G Benefits Realisation

Appendix G1 Renfrewshire City Deal Benefits Realisation Strategy

Please refer to the separate document titled 'FBC - GAIA project v1.0 - Appendix G1 Renfrewshire Benefits Realisation Strategy'.

Appendix G2 Phasing and Occupancy Rates for Shortlisted Options

Please refer to the separate document titled 'FBC - GAIA project v1.0 - Appendix G2 Phasing and Occupancy Rates for Shortlisted Options'.

Please refer to the separate document 'FBC - GAIA project v1.0 - Appendix H Procurement Sourcing Methodology' .

Appendix I GAIA Project Plan

Please refer to the separate document 'FBC - GAIA project v1.0 - Appendix J GAIA Project Plan'.

Appendix J City Deal Risk Management Strategy

Please refer to the separate document 'City Deal Risk Management Strategy' (V1.0)

Appendix K Optimism Bias Calculation

Please refer to the separate document 'FBC - GAIA project v1.0 - Appendix K - Optimism Bias Calculation'.

Appendix L Evaluation of Preferred Option

Please refer to the separate document 'FBC - GAIA project v1.0 - Evaluation of Preferred Option'.

Appendix M Socio Economic Baseline

Please refer to the separate document 'FBC - GAIA project v1.0 - Appendix M Socio Economic Baseline'.

Appendix N Additionality Assumptions

Please refer to the separate document 'FBC - GAIA project v1.0 - Appendix N Additionality Assumptions'.

Appendix O Traffic Modelling Assessment Report (GAIA Environmental Statement Volume 3 Chapter 12)

Please refer to the separate document 'FBC - GAIA project v1.0 – Appendix O GAIA Environmental Statement Volume 3 Chapter 12'.

GLASGOW CITY REGION CITY DEAL

GLASGOW AIRPORT INVESTMENT AREA PROJECT

FULL Business Case v 1.0