

Table 5-1 Cost Breakdown

| Cost Element | | Bridge 1Q20 | New signalised junction | | |
|--|------------------|----------------|-------------------------|--|--|
| | | | | | |
| TOTAL CONSTRUCTION COST | | £13,009,925 | £488,658 | | |
| | | | | | |
| Developing Business Case | | £210,000 | £0 | | |
| Outline Design | | £350,000 | £0 | | |
| Planning & Consultation Costs | | £720,000 | £0 | | |
| Detailed Design Fees | 7% | £910,695 | £34,206 | | |
| Supervision Fees | 6% | £780,596 | £29,320 | | |
| Surveys & Studies | | £60,000 | £25,000 | | |
| Archaeology Studies | | £20,000 | £5,000 | | |
| Ecology Studies | | £35,000 | £0 | | |
| Demolitions | | £46,000 | £0 | | |
| Advance Works | | £60,000 | £0 | | |
| Utilities | | £250,000 | £50,000 | | |
| Accommodation Works | | £180,000 | £0 | | |
| Highway Landscape Manitenance | | £80,000 | £0 | | |
| KCC Direct Costs | | £337,500 | £15,000 | | |
| KCC Legal Costs | | £55,000 | £5,000 | | |
| KCC Clerk of Works | | £70,200 | £0 | | |
| Land Costs | | £600,000 | £0 | | |
| Flood Compensation Land | | £600,000 | £0 | | |
| LCA Part 1 Costs | LCA Part 1 Costs | | | | |
| Lane Rental | | £56,000 | £32,000 | | |
| Commuted Sums | | £1,000,000 | £0 | | |
| KCC Adoption Fees | 6.5% | £0 | £31,763 | | |
| Funder Monitoring | | £10,000 | £0 | | |
| Network Rail | | | | | |
| Possessions | | £250,000 | £10,000 | | |
| Design Supervision | | £475,000 | £20,000 | | |
| TOC Compensation | | £25,000 | £5,000 | | |
| Track Monitoring | | £50,000 | £10,000 | | |
| Sundry Costs | | £70,000 | £10,000 | | |
| Risks | 25% | £4,958,979 | £198,546 | | |
| | | | | | |
| | | | | | |
| Sub | Sub-Total | | | | |
| Inflation - Refer to Heading for Start | Date) | £3,173,120.93 | £115,922.63 | | |
| | | | | | |
| AL ESTIMATED PROJECT COST (excluding | g VAT) | £28,468,015 | £1,130,416 | | |



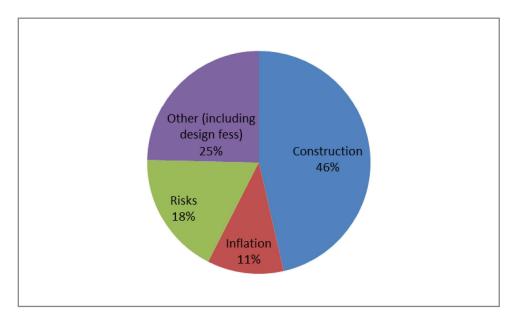


Figure 5-1 Breakdown of scheme costs

'Sunk costs' are assumed to have been absorbed within normal operations of the 'transport planning / project delivery' teams as part of ongoing preparedness.

5.2.3 Treatment of Scheme Costs

The basic scheme costs are used, with some subtle differences, in both the financial case and the economic case.

For completeness, the steps are listed here:

- deriving a base cost estimate including real cost increases;
- adjustment for risk (both cases), and optimism bias (economic case);
- re-basing the price base to the Department's base year (economic case);
- discounting to the Department's base year (economic case);
- converting to the market prices unit of account (economic case).

5.2.4 Inflation

The scheme costs have been adjusted to include inflation at £4.8m. For the scheme, the bridge and the signalised junction assume the first quarter of 2020 for the required adjustment year. The indices used in the calculation provided by the cost consultant are given below:



| Indices: | | | |
|------------------------------|----------------|--|------|
| Base Date: | | | 4Q15 |
| BCIS All IN TPI @ Base Date: | | | 274 |
| Construction Commencemen | t Date: (1Q18) | | 305 |
| Construction Commencemen | t Date: (1Q19) | | 322 |
| Construction Commencemen | t Date: (1Q20) | | 339 |
| | | | |

5.2.5 Risk and Contingency

A Quantified Risk Assessment (QRA) has been undertaken which is included in Appendix J. This equates to a risk allowance of 25% across the project.

The outline design has been developed and costed with a viaduct to overfly both the flood plain and Network Rail land to mitigate the design risks as far as practicable.

5.3 Project Funding

This section considers the capital funding requirements and commitments for the proposed scheme investment.

5.3.1 Sources of Funding

The earmarked LGF funding to be released from SELEP is £5.9m, £1m to be released in 2016-17, and £2.45m in each of 2017-18 and 2018-19. Figure 5-2 shows the LGF funding in relation to the scheme costs.

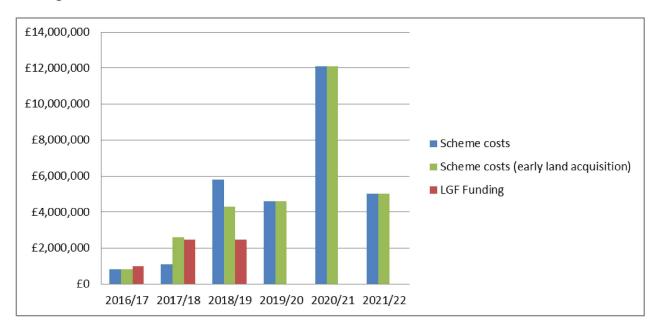


Figure 5-2 LGF Funding

As mentioned the balance of the scheme costs is to be provided by the developer. The majority of the funding is to be provided by the Sturry/Broad Oak Developers (Site 2), with additional funding from 'North of Hersden (Site 8). In addition, the developer for Herne Bay Golf Club (site 4) has forward-funded £250,000 in 2015-16. The profile is attached as Appendix H, highlighting the build-out required for the developer to provide the scheme funding.

This payment schedule has been 'agreed in principle' with the developers and letters of assurance from the developers with regards to their funding contribution to the scheme are provided in Appendix I.

5.3.2 Security and Earliest Availability of Funds

'Heads of terms' / 'Memorandum of Understanding' are being arranged between KCC and the developer.

The developer will underwrite up to £3m costs if the scheme does not proceed but spending has occurred.

5.4 Financial Risk Management Strategy

This section examines the risks associated with the costs and financial requirements of the Sturry Link Rd. It considers the mitigation that may be needed to handle the identified risks, if they arise.

5.4.1 Risks to the Scheme Cost Estimate and Funding Strategy

Table 5-2 shows the financial risk assessment.



Table 5-2 – Scheme Financial Risk Assessment

| Qualitative Financial Ri Scheme Financial Risk Item | sk Assessment Likelihood of Risk Arising (🗸) | | | Impact Severity (✓) | | | Predicted Effect on Scheme Delivery & Outcome (✓) | | | Suggested Mitigation |
|---|--|----------|------|---------------------|----------|----------|---|----------|--------|--|
| | Low | Medium | High | Slight | Moderate | Severe | Slight | Moderate | Severe | |
| Unforeseen increase in scheme cost reduces the VfM (i.e. BCR nearer to 1.0 'low') | ✓ | | | | 1 | | | 1 | | Amend preferred scheme design content to reduce scheme cost and increase VfM / BCR |
| Earmarked / secured funds do not cover current scheme capital cost | 4 | | | | | 4 | | * | | Lobby for additional funds from existing / new contributors. Consider reapportioning from other KCC schemes. |
| Majority of fund allocation is from a single source, not spread out | | * | | | | ✓ | | ✓ | | 'Heads of terms' to be completed before KCC commit excessive expenditure. |
| Majority of fund allocation is from Government LGF, giving poor 'leverage' | ~ | | | ✓ | | | √ | | | Seek additional private sector and local public sector fund contributions |
| Main funding award depends upon sound scheme transport business case, which is not currently achievable | ✓ | | | * | | | | * | | Assemble additional supporting evidence for the scheme and prepare to a standard sufficient to confirm funding award |
| Government policy change disables a planned funding source | ✓ | | | | ~ | | | ✓ | | None available |

6 Commercial Case

6.1 Overview

The Commercial Case for the *Sturry Link Rd* provides evidence that the proposed investment can be procured, implemented and operated in a viable and sustainable way. The aim is to achieve best value during the process, by engaging with the commercial market.

6.2 Expected Outcomes from the Commercial Strategy

The outcomes which the commercial strategy must deliver are to:

- Confirm that procedures are available to procure the scheme successfully;
- Check that available / allocated capital funds will cover contractor and construction costs;
- Verify that risk allowance is sufficient;
- Ensure that arrangements have been made to handle cost overruns;

6.3 Scheme Procurement Strategy

Procurement Options

KCC have identified two procurement options for the delivery of their LEP funded schemes. The alternative options are:

Full OJEU tender

This option is required for schemes with an estimated value of over £4,322,012.

KCC will then need to opt for an 'open' tender, where anyone may submit a tender, or a 'restricted' tender, where a Pre-Qualification is used to whittle down the open market to a pre-determined number of tenderers. This process takes approximately one month and the first part is a 47 day minimum period for KCC to publish a contract notice on the OJEU website.

The minimum tender period is 6 weeks but could be longer for larger schemes. Once the tenders are received they must be assessed and a preferred supplier identified. There is a mandatory 10 day 'standstill' period, during which unsuccessful tenderers may challenge the intention to award to the preferred contractor.



Delivery through existing Amey Highways Term Maintenance Contract (HTMC)

This option is strictly not procurement as the HTMC is an existing contract. The HTMC is based on a Schedule of Rates agreed at the inception of the contract. The price for each individual scheme is determined by identifying the quantities of each required item into a Bill of Quantities. Amey may price 'star' items if no rate already exists for the required item. If the scope of a specific scheme is different from the item coverage within the HTMC contract a new rate can be negotiated.

Preferred Procurement Option

The preferred procurement route for the Sturry Link Rd scheme is full OJEU tender. This option has been selected as the value of the scheme, £29m, is greater than the OJEU scheme value threshold.

6.4 Commercial Risk Assessment

Table 6-1 shows the commercial risk assessment

Table 6-1 – Scheme Commercial Risk Assessment

| Scheme Commercial Risk Item | | ihood Arising | | Impact Severity (✓) | | Predicted Effect on Scheme Procurement, Delivery & Operation (✓) | | | Immediate Bearer of Risk and Suggested Mitigation | |
|--|-----|------------------|------|------------------------|----------|--|--------|----------|---|---|
| | Low | Medium | High | Slight | Moderate | Severe | Slight | Moderate | Severe | |
| Scheme construction is delayed and costs increase, owing to unexpected engineering difficulties. | | √ | | | | √ | | √ | | Kent CC, as scheme promoter, bears the risk. Ensure that scheme development, design, procurement and construction procedures are sufficiently robust to minimise likelihood of construction difficulties. |



7 Management Case

7.1 Overview

The Management Case outlines how the proposed scheme and its intended outcomes will be delivered successfully. It gives assurances that the scheme content, programme, resources, impacts, problems, affected groups and decision makers, will all be handled appropriately, to ensure that the scheme is ultimately successful. It also covers monitoring of the scheme.

7.2 Approach to Scheme Development and Delivery

Outline the approach that will be followed, to verify that the scheme can be successfully delivered, i.e. show that the management approach will;

- Confirm the problems and scheme issues that are being considered and the problem-handling strategies that are being applied, to assure that the scheme can be delivered satisfactorily;
- Justify the measurement scales and thresholds that will be used to assess problem issues and scheme performance outcomes;
- Verify that the proposed scheme design will be satisfactory and fit-for-purpose;
- Ensure that favourable scheme performance will be judged by robust appraisal against accepted criteria;
- Assure that suitable funding sources are available;
- Show that a procurement, construction and operation strategy is being developed;
- Check that project risks are identified, handled and mitigated effectively; and
- Confirm that appropriate evaluation techniques will be introduced, to measure the scheme's success, after implementation.

Although not fully defined at this stage, the project is likely to be managed in house by PRINCE2 trained and experienced Kent County Council staff, using a well-established governance structure, which has been successfully applied to deliver other transport improvement schemes.



7.3 Evidence of Previously Successful Scheme Management Strategy

KCC have a successful track record of delivering major transport schemes within the county. The most recent of which were the East Kent Access Phase 2 (EKA2) and Sittingbourne Northern Relief Road schemes (SNRR).

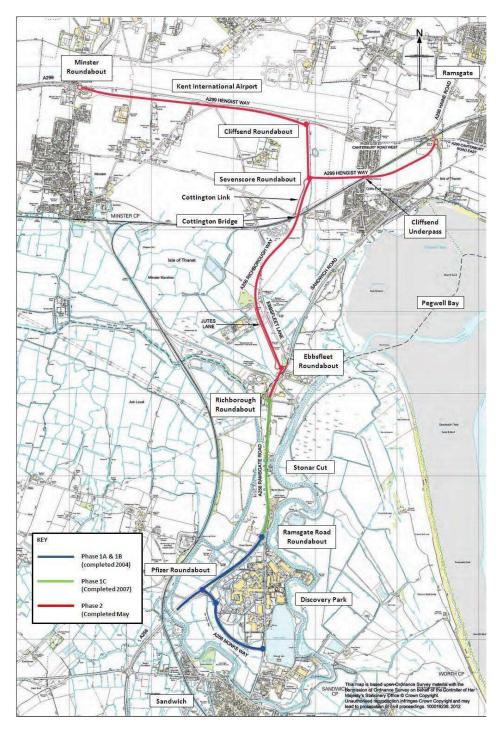
The EKA2 scheme, completed in May 2012, was designed to support economic development, job creation and social regeneration, improving access with high quality connections between the urban centres, transport hubs and development sites in East Kent. The overall objectives of the scheme were to unlock the development potential of the area, attract inward investment and maximise job opportunities for local people. The extent of the scheme is shown in **Figure 7-1**.

The scheme was successfully delivered within budget and ahead of programme through the adoption of a robust management approach similar to that set out above to deliver the Sturry Link Rd scheme. The total value of the scheme was £87.0m of which £81.25m was funded by Central Government.

The intended scheme outcomes are currently being monitored but the intended benefits of the scheme are anticipated to be realised.





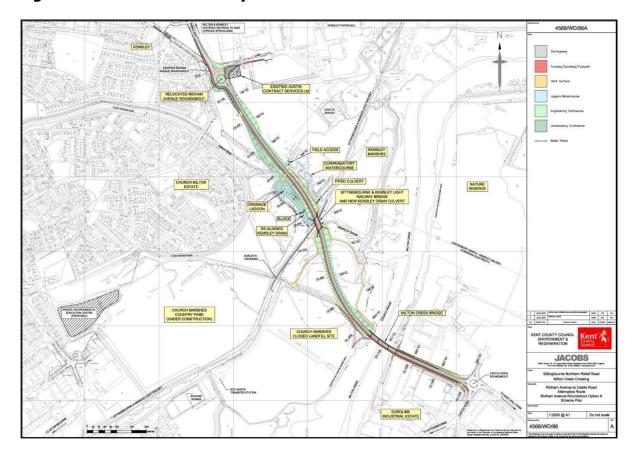


The SNRR scheme, completed in December 2011, was designed to remove the severance caused by Milton Creek and give direct access to the A249 trunk road for existing and new development areas, thereby relieving Sittingbourne town centre.

The delivered scheme is shown in **Figure 7-2** below:



Figure 7-2 – SNRR Scheme Layout



The project is an excellent example of multi agencies working towards a common aim. The scheme was funded by the Homes & Communities Agency in its Thames Gateway (Kent) regeneration role, by the Department of Transport in its support of local major schemes and by private sector S106 contributions. The scheme was delivered under budget and to programme.

Both the EKA2 and SNRR schemes have since been awarded regional Institute of Civil Engineers (ICE) Excellence Awards.

7.4 **Key Project Work Stages and Tasks**

A programme is given as Appendix G. The key stages identified are:

- Initial scheme design / Business Case (underway)
- Feasibility work (completed)
- Land Acquisition (negotiations underway)
- Public Consultation (Sep 2016)
- Planning consent (application being developed) see 7.6



- Statutory orders (early 2017)
- Detailed design (2017-18)
- Procurement / Tendering (2018-19)
- Environmental surveys (Ecology underway / other surveys being coordinated)
- Construction Mobilisation Oct 2019, Construction Jan 2020, Close Down Activities Oct 2021)
- Monitoring (part of wider LEP schemes programme)

The programme has been established by KCC in conjunction with the developers. It is an evolving document aimed to synchronise the different planning, development and construction aspects.

7.5 Project Governance, Roles and Responsibilities

KCC have set up a clear and robust structure to provide accountability and an effective decision making process for the management of the LEP funded schemes. Each scheme will have a designated project manager (Richard Shelton for Sturry Link Rd) who will be an appropriately trained and experienced member of KCC staff.

Figure 7-3 provides an outline of the overall governance structure implemented to manage the delivery of each scheme.

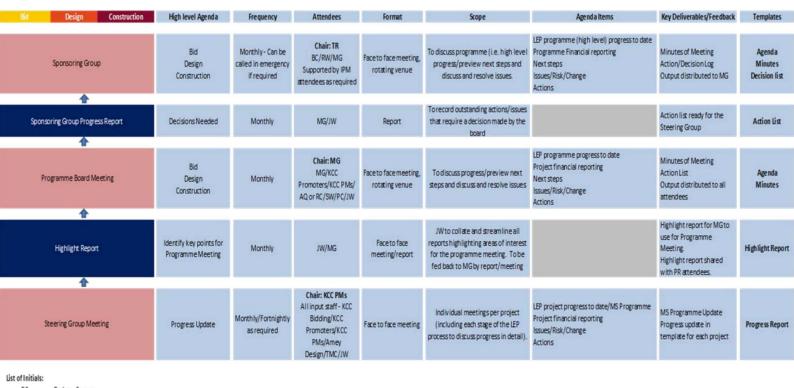
A detailed breakdown of the meetings (along with the attendees, scope and output of each) which make up the established governance process is set out below.

Project Steering Group (PSG) Meetings

PSG meetings are held fortnightly to discuss individual progress on each scheme and are chaired by KCC Project Managers (PMs). Attendees include representatives from each stage of the LEP scheme (i.e. KCC Bid Team, KCC sponsor, KCC PMs, Amey design team and construction manager). Progress is discussed in technical detail raising any issues or concerns for all to action. A progress report, minutes of meeting and an update on programme dates are provided ahead of the Programme Board (PB) meeting for collation and production of the Highlight Report.



Figure 7-3 – KCC Project Governance Structure



Issued: June 2016

BC Barbara Cooper

RW Roger Wilkin

TR Tim Read

MG Mary Gillett

AQ Andrew Quilter

RC Richard Cowling

SW Steve Whittaker

PC Paul Couchman

Joanne Whittaker

Doc. Ref.:CO04300369 /011 Rev. 03 - 61 -

Highlight Report

The Progress Reports sent by the KCC PMs comprise of the following updates; general progress, project finances, issues, risks and governance meeting dates. The Highlight Report identifies any areas of concern or where decisions are required by the PB meeting or higher to the KCC LEP Programme Manager. An agreed version of the Highlight Report is issued to the PB meeting attendees during the meeting.

Programme Board (PB) Meeting

The PB meeting is held monthly and is chaired by the KCC LEP Programme Manager. Attendees include representatives from all three stages of the schemes (i.e. KCC LEP Management, KCC LEP Bidding, KCC Sponsors, KCC PMs, Amey Account Manager, Amey Technical Advisors, Amey Construction representatives). This meeting discusses project progress to date, drilling into detail if there is an issue or action (as identified in the PSG meeting), financial progress, next steps and actions. Outputs of this meeting are the Highlight Report and the minutes of meeting.

Escalation Report

A list of actions and decisions that the PB meeting was unable to resolve is prepared ready for the Sponsoring Group (SG) meeting to discuss and ultimately resolve.

Sponsoring Group (SG) Meeting

The SG is held monthly and will be chaired by Tim Read (KCC Head of Transportation). Attendees are Barbara Cooper (Corporate Director), Roger Wilkin (Director of Highways, Transportation and Waste), Tim Read and Mary Gillett (KCC Major Projects Planning Manager). This meeting discusses high-level programme progress to date, financial progress, next steps and closes out any actions from the escalation report. Output is sent to Mary Gillett for distribution. Technical advisors are invited if necessary to expand upon an issue. All actions from the start of this meeting cycle are to be closed out by the SG when they meet (i.e. no actions roll over to subsequent meetings).

7.6 Communication and Stakeholder Management Strategy

Figure 7-4 shows the engagement approach to be used for various different stakeholders and interest groups. As mentioned consultation is a key milestone in the programme.



Issued: June 2016

There is clearly an important coordination between the Transport Authority (KCC), the developer for the Sturry/Broad Oak site, and the Planning Authority (Canterbury City Council). This is required to ensure a combined delivery of the link road and the 1,000 houses. KCC envisage there will be one planning application for the Sturry Link Road, with a joint EIA prepared with the developers of the Sturry and Broad Oak developments. The intention is to submit a planning application in Oct 2016.

The scheme will require planning consent from Kent County Council as the Planning Authority.

In support of a planning application it should be noted that the scheme is included in the Canterbury District Local Plan 2014 Draft Publication, Policy T14 currently being examined by public consultation.

Policy T14 - Sturry Link Road states

'The Council will seek to implement a Sturry Relief Road as identified on the Proposals Map. Any development proposals that might prejudice this route will be resisted. Contributions to this relief road will be sought from appropriate developments as set out in Policy SP3.'

The funding model has been previously outlined in the Financial Case. This will be enforced by including into S106 agreements with Canterbury City Council.

In addition to the transport surveys and the transport modelling provided as the basis for the Strategic Case and Economic Case, the developer has also funded and made available the topological survey and environmental/ecological survey.

The liaison with Network Rail and Environment Agency has been previously mentioned.

It is appreciated that if the development does not proceed, the link road is unlikely to be delivered.



Figure 7-4 – Stakeholder Management Plan

| High | To be Passively Monitored: | To be Actively Engaged and Managed: Canterbury City Council |
|--------------------------|---|--|
| | | Developer for Sturry / Broad Oak Site SELEP / DfT Network Rail SouthEastern |
| Stakeholder Influence | To be Passively Conciliated: Local population | To be Actively Informed: Local businesses Environment Agency Bus Operators (Stagecoach) Other developers |

7.7 Contract Management

Outline how the scheme developer, implementer and operator contracts will be successfully managed, to provide best value, quality assurance and timely delivery.

7.8 Project Risk Management and Contingency Plan

Risk Management Strategy

Project risk is managed as an on-going process as part of the scheme governance structure, as set out in section 7.2 of this report. A scheme risk register is maintained and updated at each of the two-weekly Project Steering Group meetings. Responsibility for the risk register being maintained is held by the KCC PM and is reported as part of the monthly Progress Reports.

Any high residual impact risks are then identified on the highlight report for discussion at the Programme Board (PB) meeting. Required mitigation measures are discussed and agreed at the PB meeting and actioned by the KCC PM as appropriate.

An example scheme risk register is shown in **Figure 7-5** below:



Figure 7-5 – Project Delivery Programme



Table 7-1 shows a summary of the project risk assessment. This includes aspects from all elements of the business case, and also adds 'operational' and 'scheme performance' elements.



Table 7-1 – Project Risk Assessment

| Project Risk Management Strategy | | | | | | | | | |
|---|---|---|--------------------------------|---|---|--|--|--|--|
| Risk Category | Risk Description | Likelihood of Risk Arising (Score 1- 5) | Severity of Impact (Score 1-5) | Risk Score = Likelihood x Impact Severity | Proposed Risk Mitigation and Contingency Action | | | | |
| Scheme Transport Business Case Approval | SELEP / DfT requires more quantified evidence for Economic Case Value for Money, rather than qualitative assessment | 2 | 4 | 8 | Assemble as much available evidence of scheme VfM before submitting | | | | |
| Design – | Safety | 1 | 5 | 5 | On-going safety audits to confirm design appropriate | | | | |
| Design | Issues with statutory, design, procurement or environmental surveys | 2 | 4 | 8 | Address at early stage (use risk register) | | | | |
| Funding | Not forthcoming | 1 | 5 | 5 | Ongoing discussions with funding bodies, developer and SELEP | | | | |
| Delivery | Developer's link roads are delayed | 1 | 5 | 5 | Scheme withdrawn | | | | |
| Operational | Blocking back | 1 | 4 | 4 | To be enhanced during design and negotiations with Network Rail | | | | |
| Scheme performance | Downstream capacity erodes benefits | 2 | 3 | 6 | Further study being undertaken in relation to Vauxhall Rd roundabouts | | | | |
| Overall | | | | | | | | | |

Key to Risk-Likelihood and Impact-Severity Scoring Categories:

Very Low 1.0; Low 2.0; Moderate 3.0; High 4.0; Very High 5.0;