The template

This document provides the business case template for projects seeking funding which is made available through the **South East Local Enterprise Partnership**. It is therefore designed to satisfy all SELEP governance processes, approvals by the Strategic Board, the Accountability Board and also the early requirements of the Independent Technical Evaluation process where applied.

It is also designed to be applicable across all funding streams made available by Government through SELEP. It should be filled in by the scheme promoter – defined as the final beneficiary of funding. In most cases, this is the local authority; but in some cases the local authority acts as Accountable Body for a private sector final beneficiary. In those circumstances, the private sector beneficiary would complete this application and the SELEP team would be on hand, with local partners in the federated boards, to support the promoter.

Please note that this template should be completed in accordance with the guidelines laid down in the HM Treasury's Green Book. https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent

As described below, there are likely to be two phases of completion of this template. The first, an 'outline business case' stage, should see the promoter include as much information as would be appropriate for submission though SELEP to Government calls for projects where the amount awarded to the project is not yet known. If successful, the second stage of filling this template in would be informed by clarity around funding and would therefore require a fully completed business case, inclusive of the economic appraisal which is sought below. At this juncture, the business case would therefore dovetail with SELEP's Independent Technical Evaluation process and be taken forward to funding and delivery.

SOUTH EAST
LOCAL ENTERPRISE
PARTNERSHIP

The process

This document forms the initial SELEP part of a normal project development process. The four steps in the process are defined below in simplified terms as they relate specifically to the

Local Board Decision

- Consideration of **long list** of projects, submitted with a short strategic level business case
- **Sifting/shortlisting process** using a common assessment framework agreed by SELEP Strategic Board, with projects either discounted, sent back for further development, directed to other funding routes or agreed for submission to SELEP

SELEP

- Pipeline of **locally assessed projects submitted to SELEP**, with **projects supported by strategic outline business cases - i.e., partial completion of this template**
- Prioritisation of projects across SELEP, following a common assessment framework agreed by Strategic Board.
- **Single priorisited list of projects is submitted by SELEP to Government** once agreed with SELEP Strategic Board.

SELEP ITE

- Following the allocation of LGF to a project, scheme promoters are required to prepare an **outline business case, using this template** together with appropriate annexes.
- Outline Business Case assessed through **ITE gate process**.
- **Recommendations are made by SELEP ITE to SELEP Accountability Board** for the award of funding.

Funding & Delivery

- Lead delivery partner to commence internal project management, governance and reporting, ensuring **exception reporting mechanism back to SELEP Accountability Board** and working arrangements with SELEP Capital Programme Manager.
- **Full Business Case** is required following the procurement stage for projects with an LGF allocation over £8m.

LGF process. Note – this does not illustrate background work undertaken locally, such as evidence base development, baselining and local management of the project pool and reflects the working reality of submitting funding bids to Government. In the form that follows:

Version control	
Document ID	
Version	
Author	
Document status	
Authorised by	
Date authorised	

SOUTH EAST
LOCAL ENTERPRISE
PARTNERSHIP

1. PROJECT OVERVIEW

1.1. Project name:

[Specify the name of the scheme, ensuring it corresponds with the name of the scheme at programme entry (when added to the LGF prioritised list of projects).]
Grays South

1.2. Project type:

[Site development, skills, innovation etc.]
Town centre regeneration

1.3. Federated Board Area:

[East Sussex, Kent & Medway, Essex, and Thames Gateway South Essex]
Essex

1.4. Lead County Council / Unitary Authority:

Thurrock

1.5. Development location:

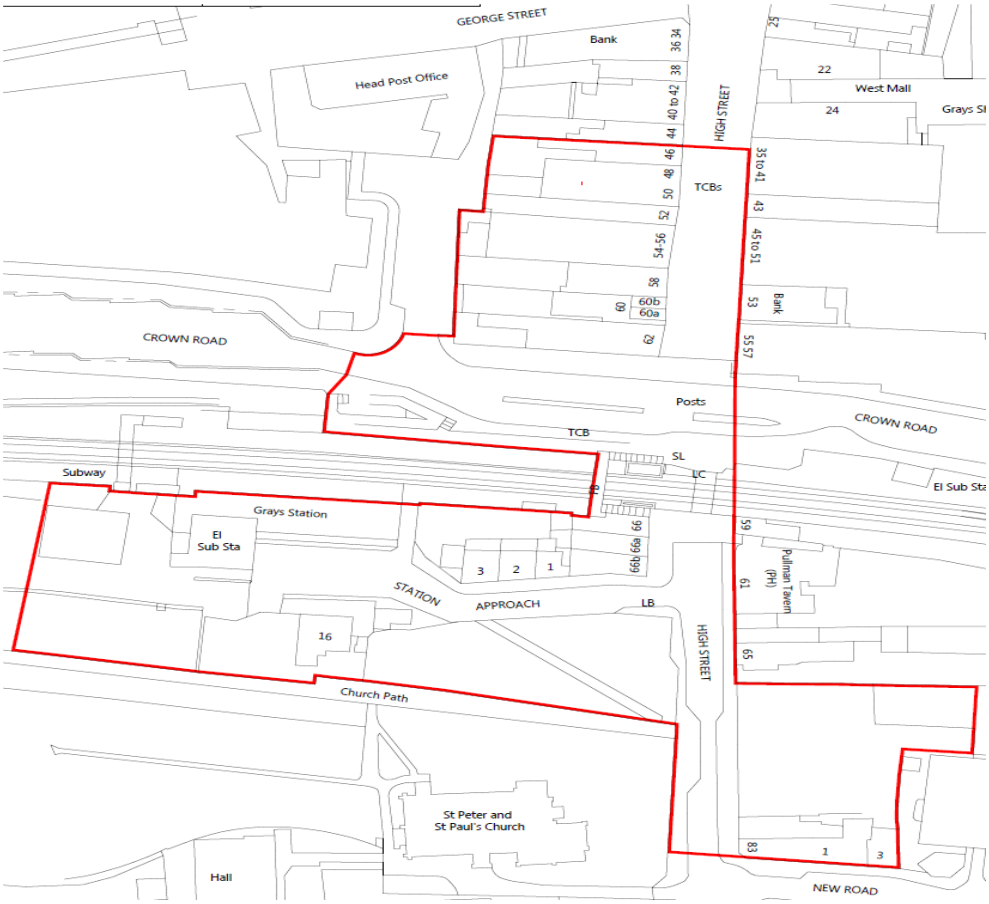
[Specify location, including postal address and postcode.]

The location of Grays Underpass is in Grays town centre and is bordered by High Street which runs north-south through the town centre, Crown Road located immediately north of the railway line and the railway line from Fenchurch Street runs approximately east-west through the town. The postcode for the location is RM17 6NN.

More specifically in Railway terms, the Engineer's Line Reference is as follows: TLL with a distance of 19 miles and 76 chains (1628 yards) down the line from London Fenchurch Street via Rainham and is located at the junction when a branch line from Upminster via Ockendon re-joins the route from Rainham.

This can be seen in both the site plan and artist's impression below:

Site Plan



Artist Impression

1.6. Project Summary:

[Provide a summary of the project; max. 0.5 pages.]

The Grays Development Framework Refresh (see Appendix G) was approved by the Council's Cabinet in November 2017 (see Appendix H) and provides the context for the Grays South Regeneration Area (GSRA), which is the Council's response to several key issues:

a) The level crossing is amongst the most dangerous crossings in the eastern region and is the only pedestrian crossing that features in the top 10 most dangerous in Britain. In January 2016, Network Rail gave formal notice to Thurrock Council of its intention to close the crossing, providing 3 years notice of closure. This gives Network Rail the right start proceedings to close the crossing at any point from 3 years of the letter (see Appendix I).
b) The need to support and enhance the viability and vitality of the town centre.
c) The need to address the significant barrier to pedestrians moving to and from the town centre created by the level crossing. Gates can currently be closed for up to 12 minutes in normal operation. The frequency and duration of closures will increase as the passenger rail service becomes more frequent from 2020 and commercial rail freight from DP World and Port of Tilbury increases, also increasing the risks of accidents.
d) Recognition that the area around the rail station does not provide a welcoming arrival point to Grays and that the quality of the public realm needs to be uplifted in response to the South Essex College development.
e) The need to provide a modern approach to delivery of the Council's services in flexible multi-purpose accommodation.

The GSRA comprises 2 phases:

- Phase 1: Extension to Civic Offices
- Phase 2a: Creation of an underpass to replace the level crossing and creation of public squares at each end, designed to provide active urban spaces suited to a wide range of events, markets and similar activities.
- Phase 2b: Creation of new, modern commercial/mixed use floorspace (c1300sq.m) and residential units above (c84 flats) on land created by phase 2a to provide definition to the public squares, street cafes, residential and commercial space and opportunities for urban living. These will contribute towards generating additional footfall within the town centre, support the development of an evening economy, and respond to a lack of town centre facilities to serve the c4 million passenger movements per year through the rail station.

Support is required for phase 2a which includes: design and construction in partnership with Network Rail; land acquisition; relocation of public highway; and demolition of some existing property. The highways relocations and property demolitions required for the underpass and public squares (phase 2a) create the space required to unlock the development potential of phase 2b.

1.7. Delivery partners:

[List all delivery partners and specify the lead applicant and nature of involvement, as per the table below.]

Partner	Nature of involvement (financial, operational etc.)
Thurrock Council	Lead Applicant
Network Rail	Delivery Partner – commitment of land, £705k of funding (already received) and delivery of works to create the underpass. See Appendix J for letter of support from Network Rail for this scheme.
Steer Group	Urban Realm Design
Montagu Evans	Property Consultant
Shoosmiths	Legal Support

1.8. Promoting Body:

[Specify who is promoting the scheme.]
Thurrock Council

1.9. Senior Responsible Owner (SRO):

[Specify the nominated SRO and provide their contact details. The SRO ensures that a programme or project meets its objectives and delivers projected benefits. This is not the same as a Section 151 Officer.]

David Moore, Interim Assistant Director for Place Delivery

1.10. Total project value and funding sources:

[Specify the total project value, how this is split by funding sources, and any constraints, dependencies or risks on the funding sources, as per the table below.]

This project forms part of the wider Grays South Project, and relates to the underpass and associated infrastructure and public realm improvements. The total cost of these elements is £28.7m, of which £10.8m in funding from the LGF is being sought via a two phased approach. Drawdown of an initial £3.7m of LGF funding was granted by SELEP in February 2019 for the year April 2019 to March 2020. This business case seeks the drawdown of the remaining £7.1m of LGF funding for the year April 2020 to March 2021.

The breakdown of the cost is as follows:

Item	Cost	Source
PRINCIPAL CONTRACTOR/DESIGNER COSTS		
Volker Fitzpatrick Estimate (underpass, steps and ramps, structures, public	£15,985,699.00	Volker Fitzpatrick

squares, Station Road diversion)		
Highway diversions, contribution to maintenance of routes used for construction traffic etc.	£250,000	Thurrock Council
COWD Network Rail (up until end of Control Period 5)	£705,000.00	Network Rail
Crown Road	£2,750,000	Thurrock Council
Public realm beyond red line	£858,000	Thurrock Council
Land Acquisition (based on Montagu Evans	£6,500,000	Thurrock Council
PROFESSIONAL FEES		Thurrock Council
Fees for Steer (urban ream design)	£715,000	Thurrock Council
Fees for Montagu Evans (planning consultants)	£225,000	Thurrock Council
Fees for Montagu Evans (land acquisition)	£100,000	Thurrock Council
Fees for Shoosmiths (legal support)	£300,000	Thurrock Council
Others	£350,000	Thurrock Council
TOTAL	**£28,738,699.00**	

The funding sources are currently identified as:

Funding Source	**Value**
Thurrock Borough Council Capital Programme	£10,396,718
S.106 Funds held by Thurrock Council	£1,200,000
Network Rail	£705,000
Development Receipts	£5,596,707
Funding sought through LGF Grant	£10,840,274
Total	**£28,738,699**

The £705k of funding from Network Rail was time limited as it was drawn from programmes which had to be spent prior to March 2019, which is the end of Control Period 6. Thurrock Council will be seeking further funding from Network Rail, though these contributions are not yet confirmed.

The value of development receipts are derived from the surpluses anticipated through the development of plots created through the project, together with the linked development of other plots that the Council owns within the town centre but outside the immediate project area. The expected level of receipts was identified through work undertaken by Montagu Evans – see Appendix K. The Council anticipates taking the financial risk on these developments and bringing them forward through its wholly owned development company, Thurrock Regeneration Limited. This would secure greater returns than would otherwise be achieved through the disposal of the sites directly to the market. Should these receipts not materialise the Council will need to secure additional capital from its own budgets or from other external sources.

1.11. SELEP funding request, including type (LGF, GPF etc.):

[*Specify the amount and type of funding sought from SELEP to deliver the project. Please also confirm that the funding will not constitute State Aid.]*

A total of £10,840,274 has been sought from the LGF to support the delivery of the underpass, associated infrastructure and public squares of the Grays South Project. An initial request was made in February 2019 for the drawdown of £3.7m of funds, relating to expenditure in 2019/20. This submission relates to the remaining £7.1m of funds, relating to expenditure in 2020/21. As shown above, the Council and Network Rail have already committed a range of funds to the project to enable the project to reach this stage.

Whilst it is anticipated that, subject to the project going ahead therefore making the land available, the Council will bring forward the development of the plots created from the creation of the underpass and public squares and reinvest the receipts generated to support the delivery of the project, there remains a gap in the funding strategy at this stage of the project. This is the amount which is sought through the LGF.

The Council can confirm that it does not consider that the funding constitutes State Aid, based upon the advice it has received.

1.12. Exemptions:

[Specify if this scheme business case is subject to any exemptions (and provide details of these exemptions) as per the SELEP Assurance Framework 2017, Section 5.7.4 and 5.7.5]

None.

1.13. Key dates:

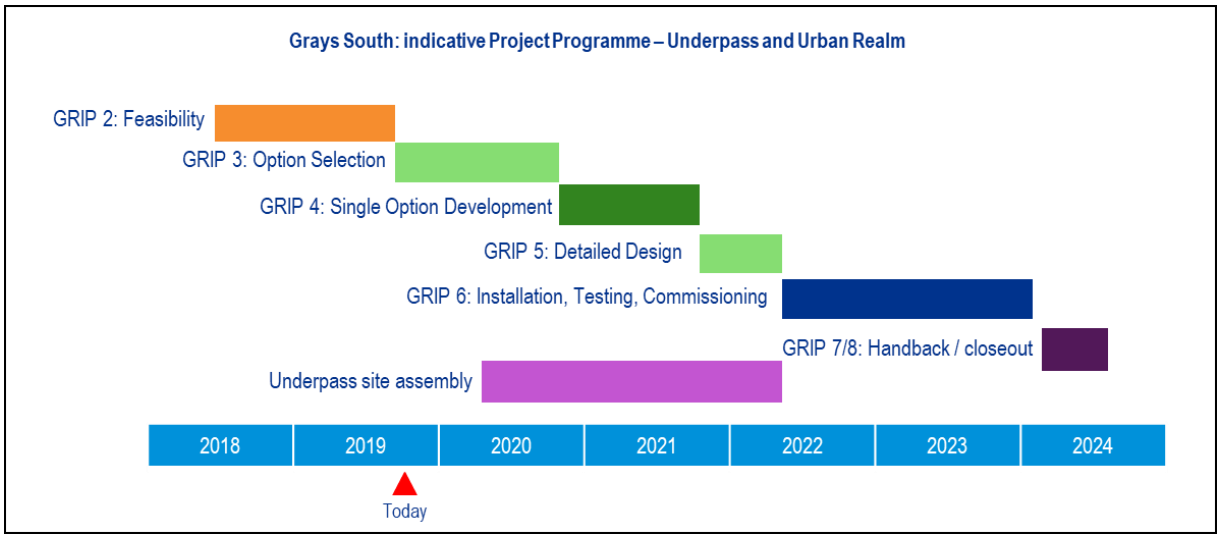
[Specify dates for the commencement of expenditure, the construction start date and the scheme completion/opening date.]

The drawdown of the initial £3.7m of LGF funding from SELEP was made at the start of 2019/20 and is being used to fund initial land acquisition costs and professional fees associated with completion of GRIP 2 and commencement of GRIP 3[1].

The remaining £7.1m of LGF funding, to which this business case relates, will be drawn down and spent in 2020/21 on further land acquisition and professional fees associated with the completion of GRIP 3 and the commencement of GRIP 4. The project will continue through the GRIP stages with GRIP 3 expected to be completed in November 2020 and construction expected to commence in 2022 and be completed in 2024.

[1] See Appendix L – GRIP Process for more information on the GRIP stages.

The configuration of land for the development plots will be defined during the public realm design to be undertaken as part of GRIP 3. An indicative programme is illustrated below which has been agreed with Network Rail. A detailed MS Project plan is included in Appendix L.



The critical path will be determined when Network Rail issue a revised programme. This programme will be updated and issues in Primavera which will list all the GRIP deliverables (broken down into specific tasks), including contingency.

1.14. Project development stage:

[*Specify the project development stages to be funded, such as inception, option selection, feasibility, outline business case, detailed design, procurement, full business case, implementation, the current project development stage, and a brief description of the outputs from previous development stages. Add additional rows as necessary. Please note, not all sections of the table may require completion.]*

Project development stages completed to date			
Task	**Description**	**Outputs achieved**	**Timescale**
GRIP 1	Output Definition	Defined project scope	Completed
GRIP 2	Feasibility	Feasibility assessment of options	Completed
Procure professional team	Procure urban realm designer, property advisor, planning consultant and legal support.	Appointed and briefed	Completed
Urban realm design	Design process for public squares either end of the underpass	Initial designs and costings	Ongoing
GRIP 3	Option Selection	GRIP 3 has commenced.	Ongoing

		Concepts developed.	
Project development stages to be completed			
Task	**Description**		**Timescale**
GRIP 4 - 8	Development through to project close out		4 years

1.15. Proposed completion of outputs:

[Include references to previous phases / tranches of the project (link to the SELEP website) and to future projects to be funded by SELEP. Please see SELEP Programme for more information.]

Work stages completed:

- Initial Feasibility completed 2013
- GRIP 2 design and feasibility completed 2015
- Development Appraisals Completed 2016
- Land Acquisition Strategy completed 2017
- Budget approved 2017
- Client Requirement and Route Requirement Documents completed for GRIP 3 completed 2018
- Initial design and costing of concepts for Urban Realm works

Work stages to be completed:

- Agreement in Principle with Network Rail to be completed by September 2020
- GRIP 3 option selection to be completed by November 2020
- GRIP 4 single option development to be completed by December 2021
- GRIP 5 detailed design to be completed by June 2022
- Land acquisition to be completed by February 2022
- GRIP 6 installation, testing, commissioning to be completed by February 2024

2. STRATEGIC CASE

The Strategic Case should present a robust case for intervention, and demonstrate how the scheme contributes to delivering the SELEP Strategic Economic Plan (SEP) and SELEP's wider policy and strategic objectives. It includes a rationale of why the intervention is required, as well as a clear definition of outcomes and the potential scope for what is to be achieved.

The outlook and objectives of the Strategic Case need should, as far as possible, align with the Monitoring and Evaluation and Benefits Realisation Plan in the Management Case.

2.1. Scope / Scheme Description:

[Outline the strategic context for intervention, by providing a succinct summary of the scheme, issues it is addressing and intended benefits; max. 2 pages.]

Grays is the main town centre serving Thurrock and is one of six Growth Hubs in the Borough; these are the locations where the Council is working with partners and stakeholders to deliver significant levels of new housing and employment.

Grays' retail function has been in gradual decline since the opening of the Lakeside Shopping Centre in 1990, with the place and retail offer declining in quality and custom.

The 2012 Thurrock Retail Study Update by Roger Tyms and Partners observed at para 6.53 that "Grays town centre is more dated and suffers from poor quality buildings and shop frontages. There is a sharp qualitative deficiency in good quality retail space itself and there is an opportunity to improve this if a suitable development opportunity can be identified". Para 6.57 goes on to state, "There is scope to improve the offer in Grays and local centres including environmental improvements".[2] Whilst this report is a number of years old there has been no improvements to the public realm or retail space in the intervening period.

A more recent, December 2018, study by Montagu Evans and Hatch Regeneris[3] identified the poor public realm as a key factor impacting town centre footfall and spend. The study allocated Grays a Walkscore[4] of 87/100 which is considered "very walkable". However, it recognised that Grays should be aiming for a score of 90-100 ("walkers' paradise") given the optimal location of the train station and pedestrianisation of Grays High Street. Other comparator areas such as Southend town centre and Barking town centre both achieve these 90-100 scores.

The report found the following main issues preventing a higher score:

- Severance caused by the train line and crossing, which is expected to worsen due to an increased number of trains coming through station from 2020.
- Difficult to navigate pedestrian routes into parts of the town centre.

This report also found that the town centre does not perform well against measures of Healthy Streets.[5] The assessment identified the following issues:

[2] https://www.thurrock.gov.uk/sites/default/files/assets/documents/ldf_tech_retail_appx.pdf

[3] Montagu Evans, Hatch Regeneris (2018) Grays Town Centre Evaluation.

[4] Walkscore measures the walkability of any address, based on the distance to amenities and pedestrian friendliness (i.e. population density and road metrics such as block length and intersection density).

[5] The Healthy Streets Approach is a framework for assessing the quality of streetscape/public realm and was introduced as part of Transport for London (TfL) policy in its first Health Action Plan in 2014.

- The train line crossing and busy road adjacent to the crossing creates a barrier to pedestrians, which restricts movement between different parts of the town centre and impacts on the performance of businesses.
- There is some pleasant green space to the south of the railway tracks, but limited seating in the high street and lack of a focal seating area for congregation or events.
- There are a number of inactive areas in the town centre, particularly south of the train station moving towards the river. Much of the architecture is not designed with safety in mind and can contribute to a feeling of unease in places. Street lighting exists but could be better in some areas.
- There are few landmarks or clusters of uses and very few food and drink businesses with outdoor seating, contributing to a lack of vibrancy.

The issues set out above have contributed to the decline of the town centre's retail and commercial offer.

A recent Retail and Leisure Study carried out in January 2018 by Peter Brett Associates also identified a number of issues in relation to Grays town centre. It found that Grays has more limited representation from national multiple retailers compared to 2007. Grays town centre now has just two of the current 28 Experian Goad key multiple retail attractors, compared to five in 2007 (WH Smiths, McDonalds, New Look, Woolworths and Boots). While outlets such as Costa Coffee and Subway have opened in recent years, there has been a preponderance of low level retail based around low value offers (outlets selling items for £1 or less) and pawn and money shops.[6] The study also found evidence of retail rents and the provision of rent free periods, which indicate low demand for retail space, and that the quality of lettings is poor compared to other retail locations in Thurrock. Furthermore, it identified that the evening economy is limited and could be improved by the introduction of more commercial leisure facilities together with an improved food and beverage offer.

Nonetheless, the town centre continues to provide essential civic/education functions for residents of Grays and the rest of Thurrock including the Council Offices, central library, museum, police station, theatre, South Essex College and a range of business services and banking functions. The Retail and Leisure Study recommended building on the importance of the town through its civic function in the Borough and recommended that other town centre uses should be encouraged since they drive day time footfall and have the potential to support additional retail shops and services.

In response to these challenges, the Council led a wide ranging consultation and engagement programme[7] to define a role for Grays going forward and develop a clear vision for the town's offer to local people. The vision, which was signed off by Thurrock Council Cabinet in July 2013, seeks to build on Grays existing strengths and supplement those with a greater convenience retail function, increased day time population and the development of an evening economy. This is further supported by the Thurrock: Your Place Your Voice public consultation exercise undertaken earlier this year.

The vision was underpinned by four principles which broadly cover the following areas:

1) Building the local economy which would be based on a diverse retail and leisure offer, supply of housing and of business accommodation;
2) Making it easier to travel in to and move around the town centre;

[6] https://www.thurrock.gov.uk/sites/default/files/assets/documents/ldf_tech_retail_201202.pdf see section 6.10

[7] A public consultation was carried out in 2013 that received almost 1,500 responses through a range of survey methods.

3) Enhancing the quality of the public realm; and
4) Supporting Thurrock's communities through opportunities for community activities.

The vision and principles have subsequently guided the Council's work which, together with the support of a range of partners, is already yielding positive results, as evidenced by the new £45m South Essex College Thurrock Campus, the refurbishment of the Seabrooke Rise Estate and the opening of a new Business Centre in the refurbished, former Magistrates Court (providing around 11,500 sq ft of accommodation for small and new businesses and supporting the creation of around 200 new jobs).

Whilst the projects that have already been brought forward are starting to address the declining town centre, a range of studies have consistently identified the need to overhaul the station and level crossing to provide a greatly enhanced arrival point to the town, improve the public realm and bring forward the quality of development which will encourage the private sector market to follow suit.

In particular, in line with the reports referenced above, the Council has identified two key challenges that are holding back the growth and regeneration of Grays town centre:

- The appearance and perception of the town has been identified as a significant barrier to securing the investment necessary to deliver these homes and jobs, as evidenced by the Montagu Evans and Hatch Regeneris report from 2018.
- The railway line which bisects the town is a barrier to pedestrian movements between Grays South and the town centre to the north, and therefore acts as a constraint to making Grays town centre a more integrated and accessible location. The Peter Brett Associates Retail and Leisure Study found that pedestrian accessibility through the town centre is impeded by the railway level crossing which severs the north and the south of High Street, resulting in a low pedestrian flow along the southern part of High street. The increasing frequency and duration of closures of the pedestrian level crossing creates a barrier to pedestrians wanting to access the town's retail offer. This issue is expected to worsen going forward as commercial rail freight from DP World increases.

In addition, Network Rail has identified the level crossing as one of the most dangerous in the Anglian Region. The level crossing has been given an All Level Crossings Risk Model (ALCRM) rating of D for individual risk and 1 for collective risk, which represent a high and very high rating respectively[8]. The number of instances of unsafe crossings is likely to increase as the frequency and duration of closure of the crossing increases the risk of pedestrians attempting to cross without waiting for the gates to open.

Furthermore, Network Rail has written to the Council to give formal notice of its intention to close Grays Level Crossing no earlier than three years from the date of a letter received on the 8th January 2016. This letter and the applicable text can be found in paragraph 3 of Appendix I. Network Rail reserves the right to exercise at its discretion the precise date of the closure after the three year grace period, but it is important to note that the likelihood of Grays level crossing closing is exceptionally high. Since giving this formal notice, Network Rail has shown that it wishes to work collaboratively with the Council to close the level crossing and replace the method of crossing the railway with a pedestrian underpass. As such, Network Rail has provided a letter of support for this submission (see Appendix J).

There is a pedestrian footbridge adjacent to the level crossing but this asset has come to the end of its life-cycle and Network Rail does not wish to continue to maintain this once the crossing

[8] The letter represents the individual risk with A being the highest and M being the lowest. Individual risk is the annualised probability of a fatality to a 'regular user', being taken as a person making a daily return trip over the crossing, assumed to be 500 traverses per year. The number represents the collective risk, being the risk to crossing users, rail staff, and passengers. 1 is the highest and 13 is the lowest. Collective risk considers the total risk for the crossing, including users (pedestrian and/or vehicle), plus train staff, plus passengers. Crossings ranked 1 to 3 are considered particularly high risk. See: http://bailey.persona-pi.com/Public-Inquiries/Essex/NR%20Dox/NR26%20Statement%20of%20Case.pdf

closes. This footbridge is not suitable for users who are mobility-impaired and at times when the crossing is closed for maintenance the footbridge has become grid-locked with users carrying pushchairs, shopping trolleys and wheelchairs over the bridge. Users tend not to use this footbridge due to the amount of stairs, lack of lighting and blind spots.

The Office of Road and Rail has also recently written to the Council to express its safety concerns. Both Network Rail and Thurrock Council are keen to close the level crossing to remove this risk to public safety.

The Council and its delivery partner Network Rail are therefore proposing the following:

1. Creation of an 8m wide pedestrian underpass to replace the existing pedestrian level crossing thereby addressing both the safety concerns shared by Network Rail, Thurrock Council and other bodies and the significant severance the crossing creates within the town centre.
2. Creation of new public squares at both ends of the underpass to create well designed public realm, providing a high quality arrival point, meeting and event space and better links between the town centre, College and High Street. This improved public realm will bring vibrancy and vitality to the town centre, support local businesses, set a benchmark for quality and make Grays more attractive to external investors.

As demonstrated by studies[9] which have been undertaken to date by the Council, the space required for this new infrastructure requires the demolition of surrounding properties and consequent loss of commercial floorspace. In time, these demolitions will provide the space for the development plots to replace the lost commercial space, providing new modern commercial floorspace and flats.

In summary, the delivery of the underpass, its associated infrastructure and the public squares will help to:

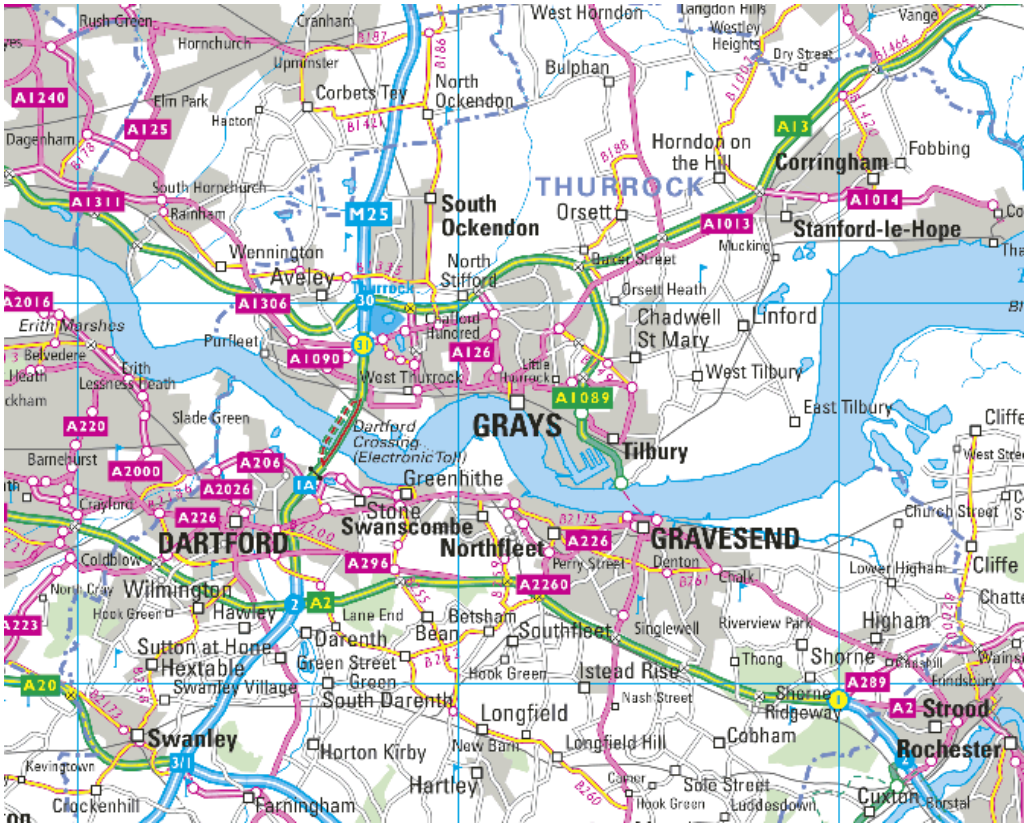
- Address safety concerns identified by Network Rail;
- Prevent increased severance in the town centre as a result of the closure of the level crossing;
- Create a higher quality public realm, with public squares that can better support community events;
- Integrate public and private transport to create a genuine multi-modal hub for pedestrians and cyclists together with bus and taxi passengers – including DDA compliant access to the station platforms;
- Redevelop plots around the public squares to create premises more conducive to attracting retail, cafés and restaurants with residential and office accommodation in upper floors – this has the potential to deliver up to 400 new homes; and
- Support the Council's refurbishment and development of the Civic Offices in Grays where it is proposed an extension to the main office will be built. This will help to maintain the Council's presence in Grays and enhance footfall for the town centre, as the extension will permit the consolidation of Council staff from other premises located throughout the borough and will also permit the co-location of other public services.

[9] Ramboll Grays Town Centre Public Realm Improvement Module 3 Report 2013; WS Atkins CP5 Anglia Grays Pedestrian Underpass GRIP 2 Development and Selection of Access Option 2015

2.2. Location description:

[Describe the location (e.g. characteristics, access constraints etc.) and include at least one map; max. 1 page excluding map.]

The project is located in Grays town centre. Grays is situated to the south of Thurrock, on the northern bank of the River Thames.

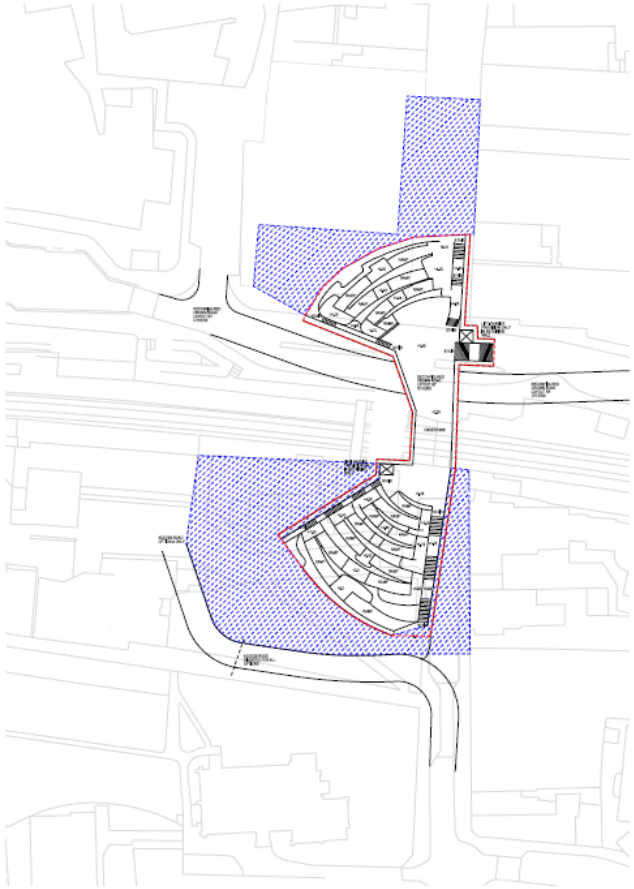


The site of the proposed underpass is at the crossover point between High Street and Crown Road in Grays town centre and is designed to provide uninterrupted passage between the north and south sides of High Street under the Essex Thameside rail line, as shown in section 1.5. The main town centre uses (comprising a shopping centre, major supermarket, small scale retail and business uses) are concentrated to the North of the railway line. However, the southern side of the railway line hosts important civic functions such as the Council Offices, the South Essex College Thurrock Campus and the Beehive Voluntary Community Resource Centre as well as important open space in Kilverts Field and Grays Beach Park and the Thames riverfront. The level crossing is a clear barrier to pedestrian movement between the two areas.

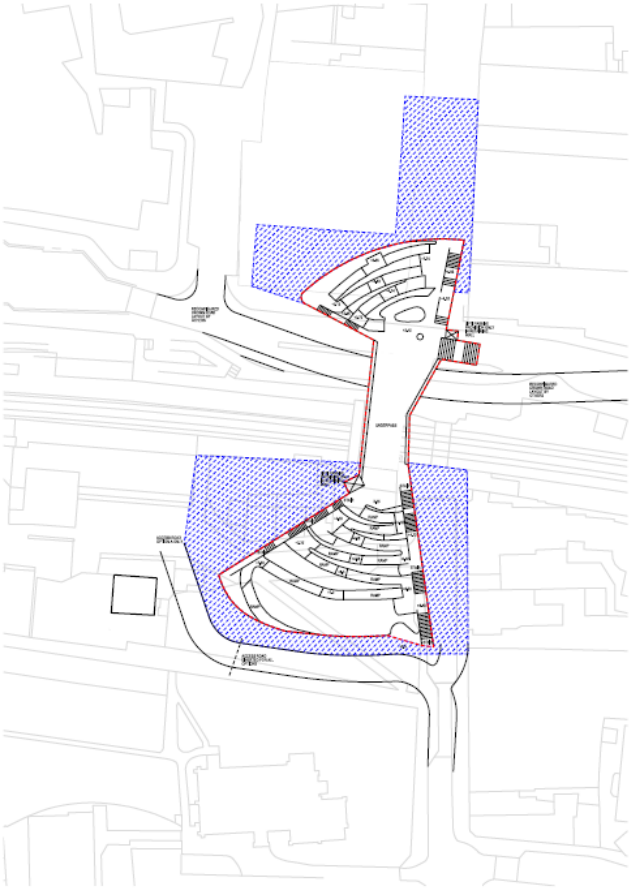
The area generally has low quality urban design although the College Campus, grade II listed church and new residential development at Seabrook rise are notable exceptions. Public realm in the town centre and around the station is of poor quality which limits both private sector investment and visitor dwell time.

Residential areas border the town centre on all sides however there is very limited residential accommodation in the town centre itself.

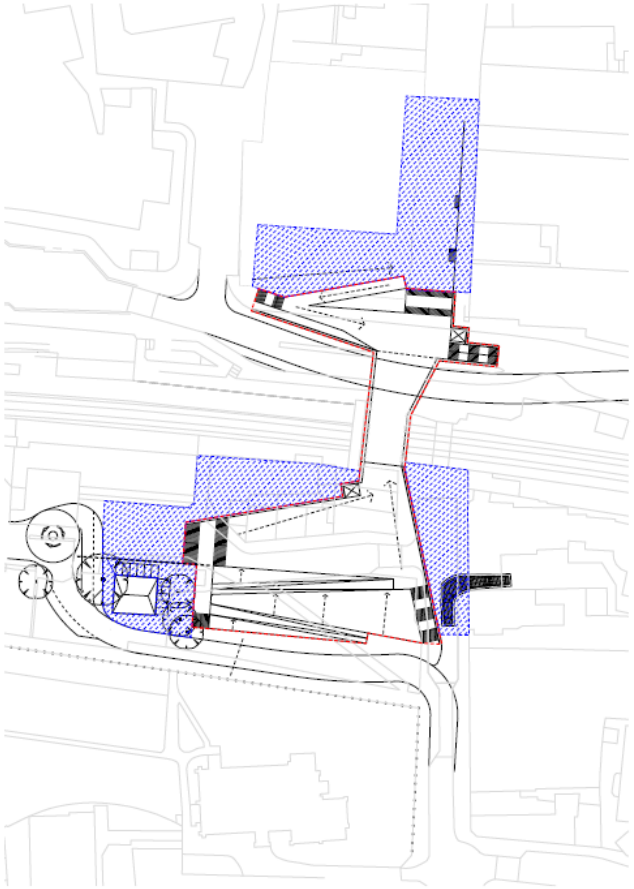
Images of the area are presented on the following page, based on three concept designs that have been developed as part of GRIP Stage 3. The final site area will be confirmed following the completion of GRIP Stage 3, and option selection.



OPTION A
Additional Public Realm Total: 2860sqm



OPTION B
Additional Public Realm Total: 2535sqm



OPTION C
Additional Public Realm Total: 2663sqm

2.3. Policy context:

[Specify how the intervention aligns with national/regional/local planning policies and the SELEP SEP; max. 3 pages.

Smaller schemes: *(less than £2 million) are required to complete this section in line with the scale of the scheme; max. 1 page]*

SELEP Strategic Economic Plan

In common with the LEP's priority to build more housing, Thurrock's Strategic Plan highlights significant growth potential in Grays and its immediate hinterland with sites identified capable of supporting 4,540 new homes and 1,650 jobs. However, it is recognised that the appearance and perception of the town is a significant barrier to securing the investment necessary to deliver these homes and jobs.

In response to this challenge, the Grays South Project aims to create a new quarter within the town centre, based around a boulevard underpass linking two new public squares bounded by a series of mixed use developments (including the recently completed £45m Thurrock College campus) and integrating the rail station into High Street, including 1,279 sqm of new commercial and mixed use floorspace to replace the existing offer and 84 new homes.

This quarter will create a high quality arrival point and meeting place at the heart of Grays including new active public spaces designed to meet the requirements of street cafes, markets and entertainment defined by the new development.

In recognition of the importance of this project to the wider LEP objectives, the Grays South Project is specifically highlighted within SELEP's Strategic Economic Plan ("SEP") as 'Grays Station public Realm and housing'. It also features as part of the Thameside Towns programme within the South Essex Growth Strategy and Grays generally is one of six Growth Hubs identified within the Thurrock's Local Plan and Economic Growth Strategy.

This submission specifically seeks the necessary additional funding for the first stage of the Grays South Project – the creation of a new underpass to improve access from the north to south side of Grays town centre, the public squares and its associated infrastructure.

Whilst the subject of this business case is to request funding to support the development of the underpass and public squares, the wider strategic benefit of this new infrastructure will indirectly support the wider Grays South project. The wider project is expected to contribute to the targets of 4,540 new homes and 1,650 jobs through the delivery of 417 new homes and 41 gross jobs.

It will also support the creative, cultural and media, and the visitor economy sectors, identified as strengths for the LEP in the SELEP SEP. By improving the town centre, the LEP will improve the visitor economy and attract visitors to the area.

If this scheme is successful in addressing the image challenges faced by Grays it will also contribute towards the delivery of the further housing targets and the associated jobs.

The project aligns strongly to other national and local policies as set out below:

National planning policy

The National Planning Policy Framework (NPPF) sets out the Government's Planning Policies for England and how they are expected to be applied. The NPPF is supported by planning guidance practice which is published on line and regularly updated.

The NPPF supports sustainable development that contributes to a strong economy and strong vibrant communities. The planning process is expected to support and promote the vitality and viability of town centres as the heart of the community.

The NPPF practice guidance for Ensuring the Vitality of Town Centres explains (paragraph 001) that Local Planning Authorities should plan positively to support town centres to generate local employment, to promote beneficial competition within and between town centres, and to create attractive, diverse places where people want to live, visit and work.

The NPPF practice guidance for town centres (paragraph 002) explains the importance of a positive vision or strategy for town centres including town teams, town centre management organisations and neighbourhood planning.

Thurrock Council's vision and objectives for the Grays South project directly align with this policy guidance.

Local Policy

The Council's Local Plan Core Strategy was adopted in December 2011. Following a focussed review of policies, an amended strategy was adopted in January 2015.

Chapter 3 describes the Thurrock Spatial Vision for 2026. Para 3.10 explains that regeneration and growth will be focussed into five geographical areas for regeneration, one of which is Grays.

The spatial vision for Grays is to establish its role as the administrative centre for the Borough including municipal, education, health and leisure facilities catering for Thurrock's communities. The vision sets out that Grays will be regenerated and modernised through the following:

- The key civic, cultural and education centre in the Borough
- New homes and employment
- A new commercial and residential quarter south of the rail line
- A new transport zone around the rail station including an improved railway crossing
- Improved pedestrian environment including better links between north of the rail line and the south and riverfront.

The Grays South project aligns to this vision as well as to the following core policies within the Local Plan:

- **Housing**: Grays is a key location with capacity for 2,605 dwellings between 2009 and 2021 and indicative capacity for a further 1,935 dwellings to be developed between 2021 and 2026. The Grays South project will contribute to this by improving the perception of Grays and opening up investment in housing.
- **Employment and growth**: Grays is one of the Thurrock's Key Strategic Employment Hubs. The core sector in Grays town centre is retail with growth sectors identified as business services, recreation and leisure and public services to support growth and 1650 additional jobs. The Grays South project will contribute to this by attracting investment in commercial space to Grays and generating business and employment growth through promoting a vibrant town centre and 18 hour economy.
- **Network of Centres**: Core Strategic Policy CSTP 7 defines the role of Grays town centre based around culture, administration and leisure with a retail offer that is complimentary to Lakeside. The Grays South project will help regenerate the town centre and improve its retail and cultural offer.
- **Viability and vitality of town centres**: Core Strategic Policy CSTP 8 promotes the viability and vitality of town centres by supporting appropriate housing, employment, retail,

cultural, entertainment, leisure and community uses, the quality of the public realm and accessibility. The Grays South project directly aligns to this policy through the accessibility enabled by the underpass and the planned public realm improvements which aim to support the wider vitality of Grays town centre.

- **Transport and accessibility**: 'Transport in the Thurrock Urban Area' identifies the importance of delivering a coordinated transport network including cycle and pedestrian routes, particularly within the growth hubs and with a focus on access to employment, education and transport facilities Grays rail station is identified as a transport interchange, including the implementation of the Transport Zone. The proposed underpass directly supports this integration.
- **Character and design:** Grays and Grays town centre are identified in the Local Plan and the Plan sets out the Council's vision for the Grays Regeneration Area as a focus for growth in jobs and homes, and for civic functions, culture and education, including a new transport zone around the rail station and an improved crossing of the rail line.

Local Transport Plan

The Transport Act and the Local Transport Act require Local Authorities to maintain a Local Transport Strategy. The Council adopted the current Local Transport Strategy in 2013 to support the delivery of the adopted core strategy. Policy TTS1 Delivering Sustainable Growth supports the formation of a Transport Zone around Grays Rail Station including an improved means of crossing the rail line. The proposed underpass will therefore directly support this policy.

Grays Vision

Following consultation with the public and local businesses, with over 1,500 responses, a vision was agreed by the Council's Cabinet in July 2013 which included the underpass as a means of maintaining and enhancing connectivity within the town.

Grays Development Framework

Following consultation, a Development Framework was adopted by the Council's Cabinet in March 2016. 85% of respondents to the consultation supported the approach set out for the town centre and 72% strongly or very strongly supported the underpass. A refreshed Framework was agreed by Cabinet in November 2017. The Framework refers specifically to the underpass.

2.4. Need for intervention:

[Specify the current and future context and articulate the underlying issues driving the need for intervention referring to a specific market failure, need to reduce externalities, Government redistribution objectives etc.; max. 2 pages.]

As noted in section 2.1, there are barriers which are inhibiting investment in the town, and therefore Thurrock Council's ability to secure the delivery of the large numbers of homes and employment that the area could support. The quality of the public realm and the severance caused by the railway line have been identified as key contributions to the constrained level of footfall and spend in the town centre. This impact will be heightened with the planned closure of the level crossing by Network Rail.

The creation of a new underpass to enable a better connection between the north and south sides of the town centre is expected to help unlock the wider regeneration and connectivity improvements in the town centre.

While the underpass will ultimately benefit the economy and residents of the locality, the underpass itself would not provide a direct commercial return to a private investor and therefore the private sector would not directly deliver the public infrastructure. It is a "public good".

There are also positive externalities associated with the project as the underpass is key to being able to unlock the later phases of the Grays South Project, and will provide direct benefits to public users whose access along the high street would otherwise be severed when the level crossing closes.

As such, intervention is required at this stage in order to 'kick-start' the project and the Council fully anticipates that once the redevelopment area is confirmed through the creation of the underpass, it will be able to fully explore the commercial opportunities that can arise from this improved infrastructure.

The specific challenges being responded to through the creation of the underpass and public squares are as follows:

Safety: Network Rail has identified the existing level crossing as one of the two most dangerous in the Anglian Region. The level crossing has been given an All Level Crossings Risk Model (ALCRM) rating of D for individual risk and 1 for collective risk, which represent a high and very high rating respectively. Whilst there have been no serious injuries or fatalities, the level of misuse from people jumping the barriers or accessing the tracks from the level crossing gives rise to an undeniable and significant level of risk. The number of instances of unsafe crossings is likely to increase as the frequency and duration of closure of the crossing increases the risk of pedestrians to cross without waiting for the gates to open. This issue is exacerbated through an increase in the level of passenger and freight traffic on the network. The number of pedestrians or cyclists per day using the crossing has increased from 8,806 in February 2015 to 9,541 in August 2017.[10] The increase in freight traffic has been driven in part by the accelerating development of London Gateway putting more, longer freight trains on the line resulting in more instances where the barriers are down and for longer periods of time.[11] These safety concerns reflect individuals' imperfect perception of risk – a market failure that results in, in this instance, individuals valuing the short term, certain, time savings more heavily than the risk-weighted cost of being involved in an accident. Furthermore, individuals will not take into consideration the wider negative cost, or externality, of a rail incident, including time cost to passengers, health service costs and cost to the operator of compensation and damage.

In order to reduce the incidents of misuse, the British Transport Police have recently increased patrols of the station. However this is not a long term solution.

Therefore, due to these safety concerns, Network Rail has resolved to close the crossing (see paragraph 3 of letter in Appendix I). The underpass is Network Rail's preferred method of securing this, failure to secure its delivery is likely to see it closing the crossing and replacing it with an upgraded bridge; but with poorer accessibility for people with limited mobility or the removal of the footbridge entirely as the footbridge and level crossing were always meant to be used in conjunction with one another.

Enhancing Connectivity: Currently there are 129 passenger trains passing through the crossing each day together with freight trains. These require gate closures at the crossing of 5-12 minutes duration. The frequency and duration of closures will increase with planned increases in the passenger service from 2020 and the planned growth of Port of Tilbury and London Gateway. Therefore even if the crossing was retained, the level of severance and safety risk will increase. The closure of the level crossing and its replacement with a bridge or no alternative crossing would sever the longstanding connection between the northern and southern sections of High

[10] Network rail. Level crossing safety. https://www.networkrail.co.uk/communities/safety-in-the-community/level-crossing-safety/

[11] London Gateway is providing new deep sea container handling facilities and is planned to serve Europe's largest logistic park.

Street, slowing much of the momentum that has been created through the College development and undermining the ambition to reconnect the town with its waterfront. The underpass will enable uninterrupted movement across the rail line. This improved connectivity provided by the underpass will generate positive externalities in the form of time savings to pedestrians and commuters as well as facilitating the flow of pedestrians to the town centre.

Retaining & Enhancing Quality of Public Realm: The chosen design of the underpass will support an enhanced public realm by avoiding the need for complex (and bulky) bridge/ramp structures and will cater for the growing number of passenger movements through Grays Station. This, combined with the new public squares that will accompany the underpass, will increase the attractiveness of Grays town centre and provide improved public realm and ambience benefits.

Facilitating Intermodal Travel: The underpass proposals have been identified as the optimum method for tying the public/private transport modes together within an integrated and accessible public realm that can provide direct access to the rail platforms. This will generate public benefits in the form of time savings and benefits from reduced car use.

Housing: Housing demand in the area continues to outstrip supply and more houses are required to meet future demand. The infrastructure being developed to support the underpass will require the demolition of some of the surrounding properties. As a result of this, the project provides the opportunity for these commercial properties to be rebuilt to encompass residential units above commercial/ mixed use units. This will allow for 84 new homes to be built on the site of the project, adding to Thurrock's housing supply.

Supporting Retail & Commercial Development: The demolition of properties on the project site (noted above) will result in the loss of some commercial space. However, this provides the opportunity to reshape the town's commercial offer by providing a better quality retail experience for consumers through easier passage between the north and south side of the rail line, thereby allowing for improved access to the main commercial area and also providing higher quality commercial space for prospective retailers and employers. This aims to subsequently attract higher quality retailers and employers which will in turn attract more visitors to Grays, with catalytic effects.

2.5. Sources of funding:

[Promoters should provide supporting evidence to show that:

- *all reasonable private sector funding options have been exhausted; and*
- *no other public funding streams are available for or fit the type of scheme that is being proposed*

Public funding is regarded as a last resort. Promoters are encouraged to think carefully about and provide strong evidence that the intervention they are proposing has exhausted all other potential sources of funding and there is a genuine need for intervention from the public sector; max. 1.5 pages.]

The purpose of the funding being sought in this application is to support the delivery of the underpass itself and the associated access points (e.g. steps, lifts, ramps etc.). Whilst this business case sets out the potential commercial benefits which will be derived from delivering this new infrastructure, the underpass itself will only deliver direct benefits through that of removing safety risk and removing barriers to movement in the town. There is therefore no direct commercial benefit from the underpass on its own, hence the requirement for public intervention to 'kick-start' this scheme.

In the absence of LGF funding, the most likely alternative sources of funds are through the Council or Network Rail. Both sources have been discounted.

The Council is already investing £10.4m through the capital programme to support land acquisition and urban realm developments.

Furthermore, the Council will be taking the full commercial risk on the ability to generate the anticipated development receipts following delivery of the underpass on the commercial redevelopment of the town centre and the Civic offices. The Council is unable to take out the further borrowing needed to provide the balance of funding at this stage because of the impact of further debt repayments on the Council's Medium Term Financial Strategy and its ability to undertake other capital works. Network Rail is providing funds through the Network Rail Level Crossing Risk Reduction Fund.

As a result of changes to Network Rail's funding position, there are no other funds currently available to support the delivery of the project. Those funds already committed were time limited. Thurrock Council will be seeking further contributions from Network Rail but these have not yet been confirmed and therefore the progression of the project cannot be based on the expectation of this funding coming forward. Outside of the two partners, there are not considered to be any immediately available alternative sources for the additional funds required.

S.106 funds have been secured but the rules on pooling s.106 contributions mean that there is no scope for further contributions to this project.

2.6. Impact of non-intervention (do nothing):

[Describe the expected outcome of non-intervention. Promoters should clearly establish a future reference case and articulate the impacts on environment, economy and society, if applicable. The future reference case should acknowledge that market conditions are likely to change in the future, with or without any intervention. 'Do nothing' scenarios where nothing changes are unlikely; max. 1 page.]

Without securing the necessary additional funds to close the existing gap the project will be unable to proceed. On that basis, we would expect Network Rail to close the crossing on safety grounds and it has expressed its wish to do so via various correspondences with Thurrock Council, most recently via the letter included in Appendix I; with no commitment to providing an alternative or what form the alternative might take. Whilst, in the face of no connection, as explained above, a footbridge would be preferable, it would not achieve the stated objective of Thurrock Council of this project. We explain our assessment of a bridge as an alternative option in section 3.1.

A lack of support for the underpass would impact on the subsequent design of the public realm and the Council's ability to bring forward a broader enhancement scheme to improve the appearance and perception of the town in order to attract investment. The redevelopment of plots around the public squares relies on the provision of the underpass and development of the public squares. These could not be brought forward without the underpass as they fall in the construction boundary/likely site compound. Without these elements of the development, the problem of the perception of the town centre will remain and the redevelopment of these plots would not generate the required returns to secure investment. Finally, the benefits of the refurbishment and development of the Civic Offices would be limited if not completed as part of the wider public realm improvements, and therefore would be unlikely to go ahead if the wider project did not receive support.

Therefore, in the absence of this intervention, the perception of the town centre could continue to decline, as a result of continued lack of investment and the impact of severing the north and south ends of the High Street.

2.7. Objectives of intervention:

[Outline the primary objectives of the intervention in the table below, and demonstrate how these objectives align with the problems presented in the Need for Intervention section.

Project Objectives

Objective 1: To improve public safety at the site of the level crossing by 2024, measured by Network Rail no longer allocating an All Level Crossing Risk Model (ALCRM) rating due to improved safety and the removal of the level crossing.

Objective 2: To maintain footfall along Grays High Street by 2024 by creating an equalities compliant, unimpeded route across the railway line from one side of Grays High Street to the other; measured by a town centre pedestrian count; and

Objective 3: To deliver and create a high quality public realm at Grays by 2024; measured by improved PERS assessment score and a Walkscore of between 90-100.

Objective 4: To improve connectivity between different modes of transport around Grays station by 2024; measured by an improved connectivity score in a Grays public perception survey.

Objective 5: To increase housing supply, by enabling the delivery of 84 new homes on the project site by 2025.

Objective 6: To support commercial development in Grays by creating a more attractive town centre and higher quality commercial space. This will be measured by:

a. Redevelopment of 1,279 sqm of commercial/ mixed use floorspace by 2025.
b. Improved score relating to the quality of the commercial/ mixed use experience in Grays obtained in a Grays public perception survey.
c. Improved score relating to the attractiveness of Grays as a place to do business obtained in a Grays survey of local businesses.

Problems or opportunities the project is seeking to address

Problem 1: The rail crossing is identified as one of the most dangerous in the Anglian region and poses a significant level of risk to the public.

Problem 2: Connectivity between the north and south sides of High Street is hampered by the rail crossing, creating an interrupted flow of movement between the two sides.

Problem 3: Existing public realm spaces are of poor quality and create a negative image of the town from a gateway perspective. An improved gateway and public realm will act as a catalyst for further private sector investment.

Problem 4: Transport linkages around Grays rail station are not well integrated, made worse by the level crossing which prevents easy interchange between transport modes. The proposed underpass will directly support improved transport integration.

Problem 5: Housing demand in the area continues to outstrip supply and more houses are required to meet future demand.

Problem 6: The retail and commercial offer in the town is in decline. Recent interventions have improved this, however, an improved gateway will offer better, more suitable commercial space for prospective businesses.

[Complete the following using a system of 0, ✓, ✓✓, ✓✓✓which maps the objectives to their ability to address each problem. Add rows and columns as required and note not all sections of the table may require completion; max. 1 page.]

	Problems identified in Need for Intervention section				
	Connectivity	Crossing Safety	Public Realm Quality	Retail/ Commercial Quality	Housing Demand
Objective 1	✓✓✓	✓✓✓	✓	✓	✓
Objective 2	✓	0	✓✓✓	✓✓	✓✓
Objective 3	0	0	✓✓✓	✓✓✓	✓✓✓
Objective 4	0	0	✓✓✓	✓✓✓	✓✓
Objective 5	0	0	✓	0	✓✓
Objective 6	0	0	✓	✓✓✓	✓

2.8. Constraints:

[Specify high level constraints or other factors such as social/environmental/financial/ developments/schemes/legal consents and agreements which may affect the suitability of the Preferred Option; max. 0.5 page.]

The main constraints to the delivery of the project relate to planning, land assembly, funding, stakeholder support and ground conditions. There is a linked delivery constraint/dependency in respect of the funding contributions expected from the development receipts. Each of these are considered below.

Planning

There is currently no planning consent in place. However, the scheme is supported by the adopted Local Plan and the Grays South scheme is specifically included in the Development Framework that has been adopted by the Council. The public consultation on the Framework indicated very high levels of public support for the proposals. Planning consent will be required to support the delivery of the project and the time and cost of this activity is built into the project programme and budget. Thurrock Council is in the process of preparing an outline planning application with a view to obtaining consent in 12 months.

Land Assembly

Network Rail and Thurrock Council own approximately two thirds of the land required to deliver the proposals. The remaining land is held by a number of third parties and will need to be acquired. The Council has already committed to make these acquisitions and made provision for the associated costs within its Capital Programme. Agents (Montagu Evans) have been appointed and are actively engaged in discussions with the interested parties (leaseholders and freeholders).

Within the agreed acquisitions strategy, every effort is to be made to acquire the properties through negotiation. However, it is anticipated that a Compulsory Purchase may be required. The Council resolved to use compulsory purchase powers if necessary at its Cabinet meeting of April 2017.

The time required to do so is built into the project programme. The Council team has good experience of the CPO process having undertaken three CPOs in the recent past to deliver regeneration projects in the Borough including a new Community Hospital and College Campus in Grays town centre. The major challenges to any CPO process revolve around evidencing

planning support, the availability of sufficient funding to deliver the ultimate project and an overwhelming public benefit.

It is anticipated that the Council will make the second resolution (which formally commences CPO proceedings) following the grant of planning consent – thereby addressing the planning challenge. The time required to undertake and complete a CPO – including any time required to go through arbitration to determine land value etc. – is built into the project programme.

Funding

The availability of funding will need to be evidenced at the time of any CPO public inquiry and the Council will need to evidence that all necessary funds are in place. This is covered below.

The overwhelming public benefit will again have to be proven at the time of any public inquiry, but given the nature of the scheme and the facilities and services which are being provided, there is not considered to be any significant risk in preparing a suitably robust case to evidence this point.

Stakeholder Support

Stakeholders have been informed and engaged throughout the development of the project to date and will continue to be engaged as the project progresses. The project has been reported regularly to the Grays Town Partnership where there has been clear support. Consultation completed earlier this year on the Grays Development Framework showed that 82.27% of respondents supported the proposals for the Town Centre and Station Quarter and that 72.87% either supported or strongly supported the proposals for an underpass. There are not considered to be any major objections to the delivery of this scheme.

Ground Conditions

Ground conditions present a potential technical constraint for the project. Some initial ground investigation surveys of the site have been undertaken by Volker Fitzpatrick's subcontractors. Some preliminary results have been provided (see Appendix N) however the Council is currently awaiting final results from the survey which are needed for the initial assessment of the ground conditions. More detailed surveys will be carried out as the project progresses.

The risk relating to this constraint has been factored into the 30% risk adjustment to costs (see section 5.4).

2.9. Scheme dependencies:

[Provide details of any related or interdependent activities that if not resolved to a satisfactory conclusion would mean that the benefits of the scheme would not be fully realised; max. 0.5 page.]

The LGF funding request for Grays South relates to Phase 2a of the wider GSRA, which comprises:

- Phase 1: Extension to Civic Offices
- Phase 2a: Creation of an underpass to replace the level crossing and creation of public squares at each end, designed to provide active urban spaces suited to a wide range of events, markets and similar activities.
- Phase 2b: Creation of new, modern commercial/mixed use floorspace (c1300sq.m) and residential units above (c84 flats) on land created by phase 2a to provide definition to the public squares, street cafes, residential and commercial space and opportunities for urban living. These will contribute towards generating additional footfall within the town centre, support the development of an evening economy, and respond to a lack of town

centre facilities to serve the c4million passenger movements per year through the rail station.

The direct housing benefits from the scheme in the form of land value uplift rely on the completion of phase 2b – relating to the development of mixed-use plots released by the development of the public squares. These plots will either be: sold for development; developed by the Council-owned Thurrock Regeneration Ltd; or developed in partnership with Network Rail and C2C. The approach to development is expected to be selected to enable development to commence towards the latter stages of the construction of the underpass and public realm.

With regards to funding, £12.3m has been secured to date by Thurrock Council and Network Rail. A further £3.7 has been secured from the LGF via SELEP. The funds from the Council (made up of £10.4m from the capital programme and £1.2m in s.106 funds) are confirmed and the Network Rail funding has already been spent.

Part of the funding package is derived from receipts generated by the future development of plots in and around the project area. These make up approximately £5.6m of the project budget. Due to the timing of these receipts, the Council will meet this commitment through its own borrowing and as such, will bear all risk if the receipts were not ultimately generated.

2.10. Expected benefits:

[This section identifies scheme benefits (which will be achieved through delivering the scheme) which may not be valued in the Economic Case. Specify the extent of the scheme benefits referring to relevant economic, social, environmental, transport or other benefits. This is where any 'GVA based' estimates of benefits should be reported together with any dependent development (e.g. commercial or residential floorspace). Please reference the relevant section of the Economic Case where additional information regarding the assessment approach can be found; max. 0.5 page.]

The project's main focus is the building of an underpass and public squares to replace the existing pedestrian level crossing.

This will have quantifiable impacts including:

- no loss of life or injury on the crossing
- reduced costs associated with incidents of misuse and accidents at the level crossing
- benefits from increased physical activity from increased walking
- reduced costs associated with car use
- ambience benefits from public realm improvements.
- pedestrian and driver journey time savings.

In addition, there will be direct positive unquantifiable impacts such as:

- avoided near misses reported on the level crossing
- reduced vandalism of the level crossing.

The project is also expected to have further wider benefits through the development of plots around the public squares. This will generate quantifiable impacts such as:

- 84 new homes directly enabled created on the site of the project
- 417 new homes catalysed in the wider regeneration of Grays

1,279 sqm gross commercial floorspace redeveloped excluding the Civic Centre[12]

There will be additional unquantifiable benefits to the area including:

- temporary GVA impacts generated from the construction phase of the project
- GVA and employment impacts from increased footfall (and the prevention of a decline in footfall) in the town centre generating increased spending and activity
- reduced and avoided severance impacts from the rail line
- increased productivity of commercial space through later opening and development of an evening economy
  a catalytic impact on potential further developments through making Grays a more attractive investment opportunity.

2.11. Key risks:

[Specify the key risks affecting delivery of the scheme and benefit realisation e.g. project dependencies, stakeholder issues, funding etc. Information on risk mitigation is included later in the template. This section should be kept brief and refer to the main risk register in the Management Case; max. 0.5 page.]

The major technical risk is in respect of encountering unexpected ground conditions not identified by current surveys. Desk top studies, radar surveys and some intrusive surveys have provided information to inform design work to date and further, more detailed surveys would be carried out as the project progresses and the timing and costs of these works have been built into the project programme and budget.

This work will be undertaken by Network Rail at the GRIP 3 stage of the process which is due to commence imminently. Within Network Rail's costings for the delivery of the underpass, there has been the inclusion of contingency within their costings to cover potential eventualities such as this. This has been calculated in line with industry standards and reflective of this type of development works.

Risks are actively monitored by the project manager and recorded within a risk register which notes the severity and impact of the risk as well as mitigating actions to be undertaken. This is discussed further within the management case.

[12] These figures are based on plans developed by Montagu Evans for the development of the sites around the public square.

3. ECONOMIC CASE

The economic case determines whether the scheme demonstrates value for money. It presents evidence of the expected impact of the scheme on the economy as well as its environmental, social and spatial impacts.

In addition to this application form, promoters will need to provide a supporting Appraisal Summary Table (AST). This should provide:

- *a calculation of Benefit-Cost Ratio (BCR) according to the DCLG Appraisal Guidance, with clearly identified, justified and sensitivity-tested assumptions and costs*
- *inclusion of optimism bias and contingency linked to a quantified risk assessment*
- *inclusion of deadweight, leakages, displacement and multipliers*

Smaller schemes (less than £2 million) are not required to provide a supporting AST, and do not have to calculate a BCR.

3.1. Options assessment:

[Outline all options that have been considered, the option assessment process, and specify the rationale for discounting alternatives.

Promoters are expected to present a sufficiently broad range of options which avoid variations (scaled-up or scaled-down version) of the main options. The key to a well scoped and planned scheme is the identification of the right range of options, or choices, in the first instance. If the wrong options are appraised the scheme will be sub-optimal from the onset.

<u>Long list of options considered:</u>
Description of all options which have been considered to address the problem(s) identified in the ***Need for Intervention*** *section above, including options which were considered at an early stage, but not taken forward.*

Network Rail has resolved to close the Grays level crossing on safety grounds.[13][14] Therefore, to address the issue of safety whilst meeting the other objectives of the project, there are 3 options that have been considered, in addition to the 'Do Minimum' of Network Rail removing the level crossing with nothing to replace it:

A. To replace the level crossing with a pedestrian underpass.
B. To replace the pedestrian crossing with a new footbridge over the railway line.
C. To remove the level crossing and refurbish the existing footbridge.
D. To remove the level crossing and existing pedestrian footbridge with no replacement crossing.

<u>Options assessment:</u>
Describe how the long list of options has been assessed (assessment approach), rationale behind shortlisting/discarding each option.

In the early stages of option testing, Thurrock Council worked in collaboration with Network Rail to assess each of these options and agree on a preferred option. In December 2012 Thurrock Council commissioned Ramboll and Coe Design to develop options for replacing the current arrangements for crossing the rail line whilst improving the appearance of the arrival point in to

[13] Appendix R: Network Rail Safety Census

[14] Appendix H: Network Rail Letter – Grays Level Crossing: Notice of proposed closure

the town and the area between the rail station and the college. The study followed three broad stages; baseline, development of options and the development of a preferred option. The proposals identified a range of public realm improvements coupled with options for enhancement of the rail crossing.

The proposals were discussed with Ward Members at the options stage and the underpass was considered to be the favoured option as it provided "the greatest opportunity to create a continual flow for pedestrians within a very high quality landscaped public realm which could be integrated with a redeveloped rail station that enhances the arrival point in the town centre". The options for a bridge were also considered, but it was decided that these "would require substantial above ground structures incorporating steps and lifts. Consequently these are not considered to offer the same benefits as an underpass."[15]

More detail on the each option considered is set out below.

Option A - the underpass - was jointly selected by Network Rail and the Council as the preferred option to replace the level crossing because it will enable uninterrupted movement across the rail line and could cater for the growing number of passenger movements through Grays Station. Furthermore, this option offers the potential for an enhanced public realm by avoiding the need for complex (and bulky) bridge and ramp structures.

Option B - a new bridge - was recognised as the lowest cost option and considered as the most viable alternative to the underpass. The requirements for a new bridge were scoped as part of the Ramboll Module 2 study and Module 3 (see Appendix Q and Appendix R). This determined that a new bridge would need to be higher (5.8m) than an underpass would be low (5m) because of the need for clearance of overhead power lines. Therefore, a bridge would require more land for ramps to provide the same level of accessibility, as required under the Equalities Act.

A bridge would result in large structures that would undermine the setting and interrupt sight lines of the Grade II Listed St Peter and St Paul's Church. This would negatively impact the public realm and therefore bring dis-benefits as well as compromising the planned wider development of Grays due its imposing structure. It would, therefore, impact on the subsequent design of the public realm and the Council's ability to bring forward a broader enhancement scheme and greater integration of the various modes of transport.

The equality impacts of a new footbridge were also considered. A bridge with a ramp would be needed to meet equality considerations, at additional cost. A bridge funded solely by Network Rail would have lower levels of disability access as it would adhere only to its own minimum standards. This would not meet the project equality objectives set by the Council, which includes the ability to navigate across the railway as easily as possible and with as short a distance of travel as possible using ramps, relative to the most direct route[16]. Due to the wider considerations of the Council in terms of the benefits to its citizens and the Grays economy, the Council could not support an option that adhered only to the minimum standards for disability and did not meet its own objectives for the project.

Furthermore, within the underpass proposals there is the potential to provide direct access to the platforms from within the underpass enabling direct access for pedestrians and cyclists and a much higher level of integration north and south of the underpass with buses and taxis. There would be no scope to provide this level of accessibility through a bridge solution which would

[15] Appendix O – Thurrock Council: Cabinet Report, July 2013

[16] Appendix S – Thurrock Council Route Requirements Document

serve to reinforce the existing relationships whereby buses and taxis serve one platform directly while cars and pedestrians directly access the other.

A stepped bridge would be around two thirds of the cost of the proposed underpass, but would not provide the required accessibility. A bridge with ramps has not been costed so cannot be directly compared to the underpass, however we expect that it would cost more than a stepped bridge, but less than the underpass.[17]

Option C – refurbishing the existing footbridge - was rejected as the existing footbridge was designed only for occasional, temporary use while the level crossing is closed. The specifications of the existing footbridge are not compliant with the Department for Transport (DfT) Design Manual for Roads and Bridges for use as the only pedestrian route. It does not have the capacity to accommodate the footfall that would use it if the level crossing was closed. More detail relating to this can be found in Appendix T – Grays Footbridge Asset Information.

Furthermore, upgrading the existing footbridge would not allow for disability access, meaning it would discriminate against people with disability and mobility difficulties. The road-bridge to the east of the level crossing that provides an alternative crossing point has an incline of 1:18, greater than the recommended maximum gradient of 1:20 for ramp access without flat rest areas.[18]

This means that refurbishing the existing footbridge could provide only a short term, suboptimal solution, and the option of maintaining footbridge access rather than a new underpass would require a new footbridge to be built, as set out in option B.

Option D – providing no replacement footbridge or an underpass - was rejected as there is no reasonable alternative crossing point available. The closest alternative crossing is a road bridge located 177m along the rail line to the east, the use of which would mean pedestrians would bypass much of the town centre and therefore it would not provide the required access to the town centre from the Grays South and the station. This is the “Do Nothing” option.

Preferred option: Option A has therefore been identified as the optimum method for tying the public/ private transport modes together within an integrated and accessible public realm that can provide direct access to the rail platforms.

Short list of options:
The ‘Options Assessment’ section is an opportunity to demonstrate how learning from other projects and experience has been used to optimise the proposal, and the Preferred Option is expected to emerge logically from this process; max. 2 pages.

Smaller schemes (less than £2 million) are required to complete an Options assessment which is proportionate to the size of the scheme; max. 1 page.]

In February 2017 the Council received confirmation that it would receive funding for this project from the Local Growth Fund which completed the funding package. In April 2017 the Council’s Cabinet determined that the project should now be implemented, the report can be viewed here[19] at item no.128.

[17] Ramboll. Grays Town Centre Public Realm Improvement Module 3 Report 2013

[18] Building regulations 2010.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/441786/BR_PDF_AD_M2_2015.pdf

[19] https://democracy.thurrock.gov.uk/ieListDocuments.aspx?CId=129&MId=5169

Having agreed on an underpass as the preferred approach to the pedestrian rail crossing, the Council has been working with Network Rail to develop the proposals for the underpass, with Network Rail leading the technical design and the Council leading land acquisition and urban design.

Having rejected all alternatives to an underpass, an assessment was made of a short list of options which were presented in the business case submitted to the February 2019 Accountability Board. Network Rail funded the design of four options, of which one was considered to be the preferred option. However, even as the preferred option among those options developed, it did not fully meet the list of requirements set out by the Council in the Route Requirements Document (see Appendix S), including:

- The underpass ramps should, as far as possible, involve as short a distance of travel using the ramps relative to the most direct route.
- Users of the underpass shall have a clear line of sight from the entrance to the exit, and from the mid-point within the underpass to the head of the ramps to improve safety.
- Steps and ramps shall be provided that minimise the travel distance between the north and south of the High Street and between the underpass and the station platforms.

For this reason further design concepts have been developed which refine the design options to better meet the list of requirements. In each case the design of the underpass itself is the same, however, each of the concepts presents a different design approach for the ramps/steps and the public squares.

Of these new design concepts, Concept A most closely aligns to the previously preferred Option 4. Concept B is similar to Concept A, but with the location moved to avoid the need to divert utilities and with a slightly larger land-take to provide more space. Concept C is a refined option that provides a more open structure, with better views from the mid-point of the underpass and fewer sharp direction-switching points for ramp users.

The differences between the concepts can be summarised as follows:

Concept	Description	Pros	Cons
Public Realm Concept A	Crescent shaped integrated ramps and steps Cost: £16.0m	– Footprint: Smallest land-take – Alignment: Direct alignment with High Street	– Accessibility: Step free access provided but ramp navigation difficult and requires multiple changes of direction for users – Amenity & functionality: Environment within ramp zones does not allow for public leisure space – Legibility & sightlines: Very poor with no clear views of church or into subway from distance – Movement: Tapered steps and multiple route clashes – Opportunities for activation of space edges: No opportunity for frontage activity

			– Heritage (church settings): Church only visible from ramps and steps. No view from subway – Placemaking: Layouts dominated by step and ramp infrastructure – Cost: High due to critical utility diversions
Public Realm Concept B	Crescent shaped integrated ramps and steps with larger land-take and avoiding utilities Cost: £14.5m	– Opportunities for activation of space edges: Some opportunity for frontage activity – Cost: Lowest cost as design is unlikely to require critical utility diversions	– Footprint: Larger land-take. However, better than Concept C. – Accessibility: Step free access provided but ramp navigation difficult and requires multiple switch-backs. Only marginally better than Concept A as a result of fewer direction changes. – Amenity & functionality: Environment within ramp zones provides limited allowance for public leisure space. – Legibility & sightlines: Poor, with no clear views of church or into subway from distance. However, better than Concept A as space is more open. – Movement: Tapered steps and multiple route clashes. – Heritage (church settings): Church only visible from ramps and steps. No view from subway. However, views are better than Concept A as layout is more open. – Placemaking: Layouts dominated by step and ramp infrastructure. However, better than Concept A as space is more open. – Alignment: Partially offset from the line of High Street. Same as for Concept C.
Public Realm Concept C	Station plaza incorporating streamlined ramps Cost: £16.0m	– Accessibility: All areas are accessible. Only one switch back movement required – Amenity & functionality: Space at the entrances to the underpass create	– Footprint: Largest land-take – Alignment: Partially offset from the line of High Street. Same as Concept B – Cost: High – avoids cost of relocating utilities but design is more costly. Similar to Concept A.

		useable space generosity – Legibility & sightlines: Open layout generates clear route – Movement: Space at the entrances to the underpass will allow free movement. – Opportunities for activation of space edges: Configuration of the south side allows for buildings along the west retaining wall – Heritage (church settings): Clear views of church from subway – Placemaking: Tapering form should allow for graded soft landscape	

The concepts will continue to be refined as part of GRIP Stage 3, which will result in a preferred option being selected. The costs in this business case relate to the highest cost option which is Option A (when taking into account the total project costs).

3.2. Preferred option:

[Describe the Preferred Option and identify how the scheme aligns with the objectives. Include evidence of stakeholder support for the Preferred Option either through consultation on the scheme itself or on the strategy the scheme forms part of; max. 1 page.]

The concepts presented above are refinements of Option 4, presented in the business case submitted in February 2019. These will continue to be refined to achieve an agreed design that fully meets the list of requirements set out in the Route Requirements Document.

The underpass and public squares has been the subject of several approvals from Cabinet in 2013, 2014 and 2015. In March Cabinet agreed a Development Framework for Grays which includes the underpass and associated plot developments on the basis that this option best met the objectives of the project in terms of:

- Maintaining footfall along Grays High Street by creating an equalities compliant, unimpeded route across the railway line
- Delivering a high quality public realm
- Improving connectivity between different modes of transport

- Enabling and catalysing the development of residential and commercial development on the project site and more widely in Grays.

The development framework included public consultation; there was strong public support with 72% of respondents either supporting or strongly supporting the pedestrian rail crossing and 85% of respondents supporting the overall approach proposed for the town centre and rail station area. See Appendix O – Thurrock Council: Cabinet Report, 2013 for further information on stakeholder engagement.

The project has also been the subject of discussions with every freeholder and leaseholder within the scheme area identified through Report on Title. In 2016, the Council ran a public consultation on the Grays Development Framework and asked specific questions about the underpass scheme. The Grays Town Management Partnership has also been provided with a series of presentations.

Planning Transport and Regeneration Overview and Scrutiny Committee in March 2017 supported the approach to delivery discussed in this report. The Committee requested that issues of safety, including CCTV, and proper drainage be addressed in future design, and that every effort is made to keep the crossing open until the project is completed, and that the public is kept informed.

3.3. Assessment approach:

[Describe the approach used to assess the impacts of the scheme, describing both the quantitative and qualitative methods used, and specify the Do Minimum and Do Something scenarios. The assessment approach should be a proportionate application of the DCLG guidance; max. 1.5 pages.].

The project's main focus is the closure of the existing level crossing and the building of a new underpass and public squares.

As has been previously articulated in other sections, Network Rail has committed to closing the level crossing. In the absence of an underpass being built to replace the level crossing, the only available crossing point would be a road bridge approximately 200m to the east, and the existing footbridge. This route by passes much of the town centre and at a gradient of 1:18 is steeper than the 1: 20 maximum necessary to enable disabled access.

However, the existing footbridge is coming to the end of its useful life and has seen a series of repairs (see Appendix T). It was installed with the purpose of being used in conjunction with the level crossing, meaning it does not have the capacity to accommodate the footfall that would use it if the level crossing was closed and it became the sole crossing point.

The Design Manual for Roads and Bridges (Section B, Part 8)[20] recommends that the width of a pedestrian footbridge should be an absolute minimum of 2 metres for pedestrians only and 4.7 metres to include cyclists. The current footbridge does not achieve this specification.

Furthermore, upgrading the existing footbridge would not allow for disability access across the rail line, meaning it would discriminate against people with disability and mobility difficulties. The road bridge to the east of the level crossing, that provides the only alternative crossing point, has

[20] http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol2/section2/BD2917_May.pdf Its Volume 2 Section B Part 8

an incline of 1:18, greater than the recommended maximum gradient of 1:20 for ramp access without flat rest areas.[21]

We, therefore, assume in our "Do Minimum" scenario that the footbridge could not provide a suitable alternative to the level crossing and would need to be removed on health and safety grounds.

The economic case therefore covers the costs and benefits of the project relative to the "Do Minimum" in which the level crossing is closed and the footbridge removed, resulting in no alternative crossing other than the road bridge to the east of the station.

The expected benefits of the 'Do Something' relative to the 'Do Minimum' counterfactual scenario are set out in section 2.10. We also detail those benefits that are quantified in our analysis and those which are assessed qualitatively.

We have conducted our assessment of the impacts of the project in accordance with the best practice principles set out in the HM Treasury Green Book[22] , MHCLG Appraisal Guide[23], and DfT WebTAG[24].

All of the impacts we have quantified have been adjusted to reflect current (2019) prices, based on the social time preference discount rate of 3.5%, in accordance with the HM Treasury Green Book. Where necessary we have converted inputted historic monetary values into 2019 prices to adjust for inflation. This applies to the use of WebTAG values which are in 2010 prices. These have been adjusted based on GDP deflators produced by HM Treasury.[25] For the conversion of 2010 WebTAG prices into 2019 prices the deflator used is 1.17.

We have assessed all impacts (with the exception of the public realm ambience benefits) over a 30 year time period to reflect what we consider to be the useful asset life of the developments, and in accordance with the MHCLG Appraisal Guide. We have assessed the public realm impacts over a 10 year period, as we consider the public realm will likely have a shorter asset life, with respect to the ambience benefits, and will require renewal after 10 years.

Cost estimates provided by Network Rail include an adjustment for inflation. We have applied an optimism bias to our estimates of costs associated with the project in accordance with the MHCLG Appraisal Guide.

The assumptions adopted in our analysis of the impacts of the project are summarised in Appendix E. Below we set out our approach to quantifying the benefits associated with each area of impact.

We have estimated the impacts of the project in two stages: first we estimate the impact of the status quo (i.e. the level crossing) relative to a counterfactual of no crossing (the level crossing being removed with no replacement crossing); we then estimate the impact of the proposed

[21] Building regulations 2010. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/441786/BR_PDF_AD_M2_2015.pdf
[22] 2018. HM Treasury. The Green Book: appraisal and evaluation in central government https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent

[23] 2016, DCLG. Appraisal Guide. https://www.gov.uk/government/publications/department-for-communities-and-local-government-appraisal-guide

[24] 2018, DfT TAG https://www.gov.uk/guidance/transport-analysis-guidance-webtag and DfT WebTAG Databook 2018.

[25] HM Treasury, GDP deflators at market prices, and money GDP March 2019 (Spring Statement).

underpass and public realm development relative to the status quo. We sum these together to understand the impact of the proposed project relative to the counterfactual of no crossing.

Do Minimum (the counterfactual) – no crossing

Network Rail has committed to closing the level crossing. Therefore in the absence of the project going ahead, we assume the level crossing and the existing footbridge will be closed with no replacement crossing. In this instance the closest alternative crossing is a road bridge approximately 200m to the east of the existing crossing.

The road layout means that to walk from one side of the current level crossing to the other, via the road bridge, would be a journey of 0.9km.

However, the actual additional distance that pedestrians wishing to cross the railway line would have to walk will depend on their origin and destination. We assume an average distance of 0.45km per journey, and 0.9km for each return journey. As per DfT WebTAG guidance, we assume that 90% of journeys are return journeys.

To assess the impact of the closure of the level crossing with no replacement crossing, we have made a number of assumptions about the behaviour of current users of the crossing in response to the crossing being closed, and any journeys to cross the railway requiring them taking a longer route.

We assume the current average distance walked is 1.18km per trip, based on NTS 2017 data. On this basis, the addition of an average of 0.45km would mean a total distance of 1.63 – just over a mile. Therefore, on average, 50% of pedestrians would need to travel a distance of over a mile.

There is a lack of evidence relating to the distance pedestrians are willing to walk. However there is evidence which suggests that for students, there is a threshold walking distance of 1.35 km for adolescents commuting to school.[26] We therefore consider an assumption of a threshold of a mile (1.6 km) to be reasonable.

Based on this threshold we assume that all those for whom the journey remains less than a mile in length (i.e. 50%) will continue to walk.

We have based our assumptions about behaviour change as a result of the longer journey on statistics from the National Travel Survey (NTS) 2017[27] relating to the average number of trips by trip length and main mode and the relative difference in mode between journeys of less than a mile and between 1 and 2 miles, summarised in the table below:

Main mode	Under 1 mile		1 to under 2 miles	
Total trips per person per year	236		179	
Walk	192	81%	53	30%
Bicycle	2	1%	5	3%
Car/van	39	16%	108	60%
Bus	2	1%	9	5%

[26] Rodriguez-Lopez et al. (2017) The Threshold Distance Associated With Walking From Home to School. Health education and behaviour.

[27] DfT (2017) National Travel Survey 2017. https://www.gov.uk/government/statistics/national-travel-survey-2017

Taxi/ other private	1	1%	3	2%

This provides an indication of the relative propensity to walk dependent on the length of the journey, specifically relating to the change between journeys of less than a mile and more than a mile but less than two miles. Based on the number and proportion of journeys made by each mode by trip length, we have made assumptions about the behaviour of users of the level crossing who currently walk. This includes a reduction in the total number of journeys made.

Mode shift by 50% of those who currently walk (assumed < 1 mile) when faced with a journey of 1 - 2 miles:	
Walk	23%
Cycle	2%
Car/van	46%
Bus	4%
Other	1%
Do not take journey	24%

Combining these assumptions with the assumption that those who currently walk less than a mile continue to walk, generates the following mode shift assumptions:

Overall mode shift from walking as a result of longer distance:	
Walk	61%
Cycle	1%
Car/van	25%
Other	1%
Do not take journey	12%

This includes an assumption that there is no mode shift to bus use, and that bus users in the NTS data would shift to car use. This is due to the fact that there are no bus routes on the south side of the railway track. Therefore for users of the crossing who need to access the other side of the tracks, bus travel will not provide a convenient alternative to walking.

These assumptions regarding behavioural change are consistent with other evidence relating to the impact of distance on active commuting. Research by Nelson et al. (2008) indicates that a 1 mile increase in distance decreased the likelihood of active commuting by 71%.[28]

However, given uncertainty related to the assumptions about behavioural change in the case of the level crossing closing and no replacement being provided, we test the sensitivity of the estimated impacts to these in our sensitivity analysis.

We consider that the assumption that only 12% of those who currently walk would no longer make the journey to be reasonable. Whilst some users of the crossing would be able to avoid the journey, the crossing is a key link between the town centre, bus station and larger population to the north of the railway track, to the station and college (with 1,466 students) to the south of the track. Users of these will have little choice but to find alternative routes. The journeys that are

[28] Nelson et al. (2008). Active commuting to school: How far is too far? International Journal of Behavioural Nutrition and Physical Activity. 2008. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2268942/

more likely to be avoided are convenience shopping trips into the town centre, for example from work places and the college in Grays South.

In addition to the mode shift assumptions above, we have applied the following assumptions in our analysis:

- Total users of the level crossing of 8,412 (source: average of Network Rail estimates for August 2017 of 9,541[29] and February 2018 of 7,283).
- 54% of users of the level crossing walk from home (4,542), 13% travel by bus (1,094) and 33% drive (2,776) (source: Grays Station Travel Plan 2014).
- Individual journeys made by users of the crossing are on average 1.18km in length for all users who currently walk. We apply this assumption due to a lack of available alternative estimates, but note that average length of journey among those who shift to car use is likely to be longer than the average across all those who walk – applying a higher estimate would increase the estimated benefits of the project.
- Current users of the crossing who drive or use a taxi from home would continue to drive. In the absence of the level crossing, we assume that they all would drive the additional average distance of 0.45km per journey, to access their destination.
- Current bus users will continue to use the bus. Due to a lack of more detailed transport modelling we do not account for any additional distance that users may walk, or any mode shift from bus use to other modes. It is uncertain whether this would over, or under-estimate the benefits. This would depend on whether the closure in the crossing resulted in bus users walking further or shifting to car use.
- Due to a lack of evidence, we do not account for the reduction in active mode benefits for those who currently drive and then use the crossing to access their destination, but who may drive the full distance if the crossing were closed. The inclusion of this impact would increase the benefits attributable to the project.

These assumptions form the basis of our assessment of the status quo relative to the outcome in the 'Do Minimum' scenario in which the level crossing is closed with no replacement crossing. Our assessment includes safety benefits from reduced incidents on the railway; health impacts in terms of avoided premature deaths and absenteeism as a result of mode shift to walking and increased walking distance in the 'Do Minimum'; journey time impacts resulting from longer walking distance in the 'Do Minimum'; impacts associated with car use in terms of external costs and vehicle operating costs; and ambience impacts with the route over the road bridge.

Our methods for quantifying these impacts are set out following our description of our approach to assessing the 'Do Something' scenario.

Do Something – project as specified

In addition to avoiding the negative impacts of the 'Do Minimum' scenario (the scenario where the level crossing is closed and no alternative crossing replaces it), there are additional benefits expected from undertaking the project (the 'Do Something'). These include ambience benefits

[29] https://www.networkrail.co.uk/communities/safety-in-the-community/level-crossing-safety/

from the public realm and health benefits associated with modal shift to walking due to an improved walking environment.

The main assumption applied in the 'Do Something' scenario relates to the mode shift from car to walking as a result of the improved accessibility and public realm improvements. We base this on assumptions applied in similar business cases. The Rathmore Road business case[30] applies an assumption of 11% mode shift to walking as a result of improved access and public realm work. To take a conservative approach, we apply an assumption of half this (5.5%) in our central estimate of mode shift.

Methodology for quantification

The impacts we include in our analysis are summarised below. These relate to the 'Do Something' (project as specified) compared to a 'Do Minimum' of no crossing:

- Safety benefits as a result of closing the level crossing.
- Negative impact of reduction in walking of 0.45km on average for those who in the absence of the crossing would continue to walk the extra distance.
- Journey time savings for those who, in the absence of the crossing, would walk the additional distance.
- Net health impacts for those who currently walk, but, in the absence of the crossing, would walk or take the bus.
- Avoided external costs and vehicle operating costs associated with avoided car use by those who currently walk, but, in the absence of the crossing, would drive.
- Avoided external costs and vehicle operating costs associated with avoided longer journeys for those who currently drive.
- Public realm benefits associated with the status quo relative to the journey over the road bridge for those who would walk in the Do Minimum scenario.
- Public realm benefits associated with the underpass and public realm improvements.
- Health benefits and reduced external costs and vehicle operating costs as a result of mode shift generated by the underpass and public realm improvements.
- Land value uplift resulting from housing units developed as part of the site surrounding the public squares.

Our methodology for estimating each is set out below.

Safety benefits/ avoided incidents

In assessing the value of avoided incidents we have drawn upon data on Network Rail's Fatality and Weighted Injury index value for the Grays Level Crossing and the DfT average value of prevention per casualty of £1.55 million (in 2010 prices) for a fatal casualty.[31]

We have estimated this cost based on Network Rail's Fatality and Weighted Injury (FWI) rate of 0.064 based on the ALCRM rating of D1.[32] This is very high relative to the average risk score for

[30] https://www.southeastlep.com/app/uploads/LGFSE45_Rathmore_Road_Business_Case.pdf
[31] DfT WebTAG June 2018 Table A 4.1.1 Average value of prevention per casualty

[32] See Appendix U – Network Rail Safety Census

automatic barrier level crossings of 0.003.[33] All monetary impacts have been converted to 2019 prices discounted to 2019 values.

In addition to the monetised impacts, there will be non-monetised benefits from reduced vandalism and incidents where pedestrians misused the level crossing, for example crossing when barriers were down or using the crossing to gain access to the station. In the period from July 2014 and February 2015, 26 trespass offences were recorded in and around Grays station by the British Transport Police[34], with many more incidents having been recorded of people taking shortcuts, climbing fencing at the crossing and damaging the barrier railings. More recently, there have been increased patrols at the station in order to reduce the incidents of misuse and two people have been fined for trespassing.[35]

The high number of violations increases the chances of a minor or major incident and vandalism of property occurring. It is expected that these will be avoided with the removal of the level crossing. This will benefit Network Rail which will no longer have to bear the costs of vandalism and other incidents and the British Transport Police will be able to reduce patrols of the station.

We have only quantified the safety benefits based on current misuse of the crossing. An increase in freight use of the line is expected to increase the instances in when the level crossing would be temporarily closed for extended periods. Anecdotal evidence on the drivers of misuse of the crossing suggests that it is at times of extended closure that most incidents of misuse occur, due to pedestrians not wanting to wait for the crossing to open. Therefore we expect that more frequent and longer closures of the crossing would increase incidents of misuse in the future, whilst at the same time more frequent trains would increase the risk of accidents. In addition, if the level crossing were to permanently close with no viable alternative crossing, then incidents of misuse may increase further as a way of avoiding the longer journey via the road bridge, depending on the nature of the barrier between the track and the highway.

DfT Active Mode Appraisal Toolkit – health impacts and external costs.

We have used the DfT WebTAG Active Mode Appraisal Toolkit (AMAT) to estimate the health impacts relating to avoided premature death and absenteeism; and external costs relating to changes in behaviour.

This is a change to the previous iteration of the business case in which the analysis used the World Health Organisation HEAT tool[36] to estimate the benefits associated with walking. Whilst the AMAT is reported to be consistent with the HEAT tool, there appear to be significant differences in the results from each, with the HEAT tool providing estimates of the value of prevented premature deaths of around 3 times higher than AMAT for equivalent inputs. We believe this may be due to the assumptions applied relating to how the value of a statistical life is applied in each tool. To take a conservative approach, we have used the AMAT to estimate the health impacts.

As the AMAT is not specifically designed for the range of impacts generated by this scheme, we have populated it separately for each route to impact, as set out below. The numbers of users

[33] Network Rail. Transforming Level Crossings 2015-2040. http://bailey.persona-pi.com/Public-Inquiries/Essex/NR%20Dox/NR17.pdf

[34] Network Rail. 2015. Don't risk your life at Grays level crossing. https://www.networkrailmediacentre.co.uk/news/dont-risk-your-life-at-grays-level-crossing#

[35] Network Rail. 2018. https://www.networkrail.co.uk/feeds/shocking-cctv-footage-shows-scale-of-misuse-at-thurrock-level-crossing-as-two-people-are-fined-for-trespass/

[36] http://www.heatwalkingcycling.org/

are based on assumptions from the Grays Station Travel Plan and the National Travel Survey, as detailed on page 32:

Route to impact	Users	Average distance - single trip (km)
Reduction in distance walked relative to 'Do Minimum'	2783	0.45
Increase in those walking relative to 'Do Minimum'	1754	1.18
Reduction in driving relative to 'Do Minimum'	1131	1.18
Reduction in distance driven relative to 'Do Minimum'	2776	0.45
Reduction in cycling relative to 'Do Minimum'	47	0.45
Increase in walking and reduction in driving as a result of underpass and public realm	463	1.18

For all routes to impact we have assumed:

- 30 year appraisal period;
- 90% of journeys are return journeys, as per AMAT default assumption;
- Impacts apply 365 days a year. This is based on the fact that the footfall data is the average of two 9 day averages and therefore should reflect the average across the year. This may slightly overestimate the impacts by including days such as Christmas Day, but the impact on the total impact would be small.
- No decay rate given that this does not apply to a specific active mode initiative.
- Background growth rate of 0.75% as per WebTAG guidance.
- For impacts relating to additional distance travelled, rather than new trips, we have adjusted the AMAT outputs where necessary (in relation to premature death) such that the output is based on the additional distance, not the average journey (of 1.18km).

All outputs from the AMAT have been converted to 2019 prices for use in the appraisal.

Vehicle operating costs

For each of the impacts assessed relating to a change in car use, we have used the estimated annual change in car kilometres generated by the AMAT to estimate the vehicle operating costs associated with this change. These have been estimated using values from the DfT WebTAG databook.[37]

In estimating the impacts from reduced car use we have not assumed any increase in footfall in the 'Do Something' scenario. This is due to uncertainty about the car use of additional station users and a trend towards less car use – meaning that the new users may be less likely to use a car than the existing users.

[37] 2018, DfT TAG https://www.gov.uk/guidance/transport-analysis-guidance-webtag and DfT WebTAG Databook 2018.

Journey time impacts

This impact relates to the additional distance walked to cross the rail tracks by using the road bridge in the 'Do Minimum'.

A weighted value of time savings was estimated using the relevant WebTAG market value of time for the corresponding years, converted to 2019 prices, and applying an appropriate weight for each type of user, worker or non-worker, for walkers. In the absence of local data, this is estimated based on the 'reasons to walk' identified in the 2014 National Travel Survey.

The weighted value of time savings is measured per minute. We have estimated the additional journey time based on the total additional distance walked over the road bridge, assumed to be 0.45km for a return trip (due to the assumption that those that walk the extra distance, will on average be those that face a shorter additional journey), and an average walking speed of 5 km/h[38]. This produces an average additional journey time of 5.4 minutes per pedestrian. This is applied to the 2,818 walkers and bus users assumed to walk the additional distance and multiplied by the weighted value of time savings for the relevant year.

We then annualised the estimated time savings per day to generate an estimated annual impact.

Public realm benefits

We have quantified the impact of this redevelopment of the public realm using the Transport for London's (TfL) Ambience Benefits Calculator. The calculator estimates the monetary value of improvements to the public realm. We have used this to estimate both the negative public realm impact for pedestrians using the road bridge in the 'Do Minimum' counterfactual, as well as the positive ambience benefits from new public squares. We use this, rather than the AMAT, due to the greater specificity that can be given relating to public realm improvements.

The urban realm attributes included in the Calculator are based on the urban realm designs produced by Steer and Steer's input in terms of the applicable attributes to be taken in to account. Due to the lack of granularity in the attributes that can be selected in the Calculator, no distinction can be made in the economic appraisal between the 3 design options, in terms of the ambience benefit. However, the difference between them and the relative benefits of each are considered qualitatively in sections 3.1 and 3.2.

For the 2,783 pedestrians assumed to use the road bridge in the 'Do Minimum' counterfactual, we used 'the physical intrusion of traffic' attribute as a proxy for the negative public realm impact of having to use the road bridge.

To account for the increase in public realm benefits from the public squares and underpass we have captured the impacts of expected public realm benefits including: provision of seating areas; plants; well-maintained areas where there are no buildings; wider and better conditioned pavements; improved lighting; improved signage; and increased safety due to more people being around after dark, taking into account the status quo i.e. what is already there in the public realm. The inputs to the calculator also include a benefit from improved crossings. This is used as a proxy for the benefit of an underpass relative to the severance generated by having no crossing point. However the impact included, which relates to the provision of a zebra crossing in place of no dedicated crossing, is expected to underestimate the ambience benefits of avoiding the severance impact of the railway.

[38] DfT WebTAG

The estimation of public realm benefits is based on:

- the current level of footfall using the level crossing of 8,412; and
- an assumption of a 5.5% mode shift to walking, relative to the status quo, as a result of the underpass and public realm improvements; leading to an additional 463 users per day. The Ambience Benefits Calculator applies the rule of half to these new users.

We have estimated the benefits from improved public realm over a 10 year period to reflect the expected useful asset life of the redevelopments.

We have assumed that the type of pedestrian using the underpass is an average user and applied this in this assumption in the Calculator. We have directly utilised the values generated from the tool as, although these are based on benefits to London pedestrians, 90% of Grays station users travel into London[39]. Therefore, we consider that the benefits gained by this group will be comparable to those estimated using the Calculator.

Commercial and residential development impacts

The development of the underpass and public squares involves the demolition of some existing commercial property and the development of new commercial property and housing units.

The demolition of existing commercial floorspace as part of the scheme will open up an opportunity for new development of 1,279 sqm of new commercial floorspace and 84 residential units above the commercial space. This land will either be sold for development; redeveloped by the Council owned Development Company Thurrock Regeneration Ltd. or developed in partnership with National Rail and C2C.

The development of commercial floorspace will largely directly replace the commercial space destroyed. However, the new floorspace is expected to achieve higher rental yields and we do capture the development receipts as they are expected to contribute to the funding of the underpass.

The 84 new residential units that would be developed on the site, above the commercial property, will be additional, as the current use of the land does not include any residential units. We estimate the land value uplift associated with this using the Housing Infrastructure Fund ready reckoner.[40]

Within the ready reckoner we assume that 'planning additionality' is high as it would not be possible to develop these housing units if the commercial units were not being replaced, and as we understand that there are insufficient alternative plots to meet current housing targets. The Thurrock Local Plan Five Year Housing Land Supply Position Statement identifies a 5 year requirement of 3,441 units but has only identified sites for 1,282 units, equivalent to 2.7 years supply. There is, therefore, an identified shortage equivalent to 2.3 years of housing. It is

[39] Travel Thurrock (2014) Grays Station Travel Plan. https://www.thurrock.gov.uk/sites/default/files/assets/documents/travelplan_station_grays_201404.pdf

[40] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/625520/HIF_Marginal_Viability_supporting_document_accessible.pdf The ready reckoner estimates the land value uplift based on the number of housing units and the location of the development and applies an adjustment for additionality.

therefore considered that unlocking these sites will increase the overall housing supply in Grays and will not displace alternative housing sites.

Construction impacts

We have estimated the temporary GVA generated through the construction of the project, including construction of the underpass, public squares and commercial and residential developments. The direct GVA generated through construction has been derived by applying the appropriate industry output to GVA ratio for the construction industry to the estimated total construction costs. The indirect and induced effects have been estimated by applying the relevant indirect and induced GVA multipliers to the direct GVA. The multipliers used in our analysis are set out in Appendix E.

Options analysis

The project represents our 'Do something' scenario and compares this against a 'Do Minimum' scenario of no crossing. We have also considered an alternative option in which a new pedestrian footbridge is built across the railway line. We cannot complete a quantitative assessment of the relative costs and benefits of this option as it was discounted by Thurrock Council Board and Network Rail in 2015 and therefore the relevant costings have not been developed. We have, however, qualitatively considered the relative costs and benefits, presented in the Appraisal Summary Table, and detailed in our options assessment in section 3.1.

3.4. Economic appraisal assumptions:

[Provide details of the key appraisal assumptions by filling in the table in Appendix E, expand if necessary. Key appraisal assumptions as set out in Appendix providing justification for the figures used and any local evidence, where appropriate (different from the standard assumptions or the ones with the greatest influence on the estimation of benefits). Explain the rationale behind displacement and deadweight assumptions.

We have detailed a number of our assumptions in section 3.3. Our key appraisal assumptions are set out in Appendix E. Below we set out the rationale behind our additionality assumptions, including displacement and deadweight.

Deadweight

We have assumed that without funding for the underpass the level crossing would be closed and not replaced and the existing footbridge would be removed. We have explored other options and do not consider that there is a viable alternative to the underpass. The safety benefits could be achieved if the crossing were closed and no alternative crossing were provided, but, depending on the nature of the barrier installed between the road and the railway, there is a risk of increased incidents due to pedestrians wishing to avoid the longer walk via the road bridge. The underpass development, as well as the public realm work, would not be undertaken by the private sector and relies on public sector funding to be brought forward. We have, therefore, not applied any degree of deadweight to the benefits from the closure of the crossing and building of the underpass and public squares.

We have applied a degree of deadweight to the benefits associated with the housing developments. Without the scheme these developments are unlikely to come forward as the public realm work specifically opens up the development plots and there is an unavailability of sufficient alternative plots the town centre. The Thurrock Local Plan Five Year Housing Land

Supply Position Statement identifies a 5 year requirement of 3,441 units but has only identified sites for 1,282 units, equivalent to 2.7 years supply. Unlocking the new housing developments will increase the overall housing supply in Grays and will not displace alternative sites. For this reason we have applied a 'high' additionality of 75% within the ready reckoner.

Displacement

In estimating the impacts of the underpass and public squares, we have taken into account the status quo and consider only the additional impacts that arise. We have, therefore, not assumed any further displacement in our estimates of the impacts as doing so would under-estimate the additionality of the impacts. Our approach to estimating the impacts is set out in more detail in section 3.3 above.

Substitution

We do not consider there to be any substitution effect associated with the underpass. We have taken into account the effect of the underpass on passenger behaviour within our analysis. We, therefore, do not apply an additional substitution assumption.

With regards to the housing development, we consider there will be a low level of substitution associated with the development. Substitution is likely to be limited for this type of development, as the provision of the funding is not expected to change behaviours. However, within the analysis the level of substitution assumed is in line with BEIS benchmarks, with a central case for the housing developments at a regional level of 4%.[41]

Leakage

We do not anticipate there will be any leakage associated with the project, at the LEP level. We expect that both the underpass, the commercial developments and public realm will be majority used by the local population and therefore the economic benefits will be retained within the SELEP area.

We note that there may be an uplift in visitors to the area as a result of the improvement in public space, which may result in some leakage of the benefits. However, we have not factored this increase in visitors in our analysis and, therefore, do not consider it appropriate to adjust the impact to factor in the leakage of these benefits.

3.5. Costs:

[Provide details of the costs of the scheme. All public-sector costs should be included:

- *Public sector grant or loan*
- *[Public sector loan repayments] (negative value)*
- *Other public sector costs*
- *[Other public sector revenues] (negative value)*

If the land is owned by the public sector, then the public sector will be incurring holding costs assumed to be 2% of the existing value of the land per year. Should the land be used for non-residential development these holding costs will be avoided. This needs to be reflected in the appraisal as a negative cost.

[41] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191512/Research_to_improve_the_assessment_of_additionality.pdf

Please note that any private costs associated with the development should be included in the appraisal as a dis-benefit and therefore feature in the numerator of the BCR calculation rather than the enumerator.

Additional details regarding the consideration of costs as well as standard assumptions that can be used in the absence of local data can be found in the DCLG appraisal data book.]

Funding Source	Value
Thurrock Borough Council Capital Programme	£10,396,718
S.106 Funds held by Thurrock Council	£1,200,000
Network Rail	£705,000
Development Receipts	£5,596,707
Funding sought through LGF Grant	£10,840,274
Total project cost	**£28,738,699**
Total public contribution	£23,141,992
Total private contribution	£5,596,707
Present value of total project cost (incl. optimism bias)	**£30,865,849**
Present value of public contribution (incl. optimism bias)	**£25,786,559**

These costs include a 30% risk uplift, to reflect the considered level of risk associated with the project, and have been adjusted for inflation. They also include the costs associated with the highest cost concept of the 3 developed.

Costs are presented in 2019 prices. Cost estimates are current other than schedule 4 costs (relating to compensation of train operators for the impact of planned service disruption) which are based on 2015 estimates. These have been uplifted to 2019 prices applying an adjustment of 1.08 based on the GDP deflators produced by HM Treasury.[42]

In accordance with the DCLG Appraisal guide, in our cost benefit analysis we have also applied an optimism bias to the estimated total project costs. The HM Treasury Green Book provides an upper and lower estimate of optimism bias for standard civil engineering projects of between 3% and 44%.

We have applied the lower quartile of the HM Treasury Green Book range, 13.25%, to our cost estimate figures. The inclusion of the optimism bias increases the total project cost to £31.1m.

3.6. Benefits:

[Provide details of the benefits of the scheme identifying the 'initial' and adjusted benefits that were used to calculate the 'initial' and 'adjusted' BCR. The DCLG Appraisal Guidance provides additional details regarding the initial and adjusted benefit calculations on page 17.

'Initial' Benefits

[42] HM Treasury, GDP deflators at market prices, and money GDP March 2019 (Spring Statement).

All impacts quantified based on the Green Book Guidance and Green Book Supplementary and Departmental Guidance should feature in the 'initial' BCR calculation. These impacts currently include:

- *Air quality*
- *Crime*
- *Private Finance Initiatives*
- *Environmental*
- *Transport (see WebTAG guidance)*
- *Public Service Transformation*
- *Asset valuation*
- *Competition*
- *Energy use and greenhouse gas emissions*
- *Private benefits e.g. land value uplift*
- *Private sector costs if not captured in land value*
- *Public sector grant or loan if not captured in land value*
- *Public sector loan repayments if not captured in land value*

'Adjusted' Benefits
There are several external impacts to the users or entities already present in a development area or to the society that are additional to the impacts included in the Green Book Supplementary and Departmental Guidance.

Such external impacts include potential agglomeration impacts on third parties, health impacts of additional affordable housing and brownfield land clean-up, educational impacts of additional housing, transport externalities, public realm impacts, environmental impacts, and cultural and amenity impacts of development. Such externalities should still form part of the appraisal and included in the 'adjusted' BCR.

Promoter should present here additional estimates of impacts based on their own evidence. These estimates might be based on tentative assumptions where the evidence base is not well established. Additional guidance regarding the identification of externalities and ways of estimating the 'adjusted' impacts are available in Annex F of the DCLG Appraisal Guidance.]

The project's main focus is the building of an underpass and public squares to replace the existing pedestrian level crossing, preventing a scenario in which the level crossing is closed with no new crossing to replace it.

This will have quantifiable impacts including:

- no loss of life or injury on the crossing
- reduced costs associated with incidents of misuse and accidents at the level crossing
- benefits from increased physical activity from increased walking
- reduced costs associated with car use
- ambience benefits from public realm improvements.
- pedestrian and driver journey time savings.

In addition, there will be direct positive unquantifiable impacts such as:

- avoided near misses reported on the level crossing
- reduced vandalism of the level crossing.

The project is also expected to have further wider benefits through the development of plots around the public squares. This will generate quantifiable impacts such as:

- 84 new homes directly enabled created on the site of the project
- 417 new homes catalysed in the wider regeneration of Grays
- 1,279 sqm gross commercial floorspace redeveloped excluding the Civic Centre

There will be additional unquantifiable benefits to the area including:

- temporary GVA impacts generated from the construction phase of the project
- GVA and employment impacts from increased footfall (and the prevention of a decline in footfall) in the town centre generating increased spending and activity
- reduced and avoided severance impacts from the rail line
- increased productivity of commercial space through later opening and development of an evening economy
- the catalytic impact on potential further developments through making Grays a more attractive investment opportunity.

Routes to impact

Category	Impact	Value (2019 prices)	Source
Reduced incidents as a result of closure of the level crossing	Safety	£1,986,245	DfT WebTAG Databook
Reduction in distance walked relative to 'Do Minimum' route over road bridge	Reduced risk of premature death	-£7,392,261	DfT AMAT adjusted for journey distance
	Absenteeism	-£3,992,826	DfT AMAT
	Journey time	£13,946,372	DfT WebTAG Databook
	Public realm	£1,506,348	TfL Ambience Benefits Calculator
Reduction in driving and mode shift to walking relative to 'Do Minimum'	Reduced risk of premature death	£12,216,961	DfT AMAT adjusted for journey distance
	Absenteeism	£6,598,820	DfT AMAT
	External costs	£881,080	DfT AMAT
	VOC	£1,068,695	DfT WebTAG Databook
Reduction in distance driven relative to 'Do Minimum'	External costs	£1,042,714	DfT AMAT
	VOC	£1,271,700	DfT WebTAG Databook
	Journey time	£4,084,404	

Reduction in cycling relative to 'Do Minimum'	Reduced risk of premature death	£695,704	DfT AMAT
	Absenteeism	£101,937	DfT AMAT
Increase in walking and reduction in driving as a result of underpass and public realm	Reduced risk of premature death	£3,224,888	DfT AMAT
	Absenteeism	£1,741,878	DfT AMAT
	External costs	£456,033	DfT AMAT
	VOC	£553,015	DfT WebTAG Databook
	Public realm	£18,195,416	TfL Ambience Benefits Calculator
New housing units	Land value uplift	£2,388,979	HIF ready reckoner

Net impacts

As we have set out sections 3.3 and 3.4, in our quantification of the impacts of the project, we have identified and quantified only the impacts that would only come about with the project and would not be expected to materialise otherwise. This includes explicit consideration of the additionality of the land value uplift when using the HIF ready reckoner. All impacts estimated can therefore be considered net impacts. The basis for the additionality assumptions and descriptions of the context are discussed in sections 3.3 and 3.4.

Summary of net results

		Net benefits (in NPV terms) over 30 years
Economic impacts associated with the underpass	Journey time saving	£18.0m
	Reduction in accidents	£2.0m
	Reduced risk of premature death	£8.7m
	Absenteeism	£4.4m
	Reduction in externalities from cars including vehicle operating costs	£5.3m
	Social impacts from public realm[43]	£19.7m
Wider public realm and housing development	New homes delivered	84
	Land value uplift	£2.4m

The net initial benefits from the project are estimated at £55.2m. This includes the benefits from the underpass itself as well as the benefits relating to the public realm.

The inclusion of the land value uplift from housing would increase the benefit to £60.6m. We do not include the temporary GVA uplift from construction impacts in our BCR calculation, but these

[43] Assessed over a 10 year period.

would add additional wider benefits of £5.5m (including the indirect and induced impacts as a result of the build phase of the project).

The initial BCR for the project, relative to the Growth Deal funding request, is 5.5:1.

Including all public sector contributions (present value adjusted for optimism bias) would result in an initial BCR of 2.3:1.

The adjusted BCR for the project, relative to the Growth Deal funding request, is 5.7:1.

Including all public sector contributions would result in an adjusted BCR of 2.4:1.

These monetised impacts do not take into account a number on unquantified benefits. Details of which are included below.

The negative impacts of the 'Do Minimum' scenario, avoided through delivering the underpass and public realm work, could be greater than those quantified in this appraisal.

The appraisal only accounts for the improvement in safety relative to the current situation. However, if no action were taken then the anticipated increase in freight trains would result in a greater duration of time during which the level crossing is temporarily closed, likely leading to increased incidents of misuse. In addition, depending on the nature of the barrier installed between the road and the railway, if the crossing was removed and no viable alternative replaced it, then incidents of misuse may increase as pedestrians seek to avoid the longer route via the road bridge.

Furthermore, there are a number of costs associated with misuse of the level crossing which are not included in the appraisal. These include costs of dealing with damage and vandalism which would be avoided if the crossing were closed. The inclusion of these in the economic appraisal would increase the benefits.

As noted in our analysis, our estimate of the public realm impacts seeks to include a proxy for the severance impact of closing the level crossing with no replacement. However, it is likely that the proxy applied (of a zebra crossing compared to no dedicated crossing of a road) would underestimate the impact of severance on the high street generated by the railway line with no crossing.

In addition, our analysis is based only on the current users of the level crossing, and does not take into account either increased footfall due to underlying pedestrian growth, or increased footfall as a result of the scheme, for example attracted by the improved public realm. Such increased footfall would increase the estimated impacts of the programme through ambience benefits, and through the number of individuals benefitting from the crossing (as a result of the underlying growth rate in population).

In assessing the status quo relative to the 'Do Minimum' scenario we quantify the health impact of users of the crossing avoiding undertaking journeys altogether in the absence of the crossing, but do not quantify the wider impact of this on the Grays economy. Through its impact on the number of journeys made, the closure of the crossing could impact the flow of people between the town centre and Grays South and have a subsequent impact on vibrancy and economy of the town centre. This impact would be particularly driven by the severance it would create between the town centre and South Essex College and the station.

By building an underpass and implementing public realm improvements, there are expected to be wider catalytic benefits of the project on the regeneration of the town centre by increasing footfall. The new commercial development is expected to help attract more multiple retailers to the town centre, to increase attractiveness to shoppers, including commuters who might otherwise have shopped in London.

In addition, the new commercial development is expected to enhance the evening economy, through later opening times and increased food and drink offerings. This has received the support of New River, the new owners of the Grays shopping centre, who wants to extend shop opening hours. Enhanced theatre and cultural services, whose development is expected to be catalysed by the wider regeneration of Grays, will also support this. The result will be increased productivity of commercial space through longer opening hours, which will increase spending in the town, generating growth and jobs for the area.

While the underpass and public squares will not be the sole driver of this further development potential for the area, for the reasons set out in the strategic case, they are expected to be a key catalyst, without which the potential for the area will be held back.

Sensitivity analysis

We have carried out sensitivity analysis on our assessment of the economic impacts associated with the project. The main sources of uncertainty relate to the assumptions regarding mode shift in both the 'Do Minimum' compared to the status quo and as a result of the underpass and public realm work, the housing developments coming forward, and the cost estimates.

We have, therefore, developed four sensitivity scenarios:

- Scenario 1: Reduced mode shift to car use in 'Do Minimum' scenario relative to the status quo.
- Scenario 2: Higher mode shift as a result of the underpass and public realm work.
- Scenario 3: No additional house building is generated, either directly or catalysed.
- Scenario 4: Increased costs

Sensitivity scenario 1

In our central case, we have assumed that, when faced with a longer journey, 61% of those that currently walk will continue to do so, 25% switch to car use, 1% cycle and 12% no longer make the journey.

We test this assumption by adjusting our assumption about the mode shift to car use to 12.5% (half the central case assumption). Under this scenario, the net adjusted benefit would reduce to £56.2m in NPV terms over 30 years. The total public sector (adjusted) BCR would be 2.2:1 and the BCR over the growth funding would be 5.3:1.

Sensitivity scenario 2

Under sensitivity scenario 2, we have assumed a mode shift from car use to walking in line with the assumption of 11% applied in similar appraisals[44]. This assumption leads to increased benefits from physical activity and a greater reduction in costs associated with car use.

[44] https://www.southeastlep.com/app/uploads/LGFSE45_Rathmore_Road_Business_Case.pdf

Accounting for this sensitivity, the net (adjusted) benefit of the project would increase to £68.9m in NPV terms over 30 years. The BCR relating to this would increase to 2.7:1 in relation to total public sector costs and the BCR over the growth funding would be 6.5:1.

Sensitivity scenario 3

Under sensitivity scenario 3, we have assumed that only 50% of the wider development would happen – meaning only 42 housing units are built on the site, and only half of the development receipts from wider development are achieved. This will have two effects which will change the overall benefits and adjusted BCR for the project: (1) there will be a lower additional land value uplift generated through the housing units delivered; and (2) lower development receipts would increase the public sector cost of the project.

Accounting for this sensitivity, would also result in a reduction in the present value of total net measurable benefits associated with the project to £59.4m over 30 years, whilst the present value of public sector costs would increase to £28.3m. The adjusted BCR, over all public sector costs (not just the LEP funding sought in this business case), would change the adjusted BCR to 2.1:1.

Sensitivity scenario 4

Under scenario 4, we have assumed that total costs increase by 30% (relative to the baseline estimates excluding optimism bias). This cost increase is on top of the 30% risk allowance already included in the cost estimates. This would increase the present value of public sector costs to £30.4m.

Accounting for this sensitivity, this would reduce the adjusted BCR to 2.1:1.

3.7. Local impact:

[If the scheme has a significant level of local impacts these should be set out in this section.]

The impacts generated will be predominantly local impacts to Grays. In particular:

i) Improved accessibility and connectivity between the town centre and residents and businesses to the south of the level crossing;
ii) Reduced safety risk;
iii) Increased footfall, and therefore spending, for town centre businesses leading to increased GVA and employment;
iv) Enhance public realm and ambience benefits for residents in the town centre.

3.8. Economic appraisal results:

[Please provide details of the key appraisal results (BCR and sensitivity tests) by completing the table below. Please note, not all sections of the table may require completion.

Promoters should also include a statement which identifies other schemes which may have potentially contributed to the same benefits/impacts.
Smaller schemes (less than £2 million) are not required to complete a quantified economic appraisal but are required to include a Value for Money rationale.]

	DCLG Appraisal Sections	Option 1 relative to status quo (Do Something)	Option 2 relative to status quo (Do Minimum)
A	Present Value Benefits [based on Green Book principles and Green Book Supplementary and Departmental Guidance (£m)]	£58.2m	A pedestrian bridge over the railway line would be expected to deliver similar 'initial' benefits in the form of safety benefits and time savings, but may have less of an impact on car use as it would not be as accessible as the underpass. The health benefits and reduction in external costs would therefore be expected to be smaller.
B	Present Value Costs (£m)	£10.6m (PV of Growth Deal funding) £22.2m (PV of in total public sector contribution)	The costs of a bridge would be cheaper than the underpass, but could require more public funding if, due to its dis-benefit in term of the public realm and perceptions of Grays town centre, it compromised the development of the identified plots, and wider Grays regeneration.
C	Present Value of other quantified impacts (£m)	£2.4m	The option of a bridge could deliver similar housing units on site, but wider developments would be less likely to be catalysed with a bridge as it would generate public realm dis-benefits and would hinder the flow of pedestrians through to the town centre.
D	Net Present Public Value (£m) [A-B] or [A-B+C]	£34.8m	
E	'Initial' Benefit-Cost Ratio [A/B]	**2.3:1** for all public funding **5.5:1** for Growth Deal funding	We would expect the initial BCR for the bridge to be lower than that of the underpass as the public realm benefits would be lower, and there may be less of an impact on mode shift as a result.
F	'Adjusted' Benefit Cost Ration [(A+C)/B]	**2.4:1** for all public funding	We would expect the adjusted BCR for the

	DCLG Appraisal Sections	Option 1 relative to status quo (Do Something)	Option 2 relative to status quo (Do Minimum)
		5.7:1 for Growth Deal funding	bridge to be lower than that of the underpass for the reasons above, as well as the potential impact on the wider development as a result of a lower quality public realm and reduced access and connectivity between the town centre and Grays South meaning a greater degree of severance would be maintained.
G	Significant Non-monetised Impacts	The project will generate additional non-monetised benefits: Reduced vandalism of the level crossing will generate a public benefit and a reduce cost to Network Rail of repairing and cleaning up damage. The safety benefits will be greater than currently estimated due to an anticipated worsening of safety in the future in a 'Do Nothing' scenario. The underpass also increase connectivity between Grays South and the town centre and reduce and avoid the negative impact of the severance of the high-street. The underpass and public squares are also expected to bring about further developments through making Grays a more attractive investment opportunity. There are a number of identified sites for development that the underpass and public realm work will indirectly support. The new commercial development is expected to help attract more multiple retailers to the town centre, to increase attractiveness to shoppers, including commuters who might otherwise have shopped in London. In addition the new commercial development is expected to increase the evening economy, through later opening times and increased food, drink offerings. This will increase the productivity of commercial space through longer opening hours, and will increase spending in the town, generating growth and jobs for the area.	
H	Value for Money (VfM) Category	High value for money (BCR>2)	

	DCLG Appraisal Sections	Option 1 relative to status quo (Do Something)	Option 2 relative to status quo (Do Minimum)
I	Switching Values & Rationale for VfM Category	The BCR is above 2, and does not include wider regeneration benefits associated with the public realm work and accessibility provided by the underpass. Our sensitivity analysis shows that with more conservative assumptions applied in the main areas of uncertainty, the BCR would hold within a range of 2.1:1 and 2.7:1.	
J	DCLG Financial Cost (£m)	(£10.8m Growth Deal funding)	
K	Risks	The main risk associated with the realisation of benefits, and the benefit cost ratio, relates certainty around the total costs of the project. However, we have conducted sensitivity around the costs and sources of funding which indicate that even with 30% increase in costs above the current estimate (which includes a 30% risk adjustment), the project would deliver acceptable value for money.	
L	Other Issues	The wider Grays Masterplan may also contribute to the housing and commercial developments. This is accounted for in the additionality factor applied.	

4. COMMERCIAL CASE

The commercial case determines whether the scheme is commercially viable and will result in a viable procurement and well-structured deal. It sets out the planning and management of the procurement process, contractual arrangements, and the allocation of risk in each of the design, build, funding, and operational phases.

4.1. Procurement options:

[Present the results of your assessment of procurement and contracting route options and the supplier market, and describe lessons learned from others or experience; max. 1 page.]

The Council and Network Rail will consider the merits of forms of collaborative working and/or joint procurement. A collaborative working approach is intended to ensure both have aligned financial and timing programs whereas, joint procurement takes collaboration a step further by bundling services into one tender and selection processes; this would include a multi-disciplined 'group working' arrangement delivered by either party.

The options available for a Network Rail led and a Thurrock Council led procurement are as follows.

Joint Procurement – Network Rail led

Advantages
- Unified approach through a working group
- Compliance with Network Rail processes including Railway Safety Case
- Option to use Network Rail frameworks for all elements

Disadvantages
- Thurrock Council's influence and control is limited
- May limit pool of potential contractors for non-rail elements (existing framework advisors)
- Inflexible (unadaptable to change should requirements and processes change)

Joint Procurement – Thurrock led

Advantages
- Unified approach through a working group
- Thurrock control and influence
- Ability to harmonise with wider town centre works (significant benefit)

Disadvantages
- Resourcing (this is a key consideration for Thurrock Council. In house resourcing is fundamental to delivery and managing contractors/advisors)
- Lack of experience of procuring for railway specific elements (This could be remedied through joint working)
- Likely to be unacceptable as a result

Separate – Network Rail & Thurrock

Advantages
- Each focuses on area of expertise
- Ability to align construction responsibilities with ongoing maintenance responsibilities

Disadvantages
- Need for coordination on specification and delivery
- Contractually, need to ensure that Network Rail elements of the scheme are compliant with Thurrock Council's requirements, which could be aligned through joint commitment to a common specification.

The Council has incorporated lessons learned from its Thurrock Regeneration Company work into its approach to the project, incorporating specialist project management, legal and design resource into its team as follows:

The Council has established a clearly defined procurement strategy which is overseen by the Procurement and Efficiency Management Board (PEMB) to ensure that the procurement processes undertaken:

- give a clear direction for fulfilling the Council's vision and goals;
- contributes to the financial health of the Council by delivering value for money;
- links commissioning and procurement with other 'social value' policies such as economic regeneration, financial control and sustainability; and
- delivers the outcome improvements expected from procurement and commissioning.

The Council has hired Neil Muldoon, an external project manager to lead the project on its behalf. Neil has broad experience in the Rail industry and is a former Network Rail employee and consultant to the Department for Transport.

The Council retains Paul Shadarevian, QC, of Cornerstone Barristers to provide legal support on the land acquisition process. Paul has over 30 years of experience in planning, compulsory purchase and compensation, having advised extensively on local plans throughout England and Wales, and has also engaged legal advisors on the CPO process.

There are several elements of the project which require consideration of the procurement approach. These are:

- land acquisition;
- public realm;
- design & construction of the underpass.

Land Acquisition
Montagu Evans has been working with the Council to support the process of land acquisition through the CPO process. Montagu Evans is a highly regarded property consultancy with offices throughout the UK and specialises in advising on major mixed use property development projects. Its services were procured through the Homes England Property Panel framework.

The Council has also appointed Shoosmiths to provide general legal support on the project.

Public Realm
The Council has appointed Steer Group as the urban design consultants under the Council's existing procurement process. Steer Group is an international consulting firm with a team specialising in urban design and placemaking.

Design & Construction of the Underpass
Network Rail has not yet confirmed who will deliver GRIP3 stage.

Beyond completion of the underpass, the Council recognises that the associated development of the surrounding area and contractors to undertake the actual urban realm improvements will require further procurement in the future. The Council believes it has the necessary experience and expertise to undertake this process in the future and will draw upon lessons learned through its own Thurrock Regeneration Limited development company.

4.2. Preferred procurement and contracting strategy*:*

[Define the procurement strategy and contracting strategy (e.g. traditional, (design and build, early contractor involvement) and justify, ensuring this aligns with the spend programme in the Financial Case and the project programme defined in the Management Case; max. 2 pages.]

Through Network Rail and Steer Group, relevant design team advisors are in place and contractors will be engaged at the appropriate time to support the delivery of the underpass and design of the public squares.

The Council is currently in contract with Network Rail for GRIP Stage 3. Once this is complete the Council will contract for GRIP Stages 4-8. This could either be with Network Rail's framework contractor (Murphy), or through Network Rail with a contractor selected via open competition, with the successful bidder selected based on cost, quality and time. Alternatively the Council could contract independently of Network Rail, liaising with Network Rail's asset protection team.

The preferred route would be to contract via Network Rail either with its framework contractor or through open competition as both these options would result in the Council dealing with Network Rail Infrastructure Projects (IP) instead of Network Rail Asset Protection (ASPRO). The Network Rail IP team is a dedicated team with immediate access to their internal team Route Asset Managers (RAMs) team which covers a variety of disciplines such as Signalling, Earthworks, Track (P-way), OLE (electrification) and ergonomics, and which is instrumental in obtaining sign off from a Network Rail perspective. The ASPRO team typically deals with smaller commissions and, although it does have access to the RAMS, it takes longer, with set service level response times and is not set up to work on projects daily. For this reason, dealing directly with the ASPRO team would be preferable, though the option of contracting independently from Network Rail remains an option for the Council.

Network Rail views the project for management purposes as a third party project with the Council as a client. Network Rail typically follows a design and build procurement route. There is a potential to follow a 'develop and construct' procurement route, which is a variation on design and build, in which most of the design is completed before the contractor is appointed. Further details on the nature of delivery will become clearer once Network Rail progress the GRIP3 (Option Selection) process.

Thurrock focus in on ensuring that the scheme overall is compliant with the project objectives.

For Thurrock elements, Thurrock has considered using a design and build procurement but prefers a traditional contracting route with separate design team procurement, notably due to the requirement for early engagement of the design team, and the need for that team to interface with and coordinate between the Thurrock and Network Rail elements. Thurrock Council will procure the contractor for the public square works through a competitive tender process enabling a construction team to work alongside Network rail once the design is completed. This contractor will be required to have experience of working near the operational railway and with Network Rail so that all railway standards are adhered to.

4.3. Procurement experience:

[Describe promoter (and advisor) experience of the proposed approach including any lessons learnt from previous procurement exercises of a similar scale and scope; max. 0.5 pages.]

Network Rail has significant experience of delivering rail safety schemes such as the underpass works and has a formal management and control process (GRIP – Governance for Railway Investments Projects[45]) for delivering projects on the operational railway. Network Rail also uses a supplier assurance process to ensure the quality of the contractors it uses and who are subject to relevant safety standards, such as holding the Principal Contractor Certificate or Principal Contractor Licence. This ensures that all contractors have appropriate and robust Health & Safety, Quality and Environment management systems to effectively discharge their duties.

The Council team leading this project has amassed significant experience in the delivery of a range of complex capital programmes includes those requiring the use of CPO. These include the delivery of South Essex College's Thurrock Campus in Grays, the development of the £60m High House Production Park in Purfleet and a £100m housing programme delivering more than 450 new homes. The Council also has a dedicated procurement team available to provide specialist advice on the project procurement.

4.4. Competition issues:

[Describe any competition issues within the supply chain; max. 0.5 page.]

Suppliers relating to the key design elements for the underpass and public squares have been appointed already and so no further competition issues are identified for the design process at this stage in the project.

As the delivery of the underpass will be largely managed by Network Rail, it has a supplier framework from which it can appoint relevant contractors.

The Council's own advisors have been procured from relevant frameworks and OJEU compliant ITT. Legal services have been procured through the 'Places for People Procurement Hub Lot 2', property advisor from the HCA Property Panel mini competition and the urban realm designers through an OJEU compliant ITT.

4.5. Human resources issues:

[Where possible, describe what you have done to identify and mitigate against any human resource issues; max. 0.5 pages.]

Network Rail has a dedicated project sponsor whose role is to coordinate the contributions of Network Rail's relevant departments and contractors to the project and who provides regular day-to-day interface with the Council's own project manager. A quarterly held Senior Steering Group exists as a face to face forum of senior members of Network Rail, Thurrock Council and C2C (the train operating company running services through Grays Railway Station). No human resource issues have been identified at this stage and it is expected that between the Council's project manager and Network Rail's project sponsor that any issues arising will be identified early with appropriate mitigating actions. The Council has a specialist HR team which can be drawn on for advice should any issues arise.

[45] https://standards.globalspec.com/std/10252862/nr-l2-ini-p3m-101-issue-5

4.6. Risks and mitigation:

Specify the allocation of commercial risks (e.g. delivery body, federated area, scheme promoters) and describe how risk is transferred between parties, ensuring this is consistent with the cost estimate and Risk Management Strategy in the Management Case; max. 1 page.]

The delivery of the project will be governed through a service level agreement between Thurrock Council and Network Rail. This is currently in the process of being developed for the GRIP 3 process stage to begin and subsequent agreements will be updated as the project progresses. This will provide the Council with a degree of certainty and comfort on the delivery of the scheme and allow the Council to closely monitor and manage any potential delivery risks with Network Rail through these agreements. Risk allocation is as follows:

Risk	Thurrock	Network Rail
Scheme scoping and overall funding envelope	✓	
Rail related compliance		✓
Delivery of underpass and related elements to specification and cost		✓
Delivery of public realm works	✓	
Development receipts	✓	
Cost overruns outside agreed scope	✓	

4.7. Maximising social value:

[Where possible, provide a description of how the procurement for the scheme increases social value in accordance with the Social Value Act 2012 (e.g. how in conducting the procurement process it will act with a view of improving the economic, social and environmental well-being of the local area and particularly local businesses); max. 0.5 page.]

The Council has defined in its Commercial and Procurement Strategy for 2018-2021 that social value will be measured within how procurement achieves community benefits. The success of the procurement will be measured based upon how the wellbeing of individuals and communities as well as the effect on social capital and the environment. Alongside this, the Council will also ensure the procurement considers how local SMEs and micro businesses are engaged as well as how voluntary community and social enterprises are engaged. This will be developed and tailored accordingly to the required procurement beyond completion of the underpass.

5. FINANCIAL CASE

The Financial Case determines whether the scheme will result in a fundable and affordable Deal. It presents the funding sources and capital requirement by year, together with a Quantitative Risk Assessment (QRA), project and funding risks and constraints. All costs in the Financial Case should be in nominal values[46].

The profile of funding availability detailed in the Financial Case needs to align with the profile of delivery in the Commercial Case.

[46] Nominal values are expressed in terms of current prices or figures, without making allowance for changes over time and the effects of inflation.

5.1. Total project value and funding sources:

[Specify the total project value and how this is split by funding sources by year, as per the table below (expand as appropriate). This should align with the total funding requirement described within the Project Overview section. Please include details of other sources of funding, and any conditions associated with the release of that funding. LGF can only be sought to 2020/21.]

This project forms part of the wider Grays South Project, and relates to the underpass and associated infrastructure and public realm. The total cost of these elements is £28.7m, of which £10.8m in funding from the LGF is being sought in two instalments.

The breakdown of the cost is as follows (see Appendix V – Network Rail Final Costs with Bill of Quantities for the underlying cost inputs to the Volker Fitzpatrick estimate):

Item	Cost	Source
PRINCIPAL CONTRACTOR/DESIGNER COSTS		
Volker Fitzpatrick Estimate (underpass, steps and ramps, structures, public squares, Station Road diversion)	£15,985,699.00	Volker Fitzpatrick
Highway diversions, contribution to maintenance of routes used for construction traffic etc.	£250,000	Thurrock Council
COWD Network Rail (up until end of Control Period 5)	£705,000.00	Network Rail
Crown Road	£2,750,000	Thurrock Council
Public realm beyond red line	£858,000	Thurrock Council
Land Acquisition (based on Montague Evans	£6,500,000	Thurrock Council
PROFESSIONAL FEES		Thurrock Council
fees for Steer	£715,000	Thurrock Council
fees for Montagu Evans (planning consultants)	£225,000	Thurrock Council
fees for Montagu Evans (land acquisition)	£100,000	Thurrock Council
fees for Shoosmiths	£300,000	Thurrock Council
Others	£350,000	Thurrock Council
TOTAL	**£28,738,699.00**	

Maintenance costs have not been included at the current time as it is difficult to estimate the size/cost/responsibility of the maintenance regime before design progresses further. In terms of maintenance liability / risk allocation it is expected that Network Rail will be responsible for the

maintenance of the asset that once constructed provides access under the operational railway, including steps and ramps. The public realm created will be included in highways maintenance, and maintenance issues would be absorbed within the normal cycle of highways maintenance by Thurrock Council. A maintenance strategy, including responsibilities, will be developed once a detailed design has been created but early initial discussions will take place throughout GRIP Stage 3.

The funding sources as currently identified are:

Funding Source	**Value**
Thurrock Borough Council Capital Programme	£10,396,718
S.106 Funds held by Thurrock Council	£1,200,000
Network Rail	£705,000
Development Receipts	£5,596,707
Funding sought through LGF Grant	£10,840,274
Total	**£28,738,699**

The development receipts are derived from the surpluses anticipated through the development of plots created through the project, together with the linked development of other plots that it owns within the town centre but outside of the immediate project area as identified by the work undertaken by Montagu Evans in this area. The Council will take the financial risk on these developments and is anticipating bringing them forward through its wholly owned development company, Thurrock Regeneration Limited which would secure greater returns than would otherwise be achieved through the disposal of the sites directly to the market. Any shortfall, will be funded by Thurrock (subject to S151 officer sign off).

5.2. SELEP funding request, including type (LGF, GPF, etc.,):

[Specify the amount and type of SELEP funding sought to deliver the project. This should align with the SELEP funding requirement described within the Project Overview section.]

LGF SELEP Grant Funding previously provided	£3,700,000
LGF SELEP Grant Funding sought through this submission	£7,140,274
Total	**£10,840,274**

5.3. Costs by type:

Detail the cost estimates for the project by year as per the table below (expand as appropriate) and specify how the inclusion of the Quantitative Risk Assessment (QRA) and other overheads aggregate to the total funding requirement. Where conversion has been made between nominal and real cost estimates (and vice versa) please provide details of any inflation assumptions applied. The Financial Case should not include Optimism Bias. Please confirm that optimism bias has not been applied in the Financial Case. Also, include details of the agreed budget set aside for Monitoring and Evaluation, and ensure this aligns with the relevant section in the Management Case. Please note, not all sections of the table may require completion.]

Construction costs have been developed by Network Rail, whilst Montagu Evans has estimated the land acquisition costs. More detailed costings will become available once Network Rail progress to the GRIP 3 stage of the design process. Inflation has already been built into these cost estimates. The figures presented below do not include optimism bias. Thurrock Council confirms that £1.2m was spent in 18/19, as per the forecast, on fees for design team, planning consultant, land acquisition team, legal support, and land assembly.

		Expenditure Forecast						
Cost type	**17/18 £m**	**18/19 £m**	**19/20 £m**	**20/21 £m**	**21/22 £m**	**22/23 £m**	**23/24 £m**	**Total £m**
Design/NR design		1.2	2.0	2.0	2.0	0	0	7.2
Land Acquisition		0	3.1	2.5	0	0	0	5.6
Construction		0	0	3.0	4.9	5.3	2.7	14.6
Total funding requirement		**1.2**	**5.1**	**7.5**	**6.9**	**5.3**	**2.7**	**28.7**

These costs include a risk adjustment of 30% on the cost of the capital works to reflect project risks – see section 5.4 below.

5.4. Quantitative risk assessment (QRA):

[Provide justification for the unit costs and a Quantitative Risk Assessment (QRA) provisions (detailed in the capital and non-capital tables above); max. 2 pages. Please provide supporting documents if appropriate.]

Within the Network Rail cost estimates, Network Rail has used an industry standard risk adjustment of 30% on the cost of the capital works to reflect project risks. This is already costed within the capital costs identified above.

With regards to the land acquisition costs, these have been costed by Montagu Evans on the assumption of a CPO. It is expected that some acquisitions will be able to be completed outside of the CPO process and that in such cases, costs will likely be less than the values set out by Montagu Evans. We believe there is sufficient contingency within the land acquisition costs to cover any unexpected events.

5.5. Funding profile (capital and non-capital):

[Where possible, explain the assumed capital and non-capital funding profile, summarise the total funding requirement by year, and funding source (add rows / columns as appropriate). Please note, not all sections of the table may require completion. Also, explain the external factors which

influence/determine the funding profile, describe the extent of any flexibility associated with the funding profile, and describe non-capital liabilities generated by the scheme; max. 1 page.]

Funding source	18/19 £m	19/20 £m	20/21 £m	21/22 £m	22/23 £m	23/24 £m	Total
Thurrock Capital Programme, S.106 Funds, Development Receipts	0.5	1.4	0.4	6.9	5.3	2.7	17.2
Network Rail Funding	0.7	0	0	0	0	0	0.7
LGF Funding	0	3.7	7.1	0	0	0	10.8
Total funding requirement	**1.2**	**5.1**	**7.5**	**6.9**	**5.3**	**2.7**	**28.7**

The above funding profile is an indicative estimate based on progress to date. This, however, will be influenced by the nature of the design and construction solution developed by Network Rail. Depending upon these construction works, funding areas such as development receipts may be able to be brought forward. Development phasing is expected to provide further development returns outside of the period covered in the table.

5.6. Funding commitment:

[Provide signed assurance from the Section 151 officer to confirm the lead applicant will cover any cost overruns relating to expenditure and programme delivery, as per the template in Appendix A. Please also confirm whether the funding is assured or subject to future decision making.]

Please see signed assurance included in Appendix A. All Thurrock Council contributions are fully secured and can be drawn down as the project dictates.

5.7. Risk and constraints:

[Specify project and funding risks and constraints. Describe how these risks have, where appropriate, been quantified within the QRA/contingency provisions; max 0.5 pages.]

The funding in relation to the development receipts and cost overruns is a risk borne by the Council. In the event that these development receipts are not produced in time to support the underpass development, the Council will provide the additional funding required through their own funds.

Each of the development elements already has an appropriate level of contingency built into the costings. Whilst Network Rail is experienced in the delivery of these infrastructure developments and further confirmation will come once we progress through the GRIP process, in the event that Network Rail's initial costings are too optimistic, the Council will absorb the commercial risk of funding shortfall through their own development receipts.

6. MANAGEMENT CASE

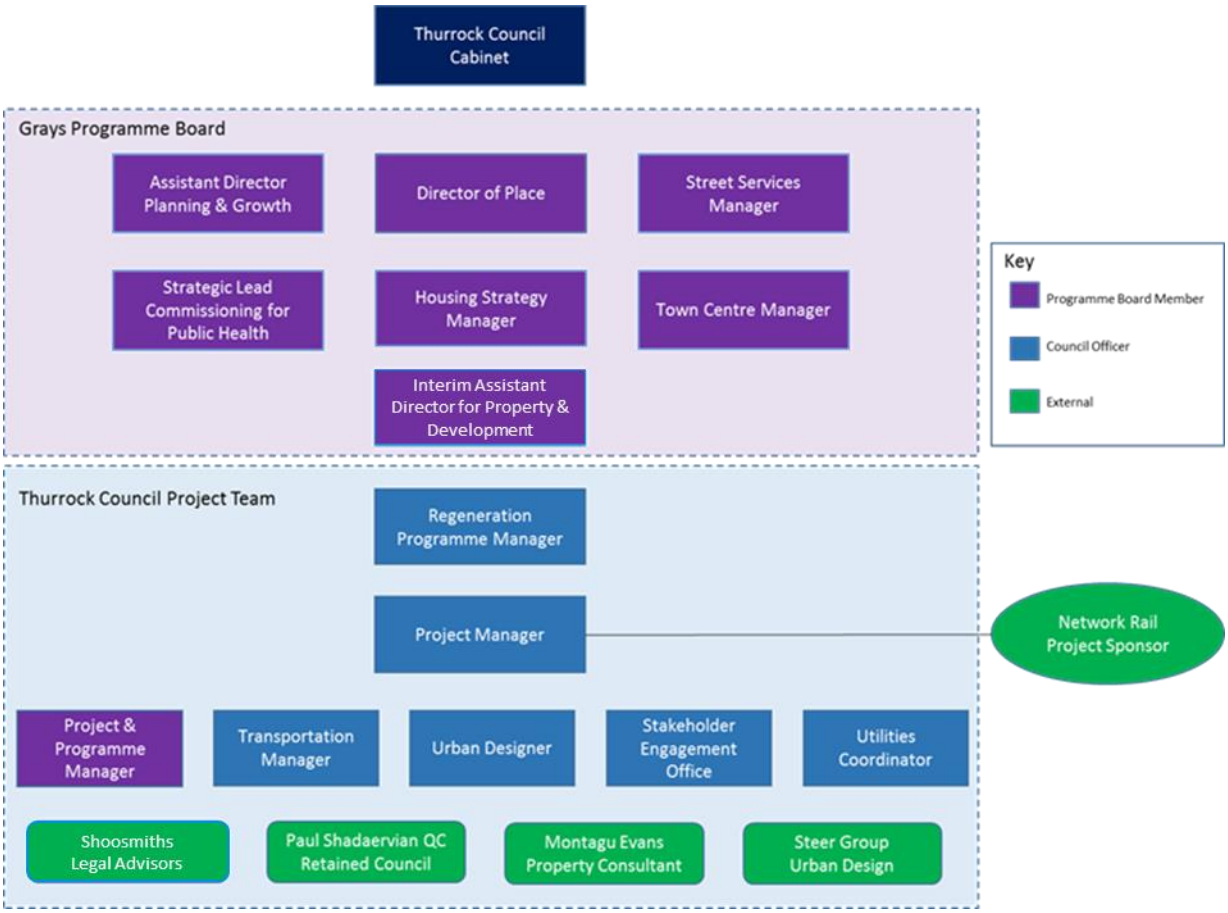
The management case determines whether the scheme is achievable and capable of being delivered successfully in accordance with recognised best practice. It demonstrates that the spending proposal is being implemented in accordance with a recognised Programme and Project Management methodology, and provides evidence of governance structure, stakeholder management, risk management, project planning and benefits realisation and assurance. It also specifies the arrangements for monitoring and evaluation in terms of inputs, outputs, outcomes and impacts.

6.1. Governance:

[Nominate the project sponsor and Senior Responsible Officer, explain the project governance structure (ideally as a diagram with accompanying text) and describe responsibilities, project accountability, meeting schedules etc.; max. 1 page.]

The Council has pulled together an experienced and senior team to lead the delivery of the project and the governance for the project has been developed in line with the Council's strategic principles.

Council Project Sponsor: Andy Millard, Interim Director of Place
Senior Responsible Officer: David Moore, Interim Assistant Director for Place Delivery



The Project Manager is responsible for the day-to-day issues and acts as the Council's liaison with the Network Rail project sponsor. A Council project team is responsible for the day-to-day delivery of the project, and the Regeneration Programme Manager alongside the Project Manager will report to the Grays Programme Board every 2 months and which is chaired by the Council's Director of Place.

Additional workstreams as required (e.g. finance and planning) will be managed through the project team, with relevant representatives being invited to join the team as the project progresses.

The Grays Programme Board is in charge of oversight of the scheme and will make recommendations to the Council's Cabinet. The Cabinet holds ultimate decision-making responsibilities for the project.

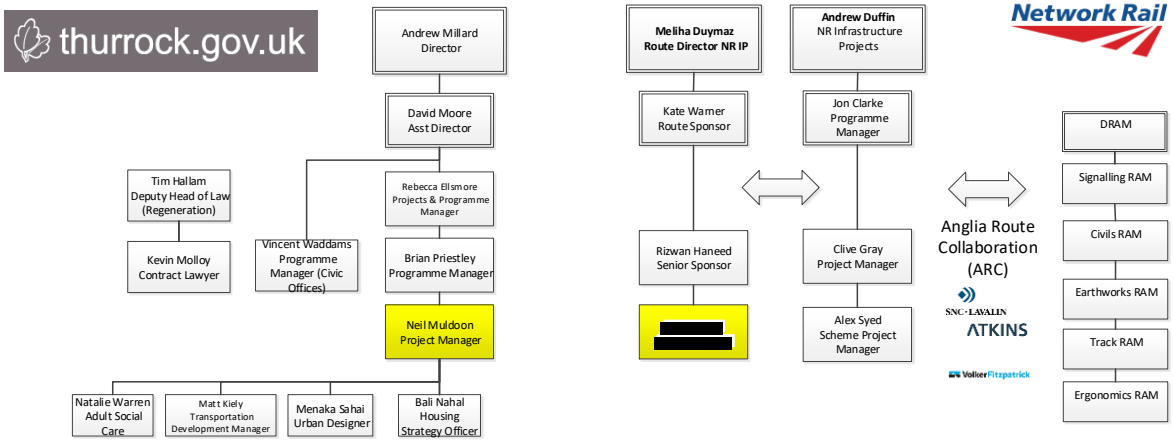
In addition, a senior steering group is in place that involves Thurrock Council, Network Rail and C2C. Senior representatives from each party meet quarterly to discuss progress against milestones and resolve key issues.

6.2. Approvals and escalation procedures:

[Specify the reporting and approval process; max. 0.5 pages.]

Ultimate decision making responsibility will rest with the Council Cabinet and the escalation process will follow the upward chain as identified above. Any issues for escalation with regards to Network Rail will be taken through the Network Rail Project Sponsor, [redacted] as necessary and this process is detailed in the recently signed Direct Services Agreement between Thurrock Council and Network Rail.

The organogram illustrated below shows the immediate project teams at both Thurrock Council and Network Rail Anglia Route, Infrastructure Projects and the ARC framework and the key reporting lines – namely at the first level Neil Muldoon, Project Manager at Thurrock Council and [redacted], Project Sponsor at Network Rail.



GRIP Stage 3 (Option Selection) is due to be signed with Network Rail imminently. At this point the approval processes will be agreed and set out for the rail element of the scheme.

6.3. Contract management:

[Explain your approach to ensuring that outputs are delivered in line with contract scope, timescale and quality; max. 0.5 pages.]

The outputs of the project will be monitored in line with the governance set out above. The Council's obligations will be monitored through the Grays Programme Board.

The project manager will be responsible for the day-to-day delivery of the project in line with the contract terms and will be supported by the regeneration programme manager and the project team as required.

Where escalation is required, the Senior Responsible Officer and Project Sponsor will liaise with colleagues from Network Rail.

Formal contract management processes (and the associated monitoring process) will be agreed with Network Rail once the project progresses beyond the GRIP 3 stage.

6.4. Key stakeholders:

[Describe key stakeholders, including any past or planned public engagement activities. The stakeholder management and engagement plan should be provided alongside the Business Case; max. 0.5 pages.]

A wide range of stakeholders have been identified and have been consulted and/or involved directly in project development and design. Engagement and consultation is intended to be an integral part of project development.

Stakeholder	Role	Interfaces
Network Rail	Delivery partner, funder, land owner (land for underpass, adjoining land with development potential), Manages rail infrastructure, approval process, possessions, appointed design/build contractors	Meetings, e-mail, telephone, contact lists circulated , legal documents
Contractors	Design/ construction	Specification and tender. Meetings, e-mail, telephone, contact lists circulated
C2C	Train operating company, lease station and station car park. Not directly involved in underpass delivery but could be involved in redevelopment of station although advised limited scope in lease arrangement. Interest in relationship of station to underpass. Design input and support, even if no funding.	Meetings, e-mail, telephone, legal documents required if joint development
Land owners in scheme area (freehold, leasehold, tenant/occupier, other rights over land)	Land will need to be acquired in sufficient time, process could be extended if CPO	Consultants to lead acquisition. Correspondence, meetings, e-mail, telephone, legal documents
Land owners adjacent scheme area (freehold, leasehold, tenant/occupier)	Amenity impact of works and operation and possible impact on business. Potential objectors to or supporters of scheme	Correspondence, e-mail, meetings, consultation

Utilities Company: Various National Grid Gas PLC	Range of utilities may require stopping/moving/replacing. Need to know there's no 'show stoppers'	Consultations on design and through approvals processes
Councillors: ward	Impact on ward	E-mail updates, reports to committee, briefing meetings
Councillors: Cabinet/O&S	Impact on Council priorities, decisions about implementation and funding	Reports to committees, briefings for key members
MP	Influence on public opinion	Briefings
Statutory Consultees: Various identified	Statutory consultee in planning process	Meetings, correspondence, consultation in design and consents processes
Community Group: Various identified	Community Group. Area includes part of town centre	Correspondence, attend meetings, consultation
Business Groups: Grays Town Partnership	Organised group of town centre interests	Correspondence, meetings, consultation
Business Groups: Various identified Thurrock	Representative group with wide contacts in business	Correspondence, meetings
Business Group: Town Centre Businesses	Consultative role on design, planning	Correspondence, consultation.
Emergency Services: Various	Consultative. Access during construction and accessibility for incidents	Correspondence, meetings, consultation on designs and consents.
Transport: Bus operators and taxis	Consultative. Access during construction, relationship to station	Correspondence, meetings, consultation on designs and consents
Transport: Thurrock Bus Users Group	Consultative on accessibility issues	Correspondence, meetings, consultation on designs and consents
Thurrock Coalition/Thurrock Diversity Network	Consultative on access and design: Represent disability groups	Correspondence, meetings, consultation on designs and consents
Press and media	News information to the general public	Communications team.

A Grays South engagement plan, detailing the strategy in which Thurrock Council wishes to manage, engage and communicate with all stakeholders has been drafted by the Council's newly appointed Urban Designers, Steer. This document is nearing completion and details mitigation measures to deal with any negative impacts.

6.5. Equality Impact:

[Provide a summary of the findings of the Equality Impact Assessment (EqIA) and attach as an Appendix to the Business Case submission. If an EqIA has not yet been undertaken, please state when this will be undertaken and how the findings of this assessment will be considered as part of the project's development and implementation. The EqIA should be part of the final submission of the Business Case, in advance of final approval from the accountability board; max. 0.5 pages.]

The Equality Impact Assessment has not been undertaken as yet. This will be undertaken upon completion of Network Rail's GRIP 3 process and will be considered as part of the finalisation of the design for the underpass and public squares.

However, based on a strategic rapid assessment we expect the project will have a significant positive impact, particularly on those with disabilities. The proposed underpass has been selected on the basis of its ease of accessibility from the street. The public square and boulevard are expected to provide improved lighting and enhance visibility and safety. This is expected to have a positive effect through reducing crime on particular user groups that are protected, for example the elderly.

No specific groups are expected to be disadvantaged by the project as the focus of the project and the design of the underpass and public squares is to provide amenities and associated benefits that will be accessible to all.

6.6. Risk management strategy:

[Define the Risk Management Strategy referring to the example provided in Appendix B (expand as appropriate), ensuring this aligns with the relevant sections in the Financial and Commercial Case. Please provide supporting commentary here; max. 0.5 pages.]

The Council has in place an active risk register which is periodically updated by the project manager and programme manager.

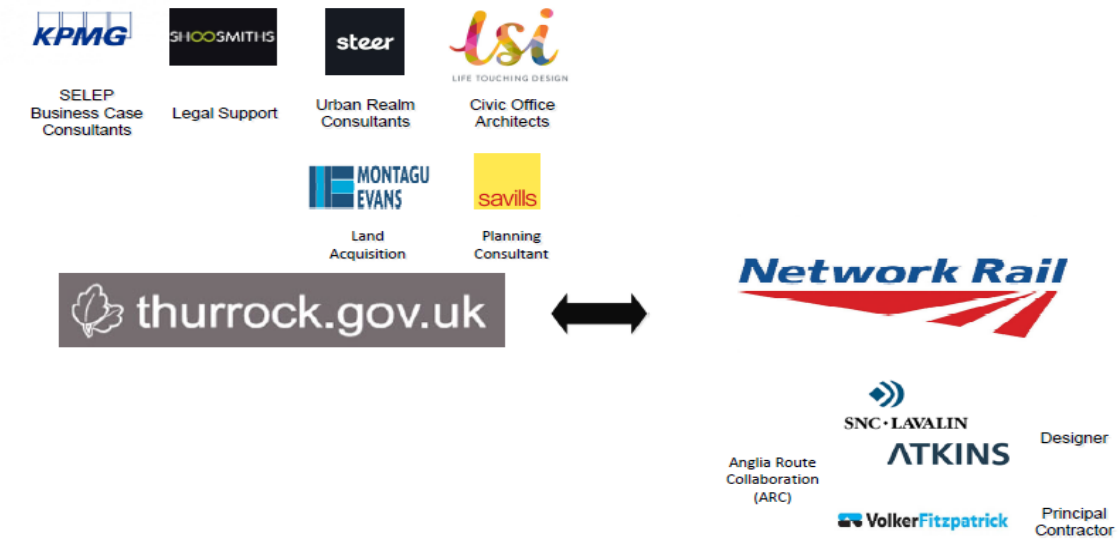
Risks are actively identified and recorded in the risk register, analysing the potential impact of the risk and the likelihood and project exposure it could cause. The register also identifies the appropriate implemented mitigating actions that are to be put in place.

Where risks require further action, this is noted in the register where the risk will be flagged for future actions by a relevant date and the current status. This is managed by the project manager who will involve relevant members of the project team and advisors as necessary.

The risks in the register appended have been assigned specific owners within the Council, and there are dates in the diary for regular risk register review meetings where risk mitigation methods will be at play to lower the risk level to an acceptable level/close. This process has commenced since Thurrock Council have signed a Direct Services Agreement with Network Rail in October 2018 and a named project team has been mobilised.

A high level organogram is illustrated below showing the latest project team at the time of writing.

Grays South Regeneration Project: Organogram



6.7. Work programme:

[Provide a high-level work programme in the form of a Gantt Chart which is realistic and achievable, by completing the table in Appendix C (expand as appropriate). Please describe the critical path and provide details regarding resource availability and suitability here; max. 0.5 pages.]

Appendix C provides a high-level work programme in the form of a Gantt Chart.

A more detailed work programme with critical path and dependencies is included in Appendix M, however there are some details that it is not possible to include at this stage as Network Rail has not yet undertaken the required steps to develop the full detail and critical paths that will affect the development of the underpass and public squares.

More detail will be added to the work programme once Network Rail has completed their GRIP 3 stage of work.

Please note that all of the companies that comprise the overall project team, detailed in the organogram above, including Network Rail and its supply chain, have the capability and capacity the deliver the services required.

Please see section 1.13 for an indicative project programme detailing the GRIP process over the duration of the project.

6.8. Previous project experience:

[Describe previous project experience and the track record of the project delivery team (as specified above) in delivering projects of similar scale and scope, including whether they were completed to time and budget and if they were successful in achieving objectives and in securing the expected benefits; max. 0.5 pages.]

The Council team leading this project has amassed significant experience in the delivery of a range of complex capital programmes includes those requiring the use of CPO. These include the delivery of South Essex College's Thurrock Campus in Grays, the development of the

£60m High House Production Park in Purfleet and a £100m housing programme delivering more than 450 new homes. Additionally, there is solid experience within the team in public consultation and public realm improvement and railways. It is important to note that the Council has secured a Project Manager with technical experience in Rail and Railways Infrastructure projects specifically to work on the delivery of this project.

6.9. Monitoring and evaluation:

[SELEP are required to submit detailed quarterly project monitoring reports to the Department for Business, Energy and Industrial Strategy for schemes that have been funded through the LGF to enable ongoing monitoring and evaluation of individual projects. Monitoring and evaluation metrics should be aligned to these reporting requirements (South East Local Enterprise Partnership Assurance Framework 2017, Section 5.8 – see SELEP Business Case Resources document). A proportionate approach to Monitoring and Evaluation should be followed ensuring evaluation objectives relate back to the business case and build on assumptions used in the appraisal process.
Promoters should also include a statement which identifies other schemes which may have potentially contributed to the same benefits/impacts.
Max. 1 page excluding table.
Smaller schemes (less than £2 million) are required to complete Monitoring and Evaluation which is proportionate to the size of the scheme; max. 0.5 page.]

The monitoring and evaluation framework will allow Thurrock Council to monitor the Grays South Project against the identified Key Performance Indicators (KPIs). The monitoring and evaluation framework is intended to be used in conjunction with the project governance processes and not in replacement of it. The plan can be used to track performance of the Grays South Project.

The monitoring and evaluation framework aligns with the objectives of the project as well as the requirements for the SELEP Assurance Framework. In some instances, in particular in relation to the indirect impacts, it will be difficult to fully attribute the impacts to the Grays South Project, given the wider town centre regeneration that is going on as part of the Grays Masterplan and Local Plan. To evaluate this, Thurrock Council supplement the monitoring data with qualitative assessment of the attribution of impacts based on consideration of other potential drivers and perceptions of local residents, businesses and visitors.

The proposed framework is provided in the separate M&E Plan and Baseline report for the project.

6.10. Benefits realisation plan:

[A Benefits Realisation Plan provides details of the process that will be followed to ensure that benefits are sustained and that returns on investment are maximised where possible. The Benefits Realisation Plan identifies the potential benefits and how these will be tracked and measured, the risks that may prevent benefits being realised and the critical success factors that need to be in place to ensure that benefits are realised. In many cases, benefits realisation management should be carried out as a duty separate from day to day project management. Describe the proposal for developing a Benefits Realisation Plan which should involve continuous public engagement to ensure the anticipated benefits are realised. The Benefits realisation plan should be consistent with the Strategic and Economic Case; max. 0.5 page.]

Benefits Realisation Planning starts at the start of the project and continues throughout the delivery and in to post delivery. Broadly these fall in to three main categories that will be monitored throughout the project

1. Technical requirements including construction and engineering requirements for all the structures
2. Functional requirements, that the project delivers on key outcomes
3. Funding, that the project is delivered within budget and on time

These will be defined through several processes within each stage of the project:

1. Consultation and engagement with communities and businesses to identify their issues and expectations.
2. Engagement with technical and statutory consultees such as train operating company, utilities companies, Environment Agency
3. Working with Delivery Partners to define technical and other requirements
4. Ensuring that all necessary consents and technical approvals processes have been followed and are in place.
5. Monitoring of funds and deliverables

Public consultation and stakeholder engagement has taken place to inform the current stage of the project and have been built in to the project programme for each stage of design including concept design, to GRIP 3 and Approval in Principle, GRIP 4 designs to secure consent. Technical stakeholders will be further engaged during GRIP 5 construction drawings.

Each stage of phase 2a will follow the Network Rail Guidance for Rail Infrastructure Projects process together with Thurrock Council's governance processes and will incorporate development and implementation of the Benefits Realisation Plan appropriate for each stage. The approach is summarised as:

1. Route Requirements Documents (RRD) which sets out all the technical and design requirements for the stage and the stage 'deliverables' and would have to be signed off by Network Rail and Thurrock Council before a Service Delivery Agreement can be completed
2. Service Delivery Agreement (SDA) sets out project Governance, the delivery and decision making process, roles and responsibilities of each delivery partner, and the programme and costs for a stage and must be completed before works starts on the stage
3. Delivery of outputs stated in 1 and 2.
4. Network Rail would then require the following approvals;
   a. Network Change approval
   b. Route Change Approval
   c. Safety Verification
5. Thurrock Council would require the following approvals;
   a. Grays Programme Board chaired by the Council's Director of Place
   b. Directors Board chaired by the Council's Chief Executive
   c. Planning, transportation and Regeneration Overview and Scrutiny Committee

   d. Cabinet
6. Stage Gate Review to verify all deliverables from 1, to 5 have been satisfactorily completed.

Designs will be subject to an Equality Impacts Assessment and to a Full Design Review with CABE prior to submission of a full planning application to secure an independent assessment of design outputs.

Note that the RRD and SDA have been completed for the next stage and that this has started.

Following completion of Construction (GRIP 6) the approach includes a similar process to the one set out above for Commissioning and Handover (GRIP 7) and for Project Close (GRIP 8) which include a review of completion of deliverables by Network Rail and Thurrock Council prior to the Stage Gate Review for each stage and Lessons Learned Report. Following completion of the scheme there will be on going monitoring based on the monitoring framework in section 6.9 and including rail safety data, pedestrian footfall surveys, pedestrian and business perception surveys and public realm review.

Phase 2b is programmed to start towards the end of construction of the underpass and access steps/ramps. Development would either be through the Council's wholly owned Development Company, Thurrock Regeneration Ltd, or as a partnership with Network Rail and C2C including their land holdings. While GRIP does not apply, the Council intends to apply the same approach to Phase 2b that it intends to use for phase 2b.

Maintenance of the structure of the underpass and the support structures will be by Network Rail, because these impact directly on the rail line, who will ensure that the structures comply with engineering and safety requirements in accordance with Office for Rail Regulation and Network Rail requirements. The Public Squares and roads will be maintained by Thurrock Council.

7. DECLARATIONS

Has any director/partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts?	*No*
Has any director/partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors	*No*
Has any director/partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme?	*No*

**If the answer is "yes" to any of these questions please give details on a separate sheet of paper of the person(s) and business(es) and details of the circumstances. This does not necessarily affect your chances of being awarded SELEP funding.*

I am content for information supplied here to be stored electronically, shared with the South East Local Enterprise Partnerships Independent Technical Evaluator, Steer Davies Gleave, and other public sector bodies who may be involved in considering the business case.

I understand that a copy of the main Business Case document will be made available on the South East Local Enterprise Partnership website one month in advance of the funding decision by SELEP Accountability Board. The Business Case supporting appendices will not be uploaded onto the website. Redactions to the main Business Case document will only be acceptable where they fall within a category for exemption, as stated in Appendix F.

Where scheme promoters consider information to fall within the categories for exemption (stated in Appendix F) they should provide a separate version of the main Business Case document to SELEP 6 weeks in advance of the SELEP Accountability Board meeting at which the funding decision is being taken, which highlights the proposed Business Case redactions.

I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. I declare that the information I have given on this form is correct and complete. Any expenditure defrayed in advance of project approval is at risk of not being reimbursed and all spend of Local Growth Fund must be compliant with the Grant Conditions.

I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

Signature of applicant	
Print full name	*David Moore*
Designation	*Interim Assistant Director: Place Delivery*

8. APPENDIX A - FUNDING COMMITMENT

Draft S151 Officer Letter to support Business Case submission

Dear Colleague
In submitting this project Business Case, I confirm on behalf of [Insert name of County or Unitary Authority] that:

- *The information presented in this Business Case is accurate and correct as at the time of writing.*
- *The funding has been identified to deliver the project and project benefits, as specified within the Business Case. Where sufficient funding has not been identified to deliver the project, this risk has been identified within the Business Case and brought to the attention of the SELEP Secretariat through the SELEP quarterly reporting process.*
- *The risk assessment included in the project Business Case identifies all substantial project risks known at the time of Business Case submission.*
- *The delivery body has considered the public-sector equality duty and has had regard to the requirements under s.149 of the Equality Act 2010 throughout their decision-making process. This should include the development of an Equality Impact Assessment which will remain as a live document through the projects development and delivery stages.*
- *The delivery body has access to the skills, expertise and resource to support the delivery of the project*
- *Adequate revenue budget has been or will be allocated to support the post scheme completion monitoring and benefit realisation reporting*
- *The project will be delivered under the conditions in the signed LGF Service Level Agreement with the SELEP Accountable Body.*

I note that the Business Case will be made available on the SELEP website one month in advance of the funding decision being taken, subject to the removal of those parts of the Business Case which are commercially sensitive and confidential as agreed with the SELEP Accountable Body.

Yours Sincerely,
SRO (Director Level)

David Moore

S151 Officer

Sean Clark

9. APPENDIX B – RISK MANAGEMENT STRATEGY

See attached file for full risk register – confidential appendix.

10. APPENDIX C – GANTT CHART

Below is a high level Gantt chart setting out the phases of work for the project. A more detailed work programme with critical path and dependencies is included in Appendix L, however there are some details that it is not possible to include at this stage as Network Rail has not yet undertaken the required steps to develop the full detail and critical paths that will affect the development of the underpass and public squares.

Key Milestones / Deliverables	Start date	Finish date	2018	2019	2020	2021	2022	2023	2024
GRIP Stage 3	Oct 2018	Nov 2020							
Urban Design Development	Aug 2019	Aug 2020							
Site assembly	Mar 2020	Feb 2022							
GRIP Stage 4	Nov 2020	Dec 2021							
GRIP Stage 5	Dec 2021	Jun 2022							
GRIP Stage 6	June 2022	Feb 2024							
GRIP Stage 7	Feb 2024	Jun 2024							

11. APPENDIX D – MONITORING AND EVALUATIONS METRICS

Please note, it is not necessary to report against all the Monitoring and Evaluation Metrics below unless they are relevant to the scheme. There is scope to add further Monitoring and Evaluation Metrics where necessary.

See Appendix X – Monitoring and Evaluation Plan, Appendix Y - Baseline report and Appendix Z - Benefits Realisation Profile.

12. APPENDIX E – ECONOMIC APPRAISAL ASSUMPTIONS

[The DCLG appraisal guide data book includes all of the appraisal and modelling values referred to in the appraisal guidance. Below is a summary table of assumptions that might be required. All applicants should clearly state all assumptions in a similar table.]

Appraisal Assumptions	**Details**
QRA and Risk allowance	N/A
Real Growth	N/A
Discounting	We have assumed a discount rate of 3.5% for the first 30 years in accordance with the HM Treasury social time preference rate.
Sensitivity Tests	We have undertaken sensitivity tests associated with the impacts generated through the public realm development and the catalysed residential development. Our sensitivity analysis is presented in section 3.6.
Additionality	We have set out our assumptions of additionality in section 3.4.
Administrative costs of regulation	N/A
Appraisal period	All impacts, except for those associated with the public realm developments, have been assessed over a 30 year appraisal period in accordance with the DCLG Appraisal guide and in reflection of the useful asset life of the developments. Public realm impacts have been assessed over a 10 year appraisal period, reflecting the short useful asset life of these developments.
Distributional weights	N/A
Employment	We have estimated the employment impacts of new housing based on the increase in population and applied a factor of 0.15 jobs per resident based on employment densities guidance.
External impacts of development	N/A
GDP	N/A
House price index	N/A
Indirect taxation correction factor	N/A
Inflation	1.17 for conversion of 2010 prices to 2019 prices
Land value uplift	HIF ready reckoner used with 75% planning additionality
Learning rates	N/A
Optimism bias	13.25%
Planning applications	N/A
Present value year	All impacts have been adjusted for the current value, based on a 2019 appraisal year using a 3.5% discount rate.
Private sector cost of capital	N/A
Rebound effects	N/A
Regulatory transition costs	N/A

Multipliers	We have conservatively not applied any multipliers to the GVA impacts generated from the housing development due to the GVA impacts representing GVA from induced employment.
	In the estimation of the indirect and induced GVA impacts associated with the construction phase of the project we have applied GVA multipliers. We have applied UK indirect GVA multipliers, sourced from the Office for National Statistics (ONS)[47]. In the estimation of the induced impacts we have applied Scottish Government Type I and Type II multipliers.[48] We have applied the relevant multipliers for the industry based on Standard Industrial Codes (SIC). The following indirect multipliers have been used in our analysis:
	
	- SIC code 41 'Construction of buildings'
	  o UK indirect multiplier of 1.91
	  o Type I multiplier of 1.63
	  o Type II multiplier of 1.97
	- SIC code 42: 'Civil engineering''
	  o UK indirect multiplier of 1.91
	  o Type I multiplier of 1.63
	  o Type II multiplier of 1.97

[47] Office for National Statistics (2018) 2013 Input-Output Analytical Tables. Multipliers and effects.

[48] Scottish Government (2018) Type I, output, income, employment and GVA multipliers. Scotland 1998-2014.

13. APPENDIX F - CATEGORIES OF EXEMPT INFORMATION

There is a clear public interest in publishing information and being open and transparent. But sometimes there is information which we can't publish because it would cause significant harm to the Council - for example by damaging a commercial deal or harming our position in a court case. Equally sometimes publishing information can harm someone who receives a service from us or one of our partners.

The law recognises this and allows us to place information in a confidential appendix if:

(a) it falls within any of paragraphs 1 to 7 below; and
(b) in all the circumstances of the case, the public interest in maintaining the exemption outweighs the public interest in disclosing the information.

1. *Information relating to any individual.*
2. *Information which is likely to reveal the identity of an individual.*
3. *Information relating to the financial or business affairs of any particular person (including the authority holding that information)*
4. *Information relating to any consultations or negotiations, or contemplated consultations or negotiations, in connection with any labour relations matter arising between the authority or a Minister of the Crown and employees of, or office holders under, the authority.*
5. *Information in respect of which a claim to legal professional privilege could be maintained in legal proceedings.*
6. *Information which reveals that the authority proposes— (a) to give under any enactment a notice under or by virtue of which requirements are imposed on a person; or (b) to make an order or direction under any enactment.*
7. *Information relating to any action taken or to be taken in connection with the prevention, investigation or prosecution of crime.*

14. APPENDIX G – Grays Town Centre Framework - REFRESH
15. APPENDIX H – Thurrock Council: Cabinet Report, April 2017
16. APPENDIX I – Network Rail Letter – Grays Level Crossing: Notice of proposed closure
17. APPENDIX J – Network Rail Letter – Support for SELEP funding: Grays Pedestrian Underpass and Level Crossing Closure Scheme
18. APPENDIX K – Montagu Evans development assessment
19. APPENDIX L – GRIP Process
20. APPENDIX M – Grays South Programme
21. APPENDIX N – Provisional results from initial ground investigation surveys
22. APPENDIX O – Thurrock Council: Cabinet Report, July 2013
23. APPENDIX P – Grays Town Centre - Ramboll Study Module 1
24. APPENDIX Q – Grays Town Centre - Ramboll Study Module 2
25. APPENDIX R – Grays Town Centre - Ramboll Study Module 3
26. APPENDIX S – Thurrock Council Route Requirements Document
27. APPENDIX T – Grays Footbridge Asset Information
28. APPENDIX U – Network Rail Safety Census
29. APPENDIX V – Network Rail Final Costs with Bill of Quantities
30. APPENDIX W – Monitoring and Evaluation Plan
31. APPENDIX X – Baseline report
32. APPENDIX Y – Benefits Realisation Profile