

# Roseburn to Leith Walk Cycle Links

Preliminary Justification Report (PJR)

December 2014

# Executive Summary

Edinburgh has an aspiration to provide a **'Family Network'** standard link from National Cycle Network routes 1, 8 and 9 at Roseburn to the City Centre, extending to Leith Walk.

The Roseburn to Leith Walk cycle link has been designed to help achieve this aspiration, by providing 4km of cycle route along an east-west corridor through Edinburgh city centre. This will improve the city's cycle network and enhance connectivity. In doing so, the project also helps Edinburgh realise its ambition of having a transport system that is **one of the most environmentally friendly, healthiest and most accessible in northern Europe** (Edinburgh's Vision for Transport 2030).

This report forms the Preliminary Justification for the project, part of the development study stage. The report has been produced using the five business cases model (Strategic, Economic, Financial, Commercial and Management).

A cycle demand model developed for this report forecast a potential increase in one-way commuter cycle trips across the route from 1,675 to 3,142 – **an increase of 88%** (1,467). This represents an **increase of 16% in the number of people cycling to work across Edinburgh** to 10,872.

The cycle link has a strong economic case, with the additional cycle demand leading to a **forecast benefit in excess of £20m**. This benefit is comprised largely of health benefits through increased active travel amongst the city's population, as well as wider economic benefits .

Given forecast costs of £6.3m, **the scheme is expected to achieve a BCR of 3.3**.

Stakeholder engagement forms a strong part of the management of the project and the design of the route.

Financially, two key revenue sources have been identified: the Sustrans Community Link Programme and internal CEC funding. The scheme is well aligned with Sustrans' funding requirements.

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# Introduction

# Introduction

Edinburgh has an aspiration to provide a 'Family Network' standard link from National Cycle Network routes 1, 8 and 9 at Roseburn to the City Centre, extending to Leith Walk, as detailed in the city's Active Travel Acton Plan. A 'Family Network' standard link is one which is designed for less confident cyclists who may be concerned about safety.

The Roseburn to Leith Walk Cycle Links project has been developed to meet this aspiration and achieve the Council's Vision for sustainable transport in Edinburgh.

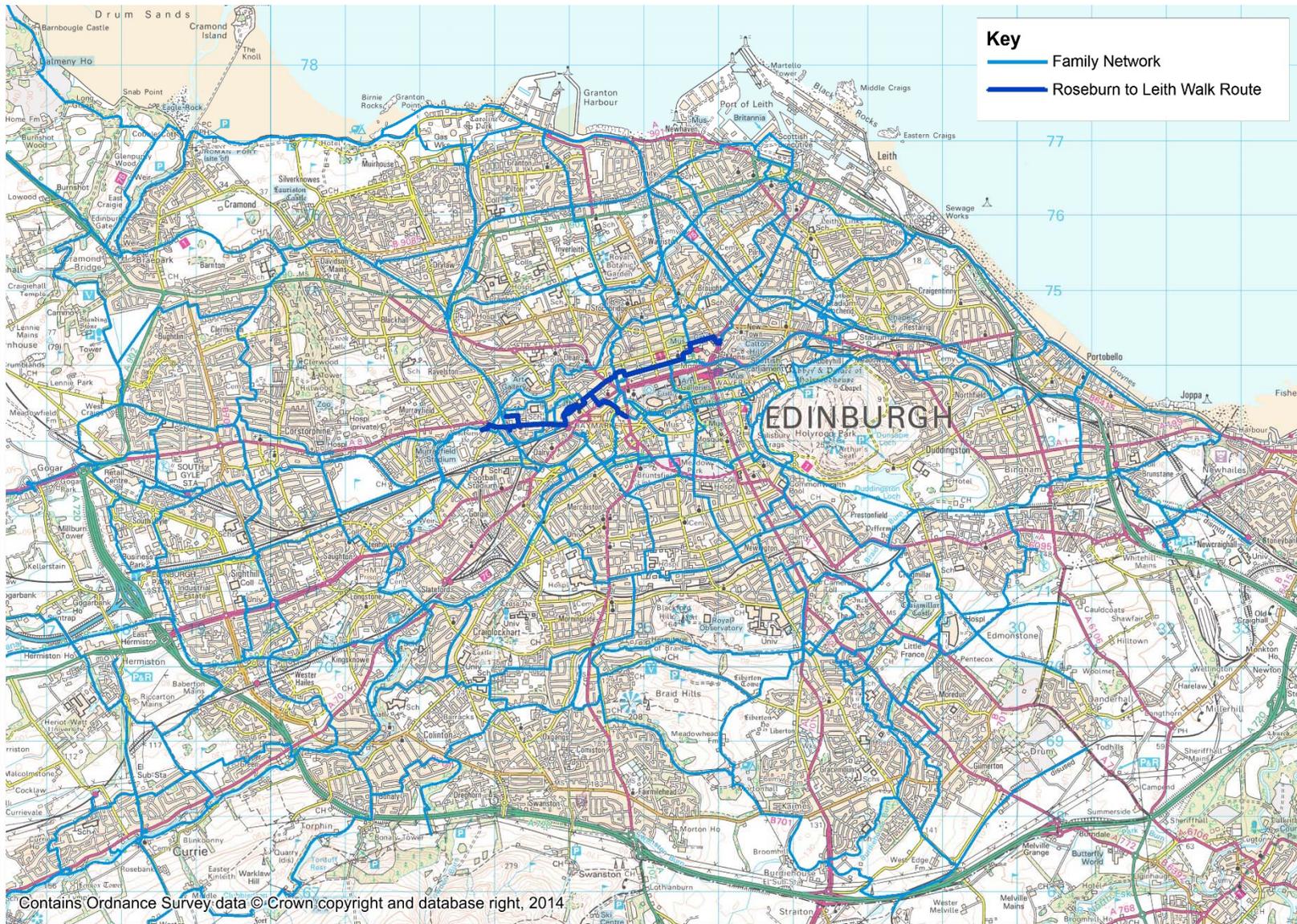
The project is currently at stage two of the development cycle, as detailed below:

- Stage 1 – WSP's Initial Feasibility Study
- **Stage 2 – Atkin's Route Development Study**
- Stage 3 – Detailed design
- Stage 4 - Construction

This reports forms the Preliminary Justification Report for the project, part of the development study stage. The report has been produced using the five business cases model (**Strategic, Economic, Financial, Commercial and Management**).

The location of the route is shown in Figure 1 on the following page.

Figure 1 –Proposed Roseburn to Leith Cycle Route and the Envisaged Family Network



# Strategic Case

# Strategic Case

## Introduction

Edinburgh aspires to having a transport system that is **one of the most environmentally friendly, healthiest and most accessible in northern Europe** (Edinburgh's Vision for Transport 2030). This falls under the wider Scottish vision that, **by 2020, 10% of everyday journeys taken in Scotland will be by bike** (Cycling Action Plan for Scotland 2013).

Options for active travel throughout the city, in particular cycling, play an integral part of delivering this vision by **reducing car dependency and greenhouse gas emissions**, improving **public health** and **reducing vehicle collisions** and **supporting the economy** by improving access to employment and reducing absenteeism. CEC's aspirations to implement a 20mph zone across the city demonstrates that the city wants to improve the opportunities for undertaking safe and attractive journeys by bike.

To have a transport system that rivals the likes of Copenhagen and Amsterdam, Edinburgh must make a smart choice to invest in active travel modes, such as cycling. In London, a city with a similar ambition to Edinburgh, the Mayor has empowered a Cycling Commissioner to deliver a cycle revolution. Edinburgh wants to drive forward its own 'cycling revolution' building on the strong support from local and national policy.

Edinburgh has the highest cycling levels of all urban areas in Scotland, yet cycling in Edinburgh still only makes up around\*:

- 2% of all trips, as the main mode;
- 2% of child journeys to school; and
- 6% of journeys to work.

There is however great potential to increase cycling:

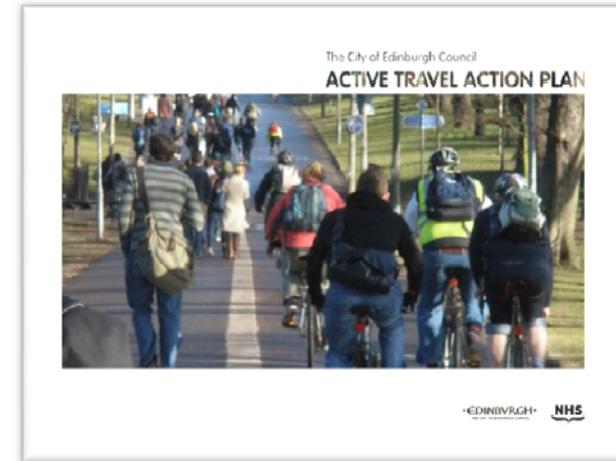
- 29% of all journeys are 2 to 5 km long (a 10 to 20 minute bike ride); and
- 14% journeys are 5 to 10 km long (a 20 to 40 minute bike ride).

\* Scottish Household Survey, 2007-08. These figures include journeys under quarter of a mile/five minutes duration.

# Strategic Case

## What is driving the project?

Edinburgh already has the highest levels of cycling and walking of any city in Scotland, with the Council keen to work from this strength, with an objective **to increase the numbers of people in Edinburgh walking and cycling, both as means of transport and for pleasure** (Active Travel Action Plan, 2013).



A pre-requisite of meeting this objective and delivering a cycle friendly city is having a dense network of safe and accessible cycle routes. The Leith Walk cycle link, delivered in 2014, was a significant step in building up a comprehensive network of routes to attract growth in cycling, receiving strong support from the local community during consultation. The proposed scheme builds on this momentum by providing a new east-west cycle route across the city centre that will better connect cyclists with existing cycle routes.

## Local attitudes to cycling

A Travel Behaviour Survey was undertaken in Edinburgh in 2014, it found:

- 12% of residents cycle at least once a week, whilst 41% state that Edinburgh is easy to get around by bicycle.
- However, half of residents feel unsafe cycling because of traffic, with 14% believing cycle routes were not adequate.

These findings show **there is a strong cycling base in the city but demand is potentially suppressed due to safety fears**. As such, there is a strong opportunity to improve the city's cycle network and this can drive significant increases in cycling across the city.

# Strategic Case

## Scheme Objective

The objective of the Roseburn to Leith Walk cycle link is to **provide the missing cycle link between Roseburn and Leith Walk, delivering a safe, family network route across the city centre.**

## Option Generation

An initial feasibility study of the route options available to complete the missing link was undertaken by WSP, taking into consideration multiple criteria including directness, safety, cost and deliverability factors. This assessment resulted in a proposed scheme route alignment, as shown in Figure 1.

## Proposed Scheme

The proposed scheme comprises over 4 kilometres of cycle route and has been designed to:

- Deliver a **high quality cycling facility** (including elements of segregating cyclists from motor traffic)
- Improve **cycle connectivity** across the city by being fully integrated with the existing cycle/pedestrian network and thereby completing the missing link in the network
- **Integrate** with the newly upgraded cycle link on Leith Walk and the streetscape improvements along George Street
- Provide **safer, more direct and convenient city centre access** to key destinations in the city centre, by bike

The scheme will be supported in its success through a well funded marketing campaign, led by the Council, to encourage the uptake of cycling in the city.

# Strategic Case

## Design Criteria

The route's facilities will be designed to meet the needs of cyclists. The design criteria used to create a high quality cycle route are illustrated below.



### Safety

Collision risk, feeling of safety & social safety



### Directness

Journey time, value of time & deviation



### Coherence

Connections & wayfinding



### Comfort

Surface quality, material, effective width, gradient, directions & undulations



### Attractiveness

Impact on walking, greening, air quality, noise pollution, minimise street clutter & secure cycle parking

# Strategic Case

## Policy Alignment

The table below summarises the significant Policy support for cycling. It clearly shows that enhancing cycle infrastructure in Edinburgh aligns with CEC and national policy.

Strategic aims for cycling →	A sustainable transport network with a well connected, accessible cycle network	Reduce transport's contribution to greenhouse gas emissions	Improve health by encouraging active modes of travel and improving local air quality	Support the local economy by providing access to employment, amenities and services	Provide reliable journey times for users	Increase cycle modal share	A safe and secure cycle network
Key policy documents ↓							
Transport 2030 Vision	✓	✓	✓	✓	✓	✓	✓
Local Transport Strategy 2014-2019	✓	✓	✓	✓	✓	✓	✓
Active Travel Action Plan	✓	✓	✓	✓		✓	✓
Cycle Action Plan for Scotland 2013	✓	✓	✓	✓		✓	✓
Cycle by Design 2010	✓	✓	✓	✓			✓

# Economic Case

# Economic Case

## Introduction

The economic case presents the forecast value for money of the scheme in the form of a **Benefit Cost Ratio** (BCR). The scheme's **potential trip generation** has been determined through a cycle demand model. The forecast cycle trip generation has been used to estimate changes to the following impacts:

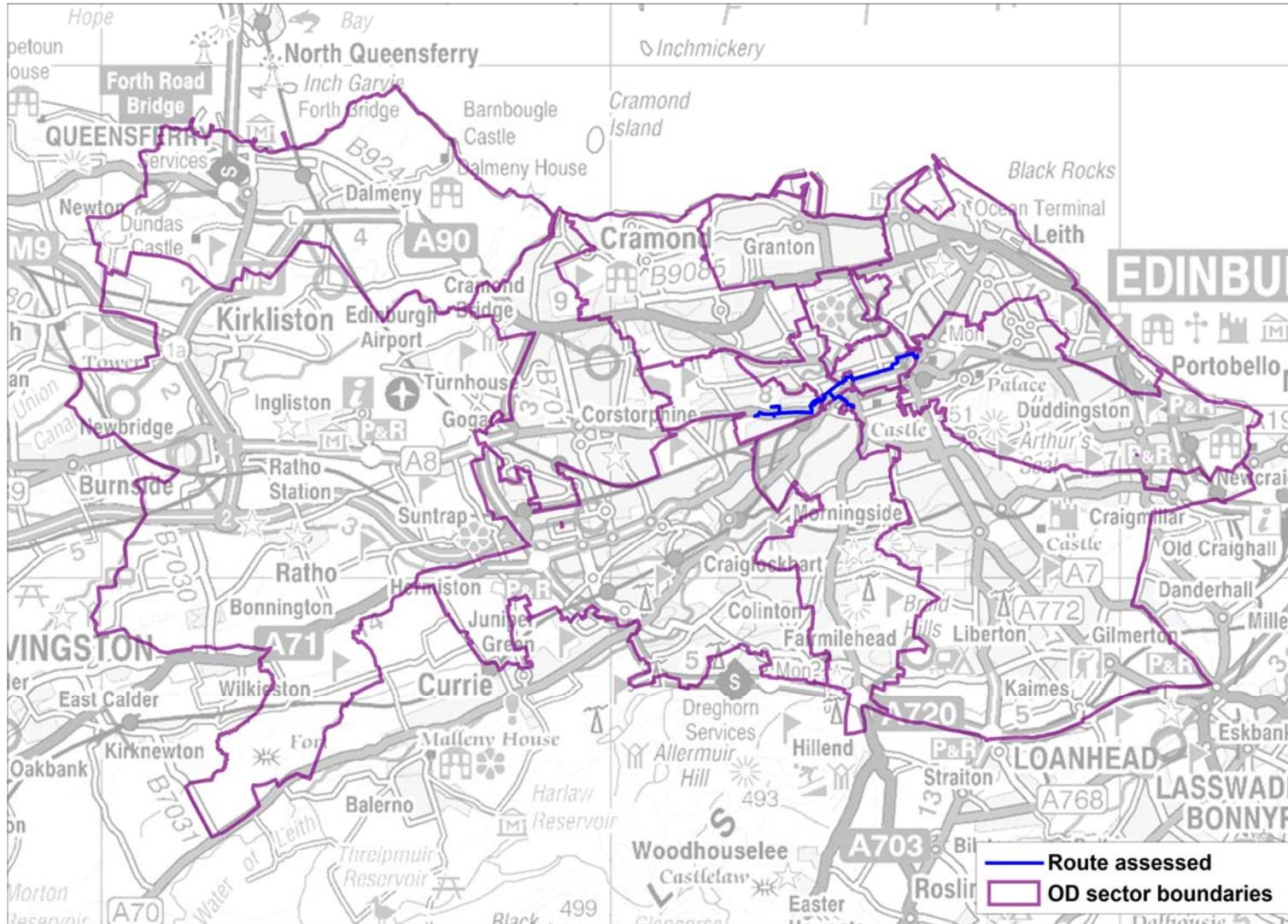
- Public Health
- Absenteeism
- Journey quality
- Cycle collisions
- Gross cycling product
- Marginal external costs

## Assumptions

- The route assessed and OD sectors are as shown in Figure 2
- Costs and optimism bias proportions are as provided by City of Edinburgh Council for the route being assessed
- There are no cycle facilities along the route corridor in the base scenario, with the scheme providing a high quality cycle track along the route
- The cycling demand model assumes that the utility of all modes except cycling remain unchanged
- Benefits are forecast based on a 10 year scheme life, the period typically used for UK cycling scheme appraisal<sup>1</sup>
- All figures presented are 2010 prices, with a 3.5% discount rate

# Economic Case

Figure 2 – OD Sectors and Route Assessed



Contains Ordnance Survey data © Crown copyright and database right (2014)

# Economic Case

## Cost

The initial feasibility study for the route (undertaken by WSP), forecast the total scheme cost to be £6.3m, including a 44% optimism bias on construction costs and 32% optimism bias on design costs.

These costs are considered to be robust for this stage of scheme development, and with the inclusion of optimism bias are likely to be an overestimate of the actual outturn costs of the scheme. Further refinement of the scheme costs will be undertaken for inclusion in the Final Justification Report.

# Economic Case

## Benefits: Forecasting Potential Demand

### *Methodology: Commuter Cyclists*

The potential demand impact of the scheme has been estimated using a disaggregate mode choice model derived by Wardman, Tight and Page (2007)<sup>2</sup>, to **forecast the impact of improvements in the attractiveness of cycling for commuting trips** of 7.5 miles or less. The model uses the current base proportion of population who cycle between Origins and Destinations (ODs) that may make use the route (e.g. Haymarket to Regent Gardens) and, based on the level of cycling provision created, can provide an estimated 'post scheme' proportion of local population cycling for commuting trips.

The following inputs have been used in the model:

- 2001 Census travel to work OD data has been used to establish those trips that would pass through the route corridor
- 2011 Census journey to work mode and economically active population data to factor the 2001 Census data to 2011 levels, whilst retaining the 2001 OD movements

The average cycling speed along the route is assumed to be a moderate 14km/hr, meaning that a one-way trip along the route would take approximately 17 minutes.

It is important to note that this cycling demand model assumes that the utility of all modes except cycling remain unchanged.

# Economic Case

## Benefits: Forecasting Potential Demand

### *Methodology: Weekday Non-Commuting Cyclists*

The number of weekday non-commuting cyclists has been estimated using 12 hour observed cycle count data for Leith Walk. The ratio between cyclists travelling during the AM peak and those travelling during the inter-peak was calculated and applied to the predicted number of inbound commuter trips in the demand model. This provided estimates for both the existing weekday non-commuting trips and those generated by the scheme.

### *Methodology: Weekend Non-Commuting Cyclists*

The number of weekend non-commuting cyclists has been estimated using Route User Intercept Survey cycle count data for three sites within Edinburgh City Centre. The surveys were undertaken on weekdays and weekends, providing a ratio of weekday to weekend trips which has been applied to the number of commuter and weekday non-commuting cyclists previously calculated as using the route.

# Economic Case

## Benefits: Forecasting Potential Demand

### *Results: Commuter Cyclists*

Census data indicates that for trips along the route corridor, the base number of one-way commuter cycle trips is 1,675. **Based on the scheme improvements, the potential number of one-way commuter cycle trips is 3,142, an additional 1,467 (88% increase) one-way commuter trips on the route.**

The additional trips represent an increase of 16% in the number of people cycling to work across the whole of Edinburgh. This equates to a change in cyclists from 9,405 to 10,872.

### *Results: Weekday Non-Commuting Cyclists*

The base number of one-way weekday non-commuting cyclists along the route corridor or parallel routes is 1,660. The model forecasts an additional 1,454 cyclists will use the route as a result of the improvements, an increase of 88%.

### *Results: Weekend Non-Commuting Cyclists*

The base number of one-way weekend non-commuting cyclists along the route corridor is 1,928. The model forecasts an additional 1,688 cyclists will use the route as a result of the improvements, an increase of 88%.

The model results have been used to quantify the forecast scheme benefits, as detailed on the following slides.

# Economic Case

## Benefits: Health

### *Methodology*

The World Health Organisation (WHO) has developed a Health Economic Assessment Tool<sup>3</sup> (HEAT) that calculates the economic benefit of preventing early mortality by increasing the number of people regularly exercising through cycling. The tool requires estimates of the number of new cyclists as a result of the scheme; the time per day they will spend active; and mortality rates applicable to the group affected by the scheme. The tool then provides an economic benefit of reduced mortality based on the value of a prevented fatality.

The estimated increase in regular commuter (1,467), weekday non-commuting (1,454) and weekend non-commuting (1,688) cyclists have been input into the HEAT tool. It has been assumed that commuter cyclist journeys would be two way trips and that commuters cycle this amount on 124 days per year (the default amount suggested by the WHO, based on empirical research). Additional weekday and weekend non-commuting trips are assumed to be one way trips (they would return by another route or another mode). Weekday non-commuting trips are assumed to occur on 124 days per year, whilst weekend non-commuting trips on 50 days per year.

# Economic Case

## Benefits: Health

### Results

The results of the HEAT calculation are presented below, showing a total health benefit of £13.2m over a 10 year scheme life.

	Health benefit
Commuter cyclist	£7,765,000
Weekday non-commuting cyclist	£3,848,000
Weekend non-commuting cyclist	£1,544,000
<b>Total</b>	<b>£13,157,000</b>

# Economic Case

## Benefits: Absenteeism

Research carried out by the WHO (2003)<sup>4</sup> found that absenteeism from work is expected to decrease when more people cycle to work. Moderate physical activity is seen to lead to a reduction in sick days taken from work and hence provides a benefit to the employer. This is in addition to the benefit of better health for the individual.

The average rate of absenteeism per worker, due to sickness or minor illness in the UK labour force is 4.4 days (ONS, 2014)<sup>5</sup>.

Research by the WHO suggests an expected reduction in absenteeism from increased cycling or walking of 6% based on 30 minutes of exercise per day. Extrapolating this to apply to the forecast average of 33 minutes exercise per day for new commuter cyclists using the route (two one-way journeys) leads to an average reduction in absenteeism of 6.6% (to 4.1 days per cyclist).

Applying this absenteeism reduction to the number of commuter cyclists and factoring in WebTAG values of time (£27.07 per hour<sup>6</sup>) and average working hours (32 hours per week<sup>7</sup>), provides a **scheme life absenteeism saving of £741,181**.

# Economic Case

## Benefits: Cycle collisions

### *Methodology*

- By isolating the personal injury collisions (PICs) involving cyclists, it is possible to estimate the predicted increase or decrease in cycle collisions as a result of the scheme. PIC data obtained from the Department for Transport identified 17 personal injury collisions involving cyclists along the proposed route alignment in the five years from 2009 to 2013. Four of these collisions were classed as serious severity and 13 as slight. The majority of the collisions occurred along George Street and the A8 West Coates.
- The scheme will lead to an increase in the number of cyclists along the route, meaning that despite the safety improvements resulting from the provision of a cycle track, there is a risk that the number of cycle collisions will increase when the scheme is implemented due to the increase in cycle activity.
- Empirical research undertaken by Jacobsen (2003) has shown that increasing levels of cycling does not result in an equivalent increase in the numbers of collisions involving cyclists (all other things being equal). This research indicated that a doubling of cycle numbers would lead to a 32% increase in cycle related collisions – meaning the cycle collision rate would decrease. This relationship has been applied to the 88% increase in cyclists forecast on the route as a result of the scheme, with the results presented on the following slide.

# Economic Case

## Benefits: Cycle collisions

### Results

The forecast change in annual average cycle collisions is presented in the table below, revealing that the number of cycle collisions is expected to increase as a result of the scheme as a result of the significant rise in cyclists on the route.

Scenario	Collision Severity			
	Slight	Serious	Fatal	Total
Base	2.6	0.8	0.0	3.4
With scheme	6.4	2.0	0.0	8.4
Change	+3.8	+1.2	-	+5.0

Monetising these benefits using values detailed in WebTAG Table A 4.1.3 produces a forecast monetised **disbenefit of £3,169,663 across the scheme life.**

It should be noted that the change in collision rate does not account for the fact that cyclists will now be using a segregated route rather than existing non-segregated routes. Consequently the calculations present a pessimistic forecast in terms of safety impacts.

# Economic Case

## Benefits: Journey Quality

### *Methodology*

Whilst many factors influence journey quality, for cyclists the fear of potential collisions is a significant factor. As the fear of a collision is influenced by the concerns about road safety, schemes that include segregated cycle tracks and improvements to intimidating junctions greatly improve cycle journey quality.

Journey quality is calculated on the basis of values as presented in TAG Data Book A4.1.67. This table provides a benefit for the provision of a new on-road segregated cycle lane of 2.99 pence per minute experienced (2010 prices). As the impact is experienced by existing users the most, current users of the route experience the full value of the benefit (2.99p) whereas, new cyclists only experience half of the benefit (1.50p).

It has been assumed that commuter and weekday non-commuting cyclists receive the journey quality time benefits on 124 days per year, whilst weekend non-commuting cyclists received the benefit on 50 days per year.

### *Results*

These values were applied to the existing and additional cycling trips along the scheme route for commuter and cycle trips. The results of this indicate a **journey quality benefit of £3,282,123 over the 10 year scheme life.**

# Economic Case

## Benefits: Gross Cycling Product

Research suggests that cycling benefits the local economy and a national study carried out by the London School of Economics (LSE) in 2010<sup>8</sup> concluded that each cyclist contributes a Gross Cycling Product (GCP) of £230 per year to the economy. This research was supported by a European wide study<sup>9</sup> which found that cycling delivers wider economic benefits in terms of supporting jobs and driving tourism – with cycling having a greater employment intensity than any other transport sub-sector.

Applying the findings of the LSE study to the forecast increase in cycling, **the scheme will generate a GCP benefit of £5,753,218 over the 10 year scheme life.**

## Benefits: Marginal External Costs

### *Methodology*

The scheme will lead to modal shift towards cycling amongst commuters. Where this shift is away from cars, there will be benefits to reduced car use in the form of decongestion, car collision, greenhouse gas, air quality, noise and indirect tax benefits. These benefits have been estimated using the Marginal External Cost (MEC) method, based on the forecast reduction in car kilometres as a result of the scheme.

The number of new commuter cycling trips has been applied to the current proportion of car trips on the scheme route to give an estimated reduction of car trips as a result of the scheme. For the purpose of this report, any car trips that have been replaced by cycle trips are assumed to be 5km. This gives a total reduction of car km of 660,619 per annum.

The estimated reduction in car km is then used to calculate the MEC benefits using figures outlined in TAG Data Book Table A 5.4.2, as presented in the results table on the following slide.

# Economic Case

## Benefits: Marginal External Costs

### Results

The MEC benefits forecast as a result of the scheme total £1,086,167 across the 10 year scheme life, as presented below.

Cost Type	Benefit
Noise	£11,314
Infrastructure	£5,657
Local air quality	£5,657
Greenhouse gases	£56,571
Car collisions	£169,714
Economic efficiency: consumer users (commuting)	£1,159,710
Wider public finances (indirect taxation revenues)	-£322,456
<b>Total</b>	<b>£1,086,167</b>

# Economic Case

## Other Benefits

A number of other, non-quantified benefits will be delivered by the scheme, including:

- There will potentially be an improvement in journey time reliability for cyclists as they may be less affected by delays than other forms of traffic, particularly during the morning and evening peak hours.
- General improvements to the public realm and streetscape, enhancing the quality of life in Edinburgh. A survey of cyclists, car drivers and pedestrians on George Street following the implementation of a trial one-way traffic system and changes to pedestrian and cycle facilities show strong support for the improvements, with 88% of respondents stating that changes had made the area more attractive.
- As discussed in the Strategic Case, the scheme will support a wider cultural shift in Edinburgh towards the use of cycles by enhancing the city's cycle network and building on the momentum of the Leith Walk cycle improvements.

# Economic Case

## Benefit Cost Ratio

The table below presents a summary of the forecast PVB and PVC of the scheme, presenting the scheme's **BCR of 3.3**.

<b>Present Value of Benefits:</b>	<b>£15,096,808</b>
Health Benefits	£13,157,000
Business Benefits (Absenteeism)	£741,181
User Benefits (Journey Quality & Journey Time Saving)	£3,282,123
Cycle collisions	-£3,169,663
Marginal external costs	£1,086,167
<b>Present Value of Costs</b>	<b>£6,324,242</b>
<b>Net Present Value</b>	<b>£8,772,566</b>
<b>Benefit Cost Ratio</b>	<b>2.39</b>
Wider Economic Benefit (Gross Cycling Product)	£5,753,218
<b>Net Present Value inc. Wider Economic Benefit</b>	<b>£14,525,784</b>
<b>Benefit Cost Ratio inc. Wider Economic Benefit</b>	<b>3.30</b>

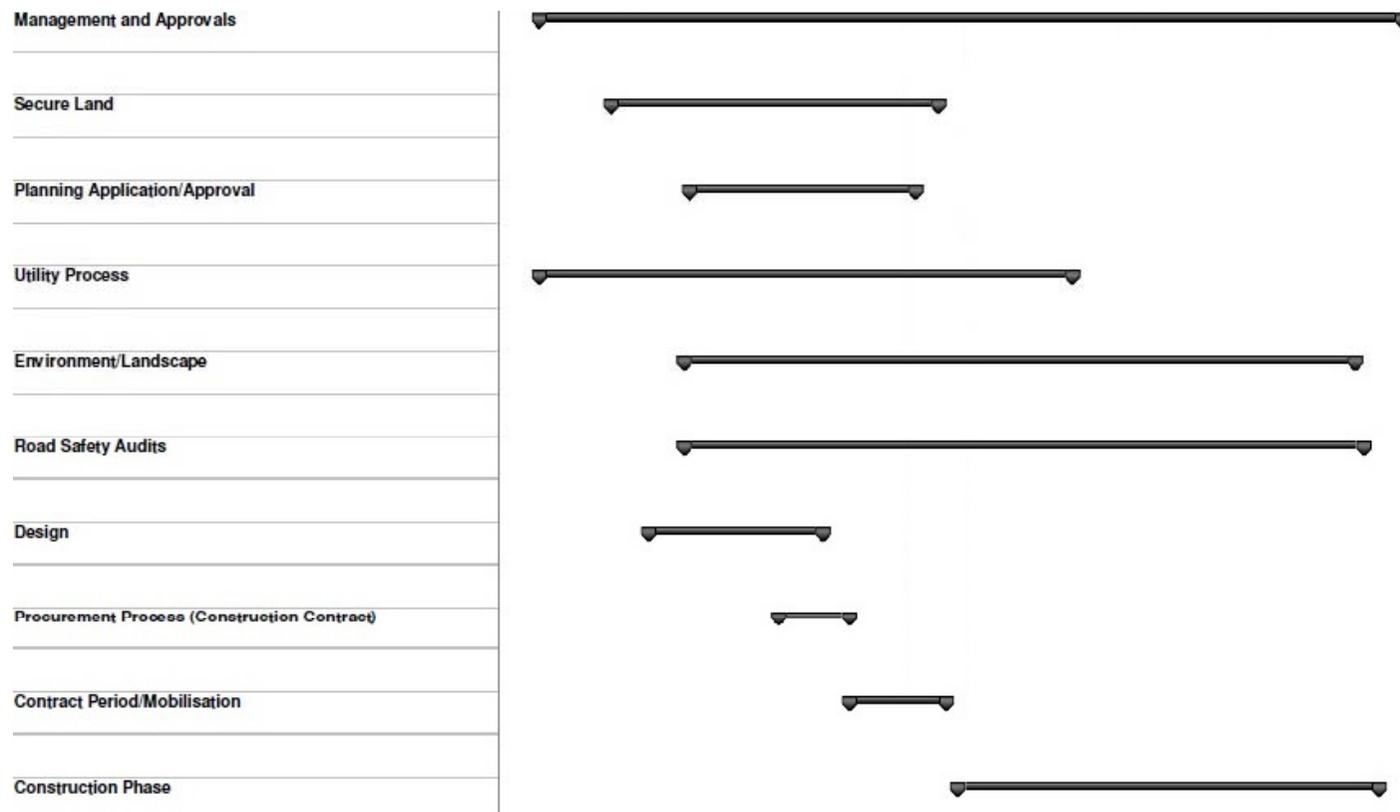
# Management Case

# Management Case

The management case details how the scheme will be delivered by CEC.

## Programme

The envisaged key stage in project delivery are shown in the programme below. **UPDATE THE PROGRAMME**



# Management Case

## Resourcing

- A detailed resource plan will be produced at the outset of the project, which will be managed and updated as changes to the requirements occur.
- Appropriate additional resources will be acquired where forecast resource need is greater than available resource need.
- Senior staff within the project team will be maintained to provide continuity and development of skills and experience. This is important to effectively managing the shifting political landscape against which the project needs to be delivered.

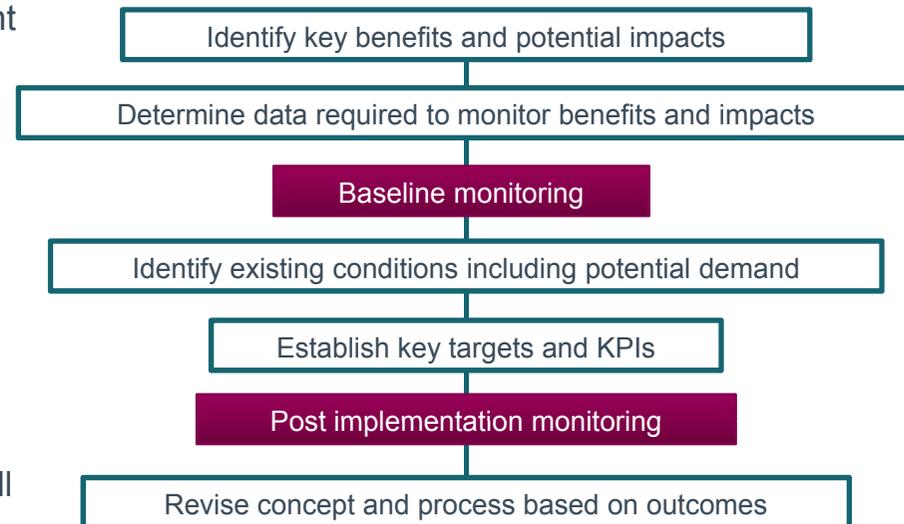
## Risk

Project risks will be mitigated by further development of the design at the appropriate stages, including risks for the supplier to address during the implementation stage and risks to be retained as a client responsibility. Value engineering will be undertaken to optimise value and reduce risk.

## Benefits Realisation

A Benefits Management Strategy will identify what the benefits of the scheme will be, how they should be quantified and measured, the systems and processes to be used to track progress, and who will be responsible for benefits realisation and assessment. The flow chart opposite summarises the benefits realisation strategy approach.

### Benefits Realisation Strategy Approach

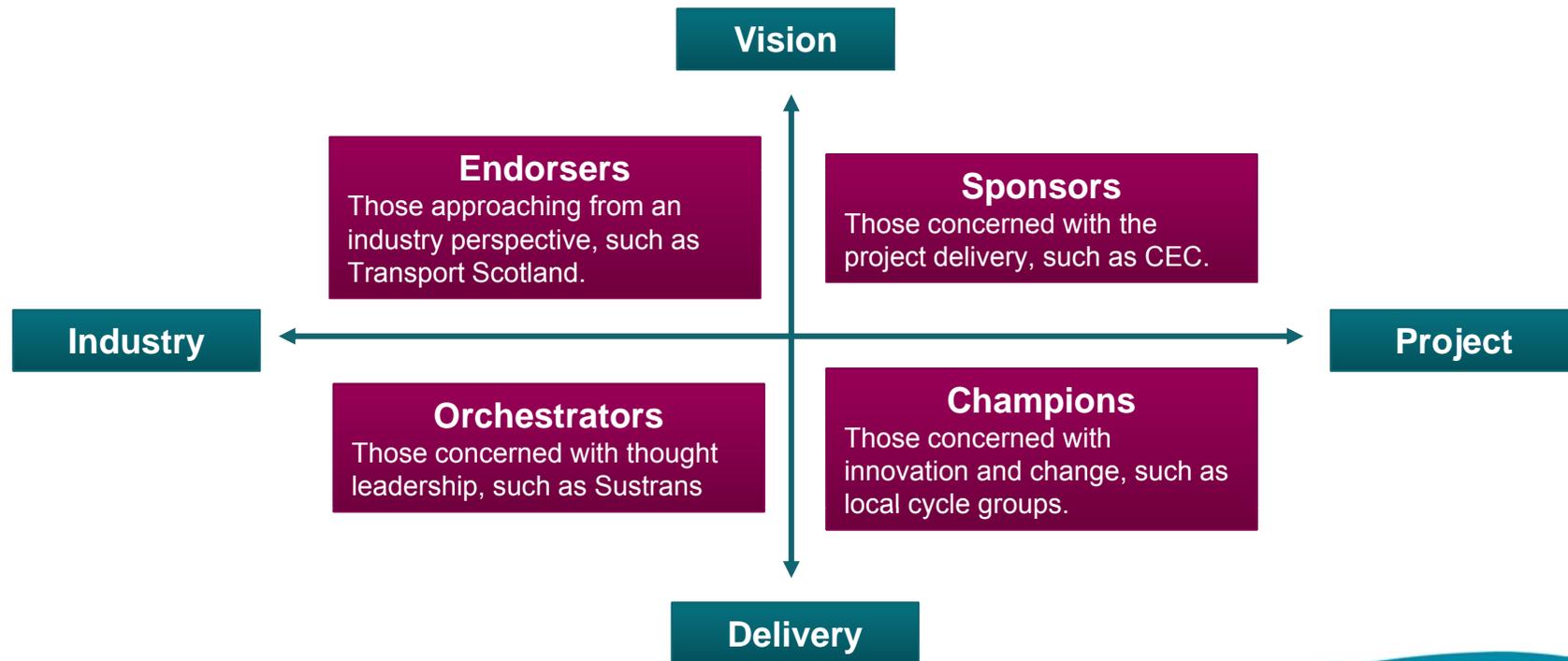


# Management Case

## Stakeholder Management

Appropriate activities will be held to ensure that the views and requirements of stakeholders are explored and recorded, in line with the 'Consulting Edinburgh framework'. This stakeholder engagement process will help inform the development of the route.

Stakeholders will be managed using the approach presented below.



# Financial Case

# Financial Case

The financial case sets out how CEC will source funds for the scheme, including an assessment of the affordability and financial risks involved.

## **Funding Sources**

CEC has identified the Sustrans Community Links Programme and internal funding programmes to finance the scheme.

The Sustrans Community Links Programme provides funding to help local authorities meet Transport Scotland's vision for cycling, as set out in the Cycling Action Plan for Scotland. This programme has the potential to provide up to 50% of the scheme's funding. An assessment of the scheme's alignment with the programme's scoring criteria is provided on the following slides, showing the scheme as being strongly aligned with the purposes of the Community Links Programme.

Internal CEC funding is usually sought by presenting a robust business case to the management.

Opportunities for third party funding will be investigated.

## **Financial Risk Management**

Approaches to managing the project's financial risk are as outlined in the management case.

# Financial Case

## Sustrans Community Links Programme funding: scheme alignment with general criteria

Sustrans criteria	Scheme alignment
Meet an identified community demand	There is strong support in Edinburgh for an improvement in cycle facilities, reflected in the city's key planning documents - the Transport Strategy and Active Travel Action Plan.
Provision of direct, convenient and attractive cycling to places people want to go to everyday.	The scheme will provide the 'missing link' across Edinburgh city centre , connecting communities with the commercial heart of the city. The route has been designed in line with the five core design principles in Transport Scotland's Cycling by Design guidance: Safety, Coherence, Directness, Comfort and Attractiveness. Demand modelling has shown there will be a significant increase in cyclists as a result of the scheme.
Large projects should include a monitoring and evaluation process.	A Benefits Management Strategy will identify what the benefits of the scheme will be, how they should be quantified and measured, the systems and processes to be used to track progress, and who will be responsible for benefits realisation and assessment.
Show evidence of community need and/or support for the improvements	The strategic case shows the strong local support for the scheme, with Edinburgh's Transport Strategy and Active Travel Action Plan supporting improved cycle connectivity in the city.

# Financial Case

## Sustrans Community Links Programme funding: scheme alignment with deliverability scoring criteria

Sustrans criteria (total available marks)	Detailed description of Scoring Criteria	Scheme alignment
Certainty of match funding (10)	<p>Match funding is an essential component of the programme and can directly affect the deliverability of the project:</p> <ul style="list-style-type: none"> <li>• 0 marks if no match funding has been identified</li> <li>• 5 marks if the match funding has been applied for but not yet confirmed</li> <li>• 10 marks if the match funding is secure and already in place</li> </ul>	CEC have identified potential internal finances to provide match funding.
Required permissions (10)	<p>Has landowner consent, planning permission and necessary legal requirements obtained; and Traffic Regulation Orders granted and in place to allow the project to be delivered?</p> <ul style="list-style-type: none"> <li>• Scored on a scale of 1 to 10 on how far the required permissions are progressed</li> </ul>	It is intended that necessary permissions will be gained.
Advancement of the design (10)	<ul style="list-style-type: none"> <li>• 0 marks where no design is in place or no drawings are presented</li> <li>• 5 Marks where an outline design or options are presented</li> <li>• 10 marks when a project is fully designed up and ready to go</li> </ul> <p>Where the application is for a design project, or a design and build project, award 10 marks so that all applications are considered on a level playing field.</p>	A preferred route alignment has been identified, with an outline design in the process of being developed.

# Financial Case

## Sustrans Community Links Programme funding: scheme alignment with quality scoring criteria

Sustrans criteria (total available marks)	Detailed description of Scoring Criteria	Scheme alignment
Evidence of community need & demand (10)	<p>Project has links to a wider community objective, e.g. School Travel Plans, Core Path Plans, Local Transport Strategies, Local walking and or cycling strategies, as detailed in criteria two:</p> <ul style="list-style-type: none"> <li>• Scored on a scale of 1 to 10 on how central the project is to achieving wider objectives</li> </ul>	<p>The strategic case shows the strong local support for the scheme, with Edinburgh's Transport Strategy and Active Travel Action Plan supporting improved cycle connectivity in the city. The scheme is of great importance for providing the 'missing link' in Edinburgh's cycle network and in growing the Family Network.</p>
Creates an effective everyday link or provides a series of significant local interventions (10)	<p>Project creates a link between a community and places people want to make a journey to:</p> <ul style="list-style-type: none"> <li>• educational institutions</li> <li>• public transport interchanges</li> <li>• healthcare facility</li> <li>• recreational facility</li> <li>• shopping centres</li> <li>• leisure centres</li> <li>• places of employment</li> <li>• residential areas</li> <li>• town centres</li> <li>• Other (must be specifically defined in the funding application)</li> </ul> <p>Scored on a scale of 1 to 10 on how central the project is to achieving wider objectives.</p>	<p>The scheme will provide the 'missing link' across Edinburgh city centre, connecting communities with the commercial heart of the city. The route passes transport interchanges (Haymarket Station) and areas of shopping and employment. It also connects communities to the east and west of the city centre. The link is designed as a Family Network route, suitable for cyclists of all capabilities, thereby providing an effective everyday link for non-commuting and commuter cyclists.</p>
Offers a significant choice for active travel and everyday purposeful journeys (10)	<p>How likely is it that the project will encourage active travel and increase modal share for walking and cycling on every day journeys?</p> <p>Scored on a scale of 1 to 10.</p>	<p>The scheme will encourage the uptake of cyclist across the city, with demand forecasting showing the potential for a significant increase in cyclists. Given the nature of the route, there is an opportunity for people currently deterred from cycling because of perceived safety issues to shift towards the use of cycling.</p>

# Financial Case

## Sustrans Community Links Programme funding: scheme alignment with quality scoring criteria

Sustrans criteria (total available marks)	Detailed description of Scoring Criteria	Scheme alignment
Community Engagement (10)	<p>Demonstrated level of community engagement:</p> <ul style="list-style-type: none"> <li>• Level 1: Informing – 0 marks</li> <li>• Level 2: Consulting – 5 marks</li> <li>• Level 3: Partnership – 10 marks</li> </ul> <p>Please refer to Appendix A of the Community Links guidance for information on community engagement.</p>	A series of stakeholder workshops will be held. Participant views will be used to inform the development of the route.
Design Standards (15)	<ul style="list-style-type: none"> <li>• 0 – If the project does not meet basic standards</li> <li>• 5 marks – Mostly meets Designing Streets or Cycling by Design standards but due to land constraints is limited in some way, within reason (e.g. to avoid damaging trees or because of land constraints)</li> <li>• 10 marks – Meets all of Designing Streets or Cycling by Design standards</li> <li>• 15 marks – Exemplar infrastructure which goes beyond the minimum requirements</li> </ul> <p>Note: Saving funds is not an acceptable reason for sub-standard design where the project is otherwise unconstrained but may be acceptable where costs are disproportionate to benefits.</p>	<p>The scheme is being designed in accordance with the 5 Core Design Principles from Transport Scotland's Cycling by Design Guidance:</p> <ul style="list-style-type: none"> <li>• Safety</li> <li>• Coherence</li> <li>• Directness</li> <li>• Comfort</li> <li>• Attractiveness.</li> </ul> <p>Application of these principles is shown in the scheme design.</p>
People focused measures (behaviour change) (15)	<ul style="list-style-type: none"> <li>• 0 Marks if the project involves no behaviour change measures</li> <li>• 5 marks if only limited behaviour change interventions are present</li> <li>• 10 marks if behaviour change measures are present such as signage, promotional aspects and enhanced community engagement</li> <li>• 15 marks if the project has a comprehensive behaviour change strategy to coincide with the capital works</li> </ul>	<p>The scheme will be supported in its success through a well funded marketing campaign, led by the Council, to encourage the uptake of cycling in the city. Edinburgh's Active Travel Marketing Strategy 2013-2018 provides the framework for this behavioural change programme.</p>

# Financial Case

## Sustrans Community Links Programme funding: scheme alignment with quality scoring criteria

Sustrans criteria (total available marks)	Detailed description of Scoring Criteria	Scheme alignment
Includes innovative and imaginative concepts (10)	<p>Scored on a scale of 1 to 10 on how effectively your project includes approaches and concepts such as the following:</p> <ul style="list-style-type: none"> <li>• Significant people focused enhancements to the local environment</li> <li>• Innovative design, over and above standard practice</li> <li>• Enhanced and innovative signage and interpretation boards</li> <li>• Ecological enhancement such as native species planting or seeding</li> <li>• Other innovative and imaginative concepts</li> </ul>	The design approach is described in the scheme design layouts.
Supports development of the National Cycle Network (10)	<ul style="list-style-type: none"> <li>• 0 marks may be given where the project does not have any relationship to the NCN</li> <li>• 5 marks may be given where the project has a direct relationship with the NCN (e.g. links directly to the NCN or a local route which itself links to the NCN)</li> <li>• 10 marks may be given for a project which forms a direct part of the NCN.</li> </ul>	The proposed scheme alignment forms a part of NCN Routes 1 and 75, directly improving the NCN.
Links to the outcomes set out within CAPS (20)	Scored on a scale of 1 to 20 on how your project meets the outcomes within CAPS.	The scheme supports the CAPS outcomes by directly improving the quantity and quality of cycle infrastructure in Edinburgh, thereby encouraging a change in travel behaviour across the city. Additionally, the route has been designed to a Family Network standard, safe for cyclists of all experience levels.

# Commercial Case

# Commercial Case

The commercial case details the procurement strategy for the project.

A procurement plan will be developed with the aid of CEC's procurement department, with the route to market through the Public Contracts Scotland and possibly using Scotland Excel Framework.

Commercial risk will be managed as per the management case.

# Conclusions

# Conclusions

The Roseburn to Leith Walk cycle link provide 4km of cycle route along an east-west corridor through Edinburgh city centre, improving the city's cycle infrastructure and enhancing connectivity. In doing so, the project supports Edinburgh's ambition to be ***one of the most environmentally friendly, healthiest and most accessible in northern Europe*** (Edinburgh's Vision for Transport 2030).

A cycle demand model developed for this report forecast a potential increase in one-way commuter cycle trips across the route from 1,675 to 3,142 – **an increase of 88%** (1,467). This represents **an increase of 16% in the number of people cycling to work across Edinburgh** to 10,872.

The cycle link has a strong economic case, with the additional cycle demand leading to a **forecast benefit in excess of £20m**. This benefit is comprised largely of health benefits through increased active travel amongst the city's population, as well as wider economic benefits (the gross cycling product).

Given forecast costs of £6.3m, **the scheme is expected to achieve a BCR of 3.3**.

Stakeholder engagement forms a strong part of the management of the project and the design of the route.

Financially, two key revenue sources have been identified: the Sustrans Community Link Programme and internal CEC funding. The scheme is well aligned with Sustrans' funding requirements.

# References

# References

1 – Department for Transport (2014) Claiming the Health Dividend: A summary and discussion of value for money estimates from studies of investment in walking and cycling.

2 – Wardman, Tight and Page (2007), Factors influencing the propensity to cycle to work. Institute of Transport Studies, University of Leeds.

3 – The World Health Organisation (WHO), Health Economic Assessment Tool (HEAT) – available online at: <http://www.heatwalkingcycling.org/index.php>

4 – World Health Organisation (WHO) (2003) '*Physical Activity Fact Sheet*'

5 – ONS, 2014 - [http://www.ons.gov.uk/ons/dcp171776\\_353899.pdf](http://www.ons.gov.uk/ons/dcp171776_353899.pdf)

6 – WebTAG Data Book Table A1.3.1

7 – Calculated using ONS data - <http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/november-2014/table-a01.xls>

8 – London School of Economics (2010) - <http://eprints.lse.ac.uk/38063/1/BritishCyclingEconomy.pdf>

9 - Europe's cycling economy has created 650,000 jobs (2014, The Guardian)  
<http://www.theguardian.com/lifeandstyle/2014/nov/12/europes-cycling-economy-has-created-650000-jobs>