

## SMALL SCHEMES

### EXECUTIVE SUMMARY OF BUSINESS CASE

For

#### MEDWAY CYCLING AREA ACTION PLAN: A PACKAGE OF MEASURES TO ENCOURAGE CYCLING

*Please note that this proforma is designed to collect key information about the project. The scheme promoters are encouraged to attach any additional supporting information to this business case proforma.*

**Project type (rail, road, LSTF, integrated package, maintenance etc.):** Integrated Package

**Type of bid:** Small

*Large Project (total project cost exceeds £15m)*

*Medium Project (total project cost is between £8m and £15m)*

*Small Project (total project cost is below £8m)*

**Project Location:** Medway wide focussing on strategic cycling corridors.

**Project start date:** 31/03/2015

**Project complete date:** 31/03/2018

**Project development stage (inception, option selection, feasibility, detailed design, implementation):** Detailed design.

**Promoting authority(ies) name:** Medway Council

**Project Manager's name and position:** Steve Hewlett

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## The Strategic Case

### 1. PROJECT DESCRIPTION

#### 1.1. Purpose

This scheme delivers a range of measures designed to improve access to cycling in the Medway area and improve upon and expand existing cycling facilities. The scheme aims to increase overall cycle trips in Medway and achieve the accompanying benefits of an increased cycling populace of improved network performance and contributing to tackling wider health and environmental issues such as obesity and climate change.

#### 1.2. Brief description

The delivery of the Medway Cycling Area Action Plan will provide a package of cycling measures that encompass all of the growth areas in Medway. As a result this scheme will contribute to the regeneration in these areas by delivering a future growth of cycling and accompanying mode shift. The package of measures will:

- Expand and improve Medway's cycling network;
- Deliver training and participation in cycling;
- Improve partnership working with local groups;
- Deliver cycling information and promotional material;
- Maintain and develop travel plans.

Cycling in Medway has grown by 2.4% per year between 2009 and 2012 partly as a result of a number of key initiatives delivered by Medway Council in partnership with key stakeholders. This scheme will continue to build on this success. The ambition is to at least continue with this level of growth in cycling as a minimum over the lifetime of the action plan.

Objectives of the scheme and action plan are:

- To increase cycling during peak travel times thereby contributing to growth in the local economy by making the local road network less congested;
- To contribute to improving the health of people who live and work in Medway by increasing physical activity through recreational and utility cycling, improving health of employees and local residents thereby reducing absenteeism and obesity.

The project links directly to the Council Plan for Medway, contributing to two of the four main priorities: 'Everyone benefitting from regeneration' and 'Adults maintain their independence and healthy lifestyles'. The project also directly links to the Medway Health and Wellbeing Strategy

#### 1.3. Strategic context

The Medway Local Transport Plan 3 came into effect on 1 April 2011 following approval of Full Council. This project links closely to all the five priorities set out in Medway's Local Transport Plan 2011/2026:

- Regeneration, economic competitiveness and growth – by providing a more reliable and efficient local transport network. A key action is encouraging walking and cycling for short journeys.
- Connectivity – by ensuring Medway has good quality transport connections to key markets and major conurbations in Kent and London. A key action is encouraging commuters to cycle to railway stations.
- Natural environment – by contributing to tackling climate change and improving air quality. A key action is encouraging walking and cycling for short journeys.

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- Equality of opportunity – by supporting equality of opportunity to access employment, education, goods and services for all residents of Medway. A key action is improving accessibility for people with mobility difficulties by improving pedestrian crossing facilities.
- Safety, security and public health – by promoting active lifestyles and reducing the risk of death, injury or ill health or being the victim of crime. Key actions include road safety interventions, improved pedestrian access to local facilities and encouraging cycling.

The South East Local Enterprise Partnership's bid for Local Growth Funding reflected the aspirations set out in LTP3, with the proposed funding and delivery plan defined within the shorter-term implementation plan.

The project links directly to the Council Plan for Medway, by contributing to all four priorities of the plan, which are:

- Everyone benefitting from regeneration
- Safe, clean and green Medway
- Adults maintain their independence and live healthy lives
- Children and young people have the best start in life in Medway

## **1.4. Powers and consents**

Medway Council has the powers of both Highway Authority and Planning Authority. The majority of the works do not require planning consent as they are either on public highway or green spaces.

## **Case for Change**

### **2. BUSINESS NEEDS / REASONS**

As traffic flows increase nationally, particularly during peak times, and as the pressure on medical and care service resources increases, the need to promote cycling as a viable and beneficial alternative to journeys by car has become a pressing one. The health benefits of cycling have long been proven, but the social and economic values of increased populace cycling are relatively new concepts. Medway aims to combine these three benefits as one strand of its integrated Local Transport Plan looking forward.

Medway Council have carried out strategic SATURN transport modelling and used the results of this study to identify local congestion points that affect journey times for private vehicles and public transport both now and in the future. Medway Council aims to improve the efficiency of the transport network by reducing local capacity constraints at these identified hotspots, resulting in journey times being more reliable. Table 5.2 in Medway's Local Transport Plan (2011-2026) identifies the location of existing and predicted congestion hotspots on key strategic corridors in Medway. Cycling as a feasible and attractive alternative to car journeys will be a key contributor to addressing these issues.

The Cycling Area Action Plan aims to build on what Medway Council have already delivered in terms of cycling infrastructure, promotion and training, including:

- Improvements to the cycle network to create a more joined up network across Medway
- Expansion of Bikeability course delivery and promotion in schools, after school clubs, Children Centres and youth centres
- Promotion of Active Medway Cycle Groups
- Continued partnership working with Sustrans on joint cycling projects
- Increased cycling information provision and promotion
- Development of Medway Council Workplace travel plan

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- ***What evidence is there of need for the project?***

The 2014 results of the National Highways and Transport Network Survey (NHT) which surveyed a minimum of 3,300 Medway residents confirmed that improvements to cycling facilities in Medway ranked high with Medway residents, fifth out of a total of fourteen proposed transport improvement aspects. The significance of this response is reflected by the increase in cycling numbers in Medway over the last four years, which evidences an increased desire by Medway residents to make journeys via cycle rather than by car.

In April 2014 a postal survey was sent to all members of the Medway Citizens Panel. Of the 1,081 members who received the survey, 573 completed and returned the survey. An analysis of the results showed that of those respondents who travel around Medway by bicycle, over half travel frequently, with 41% travelling at least once a week and 11% travelling every day. When asked to rate their satisfaction with how easily they are able to travel around Medway by bicycle almost half (41%) confirmed that they were dissatisfied.

These results show an enthusiasm to cycle in Medway amongst residents but a dissatisfaction with the existing provision of facilities. Whilst some inroads have been made recently in improving this situation, to maintain the momentum of a shift towards cycling as a more sustainable transport mode, the existing cycling facilities and promotion of cycling needs to be significantly developed and built upon further.

- ***What impact does the scheme have on releasing the growth or overcoming barriers to growth?***

In the past fifteen years Medway has moved from an area with no universities, to an area with three university campuses and two key college campuses; this is in addition to the numerous existing school institutions. It is essential in order for these large educational institutions to operate successfully that cycling, a key transportation mode for students in the university demographic, is supported and developed.

Medway also has a growing child population, with Children's Service predicting a sizeable percentage increase in the student population in the next ten to twenty years. This increase, more disproportionate to the rate of increase in neighbouring Authority areas, will impact upon traffic flows and congestion during peak school transport times. The promotion of cycling as a safe and viable home to school transport alternative will be crucial in relieving the pressure brought to bear by this increase in the student population.

In addition, cycling will play a key role in relieving the traffic flow pressure on a number of key employer sites in Medway, including the Medway City Estate and Gillingham Business Park, and this scheme will work in conjunction with other schemes (notably the Medway City Estate Connectivity Scheme) to ensure that cycling in Medway is adequately developed to become a viable alternative means of transport for employees commuting through Medway. By shifting to an alternative form of commuter transportation, the existing traffic network will operate more freely, ensuring that key commercial and industrial sites are maintained as attractive areas for future investment.

The health benefits of an increased cycling populace will also have associated growth benefits, by reducing absenteeism in the workplace through a healthier workforce and freeing up finances and resources in the local public health arena to be spent on alternative much needed initiatives.

- ***What will happen if the proposed project is not funded from LGF?***

The benefits outlined above in terms of the contribution cycling can make to growth and health will not be realised, and the success to date in growing cycling may not be maintained due to reducing budgets. With future pressure on the existing transport network predicted to be sizeable, a failure to promote and make provision for more sustainable forms of transportation is likely to have a significant impact on the functionality of Medway's transport network. Furthermore, the investment and resource dedicated to cycling so far in Medway may be lost, and the cost of maintaining those cycling facilities currently in place will be likely to increase with the facilities becoming a diminishing asset.

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- ***Is there a potential to reduce costs and still achieve the desired outcomes?***

No; the scheme proposal and the intended outcomes are predicated on the required funding needed to achieve them.

- ***Have other opportunities for the scheme been identified?***

The scheme does not require other developments or transport schemes to be in place or committed before the scheme can come forward or be justified.

## 3. BENEFITS

### 3.1 Estimate jobs and homes (direct, indirect, safeguarding, construction etc)

	2015/16	2016/17	2017/18	2018/19	2019/2020	2020/2021	Total
Jobs	64	52	88	73	90	25	390
Homes	59	88	68	48			261

- ***Describe the methodology of how the number of jobs and homes is estimated***

In terms of delivering new jobs and houses to Medway it is difficult to make a direct link between the implementation of this scheme and direct jobs/houses and therefore 5% of the total jobs/houses for Chatham and Strood combined are quoted.

- ***List all main direct and indirect; quantitative and qualitative; cash releasing and non cash releasing benefits associated with the investment***

A thriving community of cyclists within Medway will lessen the number of vehicles on Medway's road network. A reduction in vehicles on the network will achieve a range of positive outcomes to support the economy of Medway, including the shortening of home to work journey times for workers in Medway and further afield, and a more free flowing traffic network for businesses who rely upon efficient transportation as part of their business continuity plan.

In addition, less vehicles on Medway's road network will have a positive impact on the cost of network maintenance and the potential cost of implementing additional traffic congestion measures. A less congested road network will also have positive environmental impacts.

For the residents of Medway, the health benefits of increased cycling will have a range of positive impacts, as has been widely reported (see "Investigating the potential health benefits of increasing cycling in the cycling city and towns (CCT)" DfT 8<sup>th</sup> April 2013). As an additional benefit, the positive knock-on effects of this increase in physical activity in the populace will be less pressure on the resources of health and adult social care services.

Recent evidence published by the DfT ("Economic case for active travel: health benefits" 6<sup>th</sup> November 2014) compiled a range of cost-benefit evidence from studies that calculated the health benefits, alongside other benefits such as savings in travel time, congestion and accidents. The report concluded that the typical benefit-cost ratios are considerably greater than the threshold of 4:1, which is considered by DfT as 'very high' value for money.

## 4. RISKS

### 4.1. Provide a summary of key risks to the delivery of the scheme (including financial, commercial, economic and management).

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## Financial:

- Best value procurement of necessary consultancy / design / build services not achieved.
- Underestimation of design scheme cost

## Commercial:

- Negative public response to proposed scheme design proposals.

## Economic:

- Growth in cycling will not be achieved, which is likely to have an impact on economic benefits.

## Management:

- Timetable slippage due to delay in process from planning permission refusal, safety audit result, or technical adoption issue.
- Delay or unsuccessful delivery of scheme due to insufficient management or project resource.

### 4.2. Risk Assessment

Risk description	Likelihood	Impact	Likelihood x Impact	Mitigation
	1=Low, 2=Medium, 3=High			
Delay / refusal of planning permission	1	1	1	Package of measures, the majority of which will not require planning consent. Appropriate consultation will take place and necessary timescales factored into scheme timetable
Delay / negative outcome to project procurement stages	1	3	3	A robust procurement process jointly managed by both transport and category management officers will ensure a successful procurement outcome.
Delay / amendment to scheme forced by technical issues	1	2	2	Appropriate consultation will take place with Portfolio Holder, ward councillors, business and public. Necessary timescales factored into scheme timetable
Delay caused by diversions / works to utilities	1	2	2	Appropriate consultation will take place and necessary timescales factored into scheme timetable
Delay / design changes resulting from Safety audits	1	2	2	Necessary timescales factored into scheme timetable
Negative public opinion on proposed scheme design	1	2	2	Appropriate consultation will take place with Portfolio Holder, ward councillors, business and public. Necessary timescales factored into scheme timetable
Delay / unsuccessful delivery due to ineffectual cost management or project delivery resourcing	1	3	3	A robust and inclusive project management team will be assigned to the delivery of the project, with a wide range of cross-cutting skills to reduce the risk of unsuccessful delivery. Robust management and governance arrangements for all of Medway Council's LGF projects.

## The Economic Case

### 5. OPTIONS

#### 5.1. Options Considered

For this project 3 options were considered in order to achieve the required objectives and outcomes:

1. Do nothing
2. Do minimum
3. Do something

<p>1. Do Nothing</p>	<p><i>Description:</i> No action to be taken.</p> <p><i>Positive impacts:</i> There are no positive impacts.</p> <p><i>Negative impacts:</i> Could have detrimental effects as it would allow for the following issues to get worse:</p> <ul style="list-style-type: none"> <li>■ Rapid rise in levels of obesity over the past several years in Medway, particularly among children, to a great extent caused by reduced physical activity. This has a detrimental impact not only on medical costs but also on the quality and longevity of life and wellbeing.</li> <li>■ Increased car ownership and congestion, contributing to high environmental and economic impact of climate change and pollution generated from traffic.</li> </ul>
<p>2. Do Minimum</p>	<p><i>Description:</i> Minor improvements to existing cycling network such as filling gaps or removing barriers to cyclists on existing routes.</p> <p><i>Positive impacts:</i> Improvements would be likely to generate only minor growth in cycling and any associated economic and health benefits.</p> <p><i>Negative impacts:</i> The negative impacts will be similar to the Do Nothing option since major interventions are required to tackle the significant economic and health issues outlined previously.</p>
<p>3. Do Something</p>	<p><i>Description:</i> Deliver a collection of actions over the Plan period that will help achieve the objectives of the Plan as set out in the Strategic Case. The Action Plan seeks to deliver measures that will:</p> <ul style="list-style-type: none"> <li>■ Expand, improve and maintain the network of facilities for cyclists – seven cycle routes will be added to the local cycle network which will increase the current length by 66km – this equates to a 57% growth from 115km to 181km. These works will improve access by cycle to key destinations, such as schools and local facilities and provide recreational cycling opportunities including the provision of a circular recreational route;</li> <li>■ Deliver training and participation in cycling – support cycle to school programmes, health programmes for adult cyclists and organise mass participation cycling events;</li> <li>■ Deliver improvements by working in partnership with other</li> </ul>

	<p>organisations and voluntary groups – continue to work closely with Sustrans, cycling clubs and organisations in Medway and with Southeastern trains;</p> <ul style="list-style-type: none"><li>■ Provide information and promotional material – use the local media to publicise activities, raise awareness of any new or improved infrastructure and provide details of success stories; and</li><li>■ Maintain and develop travel plans – directly support the existing Medway Council staff travel plan and indirectly support local business to maintain and develop travel plans that encourage travel by cycle.</li></ul> <p><i>Positive impacts:</i> Cycling can play a crucial role in helping Medway Council achieve our priorities set out in our Council Plan, such as those determined by national indicators on improving air quality and reducing obesity. In addition, cycling can deliver a wide range of benefits, these include:</p> <ul style="list-style-type: none"><li>■ Improving quality of life and tackling health inequalities;</li><li>■ Providing low cost accessibility;</li><li>■ Strengthening local economies by boosting local journeys;</li><li>■ Addressing the climate change agenda;</li><li>■ Decreasing congestion and creating liveable streets; and</li><li>■ Reducing need for car parking spaces, freeing up valuable land in Medway.</li></ul> <p><i>Negative impacts:</i> Possible concerns from other highway users (people with disabilities, pedestrians and drivers of motorized vehicles) regarding conflicts with cyclists. This will be addressed through the design process.</p>
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## 5.2. Please provide description of the main options for investment, together with their relative advantages and disadvantages (a SWOT analysis)

- **Do nothing**

<p><b>Strengths:</b> None</p>	<p><b>Weaknesses:</b></p> <ul style="list-style-type: none"> <li>- Previous and current investment in cycling not built upon, lessening the impact and benefits achieved by that investment.</li> <li>- Viable alternative to current transport modes in Medway not provided.</li> <li>- Failure to capitalise on previous investment in cycling in Medway, and failure to build upon growth in cycling numbers of previous four years.</li> </ul>
<p><b>Opportunities:</b> None</p>	<p><b>Threats:</b></p> <ul style="list-style-type: none"> <li>- Negative impact on current traffic network, leading to increased journey times, increased network deterioration and increased network maintenance costs.</li> <li>- Negative impact on local businesses who rely on efficient commuter times for work populace and efficient network for business transportation.</li> <li>- Possible reduction in future investment in Medway due to unsustainable transport network.</li> <li>- Negative reputational impact on the Council for failing to address traffic congestion problems in Medway.</li> <li>- Increased negative impact on Medway’s health and adult social care services as more resource is required to support an inactive population.</li> </ul>

- **Do minimum**

<p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>- Partial addressing of the need for a sustainable alternative to vehicle transport in Medway</li> <li>- Partial promotion of cycling in Medway</li> </ul>	<p><b>Weaknesses:</b></p> <ul style="list-style-type: none"> <li>- Only partial impact on current traffic network. Increased in journey times, increase in network deterioration and increase in network maintenance costs still likely.</li> <li>- Negative impact on local businesses who rely on efficient commuter times for work populace and efficient network for business transportation.</li> </ul>
<p><b>Opportunities:</b> - None</p>	<p><b>Threats:</b></p> <ul style="list-style-type: none"> <li>- Negative impact on current traffic network, leading to increased journey times, increased network deterioration and increased network maintenance costs.</li> <li>- Negative impact on local businesses who rely on efficient commuter times for work populace and efficient network for business transportation.</li> <li>- Possible reduction in future investment in Medway due to unsustainable transport network.</li> </ul>

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- **Do something**

<p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>- Positive reduction in traffic congestion and increase in cycling numbers in Medway.</li> <li>- Positive impact on Medway residents' health as a result of increased cycling.</li> <li>- Reduction in future pressures on Medway's health and adult social care services as a result of improved populace health and fitness.</li> <li>- Positive environmental impact as a result of reduced vehicle usage in Medway.</li> </ul>	<p><b>Weaknesses:</b></p> <p>None</p>
<p><b>Opportunities:</b></p> <ul style="list-style-type: none"> <li>- Possible increase in business investment in Medway as a result of improved transport network efficiency.</li> <li>- Potential additional promotion and investment in Medway as a regional centre for urban cycling.</li> <li>- Potential positive reputational impact on Medway Council and the Medway towns as a promoter of active travel and sustainable transport initiatives.</li> <li>- Potential for future generations to be more active.</li> </ul>	<p><b>Threats:</b></p> <ul style="list-style-type: none"> <li>- Possible negative response from non cycling residents to investment of funds in alternative transport provision and promotion</li> <li>- Possible concerns from other highway users (people with disabilities, pedestrians and drivers of motorized vehicles) regarding conflicts with cyclists</li> </ul>

### 5.3. Options Assessment

All the options considered were tested against the five objectives of Medway's Local Transport Plan, the overarching scheme objectives and critical success factors.

The table below provides a summary of the scheme options listed above in terms of the objectives and critical success factors for the scheme.

Summary of Scheme Option Assessment and Sifting			
Reference to:	Option 1	Option 2	Option 3
Investment objectives linked to Medway LTP Priorities			
Economic growth	x	x	✓
Connectivity	x	partial	✓
Natural Environ.	x	partial	✓
Equality	x	Partial	✓
Safety & health	x	partial	✓

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Critical Success Factors			
Strategic Fit	x	partial	✓
Economic Prosperity/ Value for Money	x	partial	✓

### 5.4. Recommended Option: What is the preferred option – and why?

Recommended Option is - **Do something**

It is recognised that the move to cycling as a more sustainable and viable form of personal transport will be a step-change, rather than an encompassing and immediate change on a large scale. As such, the Do Something option is proposed as the most appropriate solution, providing a measured solution in line with the achievable increases in cycling numbers. The outcomes to be achieved by the scheme detailed herein are both achievable and will have great value in addressing both the growing traffic congestion issue and health concerns of Medway’s increasing population. There are also numerous economic benefits to an increase in cycling, as detailed here, most notably the positive impact increased cycling will have on the business sector and the reduction in service cost in the health and social care sector resultant from a healthier populace. In addition, the do maximum option is not sufficient to outweigh the additional costs required.

### 5.5. Constraints

The risk assessment has not identified any issues that represent a significant constraint to the delivery of the project.

The recommended option does not require any land acquisition.

No other known constraints have been identified at this stage (technical, environmental, archaeological).

### 5.6. Dependencies/Interdependences

Strategically, the project has interdependences with the following growth package projects that all incorporate improving conditions for cyclists:

- Chatham town centre place-making and public realm package
- Strood town centre journey time and accessibility enhancements
- Medway City Estate connectivity improvements

Scenario	Key Performance Indicators	Unit	Annual
Do-Nothing and Do-Something (first and second future year)	<p><u>Performance indicators for Cycling Schemes in line with the Core Metrics spreadsheet agreed with the Federated Area:</u></p> <ol style="list-style-type: none"> <li>1. Total Length of new cycleways (m)</li> <li>2. Accident Rate (p/a, route specific)</li> <li>3. Casualty Rate (p/a, route specific)</li> <li>4. Pedestrian Counts on new/existing routes (No.)</li> <li>5. Cycle journeys on new/existing routes (No.)</li> <li>6. Cycle Parking Counts (No.)</li> </ol> <p>Medway currently has 19 permanent cycle counters that are used to monitor cycle usage in Medway. These counters indicate that cycling has</p>		

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	<p><i>grown by 2.4% per year between 2009 and 2012 and Medway are aiming to build upon this success through delivery of the cycling action plan.</i></p> <p><i>Medway Council also undertakes regular cycle parking counts at all railway stations in Medway and this data will be used to monitor changes to cycling habits as part of multi modal journeys.</i></p>		
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*\*The scheme promoters are encouraged to use the existing datasets and model outputs to provide this information. The preference would be to use a spreadsheet type of analysis to provide information in the above table.*

### 5.7 Transport scheme assessment approach

#### 5.7.1 Provide a brief description of a (spreadsheet-based) modelling and appraisal methodology as well as detail of data source used

A spreadsheet model has been used which analyses the available data including the number of users who would benefit from the scheme and links to the available WebTAG data to arrive at a benefit figure. The full details of the economic appraisal undertaken are set out below.

The benefits were calculated overall, not split by journey purpose (high level analysis, not enough information to break it down). Given the nature and scale of the scheme this is consistent with the proportionate approach of WebTAG. Given the nature of the scheme and the proportionate approach adopted it was not felt relevant to determine this, particularly given the limited data. Regarding spread by impact type, the report provides a description for each type of benefit considered (journey quality, health etc).

#### 5.7.2 List all assumptions made for transport modelling and appraisal

See points detailed below.

#### 5.7.3 Provide key positive and negative impacts of the schemes in the table below as described in the Appraisal Summary Table and Social Distribution Impact analysis, where it is appropriate, supported by evidence.

Appraisal Summary Table (AST)				
Impact		Summary of Key Impacts	Assessment	
Category	Sub-Category		Quantitative	Qualitative
Economy	Business users and transport providers	A possible decrease in traffic congestion and travel times by increased cycling throughout the Medway towns. The wider implications of this modal shift may result in fewer vehicles on the road network. Businesses may also benefit from a small decrease in absenteeism due to promotion of active travel modes and increased worker health and wellbeing.		Moderate beneficial
Economy	Reliability impact on Business users	An increase in numbers of residents cycling during peak journey times may lead to a slight improvement in journey time reliability as road network capacity improves.		Slight beneficial
Economy	Regeneration	The impact of new and improved cycling infrastructure and incentives will improve		Moderate beneficial

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		health and may result in reduced absenteeism. May also attract additional businesses to the area, potentially increasing occupancy rates and encouraging the development of active on-street uses of public realm.		
Economy	Wider Impacts	The project is anticipated to have wider economic benefits, if the successful promotion of cycling and improved cycling facility provision results in increased cycling numbers amongst the populace. This will have a positive impact on the cost and resource requirement needed in Medway's health and social care sectors.	DfT research confirms a benefit-cost ratio of 4:1 of increased urban cycling	Moderate beneficial
Environmental	Noise	There will be a slight improvement in noise levels as a result of possible mode shift and a reduction in traffic congestion.		Slight beneficial
Environmental	Air quality	There will be a slight improvement in air quality levels as a result of possible mode shift and a reduction in traffic congestion		Slight beneficial
Environmental	Landscape	The scheme will not have an impact on the landscape.		Neutral
Environmental	Townscape	Though the scheme will have no immediate impact on the townscape, possible traffic congestion reduction may open town centres up to increased visitor numbers and potential future investment		Slight beneficial
Environmental	Heritage of historic resources	An increased reputation for Medway as an area that promotes active and sustainable travel may provide additional tourism promotional value, thus revealing Medway's heritage to a wider audience and increasing vitality in the area. Potential schemes such as cycle hire may also increase Medway's potential as an attractive tourist destination.		Moderate beneficial
Environmental	Biodiversity	The scheme will not have an impact on biodiversity as works are within the existing highway and public realm boundary.		Neutral
Environmental	Water environment	The scheme will not have an impact on the water environment as the works are within the existing highway boundary. However, the inclusion of cycle hire schemes, promotion and information around river cycle routes and facilities may indirectly benefit the promotion and preservation of the river as a key resource in Medway.		Slight beneficial
Social	Commuting and other users	The primary benefits will be to cyclists who will benefit from the improved cycling facilities. The scheme will improve		Moderate beneficial

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		the viability and attractiveness of commuting by cycle, which may increase numbers who use public transport for part of their journey.		
Social	Reliability impact on Commuting and Other users	There will be a slight improvement in journey time reliability for cyclists due to improving cycling facilities, such as improved road crossings, potential cycle hire and cycle storage amenities. There may also be a small impact on vehicle journey times due to a mode shift to cycle.		Slight beneficial
Social	Health and physical activity	Physical activity and health will be improved through the promotion of mode shift towards cycling throughout Medway.		Large beneficial
Social	Journey quality	Journey quality will be improved for cyclists as cycling facilities en-route and at destinations are improved. These improvements will also benefit pedestrians using the route.		Moderate beneficial
Social	Accidents	Improved cycling facilities which cater specifically for cyclists and which encourage the safe and appropriate use of shared spaced have been shown to decrease the number of cycling accidents that occur on the highway.		Slight beneficial
Social	Security	The scheme would have a positive impact on the security of cyclists, and cycle equipment storage.		Slight beneficial
Social	Access to services	Access to cycling services will improve throughout Medway, with for both existing cyclists and new / novice cyclists who may be looking to change their current mode of transport.		Moderate beneficial
Social	Affordability	The schemes will promote the efficiency of journeys by cycle, which will reduce the need to travel by car or personal vehicle.		Slight beneficial
Social	Severance	The scheme will aim to address the gaps in Medway's cycle network by joining up key cycle pathways and crossings, leading to a more efficient cycle journey across key routes in the towns. It will also provide opportunities for new cyclists to gain access to leisure facilities across the Medway Towns through training and education opening up a range of health and social benefits.		Moderate beneficial
Misc.	Public accounts	It is anticipated that elements of new public realm will have a positive impact on the maintenance costs for existing and proposed amenities.		Slight beneficial
Misc.	Indirect Tax	There may be a small reduction in fuel duty as a result of mode shift.		Neutral
Misc.	Reputational	The successful delivery of the scheme will have a positive impact on Council		Moderate beneficial

		reputation, and the reputation and standing of Medway as a promoter of sustainable and active travel.		
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## 5.8 Benefit Cost Ratio

### *Estimation of key input parameters - Estimation of number of users benefiting from the intervention*

- 5.8.1 In order to determine the value of benefits resulting from the implementation of the Medway Cycling Area Action Plan, it was necessary to estimate the number of users who would benefit. For this purpose, two scenarios were considered i.e. one without the scheme and one with the scheme.
- 5.8.2 Both the ‘without scheme’ and ‘with scheme’ scenarios are based on 2014 data of cyclist trips currently undertaken in Medway. This was calculated from ONS 2011 travel to work data for Medway and adjusted with the average proportions of trips by purpose and main mode from the National Travel Survey (NTS) for England (2013) and Trip End Model Presentation Program (TEMPO) growth rates. The number of trips is converted to individual users based on the assumption that 90% of trips are part of a return journey using the same route and the remaining 10% are single journeys on the route.
- 5.8.3 The ‘without scheme’ scenario is then based on annual National Trip End Model (NTEM) growth rate of 0.25% for cyclists. This is assumed to remain constant over the whole appraisal period and does not taken account of population growth or change in employment. The ‘with scheme’ scenario is based on a growth rate from a comparative study<sup>1</sup> which showed a 57% increase in cyclists relative to baseline, three years after similar upgrades (i.e. demand in 2017 in the ‘with scheme’ scenario is 57% greater than demand in 2014).
- 5.8.4 The Cycling Demonstration Towns programme study involved six towns in the first phase and Darlington was selected as being the most representative for the current assessment in terms of town characteristics and the measures implemented. In addition to the infrastructure element that involved installation of seven radial cycling routes, the program in Darlington also involved promoting cycling, building support and productive partnerships and supporting workplace and schools travel planning.
- 5.8.5 The scheme is delivered over a period of three years from 2015/16 to 2017/18 and the benefits have been apportioned in line with the phasing of the costs. The number of new cycling users generated by the scheme is calculated as the difference between the number of users expected under the ‘without scheme’ scenario and the forecast number of users under the ‘with scheme’ scenario.
- 5.8.6 Levels of growth beyond 2017/18 have been estimated using the concept of a rate of decay in use, as suggested in the Department for Transport’s WebTAG Unit A5.1 Active Mode Appraisal. For this study it was assumed that after the initial encouragement of cyclists to the intervention, rather than maintaining an increased level of cycling indefinitely, additional use reduces over time compared to the ‘without scheme’ by 10% every year from 2018.

### *Estimation of car kilometres removed*

- 5.8.7 An estimation of car kilometres saved by the scheme is required to calculate decongestion, environmental and accident benefits. The total change in cycling kilometres is calculated by multiplying the forecast number of cycling trips generated by the scheme by the average trip length

<sup>1</sup> Analysis and synthesis of evidence on the effects of investment in six Cycling Demonstration Towns, November 2009, Cycling England

value of 3.9km, sourced from the National Travel Survey. The number of car kilometres abstracted from the road network is then determined using a percentage of respondents stating that they could have used a car instead of cycling but they chose not to.

- 5.8.8 In calculating the benefits of reduced car kilometres it was assumed that 27% of people chose not to use a car although they could have and cycled instead (See assumptions sheet in the appraisal spreadsheet).

### ***Estimation of time spent travelling***

- 5.8.9 The estimation of health benefits requires an assessment of time spent active per day. This is calculated using an average trip length of 3.9km (from NTS, as above), an average speed of 20kph for cyclists (from Design Manual for Roads and Bridges section 11.8.3) and the proportion of individuals making return trips.

### ***5.9 Calculating the value of benefits***

- 5.9.1 A range of quantifiable benefits have been identified as directly attributable to cycling schemes. These benefits include:

- Health benefits from increased physical activity;
- Savings from reduced absenteeism;
- Journey quality;
- Decongestion;
- Accidents;
- Reduced environmental costs;
- Avoided or deferred infrastructure provision.

### ***Calculation of benefits to health***

- 5.9.2 Increasing the number of people cycling regularly will raise the amount of exercise taken and consequently contribute to better health. The analysis carried out here assumes a linear relation between activity levels and the risk of premature death when compared to less active individuals and is restricted to the contribution of cycling to reducing inactivity in adults only. The method for calculating the impacts was taken from 'Quantifying the health effects of cycling and walking' (WHO, 2007) and its accompanying model, the Health Economic Assessment Tool (HEAT).
- 5.9.3 Research<sup>2</sup> has found that the reduction in relative risk for cyclists at 36 minutes per day is 0.28 compared to inactive individuals. Therefore, the reduction in relative risk is calculated by interpolating between 0 and the maximum reduction of 0.28 on the basis of the average time spent travelling by bicycle per day (one of the key input parameters). It is worth noting that the average active time is based on the assumption that average trip lengths remain unchanged over the appraisal period.
- 5.9.4 The potential number of lives saved is based on the reduction in relative risk, the number of users benefiting from the intervention and an average mortality rate of 0.0022<sup>3</sup>, representing the proportion of the population of England aged 15-64 who die each year. It is accepted that there is a

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<sup>2</sup> Andersen et al (2000), All-Cause Mortality Associated With Physical Activity During Leisure Time, Work, Sports and Cycling to Work, Archives of Internal Medicine, Vol. 160, pp1621-1628

<sup>3</sup> ONS 2011

period where the health benefits will accrue over time until an individual is deemed "fully active". Therefore, making the health benefits instantaneous to new users will be an over-estimate. To avoid this, we assumed a rate of accrual of five years and that half of the new cyclists in each year receive 20% of the full benefit (as they have been more active for one year) and half receive 40% (as they have been more active for two years)<sup>4</sup>.

- 5.9.5 The number of potentially prevented deaths is then multiplied by the average value of prevention of a fatal casualty taken from the TAG Data Book (Table A4.1.1) which is assumed to grow in line with GDP/capita for the period from 2014 to 2074<sup>5</sup>. The calculations were repeated for each year in the appraisal period and then summed to give a total present value benefit of approximately £2.2 million in 2010 prices.

### ***Calculation of absenteeism benefits***

- 5.9.6 Benefits to employers from reduced absenteeism were calculated in accordance with WebTAG Unit A4.1 Social Impact Appraisal. The evidence for the reduction in absenteeism from work as a result of increased cycling was taken from a US study which found that 30 minutes of exercise a day could reduce short term sick leave by between 6% and 32% (WHO, 2003). The base level of absenteeism assumed is 9.1 of which 95% is accounted for by short-term sick leave<sup>6</sup>. Similar to the health benefits analysis, we assumed a linear relationship between levels of activity and reduced absenteeism. The value attributed to reduced sick days is based on the gross full time workplace based weekly earnings in Medway in 2013<sup>7</sup>. Absenteeism benefits only apply to commuters hence the number of new cyclists is factored by the proportion of commuting trips on the route taken from NTS.

- 5.9.7 The absenteeism benefits are estimated for each year between 2014 and 2074, including growth in line with GDP/capita in the employment cost and then summed to give a present value benefit of approximately £0.2million in 2010 prices.

### ***Calculation of journey quality benefits***

- 5.9.8 Research derives a value for 'safety-insecurity' on the basis of which journey quality benefits are calculated in accordance with WebTAG Unit A4.1 Social Impact Appraisal. In the current study, journey benefits to cyclists are derived from provision of on-road and off-road segregated cycle tracks in proportion of 80% and 20% respectively of the total cycle tracks provided. This quality value taken from DfT's TAG Data Book is assigned in full to each trip made by current users and only half to each trip made by new users following the 'rule of a half'. An assumption is also made that the average cyclist will use the new cycle tracks for approximately half their journey.

- 5.9.9 An annualisation factor of 220 days is used, based on the number of working days in a year and excluding weekend use, which might be considered a relatively conservative approach. Similar to the other type of benefits, journey quality benefits are calculated for each year of the appraisal period, including growth in the quality values in line with GDP/capita and summed to give a present value benefit of approximately £0.7million in 2010 prices.

### ***Calculation of other benefits with the Marginal External Cost method***

- 5.9.10 The Marginal External Cost (MEC) method was applied to calculate decongestion, accident, greenhouse gas, air quality, noise, reduced infrastructure and indirect tax benefits and followed the four-step process recommended in WebTAG Unit A5.4 Marginal External Costs:

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<sup>4</sup>WebTAG Unit A5.1 Active Mode Appraisal

<sup>5</sup> A 60-year appraisal period is assumed, in line with HMT Green Book and DfT WebTAG guidance

<sup>6</sup> PwC Absence Research, 2013, [http://pwc.blogs.com/press\\_room/2013/07/rising-sick-bill-is-costing-uk-business-29bn-a-year-pwc-research.html](http://pwc.blogs.com/press_room/2013/07/rising-sick-bill-is-costing-uk-business-29bn-a-year-pwc-research.html)

<sup>7</sup> Business Intelligence Statistical Bulletin, Earnings in Kent 2013, Business Intelligence, Research & Evaluation, Kent County Council, January 2014

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- Estimate the change in car kilometres;
- Analyse the characteristics of the car journeys removed;
- Calculate marginal external costs for modelled years; and
- Discount costs over the appraisal period.

5.9.11 The MECs by road type for each category of impact and year were taken from TAG Data Book Table A5.4.2 for the 'Other urban' road type. These values were then weighted with the proportions of traffic in Table A5.4.1 for 'Other urban' road type in the South East to produce weighted average marginal external costs for each year and category of impact.

5.9.12 It should be noted that no account has been made in this case for potential mode shift from public transport. The Table below shows the present value of the impacts in 2010 prices estimated with the MEC method:

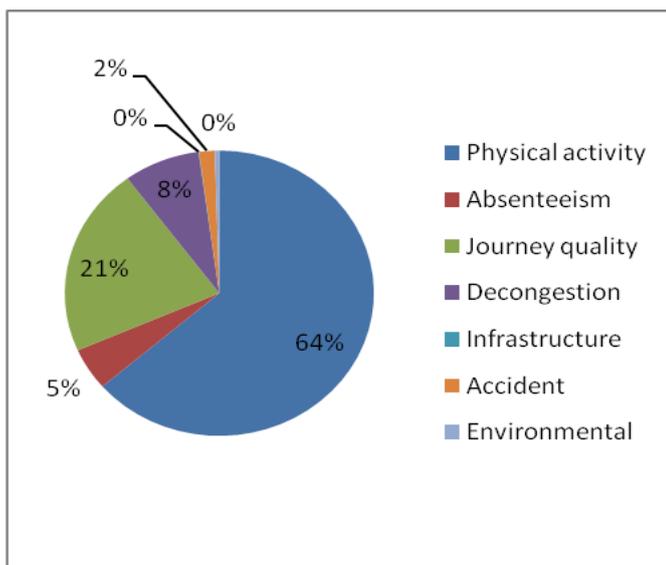
Impacts	Present value (£s)
Decongestion	274,290
Infrastructure	1,836
Accidents	56,276
Local Air Quality	288
Noise	3,676
Greenhouse Gases	12,060
Indirect Taxation	-65,676

### ***Calculating present value of benefits***

5.9.13 The appraisal period used in the calculation is 60 years and we have applied the Green Book schedule of discount rates. The stream of benefits has a 2010 Present Value base year, a 2014 appraisal year and a 2015 opening year. Because the scheme opens in 2015 the appraisal period extends to 2074 to include the 60 years of benefits.

5.9.14 The Green Book schedule of discount rates is applied from the year of the appraisal, 2014, so a 3.5% discount rate applies until 2044, with 3% applied until the end of the appraisal period in 2074. Between the appraisal year, 2014, and the Department's Present Value base year, 2010 we have also applied the 3.5% discount rate.

5.9.15 The figure below shows the proportion of total Present Value of Benefits (PVB) in 2010 prices attributable to each main impact. For simplicity, the local air quality, noise and greenhouse gases elements were aggregated into one category representing environmental benefits.



## 5.10 Calculating the value of costs

- 5.10.1 The Present Value of Costs (PVC) was determined in a very similar way to the PVB. A stream of future costs were estimated over the same appraisal period as the benefits and discounted in the same way. The original costs were expressed in 2014 prices and had to be deflated in 2010 prices to be comparable with the benefits. All figures are in 2010 price base. Costs were adjusted using the GDP deflator from the TAG data book annual parameters. All figures expressed in real terms at 2010 prices. Costs deflated to 2010 prices using GDP deflator. Inflation assumptions are subsumed into risk and contingency costs. The costs were adjusted to include optimism bias of 15% as recommended in the Green Book and taking into account the nature of the project and the stage of scheme development.
- 5.10.2 Sunk costs are generally written off as part of the day to day business of the transport planning responsibilities of Medway Council. No sunk costs were included in the analysis.
- 5.10.3 Total nominal costs for the scheme in 2014 prices were £2.9 million and the phasing is £0.2 million in 2015/16, £1.2 million in 2016/17 and £1.5 million in 2017/18. The costs were adjusted to include optimism bias<sup>8</sup> of 15% as recommended in the Green Book and taking into account the nature of the project and the stage of scheme development. Sensitivity analysis is provided around the uplift used. The calculation resulted in a PVC of £2.1 million.
- 5.10.4 Funding for the project is fully from the public sector and is secure. The majority secured from Local Growth Fund and the balance from the Place-Making fund which is in the control of Medway Council. Details are provided in Section 7.
- 5.10.5 Revenue operating costs will be minimal. Any additional maintenance costs will be funded from Medway Council's revenue account.

## 5.11 Cost-Benefit Analysis results

- 5.11.1 The results of the analysis are set out in the table below. This sets out the Present Value of Benefits (PVB), the Present Value of Costs (PVC), Net Present Value (NPV) and Benefit Cost Ratio (BCR). To calculate the BCR, the total discounted benefit over the 60 years appraisal period is divided by the total discounted cost of the scheme. The resulting benefit cost ratio was found to be 1.6 which suggests that for every £1 of public money spent, the funded scheme provides £1.6 worth of economic benefit. It should be noted however that these benefits do not include the positive

<sup>8</sup> There is a demonstrated systematic tendency for appraisers to be optimistic about key parameters, including costs. On that basis it is recommended that an uplift is applied. The magnitude of the uplift depends on the type of scheme.

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qualitative impacts discussed earlier and which could not be quantified and monetised. The unit of account used for the Cost benefit analysis (CBA) is 2010 market prices (gross of indirect tax). Costs were adjusted using the GDP deflator from the TAG data book annual parameters

Monetised Costs and Benefits	Present Value
PVB*	3,373,754
PVC*	2,137,418
Net Present Value	1,236,336
BCR	1.6 #

\*Present Values and Benefit Cost Ratio of Medway Cycle Area Action Plan

# See results of sensitivity analysis in Section 5.12, which demonstrates BCR could be as high as 2.6

### 5.12 Sensitivity Analysis

- 5.12.1 At the present time, only a limited number of benefits were sufficiently well understood and evidenced to allow for their valuation and inclusion in estimations of benefit to cost ratio for the Medway cycling scheme intervention. Particularly, travel time savings for new cyclists, multiplier effects (additional benefits from bicycle tourism, sales and manufacturing and the work of actually creating cycling infrastructure), positive impact on household disposable income from reduced spending on car fuel, health benefits to children and young people and benefits from increased levels of walking have not been considered as part of the analysis. If these represented an additional 20% on top of the current PVB, the BCR would increase to 1.9.
- 5.12.2 Moreover, the CBA was based on limited knowledge of many of the input elements that are required for the estimation of the considered benefits and costs. It was essential to use realistic assumptions to produce a meaningful BCR. Although all our assumptions were based on solid evidence from WebTAG guidance or from literature available on value for money of cycling interventions, some assumptions were considered to be somewhat more uncertain than others and were therefore included in a sensitivity analysis to understand the impact on the BCR from amending these key assumptions.
- 5.12.3 For this study, assumptions around the decay rate, the proportion of people that would choose to not use a car although they could have and the optimism bias uplift were tested. The results in terms of the change in BCR were the following:
- The BCR would increase to 2.6 (63%) if the decay rate was lowered from 10% to 5% and would decrease to 1.0 (-38%) if the decay rate was increased to 18%;
  - If there was no switch from driving to cycling (i.e. the proportion of people that would choose not to use a car although they could have would be 0%) the BCR would only decrease by approximately 10% to 1.4. This is due to the fact that decongestion, infrastructure, accidents and environmental benefits represent only 10% of the total;
  - The BCR would increase to 1.7 if optimism bias is assumed to fall to 5%. For the costs to rise to a level where they would be equal to the benefits, ie. the BCR is equal to 1.0, optimism bias would have to rise to 82%.
- 5.12.4 To further test the validity of the results, the BCR in this study has been compared with those from other studies with comparable levels of intervention and costs and similar measures implemented. The analysis was therefore judged to produce conservative estimates of the economic benefit to society of investing in cycling infrastructure.

## Commercial Case

### 6. PROCUREMENT ROUTE

#### 6.1 Define the approach taken to assess commercial viability

6.1.1 Officers have engaged with the Council’s own Category Management Team in order to carry out the necessary market assessment on the commercial viability of this project. This included:

- An appraisal of the current market conditions for the delivery of all aspects of the scheme.
- Consultation with project and performance management consultants for additional guidance on scheme procurement and best contracting methods.
- An examination of the cost benefits of the scheme. The results of this analysis which provide more specific details on the commercial viability and cost benefits of the project are set out in Section 5 above.

6.1.2 Medway Council’s Category Management Team has a proven track record of successful project delivery, both in terms of quality and value for money, recognised in March 2014 at the Excellence In Public Procurement Awards 14/15 where the Team achieved the Highly Commended Award for Innovation or Initiative, and in August 2014 being shortlisted for two major award categories in the CIPS Supply Management Awards 2014. The Team will provide support to the Project Group throughout the life of the scheme, including pre and post delivery phases. The Governance Arrangements set out in Appendix A provides additional detail on the Team’s role in the project management structure.

#### 6.2 Briefly describe the procurement strategy. Set out timescale involved in the procurement process to show that delivery can proceed quickly.

6.2.1 In order to achieve the best outcome for the project officers are currently considering two procurement strategies for this project, the two-stage approach and the traditional approach. The proposed timescale and process for the two stages is set out in detail below:

Pre Tender Stage	1. In House Preparation / Appointment of Consultants	The Client prepares a business case for its proposed project and develops this into a project brief that forms the basis for selection of a Designer and Cost Consultant (either in-house or pursuant to a new EU-compliant procedure or under an existing framework / alliance / long-term contract);
	2. Consultant Preparation	The selected designer creates a concept design and the selected cost Consultant creates a Project Budget, in each case for Client approval;
Stage 1 (Tender)	3. Market Engagement / Appointment of Main Contractor	The Client issues the project brief, approved concept design and Project Budget to the market, and invites proposals that will form the basis for their appointment under Conditional Contracts (pursuant to new EU-compliant procedures or under existing frameworks / alliances / long-term contracts);
		Bidder submissions will include appropriate design and other project proposals for evaluation, as well as Consultant fees and Contractor fees / profit/ overheads – and, where appropriate, the costing of work/supply package proposals from preferred Subcontractors and Suppliers;
Stage 2 (Pre Construction Agreement)	4. Pre-Construction Phase	The successful Contractor and Consultant team are appointed to then work up a proposal on the basis of an Open Book cost that meets the Client’s stated outcomes and cost benchmark as a second stage;

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		<p>The selected Integrated Team, comprising the Client, Consultants and Contractor (together with any provisionally approved Subcontractors and Suppliers), carries out agreed Preconstruction Phase activities under the terms of their Conditional Contracts and in accordance with a Preconstruction Phase Timetable, including build-up of developed design in respect of the project and each work/supply package, together with Project Budget reconciliations for Client approval;</p> <p>As developed design is approved, subject to review and value engineering as appropriate, the Integrated Team then builds up the technical design in respect of the project and each work / supply package for Client approval;</p>
	5. Supply Chain Engagement	<p>Contractor issues approved developed design or technical design (dependent on the extent of design proposals invited) to any provisionally approved Subcontractors and Suppliers for particular work / supply packages and creates a business case for review / development / finalisation of their work / supply package and costs and for Client approval;</p> <p>Contractor issues approved developed design or technical design (dependent on the extent of design proposals invited) with an Enquiry Document approved by the Client to prospective Subcontractors and Suppliers for each remaining work / supply package and invites them to submit tenders comprising proposals and costs for that work / supply package;</p>
	6. Finalisation of Design and Cost	<p>As successive Subcontractors and Suppliers are selected, the expanded Integrated Team finalises the technical design, confirms the components of the agreed costs for the project, and develops a Construction Phase programme;</p> <p>The expanded Integrated Team undertakes joint risk management activities so as to minimise any risk contingencies quoted by the Contractor and so as to establish a robust and acceptable basis for the Construction Phase of the project to proceed;</p> <p>If required, the Client authorises Early Works Orders to be undertaken by agreed Integrated Team members for agreed costs in advance of the Construction Phase of the project;</p>
Construction Phase	7. Construction Phase	<p><i>When technical design and costs and a Construction Phase programme have been sufficiently developed, supported by acceptable conclusion to agreed risk management activities, the Client confirms that the conditions set out in the Conditional Contracts have been satisfied and authorises the Integrated Team to undertake the Construction Phase of the project on the basis of:</i></p> <ul style="list-style-type: none"> <li>• Technical design compliant with the project brief and agreed by the Integrated Team;</li> <li>• Fixed price or target cost within the Project Budget and agreed by the Integrated Team;</li> <li>• A risk management position agreed by the Integrated Team;</li> <li>• A Construction Phase programme agreed by the Integrated Team.</li> </ul>

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- 6.2.2 The traditional approach, if taken forward, will include a more independent design stage, with the market approached subsequently for the procurement of scheme construction. Officers are continuing with the necessary due diligence on the appropriateness of the approach for this project and will finalise the specific procurement strategy by March 2015. Officers will ensure that the final strategy:
- Enables full project mobilisation within the funding period
  - Has clearly defined financial implications
  - Has clearly defined risk allocations
  - Specific project timescales, including implementation timeframe.
  - The necessary timescales for multiple procurements if appropriate to ensure all package elements of the scheme are value engineered and delivered to timescale.
- 6.2.3 In order to minimise overrun and contingency arrangements, officers are also considering the appropriateness of either a fixed price or target price contract, and how risk and contingency will be best managed in order to maximise deliverable outcomes for the project. Specific contracts being considered for the project are:
- JCT Constructing Excellence (Construction phase need adapting for pre construction phase)
  - NEC3 Option C (Construction phase need adapting for pre construction phase)
  - PPC2000
  - Public Sector Partnership Contract Option 6 (Option 10 is the preconstruction phase)
  - TPC2005 (Includes 2 stage open book mobilization phase)
- 6.2.4 The chosen procurement strategy will be fully supported by the Council's own internal procurement governance arrangements (public details of which can be found here <http://www.medway.gov.uk/businessandinvestment/procurement.aspx>), including a comprehensive Gateway reporting process, procurement support and guidance from the Council's dedicated Category Management Team, and additional due diligence on all key scheme proposals and awards through the Council's Divisional Management Team (attended by senior Council officers and service heads), Procurement Board (attended by senior Council officers, service heads, and member portfolio holders), and if necessary full Cabinet.
- 6.2.5 The risk allocation throughout the scheme will be costed partially upfront based on the potential risks and then as part of the outline design process. A fully costed risk register will be prepared before the final contract is placed.
- 6.2.6 Medway Council's Procurement & Category Management Team procure the full range of requirements for the Council ranging from social services to capital projects. All members of the Team are members of the Chartered Institute of Purchasing and Supply (CIPS) which sets standards for procurement professionals globally. One of the key lessons learnt from previous procurement projects is that the right team needs to be in place to ensure that the project can deliver the objectives and outcomes within time and budget.
- Medway Council also has a wide range of experience successfully tendering and contract managing traditional build contracts utilising JCT Design and Build as well as other forms of contracts such as NEC3 and PSPC.
- The tender process undertaken will look to ensure that the client side technical support has the correct ethos to deliver the projects and the contractors have experience of delivering these projects working collaboratively rather than adversarial approach.

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## Financial Case

### 7.1 Total cost of the project

List here the elements of gross costs, excluding optimisation bias. Please provide the date the prices for the cost estimate is based on (e.g. Q1 2014)

The table below details the nominal funding requirement for the project. The costs are 2014 prices with no inflation allowance added and overheads are included. No allowance has been made for financial uplifts.

*\*Listed is the total cost of the project for the Do Something Option*

	* Cost Estimate status (E; F; D; T)	2014/15 £000	2015/16 £000	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000	2020/21 £000
Procurement Cost								
Feasibility Cost								
Detail Design Cost			85 (E)	100 (E)	50 (E)			
Management Cost			45 (E)	100 (E)	150 (E)			
Construction Cost			45 (E)	725 (E)	1,025 (E)			
Contingency				75 (E)	50 (E)			
QRA – 15% of LGF				175 (E)	200 (E)			
Consultation & engagement			25 (E)	25 (E)	25 (E)			
<b>VAT (if appropriate)</b>								
<b>Sub-total Non-Works</b>			<b>155</b>	<b>300</b>	<b>275</b>			
<b>Sub-total Works</b>			<b>45</b>	<b>900</b>	<b>1,225</b>			
<b>TOTAL COST (ex VAT)</b>			<b>200</b>	<b>1,200</b>	<b>1,500</b>			

\*E = Broad estimate, D = Detailed estimate, T = Tender price, F= Feasibility estimate

### 7.2 Source of funding

List here the amount of funding sought:

Funding Source	2014/15 £000	2015/16 £000	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000	2020/21 £000
LGF		100	1,100	1,300			
Private Developers				100			
Borrowing							
Income							
Other (insert as many rows as required)							
<b>Local Contribution Total (leverage) –</b>		<b>100</b>	<b>100</b>	<b>100</b>			
Other Funding (ensure naming every institution; insert as many rows as required)							
<b>TOTAL FUNDING</b>		<b>200</b>	<b>1,200</b>	<b>1,500</b>			

*Please note that the totals for funding should match with the total for project cost.*

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Type of Funding	Funding Source	Please identify how secure the funds are	When will the money be available
Public	LGF	Strategic business case agreed by DfT	April 2015
	Borrowing		
	Income		
	Other (insert as many rows as required)		
	Local Contribution Total (leverage)	LTP Integrated Transport block allocation. 2015/16 allocated. Future years to be allocated.	April 2015
Private	Please list all developers		
	Private Developers Total	To be negotiated as part of major planning applications being considered over the next 2/3 years	During 2017/18
	Other Funding (ensure naming every institution; insert as many rows as required)		

## 7.3 Programming

7.3.1 Appendix B provides an overarching programme of start and delivery milestones for the key activities. However, as this project is a package of cycle network improvements, individual cycle link improvements will start and finish at different times – this level of detail is not available at this time. In summary, the majority of construction will take place in 2016/17 and 2017/18, hence the majority of the spend takes place during this period (£1.2m in 2016/17 and £1.5m in 2017/18). Design of the individual schemes is underway and will continue during 2015/16 (£0.2m).

## 7.4 Funding risks and constraints

Funding risks are low because:

- All public funds are secure either from LGF or the Integrated Transport block allocation;
- A proportionally small sum will be secured through S106 agreements. Medway Council is the local planning authority and has a good track record for securing contributions for these types of schemes.

There are no funding constraints.

## 7.5 Non-capital funding mechanism

7.5.1 Revenue operating costs will be minimal. Any additional costs associated with the maintenance of new routes will be funded from Medway Council's revenue account.

## 7.6 Affordability gap

7.6.1 The capital elements of the scheme are affordable within the funds available.

7.6.2 Medway Council is actively investigating EU funding through the Active Coastal Towns initiative, which could provide revenue funding to support the promotion of the project.

## Management Case – Delivery

### 8. DELIVERY

#### 8.1 Provide high level information about arrangements that will ensure delivery of this project

8.1.1 Medway Council has effective project management and governance arrangements in place to ensure effective delivery of LGF projects, including:

- **Project management:** an established project management toolkit based on PRINCE2 methodology. Information for staff on Medway Council’s adopted approach to project management is published on the council’s staff Intranet site. The information makes it clear that it is imperative that projects are not undertaken without the management and controls described in the toolkit. The Medway method for project management is applicable to all projects, both capital and revenue - including change management projects. Annexed to this toolkit are template documents for use in the project management process. All LGF projects are following this process, with the addition that the LGF programme is being reported to the Officer Project Group on a monthly basis.
- **Governance** arrangements that involve both elected members and senior officers of the council.

The organogram at Appendix B summarizes the structure of the LGF project management and governance arrangements. Table 8.1 details the management and governance arrangements that Medway Council has in place to deliver Medway’s LGF projects.

8.1.2 This project is a package of small schemes that will be delivered and delivered during the lifetime of project. The programming and monitoring delivery of the individual schemes will be handled by the management and governance arrangements in place. The start and delivery milestones for this project are summarized at Appendix B.

8.1.3 Appendix C provides a breakdown of established resources for LGF project work-streams. Appointment to the post of Head of Local Growth Fund Projects has been made and arrangements are in progress to recruit to the posts of Principal Transport Planner – LGF Projects and Project Officer – LGF Projects. Further activity will be supported from existing Medway Council staff resources and consultants where established arrangements exist.

Table 8.1 - Medway Council key management and governance arrangements	
Responsible group or officer	Responsibility
<b>Cabinet</b>	Member group that manages council business including high value/high risk procurement and projects including LGF projects. Cabinet meets every three weeks.
<b>Member Advisory Project Board</b>	Member overview of project development and delivery. The Board reviews, analyses and scrutinizes progress on the directorate’s capital programme and, where relevant, specific large/complex projects. Board is chaired by Frontline Services Portfolio Holder. LGF reports are regularly considered by this Board.
<b>Procurement Board</b>	Member board that agrees and scrutinises procurement activity. This Board will consider the procurement strategy for each LGF project, consider submitted tenders and scrutinise outcomes.

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<p><b>Officer Project Group</b> for Regeneration Community &amp; Culture Directorate (RCC)</p>	<p>Senior officer project management of all LGF projects.</p> <p>The Group is responsible for the strategic management of the project and has authority to commit resources to the project in accordance with the Council’s Constitution. General tasks include:</p> <ul style="list-style-type: none"> <li>• appointing the project manager;</li> <li>• signing off the project brief and business case;</li> <li>• approving the PID;</li> <li>• agreeing project controls;</li> <li>• authorising project start;</li> <li>• authorising variations to expenditure;</li> <li>• managing key risks in the highlighted risk log; and</li> <li>• authorising project closure.</li> </ul> <p>An LGF update report is a standing item on the agenda. The Group meets every four weeks.</p>
<p><b>Project Sponsor</b></p>	<p>Independent of the project and provides challenge to ensure project is delivered on time, within budget and achieving the anticipated benefits</p>
<p><b>Project Owner</b></p>	<p>Ensures governance arrangements and Medway project management principles are adhered to.</p> <p>Ensures the project is technically and financially viable and compliant with the organisation’s corporate standards and strategic business plans. Owns the Business Case, funding and cost allocation for the project. Provides leadership and direction throughout the project.</p> <p>Is responsible and accountable for ensuring the project remains focussed on achieving its objectives and that the anticipated benefits can be achieved.</p> <p>Attend the directorate Officer Project Board to lead discussions on the project.</p> <p>Provides sufficient induction for the Project Manager to ensure s/he has the best understanding of the project.</p> <p>Chair implementation board if required.</p>
<p><b>Project Manager</b></p>	<p>Responsible for delivering the project on behalf of the project owner and officer project board.</p> <p>Leads and manages the Project Team with the Authority and responsibility to run the project on a day-to-day basis.</p> <p>Delivers the right outputs, to the required level of quality and within the specified constraints of time, cost, resources and risk.</p> <p>Prepare project information, including PID, Project Plan and Business Case.</p> <p>Identify and evaluate risks, determine and manage actions, and maintain the risk log.</p> <p>Manage and control changes to scope, requirements, personnel etc.</p> <p>Ensure project’s resource plans and costs include sufficient, properly skilled support.</p> <p>Monitor and report progress against plans, quality and costs.</p> <p>Liaise with the Project Owner and Officer Project Board for their approval and decisions at key project stages.</p>
<p><b>Head of Local Growth Fund Projects</b></p>	<p>Lead on managing and being responsible for Medway’s LGF programme of projects. Includes operating at a high level with government, SE LEP and the Independent Technical Evaluator.</p> <p>This post filled and operational.</p>
<p><b>Section 151 Officer</b></p>	<p>Responsible for signing acceptance of the grant and its attached</p>

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	conditions, overseeing financial transactions and challenging where necessary, sign off of financial statements requested from SELEP.
<b>Head of Place, Category Management</b>	Lead on providing procurement advice.
<b>Head of Internal Audit</b>	Lead on providing financial governance advice. Involved in the programme from an early stage.

### 8.1.4 *Benefit realisation plan and monitoring*

- 8.1.5 Under the requirements of section 151 of the Local Government Act 1972, Medway Council confirms the financial administrator has adequate project assurance systems in place to verify that the scheme is fit and able to be procured and delivered using Medway Council procedures. This will include the council's Internal Audit team being engaged with the project at key gateways in its progress.
- 8.1.6 Medway Council will seek to agree with the SE LEP and Government a collection of KPIs (Key Performance Indicators) for the recommended option to monitor the delivery and success of the project. The metrics that may form the basis of the KPIs are listed below, which cover key outcomes and outputs from the project. Medway Council currently has monitoring arrangements in place to measure the majority of these indicators.

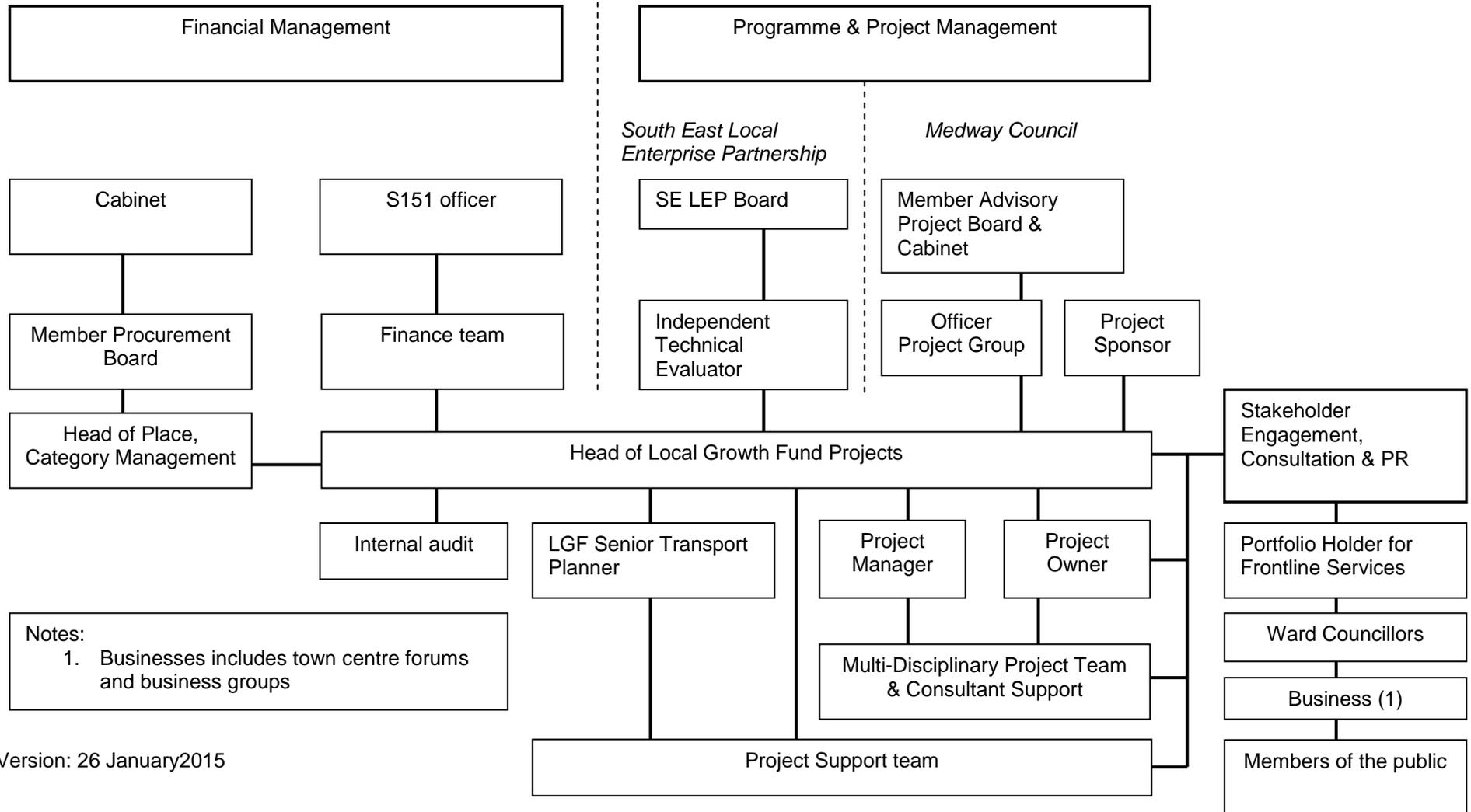
1. Core Metrics	2. Project specific outputs - Transport	3. Additional monitoring
<b>Inputs</b>	<b>Outputs</b>	Accident rate
Expenditure	Total length of resurfaced roads	Casualty rate
Funding breakdown	Total length of new cycle ways	Pedestrians counts on new/existing routes
In-kind resources provided	Type of infrastructure	Cycle journeys on new/existing routes
<b>Outcomes</b>	Type of service improvement	
Jobs connected to the intervention		
Commercial floorspace constructed		
Housing unit starts		
Housing units completed		

### 8.1.7 *Independent Technical Evaluators' sign off*

- 8.1.8 The business case will be assessed by Steer Davies Gleave, the Independent Technical Evaluator appointed by the South East Local Enterprise Partnership.

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## APPENDIX A - LOCAL GROWTH FUND – GOVERNANCE ARRANGEMENTS FOR LGF PROJECTS



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### Appendix B

#### Medway Council LGF Projects - Start and Delivery Milestones

Scheme name	Start date for funding release	Outline design commence	Detailed design complete	Acquisition of statutory powers complete	Procurement complete	Start of construction	Completion of construction
A289 Four Elms Roundabout to Medway Tunnel Journey time and Network Improvements	<b>Apr 2015</b>	Feb 2015	Mar 2016	Mar 2017	Sept 2017	Oct 2017	Dec 2018
Strood Town Centre Journey Time and Accessibility Enhancements	Apr 2015	<b>Apr 2015</b>	Sep 2016	n/a	Mar 2017	Apr 2017	Jun 2018
Chatham Town Centre Place-making and Public Realm Package - early public realm wks	Apr 2015	n/a	n/a	n/a	Mar 2015	<b>Apr 2015</b>	Oct 2016
Chatham Town Centre Place-making and Public Realm Package - masterplanwks	<b>Apr 2015</b>	Mar 2015	Dec 2015	n/a	Jun 2016	Jul 2016	Jul 2017
Medway Cycling Action Plan (package of measures)	Apr 2015	underway	In phases	n/a	n/a - term contractor	<b>Apr 2015</b>	Mar 2018
Medway City Estate Connectivity Improvement Measures – early interventions	Apr 2015	Jan 2015	Mar 2015	n/a	n/a – term contractor	<b>Apr 2015</b>	Mar 2016
Medway City Estate Connectivity Improvement Measures - package of measures	Apr 2015	<b>Apr 2015</b>	Sep 2016	Sep 2016	Mar 2017	Apr 2017	Mar 2018
Notes:							
1: Dates in bold are key dates when funding confirmation and funding release is required.							

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### APPENDIX C - BREAKDOWN OF RESOURCES FOR LGF PROJECT WORKSTREAMS

Project name & workstreams	Project Owner	Workstream Leader	Project Manager	Senior Management
<b>Senior Management</b>				
Project Sponsor				AD – FLS
Programme Manager				HLGF
Senior User				HIT
Project support				PO
<b>A289 Four Elms Rbt to Medway Tunnel</b>	HLGF		PTP	
Highway capacity improvement		HIT	PTP/PO	
Strategic links to major development sites		PTP	PTP	
<b>Strood Town Centre</b>	HLGF			
Traffic management		TM	PTP/PO	
Pedestrian accessibility		RSM		
Cyclist accessibility		STOO		
Public transport improvements		PTOM		
Strategic links to major development sites		PTP		
Strood station		NR/SE	PTOM	
<b>Chatham Town Centre Place-making &amp; PR</b>	HLGF			
Public realm including Civic Square		CRM	CRM	
Rail/bus highway alterations		PTOM	PTOM	
Chatham station forecourt		NR/SE	PTOM	
<b>Medway Cycling Action Plan</b>	HLGF			
Network improvements		PTOM	STOO	
Cycle hire		PTOM	STOO	
Other interventions		PTOM	STOO	
<b>Medway City Estate connectivity imps</b>	HLGF			

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Anthony's Way junction improvement		HIT	PTP	
River taxi		PTP	PTP/PO	
Pedestrian and cycle network imps.		HIT	STOO	
<b>Total</b>				

<b>KEY TO POST ABBREVIATIONS</b>		
<b>Post</b>		<b>Post holder</b>
Assistant Director – Frontline Services	AD-FLS	Andy McGrath
Head of Local Growth Fund Projects	HLGF	Steve Hewlett
Principal Transport Planner (LGF Projects)	PTP	New post
Project Officer (LGF Projects)	PO	New post
Head of Integrated Transport	HIT	Ruth Du-Lieu
Transport Change Manager	TCM	David Tappenden
Traffic Manager	TM	Martin Morris
Road Safety Manager	RSM	Bryan Shawyer
Parking & Transport Operations Manager	PTOM	David Bond
Senior Transport Operations Officer	STOO	Darren Taylor
Chatham Regeneration Manager	CRM	Sunny Ee
Great Lines Heritage Park Project Officer	GLHP	Nicola Moy
Public Health Project Manager	PH	Scott Elliott
Head of Greenspaces	GS	Simon Swift
Network Rail/Southeastern	NR/SE	Stephen Diplock/Nina Peek