Go Cumbria and the Lake District

Extending Smarter Travel

A partnership bid to the Access fund for Sustainable Travel

from Cumbria County Council

and the Lake District National Park Authority

Lake District National Park

Cumbria County Council

Access Fund for Sustainable Travel Revenue Competition - Application Form

Department for Transport

Applicant Information

Local transport authority name(s):

Cumbria County Council
In partnership with the Lake District National Park Authority

Bid Manager Name and position:

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Website address for published bid:

1. http://www.cumbria.gov.uk/roads-transport/LSTF/LSTF.asp
2. http://www.lakedistrict.gov.uk/caringfor/projects/seemore

SECTION A - Project description and funding profile

A1. Project name: Go Cumbria and the Lake District

A2. Headline description:
The 'Go Cumbria and the Lake District' programme will substantially increase the levels of cycling and walking in the county; and will work with business and schools to increase access by smarter travel modes.

The programme builds on the legacy of previous LSTF programmes, and lessons learnt from visitor travel will be embedded into workforce, education, leisure and residential travel patterns.

Inspirational cycle events, and measures linked to the Optimising Connectivity 2 sustainable transport improvements Growth Deal bid will give the economy a timely boost and support areas still rebuilding following recent flooding.

A3. Type of bid
a) This bid is:

☒ **Revenue only**, and I confirm we have made provisions for a minimum additional 10% matched contribution

☐ **Revenue & Capital**, and I confirm we have sourced the capital funding locally and have made provisions for a minimum additional 10% matched contribution.

b) If your bid is reliant on capital funding, please select one of the following options:

☒ **Contains Local Growth Fund contribution, but not reliant on it.** This bid contains a local contribution from the Local Growth Fund, but the work can still progress as planned if LGF funding is not secured.

A4. Total package cost (£m): 5.584
This consists of:

£1,487,121	Access Fund revenue bid
£188,027	Access Fund revenue matched local contributions
£3,490,000	Local Growth Fund capital funding bid local contribution
£419,150	Access Fund in-kind revenue contributions

A5. Total DfT revenue funding contribution sought (£m): 1.487

A6. Local contribution (£m): 4.107
This consists of:

Revenue matched contribution

£133,027	Active Cumbria, Cumbria County Council
£50,000	Lake District National Park Authority
£5,000	South Lakeland District Council

(Total £188,027)

Continued….

Capital (Local Growth Fund contribution)

£3,500,000 Growth Deal 3 funding bid – Optimising Connectivity 2 element (total for Optimising Connectivity 2 element is £5m but that includes £1.5m for 2020/21)

Additional In-kind revenue contributions:

This consists of staff time managing, co-ordinating and delivering the programme:

£237,650 Cumbria County Council
£136,500 Lake District National Park Authority
£45,000 Active Cumbria

(Total £419,150)

A7. Equality Analysis

Has any Equality Analysis been undertaken in line with the Equality Duty?

☒ Yes ☐ No

A8. Partnership bodies:

Cumbria County Council, as applicant and grant recipient, will work in partnership with the Lake District National Park Authority as programme management partners. The Cumbria Local Enterprise Partnership is also supporting the bid. Together we have a strong track record of delivering DfT programmes. The County Council will also deliver the programme of inspirational cycling events in partnership with British Cycling.

In relation to scheme delivery, the following bodies will be engaged in the design, implementation and promotion of the components of this funding bid, further developing existing partnerships with many:

Active Cumbria, part of Cumbria County Council's Public Health and Communities Service team will provide support in managing and delivering a number of the cycling and walking measures, including the Pedal Your Way to Health Roadshows and 100 Mile Challenge, working with schools, and the Go Active Walking and Cycling Campaign, Walk Leader Training and Walking Groups and Ride Leader Training and Cycle Groups, developing skills and capacity building.

British Cycling will provide a package of cycling opportunities across the geographic area of the project through supported events. British Cycling staff will support the marketing of cycling in Cumbria around inspirational events such as the Tour of Britain, provide expert advice in work place cycle planning and coaching for cycling programmes. British Cycling is also a key partner in the production of the Cumbria Cycling Strategy.

Cumbria Tourism will be responsible for marketing and promoting measures within the Go Cumbria and the Lake District programme, together with Active Cumbria and British Cycling, and Cumbria Tourism will also further promote the measures implemented through the previous 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes.

Primary Schools across Cumbria, particular within the Optimising Connectivity 2 geographical areas will be actively engaged in the programme.

A wide range of employers will be actively engaged in a number of measures particularly the Access to Work Toolkit for Businesses. This includes the University of Cumbria who support the Access Fund bid as it will strengthen their existing active travel offer.

Various delivery partners, from cycling businesses and transport operators, to car club operators will be involved in the delivery of the proposed measures within the bid package.

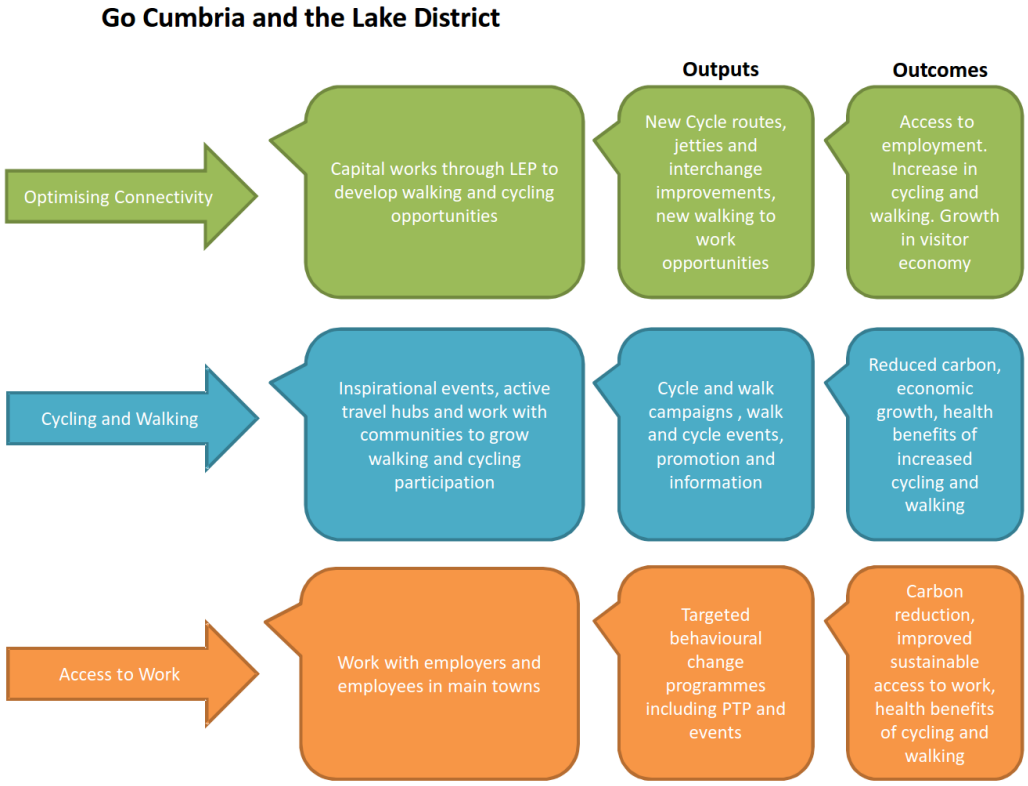
We will also continue to work with Corridor Travel Plan stakeholder groups established during the previous 'See More Cumbria and the Lake District' LSTF programme, particularly those located in the Optimising Connectivity 2 areas as set out in our bid document. The groups consist of local businesses, county, district and parish council representatives.

SECTION B – The Business Case

B1. Project Summary

The 'Go Cumbria and Lake District' programme is based around the two key objectives of the Access Fund - **Cycling and Walking** and **Access to Employment, Training and Education.** Through the delivery of our measures we will aim to substantially increase the number of people cycling and walking to work, education and training in Cumbria and help deliver the Government's Cycling and Walking Investment Strategy and the Cumbria Cycling Strategy.

The Cycling and Walking and Access to Work programme elements will be used to support and maximise the benefit of the projects to be delivered through the 'Optimising Connectivity 2' programme, which is Cumbria's local capital contribution to the Access Fund bid through the Local Growth Fund.



What are we going to do?

The Access Fund revenue funding will deliver 2 programme elements, with 10 measures split between those elements:

1. Cycling and Walking

This element of the bid will focus on inspiring and supporting the residents and visitors of Cumbria to take up cycling and walking. It will build on cycling and walking promotion and infrastructure delivered by Cumbria's previous LSTF programmes and strongly supports the Optimising Connectivity 2 programme which forms the Capital Local Growth Fund contribution element of the Access Fund.

The Go Cumbria and the Lake District programme will be a significant step to realising the Government's ambition to make walking and cycling the natural choice for shorter journeys and as the "first and last mile", part of longer journeys in a rural county such as Cumbria. The project will also encourage primary school aged children and their families to change behaviour and to become more active and consider more sustainable options to travel to and from school and work.

The cycling and walking element comprises the following integrated measures:

- Pedal Your Way to Health School Roadshows
- 100 Mile Challenge and Feet First school campaigns
- Walking and Cycling Campaign (Go Active)
- Walk Leader Training and Walking Groups
- Ride Leader Training and Cycling Groups
- Lake District Community Active Travel Areas
- Inspirational Cycle Event programme

Pedal Your Way to Health Roadshow

Through this measure Mr Stretch, PE Teacher extraordinaire, brings his unique blend of comedy, street theatre and audience participation to schools across the county through a series of roadshow performances.

The roadshows are aimed at pupils aged 5-10 years and will inspire children to make the small changes to their activity levels and diet which will pave the way for a healthy life. It will also encourage greater numbers of children aged 5-10 years to explore ways in which they can travel to school using alternative methods than cars e.g. by walking, cycling or scooting. A significant number of Roadshow performances will be delivered within the catchment area of Optimising Connectivity 2 and within the previous See More LSTF travel corridors, with remaining schools being distributed across the county.

Outputs

30 Roadshow performances in primary schools p.a. x 3 yrs. = 90 Roadshows
Average of 150 pupils aged 5-10 yrs. / school in each performance x 30 p.a = 4,500 x 3
Total = 13,500 pupils

100 Mile Challenge and Feet First

The 100 Mile Challenge programme is a whole school approach to increasing levels of physical activity, leading to more young people meeting the recommended levels of activity

each day. Each participating school will be encouraged to get as many children as possible to complete 100 miles by any means of physical activity during each academic year. A significant number of schools will be engaged for both measures within the catchment area of Optimising Connectivity 2 and within the See More travel corridors with remaining schools being distributed across the county.

Outputs

100 Mile Challenge Outputs:

150 pupils aged 5-10 yrs. / school engaged in scheme x 50 schools p.a.
Yr1 = 7,500 new
Yr2 = 7,500 new + 3,750 retained from Yr1 = 11,250
Yr3 - 7,500 new + 3,750 retained from y=Yr1 and 3,750 from Yr2 = 15,000
Total = 33,750 pupils

The Feet First measure will encourage pupils to consider alternatives to the car for their journey to school, resulting in improvements in health, well-being and alertness.

Feet First Outputs*:*
Approximately 8,000 pupils per annum aged 4-11 growing by 500 pupils each year.
Total = 25,500 pupils

Walking and Cycling Campaign (Go Active)

The Campaign was launched on 1st August 2016 with the aim of inspiring inactive residents and visitors to Cumbria to become more active. Involving Active Cumbria working in partnership with Cumbrian Newspapers Group, the University of Cumbria and Glaxo Smith Kline, it uses behaviour change principles to support registered users to be more active in either walking or cycling. Through the use of digital technology, individuals will also receive contact at 3 and 6 month touchpoints, to see if they are still active, and if not, providing support for them to re-join the programme. The Campaign will provide a high quality multimedia platform to promote all cycling and walking opportunities including within the Optimising Connectivity 2 area.

Outputs:

1,000 subscribers p.a. to weekly cycling e-newsletters = 3,000
1,000 subscribers p.a. to weekly walking e-newsletters = 3,000
75% of subscribers reporting an increase in levels of physical activity through walking and cycling at 3 months after sign up; so
Total = 2250 walking and 2250 cycling participants.

Walk Leader and Ride Leader Training, and Walking and Cycling Groups

This measure focuses on building capacity for an extensive county-wide network of trained leaders to deliver structured walking and cycling activity both within community settings and workplaces. Individuals or small collectives will be targeted to receive a full day's training delivered by approved trainers, with the view that at least 50% of trained candidates will progress to establish walking and cycling groups.

Walk Outputs:

Max 20 candidates / course x 18 walking courses = 360 candidates with target of 40% (144) from workplaces and 60% (216) from community group settings
Walking Stages:
Yr1: 60 groups x 6 walkers x 26 wks = 9,360
Yr2: 60 Yr1 groups x 6 walkers x 46 wks = 16,560
60 Yr2 groups x 6 walkers x 26 wks = 9,360
Yr3: 120 Yr1&2 groups x 6 walkers x 46 wks = 33,120
60 Yr3 groups x 6 walkers x 26 wks = 9,360
Total** = **77,760 walk stages

No of available walks:
Yr1 = 1,560
Yr2 = 4,320
Yr3 = 7,080
Total = 12,960 walks

Cycle Outputs
Max 20 candidates / course x 9 cycling courses = 180 candidates with target of 40% (72) from workplaces and 60% (108) from community group settings
Cycling Stages:
Yr1: 30 groups x 6 cyclists x 13 wks = 2,340
Yr2: 30 Yr1 groups x 6 cyclists x 23 wks = 4,140
30 Yr2 groups x 6 cyclists x 13 wks = 2,340
Yr3: 60 Yr1&2 groups x 6 cyclists x 23 wks = 8,280
30 Yr3 groups x 6 cyclists x 13 wks = 2,340
Total = 19,440 cycle stages

No of available cycle rides:
Yr1 = 390
Yr2 = 1,080
Yr3 = 1,770
Total = 3,240 cycle rides

Lake District Community Active Travel Areas
To reflect both the dispersed resident population and longer commuting journeys for workers within the Lake District National Park, we will develop 4 community active travel areas, potentially around the Keswick, Ambleside, Patterdale and Gosforth/Seascale areas. These will align with key travel plan corridors of the previous LSTF See More programme, and will build on the infrastructure and service provision improvements delivered by See More and the Go Lakes Travel LSTF programmes. The Oxenholme to Grasmere corridor includes the University of Cumbria's Ambleside Campus, and as supporters of this bid, the University is keen to work with us to identify how their students can walk and cycle more to access their teaching. The Keswick to Borrowdale corridor is also the focus for a large part of the Optimising Connectivity 2 Local Growth Fund capital bid which will deliver new multi user trails around Derwentwater and Thirlmere as well as cycle links connecting these to Keswick and Grasmere.

Within each of these areas the LDNPA will work with British Cycling and local cycle providers to develop a package of measures to increase the levels of cycling participation among the resident population, target the hospitality sector workforce to encourage them to cycle and walk to work and offer a programme of events to visitors. For walking we will identify a cohort from our Volunteer Service to be trained as a Walk Leader and will work with Active Cumbria and Walking for Health to deliver that training. We will liaise with the GP health and wellbeing champion in Cumbria and develop walking for health programmes with GP surgeries in these four corridors. There will be a progression of walking offers, from short flat walks using our Miles without Stiles routes, through to joining the established LDNP guided walks programme.

The programme of measures in all four areas could potentially include:
- Guided bike rides and walks
- Dr Bike bicycle maintenance sessions
- Cycle skills training for all ages
- A bike buddy service
- Cycle and walking ambassadors to encourage participation

- Learn to ride and stabiliser-free cycling sessions
- Health walks via GP referral

We will work to bring the newly established walking and cycling groups in Cumbria into the National Park, in particular from the District Council areas of Copeland and Allerdale where health and wellbeing statistics are especially low. We are very excited by the national potential of our Community Active Travel actions. Developing successful interventions for Cumbrian residents, particularly from urban areas, means that by year three of the Access Fund, we will have a proven method of delivery to encourage more people to walk and cycle in national parks. 50% of people in England live within 1 hour of a national park so we believe that there is potential to roll these measures out to larger urban authorities around the country.

The ultimate aim for this three year programme will be to develop a permanent, community led base for these activities that can be used by residents, commuters and visitors alike.

Outputs:
1*. Short walks programme delivered in partnership with GP surgeries in Keswick, Ambleside, Patterdale and western corridor (Gosforth/ Seascale) delivered by cohort of Walking for Health trained volunteers from the LDNPA Volunteer Service. Proportion of short walks programme dedicated to people identified by Active Cumbria's walk leaders training.*
20 walks in Yr 1 (because of set up time) x 10 participants on each walk x 4 hubs
Yr1 = 800 walking stages.
Yrs 2 and 3 minimum of 40 walks x 10 participants x 4 hubs
Yrs 2 & 3 = 1,600 walking stages. Assuming 50% of participants in Years 2 and 3 are new.
Total = 2,400 walking stages

2. *Programme of regular community cycle rides using the Ride Social model - delivered by British Cycling. Trained 'Cycle Leaders' will also provide training and champion the activity among the local community, to act as 'bike buddies' for prospective cycle commuters and to encourage visitors to cycle to key destinations.*
*(measures costed as part of Active Cumbria ride leader measures****)***
Total = 3,000 new cycle opportunities (*by end of programme from 2015-16 baseline of 1,186.)*

3. *Inventory of how employees in the hospitality sector commute to work - through research, liaison with the Lakes Hospitality Association and business engagement in partnership with Active Cumbria's Walk and Cycle Leader Training and Workplace Challenge. This will look at identifying measures to support cycling and walking, for both the first and last mile as well as longer journeys. There is limited understanding and research as to how to engage this sector and we expect that the findings of this aspect of the programme to be applicable to other rural areas in England where the visitor/hospitality and seasonal economy is strong.*
Based on a 5% increase from 2011 Census data of people cycling to work in the wards where the travel hubs are located ***we will deliver an additional 525 cycle commuters by 2020.*** *261 working days per year x 2 journeys per day = 522 so 525 x 522* ***Total = 274,050 new cycle stages.***
Based on a 5% increase from 2011 Census data of people walking to work in the wards where the travel hubs are located ***we will deliver an additional 120 walking commuters by 2020.*** *261 working days per year x 2 journeys per day = 522 so 120 x 522* ***Total*** *=* ***62,640 new walking stages.***

4. A development manager post to co-ordinate and develop the above measures.

Inspirational Cycling Events Programme

Inclusive and inspirational events are part of the development process that has been behind the increase in the number of new cyclists in England and British Cycling's sport development programme. Evidence form previous events and building on the Rio Olympics, elite sporting events can inspire increased levels of physical activity, in this case, cycling. Cumbria will continue to host these events together with bringing The Women's Tour and other women's events to inspire more women and girls to take up cycling and become more active.

Cumbria has successfully hosted stages of the Tour of Britain professional cycle races and Tour Series town centre races. The Tour Series races were held in Barrow-in-Furness in 2014 and 2015. The 2014 event drew 10,000 spectators, the 2015 race 12,000, and the percentage of people who cycle at least once a month increased from 9.3% to 19.1%, measured by the Active People Survey, the fifth largest increase in England, while also putting £210,000 into the local economy.

The 2015 Tour of Britain produced a net economic impact of £3.5m for Cumbria. And in September 2016, Cumbria came together to hold Stage 2 of the 2016 Tour of Britain race, held to show the world that Cumbria was fighting back from the devastating flooding of December 2015, with the race using roads and bridges repaired or rebuilt in the following nine months and watched by record crowds.

The Tour de Yorkshire Cycle Race is the legacy event following the Grand Depart of the 2014 Tour de France held in Yorkshire. The event comprises a 3 stage male stage race and 1 day women's race held in the historic boundaries of Yorkshire.

Following the expansion of the Yorkshire Dales National Park in Cumbria (25% of the YDNP is now in Cumbria), South Lakeland District Council, Cumbria County Council and the Yorkshire Dales National Park Authority have been seeking support for a stage start in the market town of Sedbergh, historically in the West Riding of Yorkshire. The Cumbrian partners would like to hold both men's and women's races.

Together with hosting of world class sporting events building upon this success, Cumbria will again host mass participation events to inspire the current generation to enthuse the next Laura Trott or Sir Bradly Wiggins to get on their bikes in a safe traffic free setting in the stunning Cumbrian landscape. The events will form part of the British Cycling partnership programme being the first all-inclusive mass participation events to be held in a rural setting.

British Cycling Partnership Programme

British Cycling's recreational cycling programmes have already run successfully in Cumbria since 2013, with more than 3000 places on rides filled, with people of all ages and abilities taking part in bike rides to date. The programme will continue to cover the six districts of Cumbria and will be coordinated and promoted by British Cycling in partnership with stakeholders.

The Inspirational Cycling Events and British Cycling Partnership programme will include:

- A stage of the Tour of Britain Professional Cycle Race and Women's Tour
- Rounds of the Tour Series Cycle and Maxis Women league races in Cumbrian town
- Part of stage of the Tour de Yorkshire for both women and men
- Mass participation cycling events on closed roads or traffic free infrastructure in the Lake District National Park
- Guided bike rides
- A complementary programme of Breeze Rides for women
- Self-organised Ride Social rides
- Promotion and booking of the Cumbria and the Lake District ride programme on the British Cycling website and through a national marketing campaign.

Outputs:

1. *Percentage of people cycling in Cumbria, as reported in the Active People Survey to be increased to 20% by 2019, producing 27,000 new Cumbrian Cyclists*

2. *Cycling stages from mass participation rides = 15,000.*

3*. New cycle opportunities from guided rides, Breeze and Ride Social = 3,000*

4. *Net economic impact from generated by the Inspirational Cycling Events to Cumbria of £5m.*

2. Access to Work

The second element of the Go Cumbria and the Lake District bid will focus on access to work and training. In order to promote access to work and training, and to meet the objectives of the Access Fund in respect of increasing walking and cycling, we will roll out a behaviour change programme for businesses. The programme will be branded and will target new and existing businesses in employment areas within the main towns of Cumbria, and also businesses between Keswick and Windermere, in the Optimising Connectivity 2 area where access to seasonal employment is a key issue.

We will base the programme around a 'Toolkit for Businesses', which will be made available to businesses and their employees. The Toolkit which consists of a set of mutually reinforcing measures to reflect people's journeys to work within the County will be delivered by a dedicated Business Engagement Team.

Initial engagement will be undertaken at a business level, following a prioritisation exercise to identify key target businesses to ensure highest value for money is achieved from Access Fund investment. We will identify new employment sites; this will allow us to target business engagement at a key transition point for employees, before they form travel habits to new sites. In addition, the Cumbria LEP's role as a partner in this bid will enable us to influence the design and delivery of £25bn of investments expected in Cumbria over the next 10 years, enabling walking and cycling measures to be designed in from the outset.

The measures which form part of the Toolkit for Businesses are as follows:

- Adult Cycle Training
- Dr Bike and Fix it Yourself
- Workplace Challenge
- Active Travel Surgeries
- Personalised Travel Planning
- Public Transport Taster Tickets
- Matched Funding Grants
- Accreditation

Adult Cycle Training

Many adults lack the confidence and skills that would allow them to undertake cycling to work. Our Adult Cycle Training, delivered to Bikeability Level 3 standards by qualified instructors, equips the participants with the skills to deal with the road network. The training is delivered in small groups (max 6) so that it can be tailored to a trainee's individual needs, such as a route to work.

Cycle Training will be available to all engaged employees who have undertaken the Staff Travel Survey. Delivery will be managed by Active Cumbria and levels of participation will be monitored through session attendance.

Outputs
Yr 1 = 18 courses x 6 candidates = 108 (81 cycling to work)
Yr 2 = 18 Courses x 6 candidates = 108 (81 cycling to work) + 81 cycling to work from year 1 = 162 cycling to work
Y 3 = 18 Courses x 6 candidates = 108 (81 cycling to work) + 162 cycling to work from years 1 and 2
Total = 324 participants trained and 243 (75%) regularly cycling to work

Once trained cyclists would undertake up to 4 miles / stage (to work and again return to home) x 3 occasions / week x average 23 weeks across the year.
Year 1 = 81 cyclists x 4 miles x 2 journeys x 3 times / week x 23 weeks = 44,712
Year 2 = 162 cyclists x 4 miles x 2 journeys x 3 times / week x 23 weeks = 89,424
Year 3 = 243 cyclists x 4 miles x 2 journeys x 3 times / week x 23 weeks = 134,136
Total = 268,272 miles cycled to and from work

CO2 emissions saved calculated at .33kg CO2 emissions saved per 1 mile. 268,272 miles x .33kg
Total = 88,529.76kg of CO2 emissions saved by cycling

Dr Bike and Fix it Yourself

We will provide cycle maintenance activity in two formats – Dr Bike sessions and Fix It Yourself workshops. Both measures are designed to ensure that cyclists are travelling on safe and road-worthy bikes, suitable for their journey to work.

Levels of participation, assessed against targets, will be monitored through session attendance. By providing individuals with this training and support, in addition to the Adult Cycle Training outlined above, we aim to reduce the number of employees currently travelling less than 10km, to the identified Employment Areas, by single occupancy car and to increase the number of cyclists.

Outputs*:*
108 cycle maintenance sessions with 15 participants at Dr Bike and 10 at Fix It sessions
Total = 1,350 participants

Workplace Challenge

Our Workplace Challenge promotes a more active lifestyle for employees through an innovative approach to encouraging them to log any activity they do in a week, including active travel. The Activity Log is a free online challenge which runs all year. Individuals compete with other workplaces, colleagues and friends. The more activity they do, the more points they receive. A variety of incentives and spot prizes are also available. Our aim is to engage 54 businesses in the challenge and for an average of 30 employees from each business to participate in the challenges and log activity. Active Cumbria will manage the operation of the challenge.

Outputs
Businesses take part in 2 x national / county Workplace Challenges and 2 bespoke Workplace Challenges for the business x 54 businesses
Total = 106 Workplace Challenges

Walking Stages
12 walkers x 2 journeys x 3 times / week x 8 weeks x 2 national / county challenges = 1,152 walking stages to and from work
12 walkers x 2 journeys x 3 times / week x 4 weeks x 2 local challenges = 576 walking stages to and from work
Overall = 1,728 walking stages to and from work p.a. x 3 years
Total = 5,184 walking stages

Cycling Stages
6 cyclists x 2 journeys x 3 times / week x 8 weeks x 2 national / county challenges = 576 cycling stages to and from work
6 cyclists x 2 journeys x 3 times / week x 4 weeks x 2 local challenges = 576 cycling stages to and from work
Overall = 1,152 cycling stages to and from work p.a. x 3 years
Total = 3,456 cycling stages

Active Travel Surgeries
We will run a series of Active Travel Surgery programmes throughout the project which will:
- Motivate and encourage those considering active travel modes for their journey to work.
- Provide information (maps, route planning) and advice to staff regarding active travel modes.
- Signpost to upcoming local Toolkit activity sessions, as appropriate.

Outputs
25 surgeries pa x 3years x 20 participants
Total = 1,500 surgeries

Personalised Travel Planning (PTP)
This is our key targeted measure and will be offered exclusively to those currently travelling to work by single occupancy vehicle. By providing individuals with a bespoke journey plan, containing all of the information they need to reliably make their journey to work, we aim to bring about a reduction in single occupancy car use. Through PTP we will also aim to address transport challenges currently faced by individuals in particular regarding issues relating to disability. It is considered that this measure will have benefits for the local economy as research has shown that lifestyle changes as a result of PTP results in an average reduction in absenteeism of 2.2 days per person.
Outputs
12% reduction in single occupancy car use amongst those targeted

Public Transport Taster Tickets
In order to maximise the effectiveness of our PTP programme, we will support participants, in making the switch from private car to public transport for their journey to work, through our Taster Ticket scheme. Based on the results of the journey plan an individual will be offered a fully funded public transport trial in instances where their whole journey is considered to be unfeasible by walking or cycling, but possible by public transport. Walking or cycling to and from a bus stop would become part of the first or last mile of the journey.

We will work with local public transport operators to develop a specific offer that is as flexible as possible for the recipient (e.g. a set of 5 vouchers that can be swapped for day tickets) in order to encourage high levels of take up.

Outputs
40% of participants in the scheme shifting mode from private car to public transport at least twice a week.

Matched Funding Grants
We will offer businesses engaged in the project the opportunity to apply for a Matched Funding Grant of up to £500 to support Toolkit activity at their site. Grants would be available for measures that support walking and cycling to work, addressing a barrier to more active travel. The funding must be matched by the organisation to demonstrate commitment to the measure. We will monitor the impact of this investment through follow up surveys, compared against the baseline data collected at project inception.

Accreditation
Our Accreditation scheme will look to reward businesses based on their level of engagement, in recognition of the commitment they are making to encouraging more sustainable travel and improving the health of their employees.
Our Accreditation scheme consists of three levels, as follows:

- Bronze: achieved following completion of the Staff Travel Survey
- Silver: awarded once Toolkit activity has been delivered, including participation in measures outlined above.
- Gold: awarded to businesses that have set and are working toward current mode shift targets, with measures in place to achieve them through a Travel Plan or Action Plan

As part of the toolkit there will be a requirement for a mandatory Staff Travel Survey to be undertaken at the beginning with a Follow Up Survey, to be undertaken 12 months later. This will be the primary method of monitoring the impact that the Toolkit for Businesses investment has had on mode shift.

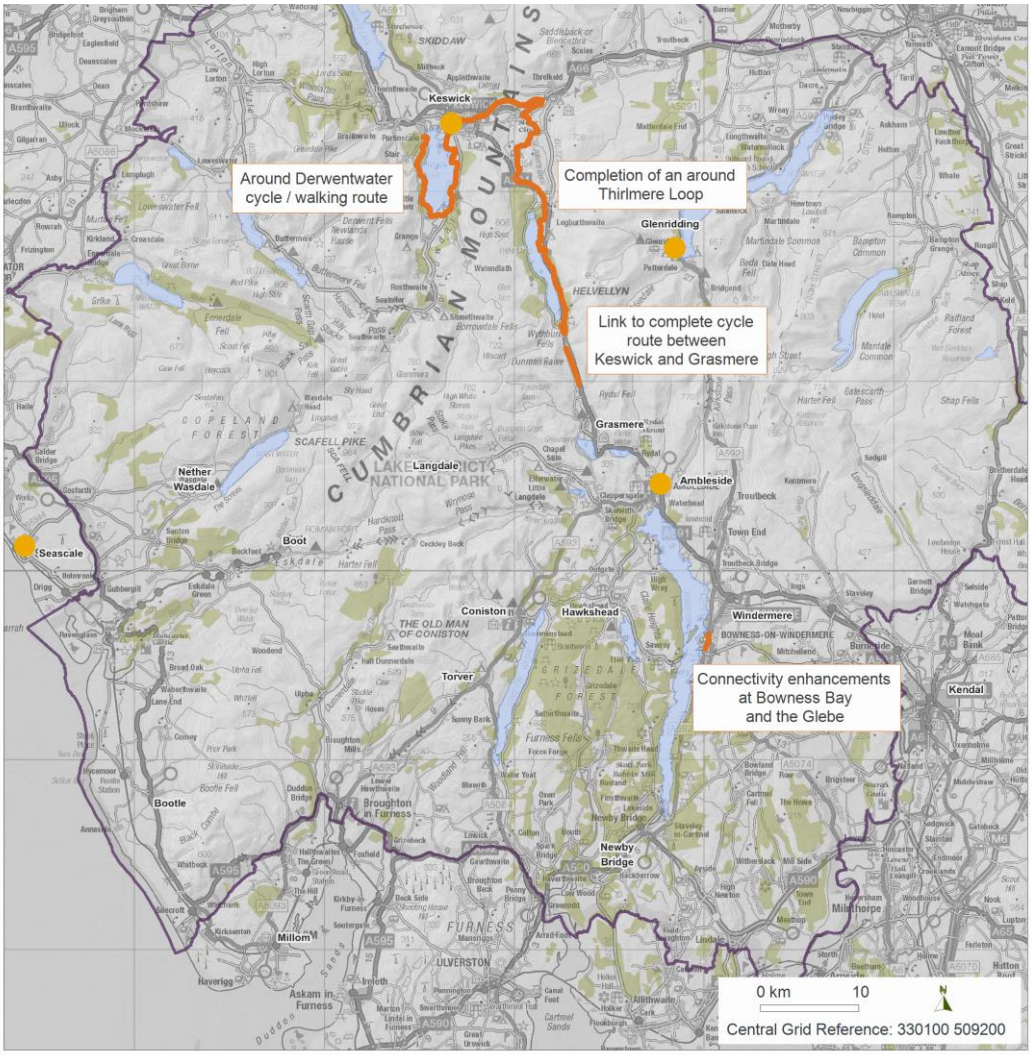
PAYD Low Emission Vehicles
In view of the rurality of many parts of Cumbria, not all residents will be able to access work and training through cycling and walking for the entirety of their journey. Therefore to incentivise shorter journeys, and to encourage people to undertake the 'first and last mile' by walking or cycling, it is proposed to locate Pay as you Drive low emission vehicles at Maryport and Workington railway stations on the Cumbrian Coast Line for further onward travel. Local Growth Deal 1 is funding improvements at both stations to improve access on foot, by bike and by car and the schemes will be completed in December 2016. We will apply the lessons learnt from the implementation of PAYD vehicles in the Go Lakes Travel and See More LSTF programmes to optimise uptake of this emerging travel mode.

Outputs:
2 low emission hybrid cars placed at 2 key locations in West Cumbria, potentially Workington and Maryport railway stations (Growth Deal 1 development projects)

Optimising Connectivity 2 (Local Growth Fund Capital)

The Optimising Connectivity 2 programme will improve travel between two of the key Lake District corridors. From Borrowdale improvements, via the Thirlmere Cycleway, and cycle link over Dunmail Raise to Grasmere, will provide a link to the Oxenholme to Grasmere corridor and the recent investment in sustainable transport there, through the Department for Transport (DfT) funded Go Lakes Travel and see More Programmes. The Optimising

Connectivity 2 programme will provide an innovative, integrated and distinctive means of moving people and will also enhance the reputation of the towns of Keswick and Windermere/ Bowness as the sustainable travel hubs for both the north and south of the Lake District and they will become the northern and southern termini for this central corridor. The projects will deliver new cycle and walking infrastructure.



The bid is for £5 million of Local Growth Fund capital and will unlock an additional £26million of private sector investment.

Five projects have been identified within the Optimising Connectivity 2 programme. These projects all have a strong strategic fit to the LEP and are considered to be deliverable by 2019-20. The first two, have been identified as priority projects through the corridor travel planning process in the DfT funded See More Cumbria and the Lake District Programme. The third and fourth relate to the development of the Thirlmere Cycleway, a long standing project with support and financial backing from United Utilities as landowner and the fifth is a further development of the LEP's Optimising Connectivity 1 programme at Bowness Bay and The Glebe, Bowness on Windermere. The projects are:

1. Derwentwater and Borrowdale Multi User Trail

There is currently no off-road cycle access around Derwent Water itself and the existing bridleways in Borrowdale are appropriate for mountain bikers only. The B5289 road is not a safe environment for leisure cyclists because of traffic volumes, road surface condition and topography. This project will develop an off-road multi user trail on both eastern and western shores of Derwentwater and a route along the valley to Grange in Borrowdale.

2. Derwentwater Landings

The Lake is a major economic asset for Keswick and the Northern area and its use is currently restricted because the existing jetty provision cannot cope with high and low water levels, which compromises the ability of the Keswick Launch service to function as a reliable sustainable transport service. This project will deliver four floating jetties to ensure that the Launch services can run on all operational days of the year. This will enable the Launch Company and associated attractions around the lake and in Borrowdale to promote the Launches as the sustainable way to travel. This will enable more people to access new parts of the area for cycling and walking, including via the proposed new multi-user trail.

3. Thirlmere Cycleway

The proposal will provide a cycle route round Thirlmere together with cycle hire/servicing facilities, café and visitor centre. The overall cost would be about £4.6 million with an LGF ask of £0.5 million for the completion of the off-road route on the ground. United Utilities, as landowner and major stakeholder, will construct two underpasses for the A591 at a cost of £1.595 million. Subject to planning permission the hub building will cost £2.5million.

4. Keswick and Grasmere Cycle Links

This infrastructure will connect the two corridors of Keswick and Oxenholme-Grasmere and provide a safe and attractive cycle link from Derwentwater to the Thirlmere Cycleway and further south to the Go Lakes Travel cycle network. This is a key link between the North and South lakes and unlocks cycling and walking for visitors and residents.

5. Bowness Bay and The Glebe

Bowness Bay and the Glebe is a key destination for visitors and a hub for sustainable travel on Lake Windermere. This scheme focuses on the enhancement of the promenade and improved pedestrian connectivity to and through this area by provision of good quality landscaping which fully integrates with the work being delivered through Optimising Connectivity 1.

B2. The Strategic Case

Introduction
Through the 'Go Cumbria and the Lake District' programme we will substantially increase the levels of cycling and walking in the County and significantly increase journeys by smarter travel modes to schools and employment areas in Cumbria. The programme builds on the legacy of previous LSTF programmes, and lessons learnt from visitor travel will be embedded into workforce, education, leisure and residential travel patterns. Inspirational cycle events, and measures linked to the Optimising Connectivity 2 Growth Deal bid will give the economy a further boost.

The Cumbria and Lake District programme will:

- Support the economy through reducing congestion and widening choices by smarter transport modes to access work
- Increase walking and cycling activity amongst residents and visitors to benefit health; improving air quality and reducing carbon emissions; and
- Support the visitor economy while reducing traffic by the provision of new cycling and walking opportunities.

Why are we doing it?
We want to influence travel behaviour for all sectors of the Cumbrian population – residents, workers and visitors – so cycling and walking become the default option for all shorter journeys to work, education and training, as well as the best way to experience the world famous Cumbrian landscapes. Although a predominantly rural county, the compact nature of Cumbria's largest settlements make them ideal places for this to happen and the range of measures for schools, workplaces and local communities in both the access to work and cycling and walking elements have been designed to deliver this modal change.

Working collaboratively, Cumbria Council County and LDNPA believe that the 'Go Cumbria and the Lake District' bid for Access Fund revenue investment will significantly contribute to a wide range of Government led strategies and action plans, namely:

- The Cycling and Walking Investment Strategy published in March 2016.
- 'Sporting Future' The Government's Strategy for an Active Nation, published in December 2015.
- Childhood Obesity – A Plan for Action, published in August 2016

The Cycling and Walking Investment Strategy (CWIS)[1] is the Government's commitment to get more people to choose walking and cycling as part of their everyday journeys. The vision is that 'walking and cycling become the natural choices for shorter journeys – or as part of a longer journey – regardless of age, gender, fitness level or income'. We know that many transport behaviours are complex and are influenced by four main types of factors. These have been taken in to account when developing our proposal:

[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/512895/cycling-and-walking-investment-strategy.pdf

Collective objective factors: 'Hard facts' which relate to things bigger than the individual person, e.g. journey distances, availability of transport infrastructure / services, the weather, traffic volumes / speed, vehicle prices, fuel prices, ticket prices	***Collective subjective*** factors: Perceptions which are held at a group rather than an individual level, e.g. group cultures, social/cultural norms, cultural values, trust in organisations / services
Individual objective factors: 'Hard facts' which relate to a specific individual, e.g. personal capabilities / skills, resource constraints / income, knowledge / understanding / awareness, habit	***Individual subjective*** factors: Perceptions which relate to the individual person, e.g. personal norms, perceptions of identity and status, perceptions of costs, perceptions of safety / risk

The Cycling and Walking elements of this revenue bid and the Optimising Connectivity 2 programme which forms Cumbria's capital element of the Access Fund, will address the collective objective factors. The OC2 programme by developing off road cycleway infrastructure will dramatically improve cycle safety by segregating users from the busy Lake District roads. The guided bike rides, cycle training, adult Bikeability and bike buddies will enable users to overcome skills and knowledge barriers, while the school and workplace challenges, the health walks programme, and the Go Active campaign will challenge and overcome group and individual perceptions of cycling and walking and increase participation.

Optimising Connectivity 2 will underpin Cumbria's Adventure Capital and Lake District World Heritage Site proposals, attracting a greater share of international tourists and building on Cumbria's 43m visitors each year. It will deliver 300 jobs and an additional £16m in GVA by 2021. The project will also unlock an estimated £26.6m in new private sector investment. Optimising Connectivity 1 projects, funded through Growth Deal 2, are currently being delivered, and these include sustainable transport improvements along the A591 corridor within the Lake District.

The Cumbria Cycle Strategy is currently in production and is a response to the conditions set out in the government's 2015 Cycle Delivery Plan consultation. The Cumbria Cycle Strategy vision is 'For Cumbria and the Lake District to be the best place for everyone to cycle, with more people cycling more often in our spectacular landscapes'. It will be published shortly but four themes have been identified that will enable the vision to be delivered. They are:

1. Improving the cycle infrastructure – creating cycle friendly facilities, improve cycle related infrastructure and make the rights of way network fit for purpose by improving connectivity of bridleways;
2. Support the Cycle Economy - encourage and enable businesses to develop cycle friendly services and promote these opportunities throughout Cumbria;
3. Embedding cycling as a healthy lifestyle – develop safe journeys to work, education and services and by providing supported cycle rides and training for local communities and workers; and
4. Promoting Cumbria as the best place to cycle – encourage more people to explore Cumbria by bike - by promoting routes through a dedicated Cycle Cumbria website; by branding Cumbria as the best cycling destination in the UK; and by bringing inspirational cycling events in Cumbria.

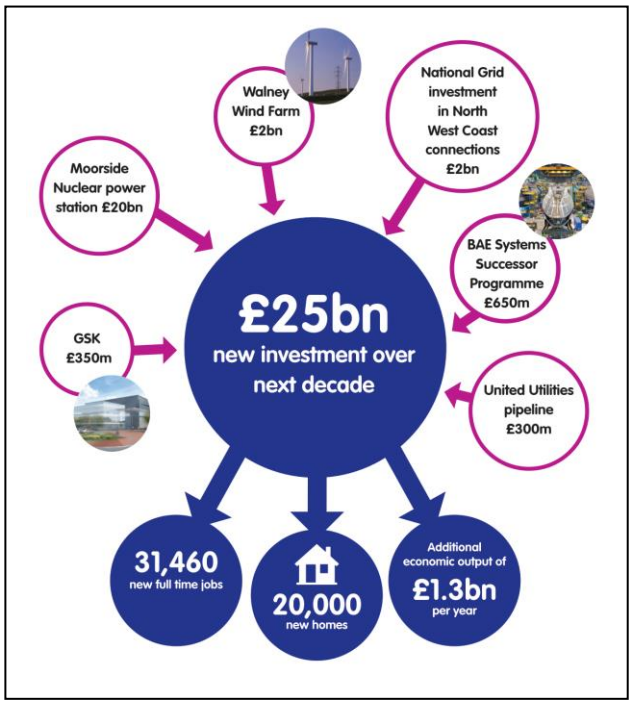
The inspirational cycle event is part of the development process that has been behind the increase in the number of new cyclists in England and British Cycling's sport development programme. Evidence from previous events and building on the brilliance of the Rio Olympics, elite sporting events can inspire increased levels of physical activity, in this case, cycling.

Cumbria has successfully hosted stages of the Tour of Britain professional cycle races and Tour Series town centre races. The Tour Series races were held in Barrow-in-Furness in 2014 and 2015. The 2014 event drew 10,000 spectators, the 2015 race 12,000, the percentage of people who cycle at least once a month increased from 9.3% to 19.1%, measured by the Active People Survey, the fifth largest increase in England.

In September 2016 Cumbria held a stage of the Tour of Britain cycle race only 9 months after the devastation of the December flooding, crossing bridges that have had to be replaced and roads that were washed away. Record crowds lined the route, bringing communities together to celebrate and thousands of visitors to the county. The event will provide boost to the local economy (the 2015 stage brought £3.5m to Cumbria) but the headline in a Cumbrian newspaper stated, it has 'lifted the gloom'.

The two elements of the Go Cumbria and the Lake District project; access to work and cycling and walking will help deliver on all of the Cumbria Cycle Strategy themes.

The Cumbria Strategic Economic Plan (SEP) has identified four priorities for maximising Cumbria's economic potential: advanced manufacturing growth, nuclear and energy excellence, vibrant rural and visitor economy and strategic connectivity of the M6 corridor. Interventions will be focussed on business support, skills development, infrastructure improvements and environmental sustainability.



The bid aligns with the priorities of the SEP and the approach of Cumbria's Strategic Investment Plan which is based on a long term programme of targeted investments and interventions in the four key drivers for the economy.

As identified in the Cumbria Infrastructure Plan, over the next 10 years Cumbria will attract over £25 billion of investment. This will result in major new developments coming forward in West Cumbria and the main towns across the County, including the Moorside Nuclear Power Station and major investments in GSK and BAE in the Furness Peninsula. Our early engagement with businesses should enable us to 'design in' active and sustainable travel options at the very outset of these investments.

The Cumbria Infrastructure Plan states that an increase of 31,460 full time equivalents jobs will be created in the county by 2024 but because of a skills gap and a declining working age population, filling these jobs will mean significant inward migration. Therefore significant additional growth is expected in the accommodation, food services, recreation, construction and transport sectors to satisfy the needs and requirements of this new workforce. Indeed one of the identified threats for Cumbria is a lack of investment in social and leisure

infrastructure and a need for a stronger offer for attracting and retaining working age families and individuals to settle in the county
Go Cumbria and the Lake District will help promote the positive social function that investment in infrastructure, facilities and services will provide. For example proposed investment in the Cumbrian Coastal Line (another element of the Cumbria LEP Local Growth Fund submission) should not just be about moving workers and materials to and from nuclear and energy sites, but by being promoted as a corridor to the attractions of the Lake District can also contribute to the health and wellbeing of that workforce and other residents as well as benefitting the rural and tourism economy.

As this submission has significant focus on getting communities more active through walking and cycling, the identified measures also align to Sport England's Strategy – 'Towards and Active Nation' and the 5 outcomes from 'Sporting Future' The Government's Strategy for an Active Nation, namely:

- Physical wellbeing
- Mental wellbeing
- Individual development
- Social and community development
- Economic development.

Clearly the measures identified in the 'Go Cumbria and the Lake District' bid will also have a major positive impact on the health and wellbeing of communities across the county. During the project development phase, Public Health Locality Managers within each of the six localities across the county see these measures as being integral to help contribute to and address many challenges and issues facing local communities. These measures also align perfectly at a local level with the Cumbria Health and Wellbeing Strategy, which aims to get people moving more and encouraging individuals and families who are currently inactive, to become more active.

To reflect both the dispersed resident population and longer commuting journeys for workers within the National Park, the Lake District National Park Authority (LDNPA) will develop community active travel areas in the three established corridors as well as the emerging western corridor.

The LDNPA will work with British Cycling, other local cycle providers and its own Volunteer Service to develop cycling and walking programmes that will be targeted at local residents, workers and visitors. They will complement and incorporate some of the measures outlined, strengthen the partnership between the LDNPA and British Cycling, as well as the wider Cumbria Cycling Partnership, and position the Lake District as a place that can embed behaviour change for leisure, utility and commuting journeys.
The Lake District National Park Authority will liaise with Public Health England's GP health and wellbeing champion and forge new relationships with GP surgeries in the four corridor areas. There will be a progression of walking offers, from short flat walks using our Miles without Stiles routes, through to joining the established LDNP guided walks programme.

Health and Wellbeing
There is growing evidence that green and open spaces have a vital and beneficial role to play in better public physical and mental health. For example:

- The Chief Medical Officer for England has said that walking between 6-12 miles a week can reduce the risk of premature death by 20-30%, and that 'physical activity is effective in the treatment of clinical depression and can be successful as psychotherapy or medication'

- NICE recommend that patients with mild depression follow a structured and supervised exercise programme including health led walks up to three sessions per week
- Natural England estimate that for every £1 spent on establishing healthy walking schemes the NHS could save £7.18 in the cost of treating conditions such as heart disease, stroke and diabetes

In addition, the World Health Organisation recommends that adults aged 18-64 years at least 150 minutes of physical activity a week, and that this reduces all-cause mortality, coronary heart disease, stroke, type 2 diabetes, colon & breast cancer, and depression[2]. Physical inactivity is responsible for up to 10% of deaths from these conditions[3] and if everyone in England met the CMO guidelines for activity, nearly 37,000 deaths a year could be prevented[4].

Defra's 8-Point Plan for National Parks, published in March 2016[5], recognises that National Parks, as Britain's breathing spaces, can make a major contribution to national health and wellbeing and will support innovative schemes for National Parks to serve public health. They will also support National Park Authorities in their ambitions for further engagement with local Clinical Commissioning Groups to grow the evidence base on green prescriptions.

Secondly, and linked to the above, there is now a recognition of the importance informal outdoor activity can play in ensuring people stay fit and healthy. For the first time, outdoor activity was included in the DCMS strategy, Sporting Future: A New Strategy for an Active Nation and this has been carried into Sport England's Towards an Active Nation Strategy for 2016 – 2021[6]. National Parks offer unrivalled opportunities for outdoor recreation in the most unspoilt landscapes in the UK and Defra want us to realise and build on this enormous potential. They state that:

'When people come to the countryside, they come to get active. For example, over three quarters of people's visits to the countryside involve walking - and there are lots of opportunities to go walking in the National Parks.' (the Lake District alone contains over 3,000 km of rights of way).

Tourism

Cumbria and the Lake District received 41.5 million visitors in 2014. Tourism contributes £2.44 billion to Cumbria's economy per year, generating 33,920 FTE jobs (figures quoted from Tourism in Cumbria 2014: Key Facts and Trends). However, we cannot assume visitors will continue to choose to visit the Lake District just because they have done before and it is essential to remain competitive and attractive to audiences nationally and internationally. The Strategic Economic Plan's (SEP) Infrastructure improvements technical annex identified a lack of sustainable connectivity at key gateways and hubs on the edge of the Lake District, a lack of connections along corridors between visitor attractions and public transport hubs, and missing links in high profile cycle routes.

[2] (WHO 2011 (http://www.who.int/dietphysicalactivity/physical-activity-recommendations-18-64years.pdf?ua=1))
[3] (WHO Fact Sheet Non Communicable Diseases March 2013).
[4] (Network of Public Health Observatories, Health Impact of Physical Inactivity. 2013.)
[5] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/509916/national-parks-8-point-plan-for-england-2016-to-2020.pdf
[6] https://www.sportengland.org/media/10629/sport-england-towards-an-active-nation.pdf

The visitor movement strategy in the Lake District National Park Partnership Plan (LDNPP) also recognises the shortcomings outlined in the SEP annex and aims to address them by making the journey itself an attraction in its own right and reducing the dominance of the car as the way to experience the special qualities of the Lake District. For example, cycling on traffic-free cycle tracks interconnected by bus and boat services, thereby extending the network of options for visitors to move from place to place will make sustainable travel the default choice for visitors.

The aim of Visitor Experience Strategy VE6 is to: 'Transform visitor movement to, from and in the Lake District, focussing on changing the travel choices visitors make by:

a. Influencing operators of train, coach and bus services to provide frequent and direct services between Britain's major towns and cities, international airports and the Lake District's entrance Gateways.

b. Improving entrance Gateways and the information available at these locations, making visitor travel easier. We will do this by developing delivery projects and programmes and securing their funding.

c. Improving visitor travel between Lake District attractions and destinations by enhancing their integration with services and infrastructure (for example cycle routes and car parking), both existing and proposed with a particular focus on the main travel routes identified (in the Intentions for Movement Strategy). We will strive to make sure that the travel experience on these main travel routes is of the highest quality by developing delivery programmes and projects, and securing their funding. This will build upon the success of the Go Lakes Travel programme.

The Optimising Connectivity Programme provides the opportunity to deliver infrastructure improvements outlined in c) and is a direct result of the See More Programme's Corridor Travel Planning process.

The revenue measures outlined in this bid will ensure the benefits these infrastructure projects will bring are shared by residents and workers/ commuters as well as visitors. The longer term aspiration for the Community Active Travel measures within Keswick, Ambleside, Patterdale and Gosforth/ Seascale is to identify a permanent home (or hub) for all walking and cycling related activities that will help fulfil the aim above and deliver consistent and high standard gateway facilities.

The access to work element of the project will deliver a programme of business engagement and behaviour change focussed on the key employment areas in Cumbria including the main towns of Barrow, Carlisle, Kendal, Penrith, Ulverston, Whitehaven and Workington, where significant employment development is proposed as part of the Local Plan process. When allied to the proposed investment in major new developments in West Cumbria and the Furness Peninsula it is essential for the economy that we have a clear and strong engagement process with businesses to address the transport impact of new developments. The business toolkit comprises a range of measures that are designed to provide an attractive range of sustainable travel choices and alternatives to the car.

The engagement offer will demonstrate value to both employees and the business as a whole. There is increasing evidence that encouraging employees to be more active can reduce sickness related absenteeism and result in a more productive workforce. Reducing the number of staff travelling to a site by car also frees up more space for visitors and customers, and can cut down on potentially significant maintenance costs.

Initial engagement will be undertaken at a business level, following a detailed prioritisation exercise to identify key target businesses to ensure highest value for money is achieved from Access Fund investment. Using Staff Travel Survey results, as a basis for Toolkit delivery, will allow for a demand-led approach which ensures that investment is targeted to the right measures, in the correct locations, to bring about behaviour change.

Through our engagement with businesses we will:

- Reduce car trips and increase walking, cycling and public transport journeys to employment areas through the use of Personalised Travel Planning (PTP);
- Improve cyclist and pedestrian safety through a programme of adult cycle training, cycle maintenance and active travel surgeries, providing practical advice, education and information;
- Reduce carbon emissions and improve air quality by replacing single occupancy car trips with those taken by walking, cycling and public transport;
- Help businesses influence employee travel patterns before patterns are formed;
- Support the local economy by reducing congestion on the surrounding road network
- will contribute to targets to improve Air Quality Management Zones in Carlisle and Kendal.

The location of Pay as you Drive (PAYD) low emission vehicles at 2 of the main railway stations on the Cumbrian Coast Line will act as an extension to the existing car club in Cumbria where 5 PAYD hybrid cars were located at Carlisle, Penrith, Oxenholme and Windermere railway stations as part of the See More LSTF programme. Car club schemes are recognised to work well with other initiatives aimed at achieving behaviour change, supporting work trips and reducing carbon emissions. The proposal aligns with the Local Growth Deal 1 station improvements which provide access to key employment areas in West Cumbria, in particular Sellafield and the future Moorside nuclear power station.

Building on our successes

The LSTF funded Go Lakes Travel and See More programmes have transformed the way visitors travel around the Lake District and Cumbria. They have delivered innovative visitor focused transport services and infrastructure supporting jobs and growth in the visitor economy, reduced carbon emissions and improved air quality.

Since 2009, car travel has decreased by 19% to 58% as the main mode for getting around (Cumbria Visitor Survey 2015); walking has increased by 18%, cycling by 1%, and boat/ferry travel has increased by 2%. Car as the main mode used by visitors to travel to Cumbria has also decreased, by 3% to 81%.

We want to continue to build on this momentum and step change in travel behaviour to more sustainable modes, by extending successful measures and developing new ones to the resident workforce connecting them with workplaces, skills and education through our proposed Go Cumbria and the Lake District programme.

Both the access to work and walking and cycling elements take full account of the importance of project legacy and we will build it into the measures from the start. For example in terms of access to work our primary legacy project will be a county-wide Business Network that will provide ongoing business-to-business support, encouraging organisations to support each other and to work together to address local issues. Operation of the Business Network will be funded throughout the Access Fund period, with the aspiration to become self-sustaining from 2020 onwards.

B3. The Economic Case – Value for Money

The Economic Appraisal Summary Note which has been produced by Keith Buchan of MTRU is included in Appendix B1. This Note sets out the approach and evidence used, uncertainties, impacts, and assumptions made in order to determine the Economic Case and Value for Money of the proposals.

DfT's Active Mode Appraisal Toolkit has been used to produce a summary of the costs and benefits over the whole bid (the Summary Note sets out the inputs and assumptions used). Outside this an estimate has been given where there would be wider economic impacts on the local and national economy, such as from the proposed Cycle Tours. The Carplus economic spreadsheet has also been used to assess the impact of the Pay as You Drive project, and these benefits are added separately to the overall assessment table from the DfT Toolkit to provide a final BCR.

The **overall BCR** for the programme has been estimated at:

	Low	Central	High
BCR	**7.6**	**9.57**	**10.97**

All of which represent very high value for money.

And the Scheme Impacts have been estimated at:

	Per day
Additional walk stages	4805
Additional cycle stages	3297

As recommended, the bid is treated as a whole with any capital elements in the contributions included in the gross costs. It should be noted that there has been other capital scheme investment planned, for example the Optimising Connectivity 2 measures which amount to £3.5million in the same expenditure period. These were subject to a separate appraisal and the current bid provides additional benefits specifically as a result of the new measures proposed.

There will be significant additional economic benefits from the Inspirational Cycling Events Programme. Using low estimates of net spend from existing economic studies on previous Tours in Cumbria there would be net benefits to the UK of £356,000 and to the Cumbrian economy of £653,920. See the Economic Appraisal Summary Note for further detail.

The Active Mode Appraisal Toolkit spreadsheets are included in Appendix B2. The Carplus Economic Spreadsheet is included in Appendix B3. The BCR summaries spreadsheet is included in Appendix B4.
A completed Scheme Impacts Proforma is included in Appendix B5.

Strategic Fit

As set out in Section B2, the measures within this proposal strongly align with both national and local strategic aims. The proposals help deliver the Government's Cycling and Walking Investment Strategy, and its commitment to get more people to choose walking and cycling as part of their everyday journeys; and also aligns with the Cumbria Cycling Strategy which aims 'For Cumbria and the Lake District to be the best place for everyone to cycle, with more people cycling more often in our spectacular landscapes'

There is also clear alignment to Sport England's Strategy – 'Towards an Active Nation' and the 5 outcomes from 'Sporting Future' The Government's Strategy for an Active Nation, by strongly supporting the health and wellbeing of residents, employees and visitors:

The proposals also support the Cumbria's Strategic Economic Plan, Strategic Investment Plan, and Cumbria Infrastructure Plan.

The Cumbria Strategic Economic Plan has identified four priorities for maximising Cumbria's economic potential: advanced manufacturing growth, nuclear and energy excellence, vibrant rural and visitor economy and strategic connectivity of the M6 corridor. Interventions will be focussed on business support, skills development, infrastructure improvements and environmental sustainability.

The bid aligns with the approach of Cumbria's Strategic Investment Plan which is based on a long term programme of targeted investments and interventions in the four key drivers for the economy; and also the Cumbria Infrastructure Plan, which sets out the £25 billion of investment expected in Cumbria over the next 10 years. This will result in major new developments coming forward in West Cumbria and the main towns across the County, including the Moorside Nuclear Power Station and major investments in Glaxo Smith-Kline (GSK) and British Aerospace (BAE) in the Furness Peninsula.

Cumbria and the Lake District received 41.5 million visitors in 2014. Tourism contributes £2.44 billion to Cumbria's economy per year, generating 33,920 FTE jobs (Tourism in Cumbria 2014: Key Facts and Trends). However, we cannot assume visitors will continue to choose to visit the Lake District just because they have done before and it is essential to remain competitive and attractive to audiences nationally and internationally. The Strategic Economic Plan's Infrastructure improvements technical annex identified a lack of sustainable connectivity at key gateways and hubs on the edge of the Lake District, a lack of connections between visitor attractions and public transport hubs, and missing links in high profile cycle routes.

The visitor movement strategy in the Lake District National Park Partnership Plan (LDNPP) also recognises the shortcomings outlined in the SEP annex and aims to address them by making the journey itself an attraction in its own right and reducing the dominance of the car as the way to experience the special qualities of the Lake District. For example, cycling on traffic-free cycle tracks interconnected by bus and boat services, thereby extending the network of options for visitors to move from place to place will make sustainable travel the default choice for visitors.

Optimising Connectivity 2 (OC2) Local Growth Fund capital contribution

Optimising Connectivity 2 capital measures will underpin Cumbria's Adventure Capital and Lake District World Heritage Site proposals, attracting a greater share of international tourists and building on Cumbria's 43m visitors each year.

An Economic Appraisal was carried out as part of the LGF application and a BCR of 3.45 was produced and Net Present Value Benefits (NPVB) of £14,585,000. It is calculated that the scheme will generate 134.3 direct FTE jobs and 161.7 indirect, a total of 296.

There is great synergy between the OC2 programme and these proposed Access Fund revenue measures. However they are not interdependent so the economic analysis and project proforma for Go Cumbria does not include OC2 impacts.

Optimising Connectivity 1 projects as a result of the Growth Deal 2 are currently being delivered successfully, these include sustainable transport improvements along the A591 corridor within the Lake District.

Programme and Outputs

Through the 'Go Cumbria and the Lake District' programme we will substantially increase the levels of cycling and walking in the County and significantly increase journeys by smarter travel modes to schools and employment areas. The programme builds on the legacy of previous LSTF programmes, and lessons learnt from visitor travel will be embedded into workforce, education, leisure and residential travel patterns. Inspirational cycle events, and measures linked to the Optimising Connectivity 2 Growth Deal bid will give the economy a further boost.

The Cumbria and Lake District programme will:

- Support the economy through reducing congestion and widening choices by smarter transport modes to access work
- Increase walking and cycling activity amongst residents and visitors to benefit health; improving air quality and reducing carbon emissions; and
- Support the visitor economy while reducing traffic by the provision of new cycling and walking opportunities.

There are 2 main elements within the Go Cumbria proposal - 'Cycling and Walking' and 'Access to Work'. A further supporting element, the Optimising Connectivity 2 capital programme, will form Cumbria's capital element of the Access Fund, with a funding decision expected in November 2016. Together they will help deliver the Government's Cycling and Walking Investment Strategy and the Cumbria Cycling Strategy, and will influence travel behaviour for all sectors of the Cumbrian population, residents, workers and visitors.

As set out on section B1 (Project Summary) the following projects will be delivered:

Cycling and Walking:
- Pedal Your Way to Health School Roadshows
- 100 Mile Challenge and Feet First school campaigns
- Walking and Cycling Campaign (Go Active)
- Walk Leader Training and Walking Groups
- Ride Leader Training and Cycling Groups
- Lake District Community Active Travel Areas
- Inspirational Cycle Event programme

Access to work:
- Adult Cycle Training
- Dr Bike and Fix it yourself workshops
- Workplace challenge
- Active Travel Surgeries
- Personalised Travel Planning (PTP)
- Public Transport Taster Sessions
- Pay as you drive cars at work travel hubs

The **Outputs** from the measures included within our bid, as set out in more detail in Section B1 are:

Pedal Your Way to Health Roadshow

30 Roadshow performances in primary schools p.a. x 3 yrs. = 90 Roadshows
Average of 150 pupils aged 5-10 yrs. / school in each performance x 30 p.a = 4,500 x 3
Total = 13,500 pupils

100 Mile Challenge and Feet First

100 Mile Challenge Outputs:

150 pupils aged 5-10 yrs. / school engaged in scheme x 50 schools p.a.
Yr1 = 7,500 new
Yr2 = 7,500 new + 3,750 retained from Yr1 = 11,250
Yr3 - 7,500 new + 3,750 retained from y=Yr1 and 3,750 from Yr2 = 15,000
Total = 33,750 pupils
***Feet First Outputs**:*
Approximately 8,000 pupils per annum aged 4-11 growing by 500 pupils each year.
Total = 25,500 pupils

Walking and Cycling Campaign (Go Active)

1,000 subscribers p.a. to weekly cycling e-newsletters = 3,000
1,000 subscribers p.a. to weekly walking e-newsletters = 3,000
75% of subscribers reporting an increase in levels of physical activity through walking and cycling at 3 months after sign up; so
Total = 2250 walking and 2250 cycling participants.

Walk Leader and Ride Leader Training, and Walking and Cycling Groups

Walk Outputs:

Max 20 candidates / course x 18 walking courses = 360 candidates with target of 40% (144) from workplaces and 60% (216) from community group settings
Walking Stages:
Yr1: 60 groups x 6 walkers x 26 wks = 9,360
Yr2: 60 Yr1 groups x 6 walkers x 46 wks = 16,560
60 Yr2 groups x 6 walkers x 26 wks = 9,360
Yr3: 120 Yr1&2 groups x 6 walkers x 46 wks = 33,120
60 Yr3 groups x 6 walkers x 26 wks = 9,360
Total** = **77,760 walk stages

No of available walks:
Yr1 = 1,560
Yr2 = 4,320
Yr3 = 7,080
Total = 12,960 walks

Cycle Outputs

Max 20 candidates / course x 9 cycling courses = 180 candidates with target of 40% (72) from workplaces and 60% (108) from community group settings
Cycling Stages:
Yr1: 30 groups x 6 cyclists x 13 wks = 2,340
Yr2: 30 Yr1 groups x 6 cyclists x 23 wks = 4,140
30 Yr2 groups x 6 cyclists x 13 wks = 2,340
Yr3: 60 Yr1&2 groups x 6 cyclists x 23 wks = 8,280
30 Yr3 groups x 6 cyclists x 13 wks = 2,340
Total = 19,440 cycle stages

No of available cycle rides:
Yr1 = 390
Yr2 = 1,080
Yr3 = 1,770
Total = 3,240 cycle rides

Lake District Community Active Travel Areas

Total = 2,400 walking stages

Total = 3,000 new cycle opportunities (*by end of programme from 2015-16 baseline of 1,186.)*

Based on a 5% increase from 2011 Census data of people cycling to work in the wards where the travel hubs are located ***we will deliver an additional 525 cycle commuters by 2020.*** *261 working days per year x 2 journeys per day = 522 so 525 x 522* ***Total = 274,050 new cycle stages.***

Based on a 5% increase from 2011 Census data of people walking to work in the wards where the travel hubs are located ***we will deliver an additional 120 walking commuters by 2020.*** *261 working days per year x 2 journeys per day = 522 so 120 x 522* ***Total*** *=* ***62,640 new walking stages.***

4. A development manager post to co-ordinate and develop the above measures.

Inspirational Cycling Events Programme

*1****. Percentage of people cycling in Cumbria****, as reported in the Active People Survey* ***to be increased to 20% by 2019****,* ***producing 27,000 new Cumbrian Cyclists***

2. ***Cycling stages from mass participation rides*** *=* ***15,000.***

3. ***New cycle opportunities from guided rides, Breeze and Ride Social = 3,000***

4. ***Net economic impact from generated by the Inspirational Cycling Events to Cumbria of £5m.***

Adult Cycle Training

Total = 324 participants trained and 243 (75%) regularly cycling to work

Total = 268,272 miles cycled to and from work

Total = 88,529.76kg of CO2 emissions saved by cycling

Dr Bike and Fix it Yourself

108 cycle maintenance sessions with 15 participants at Dr Bike and 10 at Fix It sessions

Total = 1,350 participants

Workplace Challenge

Total = 106 Workplace Challenges

Total = 5,184 walking stages

Total = 3,456 cycling stages

Active Travel Surgeries

25 surgeries pa x 3years x 20 participants

Total = 1,500 surgeries

Personalised Travel Planning (PTP)

12% reduction in single occupancy car use amongst those targeted

Public Transport Taster Tickets

40% of participants in the scheme shifting mode from private car to public transport at least twice a week.

PAYD Low Emission Vehicles

2 low emission hybrid cars placed at 2 key locations in West Cumbria

B4. The Financial Case – Project Costs

Table A: Funding profile (Nominal terms)

£000s	2017/18	2018/19	2019/20	Total
DfT funding sought	498.441	498.599	490.080	1487.120
Local Authority contribution	62.676 (cash) 143.050 (in-kind)	62.676 (cash) 163.050 (In-kind)	62.675 (cash) 113.050 (in-kind)	188.027 (cash) 419.150 (in-kind)
Third Party contribution including LGF	290 (LGF)	1700 (LGF)	1500 (LGF)	3490 (LGF)
TOTAL	**994.167**	**2424.325**	**2165.805**	**5584.297**

B4. Management Case - Delivery

Delivery will be managed by a partnership of public sector bodies, primarily Cumbria County Council and the Lake District National Park Authority. Delivery will be through a combination of public and private sector. A Project Plan is included as Appendix B6.

No land acquisition is required as part of this Access Fund package.
No infrastructure is required as part of this Access Fund package, but the measures proposed do compliment measures to be funded through the Local Growth Fund.

B5. Management Case – Statutory Powers and Consents

The Go Cumbria and the Lake District programme does not require any statutory powers or consents.

B6. Management Case – Governance

The programme will be managed by Cumbria County Council, in partnership with the Lake District National Park Authority. The partnership has excellent experience of delivering similar programmes, particularly for the Local Sustainable Transport Fund.

The Programme Board, set up to manage the 2015-16 LSTF funded 'See More Cumbria and the Lake District' and 2011-2015 'Go Lakes Travel' programmes will be used as basis to oversee this programme. The Board will consist of senior managers from the key partners, and will be chaired by Cumbria County Council.

The Cumbria Local Enterprise Partnership Board provides the strategic direction for investment to deliver the Strategic Economic Plan priorities.

The Go Cumbria and the Lake District projects will be delivered in the same manner as the previous See More Cumbria and the Lake District and Go Lakes Travel programmes, with Project Leads for different aspects of the programme, and a Programme Manager co-ordinating the Project Leads, with regular progress meetings. The projects will be managed and aligned with Cumbria County Council's Project and Programme Management Toolkit, and will be managed following PRINCE II methodology.

Tolerances for time, cost, scope and risk will be determined by the Project Board and the Programme Manager and Project Leads will operate within those tolerances. Where the

project is forecast to exceed tolerances, the Project Lead will escalate to the Programme Board as necessary.
An Organogram setting out the project governance structure is included as Appendix B7, and the Programme Board Terms of Reference are included as Appendix B8.

B7. Management Case - Risk Management

The previous See More Cumbria and the Lake District and Go Lakes Travel LSTF programmes established a robust process for risk management which proved effective in minimising the impact of risks and issues on programme delivery. It is proposed that this process is adopted for the Go Cumbria and the Lake District programme and risks/issues are managed in the same way. The Risk Management Strategy is included as Appendix B9, and the initial Risk Register is included as Appendix B10.

B8. Management Case - Stakeholder Management

a) Can the scheme be considered as controversial in any way?
☐ Yes ☒ No

b) Have there been any external campaigns either supporting or opposing the scheme?
☐ Yes ☒ No

B9. The Commercial Case

Cumbria County Council and the Lake District National Park Authority have ensured that **staff is in place** to deliver the proposed programme, with an identified Programme Manager and Project Leads, and a Programme Board already in place. Project planning has already taken place, and **delivery can begin at the start of April 2017**.

Existing LSTF staff will be used in some cases to deliver measures. Active Cumbria team members will deliver a number of the cycling and walking elements and Toolkit for Businesses – again project planning has been undertaken and staff is in place to deliver. Where external consultants/companies are required, for example with elements of the Toolkit for Businesses, the programme will be using the same procurement strategy used for the See More Cumbria and the Lake District and Go Lakes Travel LSTF programmes, ensuring value for money.
Delivery will be managed through staged delivery plans with risk management strategies in place. Contracts with partners and suppliers will ensure that the scale of single cost components will be minimised and progress will be closely tracked.

SECTION C – Monitoring, Evaluation and Benefits Realisation

C1. Monitoring and Evaluation

By submitting this bid, I agree to work with the Department to provide a reasonable level of monitoring to enable the measurement of outputs and, where appropriate, evaluation of outcomes.

☒ Yes ☐ No

Monitoring and evaluation of all schemes will be carried out. Specific outputs will be recorded for each scheme and participants will be monitored to obtain qualitative data to evaluate to what extent the interventions have led to long term behaviour change. A short summary of these mechanisms and data sources is shown in the table below. More detailed

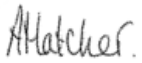
monitoring plans have been developed and can be provided for the programme including targets for the outputs and outcomes for each measure.

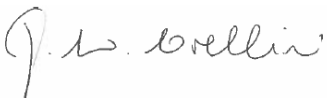
Theme	Outputs	Outcomes	
		Quantitative	Qualitative
Cycling and walking	Number of events held Number of schools engaged Number of active travel areas/hubs developed Miles of cycle route developed (through LEP capital part of scheme)	Participation numbers in events and initiatives Visits to active travel hubs/virtual hubs Number/% increase in cyclists and walkers on new/improved routes	Economic impact of large scale events Participant surveys, before and after User intercept surveys on new cycle routes
Travel to work	Number of businesses engaged Number of employees engaged Number of travel surveys completed	Attendance at events PTPs completed Public transport tickets issued Use of car club vehicles	Workplace travel survey, before and after interventions Follow up of PTP participants
Overarching	% increase in participation in cycling and walking in Active People Survey % increase in visitors using sustainable transport modes reported in the Cumbria Visitor Survey		

The measures in this bid, when coupled with the associated capital works in the Optimising Connectivity 2 bid to the LEP, will build on the past successes of the Go Lakes Travel and See More programmes increase use of active travel modes amongst both visitors and residents throughout Cumbria. These increases and comparison with baseline data will be tracked through the annual Sport England Active People Survey for residents and for visitors through the 2018 Cumbria Tourism visitor survey.

As well as the annual DfT reporting we will analyse the data obtained to evaluate the success of the programme and to inform the direction of future sustainable transport initiatives both within Cumbria and the Lake District and in other authorities and national parks.

SECTION D - Declarations

D1. Senior Responsible Owner Declaration	
As Senior Responsible Owner for Go Cumbria and the Lake District I hereby submit this request for approval to DfT on behalf of Cumbria County Council and confirm that I have the necessary authority to do so. I confirm that Cumbria County Council will have all the necessary statutory powers in place to ensure the planned timescales in the application can be realised.	
Name: Alison Hatcher	Signed: 
Position: Senior Manager, Economic Development and Planning	

D2. Section 151 Officer Declaration	
As Section 151 Officer for Cumbria County Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Cumbria County Council - has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution; - accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties; - accepts responsibility for meeting any ongoing revenue and capital requirements in relation to the scheme; - accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested and that no DfT funding will be provided after 2019/20; - Confirms that the authority has the necessary governance / assurance arrangements in place and the authority can provide, if required, evidence of a stakeholder analysis and communications plan in place.	
Name: Julie Crellin	Signed: 

APPENDICES

Appendix A1: Letters of Support

Appendix B1: Economic Appraisal Summary Note
Appendix B2: Active Mode Appraisal Toolkit Spreadsheets
Appendix B3: Carplus Economic Spreadsheet
Appendix B4: BCR summary spreadsheet
Appendix B5: Scheme Impact Pro-forma
Appendix B6: Project Plan
Appendix B7: Organogram
Appendix B8: Programme Board terms of reference
Appendix B9: Risk Management Strategy
Appendix B10: Risk Register

Appendix D1: Section 151 Officer letter

Appendix A1

Letters of Support

Cumbria Local Enterprise Partnership

Redhills

Penrith

CA11 0DT

Dear Sir/Madam,

Access Fund for Sustainable Travel – Go Cumbria and the Lake District

Cumbria Local Enterprise Partnership would like to offer our support to the "Go Cumbria and the Lake District" bid to the Access Fund for Sustainable Travel 2017/18 – 2019-20. This will continue our support for the preceding "See More Cumbria and the Lake District" and "Go Lakes Travel" LSTF programmes which have brought about increased levels of journeys by sustainable transport.

The bid will align with the LEP supported Optimising Connectivity 2 programme which forms Cumbria's capital element of the Access Fund. The Optimising Connectivity 2 programme will provide new cycling and walking infrastructure to encourage sustainable travel along the corridor between Keswick and Bowness on Windermere in the heart of the Lake District National Park. The Access Fund measures will utilise this infrastructure to help encourage increased levels of journeys on foot and by bike to work, training and education in the corridor.

We strongly support that Cumbria County Council and the Lake District National Park Authority should continue to build on the momentum of the current LSTF programmes and deliver a further step change in travel behaviour by encouraging sustainable travel to work, training and education.

We particularly welcome the proposed "Toolkit for Businesses" which will focus on the key employment areas across Cumbria. The range of measures to support and encourage employees to walk, cycle or use public transport for work will help improve their health and wellbeing, and will support the local economy by reducing both congestion and greenhouse emissions.

Graham Haywood

Lake District National Park Authority
Murley Moss, Oxenholme Road
Kendal, LA9 7RL

Telephone: 01539 724555
Fax: 01539 740822
Minicom: 01539 792690
Email: hq@lakedistrict.gov.uk
Website: www.lakedistrict.gov.uk

Direct email: Stephen.ratcliffe@lakedistrict.gov.uk
Direct dial: 01539 792622
Our ref:
Your ref:

Date: 5 September 2016

Nicola Parker
Infrastructure Planning Manager
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Baron Way
Kingmoor Business Park
Carlisle
CA6 4SJ

Dear Nicola

DfT Access Fund 2017 - 2020

I would like to offer our support to the 'Go Cumbria and the Lake District' bid to the Access Fund for 2017 to 2020. This continues our support for the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes, which have encouraged more visitors to Cumbria and the Lake District to use sustainable transport modes to travel here and around the county.

We strongly support that Cumbria County Council and partners, including ourselves, should continue to build on the momentum of the previous LSTF programmes and deliver a further step change in travel behaviour by developing sustainable travel provision to influence access to work, education and services.

The activity included within the 'Go Cumbria and the Lake District' supports delivery against the four key themes within the 'Cumbria Strategic Economic Plan 2014-2024', including a Vibrant Rural and Visitor Economy and Advanced Manufacturing Growth through enhancing access to employment opportunities. Investment in cycling and walking will also further our vision in the Cumbria Cycle Strategy for the county to become 'the best place for everyone to cycle, with more people cycling more often in our spectacular landscapes.

To show our support I can confirm that the Lake District National Park Authority can make a financial contribution to the programme of up to £50,000.

Yours sincerely

STEVE RATCLIFFE
DIRECTOR OF SUSTAINABLE DEVELOPMENT

The Sport & Physical Activity Partnership

Mr Paul Marriott
Infrastructure Planning Officer
Economic Development and Infrastructure Planning
Cumbria County Council
Parkhouse Building
Kingmoor Business Park
Carlisle
CA6 4SJ

6th September 2016

Dear Paul

Access Fund for Sustainable Travel – Go Cumbria and the Lake District

As Senior Manager for Active Cumbria, part of Cumbria County Council's Public Health and Communities Service, I would like to offer my full support to the 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The Go Cumbria and the Lake District programme will undoubtedly have a significant and positive impact on increasing the number of people cycling and walking, in particular to workplaces and schools as well as improving the health and wellbeing of communities through increased levels of physical activity.

I am confident that whilst our county is extremely vast we will have the capability and skills to specifically target the communities and businesses and effectively deliver the identified measures where the greatest economic and health gains will be achieved. Clearly Access Fund investment will be essential in order for us to realise the ambition to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

May I also take this opportunity to clarify the cash elements of match funding that Active Cumbria and Active Travel will provide to support the bid submission, namely:

100 Mile Challenge and Feet First	£28,027.50
Walking and Cycling Campaign – Go Active	£105,000.00

As this submission has significant focus on getting communities more active through walking and cycling, the identified measures very much align to 5 outcomes from 'Sporting Future' - The Government's Strategy for an Active Nation as well as Sport England's Strategy – 'Towards and Active Nation' which has just recently been published.

Yours sincerely

Bruce Lawson
Senior Manager, Active Cumbria

Active Cumbria
Cumbria County Council
The Courts | Carlisle | CA3 8NA
t: 01228 226885 | f: 01228 601256
www.activecumbria.org

Nicola Parker
Infrastructure Planning Manager
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Baron Way
Kingmoor Business Park
Carlisle
CA6 4SJ

South Lakeland District Council
South Lakeland House
Lowther Street
Kendal
Cumbria
LA9 4UD
01539 733333
6th September 2016

Dear Nicola,

Access Fund for Sustainable Travel Revenue

I would like to offer the support of South Lakeland District Council to the Lake District National Park and Cumbria County Council bid "for the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The Project will make a significant impact on increasing the number of people cycling and walking to work and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

By engaging closely with businesses in the six main towns through the proposed business toolkit and with new residents of the most significant housing allocations through personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

To show our support I can confirm that South Lakeland District Council can make a financial contribution to the programme of £5,000.

Yours sincerely,

Simon Rowley
Assistant Director Neighbourhood Services
South Lakeland District Council

Mark Brierley
Infrastructure Planning Officer
Environment & Community Services
Cumbria County Council
Parkhouse Building
Kingmoor Business Park
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CA6 4SJ

British Cycling
Stuart Street
Manchester M11 4DQ

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F: +44 (0) 161 274 2001
E: info@britishcycling.org.uk
britishcycling.org.uk

26th August 2016

Dear Mark,

SUPPORT FOR CUMBRIA COUNTY COUNCIL'S BID TO THE DfT ACCESS FUND

As one of the key organisations delivering cycling projects in Cumbria and the Lake District, British Cycling would like to lend its support to Cumbria County Council's bid to the DfT's Access Fund.

British Cycling has been working in partnership with Cumbria County Council (CCC) and the Lake District National Park Authority (LDNPA) since 2013 to organise and operate a recreational cycling programme in Cumbria and provide national cycling promotion.

During this time the partnership has grown. British Cycling has increased its investment in Cumbria alongside investment from a range of partners in the county. As a result the recreational cycling programme operates in all six local authority areas of Cumbria and targets residents and visitors.

We would like to build on our existing partnership in Cumbria to reflect the full breadth and depth of our work, in support of the emerging Cumbria Cycling Strategy.

The projects outlined in the bid will support Cumbria and the Lake District's long term commitment to promote cycling.

Moreover, with the Olympic & Paralympic and Tour de France successes, we continue to inspire further participation at grass-roots level.

A sustained and strengthened partnership over the next three years will enable us to build on our work to date in Cumbria, which brings together sustainable transport, public health and visitor economy initiatives to benefit residents and visitors of Cumbria by increasing cycling participation.

We are therefore contributing local investment of £478,500 towards the county wide British Cycling Recreational Partnership.

We are confident that you will, with our support, be able to deliver the proposed Bid to those people from areas of both employment and health deprivation, to access employment by active transport.

Yours sincerely,

Caroline Gilbert
Recreation Manager (Cumbria and Lancashire)

Public Health and Communities
Kraemer Building
The Courts
Carlisle
CA3 8NA

E: Colin.Cox@cubmria.gov.uk

Date: 6th September 2016

Mr Paul Marriott
Infrastructure Planning Officer
Economic Development and Infrastructure Planning
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Kingmoor Business Park
Carlisle
CA6 4SJ

Dear Mr Marriott,

Access Fund for Sustainable Travel – Go Cumbria and the Lake District

As Director of Public Health for Cumbria, I would like to offer my full support to Cumbria County Council and the Lake District National Park Authority's 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

I feel confident that the Go Cumbria and the Lake District programme will make a significant impact on increasing the number of people cycling and walking, in particular to workplaces and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes; and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

By engaging closely with businesses in a number of towns through the business toolkit and personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

Clearly the measures identified in the bid will also have a major positive impact on the health and wellbeing of communities across the county. I know that the Public Health Locality Managers within each of the six localities see these measures as being integral to help contribute to and address many challenges and issues facing local communities. These measures also align perfectly at a local level with the Cumbria Health and Wellbeing Strategy but also at a national level with the outcomes of the Government Sport Strategy: 'A Sporting Future', which aims to get people moving more and encouraging individuals and families who are currently inactive, to become more active.

Yours sincerely

Colin Cox
AD Public Health and Communities/Director of Public Health Cumbria

Our Ref:
Your Ref:

This matter is being dealt with by:

Rebecca Stamper

Direct Line: 01900 702711

Allerdale borough council
www.allerdale.gov.uk

Nicola Parker
Infrastructure Planning Manager
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Baron Way
Kingmoor Business Park
Carlisle
CA6 4SJ

Dear Nicola,

Access Fund for Sustainable Travel Revenue

I would like to offer the support of Allerdale Borough Council to the Cumbria bid for the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The Project will contribute to helping achieve our Council Plan priority to 'Improve health and wellbing' and make a significant impact on within our communities, increasing the number of people cycling and walking to work and schools and compliment the recreational programmes we support delivered through the Cumbria Cycle Partnership.

Through building upon the cycling and walking infrastructure and promotion and by engaging closely with local businesses and residents in Workington and the surrounding areas, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options, helping making them the natural choice to travel a healthier, more economic and environmentally positive one.

Yours faithfully,

Rebecca Stamper
Sports, Arts and Leisure Officer

Allerdale Borough Council
Allerdale House
Workington
Cumbria CA14 3YJ
Tel: 0303 123 1702

Your Reference:
Our Reference: Cycling
Enquiries to: Mr Ian Parker
Direct Dial: (01768) 212473
Mobile: 07789 762624
Email: leisure@eden.gov.uk
Date: 08 September 2016

Eden
District Council
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Tel: 01768 817817
Fax: 01768 890470

Mrs N Parker
Infrastructure Planning Manager
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Baron Way
Kingmoor Business Park
Carlisle
CA6 4SJ

Dear Mrs Parker,

Access Fund for Sustainable Travel Revenue

I would like to offer the support of Eden District Council to Cumbria County Council's bid " for the Access Fund for Sustainable Travel for 2017/18 to 2020/21."

It is anticipated that the Project will make a significant impact on increasing the number of people cycling and walking to work and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, then the Council endorses the aim that it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

By engaging closely with businesses in the districts main towns through the proposed business toolkit and with new residents of the most significant housing allocations through personalised travel planning, the Council supports the bids proposal that there will be the opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

Should the Council be able to add any further support to the application in the future then do not hesitate to make contact.

Yours sincerely

Ian Parker
Leisure Services Officer

Nicola Parker
Infrastructure Planning Manager
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Baron Way
Kingmoor Business Park
Carlisle
CA6 4SJ

Dear Nicola,

Access Fund for Sustainable Travel Revenue

On behalf of the South Copeland Coastal Communities Team I would like to offer support for the Cumbria County Council/LDNPA bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The team recognises the current limitations of the walking and cycling infrastructure particularly along the western Lake District coastal region and have identified this as a priority for action in our recently published economic plan January 2016.

The Project will make a significant impact on increasing the number of people cycling and walking to work and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria

By engaging closely with businesses in the six main towns through the proposed business toolkit and with new residents of the most significant housing allocations through personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

Yours faithfully,

Eric Barker
c/o South Copeland Coastal Communities Team
Copeland Borough Council
Black Combe Office
Millom network centre
Salthouse Road
Millom
LA18 5AB

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9th September 2016

Mr Paul Marriott
Infrastructure Planning Officer
Economic Development and Infrastructure Planning
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Kingmoor Business Park
Carlisle
CA6 4SJ

Dear Mr Marriot

Access Fund for Sustainable Travel – Go Cumbria and the Lake District

As Development Director for Cumbrian Newspapers Group, I would like to offer my full support to Cumbria County Council and the Lake District National Park Authority's 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

I feel confident that the Go Cumbria and the Lake District programme will make a significant impact on increasing the number of people cycling and walking, in particular to workplaces and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

By engaging closely with businesses in a number of towns through the business toolkit and personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

The Go Active Walking and Cycling Campaign as identified within the bid, will see the contribution of financial investment and in-kind contributions from a number of businesses across the county including ourselves. The ambitions of the campaign align perfectly with the outcomes of the Government Sport Strategy: 'A Sporting Future' and Sport England's Strategy: 'Towards and Active Nation' which reference the need for more local campaigns to get people moving more and encouraging individuals and families who are currently inactive, to become more active.

Yours sincerely

Jonathan Lee
Group Development Director
CN Group

Department for Transport
Access Fund for Sustainable Travel

Dear Sir/Madam,

Access Fund for Sustainable Travel – Go Cumbria and the Lake District

I would like to offer the support of SweetSpot Group Ltd to Cumbria County Council and the Lake District National Park Authority's 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The Go Cumbria and the Lake District programme will make a significant impact on increasing the number of people cycling and walking, in particular to workplaces and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

By engaging closely with businesses in a number of towns through the business toolkit and personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

From our experience of staging national and international major cycling events such as the Tour of Britain and the Tour Series, high profile cycling events can have a significant effect on increasing the number of people engaging in cycling activity in their day-to-day lives. This effect is greatly enhanced where the local authority and partner organisations have worked proactively to engage businesses and communities in positive engagement programmes.

I am delighted to say that our experience of working in Cumbria, particularly working with Cumbria County Council and the Lake District National Park, has always been a very positive one. Indeed, innovative engagement programmes developed in Cumbria linked to our previous events have been used by us as examples of best practice across the country.

Consequently, on behalf of SweetSpot Group Ltd, I fully endorse Cumbria County Council and the Lake District National Park Authority's bid to the Access Fund.

Yours faithfully,

Hugh Roberts
Chief Executive

SweetSpot Group
The Old House, 4 Heath Road, Weybridge, Surrey. KT13 8TB
Tel: 01932 831485

Cumbria County Council

Mark Brierley • Environment & Community Services• Cumbria County Council
Parkhouse Building - Kingmoor Business Park - Carlisle - CA6 4SJ
E: mark.brierley@cumbria.gov.uk

8th September 2016

Dear Sir or Madam

Access Fund for Sustainable Travel – Go Cumbria and the Lake District

I would like to offer the support of the Cumbria Tour of Britain Partnership to Cumbria County Council and the Lake District National Park Authority's 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The Cumbria Tour of Britain Partnership was formed in the aftermath of Storm Desmond to bring the Tour of Britain cycle race back to the county. In doing so, the aim of the partnership was to send the clear message that 'Cumbria is open of business'. The members of partnership are Cumbria County Council, South Lakeland and Eden District Councils, Carlisle City Council, Allerdale Brough Council, the Lake District National Park Authority and United Utilities PLC. Cumbria County Council is the accountable body for the partnership and provides administrative support.

The Go Cumbria and the Lake District programme will make a significant impact on increasing the number of people cycling and walking, in particular to workplaces and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

By engaging closely with businesses in a number of towns through the business toolkit and personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

The partnership recognises events such as the Tour of Britain is an exciting event, showcasing on a national and international stage the very best of what Cumbria has to offer and in return it provides our county with a significant economic boost, while providing inspiration to more people to take up cycling.

Yours faithfully

Mark Brierley
On behalf of the **Cumbria Tour of Britain Partnership**

sustrans
JOIN THE MOVEMENT

Sustrans
5th Floor, Hanover House
30 – 32 Charlotte Street
Manchester
M1 4FD

0161 923 6050

8th September 2016

Dear Sir/Madam

Access Fund for Sustainable Travel – Go Cumbria and the Lake District

This letter is to express our support of Cumbria County Council and the Lake District National Park Authority's 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The Go Cumbria and the Lake District programme will make a significant impact on increasing the number of people cycling and walking, in particular to workplaces and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

By engaging closely with businesses in a number of towns through the business toolkit and personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

Yours faithfully,

Neil Mitchell

Neil Mitchell
Head of Delivery, England North

08 September 2016

Cumbria Tourism
At the heart of our visitor economy

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Cumbria LA8 9PL
Tel: 01539 822222
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www.cumbriatourism.org

Paul Marriott MSc BSc (Hons)
Infrastructure Planning Officer
Economic Development and Infrastructure Planning
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Kingmoor Business Park
Carlisle
CA6 4SJ

Dear Paul,

Access Fund for Sustainable Travel – 'Go Cumbria and the Lake District' Bid

Cumbria Tourism supports the Cumbria County Council and the Lake District National Park Authority's 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel.

The Go Cumbria and the Lake District programme will make a significant impact on increasing the number of people cycling and walking, in particular to workplaces and schools and also for leisure.

The new project will build on the cycling and walking infrastructure and promotion delivered through the previous 'See More Cumbria and the Lake District' and 'Go Lakes Travel' Local Sustainability Transport Fund programmes.

A strong partnership between Active Cumbria, Lake District National Park Authority and British Cycling will deliver a range of measures making walking and cycling the natural choice for shorter journeys and as part of longer journeys throughout Cumbria. Infrastructure improvements and continued publicity of walking and cycling will also have a positive influence on visitor behaviour and will help further confirm Cumbria's reputation as a sustainable tourism destination.

Yours sincerely,

Ian Stephens.

Ian Stephens
Managing Director
Cumbria Tourism

Dear Sir/Madam,

Access Fund for Sustainable Travel – Go Cumbria and the Lake District

I would like to offer the support of the Cyclewise group to Cumbria County Council and the Lake District National Park Authority's 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The Go Cumbria and the Lake District programme will make a significant impact on increasing the number of people cycling and walking, in particular to workplaces and schools.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria.

By engaging closely with businesses in a number of towns through the business toolkit and personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

As the delivery partner for Cumbria County Council of the Bikeability Scheme having so far trained 25,000 young people and also being the UK's first British Cycling accredited Mountain bike centre at our Lakeland base at Whinlatter, Keswick where we deliver the British Cycling Mountain Bike leaders award, we are fully aware of the tremendous positive impact all forms of Cycle training has on individuals, families and communities. Without doubt we are experiencing a cultural cycling evolution in the UK and many are seeking different access points into this incredible activity. Undoubtedly this grant would go someway in making a positive impact in Cumbria that would have many far reaching effects.

Yours faithfully,

Rich Martin
Director

Cyclewise Training Ltd, Whinlatter Forest Park, Braithwaite, Keswick, CA12 5TW
www.cyclewise.co.uk

Stagecoach CUMBRIA & NORTH LANCASHIRE

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T 01228 597222
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Paul Marriott
Infrastructure Planning Officer
Economic Development and Infrastructure Planning
Environment and Regulatory Services
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Parkhouse Building
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CA6 4SJ

08 September 2016

Dear Paul,

Access Fund for Sustainable Travel Revenue

I would like to offer the support of Stagecoach to Cumbria County Council and the Lake District National Park Authority's 'Go Cumbria and the Lake District' bid to the Access Fund for Sustainable Travel.

Stagecoach Cumbria has been delighted to work with the previous See More Cumbria and the Lake District LSTF programme. We received funding in 2015 to run extra buses to allow more visitors to travel in the Honister and Ullswater areas. We have continued the majority of these services into a second year on a purely commercial basis and we are confident that some of these services will be a fixture of the Lake District for years to come. The marketing carried out by the See More programme has also aided our business across the lakes and contributed to increasing numbers of passengers on all our Lakes services. Stagecoach Cumbria and North Lancashire are delighted to support your application to the above.

Our bus services provide one part of the sustainable transport mix with one bus potentially taking upwards of 30 cars off the road. We support this bid as not only does it aim to boost bus travel it works towards improving all sustainable transport modes including walking and cycling.

We welcome the business toolkit and personalised travel planning project which includes walking, cycling and the bus. We hope to work with Cumbria County Council and the Lake District National Park Authority to deliver the bus part of the sustainable transport blend.

I wish you every success with your funding application.

Yours Sincerely

M. Sanderson

Michael Sanderson
Commercial Manager

Co-wheels carclub
3a Sunderland Rd, Gilesgate, Durham DH1 2LH
T: 0191 375 1050
E: info@co-wheels.org.uk
W: www.co-wheels.org.uk

05 September 2016

To whom it may concern

I would like to offer Co-wheels support to the Cumbria wide bid to the Department for Transport Access Fund being made by Cumbria County Council and the Lake District National Park Authority.

This would complement our support for the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes which have played a huge part in encouraging more visitors to Cumbria and the Lake District to use sustainable transport modes to travel here and also to get around once in the county.

As the existing Car Club operator in Cumbria and the Lake District offering pay as you drive low emission hybrid vehicles at the rail stations, in partnership with the See More programme, we are heartened to learn that since 2009, car use as the main mode of transport used by visitors to travel **to** Cumbria has decreased by 3% to 81%. And as a facilitator in the provision of an electric vehicle network in the North Lake District, as a further alternative travel option for visitors, that the main mode of travel **around** once in Cumbria, car use has decreased by 19% to 58%.

I also understand that there has been a corresponding increase in walking as the main mode to get around, by 18%, with cycling increasing by 1% and boat/ferry travel by 2% (Cumbria Visitor Survey 2015).

We therefore, strongly agree that Cumbria County Council and the Lake District National Park Authority, together with other key and private sector partners, should continue to build on this momentum and deliver a further step change in travel behaviour by developing sustainable travel provision, which adds further value to the local economy, through increasing access options to new and existing employment, education, and training.

The Co-wheels pay as you drive car club is a multi-award winning model that has proven success to contribute to this and we give full consent for this letter to be used to support the latest application to the Access Fund.

Kind regards

R.M. Falconer

Richard Falconer

Director

YORKSHIRE DALES
National Park Authority

Nicola Parker
Infrastructure Planning Manager
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Kingmoor Business Park
Carlisle CA6 4SJ

01 September 2016

Dear Nicola

Access Fund for Sustainable Travel Revenue

I would like to offer the support of the Yorkshire Dales National Park Authority to the Go Cumbria and the Lake District bid to the Access Fund for Sustainable Travel for 2017/18 to 2020/21. 24% of the Yorkshire Dales National Park lies in the county of Cumbria.

The National Park Authority actively looks to promote walking and cycling as ways to enjoy the countryside and as a means for residents to access education, work and leisure. The National Park Authority is committed to building on the success of the Tour de France Grand Depart in 2014, and its current focus is on creating opportunities for family friendly cycling as well as continuing to promote wider cycling opportunities throughout the area.

Infrastructure developments need to be complemented by other measures to encourage its use, which is why we are keen to support the Go Cumbria and the Lake District project with its focus on training, behaviour change and improving health and well being.

Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria

Yours faithfully

Richard Burnett
Director of Corporate Services

Colvend, Hebden Road, Grassington,
Skipton, North Yorkshire, BD23 5LB
Tel: 0300 456 0030 or **01756 751600**
Fax: 01756 751699
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Chief Executive: David Butterworth

Nicola Parker
Infrastructure Planning Manager
Environment and Regulatory Services
Cumbria County Council
Parkhouse Building
Baron Way
Kingmoor Business Park
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CA6 4SJ

Dear Nicola,

Access Fund for Sustainable Travel Revenue

I would like to offer the support of LAKE DISTRICT CYCLING to the Cumbrian bid " for the Access Fund for Sustainable Travel for 2017/18 to 2020/21.

The Project will make a significant impact on increasing the number of people cycling and walking to work and schools.

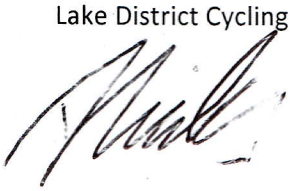
Through building upon the cycling and walking infrastructure and promotion delivered through the preceding 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes and focussing on a range of measures to be delivered by a partnership approach of Active Cumbria, Lake District National Park Authority and British Cycling, it will be possible to make walking and cycling the natural choice for shorter journeys and as part of longer journeys in a rural county such as Cumbria

By engaging closely with businesses in the six main towns through the proposed business toolkit and with new residents of the most significant housing allocations through personalised travel planning, there will be opportunity to make sustained increases in journeys to work by walking, cycling and other sustainable travel options.

To show our support I can confirm that LAKE DISTRICT CYCLING can make a financial contribution to the programme of £100 plus £500 in kind marketing and outreach work.

Yours faithfully,

Daniel Richards,
Lake District Cycling



University of Cumbria

Nicola Parker
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Fusehill Street
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5 September 2016

Dear Nicola

DfT Access Fund 2017 - 2020

I would like to offer our support to the 'Go Cumbria and the Lake District' bid to the Access Fund for 2017 to 2020.

We strongly support that Cumbria County Council and partners should continue to build on the momentum of the previous Local Sustainable Transport Fund programmes and deliver a further step change in travel behaviour by developing sustainable travel provision to influence access to work, education and services.

The University of Cumbria is a, multi-campus university home to over 10,000 students. Our locations include Ambleside, Carlisle, Barrow and Workington. We encourage and enable our students to walk and cycle to access university services. The activity included within the 'Go Cumbria and the Lake District' will provide additional services and support for this work.

Yours sincerely

Sandra Booth
Pro Vice Chancellor, Enterprise, Business Development and Engagement

Appendix B1

Economic Appraisal Summary Note

Economic Appraisal Summary Note (Appendix B1)

Introduction

As suggested in the DfT guidance the Active Travel toolkit has been used to produce a summary of the costs and benefits over the whole bid. Outside this an estimate is given where there would be wider economic impacts on the local and national economy. Thus there are some wider economic benefits from the cycle Tours and Mass Ride which are not included in the BCR, these are estimated and reported separately from the toolkit results.

As recommended, the bid is treated as a whole with any capital elements in the contributions included in the gross costs. It should be noted that there has been other capital scheme investment planned, for example the Optimising Connectivity 2 measures which amount to £3.5million in the same expenditure period. These were subject to a separate appraisal and the current bid provides additional benefits specifically as a result of the new measures proposed. There is no added benefit from the synergy between programmes, although this is likely to arise and would improve value for money still further.

In order to use the toolkit we have produced standard inputs for users as follows, either:

- Numbers of new daily users direct from the forecasts where these average 220 days, or
- Numbers of daily user equivalents where annual use is less than 220 days (e.g. schoolchildren, community and health based schemes).

This has enabled an overall economic assessment across the measures, many of which are synergistic and some of which are supportive, although this effect is not included. This is considered to be robust and realistic. The way in which the total inputs were calculated is summarised below and uses standard techniques.

There is a separate assessment of the impact of the pay as you drive scheme using the Carplus economic spreadsheet. This is a published tool in current use and based on very similar WebTAG parameters to the Toolkit. These benefits are added separately to the overall assessment table from the DfT Toolkit (worksheet AMCB) to provide a final BCR.

Once this had been undertaken it was straightforward to vary the assumptions in the toolkit to reflect lower or higher than expected outcomes. This included:

- Percentage of users previously using cars
- Level of congestion
- Assumptions on journey ambience

The table below shows the assumptions used for the tests.

	Low	Central	High
% car users	27% (Toolkit example, 50% of local JTW)	41%: Weight ave of Census for JTW and Toolkit for other	56% (Census JTW)
Level of congestion	Rural from Toolkit	Weighted average from Toolkit	Weighted average from Toolkit
Journey ambience	Zero all users: assumes no existing users	50% Toolkit benefits new users only	100% Toolkit benefits new users only
User number estimates	-10%	Central (as set out in this report)	+10%

Journey ambience is important because the Toolkit has a benefit to existing users from, for example, new cycle infrastructure. This is not really relevant in this case, other proposals in the area have capital spending and have been assessed on that basis. For this reason the existing user parameter in the Toolkit was set to zero – the only effect this has is to remove the journey ambience benefits to existing users. In terms of new users, there will clearly be benefits (safety, security, help with maintenance), but for the central case these were assumed to be 50% less than for new infrastructure. The low case removes them completely, the high case uses 100% of the Toolkit value.

Census data from 2011 for the affected wards has been used to derive transfer from car estimates for work journeys. Only car driver mode has been used to avoid overestimating the decongestion and other benefits. It should also be noted that the likelihood of any transfer from bus to cycle for journey to work is very rare – bus mode share for the JTW was less than cycle in 2011 at just under 1.5% (cycle was 2.9%).

Copies of the DfT Toolkit spreadsheets are submitted with the bid as requested.

Input calculations

Following the Toolkit guidance, only the final year participation rates have been used for the appraisal not the total over 3 years. In the case of programmes which attract people to try more walking and cycling, and familiarise themselves with the mode, there will be some underestimation caused by people who do not participate in the final year who have participated in earlier years and raised their level of walking or cycling as a result of this process.

The input calculations for the daily users for each measure in the programme are summarised below.

Measures 1 and 2
The final year user numbers (15,000) and the mileage from the pilot survey (61.39 p.a.) is used to produce distance. This is split using the proportion of mileage from those who said they walked or cycled to school (adjusted for longer cycle trip length). These are divided by the average trip length to give annual trips for each mode, then by 220 (as in DfT spreadsheet) to provide standard input of daily trips. This produces 285 new cycle trips and 2672 walk. These are then adjusted both to allow for 10% fewer days than the standard 220, and walk is further adjusted (-20%) to allow for leakage (e.g. bad weather). This produces final figures of 257 cycle trips and 1923 walk to be inputted.

Measure 3
This has no specific outputs but is supportive of measures 4 and 5 in particular, so cost shared across other measures. This is a conservative approach since there is likely to be direct encouragement of activity outside other programmes.

Measure 4
Again this uses the final year participation numbers of walkers of 1083 and divides into two groups: work related and non-work. Non-work is adjusted downwards to allow for less frequent daily trips.

Measure 5
As above this uses the final year participation numbers of cyclists of 540 and divides into two groups: work related and non-work. Non-work is adjusted downwards to allow for less frequent daily trips.

Measure 6 and 7

Using data from previous events the predicted increase in how many more people would cycle at least once a month has been adjusted to produce a daily trip equivalent figure of 1,473. The two events have been treated as one impact to avoid double counting, but this produces a conservative estimate.

Measure 8

For walking, the impact is focussed on the GP surgeries and although walking is likely to be less frequent than 220 trips per year, the health benefits may well be greater for this group. In the absence of specific benchmarking the users have been factored down to reflect lower trips per year. This is likely to underestimate the real benefit to this group and needs health related as well as transport related monitoring.

For the cycling element, the predictions are for commuters based on an improved cycle mode share in the areas of impact on the Census JTW data by 5%.

Measure 9

The walking trips are produced by using the walk share of the Challenge participants in the final year and factoring them down by 10% to reflect lower than 220 days a year. The cycling trips are the combined impact of the Challenge participants and the cycle training participants, both for the final year.

The PAYD scheme is assessed for benefits using the Carplus spreadsheet as previously stated. These are added to the economic table but shown separately.

Results

Summary outputs from the Active Travel Toolkit
(All in £000 2010 values)

	Low	Central	High
PVB from DfT Toolkit	10543.36	13226.85	15075.18
PVB from Carplus PAYD	114.77	171.12	227.46
New PVB	10658.13	13397.97	15302.65
PVC from DfT Toolkit	1402.53	1399.48	1395.43
New BCR	7.60	9.57	10.97

Notes:

There is a slight variation in the scheme costs. This is caused by a variation in the avoided infrastructure costs related to the level of transfer from car use.

Although the DfT toolkit was used (worksheet AMCB) it did not automatically update the summary on the user input page. The figures are therefore slightly different on that page but correct in the work sheet.

All of these represent very high value for money.

Wider economic impacts

While a cost benefit analysis has been undertaken it is also recognised that there may be other benefits arising from transport initiatives, in this case the planned tours and the mass participation rides. It is important that local impacts and national impacts are separated, while there are likely to be benefits from greater local spend, there may be less impact on national spending. Appraisals of such events typically contain elements of:

- Deadweight: people in the area would have spent the same amount of money on items such as food and accommodation whether the event took place or not.
- Displacement: people in the area at the time would have spent the money on another local activity.
- Leakage: people spend money outside the area which is related to the event (e.g. buying travel tickets).
- Multipliers: the extra income to businesses, or the extra income to individuals, causes them to spend more.

Thus gross expenditure in relation to an event, usually derived from attendances and average visitor spend, needs to be reduced for the above reasons. However, evidence such as the economic impact reports for the 2015 Tour of Britain and the Izumi Tour Stage through Barrow, show significant variation in both gross and net figures.

The international Tour of Britain event shows high additional spending per visitor, both for the UK economy (£36.52 to £42.72) and for the Cumbrian economy (£29.73 to £35.09). The more specialist team speed event has a different profile with fewer spectators and equally importantly less additional spend, ranging from £4.84 per visitor to the UK economy, but £12.28 additional in the Cumbrian economy. However, this is due to very high deadweight effect of 85% from the visitor survey. This compares to 53% for Tour of Britain Stage 3 and 39% for Stage 5.

However, it would be reasonable to expect UK and Cumbria net gains to be lower for local tour events, and somewhere between national and local for the "Tour de Yorkshire" event. In addition, more work is needed on the potential multiplier effects since jobs will be created directly and indirectly in relation to organising and servicing the events.

Even using low estimates of net spend from the existing studies there would be net benefits to the UK of £356,000 and to the Cumbrian economy of £653,920. This is not included in the cost benefit table and is thus strictly an additional benefit. It should also be noted that the result is sensitive to the assumptions on deadweight loss. The gross figures would be more than five times the above figures. The conclusion is that there will be significant additional economic benefits, but with a high level of uncertainty. Even at the lowest level, for example, they would more than cover the cost of the events.

Appendix B2

Active Mode Appraisal Toolkit Spreadsheets

(Also attached in Excel format to submission email)

Active Mode Appraisal Toolkit Spreadsheet 1

LOW

Department for Transport

Active Mode Appraisal Toolkit

Last updated: March 2015

Queries and comments on this toolkit should be referred to:
Local Economics
Department for Transport
Zone 2/15 Great Minster House
33 Horseferry Road
London
SW1P 4DR

Email: walking.cycling@dft.gsi.gov.uk

Please answer the following questions with your best estimates to obtain a benefit cost ratio of your scheme.
By varying your answers you can test the importance of the input data on the overall value for money of your scheme.
The answers provided are for the example case study from Appendix B of WebTAG unit A5.1. This case study provides further helpful commentary that users of this tool might want to refer to.

Scheme details

When would the scheme be likely to open? 2017
What is the last year of initial funding? 2019
Decay rate (starting from last year of funding) 20.0%

WebTAG A5.1 explains - the impacts especially of revenue funded initatives such as cycle training or personalised travel planning are likely to diminish year by year following the investment. For the case study here this is likely to be conservative.

Appraisal period (should be the expected asset life, maximum 60) 20 yrs

Do Nothing scenario

This is what is most likely to happen if the scheme is not implemented.
The data could for example be from automatic or manual traffic counts.

Number of cycling journeys 0 per day, average length 3.9 km and speed 20 kph
Number of walking journey 0 per day, average length 1.15 km and speed 5 kph
Ideally the data is taken from 'average weekday' in spring or autumn to avoid seasonal bias.
A return trip involves two journeys and would need to be counted as such.
To identify how many individual users this implies, please estimate the share of journeys that form part of a return trip here: 90%

Do Something scenario

Once your scheme has reached it's full impact (ignoring any initial build up here), how would these figures have changed (due to the intervention)?
Number of cycling journeys 2,967 per day, e.g. from automatic or manual cycle count.
Number of walking journey 4,325 per day
For simplicity it is assumed that the length and speed of journeys is largely unaffected by the intervention.

Journey Quality impacts

WebTAG units A5.1 and A4.1 provides guidance, the Databook provides suggested values that users might place on the improvemed infrastructure your scheme provides. The values are shown in the WebTAG journey quality tab.
The improvement over the 'do nothing' scenario should be valued, rather than the absolut level.

For cyclists 1.76 pence per minute 0 pence per trip (e.g. shower facilities)
For pedestrians 2.61 pence per km
As demonstrated in the case study, these values should take account of the proportion of the average journey that would be made on the improved infrastructure.

Decongestion benefits

What proportion of new users would most likely be using a car in the do nothing scenario?
for cyclists 27.3%
for pedestrians 27.3%

Which area type from the drop down is most similar to the area your scheme is located in?
Rural

Additional information

Background Growth
If you have an estimate of the growth in background use (in both scenarios), please set
the annual growth rate 0.00%
the period over which this applies 20 years

Number of days in the year that you would expect the above usage figures 220 days p.a.
In the case study this is assumed to the typical number of working days - but might more appropriately be set to the number of weekdays.

Costs

Please provide estimates for upfront costs as well as future maintenance costs in the table below. Please enter the full costs of the scheme in the first column and any private sector contribution to those costs in the second. All other funds are assumed to be from local or central Government.
Please use a constant price base and specify the year here 2016
Please refer to WebTAG unit A1.2 to set Optimism Bias 15%

Year	Total scheme costs '000£	3rd party contributions '000£
2009		
2010	0	
2011	0	
2012	0	
2013	0	
2014	0	
2015	0	
2016	0	
2017	703	204
2018	723	224
2019	664	174
2020	0	
2021	0	
2022	0	
2023	0	
2024	0	
2025	0	
2026	0	
2027	0	
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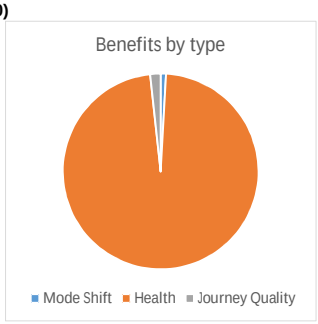
Results

Analysis of Monetised Costs and Benefits (in £'000)

Noise	4.79
Local Air Quality	0.00
Greenhouse Gases	33.82
Journey Quality	187.88
Physical Acitivity (incl. absenteeism)	10734.94
Accidents	38.40
Decongestion	208.56
Indirect taxation	-193.60
Private contribution	-471.42
Present Value of Benefits (PVB)	10543.36
Present Value of Costs (PVC)	1402.53
Benefit Cost Ratio (BCR)	**7.52**



The case study in WebTAG unit A5.1 uses slightly different assumptions on the valuation of decongestion benefits which result in a higher estimated benefit there. This is due to the specfic nature of the case study and to fully replicate this approach here would have increased the complexity of this tool with no apparent benefit.

Discount rate			
first 30 years	3.50%		
next 30 years	3%		
Appraisal period [max 60]	20	years	
CPI 2010 to construction cost year	1.16		
Market price conversion	1.191		
Scheme opening year	2017		
Optimism Bias	15%		
Decay rate	20%		
Year decay starts	2019		

	Cyclists	Pedestrians	
No of trips without scheme	0	0	per day
No of trips with scheme	2,967	4,325	per day
trip length without scheme	3.9	1.15	km
trip length with scheme	3.9	1.15	km
Average Speed on route	20	5	km/h
Exogenous growth in use	0.00%	per annum	
period over which growth maintained	20	years	
Journey ambience	1.76	2.61	p/minute for cyclists, p/km for walking
Journey ambience - per trip - without	0.0	pence (e.g. secure cycle storage)	
Journey ambience - per trip - with scheme	0.0	pence (e.g. secure cycle storage)	
number of (working) days cycled per year	220	days	
Share of new users who would have driven a	0.273	0.273	
Share of trips that are part of return journeys	90%		
Ramp up of health benefits	5	years	
New users who are already active	0%	0%	

Area type	Rural

	2010	2015	2020	2025	2030	2035
Decongestion	2.7	3.2	4.1	5.7	7.1	8.4
Infrastructure	0.1	0.1	0.1	0.1	0.2	0.2
Accident	0.7	0.7	0.8	0.9	1	1.1
Local Air Quality	0	0	0	0	0	0
Noise	0.1	0.1	0.1	0.1	0.1	0.2
Greenhouse Gases	0.8	0.8	0.7	0.7	0.6	0.9
Indirect Taxation	-4.7	-4.6	-4.2	-3.6	-3.3	-3.2

Costs

Costs entered in 2016 prices

Year	Total Scheme costs '000£	Cost born by third parties, '000£
2009	0	0
2010	0	0
2011	0	0
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016	0	0
2017	703	204
2018	723	224
2019	664	174
2020	0	0
2021	0	0
2022	0	0
2023	0	0
2024	0	0
2025	0	0
2026	0	0
2027	0	0
2028	0	0
2029	0	0
2030	0	0
2031	0	0
2032	0	0
2033	0	0
2034	0	0
2035	0	0
2036	0	0
2037	0	0
2038	0	0
2039	0	0
2040	0	0
2041	0	0
2042	0	0
2043	0	0
2044	0	0
2045	0	0
2046	0	0
2047	0	0
2048	0	0
2049	0	0
2050	0	0
2051	0	0
2052	0	0
2053	0	0
2054	0	0
2055	0	0
2056	0	0
2057	0	0
2058	0	0
2059	0	0
2060	0	0
2061	0	0
2062	0	0
2063	0	0
2064	0	0
2065	0	0
2066	0	0
2067	0	0
2068	0	0
2069	0	0
2070	0	0

Congestion beenfit	208.56
Infrastructure	5.01
Accident	38.40
Local Air Quality	0.00
Noise	4.79
Greenhouse Gases	33.82
Reduced risk of premature death	9760.23
Absenteeism	974.71
Journey Ambience	187.88
PAYD	114.77
Indirect Taxation	-193.60
Government	1407.55
Private contribution	471.42
PVB	10658.13
PVC	1402.53
BCR	**7.60**

Mode Shift	96.97	0.9%
Health	10734.94	97.4%
Journey Qu	187.88	1.7%

In £'000

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Discounting to 2010		0.871442	0.842	0.8135	0.78599	0.7594	0.7337	0.7089	0.6849	0.6618	0.6394	0.6178	0.5969	0.5767	0.5572	0.5384	0.5202	0.5026
Appraisal		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
GDP per capita v 2010		1.030305	1.0475	1.0679	1.08914	1.1098	1.1347	1.1601	1.1817	1.2038	1.2265	1.2499	1.2751	1.301	1.3277	1.3552	1.3835	1.4126
Background user growth		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decay		1	1	1	1	1	1	0.8	0.64	0.512	0.4096	0.3277	0.2621	0.2097	0.1678	0.1342	0.1074	0.0859
Build up of Health benefit		0	0	0	0.2	0.4	0.6	0.8	1	1	1	1	1	1	1	1	1	1
Decongestion																		
Car km reduction ('000)		0	0	0	994	994	994	994	994	994	994	994	994	994	994	994	994	994
Congestion beenfit	208.56	0.00	0.00	0.00	27.60	28.02	28.45	23.11	19.08	15.75	13.00	10.73	8.86	7.16	5.78	4.67	3.77	3.05
Infrastructure	5.01	0.00	0.00	0.00	0.78	0.75	0.73	0.56	0.44	0.34	0.26	0.20	0.16	0.14	0.12	0.11	0.10	0.09
Accident	38.40	0.00	0.00	0.00	5.77	5.72	5.68	4.51	3.57	2.82	2.23	1.77	1.40	1.10	0.87	0.69	0.54	0.43
Local Air Quality	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Noise	4.79	0.00	0.00	0.00	0.78	0.75	0.73	0.56	0.44	0.34	0.26	0.20	0.16	0.12	0.09	0.07	0.06	0.04
Greenhouse Gases	33.82	0.00	0.00	0.00	5.92	5.57	5.24	3.94	3.05	2.36	1.82	1.41	1.09	0.82	0.61	0.46	0.34	0.26
Indirect Taxation	-193.60	0.00	0.00	0.00	-34.64	-32.87	-31.18	-23.67	-17.74	-13.30	-9.96	-7.47	-5.60	-4.25	-3.23	-2.45	-1.86	-1.42
Health																		
Reduced risk of premature death	9760.23	0.00	0.00	0.00	424.57	836.02	######	######	######	######	796.58	627.42	494.75	390.20	307.79	242.83	191.62	151.23
Absenteeism	974.71	0.00	0.00	0.00	42.40	83.49	123.70	130.35	128.28	101.01	79.55	62.66	49.41	38.97	30.74	24.25	19.14	15.10
Journey Ambience																		
JA existing users (no decay)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JA new users (decay)	187.88	0.00	0.00	0.00	28.77	28.32	27.98	22.11	17.41	13.71	10.79	8.50	6.70	5.29	4.17	3.29	2.60	2.05
Costs																		
Government	1,407.55	0.00	0.00	0.00	488.23	474.20	445.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Private contribution	471.42	0	0	0	164.996	175.04	131.38	0	0	0	0	0	0	0	0	0	0	0

2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
0.4856	0.4692	0.4533	0.438	0.4231	0.4088	0.395	0.3817	0.3687	0.3563	0.3442	0.3326	0.3213	0.3105	0.3	0.2898	0.28	0.2719	0.264	0.2563	0.2488	0.2416	0.2345	0.2277
1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.4412	1.4705	1.5007	1.5302	1.5619	1.5944	1.6278	1.662	1.697	1.7344	1.7726	1.812	1.8522	1.8934	1.9354	1.9784	2.021	2.0644	2.1088	2.1542	2.2005	2.2464	2.2933	2.3411
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0687	0.055	0.044	0.0352	0.0281	0.0225	0.018	0.0144	0.0115	0.0092	0.0074	0.0059	0.0047	0.0038	0.003	0.0024	0.0019	0.0015	0.0012	0.001	0.0008	0.0006	0.0005	0.0004
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994
2.43	1.95	1.56	1.24	0.99	0.77	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.34	0.27	0.21	0.17	0.13	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.22	0.18	0.15	0.13	0.11	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-1.09	-0.84	-0.64	-0.49	-0.38	-0.29	-0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119.25	94.05	74.19	58.47	46.13	36.40	28.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.91	9.39	7.41	5.84	4.61	3.64	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.62	1.27	1.01	0.79	0.63	0.49	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077
0.2211	0.2146	0.2084	0.2023	0.1964	0.1907	0.1851	0.1797	0.1745	0.1694	0.1645	0.1597	0.155	0.1505	0.1461	0.1419	0.1378	0.1337	0.1298	0.1261	0.1224	0.1188	0.1154
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.3899	2.4398	2.4914	2.544	2.5977	2.6552	2.7139	2.7741	2.8356	2.8983	2.9625	3.0281	3.0946	3.1626	3.232	3.303	3.3755	3.4489	3.5239	3.6006	3.6789	3.7589	3.8403
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.0003	0.0003	0.0002	0.0002	0.0001	0.0001	9E-05	7E-05	5E-05	4E-05	3E-05	3E-05	2E-05	2E-05	1E-05	1E-05	9E-06	7E-06	6E-06	5E-06	4E-06	3E-06	2E-06
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-403.4
994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994	994
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sheme parametres	Cyclists	Pedestrians	
New distance	3.9	1.15	
new users	2967	4325	
Distance per year	2,545,686	1,094,225	total additional km
reduction in car use	694,972	298,723	avoided carkm
	993,696	**avoided Vkm**	

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Decongest	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.5	3.7	3.9	4.1	4.4	4.7	5.0	5.3	5.7	6.0	6.2	6.5	6.8
Infrastructu	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Accident	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0
Local Air Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Greenhous	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
Indirect Ta	-4.7	-4.7	-4.7	-4.6	-4.6	-4.6	-4.5	-4.4	-4.4	-4.3	-4.2	-4.1	-3.9	-3.8	-3.7	-3.6	-3.5	-3.5	-3.4	-3.4

2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
7.1	7.3	7.6	7.9	8.1	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-3.3	-3.3	-3.3	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2

2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075
8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2

Sheme parametres	Cyclists	Pedestrians
DN distance	3.9	1.15
DS distance	3.9	1.15
Difference	0	0
Speed	20	5
minutes per day	21	25
per weekday	21.27	
per day over 7 days		15.12
new users	1631.9	2378.8
existing users	0.0	0.0
% of weekdays cycled	1	
% of 7 days walked		0.60274

Reference values in HEAT		
min (per weekday/per day)	36	21.5
Relative Risk (HEAT)	0.28	0.22
England 7 Wales Mortality ri	0.00235	0.00235
Value of Life	1,653,687	

Impact on New users		
New users are already activ	0	0
exp. deaths among new use	3.8348475	5.590063
Relative Risk DS	0.17	0.15475
Lives saved DS	0.634493	0.865062
Value (£ per year)	**£1,049,253**	########

Impact on existing users (if route distance changed)		
difference in minutes	0	0
difference relative risk	0.000	0.000
Deaths amongst existing us	0.000	0.000
Lives saved DS	0.0000	0.0000
Value (£ per year)	**£0**	**£0**

Net Impact DS	**£1,049,253**	######## **per annum**

Sheme parametres	Cyclists	Pedestrians
DN distance	3.9	1.15
DS distance	3.9	1.15
difference	0	0
speed	20	5
DS time/km	21.27	1.15
over a year	4680.00	253
new users	1631.9	4325
exising users	0.0	0
Ambience p/min	1.76	
Ambience p/km		2.61
ambience per trip DN	0	
ambience per trip DN	0	

Impact on New users		
En route	£67,206.11	£14,279.64
Per Trip	0	

Impact on existing users		
En route	£0.00	£0
Per Trip	0	

Net Impact DS		
existing users	**£0.00**	**£ per year in 2010 values**
new users	**£33,603.06**	**£ per year in 2010 values**

				compared to 30 Min
Newcyclist	1631.85	21	minutes per weekday	0.71
New [pede	2378.75	25	minutes per weekday	0.84

average short-term sick leave absence in UK	6.46	
30 Minutes per weekday result in a reduction in sick day	6%	
average reduction in short-term sick leave per cyclist	0.27484364	
average reduction in short-term sick leave per walker	0.32417455	
	1219.63	days reduced absenteesim
VoT per hour average business	27.07	WebTAG
Output lost from day leave	£203.05	over 7.5 hours
increased output from reduced absenteeism	**£247,646**	per year

Latest version of WebTAG databook used May 2014

Annual Parameters

	GDP deflator1	Real GDP2			Population3			Households4			Average GDP per person			Average GDP per household			Work & Non-Work VoT			
Year	CPI-based (2010 = 100)	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1996 = 100	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1996 = 100	Work VoT Growth (% pa)	Non-Work VoT Growth (% pa)	Work Index 2002 = 100	Non-work Index 2002 = 100
1990	61.43	934,589	-	100.00	57,238	-	100.00	-	-	-	16,328	-	100.00	-	-	-	-	-	-	-
1991	65.55	922,510	-1.29	98.71	57,439	0.35	100.35	-	-	-	16,061	-1.64	98.36	-	-	-	-	-	-	-
1992	67.46	934,454	1.29	99.99	57,585	0.25	100.61	-	-	-	16,228	1.04	99.38	-	-	-	-	-	-	-
1993	68.73	967,071	3.49	103.48	57,714	0.22	100.83	-	-	-	16,756	3.26	102.62	-	-	-	-	-	-	-
1994	69.53	1,014,974	4.95	108.60	57,862	0.26	101.09	-	-	-	17,541	4.68	107.43	-	-	-	-	-	-	-
1995	71.20	1,050,837	3.53	112.44	58,025	0.28	101.38	-	-	-	18,110	3.24	110.91	-	-	-	-	-	-	-
1996	73.19	1,087,525	3.49	116.36	58,164	0.24	101.62	23,738	-	100.00	18,697	3.24	114.51	45,814	-	100.00	-	-	-	-
1997	74.49	1,134,837	4.35	121.43	58,314	0.26	101.88	23,865	0.54	100.54	19,461	4.08	119.18	47,552	3.80	103.80	-	-	-	-
1998	75.91	1,175,317	3.57	125.76	58,475	0.28	102.16	24,036	0.72	101.26	20,100	3.28	123.10	48,898	2.83	106.73	-	-	-	-
1999	77.56	1,209,852	2.94	129.45	58,684	0.36	102.53	24,209	0.72	101.98	20,616	2.57	126.26	49,975	2.20	109.08	-	-	-	-
2000	78.18	1,262,629	4.36	135.10	58,886	0.34	102.88	24,396	0.77	102.77	21,442	4.00	131.32	51,756	3.56	112.97	-	-	-	-
2001	79.96	1,290,216	2.18	138.05	59,113	0.39	103.28	24,535	0.57	103.36	21,826	1.79	133.67	52,587	1.61	114.78	-	-	-	-
2002	81.94	1,319,829	2.30	141.22	59,366	0.43	103.72	24,776	0.98	104.37	22,232	1.86	136.16	53,270	1.30	116.28	-	-	100.00	100.00
2003	83.71	1,371,948	3.95	146.80	59,637	0.46	104.19	24,878	0.41	104.80	23,005	3.48	140.89	55,147	3.52	120.37	3.48	3.48	103.48	103.48
2004	85.69	1,415,482	3.17	151.46	59,950	0.53	104.74	24,936	0.23	105.05	23,611	2.63	144.60	56,765	2.93	123.90	2.63	2.63	106.20	106.20
2005	87.37	1,461,270	3.23	156.35	60,413	0.77	105.55	25,130	0.78	105.86	24,188	2.44	148.14	58,148	2.44	126.92	2.44	2.44	108.80	108.80
2006	89.87	1,501,528	2.76	160.66	60,827	0.68	106.27	25,263	0.53	106.42	24,685	2.06	151.18	59,436	2.21	129.73	2.06	2.06	111.03	111.03
2007	91.94	1,552,989	3.43	166.17	61,319	0.81	107.13	25,457	0.77	107.24	25,326	2.60	155.11	61,004	2.64	133.16	2.60	2.60	113.92	113.92
2008	94.89	1,541,039	-0.77	164.89	61,824	0.82	108.01	25,687	0.90	108.21	24,926	-1.58	152.66	59,993	-1.66	130.95	-1.58	-1.58	112.12	112.12
2009	96.99	1,461,361	-5.17	156.36	62,261	0.71	108.78	25,830	0.56	108.81	23,472	-5.84	143.75	56,576	-5.70	123.49	-5.84	-5.84	105.58	105.58
2010	100.00	1,485,616	1.66	158.96	62,760	0.80	109.65	26,006	0.68	109.55	23,672	0.85	144.97	57,126	0.97	124.69	0.85	0.85	106.47	106.47
2011	102.31	1,502,216	1.12	160.74	63,285	0.84	110.57	26,135	0.50	110.10	23,737	0.28	145.38	57,479	0.62	125.46	0.28	0.28	106.77	106.77
2012	104.06	1,506,388	0.28	161.18	63,705	0.66	111.30	26,355	0.84	111.02	23,646	-0.38	144.82	57,158	-0.56	124.76	-0.38	-0.38	106.36	106.36
2013	105.73	1,531,428	1.66	163.86	-	0.59	111.95	26,414	0.22	111.27	-	1.07	146.36	57,978	1.44	126.55	1.07	1.07	107.50	107.50
2014	108.16	-	2.70	168.29	-	0.64	112.67	-	1.07	112.46	-	2.05	149.37	-	1.62	128.60	2.05	2.05	109.70	109.70
2015	109.89	-	2.30	172.16	-	0.62	113.37	-	1.06	113.65	-	1.67	151.86	-	1.23	130.18	1.67	1.67	111.53	111.53
2016	111.87	-	2.60	176.63	-	0.64	114.09	-	1.05	114.84	-	1.95	154.82	-	1.54	132.18	1.95	1.95	113.71	113.71
2017	113.99	-	2.60	181.22	-	0.60	114.77	-	1.03	116.02	-	1.99	157.90	-	1.55	134.23	1.99	1.99	115.97	115.97
2018	116.27	-	2.50	185.76	-	0.59	115.45	-	1.02	117.21	-	1.90	160.90	-	1.46	136.19	1.90	1.90	118.17	118.17
2019	118.60	-	2.80	190.96	-	0.55	116.09	-	0.98	118.36	-	2.23	164.49	-	1.80	138.65	2.23	2.23	120.81	120.81
2020	121.09	-	2.80	196.30	-	0.54	116.72	-	0.97	119.51	-	2.24	168.19	-	1.81	141.16	2.24	2.24	123.52	123.52
2021	123.75	-	2.40	201.01	-	0.53	117.34	-	0.96	120.66	-	1.86	171.31	-	1.43	143.17	1.86	1.86	125.82	125.82
2022	126.48	-	2.40	205.84	-	0.52	117.95	-	0.95	121.81	-	1.87	174.52	-	1.43	145.22	1.87	1.87	128.18	128.18
2023	129.26	-	2.40	210.78	-	0.50	118.54	-	0.94	122.95	-	1.89	177.81	-	1.44	147.32	1.89	1.89	130.59	130.59
2024	132.10	-	2.40	215.84	-	0.49	119.12	-	0.88	124.04	-	1.90	181.19	-	1.50	149.54	1.90	1.90	133.08	133.08
2025	135.01	-	2.50	221.23	-	0.47	119.68	-	0.88	125.13	-	2.02	184.85	-	1.61	151.95	2.02	2.02	135.76	135.76
2026	137.98	-	2.50	226.76	-	0.46	120.23	-	0.87	126.21	-	2.04	188.61	-	1.62	154.40	2.04	2.04	138.53	138.53
2027	141.01	-	2.50	232.43	-	0.44	120.75	-	0.86	127.30	-	2.05	192.49	-	1.63	156.91	2.05	2.05	141.37	141.37
2028	144.12	-	2.50	238.24	-	0.42	121.26	-	0.85	128.38	-	2.07	196.47	-	1.63	159.48	2.07	2.07	144.30	144.30
2029	147.29	-	2.50	244.20	-	0.40	121.75	-	0.78	129.38	-	2.09	200.57	-	1.71	162.20	2.09	2.09	147.31	147.31
2030	150.53	-	2.50	250.31	-	0.39	122.22	-	0.77	130.38	-	2.10	204.79	-	1.72	164.99	2.10	2.10	150.41	150.41
2031	153.84	-	2.40	256.31	-	0.37	122.68	-	0.76	131.37	-	2.02	208.93	-	1.62	167.67	2.02	2.02	153.45	153.45
2032	157.22	-	2.40	262.46	-	0.36	123.11	-	0.76	132.37	-	2.04	213.19	-	1.63	170.40	2.04	2.04	156.57	156.57
2033	160.68	-	2.40	268.76	-	0.34	123.54	-	0.75	133.37	-	2.05	217.56	-	1.63	173.18	2.05	2.05	159.79	159.79
2034	164.22	-	2.30	274.94	-	0.33	123.94	-	0.33	133.81	-	1.96	221.83	-	1.96	176.58	1.96	1.96	162.92	162.92
2035	167.83	-	2.40	281.54	-	0.32	124.34	-	0.32	134.24	-	2.07	226.43	-	2.07	180.24	2.07	2.07	166.30	166.30
2036	171.52	-	2.40	288.30	-	0.31	124.73	-	0.31	134.65	-	2.08	231.15	-	2.08	184.00	2.08	2.08	169.77	169.77
2037	175.30	-	2.40	295.22	-	0.30	125.10	-	0.30	135.06	-	2.09	235.98	-	2.09	187.85	2.09	2.09	173.31	173.31
2038	179.15	-	2.40	302.30	-	0.29	125.47	-	0.29	135.45	-	2.10	240.95	-	2.10	191.80	2.10	2.10	176.96	176.96
2039	183.09	-	2.40	309.56	-	0.29	125.83	-	0.29	135.85	-	2.10	246.01	-	2.10	195.83	2.10	2.10	180.68	180.68
2040	187.12	-	2.50	317.30	-	0.29	126.20	-	0.29	136.24	-	2.20	251.44	-	2.20	200.15	2.20	2.20	184.66	184.66
2041	191.24	-	2.50	325.23	-	0.29	126.56	-	0.29	136.63	-	2.20	256.98	-	2.20	204.56	2.20	2.20	188.73	188.73
2042	195.45	-	2.50	333.36	-	0.27	126.91	-	0.27	137.01	-	2.22	262.68	-	2.22	209.10	2.22	2.22	192.93	192.93
2043	199.75	-	2.50	341.70	-	0.27	127.25	-	0.27	137.38	-	2.22	268.52	-	2.22	213.75	2.22	2.22	197.21	197.21
2044	204.14	-	2.50	350.24	-	0.27	127.60	-	0.27	137.75	-	2.22	274.49	-	2.22	218.49	2.22	2.22	201.59	201.59
2045	208.63	-	2.50	358.99	-	0.27	127.95	-	0.27	138.13	-	2.22	280.58	-	2.22	223.35	2.22	2.22	206.07	206.07
2046	213.22	-	2.50	367.97	-	0.27	128.29	-	0.27	138.51	-	2.22	286.82	-	2.22	228.31	2.22	2.22	210.65	210.65
2047	217.91	-	2.40	376.80	-	0.24	128.61	-	0.24	138.84	-	2.15	292.98	-	2.15	233.22	2.15	2.15	215.18	215.18
2048	222.71	-	2.40	385.84	-	0.24	128.92	-	0.24	139.18	-	2.15	299.28	-	2.15	238.24	2.15	2.15	219.81	219.81
2049	227.60	-	2.40	395.10	-	0.24	129.24	-	0.24	139.52	-	2.15	305.72	-	2.15	243.36	2.15	2.15	224.53	224.53
2050	232.61	-	2.40	404.59	-	0.24	129.55	-	0.24	139.86	-	2.15	312.29	-	2.15	248.59	2.15	2.15	229.36	229.36
2051	237.73	-	2.40	414.30	-	0.24	129.87	-	0.24	140.21	-	2.15	319.01	-	2.15	253.94	2.15	2.15	234.29	234.29
2052	242.96	-	2.30	423.83	-	0.21	130.14	-	0.21	140.50	-	2.09	325.67	-	2.09	259.24	2.09	2.09	239.18	239.18
2053	248.30	-	2.30	433.57	-	0.21	130.41	-	0.21	140.79	-	2.09	332.46	-	2.09	264.64	2.09	2.09	244.17	244.17
2054	253.77	-	2.30	443.55	-	0.21	130.69	-	0.21	141.09	-	2.09	339.40	-	2.09	270.17	2.09	2.09	249.27	249.27
2055	259.35	-	2.30	453.75	-	0.21	130.96	-	0.21	141.38	-	2.09	346.48	-	2.09	275.80	2.09	2.09	254.47	254.47
2056	265.06	-	2.30	464.18	-	0.21	131.23	-	0.21	141.68	-	2.09	353.71	-	2.09	281.56	2.09	2.09	259.78	259.78
2057	270.89	-	2.30	474.86	-	0.18	131.48	-	0.18	141.94	-	2.11	361.18	-	2.11	287.50	2.11	2.11	265.27	265.27
2058	276.85	-	2.30	485.78	-	0.18	131.72	-	0.18	142.20	-	2.11	368.81	-	2.11	293.58	2.11	2.11	270.87	270.87
2059	282.94	-	2.30	496.95	-	0.18	131.96	-	0.18	142.46	-	2.11	376.60	-	2.11	299.78	2.11	2.11	276.59	276.59
2060	289.16	-	2.40	508.88	-	0.18	132.20	-	0.18	142.72	-	2.21	384.93	-	2.21	306.41	2.21	2.21	282.71	282.71
2061	295.52	-	2.40	521.10	-	0.18	132.44	-	0.18	142.98	-	2.21	393.45	-	2.21	313.19	2.21	2.21	288.96	288.96
2062	302.03	-	2.40	533.60	-	0.18	132.68	-	0.18	143.24	-	2.22	402.17	-	2.22	320.14	2.22	2.22	295.37	295.37
2063	308.67	-	2.40	546.41	-	0.18	132.92	-	0.18	143.50	-	2.21	411.08	-	2.21	327.23	2.21	2.21	301.91	301.91
2064	315.46	-	2.40	559.52	-	0.18	133.16	-	0.18	143.76	-	2.21	420.18	-	2.21	334.47	2.21	2.21	308.60	308.60
2065	322.40	-	2.40	572.95	-	0.18	133.40	-	0.18	144.02	-	2.21	429.48	-	2.21	341.88	2.21	2.21	315.43	315.43
2066	329.49	-	2.40	586.70	-	0.18	133.65	-	0.18	144.28	-	2.21	438.99	-	2.21	349.45	2.21	2.21	322.41	322.41
2067	336.74	-	2.40	600.78	-	0.20	133.91	-	0.20	144.57	-	2.20	448.63	-	2.20	357.12	2.20	2.20	329.50	329.50
2068	344.15	-	2.40	615.20	-	0.20	134.18	-	0.20	144.86	-	2.20	458.49	-	2.20	364.96	2.20	2.20	336.73	336.73
2069	351.72	-	2.40	629.97	-	0.20	134.45	-	0.20	145.15	-	2.20	468.56	-	2.20	372.98	2.20	2.20	344.13	344.13
2070	359.46	-	2.40	645.08	-	0.20	134.72	-	0.20	145.44	-	2.20	478.85	-	2.20	381.17	2.20	2.20	351.68	351.68
2071	367.37	-	2.40	660.57	-	0.20	134.99	-	0.20	145.73	-	2.20	489.36	-	2.20	389.54	2.20	2.20	359.41	359.41
2072	375.45	-	2.40	676.42	-	0.22	135.28	-	0.22	146.05	-	2.17	500.00	-	2.17	398.01	2.17	2.17	367.22	367.22
2073	383.71	-	2.40	692.65	-	0.22	135.58	-	0.22	146.37	-	2.17	510.88	-	2.17	406.67	2.17	2.17	375.21	375.21
2074	392.15	-	2.40	709.28	-	0.22	135.88	-	0.22	146.70	-	2.17	521.99	-	2.17	415.51	2.17	2.17	383.37	383.37
2075	400.78	-	2.40	726.30	-	0.22	136.18	-	0.22	147.02	-	2.17	533.34	-	2.17	424.55	2.17	2.17	391.71	391.71
2076	409.60	-	2.40	743.73	-	0.22	136.48	-	0.22	147.34	-	2.17	544.94	-	2.17	433.78	2.17	2.17	400.22	400.22
2077	418.61	-	2.40	761.58	-	0.23	136.79	-	0.23	147.68	-	2.17	556.74	-	2.17	443.17	2.17	2.17	408.89	408.89
2078	427.82	-	2.40	779.86	-	0.23	137.11	-	0.23	148.02	-	2.17	568.80	-	2.17	452.78	2.17	2.17	417.75	417.75
2079	437.23	-	2.40	798.58	-	0.23	137.42	-	0.23	148.36	-	2.17	581.12	-	2.17	462.58	2.17	2.17	426.80	426.80
2080	446.85	-	2.40	817.74	-	0.23	137.73	-	0.23	148.70	-	2.17	593.71	-	2.17	472.60	2.17	2.17	436.05	436.05
2081	456.68	-	2.40	837.37	-	0.23	138.05	-	0.23	149.04	-	2.17	606.57	-	2.17	482.84	2.17	2.17	445.49	445.49
2082	466.73	-	2.40	857.46	-	0.22	138.36	-	0.22	149.37	-	2.17	619.74	-	2.17	493.32	2.17	2.17	455.16	455.16
2083	476.99	-	2.40	878.04	-	0.22	138.67	-	0.22	149.71	-	2.17	633.19	-	2.17	504.03	2.17	2.17	465.04	465.04
2084	487.49	-	2.40	899.12	-	0.22	138.98	-	0.22	150.04	-	2.17	646.94	-	2.17	514.97	2.17	2.17	475.14	475.14
2085	498.21	-	2.40	920.70	-	0.22	139.29	-	0.22	150.38	-	2.17	660.98	-	2.17	526.15	2.17	2.17	485.45	485.45
2086	509.17	-	2.40	942.79	-	0.22	139.61	-	0.22	150.72	-	2.17	675.32	-	2.17	537.57	2.17	2.17	495.99	495.99
2087	520.37	-	2.40	965.42	-	0.22	139.91	-	0.22	151.05	-	2.17	690.01	-	2.17	549.26	2.17	2.17	506.77	506.77
2088	531.82	-	2.40	988.59	-	0.22	140.22	-	0.22	151.38	-	2.18	705.02	-	2.18	561.21	2.18	2.18	517.80	517.80
2089	543.52	-	2.40	1,012.32	-	0.22	140.53	-	0.22	151.71	-	2.18	720.36	-	2.18	573.42	2.18	2.18	529.06	529.06
2090	555.48	-	2.40	1,036.61	-	0.22	140.84	-	0.22	152.05	-	2.18	736.04	-	2.18	585.90	2.18	2.18	540.58	540.58
2091	567.70	-	2.40	1,061.49	-	0.22	141.15	-	0.22	152.38	-	2.18	752.05	-	2.18	598.64	2.18	2.18	552.34	552.34
2092	580.19	-	2.40	1,086.97	-	0.22	141.46	-	0.22	152.71	-	2.18	768.41	-	2.18	611.67	2.18	2.18	564.36	564.36
2093	592.95	-	2.40	1,113.05	-	0.22	141.77	-	0.22	153.06	-	2.17	785.09	-	2.17	624.95	2.17	2.17	576.61	576.61
2094	606.00	-	2.40	1,139.77	-	0.22	142.09	-	0.22	153.40	-	2.17	802.14	-	2.17	638.51	2.17	2.17	589.12	589.12
2095	619.33	-	2.40	1,167.12	-	0.22	142.41	-	0.22	153.74	-	2.17	819.55	-	2.17	652.37	2.17	2.17	601.91	601.91
2096	632.96	-	2.40	1,195.13	-	0.22	142.73	-	0.22	154.09	-	2.17	837.34	-	2.17	666.53	2.17	2.17	614.98	614.98
2097	646.88	-	2.40	1,223.81	-	0.22	143.05	-	0.22	154.44	-	2.17	855.51	-	2.17	681.00	2.17	2.17	628.33	628.33
2098	661.11	-	2.40	1,253.19	-	0.22	143.37	-	0.22	154.78	-	2.17	874.08	-	2.17	695.79	2.17	2.17	641.96	641.96
2099	675.66	-	2.40	1,283.26	-	0.22	143.69	-	0.22	155.13	-	2.17	893.06	-	2.17	710.89	2.17	2.17	655.90	655.90
2100	690.52	-	2.40	1,314.06	-	0.22	144.02	-	0.22	155.48	-	2.17	912.44	-	2.17	726.32	2.17	2.17	670.14	670.14

Table A 1.3.1: Values of Working (Employers' Business) Time by Mode (£ per hour, 2010 prices, 2010 values)			
Mode	**Resource Cost**	**Perceived Cost**	**Market Price**
Car driver	22.74	22.74	27.06
Car passenger	17.25	17.25	20.52
LGV (driver or passenger)	10.24	10.24	12.18
OGV (driver or passenger)	12.06	12.06	14.35
PSV driver	12.32	12.32	14.66
PSV passenger	13.97	13.97	16.63
Taxi driver	10.89	10.89	12.96
Taxi / Minicab passenger	21.96	21.96	26.13
Rail passenger	26.86	26.86	31.96
Underground passenger	22.08	22.08	26.28
Walker	17.54	17.54	20.88
Cyclist	17.47	17.47	20.78
Motorcyclist	19.42	19.42	23.11
Average of all working persons	22.75	22.75	27.07
Values of Non-Working Time by Trip Purpose (£ per hour, 2010 prices, 2010 values)			
Trip Purpose	**Resource Cost**	**Perceived Cost**	**Market Price**
Commuting	5.72	6.81	6.81
Other	5.08	6.04	6.04

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)												
		London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	Congestion band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
Congestion*	1	0.0	1.4	12.4	0.0	0.9	2.3	0.6	2.3	0.0	0.4	0.2	**1.2**
	2	0.0	4.4	25.6	0.0	3.0	9.2	1.8	8.7	0.0	1.3	1.4	**2.8**
	3	0.0	19.7	52.9	0.6	24.8	20.5	10.7	18.8	1.0	3.3	7.5	**9.9**
	4	13.8	131.8	145.9	25.2	132.2	148.8	45.5	130.1	18.3	49.2	39.1	**87.6**
	5	0.0	258.0	199.3	57.9	169.6	226.4	71.0	215.2	77.7	116.8	129.6	**155.0**
	Average	**0.1**	**67.1**	**46.4**	**2.8**	**34.2**	**23.8**	**13.2**	**10.8**	**1.1**	**2.2**	**2.7**	**11.5**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	0.0	0.7	0.7	**1.6**
Local Air Quality	All	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.9	1.0	1.2	0.9	0.9	1.0	0.8	0.9	0.9	0.8	0.8	**0.9**
Indirect Taxation	All	-5.3	-5.6	-7.1	-5.2	-5.2	-5.7	-4.8	-5.4	-5.3	-4.8	-4.7	**-5.1**
Total		**-3.8**	**66.1**	**44.1**	**-1.1**	**33.3**	**22.5**	**12.6**	**9.7**	**-3.2**	**-1.0**	**-0.3**	**9.2**

2015 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
		London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	Congestion band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
Congestion*	1	0.0	1.4	13.1	0.0	0.9	2.4	0.6	2.4	0.0	0.4	0.2	**1.2**
	2	0.0	4.6	28.1	0.0	3.1	9.5	1.9	8.9	0.0	1.2	1.4	**2.9**
	3	0.1	22.8	54.1	0.6	24.7	21.2	10.9	19.1	0.7	3.5	7.2	**9.8**
	4	15.1	111.2	136.9	17.8	125.5	128.9	42.5	129.3	17.5	47.8	32.7	**78.3**
	5	0.0	237.2	211.7	62.0	204.9	249.1	73.9	228.0	74.8	124.6	139.2	**167.2**
	Average	**0.1**	**75.1**	**50.2**	**1.7**	**35.9**	**25.7**	**14.5**	**11.3**	**1.1**	**2.4**	**3.2**	**12.3**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.2	3.2	0.0	3.2	3.2	3.2	3.2	0.0	0.7	0.7	**1.7**
Local Air Quality	All	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.9	0.9	1.2	0.8	0.8	0.9	0.8	0.9	0.9	0.8	0.8	**0.8**
Indirect Taxation	All	-5.2	-5.4	-6.9	-5.0	-5.0	-5.6	-4.7	-5.3	-5.1	-4.7	-4.6	**-5.0**
Total		**-3.8**	**74.2**	**48.2**	**-2.2**	**35.3**	**24.6**	**14.2**	**10.5**	**-3.1**	**-0.7**	**0.3**	**10.1**

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
		London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	Congestion band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
Congestion*	1	0.0	1.4	14.2	0.0	1.0	2.6	0.6	2.6	0.0	0.4	0.2	**1.3**
	2	0.0	4.8	30.8	0.0	3.4	10.2	2.0	9.9	0.0	1.4	1.5	**3.2**
	3	0.7	24.8	56.5	1.2	26.9	23.2	12.6	21.0	1.7	3.9	7.9	**10.7**
	4	16.5	114.0	133.3	21.8	97.3	94.3	45.3	90.7	21.5	47.0	30.6	**63.3**
	5	0.0	293.4	253.3	72.5	249.8	298.1	87.1	257.8	93.9	136.7	175.2	**213.2**
	Average	**0.4**	**100.2**	**62.6**	**3.1**	**46.0**	**32.4**	**18.3**	**13.6**	**2.0**	**3.1**	**4.1**	**15.8**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	**1.9**
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	**0.7**
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	**-4.5**
Total		**-3.2**	**99.9**	**61.2**	**-0.5**	**45.9**	**31.9**	**18.5**	**13.4**	**-1.8**	**0.5**	**1.6**	**14.1**

2025 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.7	14.4	0.0	1.1	2.7	0.7	2.7	0.0	0.5	0.2	**1.4**
	2	0.0	5.2	32.9	0.0	3.6	10.6	2.2	10.5	0.0	1.5	1.9	**3.7**
	3	1.9	27.4	61.7	2.6	28.8	25.1	13.9	22.6	2.7	4.2	8.4	**11.3**
	4	20.8	116.0	145.6	23.9	107.2	105.7	47.5	88.0	22.8	48.2	30.7	**62.8**
	5	0.0	400.7	305.2	81.5	296.3	369.9	101.9	300.4	98.7	156.1	230.5	**262.6**
	Average	**1.1**	**141.2**	**76.3**	**5.5**	**56.9**	**42.8**	**23.1**	**16.1**	**3.7**	**4.0**	**5.7**	**20.5**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	**2.0**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	**0.7**
Indirect Taxation	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	**-3.9**
Total		**-1.8**	**141.8**	**76.0**	**2.7**	**57.8**	**43.4**	**24.3**	**17.0**	**0.5**	**2.1**	**3.9**	**19.5**

2030 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.8	16.6	0.0	1.1	3.0	0.7	2.9	0.0	0.6	0.3	**1.6**
	2	0.0	5.4	38.4	0.0	4.1	11.7	2.4	11.3	0.0	1.6	2.1	**4.2**
	3	2.5	28.1	64.2	3.0	32.8	27.1	15.5	24.5	5.0	4.5	8.9	**12.7**
	4	22.4	122.3	156.3	27.7	114.7	114.2	51.9	94.3	25.8	52.1	31.6	**65.2**
	5	0.0	450.2	348.5	90.8	343.8	434.5	118.6	336.6	108.8	178.7	269.7	**299.0**
	Average	**1.9**	**172.2**	**90.3**	**7.6**	**69.0**	**51.7**	**28.0**	**18.3**	**6.3**	**5.0**	**7.1**	**25.0**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.1**
Accident	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	**2.2**
Local Air Quality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.2**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	**0.7**
Indirect Taxation	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	**-3.6**
Total		**-0.7**	**173.5**	**90.9**	**5.1**	**70.7**	**53.2**	**30.0**	**19.9**	**3.4**	**3.6**	**5.7**	**24.6**

2035 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.8	19.2	0.0	1.2	3.3	0.8	3.1	0.0	0.6	0.3	**1.7**
	2	0.0	5.8	42.4	0.1	4.4	12.6	2.5	12.1	0.0	1.8	2.3	**4.6**
	3	3.5	30.5	71.1	4.5	35.3	29.0	17.1	26.7	8.6	5.0	10.1	**14.9**
	4	24.6	140.0	168.6	30.7	124.2	120.9	56.5	97.3	29.4	56.5	34.0	**67.9**
	5	0.0	543.1	402.9	97.5	425.6	504.8	138.5	386.7	120.7	201.6	307.5	**348.1**
	Average	**3.1**	**217.5**	**106.8**	**11.3**	**86.6**	**63.4**	**34.3**	**21.2**	**10.4**	**6.3**	**8.4**	**31.2**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.2**
Accident	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	**2.5**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	**0.2**
Greenhouse Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	**1.0**
Indirect Taxation	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	**-3.5**
Total		**1.0**	**219.7**	**108.3**	**9.2**	**89.1**	**65.7**	**37.0**	**23.7**	**8.0**	**5.3**	**7.6**	**31.6**

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)												
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.1	67.1	46.4	2.8	34.2	23.8	13.2	10.8	1.1	2.2	2.7	11.5
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	0.0	0.7	0.7	1.6
Local Air Quality	All	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.9	1.0	1.2	0.9	0.9	1.0	0.8	0.9	0.9	0.8	0.8	0.9
Indirect Taxation	All	-5.3	-5.6	-7.1	-5.2	-5.2	-5.7	-4.8	-5.4	-5.3	-4.8	-4.7	-5.1
Total		-3.8	66.1	44.1	-1.1	33.3	22.5	12.6	9.7	-3.2	-1.0	-0.3	9.2

2015 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.1	75.1	50.2	1.7	35.9	25.7	14.5	11.3	1.1	2.4	3.2	12.3
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.2	3.2	0.0	3.2	3.2	3.2	3.2	0.0	0.7	0.7	1.7
Local Air Quality	All	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.9	0.9	1.2	0.8	0.8	0.9	0.8	0.9	0.9	0.8	0.8	0.8
Indirect Taxation	All	-5.2	-5.4	-6.9	-5.0	-5.0	-5.6	-4.7	-5.3	-5.1	-4.7	-4.6	-5.0
Total		-3.8	74.2	48.2	-2.2	35.3	24.6	14.2	10.5	-3.1	-0.7	0.3	10.1

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.4	100.2	62.6	3.1	46.0	32.4	18.3	13.6	2.0	3.1	4.1	15.8
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	1.9
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	0.7
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	-4.5
Total		-3.2	99.9	61.2	-0.5	45.9	31.9	18.5	13.4	-1.8	0.5	1.6	14.1

2025 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	1.1	141.2	76.3	5.5	56.9	42.8	23.1	16.1	3.7	4.0	5.7	20.5
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	2.0
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	0.7
Indirect Taxation	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	-3.9
Total		-1.8	141.8	76.0	2.7	57.8	43.4	24.3	17.0	0.5	2.1	3.9	19.5

2030 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	1.9	172.2	90.3	7.6	69.0	51.7	28.0	18.3	6.3	5.0	7.1	25.0
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.1
Accident	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	2.2
Local Air Quality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	0.2
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.7
Indirect Taxation	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	-3.6
Total		-0.7	173.5	90.9	5.1	70.7	53.2	30.0	19.9	3.4	3.6	5.7	24.6

2035 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	3.1	217.5	106.8	11.3	86.6	63.4	34.3	21.2	10.4	6.3	8.4	31.2
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2
Accident	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	2.5
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	0.2
Greenhouse Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	1.0
Indirect Taxation	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	-3.5
Total		1.0	219.7	108.3	9.2	89.1	65.7	37.0	23.7	8.0	5.3	7.6	31.6

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010

Cost type	Congestion band	London	Inner and Outer Conurbations	Other Urban	Rural	Weighted Average
		Other Rds	Other Rds	Other Rds	Other Rds	
		1	2	3	4	5
Congestion 2010	**Average**	**46.4**	**23.8**	**10.8**	**2.7**	**11.5**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.0	3.0	3.0	0.7	**1.6**
Local Air Quality	All	0.3	0.1	0.1	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.2	1.0	0.9	0.8	**0.9**
Indirect Taxation	All	-7.1	-5.7	-5.4	-4.7	**-5.1**
Congestion 2015	**Average**	**50.2**	**25.7**	**11.3**	**3.2**	**12.3**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.2	3.2	3.2	0.7	**1.7**
Local Air Quality	All	0.2	0.1	0.1	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.2	0.9	0.9	0.8	**0.8**
Indirect Taxation	All	-6.9	-5.6	-5.3	-4.6	**-5.0**
Congestion 2020	**Average**	**62.6**	**32.4**	**13.6**	**4.1**	**15.8**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.5	3.5	3.5	0.8	**1.9**
Local Air Quality	All	0.1	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.0	0.8	0.8	0.7	**0.7**
Indirect Taxation	All	-6.3	-5.1	-4.8	-4.2	**-4.5**
Congestion 2025	**Average**	**76.3**	**42.8**	**16.1**	**5.7**	**20.5**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.8	3.8	3.8	0.9	**2.0**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.1	**0.1**
Greenhouse Gases	All	1.0	0.8	0.8	0.7	**0.7**
Indirect Taxation	All	-5.5	-4.4	-4.1	-3.6	**-3.9**
Congestion 2030	**Average**	**90.3**	**51.7**	**18.3**	**7.1**	**25.0**
Infrastructure	All	0.2	0.2	0.2	0.2	**0.1**
Accident	All	4.2	4.2	4.2	1.0	**2.2**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.1	**0.2**
Greenhouse Gases	All	1.0	0.8	0.7	0.6	**0.7**
Indirect Taxation	All	-5.1	-4.0	-3.8	-3.3	**-3.6**
Congestion 2035	**Average**	**106.8**	**63.4**	**21.2**	**8.4**	**31.2**
Infrastructure	All	0.2	0.2	0.2	0.2	**0.2**
Accident	All	4.6	4.6	4.6	1.1	**2.5**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.2	**0.2**
Greenhouse Gases	All	1.4	1.1	1.1	0.9	**1.0**
Indirect Taxation	All	-5.0	-3.9	-3.7	-3.2	**-3.5**
Total		**108.3**	**65.7**	**23.7**	**7.6**	**31.6**

Inner and Outer Conurbations	**2**
London	1
Other Urban	3
Rural	4
Weighted Average	5

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
Cost type	**Congestion band**	**London**			**Inner and Outer Conurbations**			**Other Urban**		**Rural**			**Weighted Average**
		Motorways	**A roads**	**Other Rds**	**Motorways**	**A roads**	**Other Rds**	**A roads**	**Other Rds**	**Motorways**	**A roads**	**Other Rds**	
Congestion*	1	0.0	1.4	14.2	0.0	1.0	2.6	0.6	2.6	0.0	0.4	0.2	**1.3**
	2	0.0	4.8	30.8	0.0	3.4	10.2	2.0	9.9	0.0	1.4	1.5	**3.2**
	3	0.7	24.8	56.5	1.2	26.9	23.2	12.6	21.0	1.7	3.9	7.9	**10.7**
	4	16.5	114.0	133.3	21.8	97.3	94.3	45.3	90.7	21.5	47.0	30.6	**63.3**
	5	0.0	293.4	253.3	72.5	249.8	298.1	87.1	257.8	93.9	136.7	175.2	**213.2**
	Average	**0.4**	**100.2**	**62.6**	**3.1**	**46.0**	**32.4**	**18.3**	**13.6**	**2.0**	**3.1**	**4.1**	**15.8**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	**1.9**
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	**0.7**
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	**-4.5**
Total		**-3.2**	**99.9**	**61.2**	**-0.5**	**45.9**	**31.9**	**18.5**	**13.4**	**-1.8**	**0.5**	**1.6**	**14.1**

2025 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	1	0.0	1.7	14.4	0.0	1.1	2.7	0.7	2.7	0.0	0.5	0.2	**1.4**
	2	0.0	5.2	32.9	0.0	3.6	10.6	2.2	10.5	0.0	1.5	1.9	**3.7**
Congestion*	3	1.9	27.4	61.7	2.6	28.8	25.1	13.9	22.6	2.7	4.2	8.4	**11.3**
	4	20.8	116.0	145.6	23.9	107.2	105.7	47.5	88.0	22.8	48.2	30.7	**62.8**
	5	0.0	400.7	305.2	81.5	296.3	369.9	101.9	300.4	98.7	156.1	230.5	**262.6**
	Average	**1.1**	**141.2**	**76.3**	**5.5**	**56.9**	**42.8**	**23.1**	**16.1**	**3.7**	**4.0**	**5.7**	**20.5**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	**2.0**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	**0.7**
Indirect Taxation	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	**-3.9**
Total		**-1.8**	**141.8**	**76.0**	**2.7**	**57.8**	**43.4**	**24.3**	**17.0**	**0.5**	**2.1**	**3.9**	**19.5**

2030 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	1	0.0	1.8	16.6	0.0	1.1	3.0	0.7	2.9	0.0	0.6	0.3	**1.6**
	2	0.0	5.4	38.4	0.0	4.1	11.7	2.4	11.3	0.0	1.6	2.1	**4.2**
Congestion*	3	2.5	28.1	64.2	3.0	32.8	27.1	15.5	24.5	5.0	4.5	8.9	**12.7**
	4	22.4	122.3	156.3	27.7	114.7	114.2	51.9	94.3	25.8	52.1	31.6	**65.2**
	5	0.0	450.2	348.5	90.8	343.8	434.5	118.6	336.6	108.8	178.7	269.7	**299.0**
	Average	**1.9**	**172.2**	**90.3**	**7.6**	**69.0**	**51.7**	**28.0**	**18.3**	**6.3**	**5.0**	**7.1**	**25.0**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.1**
Accident	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	**2.2**
Local Air Quality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.2**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	**0.7**
Indirect Taxation	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	**-3.6**
Total		**-0.7**	**173.5**	**90.9**	**5.1**	**70.7**	**53.2**	**30.0**	**19.9**	**3.4**	**3.6**	**5.7**	**24.6**

2035 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	1	0.0	1.8	19.2	0.0	1.2	3.3	0.8	3.1	0.0	0.6	0.3	**1.7**
	2	0.0	5.8	42.4	0.1	4.4	12.6	2.5	12.1	0.0	1.8	2.3	**4.6**
Congestion*	3	3.5	30.5	71.1	4.5	35.3	29.0	17.1	26.7	8.6	5.0	10.1	**14.9**
	4	24.6	140.0	168.6	30.7	124.2	120.9	56.5	97.3	29.4	56.5	34.0	**67.9**
	5	0.0	543.1	402.9	97.5	425.6	504.8	138.5	386.7	120.7	201.6	307.5	**348.1**
	Average	**3.1**	**217.5**	**106.8**	**11.3**	**86.6**	**63.4**	**34.3**	**21.2**	**10.4**	**6.3**	**8.4**	**31.2**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.2**
Accident	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	**2.5**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	**0.2**
Greenhouse Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	**1.0**
Indirect Taxation	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	**-3.5**
Total		**1.0**	**219.7**	**108.3**	**9.2**	**89.1**	**65.7**	**37.0**	**23.7**	**8.0**	**5.3**	**7.6**	**31.6**

Table 4.1.7: Values of aspects in pedestrian environment (2010 values and 2010 prices)		
Scheme type	**Value p/km**	**Source**
Street lighting	3.8	Heuman (2005)
Kerb level	2.7	Heuman (2005)
Crowding	1.9	Heuman (2005)
Pavement evenness	0.9	Heuman (2005)
Information panels	0.9	Heuman (2005)
Benches	0.6	Heuman (2005)
Directional signage	0.6	Heuman (2005)

Table 4.1.6: Value of journey ambience benefit of cycle facilities relative to no facilities (2010 prices & 2010 values)		
Scheme type	**Value p/min**	**Source**
Off-road segregated cycle track	7.03	Hopkinson & Wardman (1996)
On-road segregated cycle lane	2.99	Hopkinson & Wardman (1996)
On-road non-segregated cycle lane	2.97	Wardman et al. (1997)
Wider lane	1.81	Hopkinson & Wardman (1996)
Shared bus lane	0.77	Hopkinson & Wardman (1996)
	pence	
Secure cycle parking facilities	98.14	Wardman et al. (2007)
Changing and shower facilities	20.82	Wardman et al. (2007)

	Annual average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005=100													
1998	91.1	89.9	90.3	90.5	91.0	91.5	91.3	90.8	91.2	91.6	91.6	91.7	91.9
1999	92.3	91.4	91.5	92.0	92.4	92.7	92.6	92.0	92.3	92.7	92.6	92.7	93.0
2000	93.1	92.1	92.4	92.6	92.9	93.2	93.3	92.8	92.8	93.6	93.5	93.7	93.7
2001	94.2	92.9	93.1	93.4	94.0	94.7	94.9	94.2	94.5	94.8	94.7	94.5	94.7
2002	95.4	94.4	94.5	94.9	95.3	95.5	95.5	95.2	95.5	95.7	95.9	95.9	96.3
2003	96.7	95.7	96.0	96.3	96.7	96.7	96.5	96.5	96.8	97.1	97.2	97.2	97.5
2004	98.0	97.0	97.2	97.4	97.8	98.1	98.1	97.8	98.1	98.2	98.4	98.6	99.1
2005	100.0	98.6	98.8	99.3	99.7	100.0	100.0	100.1	100.4	100.6	100.7	100.7	101.0
2006	102.3	100.5	100.9	101.1	101.7	102.2	102.5	102.5	102.9	103.0	103.2	103.4	104.0
2007	104.7	103.2	103.7	104.2	104.5	104.8	105.0	104.4	104.7	104.8	105.3	105.6	106.2
2008	108.5	105.5	106.3	106.7	107.6	108.3	109.0	109.0	109.7	110.3	110.0	109.9	109.5
2009	110.8	108.7	109.6	109.8	110.1	110.7	111.0	110.9	111.4	111.5	111.7	112.0	112.6
2010	114.5	112.4	112.9	113.5	114.2	114.4	114.6	114.3	114.9	114.9	115.2	115.6	116.8
2011	119.6	116.9	117.8	118.1	119.3	119.5	119.4	119.4	120.1	120.9	121.0	121.2	121.7
2012	123.0	121.1	121.8	122.2	122.9	122.8	122.3	122.5	123.1	123.5	124.2	124.4	125.0
2013	126.1	124.4	125.2	125.6	125.9	126.1	125.9	125.8	126.4	126.8	126.9	127.0	127.5
2014	..	126.7	127.4	127.7	128.1	128.0	128.3	127.8	..	..	..	..	..
1.027071 2015		130.1299											

2010	1
2011	1.040036
2012	1.077402
2013	1.106762
2014	1.127224
2015	1.157739

Active Mode Appraisal Toolkit Spreadsheet 2

CENTRAL

Department for Transport

Active Mode Appraisal Toolkit

Last updated: March 2015

Queries and comments on this toolkit should be referred to:
Local Economics
Department for Transport
Zone 2/15 Great Minster House
33 Horseferry Road
London
SW1P 4DR

Email: walking.cycling@dft.gsi.gov.uk

Please answer the following questions with your best estimates to obtain a benefit cost ratio of your scheme.
By varying your answers you can test the importance of the input data on the overall value for money of your scheme.
The answers provided are for the example case study from Appendix B of WebTAG unit A5.1. This case study provides further helpful commentary that users of this tool might want to refer to.

Scheme details

When would the scheme be likely to open? 2017
What is the last year of initial funding? 2019
Decay rate (starting from last year of funding) 20.0%

WebTAG A5.1 explains - the impacts especially of revenue funded initatives such as cycle training or personalised travel planning are likely to diminish year by year following the investment. For the case study here this is likely to be conservative.

Appraisal period (should be the expected asset life, maximum 60) 20 yrs

Costs

Please provide estimates for upfront costs as well as future maintenance costs in the table below. Please enter the full costs of the scheme in the first column and any private sector contribution to those costs in the second. All other funds are assumed to be from local or central Government.

Please use a constant price base and specify the year here 2016
Please refer to WebTAG unit A1.2 to set Optimism Bias 15%

Do Nothing scenario

This is what is most likely to happen if the scheme is not implemented.
The data could for example be from automatic or manual traffic counts.

Number of cycling journeys 0 per day, average length 3.9 km and speed 20 kph
Number of walking journey 0 per day, average length 1.15 km and speed 5 kph
Ideally the data is taken from 'average weekday' in spring or autumn to avoid seasonal bias.
A return trip involves two journeys and would need to be counted as such.
To identify how many individual users this implies, please estimate the share of journeys that form part of a return trip here: 90%

Do Something scenario

Once your scheme has reached it's full impact (ignoring any initial build up here), how would these figures have changed (due to the intervention)?
Number of cycling journeys 3,297 per day, e.g. from automatic or manual cycle count.
Number of walking journey 4,805 per day
For simplicity it is assumed that the length and speed of journeys is largely unaffected by the intervention.

Journey Quality impacts

WebTAG units A5.1 and A4.1 provides guidance, the Databook provides suggested values that users might place on the improvemed infrastructure your scheme provides. The values are shown in the WebTAG journey quality tab. The improvement over the 'do nothing' scenario should be valued, rather than the absolut level.

For cyclists 1.76 pence per minute 0 pence per trip (e.g. shower facilities)
For pedestrians 2.61 pence per km
As demonstrated in the case study, these values should take account of the proportion of the average journey that would be made on the improved infrastructure.

Decongestion benefits

What proportion of new users would most likely be using a car in the do nothing scenario?
for cyclists 41.0%
for pedestrians 41.0%

Which area type from the drop down is most similar to the area your scheme is located in?
Weighted Average

Additional information

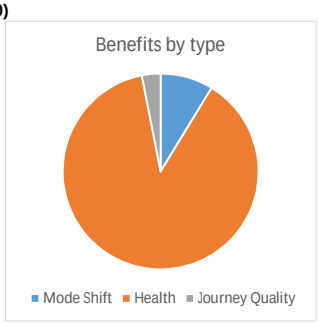
Background Growth
If you have an estimate of the growth in background use (in both scenarios), please set
the annual growth rate 0.25%
the period over which this applies 20 years

Number of days in the year that you would expect the above usage figures 220 days p.a.
In the case study this is assumed to the typical number of working days - but might more appropriately be set to the number of weekdays.

Results

Analysis of Monetised Costs and Benefits (in £'000)

Noise	8.46
Local Air Quality	0.00
Greenhouse Gases	57.50
Journey Quality	421.75
Physical Acitivity (incl. absenteeism)	12085.98
Accidents	151.45
Decongestion	1324.34
Indirect taxation	-351.21
Private contribution	-471.42
Present Value of Benefits (PVB)	13226.85
Present Value of Costs (PVC)	1399.48
Benefit Cost Ratio (BCR)	**9.45**



Year	Total scheme costs '000£	3rd party contributions '000£
2009		
2010	0	
2011	0	
2012	0	
2013	0	
2014	0	
2015	0	
2016	0	
2017	703	204
2018	723	224
2019	664	174
2020	0	
2021	0	
2022	0	
2023	0	
2024	0	
2025	0	
2026	0	
2027	0	
2028	0	
2029	0	
2030		
2031		
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2068		
2069		
2070		

The case study in WebTAG unit A5.1 uses slightly different assumptions on the valuation of decongestion benefits which result in a higher estimated benefit there. This is due to the specfic nature of the case study and to fully replicate this approach here would have increased the complexity of this tool with no apparent benefit.

Discount rate			
first 30 years	3.50%		
next 30 years	3%		
Appraisal period [max 60]	20	years	
CPI 2010 to construction cost year	1.16		
Market price conversion	1.191		
Scheme opening year	2017		
Optimism Bias	15%		
Decay rate	20%		
Year decay starts	2019		

	Cyclists	Pedestrians	
No of trips without scheme	0	0	per day
No of trips with scheme	3,297	4,805	per day
trip length without scheme	3.9	1.15	km
trip length with scheme	3.9	1.15	km
Average Speed on route	20	5	km/h
Exogenous growth in use	0.25%	per annum	
period over which growth maintained	20	years	
Journey ambience	1.76	2.61	p/minute for cyclists, p/km for walking
Journey ambience - per trip - without	0.0	pence (e.g. secure cycle storage)	
Journey ambience - per trip - with scheme	0.0	pence (e.g. secure cycle storage)	
number of (working) days cycled per year	220	days	
Share of new users who would have driven a	0.41	0.41	
Share of trips that are part of return journeys	90%		
Ramp up of health benefits	5	years	
New users who are already active	0%	0%	

Area type	Weighted Average					
	2010	2015	2020	2025	2030	2035
Decongestion	11.5	12.3	15.8	20.5	25	31.2
Infrastructure	0.1	0.1	0.1	0.1	0.1	0.2
Accident	1.6	1.7	1.9	2	2.2	2.5
Local Air Quality	0.1	0.1	0	0	0	0
Noise	0.1	0.1	0.1	0.1	0.2	0.2
Greenhouse Gases	0.9	0.8	0.7	0.7	0.7	1
Indirect Taxation	-5.1	-5	-4.5	-3.9	-3.6	-3.5

Costs

Costs entered in 2016 prices

Year	Total Scheme costs '000£	Cost born by third parties, '000£
2009	0	0
2010	0	0
2011	0	0
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016	0	0
2017	703	204
2018	723	224
2019	664	174
2020	0	0
2021	0	0
2022	0	0
2023	0	0
2024	0	0
2025	0	0
2026	0	0
2027	0	0
2028	0	0
2029	0	0
2030	0	0
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2034	0	0
2035	0	0
2036	0	0
2037	0	0
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2041	0	0
2042	0	0
2043	0	0
2044	0	0
2045	0	0
2046	0	0
2047	0	0
2048	0	0
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2050	0	0
2051	0	0
2052	0	0
2053	0	0
2054	0	0
2055	0	0
2056	0	0
2057	0	0
2058	0	0
2059	0	0
2060	0	0
2061	0	0
2062	0	0
2063	0	0
2064	0	0
2065	0	0
2066	0	0
2067	0	0
2068	0	0
2069	0	0
2070	0	0

Congestion beenfit	1324.34			
Infrastructure	8.06	Mode Shift	1198.61	8.7%
Accident	151.45	Health	12085.98	88.2%
Local Air Quality	0.00	Journey Qu	421.75	3.1%
Noise	8.46			
Greenhouse Gases	57.50			
Reduced risk of premature death	10988.61			
Absenteeism	1097.37			
Journey Ambience	421.75			
PAYD	171.12			
Indirect Taxation	-351.21			
Government	1407.55			
Private contribution	471.42			
PVB	13397.97			
PVC	1399.48			
BCR	**9.57**			

In £'000

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Discounting to 2010		0.871442	0.842	0.814	0.78599	0.759	0.734	0.709	0.685	0.662	0.639	0.618	0.597	0.577	0.557	0.538	0.52	0.503	0.486	0.469	0.453	0.438	0.423	0.409	0.395	0.382	0.369	0.356	0.344	0.333
Appraisal		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
GDP per capita v 2010		1.030305	1.047	1.068	1.08914	1.11	1.135	1.16	1.182	1.204	1.227	1.25	1.275	1.301	1.328	1.355	1.384	1.413	1.441	1.471	1.501	1.53	1.562	1.594	1.628	1.662	1.697	1.734	1.773	1.812
Background user growth		1	1	1	1	1.003	1.005	1.008	1.01	1.013	1.015	1.018	1.02	1.023	1.025	1.028	1.03	1.033	1.036	1.038	1.041	1.043	1.046	1.049	1.051	1.051	1.051	1.051	1.051	1.051
Decay		1	1	1	1	1	1	0.8	0.64	0.512	0.41	0.328	0.262	0.21	0.168	0.134	0.107	0.086	0.069	0.055	0.044	0.035	0.028	0.023	0.018	0.014	0.012	0.009	0.007	0.006
Build up of Health benefit		0	0	0	0.2	0.4	0.6	0.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decongestion																														
Car km reduction ('000)		0	0	0	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658
Congestion beenfit	1324.34	0.00	0.00	0.00	177.20	180.45	183.76	149.71	122.21	99.76	81.43	66.47	54.26	43.75	35.27	28.44	22.93	18.49	14.97	12.13	9.82	7.96	6.45	4.99	3.87	0.00	0.00	0.00	0.00	0.00
Infrastructure	8.06	0.00	0.00	0.00	1.30	1.26	1.22	0.95	0.73	0.57	0.44	0.34	0.26	0.21	0.16	0.12	0.10	0.07	0.07	0.06	0.05	0.05	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00
Accident	151.45	0.00	0.00	0.00	23.17	22.94	22.72	18.00	14.09	11.03	8.64	6.76	5.29	4.18	3.30	2.61	2.06	1.63	1.29	1.03	0.82	0.65	0.52	0.40	0.31	0.00	0.00	0.00	0.00	0.00
Local Air Quality	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Noise	8.46	0.00	0.00	0.00	1.30	1.26	1.22	0.95	0.73	0.57	0.44	0.34	0.26	0.24	0.21	0.19	0.17	0.15	0.11	0.09	0.07	0.05	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00
Greenhouse Gases	57.50	0.00	0.00	0.00	9.88	9.32	8.79	6.63	5.14	3.98	3.09	2.39	1.85	1.44	1.11	0.86	0.67	0.52	0.43	0.36	0.30	0.25	0.21	0.16	0.12	0.00	0.00	0.00	0.00	0.00
Indirect Taxation	-351.21	0.00	0.00	0.00	-62.48	-59.25	-56.20	-42.64	-32.11	-24.18	-18.21	-13.71	-10.32	-7.87	-6.00	-4.58	-3.49	-2.66	-2.05	-1.58	-1.22	-0.94	-0.72	-0.56	-0.43	0.00	0.00	0.00	0.00	0.00
Health																														
Reduced risk of premature deatl	10988.61	0.00	0.00	0.00	471.73	931.21	#####	#####	#####	#####	898.42	709.41	560.80	443.40	350.63	277.32	219.38	173.57	137.21	108.49	85.79	67.78	53.61	42.41	33.55	0.00	0.00	0.00	0.00	0.00
Absenteeism	1097.37	0.00	0.00	0.00	47.11	92.99	138.13	145.92	143.96	113.64	89.72	70.84	56.00	44.28	35.02	27.69	21.91	17.33	13.70	10.83	8.57	6.77	5.35	4.24	3.35	0.00	0.00	0.00	0.00	0.00
Journey Ambience																														
JA existing users (no decay)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JA new users (decay)	421.75	0.00	0.00	0.00	63.93	63.10	62.49	49.51	39.07	30.84	24.35	19.23	15.20	12.02	9.50	7.52	5.95	4.70	3.72	2.94	2.33	1.84	1.45	1.15	0.91	0.00	0.00	0.00	0.00	0.00
Costs																														
Government	1,407.55	0.00	0.00	0.00	488.23	474.20	445.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Private contribution	471.42	0	0	0	164.996	175	131.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077
0.321	0.31	0.3	0.29	0.28	0.272	0.264	0.256	0.249	0.242	0.235	0.228	0.221	0.215	0.208	0.202	0.196	0.191	0.185	0.18	0.175	0.169	0.164	0.16	0.155	0.151	0.146	0.142	0.138	0.134	0.13	0.126	0.122	0.119	0.115
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.852	1.893	1.935	1.978	2.021	2.064	2.109	2.154	2.2	2.246	2.293	2.341	2.39	2.44	2.491	2.544	2.598	2.655	2.714	2.774	2.836	2.898	2.963	3.028	3.095	3.163	3.232	3.303	3.376	3.449	3.524	3.601	3.679	3.759	3.84
1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
0.005	0.004	0.003	0.002	0.002	0.002	0.001	1E-03	8E-04	6E-04	5E-04	4E-04	3E-04	3E-04	2E-04	2E-04	1E-04	1E-04	9E-05	7E-05	5E-05	4E-05	3E-05	3E-05	2E-05	2E-05	1E-05	1E-05	9E-06	7E-06	6E-06	5E-06	4E-06	3E-06	2E-06
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-403.4
1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658	1658
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sheme parametres	Cyclists	Pedestrians	
New distance	3.9	1.15	
new users	3297	4805	
Distance per year	2,828,826	1,215,665	total additional km
reduction in car use	1,159,819	498,423	avoided carkm
	1,658,241	**avoided Vkm**	

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Decongest	11.5	11.7	11.8	12.0	12.1	12.3	12.9	13.6	14.3	15.0	15.8	16.6	17.5	18.5	19.5	20.5	21.3	22.2	23.1	24.0	25.0	26.1	27.3	28.6	29.8	31.2	31.2	31.2	31.2	31.2	31.2
Infrastructu	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Accident	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
Local Air C	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Greenhous	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Indirect Ta	-5.1	-5.1	-5.1	-5.0	-5.0	-5.0	-4.9	-4.8	-4.7	-4.6	-4.5	-4.4	-4.2	-4.1	-4.0	-3.9	-3.8	-3.8	-3.7	-3.7	-3.6	-3.6	-3.6	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5

2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075
31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5

Sheme parametres	Cyclists	Pedestrians
DN distance	3.9	1.15
DS distance	3.9	1.15
Difference	0	0
Speed	20	5
minutes per day	21	25
per weekday	21.27	
per day over 7 days		15.12
new users	1813.4	2642.8
existing users	0.0	0.0
% of weekdays cycled	1	
% of 7 days walked		0.60274

Reference values in HEAT		
min (per weekday/per day)	36	21.5
Relative Risk (HEAT)	0.28	0.22
England 7 Wales Mortality ri	0.00235	0.00235
Value of Life	1,653,687	

Impact on New users		
New users are already activ	0	0
exp. deaths among new use	4.2613725	6.210463
Relative Risk DS	0.17	0.15475
Lives saved DS	0.7050635	0.961069
Value (£ per year)	**£1,165,954**	########

Impact on existing users (if route distance changed)		
difference in minutes	0	0
difference relative risk	0.000	0.000
Deaths amongst existing us	0.000	0.000
Lives saved DS	0.0000	0.0000
Value (£ per year)	**£0**	**£0**

Net Impact DS	**£1,165,954**	########	**per annum**

Sheme parametres	Cyclists	Pedestrians
DN distance	3.9	1.15
DS distance	3.9	1.15
difference	0	0
speed	20	5
DS time/km	21.27	1.15
over a year	4680.00	253
new users	1813.4	4805
exising users	0.0	0
Ambience p/min	1.76	
Ambience p/km		2.61
ambience per trip DN	0	
ambience per trip DN	0	

Impact on New users		
En route	£74,681.01	£15,864.43
Per Trip	0	

Impact on existing users		
En route	£0.00	£0
Per Trip	0	

Net Impact DS		
existing users	**£0.00**	**£ per year in 2010 values**
new users	**£74,681.01**	**£ per year in 2010 values**

				compared to 30 Min
Newcyclist	1813.35	21	minutes per weekday	0.71
New [pede	2642.75	25	minutes per weekday	0.84

average short-term sick leave absence in UK	6.46	
30 Minutes per weekday result in a reduction in sick day	6%	
average reduction in short-term sick leave per cyclist	0.27484364	
average reduction in short-term sick leave per walker	0.32417455	
	1355.10	days reduced absenteesim
VoT per hour average business	27.07	WebTAG
Output lost from day leave	£203.05	over 7.5 hours
increased output from reduced absenteeism	**£275,152**	per year

Latest version of WebTAG databook used May 2014

Annual Parameters

Year	GDP deflator1	Real GDP2			Population3			Households4			Average GDP per person			Average GDP per household			Work & Non-Work VoT			
	CPI-based (2010 = 100)	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1996 = 100	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1996 = 100	Work VoT Growth (% pa)	Non-Work VoT Growth (% pa)	Work Index 2002 = 100	Non-work Index 2002 = 100
1990	61.43	934,589	-	100.00	57,238	-	100.00	-	-	-	16,328	-	100.00	-	-	-	-	-	-	-
1991	65.55	922,510	-1.29	98.71	57,439	0.35	100.35	-	-	-	16,061	-1.64	98.36	-	-	-	-	-	-	-
1992	67.46	934,454	1.29	99.99	57,585	0.25	100.61	-	-	-	16,228	1.04	99.38	-	-	-	-	-	-	-
1993	68.73	967,071	3.49	103.48	57,714	0.22	100.83	-	-	-	16,756	3.26	102.62	-	-	-	-	-	-	-
1994	69.53	1,014,974	4.95	108.60	57,862	0.26	101.09	-	-	-	17,541	4.68	107.43	-	-	-	-	-	-	-
1995	71.20	1,050,837	3.53	112.44	58,025	0.28	101.38	-	-	-	18,110	3.24	110.91	-	-	-	-	-	-	-
1996	73.19	1,087,525	3.49	116.36	58,164	0.24	101.62	23,738	-	100.00	18,697	3.24	114.51	45,814	-	100.00	-	-	-	-
1997	74.49	1,134,837	4.35	121.43	58,314	0.26	101.88	23,865	0.54	100.54	19,461	4.08	119.18	47,552	3.80	103.80	-	-	-	-
1998	75.91	1,175,317	3.57	125.76	58,475	0.28	102.16	24,036	0.72	101.26	20,100	3.28	123.10	48,898	2.83	106.73	-	-	-	-
1999	77.56	1,209,852	2.94	129.45	58,684	0.36	102.53	24,209	0.72	101.98	20,616	2.57	126.26	49,975	2.20	109.08	-	-	-	-
2000	78.18	1,262,629	4.36	135.10	58,886	0.34	102.88	24,396	0.77	102.77	21,442	4.00	131.32	51,756	3.56	112.97	-	-	-	-
2001	79.96	1,290,216	2.18	138.05	59,113	0.39	103.28	24,535	0.57	103.36	21,826	1.79	133.67	52,587	1.61	114.78	-	-	-	-
2002	81.94	1,319,829	2.30	141.22	59,366	0.43	103.72	24,776	0.98	104.37	22,232	1.86	136.16	53,270	1.30	116.28	-	-	100.00	100.00
2003	83.71	1,371,948	3.95	146.80	59,637	0.46	104.19	24,878	0.41	104.80	23,005	3.48	140.89	55,147	3.52	120.37	3.48	3.48	103.48	103.48
2004	85.69	1,415,482	3.17	151.46	59,950	0.53	104.74	24,936	0.23	105.05	23,611	2.63	144.60	56,765	2.93	123.90	2.63	2.63	106.20	106.20
2005	87.37	1,461,270	3.23	156.35	60,413	0.77	105.55	25,130	0.78	105.86	24,188	2.44	148.14	58,148	2.44	126.92	2.44	2.44	108.80	108.80
2006	89.87	1,501,528	2.76	160.66	60,827	0.68	106.27	25,263	0.53	106.42	24,685	2.06	151.18	59,436	2.21	129.73	2.06	2.06	111.03	111.03
2007	91.94	1,552,989	3.43	166.17	61,319	0.81	107.13	25,457	0.77	107.24	25,326	2.60	155.11	61,004	2.64	133.16	2.60	2.60	113.92	113.92
2008	94.89	1,541,039	-0.77	164.89	61,824	0.82	108.01	25,687	0.90	108.21	24,926	-1.58	152.66	59,993	-1.66	130.95	-1.58	-1.58	112.12	112.12
2009	96.99	1,461,361	-5.17	156.36	62,261	0.71	108.78	25,830	0.56	108.81	23,472	-5.84	143.75	56,576	-5.70	123.49	-5.84	-5.84	105.58	105.58
2010	100.00	1,485,616	1.66	158.96	62,760	0.80	109.65	26,006	0.68	109.55	23,672	0.85	144.97	57,126	0.97	124.69	0.85	0.85	106.47	106.47
2011	102.31	1,502,216	1.12	160.74	63,285	0.84	110.57	26,135	0.50	110.10	23,737	0.28	145.38	57,479	0.62	125.46	0.28	0.28	106.77	106.77
2012	104.06	1,506,388	0.28	161.18	63,705	0.66	111.30	26,355	0.84	111.02	23,646	-0.38	144.82	57,158	-0.56	124.76	-0.38	-0.38	106.36	106.36
2013	105.73	1,531,428	1.66	163.86	-	0.59	111.95	26,414	0.22	111.27	-	1.07	146.36	57,978	1.44	126.55	1.07	1.07	107.50	107.50
2014	108.16	-	2.70	168.29	-	0.64	112.67	-	1.07	112.46	-	2.05	149.37	-	1.62	128.60	2.05	2.05	109.70	109.70
2015	109.89	-	2.30	172.16	-	0.62	113.37	-	1.06	113.65	-	1.67	151.86	-	1.23	130.18	1.67	1.67	111.53	111.53
2016	111.87	-	2.60	176.63	-	0.64	114.09	-	1.05	114.84	-	1.95	154.82	-	1.54	132.18	1.95	1.95	113.71	113.71
2017	113.99	-	2.60	181.22	-	0.60	114.77	-	1.03	116.02	-	1.99	157.90	-	1.55	134.23	1.99	1.99	115.97	115.97
2018	116.27	-	2.50	185.76	-	0.59	115.45	-	1.02	117.21	-	1.90	160.90	-	1.46	136.19	1.90	1.90	118.17	118.17
2019	118.60	-	2.80	190.96	-	0.55	116.09	-	0.98	118.36	-	2.23	164.49	-	1.80	138.65	2.23	2.23	120.81	120.81
2020	121.09	-	2.80	196.30	-	0.54	116.72	-	0.97	119.51	-	2.24	168.19	-	1.81	141.16	2.24	2.24	123.52	123.52
2021	123.75	-	2.40	201.01	-	0.53	117.34	-	0.96	120.66	-	1.86	171.31	-	1.43	143.17	1.86	1.86	125.82	125.82
2022	126.48	-	2.40	205.84	-	0.52	117.95	-	0.95	121.81	-	1.87	174.52	-	1.43	145.22	1.87	1.87	128.18	128.18
2023	129.26	-	2.40	210.78	-	0.50	118.54	-	0.94	122.95	-	1.89	177.81	-	1.44	147.32	1.89	1.89	130.59	130.59
2024	132.10	-	2.40	215.84	-	0.49	119.12	-	0.88	124.04	-	1.90	181.19	-	1.50	149.54	1.90	1.90	133.08	133.08
2025	135.01	-	2.50	221.23	-	0.47	119.68	-	0.88	125.13	-	2.02	184.85	-	1.61	151.95	2.02	2.02	135.76	135.76
2026	137.98	-	2.50	226.76	-	0.46	120.23	-	0.87	126.21	-	2.04	188.61	-	1.62	154.40	2.04	2.04	138.53	138.53
2027	141.01	-	2.50	232.43	-	0.44	120.75	-	0.86	127.30	-	2.05	192.49	-	1.63	156.91	2.05	2.05	141.37	141.37
2028	144.12	-	2.50	238.24	-	0.42	121.26	-	0.85	128.38	-	2.07	196.47	-	1.63	159.48	2.07	2.07	144.30	144.30
2029	147.29	-	2.50	244.20	-	0.40	121.75	-	0.78	129.38	-	2.09	200.57	-	1.71	162.20	2.09	2.09	147.31	147.31
2030	150.53	-	2.50	250.31	-	0.39	122.22	-	0.77	130.38	-	2.10	204.79	-	1.72	164.99	2.10	2.10	150.41	150.41
2031	153.84	-	2.40	256.31	-	0.37	122.68	-	0.76	131.37	-	2.02	208.93	-	1.62	167.67	2.02	2.02	153.45	153.45
2032	157.22	-	2.40	262.46	-	0.36	123.11	-	0.76	132.37	-	2.04	213.19	-	1.63	170.40	2.04	2.04	156.57	156.57
2033	160.68	-	2.40	268.76	-	0.34	123.54	-	0.75	133.37	-	2.05	217.56	-	1.63	173.18	2.05	2.05	159.79	159.79
2034	164.22	-	2.30	274.94	-	0.33	123.94	-	0.33	133.81	-	1.96	221.83	-	1.96	176.58	1.96	1.96	162.92	162.92
2035	167.83	-	2.40	281.54	-	0.32	124.34	-	0.32	134.24	-	2.07	226.43	-	2.07	180.24	2.07	2.07	166.30	166.30
2036	171.52	-	2.40	288.30	-	0.31	124.73	-	0.31	134.65	-	2.08	231.15	-	2.08	184.00	2.08	2.08	169.77	169.77
2037	175.30	-	2.40	295.22	-	0.30	125.10	-	0.30	135.06	-	2.09	235.98	-	2.09	187.85	2.09	2.09	173.31	173.31
2038	179.15	-	2.40	302.30	-	0.29	125.47	-	0.29	135.45	-	2.10	240.95	-	2.10	191.80	2.10	2.10	176.96	176.96
2039	183.09	-	2.40	309.56	-	0.29	125.83	-	0.29	135.85	-	2.10	246.01	-	2.10	195.83	2.10	2.10	180.68	180.68
2040	187.12	-	2.50	317.30	-	0.29	126.20	-	0.29	136.24	-	2.20	251.44	-	2.20	200.15	2.20	2.20	184.66	184.66
2041	191.24	-	2.50	325.23	-	0.29	126.56	-	0.29	136.63	-	2.20	256.98	-	2.20	204.56	2.20	2.20	188.73	188.73
2042	195.45	-	2.50	333.36	-	0.27	126.91	-	0.27	137.01	-	2.22	262.68	-	2.22	209.10	2.22	2.22	192.93	192.93
2043	199.75	-	2.50	341.70	-	0.27	127.25	-	0.27	137.38	-	2.22	268.52	-	2.22	213.75	2.22	2.22	197.21	197.21
2044	204.14	-	2.50	350.24	-	0.27	127.60	-	0.27	137.75	-	2.22	274.49	-	2.22	218.49	2.22	2.22	201.59	201.59
2045	208.63	-	2.50	358.99	-	0.27	127.95	-	0.27	138.13	-	2.22	280.58	-	2.22	223.35	2.22	2.22	206.07	206.07
2046	213.22	-	2.50	367.97	-	0.27	128.29	-	0.27	138.51	-	2.22	286.82	-	2.22	228.31	2.22	2.22	210.65	210.65
2047	217.91	-	2.40	376.80	-	0.24	128.61	-	0.24	138.84	-	2.15	292.98	-	2.15	233.22	2.15	2.15	215.18	215.18
2048	222.71	-	2.40	385.84	-	0.24	128.92	-	0.24	139.18	-	2.15	299.28	-	2.15	238.24	2.15	2.15	219.81	219.81
2049	227.60	-	2.40	395.10	-	0.24	129.24	-	0.24	139.52	-	2.15	305.72	-	2.15	243.36	2.15	2.15	224.53	224.53
2050	232.61	-	2.40	404.59	-	0.24	129.55	-	0.24	139.86	-	2.15	312.29	-	2.15	248.59	2.15	2.15	229.36	229.36
2051	237.73	-	2.40	414.30	-	0.24	129.87	-	0.24	140.21	-	2.15	319.01	-	2.15	253.94	2.15	2.15	234.29	234.29
2052	242.96	-	2.30	423.83	-	0.21	130.14	-	0.21	140.50	-	2.09	325.67	-	2.09	259.24	2.09	2.09	239.18	239.18
2053	248.30	-	2.30	433.57	-	0.21	130.41	-	0.21	140.79	-	2.09	332.46	-	2.09	264.64	2.09	2.09	244.17	244.17
2054	253.77	-	2.30	443.55	-	0.21	130.69	-	0.21	141.09	-	2.09	339.40	-	2.09	270.17	2.09	2.09	249.27	249.27
2055	259.35	-	2.30	453.75	-	0.21	130.96	-	0.21	141.38	-	2.09	346.48	-	2.09	275.80	2.09	2.09	254.47	254.47
2056	265.06	-	2.30	464.18	-	0.21	131.23	-	0.21	141.68	-	2.09	353.71	-	2.09	281.56	2.09	2.09	259.78	259.78
2057	270.89	-	2.30	474.86	-	0.18	131.48	-	0.18	141.94	-	2.11	361.18	-	2.11	287.50	2.11	2.11	265.27	265.27
2058	276.85	-	2.30	485.78	-	0.18	131.72	-	0.18	142.20	-	2.11	368.81	-	2.11	293.58	2.11	2.11	270.87	270.87
2059	282.94	-	2.30	496.95	-	0.18	131.96	-	0.18	142.46	-	2.11	376.60	-	2.11	299.78	2.11	2.11	276.59	276.59
2060	289.16	-	2.40	508.88	-	0.18	132.20	-	0.18	142.72	-	2.21	384.93	-	2.21	306.41	2.21	2.21	282.71	282.71
2061	295.52	-	2.40	521.10	-	0.18	132.44	-	0.18	142.98	-	2.21	393.45	-	2.21	313.19	2.21	2.21	288.96	288.96
2062	302.03	-	2.40	533.60	-	0.18	132.68	-	0.18	143.24	-	2.22	402.17	-	2.22	320.14	2.22	2.22	295.37	295.37
2063	308.67	-	2.40	546.41	-	0.18	132.92	-	0.18	143.50	-	2.21	411.08	-	2.21	327.23	2.21	2.21	301.91	301.91
2064	315.46	-	2.40	559.52	-	0.18	133.16	-	0.18	143.76	-	2.21	420.18	-	2.21	334.47	2.21	2.21	308.60	308.60
2065	322.40	-	2.40	572.95	-	0.18	133.40	-	0.18	144.02	-	2.21	429.48	-	2.21	341.88	2.21	2.21	315.43	315.43
2066	329.49	-	2.40	586.70	-	0.18	133.65	-	0.18	144.28	-	2.21	438.99	-	2.21	349.45	2.21	2.21	322.41	322.41
2067	336.74	-	2.40	600.78	-	0.20	133.91	-	0.20	144.57	-	2.20	448.63	-	2.20	357.12	2.20	2.20	329.50	329.50
2068	344.15	-	2.40	615.20	-	0.20	134.18	-	0.20	144.86	-	2.20	458.49	-	2.20	364.96	2.20	2.20	336.73	336.73
2069	351.72	-	2.40	629.97	-	0.20	134.45	-	0.20	145.15	-	2.20	468.56	-	2.20	372.98	2.20	2.20	344.13	344.13
2070	359.46	-	2.40	645.08	-	0.20	134.72	-	0.20	145.44	-	2.20	478.85	-	2.20	381.17	2.20	2.20	351.68	351.68
2071	367.37	-	2.40	660.57	-	0.20	134.99	-	0.20	145.73	-	2.20	489.36	-	2.20	389.54	2.20	2.20	359.41	359.41
2072	375.45	-	2.40	676.42	-	0.22	135.28	-	0.22	146.05	-	2.17	500.00	-	2.17	398.01	2.17	2.17	367.22	367.22
2073	383.71	-	2.40	692.65	-	0.22	135.58	-	0.22	146.37	-	2.17	510.88	-	2.17	406.67	2.17	2.17	375.21	375.21
2074	392.15	-	2.40	709.28	-	0.22	135.88	-	0.22	146.70	-	2.17	521.99	-	2.17	415.51	2.17	2.17	383.37	383.37
2075	400.78	-	2.40	726.30	-	0.22	136.18	-	0.22	147.02	-	2.17	533.34	-	2.17	424.55	2.17	2.17	391.71	391.71
2076	409.60	-	2.40	743.73	-	0.22	136.48	-	0.22	147.34	-	2.17	544.94	-	2.17	433.78	2.17	2.17	400.22	400.22
2077	418.61	-	2.40	761.58	-	0.23	136.79	-	0.23	147.68	-	2.17	556.74	-	2.17	443.17	2.17	2.17	408.89	408.89
2078	427.82	-	2.40	779.86	-	0.23	137.11	-	0.23	148.02	-	2.17	568.80	-	2.17	452.78	2.17	2.17	417.75	417.75
2079	437.23	-	2.40	798.58	-	0.23	137.42	-	0.23	148.36	-	2.17	581.12	-	2.17	462.58	2.17	2.17	426.80	426.80
2080	446.85	-	2.40	817.74	-	0.23	137.73	-	0.23	148.70	-	2.17	593.71	-	2.17	472.60	2.17	2.17	436.05	436.05
2081	456.68	-	2.40	837.37	-	0.23	138.05	-	0.23	149.04	-	2.17	606.57	-	2.17	482.84	2.17	2.17	445.49	445.49
2082	466.73	-	2.40	857.46	-	0.22	138.36	-	0.22	149.37	-	2.17	619.74	-	2.17	493.32	2.17	2.17	455.16	455.16
2083	476.99	-	2.40	878.04	-	0.22	138.67	-	0.22	149.71	-	2.17	633.19	-	2.17	504.03	2.17	2.17	465.04	465.04
2084	487.49	-	2.40	899.12	-	0.22	138.98	-	0.22	150.04	-	2.17	646.94	-	2.17	514.97	2.17	2.17	475.14	475.14
2085	498.21	-	2.40	920.70	-	0.22	139.29	-	0.22	150.38	-	2.17	660.98	-	2.17	526.15	2.17	2.17	485.45	485.45
2086	509.17	-	2.40	942.79	-	0.22	139.61	-	0.22	150.72	-	2.17	675.32	-	2.17	537.57	2.17	2.17	495.99	495.99
2087	520.37	-	2.40	965.42	-	0.22	139.91	-	0.22	151.05	-	2.17	690.01	-	2.17	549.26	2.17	2.17	506.77	506.77
2088	531.82	-	2.40	988.59	-	0.22	140.22	-	0.22	151.38	-	2.18	705.02	-	2.18	561.21	2.18	2.18	517.80	517.80
2089	543.52	-	2.40	1,012.32	-	0.22	140.53	-	0.22	151.71	-	2.18	720.36	-	2.18	573.42	2.18	2.18	529.06	529.06
2090	555.48	-	2.40	1,036.61	-	0.22	140.84	-	0.22	152.05	-	2.18	736.04	-	2.18	585.90	2.18	2.18	540.58	540.58
2091	567.70	-	2.40	1,061.49	-	0.22	141.15	-	0.22	152.38	-	2.18	752.05	-	2.18	598.64	2.18	2.18	552.34	552.34
2092	580.19	-	2.40	1,086.97	-	0.22	141.46	-	0.22	152.71	-	2.18	768.41	-	2.18	611.67	2.18	2.18	564.36	564.36
2093	592.95	-	2.40	1,113.05	-	0.22	141.77	-	0.22	153.06	-	2.17	785.09	-	2.17	624.95	2.17	2.17	576.61	576.61
2094	606.00	-	2.40	1,139.77	-	0.22	142.09	-	0.22	153.40	-	2.17	802.14	-	2.17	638.51	2.17	2.17	589.12	589.12
2095	619.33	-	2.40	1,167.12	-	0.22	142.41	-	0.22	153.74	-	2.17	819.55	-	2.17	652.37	2.17	2.17	601.91	601.91
2096	632.96	-	2.40	1,195.13	-	0.22	142.73	-	0.22	154.09	-	2.17	837.34	-	2.17	666.53	2.17	2.17	614.98	614.98
2097	646.88	-	2.40	1,223.81	-	0.22	143.05	-	0.22	154.44	-	2.17	855.51	-	2.17	681.00	2.17	2.17	628.33	628.33
2098	661.11	-	2.40	1,253.19	-	0.22	143.37	-	0.22	154.78	-	2.17	874.08	-	2.17	695.79	2.17	2.17	641.96	641.96
2099	675.66	-	2.40	1,283.26	-	0.22	143.69	-	0.22	155.13	-	2.17	893.06	-	2.17	710.89	2.17	2.17	655.90	655.90
2100	690.52	-	2.40	1,314.06	-	0.22	144.02	-	0.22	155.48	-	2.17	912.44	-	2.17	726.32	2.17	2.17	670.14	670.14

Table A 1.3.1: Values of Working (Employers' Business) Time by Mode (£ per hour, 2010 prices, 2010 values)			
Mode	**Resource Cost**	**Perceived Cost**	**Market Price**
Car driver	22.74	22.74	27.06
Car passenger	17.25	17.25	20.52
LGV (driver or passenger)	10.24	10.24	12.18
OGV (driver or passenger)	12.06	12.06	14.35
PSV driver	12.32	12.32	14.66
PSV passenger	13.97	13.97	16.63
Taxi driver	10.89	10.89	12.96
Taxi / Minicab passenger	21.96	21.96	26.13
Rail passenger	26.86	26.86	31.96
Underground passenger	22.08	22.08	26.28
Walker	17.54	17.54	20.88
Cyclist	17.47	17.47	20.78
Motorcyclist	19.42	19.42	23.11
Average of all working persons	22.75	22.75	27.07
Values of Non-Working Time by Trip Purpose (£ per hour, 2010 prices, 2010 values)			
Trip Purpose	**Resource Cost**	**Perceived Cost**	**Market Price**
Commuting	5.72	6.81	6.81
Other	5.08	6.04	6.04

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)												
	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
Congestion*	1	0.0	1.4	12.4	0.0	0.9	2.3	0.6	2.3	0.0	0.4	0.2	**1.2**
	2	0.0	4.4	25.6	0.0	3.0	9.2	1.8	8.7	0.0	1.3	1.4	**2.8**
	3	0.0	19.7	52.9	0.6	24.8	20.5	10.7	18.8	1.0	3.3	7.5	**9.9**
	4	13.8	131.8	145.9	25.2	132.2	148.8	45.5	130.1	18.3	49.2	39.1	**87.6**
	5	0.0	258.0	199.3	57.9	169.6	226.4	71.0	215.2	77.7	116.8	129.6	**155.0**
	Average	**0.1**	**67.1**	**46.4**	**2.8**	**34.2**	**23.8**	**13.2**	**10.8**	**1.1**	**2.2**	**2.7**	**11.5**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	0.0	0.7	0.7	**1.6**
Local Air Quality	All	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.9	1.0	1.2	0.9	0.9	1.0	0.8	0.9	0.9	0.8	0.8	**0.9**
Indirect Taxation	All	-5.3	-5.6	-7.1	-5.2	-5.2	-5.7	-4.8	-5.4	-5.3	-4.8	-4.7	**-5.1**
Total		**-3.8**	**66.1**	**44.1**	**-1.1**	**33.3**	**22.5**	**12.6**	**9.7**	**-3.2**	**-1.0**	**-0.3**	**9.2**

2015 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
Congestion*	1	0.0	1.4	13.1	0.0	0.9	2.4	0.6	2.4	0.0	0.4	0.2	**1.2**
	2	0.0	4.6	28.1	0.0	3.1	9.5	1.9	8.9	0.0	1.2	1.4	**2.9**
	3	0.1	22.8	54.1	0.6	24.7	21.2	10.9	19.1	0.7	3.5	7.2	**9.8**
	4	15.1	111.2	136.9	17.8	125.5	128.9	42.5	129.3	17.5	47.8	32.7	**78.3**
	5	0.0	237.2	211.7	62.0	204.9	249.1	73.9	228.0	74.8	124.6	139.2	**167.2**
	Average	**0.1**	**75.1**	**50.2**	**1.7**	**35.9**	**25.7**	**14.5**	**11.3**	**1.1**	**2.4**	**3.2**	**12.3**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.2	3.2	0.0	3.2	3.2	3.2	3.2	0.0	0.7	0.7	**1.7**
Local Air Quality	All	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.9	0.9	1.2	0.8	0.8	0.9	0.8	0.9	0.9	0.8	0.8	**0.8**
Indirect Taxation	All	-5.2	-5.4	-6.9	-5.0	-5.0	-5.6	-4.7	-5.3	-5.1	-4.7	-4.6	**-5.0**
Total		**-3.8**	**74.2**	**48.2**	**-2.2**	**35.3**	**24.6**	**14.2**	**10.5**	**-3.1**	**-0.7**	**0.3**	**10.1**

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
Congestion*	1	0.0	1.4	14.2	0.0	1.0	2.6	0.6	2.6	0.0	0.4	0.2	**1.3**
	2	0.0	4.8	30.8	0.0	3.4	10.2	2.0	9.9	0.0	1.4	1.5	**3.2**
	3	0.7	24.8	56.5	1.2	26.9	23.2	12.6	21.0	1.7	3.9	7.9	**10.7**
	4	16.5	114.0	133.3	21.8	97.3	94.3	45.3	90.7	21.5	47.0	30.6	**63.3**
	5	0.0	293.4	253.3	72.5	249.8	298.1	87.1	257.8	93.9	136.7	175.2	**213.2**
	Average	**0.4**	**100.2**	**62.6**	**3.1**	**46.0**	**32.4**	**18.3**	**13.6**	**2.0**	**3.1**	**4.1**	**15.8**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	**1.9**
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	**0.7**
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	**-4.5**
Total		**-3.2**	**99.9**	**61.2**	**-0.5**	**45.9**	**31.9**	**18.5**	**13.4**	**-1.8**	**0.5**	**1.6**	**14.1**

al External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	1	0.0	1.7	14.4	0.0	1.1	2.7	0.7	2.7	0.0	0.5	0.2	**1.4**
	2	0.0	5.2	32.9	0.0	3.6	10.6	2.2	10.5	0.0	1.5	1.9	**3.7**
	3	1.9	27.4	61.7	2.6	28.8	25.1	13.9	22.6	2.7	4.2	8.4	**11.3**
	4	20.8	116.0	145.6	23.9	107.2	105.7	47.5	88.0	22.8	48.2	30.7	**62.8**
	5	0.0	400.7	305.2	81.5	296.3	369.9	101.9	300.4	98.7	156.1	230.5	**262.6**
	Average	**1.1**	**141.2**	**76.3**	**5.5**	**56.9**	**42.8**	**23.1**	**16.1**	**3.7**	**4.0**	**5.7**	**20.5**
e	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	**2.0**
ality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.1**
Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	**0.7**
ıtion	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	**-3.9**
		-1.8	**141.8**	**76.0**	**2.7**	**57.8**	**43.4**	**24.3**	**17.0**	**0.5**	**2.1**	**3.9**	**19.5**

al External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	1	0.0	1.8	16.6	0.0	1.1	3.0	0.7	2.9	0.0	0.6	0.3	**1.6**
	2	0.0	5.4	38.4	0.0	4.1	11.7	2.4	11.3	0.0	1.6	2.1	**4.2**
	3	2.5	28.1	64.2	3.0	32.8	27.1	15.5	24.5	5.0	4.5	8.9	**12.7**
	4	22.4	122.3	156.3	27.7	114.7	114.2	51.9	94.3	25.8	52.1	31.6	**65.2**
	5	0.0	450.2	348.5	90.8	343.8	434.5	118.6	336.6	108.8	178.7	269.7	**299.0**
	Average	**1.9**	**172.2**	**90.3**	**7.6**	**69.0**	**51.7**	**28.0**	**18.3**	**6.3**	**5.0**	**7.1**	**25.0**
e	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.1**
	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	**2.2**
ality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.2**
Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	**0.7**
ıtion	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	**-3.6**
		-0.7	**173.5**	**90.9**	**5.1**	**70.7**	**53.2**	**30.0**	**19.9**	**3.4**	**3.6**	**5.7**	**24.6**

al External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	1	0.0	1.8	19.2	0.0	1.2	3.3	0.8	3.1	0.0	0.6	0.3	**1.7**
	2	0.0	5.8	42.4	0.1	4.4	12.6	2.5	12.1	0.0	1.8	2.3	**4.6**
	3	3.5	30.5	71.1	4.5	35.3	29.0	17.1	26.7	8.6	5.0	10.1	**14.9**
	4	24.6	140.0	168.6	30.7	124.2	120.9	56.5	97.3	29.4	56.5	34.0	**67.9**
	5	0.0	543.1	402.9	97.5	425.6	504.8	138.5	386.7	120.7	201.6	307.5	**348.1**
	Average	**3.1**	**217.5**	**106.8**	**11.3**	**86.6**	**63.4**	**34.3**	**21.2**	**10.4**	**6.3**	**8.4**	**31.2**
e	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.2**
	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	**2.5**
ality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	**0.2**
Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	**1.0**
ıtion	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	**-3.5**
		1.0	**219.7**	**108.3**	**9.2**	**89.1**	**65.7**	**37.0**	**23.7**	**8.0**	**5.3**	**7.6**	**31.6**

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)												
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.1	67.1	46.4	2.8	34.2	23.8	13.2	10.8	1.1	2.2	2.7	11.5
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	0.0	0.7	0.7	1.6
Local Air Quality	All	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.9	1.0	1.2	0.9	0.9	1.0	0.8	0.9	0.9	0.8	0.8	0.9
Indirect Taxation	All	-5.3	-5.6	-7.1	-5.2	-5.2	-5.7	-4.8	-5.4	-5.3	-4.8	-4.7	-5.1
Total		-3.8	66.1	44.1	-1.1	33.3	22.5	12.6	9.7	-3.2	-1.0	-0.3	9.2

2015 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.1	75.1	50.2	1.7	35.9	25.7	14.5	11.3	1.1	2.4	3.2	12.3
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.2	3.2	0.0	3.2	3.2	3.2	3.2	0.0	0.7	0.7	1.7
Local Air Quality	All	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.9	0.9	1.2	0.8	0.8	0.9	0.8	0.9	0.9	0.8	0.8	0.8
Indirect Taxation	All	-5.2	-5.4	-6.9	-5.0	-5.0	-5.6	-4.7	-5.3	-5.1	-4.7	-4.6	-5.0
Total		-3.8	74.2	48.2	-2.2	35.3	24.6	14.2	10.5	-3.1	-0.7	0.3	10.1

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.4	100.2	62.6	3.1	46.0	32.4	18.3	13.6	2.0	3.1	4.1	15.8
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	1.9
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	0.7
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	-4.5
Total		-3.2	99.9	61.2	-0.5	45.9	31.9	18.5	13.4	-1.8	0.5	1.6	14.1

2025 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	1.1	141.2	76.3	5.5	56.9	42.8	23.1	16.1	3.7	4.0	5.7	20.5
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	2.0
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	0.7
Indirect Taxation	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	-3.9
Total		-1.8	141.8	76.0	2.7	57.8	43.4	24.3	17.0	0.5	2.1	3.9	19.5

2030 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	1.9	172.2	90.3	7.6	69.0	51.7	28.0	18.3	6.3	5.0	7.1	25.0
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.1
Accident	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	2.2
Local Air Quality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	0.2
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.7
Indirect Taxation	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	-3.6
Total		-0.7	173.5	90.9	5.1	70.7	53.2	30.0	19.9	3.4	3.6	5.7	24.6

2035 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	3.1	217.5	106.8	11.3	86.6	63.4	34.3	21.2	10.4	6.3	8.4	31.2
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2
Accident	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	2.5
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	0.2
Greenhouse Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	1.0
Indirect Taxation	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	-3.5
Total		1.0	219.7	108.3	9.2	89.1	65.7	37.0	23.7	8.0	5.3	7.6	31.6

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010

Cost type	Congestion band	London	Inner and Outer Conurbations	Other Urban	Rural	Weighted Average
		Other Rds	Other Rds	Other Rds	Other Rds	
		1	2	3	4	5
Congestion 2010	**Average**	**46.4**	**23.8**	**10.8**	**2.7**	**11.5**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.0	3.0	3.0	0.7	**1.6**
Local Air Quality	All	0.3	0.1	0.1	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.2	1.0	0.9	0.8	**0.9**
Indirect Taxation	All	-7.1	-5.7	-5.4	-4.7	**-5.1**
Congestion 2015	**Average**	**50.2**	**25.7**	**11.3**	**3.2**	**12.3**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.2	3.2	3.2	0.7	**1.7**
Local Air Quality	All	0.2	0.1	0.1	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.2	0.9	0.9	0.8	**0.8**
Indirect Taxation	All	-6.9	-5.6	-5.3	-4.6	**-5.0**
Congestion 2020	**Average**	**62.6**	**32.4**	**13.6**	**4.1**	**15.8**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.5	3.5	3.5	0.8	**1.9**
Local Air Quality	All	0.1	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.0	0.8	0.8	0.7	**0.7**
Indirect Taxation	All	-6.3	-5.1	-4.8	-4.2	**-4.5**
Congestion 2025	**Average**	**76.3**	**42.8**	**16.1**	**5.7**	**20.5**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.8	3.8	3.8	0.9	**2.0**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.1	**0.1**
Greenhouse Gases	All	1.0	0.8	0.8	0.7	**0.7**
Indirect Taxation	All	-5.5	-4.4	-4.1	-3.6	**-3.9**
Congestion 2030	**Average**	**90.3**	**51.7**	**18.3**	**7.1**	**25.0**
Infrastructure	All	0.2	0.2	0.2	0.2	**0.1**
Accident	All	4.2	4.2	4.2	1.0	**2.2**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.1	**0.2**
Greenhouse Gases	All	1.0	0.8	0.7	0.6	**0.7**
Indirect Taxation	All	-5.1	-4.0	-3.8	-3.3	**-3.6**
Congestion 2035	**Average**	**106.8**	**63.4**	**21.2**	**8.4**	**31.2**
Infrastructure	All	0.2	0.2	0.2	0.2	**0.2**
Accident	All	4.6	4.6	4.6	1.1	**2.5**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.2	**0.2**
Greenhouse Gases	All	1.4	1.1	1.1	0.9	**1.0**
Indirect Taxation	All	-5.0	-3.9	-3.7	-3.2	**-3.5**
Total		**108.3**	**65.7**	**23.7**	**7.6**	**31.6**

Inner and Outer Conurbations	**2**
London	1
Other Urban	3
Rural	4
Weighted Average	5

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
Cost type	**Congestion band**	**London**			**Inner and Outer Conurbations**			**Other Urban**		**Rural**			**Weighted Average**
		Motorways	**A roads**	**Other Rds**	**Motorways**	**A roads**	**Other Rds**	**A roads**	**Other Rds**	**Motorways**	**A roads**	**Other Rds**	
Congestion*	1	0.0	1.4	14.2	0.0	1.0	2.6	0.6	2.6	0.0	0.4	0.2	**1.3**
	2	0.0	4.8	30.8	0.0	3.4	10.2	2.0	9.9	0.0	1.4	1.5	**3.2**
	3	0.7	24.8	56.5	1.2	26.9	23.2	12.6	21.0	1.7	3.9	7.9	**10.7**
	4	16.5	114.0	133.3	21.8	97.3	94.3	45.3	90.7	21.5	47.0	30.6	**63.3**
	5	0.0	293.4	253.3	72.5	249.8	298.1	87.1	257.8	93.9	136.7	175.2	**213.2**
	Average	**0.4**	**100.2**	**62.6**	**3.1**	**46.0**	**32.4**	**18.3**	**13.6**	**2.0**	**3.1**	**4.1**	**15.8**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	**1.9**
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	**0.7**
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	**-4.5**
Total		**-3.2**	**99.9**	**61.2**	**-0.5**	**45.9**	**31.9**	**18.5**	**13.4**	**-1.8**	**0.5**	**1.6**	**14.1**

2025 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
	1	0.0	1.7	14.4	0.0	1.1	2.7	0.7	2.7	0.0	0.5	0.2	**1.4**
	2	0.0	5.2	32.9	0.0	3.6	10.6	2.2	10.5	0.0	1.5	1.9	**3.7**
Congestion*	3	1.9	27.4	61.7	2.6	28.8	25.1	13.9	22.6	2.7	4.2	8.4	**11.3**
	4	20.8	116.0	145.6	23.9	107.2	105.7	47.5	88.0	22.8	48.2	30.7	**62.8**
	5	0.0	400.7	305.2	81.5	296.3	369.9	101.9	300.4	98.7	156.1	230.5	**262.6**
	Average	**1.1**	**141.2**	**76.3**	**5.5**	**56.9**	**42.8**	**23.1**	**16.1**	**3.7**	**4.0**	**5.7**	**20.5**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	**2.0**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	**0.7**
Indirect Taxation	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	**-3.9**
Total		**-1.8**	**141.8**	**76.0**	**2.7**	**57.8**	**43.4**	**24.3**	**17.0**	**0.5**	**2.1**	**3.9**	**19.5**

2030 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
	1	0.0	1.8	16.6	0.0	1.1	3.0	0.7	2.9	0.0	0.6	0.3	**1.6**
	2	0.0	5.4	38.4	0.0	4.1	11.7	2.4	11.3	0.0	1.6	2.1	**4.2**
Congestion*	3	2.5	28.1	64.2	3.0	32.8	27.1	15.5	24.5	5.0	4.5	8.9	**12.7**
	4	22.4	122.3	156.3	27.7	114.7	114.2	51.9	94.3	25.8	52.1	31.6	**65.2**
	5	0.0	450.2	348.5	90.8	343.8	434.5	118.6	336.6	108.8	178.7	269.7	**299.0**
	Average	**1.9**	**172.2**	**90.3**	**7.6**	**69.0**	**51.7**	**28.0**	**18.3**	**6.3**	**5.0**	**7.1**	**25.0**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.1**
Accident	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	**2.2**
Local Air Quality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.2**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	**0.7**
Indirect Taxation	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	**-3.6**
Total		**-0.7**	**173.5**	**90.9**	**5.1**	**70.7**	**53.2**	**30.0**	**19.9**	**3.4**	**3.6**	**5.7**	**24.6**

2035 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
	1	0.0	1.8	19.2	0.0	1.2	3.3	0.8	3.1	0.0	0.6	0.3	**1.7**
	2	0.0	5.8	42.4	0.1	4.4	12.6	2.5	12.1	0.0	1.8	2.3	**4.6**
Congestion*	3	3.5	30.5	71.1	4.5	35.3	29.0	17.1	26.7	8.6	5.0	10.1	**14.9**
	4	24.6	140.0	188.6	30.7	124.2	120.9	56.5	97.3	29.4	56.5	34.0	**67.9**
	5	0.0	543.1	402.9	97.5	425.6	504.8	138.5	386.7	120.7	201.6	307.5	**348.1**
	Average	**3.1**	**217.5**	**106.8**	**11.3**	**86.6**	**63.4**	**34.3**	**21.2**	**10.4**	**6.3**	**8.4**	**31.2**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.2**
Accident	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	**2.5**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	**0.2**
Greenhouse Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	**1.0**
Indirect Taxation	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	**-3.5**
Total		**1.0**	**219.7**	**108.3**	**9.2**	**89.1**	**65.7**	**37.0**	**23.7**	**8.0**	**5.3**	**7.6**	**31.6**

Table 4.1.7: Values of aspects in pedestrian environment (2010 values and 2010 prices)		
Scheme type	**Value p/km**	**Source**
Street lighting	3.8	Heuman (2005)
Kerb level	2.7	Heuman (2005)
Crowding	1.9	Heuman (2005)
Pavement evenness	0.9	Heuman (2005)
Information panels	0.9	Heuman (2005)
Benches	0.6	Heuman (2005)
Directional signage	0.6	Heuman (2005)

Table 4.1.6: Value of journey ambience benefit of cycle facilities relative to no facilities (2010 prices & 2010 values)		
Scheme type	**Value p/min**	**Source**
Off-road segregated cycle track	7.03	Hopkinson & Wardman (1996)
On-road segregated cycle lane	2.99	Hopkinson & Wardman (1996)
On-road non-segregated cycle lane	2.97	Wardman et al. (1997)
Wider lane	1.81	Hopkinson & Wardman (1996)
Shared bus lane	0.77	Hopkinson & Wardman (1996)
	pence	
Secure cycle parking facilities	98.14	Wardman et al. (2007)
Changing and shower facilities	20.82	Wardman et al. (2007)

	Annual average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005=100													
1998	91.1	89.9	90.3	90.5	91.0	91.5	91.3	90.8	91.2	91.6	91.6	91.7	91.9
1999	92.3	91.4	91.5	92.0	92.4	92.7	92.6	92.0	92.3	92.7	92.6	92.7	93.0
2000	93.1	92.1	92.4	92.6	92.9	93.2	93.3	92.8	92.8	93.6	93.5	93.7	93.7
2001	94.2	92.9	93.1	93.4	94.0	94.7	94.9	94.2	94.5	94.8	94.7	94.5	94.7
2002	95.4	94.4	94.5	94.9	95.3	95.5	95.5	95.2	95.5	95.7	95.9	95.9	96.3
2003	96.7	95.7	96.0	96.3	96.7	96.7	96.5	96.5	96.8	97.1	97.2	97.2	97.5
2004	98.0	97.0	97.2	97.4	97.8	98.1	98.1	97.8	98.1	98.2	98.4	98.6	99.1
2005	100.0	98.6	98.8	99.3	99.7	100.0	100.0	100.1	100.4	100.6	100.7	100.7	101.0
2006	102.3	100.5	100.9	101.1	101.7	102.2	102.5	102.5	102.9	103.0	103.2	103.4	104.0
2007	104.7	103.2	103.7	104.2	104.5	104.8	105.0	104.4	104.7	104.8	105.3	105.6	106.2
2008	108.5	105.5	106.3	106.7	107.6	108.3	109.0	109.0	109.7	110.3	110.0	109.9	109.5
2009	110.8	108.7	109.6	109.8	110.1	110.7	111.0	110.9	111.4	111.5	111.7	112.0	112.6
2010	114.5	112.4	112.9	113.5	114.2	114.4	114.6	114.3	114.9	114.9	115.2	115.6	116.8
2011	119.6	116.9	117.8	118.1	119.3	119.5	119.4	119.4	120.1	120.9	121.0	121.2	121.7
2012	123.0	121.1	121.8	122.2	122.9	122.8	122.3	122.5	123.1	123.5	124.2	124.4	125.0
2013	126.1	124.4	125.2	125.6	125.9	126.1	125.9	125.8	126.4	126.8	126.9	127.0	127.5
2014	..	126.7	127.4	127.7	128.1	128.0	128.3	127.8	..	..	..	..	..
1.027071 2015		130.1299											

2010	1
2011	1.040036
2012	1.077402
2013	1.106762
2014	1.127224
2015	1.157739

Active Mode Appraisal Toolkit Spreadsheet 3

HIGH

Department for Transport

Active Mode Appraisal Toolkit

Last updated: March 2015

Queries and comments on this toolkit should be referred to:
Local Economics
Department for Transport
Zone 2/15 Great Minster House
33 Horseferry Road
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Email: walking.cycling@dft.gsi.gov.uk

Please answer the following questions with your best estimates to obtain a benefit cost ratio of your scheme.
By varying your answers you can test the importance of the input data on the overall value for money of your scheme.
The answers provided are for the example case study from Appendix B of WebTAG unit A5.1. This case study provides further helpful commentary that users of this tool might want to refer to.

Scheme details

When would the scheme be likely to open? 2017
What is the last year of initial funding? 2019
Decay rate (starting from last year of funding) 20.0%

WebTAG A5.1 explains - the impacts especially of revenue funded initatives such as cycle training or personalised travel planning are likely to diminish year by year following the investment. For the case study here this is likely to be conservative.

Appraisal period (should be the expected asset life, maximum 60) 20 yrs

Costs

Please provide estimates for upfront costs as well as future maintenance costs in the table below. Please enter the full costs of the scheme in the first column and any private sector contribution to those costs in the second. All other funds are assumed to be from local or central Government.

Please use a constant price base and specify the year here 2016
Please refer to WebTAG unit A1.2 to set Optimism Bias 15%

Do Nothing scenario

This is what is most likely to happen if the scheme is not implemented.
The data could for example be from automatic or manual traffic counts.

Number of cycling journeys 0 per day, average length 3.9 km and speed 20 kph
Number of walking journey 0 per day, average length 1.15 km and speed 5 kph
Ideally the data is taken from 'average weekday' in spring or autumn to avoid seasonal bias.
A return trip involves two journeys and would need to be counted as such.
To identify how many individual users this implies, please estimate the share of journeys that form part of a return trip here: 90%

Do Something scenario

Once your scheme has reached it's full impact (ignoring any initial build up here), how would these figures have changed (due to the intervention)?
Number of cycling journeys 3,626 per day, e.g. from automatic or manual cycle count.
Number of walking journey 5,286 per day
For simplicity it is assumed that the length and speed of journeys is largely unaffected by the intervention.

Journey Quality impacts

WebTAG units A5.1 and A4.1 provides guidance, the Databook provides suggested values that users might place on the improvemed infrastructure your scheme provides. The values are shown in the WebTAG journey quality tab. The improvement over the 'do nothing' scenario should be valued, rather than the absolut level.

For cyclists 1.76 pence per minute 0 pence per trip (e.g. shower facilities)
For pedestrians 2.61 pence per km
As demonstrated in the case study, these values should take account of the proportion of the average journey that would be made on the improved infrastructure.

Decongestion benefits

What proportion of new users would most likely be using a car in the do nothing scenario?
for cyclists 56.0%
for pedestrians 56.0%

Which area type from the drop down is most similar to the area your scheme is located in?
Weighted Average

Additional information

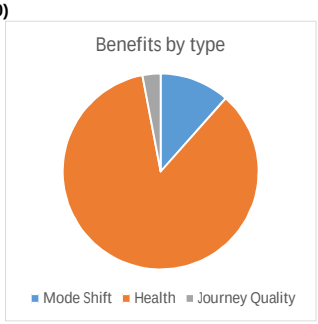
Background Growth
If you have an estimate of the growth in background use (in both scenarios), please set
the annual growth rate 0.25%
the period over which this applies 20 years

Number of days in the year that you would expect the above usage figures 220 days p.a.
In the case study this is assumed to the typical number of working days - but might more appropriately be set to the number of weekdays.

Results

Analysis of Monetised Costs and Benefits (in £'000)

Noise	12.70
Local Air Quality	0.00
Greenhouse Gases	86.39
Journey Quality	463.83
Physical Acitivity (incl. absenteeism)	13294.24
Accidents	227.52
Decongestion	1989.53
Indirect taxation	-527.61
Private contribution	-471.42
Present Value of Benefits (PVB)	15075.18
Present Value of Costs (PVC)	1395.43
Benefit Cost Ratio (BCR)	**10.80**



Year	Total scheme costs '000£	3rd party contributions '000£
2009		
2010	0	
2011	0	
2012	0	
2013	0	
2014	0	
2015	0	
2016	0	
2017	703	204
2018	723	224
2019	664	174
2020	0	
2021	0	
2022	0	
2023	0	
2024	0	
2025	0	
2026	0	
2027	0	
2028	0	
2029	0	
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2069		
2070		

The case study in WebTAG unit A5.1 uses slightly different assumptions on the valuation of decongestion benefits which result in a higher estimated benefit there. This is due to the specfic nature of the case study and to fully replicate this approach here would have increased the complexity of this tool with no apparent benefit.

Discount rate			
first 30 years	3.50%		
next 30 years	3%		
Appraisal period [max 60]	20	years	
CPI 2010 to construction cost year	1.16		
Market price conversion	1.191		
Scheme opening year	2017		
Optimism Bias	15%		
Decay rate	20%		
Year decay starts	2019		

	Cyclists	Pedestrians	
No of trips without scheme	0	0	per day
No of trips with scheme	3,626	5,286	per day
trip length without scheme	3.9	1.15	km
trip length with scheme	3.9	1.15	km
Average Speed on route	20	5	km/h
Exogenous growth in use	0.25%		per annum
period over which growth maintained	20		years
Journey ambience	1.76	2.61	p/minute for cyclists, p/km for walking
Journey ambience - per trip - without	0.0		pence (e.g. secure cycle storage)
Journey ambience - per trip - with scheme	0.0		pence (e.g. secure cycle storage)
number of (working) days cycled per year	220		days
Share of new users who would have driven	0.56	0.56	
Share of trips that are part of return journeys	90%		
Ramp up of health benefits	5		years
New users who are already active	0%	0%	

Area type	Weighted Average					
	2010	2015	2020	2025	2030	2035
Decongestion	11.5	12.3	15.8	20.5	25	31.2
Infrastructure	0.1	0.1	0.1	0.1	0.1	0.2
Accident	1.6	1.7	1.9	2	2.2	2.5
Local Air Quality	0.1	0.1	0	0	0	0
Noise	0.1	0.1	0.1	0.1	0.2	0.2
Greenhouse Gases	0.9	0.8	0.7	0.7	0.7	1
Indirect Taxation	-5.1	-5	-4.5	-3.9	-3.6	-3.5

Costs

Costs entered in 2016

Year	Total Scheme costs '000£	Cost born by third parties, '000£
2009	0	0
2010	0	0
2011	0	0
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016	0	0
2017	703	204
2018	723	224
2019	664	174
2020	0	0
2021	0	0
2022	0	0
2023	0	0
2024	0	0
2025	0	0
2026	0	0
2027	0	0
2028	0	0
2029	0	0
2030	0	0
2031	0	0
2032	0	0
2033	0	0
2034	0	0
2035	0	0
2036	0	0
2037	0	0
2038	0	0
2039	0	0
2040	0	0
2041	0	0
2042	0	0
2043	0	0
2044	0	0
2045	0	0
2046	0	0
2047	0	0
2048	0	0
2049	0	0
2050	0	0
2051	0	0
2052	0	0
2053	0	0
2054	0	0
2055	0	0
2056	0	0
2057	0	0
2058	0	0
2059	0	0
2060	0	0
2061	0	0
2062	0	0
2063	0	0
2064	0	0
2065	0	0
2066	0	0
2067	0	0
2068	0	0
2069	0	0
2070	0	0

Congestion beenfit	1989.53		
Infrastructure	12.11	Mode Shift	1800.65
Accident	227.52	Health	13294.24
Local Air Quality	0.00	Journey Qu	463.83
Noise	12.70		
Greenhouse Gases	86.39		
Reduced risk of premature death	12087.14		
Absenteeism	1207.09		
Journey Ambience	463.83		
PAYD	227.46		
Indirect Taxation	-527.61		
Government	1407.55		
Private contribution	471.42		
PVB	15302.65		
PVC	1395.43		
BCR	**10.97**		

In £'000

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Discounting to 2010		0.871442	0.842	0.814	0.78599	0.759	0.734	0.709	0.685	0.662	0.639	0.618	0.597	0.577	0.557	0.538	0.52	0.503	0.486	0.469	0.453	0.438	0.423	0.409	0.395	0.382	0.369	0.356	0.344	0.333
Appraisal		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
GDP per capita v 2010		1.030305	1.047	1.068	1.08914	1.11	1.135	1.16	1.182	1.204	1.227	1.25	1.275	1.301	1.328	1.355	1.384	1.413	1.441	1.471	1.501	1.53	1.562	1.594	1.628	1.662	1.697	1.734	1.773	1.812
Background user growth		1	1	1	1	1.003	1.005	1.008	1.01	1.013	1.015	1.018	1.02	1.023	1.025	1.028	1.03	1.033	1.036	1.038	1.041	1.043	1.046	1.049	1.051	1.051	1.051	1.051	1.051	1.051
Decay		1	1	1	1	1	1	0.8	0.64	0.512	0.41	0.328	0.262	0.21	0.168	0.134	0.107	0.086	0.069	0.055	0.044	0.035	0.028	0.023	0.018	0.014	0.012	0.009	0.007	0.006
Build up of Health benefit		0	0	0	0.2	0.4	0.6	0.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Decongestion																														
Car km reduction ('000)		0	0	0	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491
Congestion beenfit	1989.53	0.00	0.00	0.00	266.21	271.09	276.06	224.90	183.59	149.87	122.34	99.86	81.52	65.73	52.99	42.72	34.45	27.77	22.50	18.22	14.76	11.95	9.68	7.50	5.81	0.00	0.00	0.00	0.00	0.00
Infrastructure	12.11	0.00	0.00	0.00	1.96	1.90	1.84	1.42	1.10	0.85	0.66	0.51	0.40	0.31	0.24	0.19	0.14	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.04	0.00	0.00	0.00	0.00	0.00
Accident	227.52	0.00	0.00	0.00	34.80	34.47	34.13	27.05	21.17	16.58	12.98	10.16	7.95	6.28	4.96	3.92	3.09	2.44	1.94	1.54	1.23	0.98	0.78	0.60	0.47	0.00	0.00	0.00	0.00	0.00
Local Air Quality	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Noise	12.70	0.00	0.00	0.00	1.96	1.90	1.84	1.42	1.10	0.85	0.66	0.51	0.40	0.35	0.32	0.28	0.25	0.22	0.17	0.13	0.10	0.08	0.06	0.05	0.04	0.00	0.00	0.00	0.00	0.00
Greenhouse Gases	86.39	0.00	0.00	0.00	14.85	14.00	13.21	9.96	7.72	5.98	4.64	3.59	2.78	2.16	1.67	1.30	1.00	0.78	0.65	0.54	0.45	0.37	0.31	0.24	0.19	0.00	0.00	0.00	0.00	0.00
Indirect Taxation	-527.61	0.00	0.00	0.00	-93.86	-89.02	-84.42	-64.05	-48.23	-36.32	-27.35	-20.60	-15.51	-11.83	-9.02	-6.88	-5.24	-4.00	-3.08	-2.37	-1.83	-1.41	-1.09	-0.84	-0.65	0.00	0.00	0.00	0.00	0.00
Health																														
Reduced risk of premature deatl	12087.14	0.00	0.00	0.00	518.89	#####	#####	#####	#####	#####	988.24	780.33	616.86	487.72	385.68	305.05	241.31	190.92	150.93	119.33	94.37	74.56	58.97	46.65	36.90	0.00	0.00	0.00	0.00	0.00
Absenteeism	1207.09	0.00	0.00	0.00	51.82	102.29	151.94	160.51	158.36	125.01	98.69	77.93	61.60	48.71	38.52	30.46	24.10	19.07	15.07	11.92	9.42	7.45	5.89	4.66	3.69	0.00	0.00	0.00	0.00	0.00
Journey Ambience																														
JA existing users (no decay)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JA new users (decay)	463.83	0.00	0.00	0.00	70.31	69.40	68.72	54.45	42.97	33.92	26.78	21.15	16.72	13.22	10.45	8.27	6.54	5.17	4.09	3.23	2.56	2.02	1.60	1.26	1.00	0.00	0.00	0.00	0.00	0.00
Costs																														
Government	1,407.55	0.00	0.00	0.00	488.23	474.20	445.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Private contribution	471.42	0	0	0	164.996	175	131.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077
0.321	0.31	0.3	0.29	0.28	0.272	0.264	0.256	0.249	0.242	0.235	0.228	0.221	0.215	0.208	0.202	0.196	0.191	0.185	0.18	0.175	0.169	0.164	0.16	0.155	0.151	0.146	0.142	0.138	0.134	0.13	0.126	0.122	0.119	0.115
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.852	1.893	1.935	1.978	2.021	2.064	2.109	2.154	2.2	2.246	2.293	2.341	2.39	2.44	2.491	2.544	2.598	2.655	2.714	2.774	2.836	2.898	2.963	3.028	3.095	3.163	3.232	3.303	3.376	3.449	3.524	3.601	3.679	3.759	3.84
1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051	1.051
0.005	0.004	0.003	0.002	0.002	0.002	0.001	1E-03	8E-04	6E-04	5E-04	4E-04	3E-04	3E-04	2E-04	2E-04	1E-04	1E-04	9E-05	7E-05	5E-05	4E-05	3E-05	3E-05	2E-05	2E-05	1E-05	1E-05	9E-06	7E-06	6E-06	5E-06	4E-06	3E-06	2E-06
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-403.4
2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491	2491
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Sheme parametres	Cyclists	Pedestrians	
New distance	3.9	1.15	
new users	3626	5286	
Distance per year	3,111,108	1,337,358	total additional km
reduction in car use	1,742,220	748,920	avoided carkm
	2,491,141	**avoided Vkm**	

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Decongest	11.5	11.7	11.8	12.0	12.1	12.3	12.9	13.6	14.3	15.0	15.8	16.6	17.5	18.5	19.5	20.5	21.3	22.2	23.1	24.0	25.0	26.1	27.3	28.6	29.8	31.2	31.2	31.2	31.2	31.2	31.2
Infrastructu	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Accident	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
Local Air C	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Greenhous	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Indirect Ta	-5.1	-5.1	-5.1	-5.0	-5.0	-5.0	-4.9	-4.8	-4.7	-4.6	-4.5	-4.4	-4.2	-4.1	-4.0	-3.9	-3.8	-3.8	-3.7	-3.7	-3.6	-3.6	-3.6	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5	-3.5

Sheme parametres	Cyclists	Pedestrians
DN distance	3.9	1.15
DS distance	3.9	1.15
Difference	0	0
Speed	20	5
minutes per day	21	25
per weekday	21.27	
per day over 7 days		15.12
new users	1994.3	2907.3
existing users	0.0	0.0
% of weekdays cycled	1	
% of 7 days walked		0.60274

Reference values in HEAT		
min (per weekday/per day)	36	21.5
Relative Risk (HEAT)	0.28	0.22
England 7 Wales Mortality ri	0.00235	0.00235
Value of Life	1,653,687	

Impact on New users		
New users are already activ	0	0
exp. deaths among new use	4.686605	6.832155
Relative Risk DS	0.17	0.15475
Lives saved DS	0.7754201	1.057275
Value (£ per year)	**£1,282,302**	########

Impact on existing users (if route distance changed)		
difference in minutes	0	0
difference relative risk	0.000	0.000
Deaths amongst existing us	0.000	0.000
Lives saved DS	0.0000	0.0000
Value (£ per year)	**£0**	**£0**

Net Impact DS	**£1,282,302**	########	**per annum**

Sheme parametres	Cyclists	Pedestrians
DN distance	3.9	1.15
DS distance	3.9	1.15
difference	0	0
speed	20	5
DS time/km	21.27	1.15
over a year	4680.00	253
new users	1994.3	5286
exising users	0.0	0
Ambience p/min	1.76	
Ambience p/km		2.61
ambience per trip DN	0	
ambience per trip DN	0	

Impact on New users		
En route	£82,133.25	£17,452.52
Per Trip	0	

Impact on existing users		
En route	£0.00	£0
Per Trip	0	

Net Impact DS		
existing users	**£0.00**	**£ per year in 2010 values**
new users	**£82,133.25**	**£ per year in 2010 values**

			compared to 30 Min
Newcyclist	1994.30	21 minutes per weekday	0.71
New [pede	2907.30	25 minutes per weekday	0.84

average short-term sick leave absence in UK	6.46	
30 Minutes per weekday result in a reduction in sick day	6%	
average reduction in short-term sick leave per cyclist	0.27484364	
average reduction in short-term sick leave per walker	0.32417455	
	1490.59	days reduced absenteesim
VoT per hour average business	27.07	WebTAG
Output lost from day leave	£203.05	over 7.5 hours
increased output from reduced absenteeism	**£302,664**	per year

Latest version of WebTAG databook used May 2014

Annual Parameters

Year	GDP deflator1	Real GDP2			Population3			Households4			Average GDP per person			Average GDP per household			Work & Non-Work VoT			
	CPI-based (2010 = 100)	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1996 = 100	Historic Value	Annual Growth (%pa)	Index 1990 = 100	Historic Value	Annual Growth (%pa)	Index 1996 = 100	Work VoT Growth (% pa)	Non-Work VoT Growth (% pa)	Work Index 2002 = 100	Non-work Index 2002 = 100
1990	61.43	934,589	-	100.00	57,238	-	100.00	-	-	-	16,328	-	100.00	-	-	-	-	-	-	-
1991	65.55	922,510	-1.29	98.71	57,439	0.35	100.35	-	-	-	16,061	-1.64	98.36	-	-	-	-	-	-	-
1992	67.46	934,454	1.29	99.99	57,585	0.25	100.61	-	-	-	16,228	1.04	99.38	-	-	-	-	-	-	-
1993	68.73	967,071	3.49	103.48	57,714	0.22	100.83	-	-	-	16,756	3.26	102.62	-	-	-	-	-	-	-
1994	69.53	1,014,974	4.95	108.60	57,862	0.26	101.09	-	-	-	17,541	4.68	107.43	-	-	-	-	-	-	-
1995	71.20	1,050,837	3.53	112.44	58,025	0.28	101.38	-	-	-	18,110	3.24	110.91	-	-	-	-	-	-	-
1996	73.19	1,087,525	3.49	116.36	58,164	0.24	101.62	23,738	-	100.00	18,697	3.24	114.51	45,814	-	100.00	-	-	-	-
1997	74.49	1,134,837	4.35	121.43	58,314	0.26	101.88	23,865	0.54	100.54	19,461	4.08	119.18	47,552	3.80	103.80	-	-	-	-
1998	75.91	1,175,317	3.57	125.76	58,475	0.28	102.16	24,036	0.72	101.26	20,100	3.28	123.10	48,898	2.83	106.73	-	-	-	-
1999	77.56	1,209,852	2.94	129.45	58,684	0.36	102.53	24,209	0.72	101.98	20,616	2.57	126.26	49,975	2.20	109.08	-	-	-	-
2000	78.18	1,262,629	4.36	135.10	58,886	0.34	102.88	24,396	0.77	102.77	21,442	4.00	131.32	51,756	3.56	112.97	-	-	-	-
2001	79.96	1,290,216	2.18	138.05	59,113	0.39	103.28	24,535	0.57	103.36	21,826	1.79	133.67	52,587	1.61	114.78	-	-	-	-
2002	81.94	1,319,829	2.30	141.22	59,366	0.43	103.72	24,776	0.98	104.37	22,232	1.86	136.16	53,270	1.30	116.28	-	-	100.00	100.00
2003	83.71	1,371,948	3.95	146.80	59,637	0.46	104.19	24,878	0.41	104.80	23,005	3.48	140.89	55,147	3.52	120.37	3.48	3.48	103.48	103.48
2004	85.69	1,415,482	3.17	151.46	59,950	0.53	104.74	24,936	0.23	105.05	23,611	2.63	144.60	56,765	2.93	123.90	2.63	2.63	106.20	106.20
2005	87.37	1,461,270	3.23	156.35	60,413	0.77	105.55	25,130	0.78	105.86	24,188	2.44	148.14	58,148	2.44	126.92	2.44	2.44	108.80	108.80
2006	89.87	1,501,528	2.76	160.66	60,827	0.68	106.27	25,263	0.53	106.42	24,685	2.06	151.18	59,436	2.21	129.73	2.06	2.06	111.03	111.03
2007	91.94	1,552,989	3.43	166.17	61,319	0.81	107.13	25,457	0.77	107.24	25,326	2.60	155.11	61,004	2.64	133.16	2.60	2.60	113.92	113.92
2008	94.89	1,541,039	-0.77	164.89	61,824	0.82	108.01	25,687	0.90	108.21	24,926	-1.58	152.66	59,993	-1.66	130.95	-1.58	-1.58	112.12	112.12
2009	96.99	1,461,361	-5.17	156.36	62,261	0.71	108.78	25,830	0.56	108.81	23,472	-5.84	143.75	56,576	-5.70	123.49	-5.84	-5.84	105.58	105.58
2010	100.00	1,485,616	1.66	158.96	62,760	0.80	109.65	26,006	0.68	109.55	23,672	0.85	144.97	57,126	0.97	124.69	0.85	0.85	106.47	106.47
2011	102.31	1,502,216	1.12	160.74	63,285	0.84	110.57	26,135	0.50	110.10	23,737	0.28	145.38	57,479	0.62	125.46	0.28	0.28	106.77	106.77
2012	104.06	1,506,388	0.28	161.18	63,705	0.66	111.30	26,355	0.84	111.02	23,646	-0.38	144.82	57,158	-0.56	124.76	-0.38	-0.38	106.36	106.36
2013	105.73	1,531,428	1.66	163.86	-	0.59	111.95	26,414	0.22	111.27	-	1.07	146.36	57,978	1.44	126.55	1.07	1.07	107.50	107.50
2014	108.16	-	2.70	168.29	-	0.64	112.67	-	1.07	112.46	-	2.05	149.37	-	1.62	128.60	2.05	2.05	109.70	109.70
2015	109.89	-	2.30	172.16	-	0.62	113.37	-	1.06	113.65	-	1.67	151.86	-	1.23	130.18	1.67	1.67	111.53	111.53
2016	111.87	-	2.60	176.63	-	0.64	114.09	-	1.05	114.84	-	1.95	154.82	-	1.54	132.18	1.95	1.95	113.71	113.71
2017	113.99	-	2.60	181.22	-	0.60	114.77	-	1.03	116.02	-	1.99	157.90	-	1.55	134.23	1.99	1.99	115.97	115.97
2018	116.27	-	2.50	185.76	-	0.59	115.45	-	1.02	117.21	-	1.90	160.90	-	1.46	136.19	1.90	1.90	118.17	118.17
2019	118.60	-	2.80	190.96	-	0.55	116.09	-	0.98	118.36	-	2.23	164.49	-	1.80	138.65	2.23	2.23	120.81	120.81
2020	121.09	-	2.80	196.30	-	0.54	116.72	-	0.97	119.51	-	2.24	168.19	-	1.81	141.16	2.24	2.24	123.52	123.52
2021	123.75	-	2.40	201.01	-	0.53	117.34	-	0.96	120.66	-	1.86	171.31	-	1.43	143.17	1.86	1.86	125.82	125.82
2022	126.48	-	2.40	205.84	-	0.52	117.95	-	0.95	121.81	-	1.87	174.52	-	1.43	145.22	1.87	1.87	128.18	128.18
2023	129.26	-	2.40	210.78	-	0.50	118.54	-	0.94	122.95	-	1.89	177.81	-	1.44	147.32	1.89	1.89	130.59	130.59
2024	132.10	-	2.40	215.84	-	0.49	119.12	-	0.88	124.04	-	1.90	181.19	-	1.50	149.54	1.90	1.90	133.08	133.08
2025	135.01	-	2.50	221.23	-	0.47	119.68	-	0.88	125.13	-	2.02	184.85	-	1.61	151.95	2.02	2.02	135.76	135.76
2026	137.98	-	2.50	226.76	-	0.46	120.23	-	0.87	126.21	-	2.04	188.61	-	1.62	154.40	2.04	2.04	138.53	138.53
2027	141.01	-	2.50	232.43	-	0.44	120.75	-	0.86	127.30	-	2.05	192.49	-	1.63	156.91	2.05	2.05	141.37	141.37
2028	144.12	-	2.50	238.24	-	0.42	121.26	-	0.85	128.38	-	2.07	196.47	-	1.63	159.48	2.07	2.07	144.30	144.30
2029	147.29	-	2.50	244.20	-	0.40	121.75	-	0.78	129.38	-	2.09	200.57	-	1.71	162.20	2.09	2.09	147.31	147.31
2030	150.53	-	2.50	250.31	-	0.39	122.22	-	0.77	130.38	-	2.10	204.79	-	1.72	164.99	2.10	2.10	150.41	150.41
2031	153.84	-	2.40	256.31	-	0.37	122.68	-	0.76	131.37	-	2.02	208.93	-	1.62	167.67	2.02	2.02	153.45	153.45
2032	157.22	-	2.40	262.46	-	0.36	123.11	-	0.76	132.37	-	2.04	213.19	-	1.63	170.40	2.04	2.04	156.57	156.57
2033	160.68	-	2.40	268.76	-	0.34	123.54	-	0.75	133.37	-	2.05	217.56	-	1.63	173.18	2.05	2.05	159.79	159.79
2034	164.22	-	2.30	274.94	-	0.33	123.94	-	0.33	133.81	-	1.96	221.83	-	1.96	176.58	1.96	1.96	162.92	162.92
2035	167.83	-	2.40	281.54	-	0.32	124.34	-	0.32	134.24	-	2.07	226.43	-	2.07	180.24	2.07	2.07	166.30	166.30
2036	171.52	-	2.40	288.30	-	0.31	124.73	-	0.31	134.65	-	2.08	231.15	-	2.08	184.00	2.08	2.08	169.77	169.77
2037	175.30	-	2.40	295.22	-	0.30	125.10	-	0.30	135.06	-	2.09	235.98	-	2.09	187.85	2.09	2.09	173.31	173.31
2038	179.15	-	2.40	302.30	-	0.29	125.47	-	0.29	135.45	-	2.10	240.95	-	2.10	191.80	2.10	2.10	176.96	176.96
2039	183.09	-	2.40	309.56	-	0.29	125.83	-	0.29	135.85	-	2.10	246.01	-	2.10	195.83	2.10	2.10	180.68	180.68
2040	187.12	-	2.50	317.30	-	0.29	126.20	-	0.29	136.24	-	2.20	251.44	-	2.20	200.15	2.20	2.20	184.66	184.66
2041	191.24	-	2.50	325.23	-	0.29	126.56	-	0.29	136.63	-	2.20	256.98	-	2.20	204.56	2.20	2.20	188.73	188.73
2042	195.45	-	2.50	333.36	-	0.27	126.91	-	0.27	137.01	-	2.22	262.68	-	2.22	209.10	2.22	2.22	192.93	192.93
2043	199.75	-	2.50	341.70	-	0.27	127.25	-	0.27	137.38	-	2.22	268.52	-	2.22	213.75	2.22	2.22	197.21	197.21
2044	204.14	-	2.50	350.24	-	0.27	127.60	-	0.27	137.75	-	2.22	274.49	-	2.22	218.49	2.22	2.22	201.59	201.59
2045	208.63	-	2.50	358.99	-	0.27	127.95	-	0.27	138.13	-	2.22	280.58	-	2.22	223.35	2.22	2.22	206.07	206.07
2046	213.22	-	2.50	367.97	-	0.27	128.29	-	0.27	138.51	-	2.22	286.82	-	2.22	228.31	2.22	2.22	210.65	210.65
2047	217.91	-	2.40	376.80	-	0.24	128.61	-	0.24	138.84	-	2.15	292.98	-	2.15	233.22	2.15	2.15	215.18	215.18
2048	222.71	-	2.40	385.84	-	0.24	128.92	-	0.24	139.18	-	2.15	299.28	-	2.15	238.24	2.15	2.15	219.81	219.81
2049	227.60	-	2.40	395.10	-	0.24	129.24	-	0.24	139.52	-	2.15	305.72	-	2.15	243.36	2.15	2.15	224.53	224.53
2050	232.61	-	2.40	404.59	-	0.24	129.55	-	0.24	139.86	-	2.15	312.29	-	2.15	248.59	2.15	2.15	229.36	229.36
2051	237.73	-	2.40	414.30	-	0.24	129.87	-	0.24	140.21	-	2.15	319.01	-	2.15	253.94	2.15	2.15	234.29	234.29
2052	242.96	-	2.30	423.83	-	0.21	130.14	-	0.21	140.50	-	2.09	325.67	-	2.09	259.24	2.09	2.09	239.18	239.18
2053	248.30	-	2.30	433.57	-	0.21	130.41	-	0.21	140.79	-	2.09	332.46	-	2.09	264.64	2.09	2.09	244.17	244.17
2054	253.77	-	2.30	443.55	-	0.21	130.69	-	0.21	141.09	-	2.09	339.40	-	2.09	270.17	2.09	2.09	249.27	249.27
2055	259.35	-	2.30	453.75	-	0.21	130.96	-	0.21	141.38	-	2.09	346.48	-	2.09	275.80	2.09	2.09	254.47	254.47
2056	265.06	-	2.30	464.18	-	0.21	131.23	-	0.21	141.68	-	2.09	353.71	-	2.09	281.56	2.09	2.09	259.78	259.78
2057	270.89	-	2.30	474.86	-	0.18	131.48	-	0.18	141.94	-	2.11	361.18	-	2.11	287.50	2.11	2.11	265.27	265.27
2058	276.85	-	2.30	485.78	-	0.18	131.72	-	0.18	142.20	-	2.11	368.81	-	2.11	293.58	2.11	2.11	270.87	270.87
2059	282.94	-	2.30	496.95	-	0.18	131.96	-	0.18	142.46	-	2.11	376.60	-	2.11	299.78	2.11	2.11	276.59	276.59
2060	289.16	-	2.40	508.88	-	0.18	132.20	-	0.18	142.72	-	2.21	384.93	-	2.21	306.41	2.21	2.21	282.71	282.71
2061	295.52	-	2.40	521.10	-	0.18	132.44	-	0.18	142.98	-	2.21	393.45	-	2.21	313.19	2.21	2.21	288.96	288.96
2062	302.03	-	2.40	533.60	-	0.18	132.68	-	0.18	143.24	-	2.22	402.17	-	2.22	320.14	2.22	2.22	295.37	295.37
2063	308.67	-	2.40	546.41	-	0.18	132.92	-	0.18	143.50	-	2.21	411.08	-	2.21	327.23	2.21	2.21	301.91	301.91
2064	315.46	-	2.40	559.52	-	0.18	133.16	-	0.18	143.76	-	2.21	420.18	-	2.21	334.47	2.21	2.21	308.60	308.60
2065	322.40	-	2.40	572.95	-	0.18	133.40	-	0.18	144.02	-	2.21	429.48	-	2.21	341.88	2.21	2.21	315.43	315.43
2066	329.49	-	2.40	586.70	-	0.18	133.65	-	0.18	144.28	-	2.21	438.99	-	2.21	349.45	2.21	2.21	322.41	322.41
2067	336.74	-	2.40	600.78	-	0.20	133.91	-	0.20	144.57	-	2.20	448.63	-	2.20	357.12	2.20	2.20	329.50	329.50
2068	344.15	-	2.40	615.20	-	0.20	134.18	-	0.20	144.86	-	2.20	458.49	-	2.20	364.96	2.20	2.20	336.73	336.73
2069	351.72	-	2.40	629.97	-	0.20	134.45	-	0.20	145.15	-	2.20	468.56	-	2.20	372.98	2.20	2.20	344.13	344.13
2070	359.46	-	2.40	645.08	-	0.20	134.72	-	0.20	145.44	-	2.20	478.85	-	2.20	381.17	2.20	2.20	351.68	351.68
2071	367.37	-	2.40	660.57	-	0.20	134.99	-	0.20	145.73	-	2.20	489.36	-	2.20	389.54	2.20	2.20	359.41	359.41
2072	375.45	-	2.40	676.42	-	0.22	135.28	-	0.22	146.05	-	2.17	500.00	-	2.17	398.01	2.17	2.17	367.22	367.22
2073	383.71	-	2.40	692.65	-	0.22	135.58	-	0.22	146.37	-	2.17	510.88	-	2.17	406.67	2.17	2.17	375.21	375.21
2074	392.15	-	2.40	709.28	-	0.22	135.88	-	0.22	146.70	-	2.17	521.99	-	2.17	415.51	2.17	2.17	383.37	383.37
2075	400.78	-	2.40	726.30	-	0.22	136.18	-	0.22	147.02	-	2.17	533.34	-	2.17	424.55	2.17	2.17	391.71	391.71
2076	409.60	-	2.40	743.73	-	0.22	136.48	-	0.22	147.34	-	2.17	544.94	-	2.17	433.78	2.17	2.17	400.22	400.22
2077	418.61	-	2.40	761.58	-	0.23	136.79	-	0.23	147.68	-	2.17	556.74	-	2.17	443.17	2.17	2.17	408.89	408.89
2078	427.82	-	2.40	779.86	-	0.23	137.11	-	0.23	148.02	-	2.17	568.80	-	2.17	452.78	2.17	2.17	417.75	417.75
2079	437.23	-	2.40	798.58	-	0.23	137.42	-	0.23	148.36	-	2.17	581.12	-	2.17	462.58	2.17	2.17	426.80	426.80
2080	446.85	-	2.40	817.74	-	0.23	137.73	-	0.23	148.70	-	2.17	593.71	-	2.17	472.60	2.17	2.17	436.05	436.05
2081	456.68	-	2.40	837.37	-	0.23	138.05	-	0.23	149.04	-	2.17	606.57	-	2.17	482.84	2.17	2.17	445.49	445.49
2082	466.73	-	2.40	857.46	-	0.22	138.36	-	0.22	149.37	-	2.17	619.74	-	2.17	493.32	2.17	2.17	455.16	455.16
2083	476.99	-	2.40	878.04	-	0.22	138.67	-	0.22	149.71	-	2.17	633.19	-	2.17	504.03	2.17	2.17	465.04	465.04
2084	487.49	-	2.40	899.12	-	0.22	138.98	-	0.22	150.04	-	2.17	646.94	-	2.17	514.97	2.17	2.17	475.14	475.14
2085	498.21	-	2.40	920.70	-	0.22	139.29	-	0.22	150.38	-	2.17	660.98	-	2.17	526.15	2.17	2.17	485.45	485.45
2086	509.17	-	2.40	942.79	-	0.22	139.61	-	0.22	150.72	-	2.17	675.32	-	2.17	537.57	2.17	2.17	495.99	495.99
2087	520.37	-	2.40	965.42	-	0.22	139.91	-	0.22	151.05	-	2.17	690.01	-	2.17	549.26	2.17	2.17	506.77	506.77
2088	531.82	-	2.40	988.59	-	0.22	140.22	-	0.22	151.38	-	2.18	705.02	-	2.18	561.21	2.18	2.18	517.80	517.80
2089	543.52	-	2.40	1,012.32	-	0.22	140.53	-	0.22	151.71	-	2.18	720.36	-	2.18	573.42	2.18	2.18	529.06	529.06
2090	555.48	-	2.40	1,036.61	-	0.22	140.84	-	0.22	152.05	-	2.18	736.04	-	2.18	585.90	2.18	2.18	540.58	540.58
2091	567.70	-	2.40	1,061.49	-	0.22	141.15	-	0.22	152.38	-	2.18	752.05	-	2.18	598.64	2.18	2.18	552.34	552.34
2092	580.19	-	2.40	1,086.97	-	0.22	141.46	-	0.22	152.71	-	2.18	768.41	-	2.18	611.67	2.18	2.18	564.36	564.36
2093	592.95	-	2.40	1,113.05	-	0.22	141.77	-	0.22	153.06	-	2.17	785.09	-	2.17	624.95	2.17	2.17	576.61	576.61
2094	606.00	-	2.40	1,139.77	-	0.22	142.09	-	0.22	153.40	-	2.17	802.14	-	2.17	638.51	2.17	2.17	589.12	589.12
2095	619.33	-	2.40	1,167.12	-	0.22	142.41	-	0.22	153.74	-	2.17	819.55	-	2.17	652.37	2.17	2.17	601.91	601.91
2096	632.96	-	2.40	1,195.13	-	0.22	142.73	-	0.22	154.09	-	2.17	837.34	-	2.17	666.53	2.17	2.17	614.98	614.98
2097	646.88	-	2.40	1,223.81	-	0.22	143.05	-	0.22	154.44	-	2.17	855.51	-	2.17	681.00	2.17	2.17	628.33	628.33
2098	661.11	-	2.40	1,253.19	-	0.22	143.37	-	0.22	154.78	-	2.17	874.08	-	2.17	695.79	2.17	2.17	641.96	641.96
2099	675.66	-	2.40	1,283.26	-	0.22	143.69	-	0.22	155.13	-	2.17	893.06	-	2.17	710.89	2.17	2.17	655.90	655.90
2100	690.52	-	2.40	1,314.06	-	0.22	144.02	-	0.22	155.48	-	2.17	912.44	-	2.17	726.32	2.17	2.17	670.14	670.14

Table A 1.3.1: Values of Working (Employers' Business) Time by Mode (£ per hour, 2010 prices, 2010 values)			
Mode	**Resource Cost**	**Perceived Cost**	**Market Price**
Car driver	22.74	22.74	27.06
Car passenger	17.25	17.25	20.52
LGV (driver or passenger)	10.24	10.24	12.18
OGV (driver or passenger)	12.06	12.06	14.35
PSV driver	12.32	12.32	14.66
PSV passenger	13.97	13.97	16.63
Taxi driver	10.89	10.89	12.96
Taxi / Minicab passenger	21.96	21.96	26.13
Rail passenger	26.86	26.86	31.96
Underground passenger	22.08	22.08	26.28
Walker	17.54	17.54	20.88
Cyclist	17.47	17.47	20.78
Motorcyclist	19.42	19.42	23.11
Average of all working persons	22.75	22.75	27.07
Values of Non-Working Time by Trip Purpose (£ per hour, 2010 prices, 2010 values)			
Trip Purpose	**Resource Cost**	**Perceived Cost**	**Market Price**
Commuting	5.72	6.81	6.81
Other	5.08	6.04	6.04

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)												
Cost type	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.4	12.4	0.0	0.9	2.3	0.6	2.3	0.0	0.4	0.2	**1.2**
	2	0.0	4.4	25.6	0.0	3.0	9.2	1.8	8.7	0.0	1.3	1.4	**2.8**
	3	0.0	19.7	52.9	0.6	24.8	20.5	10.7	18.8	1.0	3.3	7.5	**9.9**
	4	13.8	131.8	145.9	25.2	132.2	148.8	45.5	130.1	18.3	49.2	39.1	**87.6**
	5	0.0	258.0	199.3	57.9	169.6	226.4	71.0	215.2	77.7	116.8	129.6	**155.0**
	Average	**0.1**	**67.1**	**46.4**	**2.8**	**34.2**	**23.8**	**13.2**	**10.8**	**1.1**	**2.2**	**2.7**	**11.5**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	0.0	0.7	0.7	**1.6**
Local Air Quality	All	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.9	1.0	1.2	0.9	0.9	1.0	0.8	0.9	0.9	0.8	0.8	**0.9**
Indirect Taxation	All	-5.3	-5.6	-7.1	-5.2	-5.2	-5.7	-4.8	-5.4	-5.3	-4.8	-4.7	**-5.1**
Total		**-3.8**	**66.1**	**44.1**	**-1.1**	**33.3**	**22.5**	**12.6**	**9.7**	**-3.2**	**-1.0**	**-0.3**	**9.2**

2015 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
Cost type	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.4	13.1	0.0	0.9	2.4	0.6	2.4	0.0	0.4	0.2	**1.2**
	2	0.0	4.6	28.1	0.0	3.1	9.5	1.9	8.9	0.0	1.2	1.4	**2.9**
	3	0.1	22.8	54.1	0.6	24.7	21.2	10.9	19.1	0.7	3.5	7.2	**9.8**
	4	15.1	111.2	136.9	17.8	125.5	128.9	42.5	129.3	17.5	47.8	32.7	**78.3**
	5	0.0	237.2	211.7	62.0	204.9	249.1	73.9	228.0	74.8	124.6	139.2	**167.2**
	Average	**0.1**	**75.1**	**50.2**	**1.7**	**35.9**	**25.7**	**14.5**	**11.3**	**1.1**	**2.4**	**3.2**	**12.3**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.2	3.2	0.0	3.2	3.2	3.2	3.2	0.0	0.7	0.7	**1.7**
Local Air Quality	All	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.9	0.9	1.2	0.8	0.8	0.9	0.8	0.9	0.9	0.8	0.8	**0.8**
Indirect Taxation	All	-5.2	-5.4	-6.9	-5.0	-5.0	-5.6	-4.7	-5.3	-5.1	-4.7	-4.6	**-5.0**
Total		**-3.8**	**74.2**	**48.2**	**-2.2**	**35.3**	**24.6**	**14.2**	**10.5**	**-3.1**	**-0.7**	**0.3**	**10.1**

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
Cost type	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.4	14.2	0.0	1.0	2.6	0.6	2.6	0.0	0.4	0.2	**1.3**
	2	0.0	4.8	30.8	0.0	3.4	10.2	2.0	9.9	0.0	1.4	1.5	**3.2**
	3	0.7	24.8	56.5	1.2	26.9	23.2	12.6	21.0	1.7	3.9	7.9	**10.7**
	4	16.5	114.0	133.3	21.8	97.3	94.3	45.3	90.7	21.5	47.0	30.6	**63.3**
	5	0.0	293.4	253.3	72.5	249.8	298.1	87.1	257.8	93.9	136.7	175.2	**213.2**
	Average	**0.4**	**100.2**	**62.6**	**3.1**	**46.0**	**32.4**	**18.3**	**13.6**	**2.0**	**3.1**	**4.1**	**15.8**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	**1.9**
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	**0.7**
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	**-4.5**
Total		**-3.2**	**99.9**	**61.2**	**-0.5**	**45.9**	**31.9**	**18.5**	**13.4**	**-1.8**	**0.5**	**1.6**	**14.1**

2025 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
Cost type	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.7	14.4	0.0	1.1	2.7	0.7	2.7	0.0	0.5	0.2	**1.4**
	2	0.0	5.2	32.9	0.0	3.6	10.6	2.2	10.5	0.0	1.5	1.9	**3.7**
	3	1.9	27.4	61.7	2.6	28.8	25.1	13.9	22.6	2.7	4.2	8.4	**11.3**
	4	20.8	116.0	145.6	23.9	107.2	105.7	47.5	88.0	22.8	48.2	30.7	**62.8**
	5	0.0	400.7	305.2	81.5	296.3	369.9	101.9	300.4	98.7	156.1	230.5	**262.6**
	Average	**1.1**	**141.2**	**76.3**	**5.5**	**56.9**	**42.8**	**23.1**	**16.1**	**3.7**	**4.0**	**5.7**	**20.5**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	**2.0**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	**0.7**
Indirect Taxation	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	**-3.9**
Total		**-1.8**	**141.8**	**76.0**	**2.7**	**57.8**	**43.4**	**24.3**	**17.0**	**0.5**	**2.1**	**3.9**	**19.5**

2030 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
Cost type	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.8	16.6	0.0	1.1	3.0	0.7	2.9	0.0	0.6	0.3	**1.6**
	2	0.0	5.4	38.4	0.0	4.1	11.7	2.4	11.3	0.0	1.6	2.1	**4.2**
	3	2.5	28.1	64.2	3.0	32.8	27.1	15.5	24.5	5.0	4.5	8.9	**12.7**
	4	22.4	122.3	156.3	27.7	114.7	114.2	51.9	94.3	25.8	52.1	31.6	**65.2**
	5	0.0	450.2	348.5	90.8	343.8	434.5	118.6	336.6	108.8	178.7	269.7	**299.0**
	Average	**1.9**	**172.2**	**90.3**	**7.6**	**69.0**	**51.7**	**28.0**	**18.3**	**6.3**	**5.0**	**7.1**	**25.0**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.1**
Accident	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	**2.2**
Local Air Quality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.2**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	**0.7**
Indirect Taxation	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	**-3.6**
Total		**-0.7**	**173.5**	**90.9**	**5.1**	**70.7**	**53.2**	**30.0**	**19.9**	**3.4**	**3.6**	**5.7**	**24.6**

2035 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
Cost type	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
Congestion*	1	0.0	1.8	19.2	0.0	1.2	3.3	0.8	3.1	0.0	0.6	0.3	**1.7**
	2	0.0	5.8	42.4	0.1	4.4	12.6	2.5	12.1	0.0	1.8	2.3	**4.6**
	3	3.5	30.5	71.1	4.5	35.3	29.0	17.1	26.7	8.6	5.0	10.1	**14.9**
	4	24.6	140.0	168.6	30.7	124.2	120.9	56.5	97.3	29.4	56.5	34.0	**67.9**
	5	0.0	543.1	402.9	97.5	425.6	504.8	138.5	386.7	120.7	201.6	307.5	**348.1**
	Average	**3.1**	**217.5**	**106.8**	**11.3**	**86.6**	**63.4**	**34.3**	**21.2**	**10.4**	**6.3**	**8.4**	**31.2**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.2**
Accident	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	**2.5**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	**0.2**
Greenhouse Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	**1.0**
Indirect Taxation	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	**-3.5**
Total		**1.0**	**219.7**	**108.3**	**9.2**	**89.1**	**65.7**	**37.0**	**23.7**	**8.0**	**5.3**	**7.6**	**31.6**

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)												
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.1	67.1	46.4	2.8	34.2	23.8	13.2	10.8	1.1	2.2	2.7	11.5
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	0.0	0.7	0.7	1.6
Local Air Quality	All	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.9	1.0	1.2	0.9	0.9	1.0	0.8	0.9	0.9	0.8	0.8	0.9
Indirect Taxation	All	-5.3	-5.6	-7.1	-5.2	-5.2	-5.7	-4.8	-5.4	-5.3	-4.8	-4.7	-5.1
Total		-3.8	66.1	44.1	-1.1	33.3	22.5	12.6	9.7	-3.2	-1.0	-0.3	9.2

2015 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.1	75.1	50.2	1.7	35.9	25.7	14.5	11.3	1.1	2.4	3.2	12.3
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.2	3.2	0.0	3.2	3.2	3.2	3.2	0.0	0.7	0.7	1.7
Local Air Quality	All	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.9	0.9	1.2	0.8	0.8	0.9	0.8	0.9	0.9	0.8	0.8	0.8
Indirect Taxation	All	-5.2	-5.4	-6.9	-5.0	-5.0	-5.6	-4.7	-5.3	-5.1	-4.7	-4.6	-5.0
Total		-3.8	74.2	48.2	-2.2	35.3	24.6	14.2	10.5	-3.1	-0.7	0.3	10.1

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	0.4	100.2	62.6	3.1	46.0	32.4	18.3	13.6	2.0	3.1	4.1	15.8
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	1.9
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	0.7
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	-4.5
Total		-3.2	99.9	61.2	-0.5	45.9	31.9	18.5	13.4	-1.8	0.5	1.6	14.1

2025 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	1.1	141.2	76.3	5.5	56.9	42.8	23.1	16.1	3.7	4.0	5.7	20.5
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Accident	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	2.0
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	0.1
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	0.7
Indirect Taxation	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	-3.9
Total		-1.8	141.8	76.0	2.7	57.8	43.4	24.3	17.0	0.5	2.1	3.9	19.5

2030 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	1.9	172.2	90.3	7.6	69.0	51.7	28.0	18.3	6.3	5.0	7.1	25.0
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.1
Accident	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	2.2
Local Air Quality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	0.2
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.7
Indirect Taxation	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	-3.6
Total		-0.7	173.5	90.9	5.1	70.7	53.2	30.0	19.9	3.4	3.6	5.7	24.6

2035 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
	Congestion band	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted Average
Cost type		Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	
	Average	3.1	217.5	106.8	11.3	86.6	63.4	34.3	21.2	10.4	6.3	8.4	31.2
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2
Accident	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	2.5
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	0.2
Greenhouse Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	1.0
Indirect Taxation	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	-3.5
Total		1.0	219.7	108.3	9.2	89.1	65.7	37.0	23.7	8.0	5.3	7.6	31.6

Table A 5.4.2:	2010 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010

Cost type	Congestion band	London	Inner and Outer Conurbations	Other Urban	Rural	Weighted Average
		Other Rds	Other Rds	Other Rds	Other Rds	
		1	2	3	4	5
Congestion 2010	**Average**	**46.4**	**23.8**	**10.8**	**2.7**	**11.5**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.0	3.0	3.0	0.7	**1.6**
Local Air Quality	All	0.3	0.1	0.1	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.2	1.0	0.9	0.8	**0.9**
Indirect Taxation	All	-7.1	-5.7	-5.4	-4.7	**-5.1**
Congestion 2015	**Average**	**50.2**	**25.7**	**11.3**	**3.2**	**12.3**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.2	3.2	3.2	0.7	**1.7**
Local Air Quality	All	0.2	0.1	0.1	0.0	**0.1**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.2	0.9	0.9	0.8	**0.8**
Indirect Taxation	All	-6.9	-5.6	-5.3	-4.6	**-5.0**
Congestion 2020	**Average**	**62.6**	**32.4**	**13.6**	**4.1**	**15.8**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.5	3.5	3.5	0.8	**1.9**
Local Air Quality	All	0.1	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.1	**0.1**
Greenhouse Gases	All	1.0	0.8	0.8	0.7	**0.7**
Indirect Taxation	All	-6.3	-5.1	-4.8	-4.2	**-4.5**
Congestion 2025	**Average**	**76.3**	**42.8**	**16.1**	**5.7**	**20.5**
Infrastructure	All	0.1	0.1	0.1	0.1	**0.1**
Accident	All	3.8	3.8	3.8	0.9	**2.0**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.1	**0.1**
Greenhouse Gases	All	1.0	0.8	0.8	0.7	**0.7**
Indirect Taxation	All	-5.5	-4.4	-4.1	-3.6	**-3.9**
Congestion 2030	**Average**	**90.3**	**51.7**	**18.3**	**7.1**	**25.0**
Infrastructure	All	0.2	0.2	0.2	0.2	**0.1**
Accident	All	4.2	4.2	4.2	1.0	**2.2**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.1	**0.2**
Greenhouse Gases	All	1.0	0.8	0.7	0.6	**0.7**
Indirect Taxation	All	-5.1	-4.0	-3.8	-3.3	**-3.6**
Congestion 2035	**Average**	**106.8**	**63.4**	**21.2**	**8.4**	**31.2**
Infrastructure	All	0.2	0.2	0.2	0.2	**0.2**
Accident	All	4.6	4.6	4.6	1.1	**2.5**
Local Air Quality	All	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.2	**0.2**
Greenhouse Gases	All	1.4	1.1	1.1	0.9	**1.0**
Indirect Taxation	All	-5.0	-3.9	-3.7	-3.2	**-3.5**
Total		**108.3**	**65.7**	**23.7**	**7.6**	**31.6**

Inner and Outer Conurbations	**2**
London	1
Other Urban	3
Rural	4
Weighted Average	5

2020 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)													
Cost type	**Congestion band**	**London**			**Inner and Outer Conurbations**			**Other Urban**		**Rural**			**Weighted Average**
		Motorways	**A roads**	**Other Rds**	**Motorways**	**A roads**	**Other Rds**	**A roads**	**Other Rds**	**Motorways**	**A roads**	**Other Rds**	
Congestion*	1	0.0	1.4	14.2	0.0	1.0	2.6	0.6	2.6	0.0	0.4	0.2	**1.3**
	2	0.0	4.8	30.8	0.0	3.4	10.2	2.0	9.9	0.0	1.4	1.5	**3.2**
	3	0.7	24.8	56.5	1.2	26.9	23.2	12.6	21.0	1.7	3.9	7.9	**10.7**
	4	16.5	114.0	133.3	21.8	97.3	94.3	45.3	90.7	21.5	47.0	30.6	**63.3**
	5	0.0	293.4	253.3	72.5	249.8	298.1	87.1	257.8	93.9	136.7	175.2	**213.2**
	Average	**0.4**	**100.2**	**62.6**	**3.1**	**46.0**	**32.4**	**18.3**	**13.6**	**2.0**	**3.1**	**4.1**	**15.8**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.5	3.5	0.0	3.5	3.5	3.5	3.5	0.0	0.8	0.8	**1.9**
Local Air Quality	All	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.8	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	**0.7**
Indirect Taxation	All	-4.7	-5.0	-6.3	-4.5	-4.6	-5.1	-4.3	-4.8	-4.6	-4.2	-4.2	**-4.5**
Total		**-3.2**	**99.9**	**61.2**	**-0.5**	**45.9**	**31.9**	**18.5**	**13.4**	**-1.8**	**0.5**	**1.6**	**14.1**

2025 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
	1	0.0	1.7	14.4	0.0	1.1	2.7	0.7	2.7	0.0	0.5	0.2	**1.4**
	2	0.0	5.2	32.9	0.0	3.6	10.6	2.2	10.5	0.0	1.5	1.9	**3.7**
Congestion*	3	1.9	27.4	61.7	2.6	28.8	25.1	13.9	22.6	2.7	4.2	8.4	**11.3**
	4	20.8	116.0	145.6	23.9	107.2	105.7	47.5	88.0	22.8	48.2	30.7	**62.8**
	5	0.0	400.7	305.2	81.5	296.3	369.9	101.9	300.4	98.7	156.1	230.5	**262.6**
	Average	**1.1**	**141.2**	**76.3**	**5.5**	**56.9**	**42.8**	**23.1**	**16.1**	**3.7**	**4.0**	**5.7**	**20.5**
Infrastructure	All	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	**0.1**
Accident	All	0.0	3.8	3.8	0.0	3.8	3.8	3.8	3.8	0.0	0.9	0.9	**2.0**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.1**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.7	**0.7**
Indirect Taxation	All	-4.0	-4.4	-5.5	-3.8	-4.0	-4.4	-3.7	-4.1	-3.9	-3.6	-3.6	**-3.9**
Total		**-1.8**	**141.8**	**76.0**	**2.7**	**57.8**	**43.4**	**24.3**	**17.0**	**0.5**	**2.1**	**3.9**	**19.5**

2030 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
	1	0.0	1.8	16.6	0.0	1.1	3.0	0.7	2.9	0.0	0.6	0.3	**1.6**
	2	0.0	5.4	38.4	0.0	4.1	11.7	2.4	11.3	0.0	1.6	2.1	**4.2**
Congestion*	3	2.5	28.1	64.2	3.0	32.8	27.1	15.5	24.5	5.0	4.5	8.9	**12.7**
	4	22.4	122.3	156.3	27.7	114.7	114.2	51.9	94.3	25.8	52.1	31.6	**65.2**
	5	0.0	450.2	348.5	90.8	343.8	434.5	118.6	336.6	108.8	178.7	269.7	**299.0**
	Average	**1.9**	**172.2**	**90.3**	**7.6**	**69.0**	**51.7**	**28.0**	**18.3**	**6.3**	**5.0**	**7.1**	**25.0**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.1**
Accident	All	0.0	4.2	4.2	0.0	4.2	4.2	4.2	4.2	0.0	1.0	1.0	**2.2**
Local Air Quality	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.1	**0.2**
Greenhouse Gases	All	0.7	0.8	1.0	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	**0.7**
Indirect Taxation	All	-3.6	-4.2	-5.1	-3.5	-3.7	-4.0	-3.4	-3.8	-3.6	-3.3	-3.3	**-3.6**
Total		**-0.7**	**173.5**	**90.9**	**5.1**	**70.7**	**53.2**	**30.0**	**19.9**	**3.4**	**3.6**	**5.7**	**24.6**

2035 Marginal External Costs & Indirect Tax - Cars (pence per car km, 2010 prices, 1 d.p.)

	Congestion	London			Inner and Outer Conurbations			Other Urban		Rural			Weighted
Cost type	band	Motorways	A roads	Other Rds	Motorways	A roads	Other Rds	A roads	Other Rds	Motorways	A roads	Other Rds	Average
	1	0.0	1.8	19.2	0.0	1.2	3.3	0.8	3.1	0.0	0.6	0.3	**1.7**
	2	0.0	5.8	42.4	0.1	4.4	12.6	2.5	12.1	0.0	1.8	2.3	**4.6**
Congestion*	3	3.5	30.5	71.1	4.5	35.3	29.0	17.1	26.7	8.6	5.0	10.1	**14.9**
	4	24.6	140.0	188.6	30.7	124.2	120.9	56.5	97.3	29.4	56.5	34.0	**67.9**
	5	0.0	543.1	402.9	97.5	425.6	504.8	138.5	386.7	120.7	201.6	307.5	**348.1**
	Average	**3.1**	**217.5**	**106.8**	**11.3**	**86.6**	**63.4**	**34.3**	**21.2**	**10.4**	**6.3**	**8.4**	**31.2**
Infrastructure	All	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	**0.2**
Accident	All	0.0	4.6	4.6	0.0	4.6	4.6	4.6	4.6	0.0	1.1	1.1	**2.5**
Local Air Quality	All	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Noise	All	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.2	**0.2**
Greenhouse Gases	All	1.0	1.2	1.4	1.0	1.0	1.1	0.9	1.1	1.0	0.9	0.9	**1.0**
Indirect Taxation	All	-3.5	-4.1	-5.0	-3.4	-3.6	-3.9	-3.3	-3.7	-3.4	-3.2	-3.2	**-3.5**
Total		**1.0**	**219.7**	**108.3**	**9.2**	**89.1**	**65.7**	**37.0**	**23.7**	**8.0**	**5.3**	**7.6**	**31.6**

Table 4.1.7: Values of aspects in pedestrian environment (2010 values and 2010 prices)		
Scheme type	**Value p/km**	**Source**
Street lighting	3.8	Heuman (2005)
Kerb level	2.7	Heuman (2005)
Crowding	1.9	Heuman (2005)
Pavement evenness	0.9	Heuman (2005)
Information panels	0.9	Heuman (2005)
Benches	0.6	Heuman (2005)
Directional signage	0.6	Heuman (2005)

Table 4.1.6: Value of journey ambience benefit of cycle facilities relative to no facilities (2010 prices & 2010 values)		
Scheme type	**Value p/min**	**Source**
Off-road segregated cycle track	7.03	Hopkinson & Wardman (1996)
On-road segregated cycle lane	2.99	Hopkinson & Wardman (1996)
On-road non-segregated cycle lane	2.97	Wardman et al. (1997)
Wider lane	1.81	Hopkinson & Wardman (1996)
Shared bus lane	0.77	Hopkinson & Wardman (1996)
	pence	
Secure cycle parking facilities	98.14	Wardman et al. (2007)
Changing and shower facilities	20.82	Wardman et al. (2007)

	Annual average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005=100													
1998	91.1	89.9	90.3	90.5	91.0	91.5	91.3	90.8	91.2	91.6	91.6	91.7	91.9
1999	92.3	91.4	91.5	92.0	92.4	92.7	92.6	92.0	92.3	92.7	92.6	92.7	93.0
2000	93.1	92.1	92.4	92.6	92.9	93.2	93.3	92.8	92.8	93.6	93.5	93.7	93.7
2001	94.2	92.9	93.1	93.4	94.0	94.7	94.9	94.2	94.5	94.8	94.7	94.5	94.7
2002	95.4	94.4	94.5	94.9	95.3	95.5	95.5	95.2	95.5	95.7	95.9	95.9	96.3
2003	96.7	95.7	96.0	96.3	96.7	96.7	96.5	96.5	96.8	97.1	97.2	97.2	97.5
2004	98.0	97.0	97.2	97.4	97.8	98.1	98.1	97.8	98.1	98.2	98.4	98.6	99.1
2005	100.0	98.6	98.8	99.3	99.7	100.0	100.0	100.1	100.4	100.6	100.7	100.7	101.0
2006	102.3	100.5	100.9	101.1	101.7	102.2	102.5	102.5	102.9	103.0	103.2	103.4	104.0
2007	104.7	103.2	103.7	104.2	104.5	104.8	105.0	104.4	104.7	104.8	105.3	105.6	106.2
2008	108.5	105.5	106.3	106.7	107.6	108.3	109.0	109.0	109.7	110.3	110.0	109.9	109.5
2009	110.8	108.7	109.6	109.8	110.1	110.7	111.0	110.9	111.4	111.5	111.7	112.0	112.6
2010	114.5	112.4	112.9	113.5	114.2	114.4	114.6	114.3	114.9	114.9	115.2	115.6	116.8
2011	119.6	116.9	117.8	118.1	119.3	119.5	119.4	119.4	120.1	120.9	121.0	121.2	121.7
2012	123.0	121.1	121.8	122.2	122.9	122.8	122.3	122.5	123.1	123.5	124.2	124.4	125.0
2013	126.1	124.4	125.2	125.6	125.9	126.1	125.9	125.8	126.4	126.8	126.9	127.0	127.5
2014	..	126.7	127.4	127.7	128.1	128.0	128.3	127.8	..	..	..	..	..
1.027071 2015		130.1299											

2010	1
2011	1.040036
2012	1.077402
2013	1.106762
2014	1.127224
2015	1.157739

Appendix B3

Carplus Economic Spreadsheet

(Also attached in Excel format to submission email)

Discounted cost benefit calculation

TAG data book MECs converted to 2015 prices

Scheme and nature of benefit			Central	High	Low		
Assumed self sufficiency after 5 years							
5 years							
Carbon	Number of vehicles		0	0	0	No electric vehicle bonus	Factor
Average 60gm/km <ave car							1.5
	Average mileage	8176					
Reduced Marginal External							
Costs (MECs) from cars	Number of members	40	12,200	14,640	9,760		
Mortality benefits	Number of members	40	11,200	16,800	5,600		
Productivity benefits	Number of members	40	4,619	4,619	4,619		
			28,019	36,059	19,979		
NPV			28,019	36,059	19,979		
	Carplus support			0	0		
	BCR		#DIV/0!	#DIV/0!	#DIV/0!		
30 years							
Carbon	Number of vehicles	0	0	0	0	No electric vehicle bonus	
	Average mileage	8176					
Reduced Marginal External							
Costs from cars	Number of members	40	73,137	87,764	58,509		
Mortality benefits	Number of members	40	83,440	125,160	41,720		
Productivity benefits	Number of members	40	14,540	14,540	14,540		
PVB			171,116	227,464	114,769		
NPV			171,116	227,464	114,769		
	Carplus support		0	0	0		
	BCR		#DIV/0!	#DIV/0!	#DIV/0!		

Note

National average mileage	8176
National average members per car	40

Basis for producing NPV and BCR

Base year chosen as 2015 to reflect scheme cost estimates
Benefits then discounted using 3.5%
Treasury

	Factors applied to benefits
2015	1
	0.9662
	0.9335
	0.9019
	0.8714
	0.842
	0.8135
	0.786
	0.7594
	0.7337
	0.7089
	0.6849
	0.6618
	0.6394
	0.6178
	0.5969
	0.5767
	0.5572
	0.5384
	0.5202
	0.5026
	0.4856
	0.4692
	0.4533
	0.438
	0.4231
	0.4088
	0.395
	0.3817
	0.3687
	0.3563

2010 marginal external cost values from TAG data book uprated to 2014 using GDP deflator

GDP deflator		
2010	93.039	0.93039
2011	95.016	
2012	96.594	
2013	98.323	
2014	100	

https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-march-2015-quarterly-national-accounts

Active Travel Mortality Benefits

Sources HEAT Tool
TAG Unit A 4.1

Ave members per car club car
40

HEAT benefits
(Using UK data)
5 years discounted at 3.5%
Walk from 15m per day to 30m
£2,100 Average
Cycle from 6hours a year to 100
£1,900 2000
E&W 13_14
Cars avoided (SDG report para 2.18)
28%
Average all car clubs Per vehicle
%car avoided X HEAT X members £22,400
Allow 50% fit by other means
£11,200
Per member 280
Hi 25% fit other means 420
Lo 75% fit other means 140

Physical fitness from cycling Discounted
Per memb NHS 7.08 24.71
Productivi 17.64 23.88
24.71 23.07
Walk 58% 22.29
Cycle 32% 21.53
(3 or more times a week) 115.47
NTS cycling eq 0.07
Cycle users gained 25%

Health (physical fitness)
This is based on averages for full year of cycling (160 days average) for each user gained
Source: TAG Unit A4.1 for absenteeism, LSTF for NHS
NHS Savings 28.3
Productivity Gains 70.5432
Ave earnings per hour 22.75
WHO low % saved absence 6%
WHO high % saved absence 32%
Ave short term absence UK 6.46
Low est 70.5432
High est 376.23
TAG recommends use of the minimum figure as an "at least" value
This has been adopted for the report without low/high estimates

HEAT benefits
(Using UK data)
30 years discounted at 3.5%
Walk from 15m per day to 30m
£15,400 Average
Cycle from 6hours a year to 100
£14,400 14900
E&W 13_14
Cars avoided (SDG report para 2.18)
28%
Average all car clubs Per vehicle
%car avoided X HEAT X members £166,880
Allow 50% fit by other means
£83,440
Per member £2,086
Hi 25% fit other means ########
Lo 75% fit other means ########

Physical fitness from cycling Discounted
Per memb NHS 7.08 24.71
Productivi 17.64 23.88
24.71 23.07
Walk 58% 22.29
Cycle 32% 21.53
(3 or more times a week) 20.81
NTS cycling eq 7% 20.10
Cycle gain 25% 19.42
18.77
18.13
17.52
16.92
16.35
15.80
15.27
14.75
14.25
13.77
13.30
12.85

As a cross check to the HEAT tool, the calculation below uses TAG
This results in a slightly higher level of benefit

TAG Unit 4.1
Per person
Walk from 15m per day to 30m
WHO base Relative risk 0.22
Lives saved 0.00052
Reduced mortality £ 855.118
Cycle from 6hours a year to 100
Copenhagen base
Ave cycle speed 14
Without scheme hours 6
Annual kms 84
With scheme hours 100
Annual kms 1400
Relative risk 0.24198
Lives saved 0.00057
Reduced mortality £ 940.534
Ave reduced mortality 897.826
Number of users 40
Per vehicle 35913

Assume 50% fit other means 17956.5
In 2015 prices 19300

363.49

Marginal external car costs avoided

Ave miles saved per member (net) 223.84 (from survey data)

Marginal External Cost (MEC) — MEC from TAG data book

	2015 in 2010 prices			2020 in 2010 prices			2025 in 2010 prices			2030 in 2010 prices			2035 in 2010 prices		
	All	CO2e	per car £	tot per km	CO2e		tot per km	Per car km C		tot per km	Per car km C		tot per km	Per car km C	
	per car km	per car km	42.12275	Ave 15/20	0.186	0.0028	36.85741	0.234	0.0028		0.282	0.0028		0.351	0.0028
	0.151	0.0032		60.72417	per member		75.67997	per member		92.97825	per member		114.0605	per member	
	per member				67.03083			84.32911			101.6274			126.4937	
	54.4175						Ave								
				1340617			39.49008	1686582							
Members	20,000	1088350		18429				18429							
Cars	500	21061		1359045				1705011							
Ave mileag	8176	1109411													
Memb/car	40														

Social benefit per vehicle

2010 prices		Discounted	
Y1	2218.823	1	2218.823
Y2	2218.823	0.965	2141.164
Y3	2218.823	0.931225	2066.223
Y4	2218.823	0.898632	1993.905
Y5	2718.091	0.86718	2357.074
Ann uplift	11593.38		10777.19

Per car CO2e

gm/km sav	tonnes p a	Add 15%	Cost £
60	0.49056	0.564144	0

Per car MEC

Average distance car :	7900
MEC	1920.569

5 year calculation

Ave miles saved per member (net) 223.84

TAG	Individual elements MEC per member		Discounted
	2015 to 2020	60.72	60.72
			58.67
			56.69
			54.77
			52.92
			283.76

30 year calculation

TAG	Individual elements MEC per member		Discounted	
	2015 to 2030	60.72	60.72	2015
			58.67	2016
			56.69	2017
			54.77	2018
			52.92	2019
		75.68	63.72	2020
			61.57	2021
			59.48	2022
			57.47	2023
			55.53	2024
		92.98	65.91	2025
			63.68	2026
			61.53	2027
			59.45	2028
			57.44	2029
		114.06	68.08	2030
			65.78	2031
			63.55	2032
			61.41	2033
			59.33	2034
			57.33	2035
			55.39	2036
			53.52	2037
			51.70	2038
			49.96	2039
			48.26	2040
			46.63	2041
			45.05	2042
			43.54	2043
			42.05	2044
			1701.14	

Carbon calculations
CO2 equivalent prices
TAG data book table A 3.4

£ per tonne 2010 prices

					5 years			30 years	Derived from 60gm/km reduction cf average to 2030		
	Lo	Central	Hi	CO2e per vehicle	Central	Hi	Lo	CO2e per vehicle	Central	Hi	Lo
2015	28.70	57.40	86.10	2015 to 2020	0.00	0.00	0.00	2015 to 2030	0.00	0.00	0.00
2016	29.13	58.26	87.39		0.00	0.00	0.00	Discounted	0.00	0.00	0.00
2017	29.57	59.14	88.70		0.00	0.00	0.00		0.00	0.00	0.00
2018	30.01	60.02	90.03		0.00	0.00	0.00		0.00	0.00	0.00
2019	30.46	60.92	91.39		0.00	0.00	0.00		0.00	0.00	0.00
2020	30.92	61.84	92.76		0.00	0.00	0.00		0.00	0.00	0.00
2021	31.43	62.87	94.30						0.00	0.00	0.00
2022	31.95	63.90	95.85						0.00	0.00	0.00
2023	32.46	64.93	97.39						0.00	0.00	0.00
2024	32.98	65.96	98.94						0.00	0.00	0.00
2025	33.50	66.99	100.49						0.00	0.00	0.00
2026	34.01	68.02	102.03						0.00	0.00	0.00
2027	34.53	69.05	103.58						0.00	0.00	0.00
2028	35.04	70.08	105.12						0.00	0.00	0.00
2029	35.56	71.11	106.67						0.00	0.00	0.00
2030	36.07	72.14	108.22						0.00	0.00	0.00
2031	39.42	78.84	118.26						0.00	0.00	0.00
2032	42.77	85.54	128.31						0.00	0.00	0.00
2033	46.12	92.24	138.36						0.00	0.00	0.00
2034	49.47	98.94	148.41						0.00	0.00	0.00
2035	52.82	105.64	158.46						0.00	0.00	0.00
2036	56.17	112.34	168.51						0.00	0.00	0.00
2037	59.52	119.04	178.56						0.00	0.00	0.00
2038	62.87	125.74	188.60						0.00	0.00	0.00
2039	66.22	132.44	198.65						0.00	0.00	0.00
2040	69.57	139.13	208.70						0.00	0.00	0.00
2041	72.92	145.83	218.75						0.00	0.00	0.00
2042	76.27	152.53	228.80						0.00	0.00	0.00
2043	79.62	159.23	238.85						0.00	0.00	0.00
2044	82.97	165.93	248.90						0.00	0.00	0.00
									0.00	0.00	0.00

Per car CO2e

gm/km sav	tonnes p a	Add 15%	Cost £
60	0.49056	0.564144	52.13586

Appendix B4

BCR Summary spreadsheet

(Also attached in Excel format to submission email)

Appendix B4 - BCR summaries

Extracted from DfT Active Travel Toolkit work sheet AMCB

Low		Central		High	
Congestion beenfit	208.56	Congestion beenfit	1324.34	Congestion beenfit	1989.53
Infrastructure	5.01	Infrastructure	8.06	Infrastructure	12.11
Accident	38.40	Accident	151.45	Accident	227.52
Local Air Quality	0.00	Local Air Quality	0.00	Local Air Quality	0.00
Noise	4.79	Noise	8.46	Noise	12.70
Greenhouse Gases	33.82	Greenhouse Gases	57.50	Greenhouse Gases	86.39
Reduced risk of premature death	9760.23	Reduced risk of premature death	10988.61	Reduced risk of premature death	12087.14
Absenteeism	974.71	Absenteeism	1097.37	Absenteeism	1207.09
Journey Ambience	187.88	Journey Ambience	421.75	Journey Ambience	463.83
PAYD	114.77	PAYD	171.12	PAYD	227.46
Indirect Taxation	-193.60	Indirect Taxation	-351.21	Indirect Taxation	-527.61
Government	1407.55	Government	1407.55	Government	1407.55
Private contribution	471.42	Private contribution	471.42	Private contribution	471.42
PVB	10658.13	PVB	13397.97	PVB	15302.65
PVC	1402.53	PVC	1399.48	PVC	1395.43
BCR	7.60	BCR	9.57	BCR	10.97

Appendix B5

Scheme Impact Proforma

(Also attached in Excel format to submission email)

Access Fund Revenue Competition - Schemes Impact Pro-Forma

For cycling/walking elements of your bid, please provide the following evidence - if available			
Input data	**Without Scheme**	**With Scheme**	**Reference to supporting information (e.g. section of Economic Appraisal Summary).**
Calculation of detailed outcomes for each individual element, by work and non-work travel, of the comprehensive package of measures to encourage people to walk and cycle both for work, school and other purposes and to work with businesses to encourage more sustainable travel choice. For the high profile cycling events we have also used published economic appraisals of recent similar events.	A lack of awareness of the benefits of walking and cycling and a lack of confidence in choosing those forms of travel, particularly cycling.	3,297 new daily cycle trips and 4,805 new walking trips and 1.64million fewer car kms a year through direct engagement with schools, workplaces and GP surgeries to build confidence and encourage	*While the measures are a package and appraised as a whole, each element has been considered for the indidvidual impacts for both walking and cycling and for work, school and the GP based clients. These are set out in the economic report section "Input Calculations". Evidence for these have included previous schemes and assessments and Census 2011 data for Journey to Work for the areas affected by the scheme. Wider benefits outside the BCR from the cycling events, at both local and UK level, are assessed using published data for similar events in the locality and set out separately in the Economics Report.*
Route length (km)	Non-route based	Non-route based	*No new route in this package, although it will support and maximise value from existing capital expenditure already in hand, for example Optimising Connectivity 2 package.*
Average trip length (km)	Cycle 3.9 km Walk 1.15 km	Cycle 3.9 km Walk 1.15 km	*The NTS average data has been used to assess the benefits.*
Average cycling speed (kph)	Cycle 20 kph Walk 5 kph	Cycle 20 kph Walk 5 kph	*By definition these journeys are new so NTS averages have been used.*
Number of users (per day)	See note	3,297 new daily cycle trips and 4,805 new walking trips	*There is not comprehensive cycle or walk data for the area affected by the scheme. Other sources such as the Census and NTS have been used. A monitoring and evaluation programme is included in the scheme cost to ensure that more data is available in future. Sensitivity testing on forecast use has been undertaken and is set out in the Economics Report.*
Percentage of additional users that would have driven a car otherwise.	N.A.	56% for JTW, 27% for non-work	*The Census JTW car driver mode share has been used (excluding car passengers) as a best estimate. The non-work data assumes a much lower transfer rate 50% of the JTW. Low, central and high cost benefit assessments explore the impact of these figures on the value for money and are set out in the Economics Report.*

If you are expecting your project to reduce car travel, please provide the following information			
Input data	**Without Scheme**	**With Scheme**	**Reference to supporting information (e.g. section of Economic Appraisal Summary).**
Traffic levels (Vehicle km) in the affected area		1.64 mn fewer veh km in the final year, 14.6 mn	*Extracted from the DfT Active Travel Toolkit: Decongestion worksheet for final year figure. 14.6 million fewer veh kms over the 20 year period, allowing for decay at 10% a year (independent calculation).*
Traffic levels (Vehicle hours) in the affected area			
Average Speed in the Morning Peak			
Mode share (in person trips)			
Car Driver			
Car Passenger			
Bus passenger			
Rail Passenger			
Cyclist			
Walking			

For Bus elements of your bid please fill in the following table			
Input data	**Without Scheme**	**With Scheme**	**Reference to supporting information (e.g. section of Economic Appraisal Summary).**
Annual number of passenger trips	Very low: 1.5% of the JTW	High level of uncertainty so forecast not undertaken	*The low level of bus use for JTW in much of the area is revealed in the Census and this means more detailed data is not available from other local travel surveys. In the economic appraisal the cost of the public transport part of the measure has been included but with no benefits, although there are walking and cycling benefits from the overall business toolkit measure.*
Average trip distance (km)			
Total bus kilometres travelled (km), only change if 'with' scheme includes new bus services			
Average wait time (mins)			
Average fare per trip (£)			
Average in-vehicle time (mins)			
Description of your intervention	*Measures will promote Access to Work through a behavioural change programme focussing on key employment and training areas across Cumbria. New employment sites will be targeted, therefore a key transition point for employees before they form travel habits. The Business Toolkit measure involves promotion of services which might be attractive including "tasters" - similar to the familiarisation approach used for some of the walking and cycling initiatives. Car trips to key employment areas will be reduced in addition to the targeted walking and cycling measures.*		

Appendix B6

Project Plan

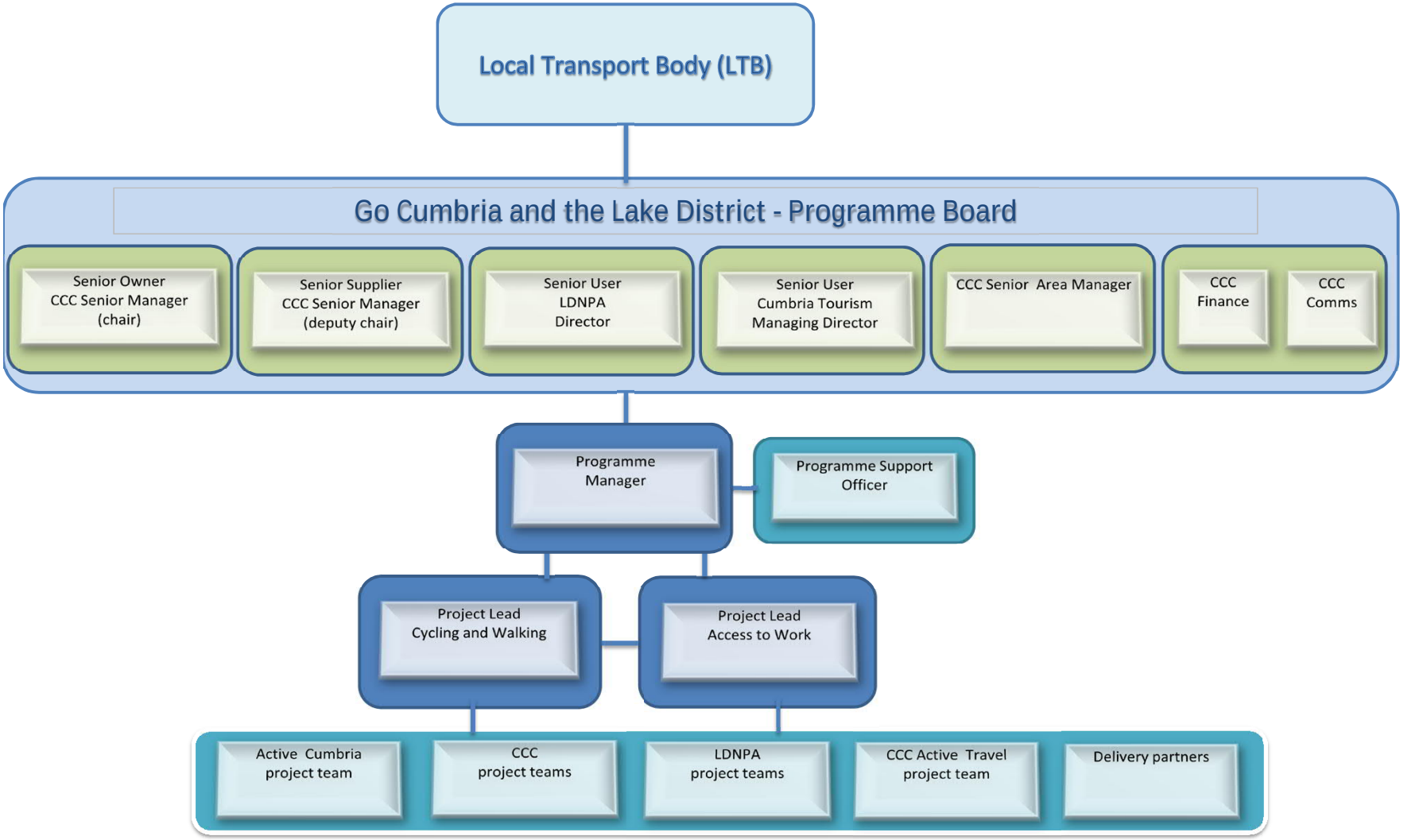
ID	Task Name	Duration	Start	Finish	Predec	Resource Names
1	Programme and Project Management	970 days	Wed 13/07/16	Tue 31/03/20		
2	Access Fund bid submission deadline	1 day	Fri 09/09/16	Fri 09/09/16		
3	Work up programme & projects prior to start date	189 days	Wed 13/07/16	Mon 03/04/17		Programme Manager / Project Leads
4	Review previous LSTF programmes lessons learnt	20 days	Wed 01/02/17	Tue 28/02/17		Programme Manager / Project Leads
5	Project start date	1 day	Mon 03/04/17	Mon 03/04/17		
6	2017/18 Programme agreed with Programme Board	5 days	Mon 20/03/17	Fri 24/03/17		Project Leads / Programme Manager / Programme Board
7	2018/19 Programme agreed with Programme Board	5 days	Mon 02/04/18	Fri 06/04/18		Project Leads / Programme Manager / Programme Board
8	2019/20 Programme agreed with Programme Board	5 days	Mon 01/04/19	Fri 05/04/19		Project Leads / Programme Manager / Programme Board
9	Programme and Project Management	782 days	Mon 03/04/17	Tue 31/03/20		Programme Manager / Project Leads
10	Cycling and Walking	782 days	Mon 03/04/17	Tue 31/03/20		
11	Pedal your way to health school roadshows (during school term time)	782 days	Mon 03/04/17	Tue 31/03/20		Active Cumbria / 3rd party delivery / schools
12	Primary School Active - 100 Mile Challenge & Feet First (during school term time)	782 days	Mon 03/04/17	Tue 31/03/20		Active Cumbria / Active Travel teams
13	Walking & Cycling Campaign (Go Active)	782 days	Mon 03/04/17	Tue 31/03/20		Active Cumbria
14	Walk Leader Training and Walking Groups	762 days	Mon 01/05/17	Tue 31/03/20		Active Cumbria / LDNPA
15	Ride Leader Training and Cycle Groups	762 days	Mon 01/05/17	Tue 31/03/20		Active Cumbria / British Cycling / Cycle training providers
16	Inspirational Cycling Events (eg Tour of Britain / Tour Series / Tour De Yorkshire) - 1 per year in 2017 & 2018, planning throughout each year	413 days	Mon 03/04/17	Wed 31/10/18		Project Lead / British Cycling / other stakeholders
17	Mass Participation Bicycle Ride (2018 and/or 2019)	414 days	Mon 02/04/18	Thu 31/10/19		Project Lead / British Cycling / other stakeholders
18	Lake District Community Active Travel	782 days	Mon 03/04/17	Tue 31/03/20		Project Lead / LDNPA
19	Access to Work, Education & Training	782 days	Mon 03/04/17	Tue 31/03/20		
20	Toolkit for Business	782 days	Mon 03/04/17	Tue 31/03/20		
21	Workplace Challenge	782 days	Mon 03/04/17	Tue 31/03/20		Project Lead / Active Cumbria / Consultants
22	Personalised Travel Planning	762 days	Mon 01/05/17	Tue 31/03/20		Project Lead / Active Cumbria / Consultants
23	Walking and Cycling Audits	631 days	Thu 01/06/17	Thu 31/10/19		CCC / LDNPA / Consultants
24	Adult cycle training	563 days	Mon 05/06/17	Wed 31/07/19		Project Lead / Active Cumbria / Cycle training providers
25	Dr Bike & Fix It Yourself	563 days	Mon 05/06/17	Wed 31/07/19		External providers
26	Active Travel Surgeries	631 days	Thu 01/06/17	Thu 31/10/19		Project Lead / Active Cumbria / Consultants
27	Matched funding	739 days	Thu 01/06/17	Tue 31/03/20		Project Lead
28	Accreditation	739 days	Thu 01/06/17	Tue 31/03/20		Project Lead / Active Cumbria
29	Library of Resources	739 days	Thu 01/06/17	Tue 31/03/20		Project Lead / Active Cumbria
30	Business Network	262 days	Mon 01/04/19	Tue 31/03/20		Project Lead / Active Cumbria / Consultants
31	Pay As You Drive vehicles	782 days	Mon 03/04/17	Tue 31/03/20		Project Lead / Car club partner
32	Monitoring & Evaluation	782 days	Mon 03/04/17	Tue 31/03/20		Programme team
33	Marketing, Promotion, Communications	782 days	Mon 03/04/17	Tue 31/03/20		Programme team / Marketing consultants

Project: LSTF revenue bid PROJEC
Date: Tue 06/09/16

Task	Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Deadline
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Progress

Appendix B7

Organogram


Local Transport Body (LTB)
Go Cumbria and the Lake District - Programme Board
Senior Owner
CCC Senior Manager
(chair)
Senior Supplier
CCC Senior Manager
(deputy chair)
Senior User
LDNPA
Director
Senior User
Cumbria Tourism
Managing Director
CCC Senior Area Manager
CCC
Finance
CCC
Comms
Programme
Manager
Programme Support
Officer
Project Lead
Cycling and Walking
Project Lead
Access to Work
Active Cumbria
project team
CCC
project teams
LDNPA
project teams
CCC Active Travel
project team
Delivery partners

Appendix B8

Programme Board terms of reference

Go Cumbria and the Lake District

Governance
Programme Board Terms of Reference

1. Overview

1.1 These are the provisional Terms of Reference for the 'Go Cumbria and the Lake District' initiative which is bidding for funding from DFT in order to deliver the Projects under it.

1.2 The Programme Board set up for the previous See More Cumbria and the Lake District programme will continue to oversee the delivery of Go Cumbria and the Lake District. The Programme Board is made up of the organisations who are involved in delivering the Programme (the Partners), namely Cumbria County Council (CCC) and the Lake District National Park Authority (LDNPA).

1.3 The Programme will be made up of a number of Projects which are collectively intended to deliver the Programme.

1.4 Cumbria County Council are the applicant and grant recipient and therefore retains overall control of how the Programme sum is spent.

2. Responsibilities

2.1 The Programme Board will be responsible for:

- The successful delivery of the Go Cumbria and the Lake District programme.
- The strategic direction and management of the Programme and its constituent projects.
- Ensuring the Programme successfully achieves the objectives.
- Ensuring the Programme meets the requirements of the target audience, stakeholders, partner organisations and the DfT.
- Exploring future funding opportunities.

3. Constitution

3.1 The Programme Board constitution is:

i. CCC, Senior Manager, Economic Development and Planning, Environment & Community Services (Senior Owner) (Chair)
ii. CCC, Senior Manager, Strategic Asset Management, Highways, Transport & Fleet (Senior Supplier) (Deputy Chair)
iii. CCC, Senior Area Manager
iv. LDNPA, Director of Sustainable Development (Senior User)
v. Cumbria Tourism, Managing Director (Senior User)
vi. CCC Strategic Communications Advisor (Communications)
vii. CCC Principal Finance Officer (Finance)

3.2 If a board member cannot attend a scheduled board meeting a substitute representative should attend in their place.

3.3 The day to day management of the Programme will be undertaken by the CCC Infrastructure Planning team's Programme Manager. The Programme Manager reports to the Programme Board.

4. Role

4.1 The role of the Programme Board is to:

a. Approve the planned use and allocation of the Programme Sum to each Project within the Programme;
b. Ensure appropriate resources are available to deliver the Programme;
c. Ensure a communications plan is in place for the Programme;
d. Provide the Programme Manager with support and guidance as required for effective delivery of the Programme;
e. Reconcile differences in opinion and approach between the Partners;
f. Keep the Programme scope under control and realise the intended benefits;
g. Agree reporting and tolerance levels for financial and project variances and approve any changes as requested;
h. Approve changes to the Project's plans/scope of works in line with Programme tolerances;
i. Monitor budgets, risks, issues, quality and timeliness of delivery;
j. Ensure risks and issues are being monitored and managed;
k. Report to and escalate issues and/or risks as appropriate, to CCC's Environment Departmental Management Team, to LDNPA's Transport Member Working Group and/or Transport Programme Board or to the DfT;
l. Authorise Programme closure, review lessons learned and agree forward responsibilities;

4.2 The following specific responsibilities relate to the individual roles on the Programme Board.

The Senior Owner is ultimately responsible for the successful delivery of the Programme and will:

- Ensure that the Programme achieves the objectives and associated benefits;
- Ensure the Programme is value for money;
- Balances the demands of the Senior User and Senior Supplier.

The Senior Supplier will:

- Represent the interests of those designing, developing, procuring and implementing the Programme;
- Be responsible for the quality of the final outputs of the Programme (alignment with design standards, use of appropriate materials etc).

The Senior User will:

- Represent the interests of those who will use the outputs of the Programme;
- Be responsible for ensuring the outputs of the Programme meet the objectives of the Programme in terms of quality, functionality and ease of use.

5. Board Administration

5.1 The Programme Board will be updated at least on a monthly basis via Programme Checkpoint Reports from the Programme Manager.

5.2 The Programme Board will meet bi-monthly but may meet more frequently as circumstances demand.

5.3 The agenda and appropriate papers will be circulated one week in advance by the Programme Manager.

5.4 Members must supply apologies to the Programme Manager if they cannot attend.

5.5 CCC is responsible for recording Programme Board actions and circulating these within one week of the meeting.

5.6 Any matters arising between Programme Board meetings which need to be addressed prior to the next meeting shall be circulated by the Programme Manager as appropriate.

6. Financial General

6.1 CCC will be the applicant and grant recipient for the Programme.

6.2 Any dispute relating to how the Programme Sum is used shall be determined by CCC and CCC's decision shall be final.

6.3 The Partners acknowledge and accept any procurement they carry out and or grant requests they invite shall be subject to CCC's approval and no release of the Programme Sum for such orders and/or grants shall be given unless CCC is in agreement.

Appendix B9

Risk Management Strategy

Go Cumbria and the Lake District
Risk Management Strategy

1. Introduction

A robust Risk Management Strategy is essential for the successful delivery of the Access Fund for Sustainable Travel funded programme. This Risk Management Strategy builds on what has been learned from the previous 'See More Cumbria and the Lake District' and 'Go Lakes Travel' LSTF programmes, and provides a systematic, effective and efficient way for programme and projects risks to be identified and managed. The basis for the strategy is summarised in figure 1 below:

Figure 1: Risk Management Summary

For the Go Cumbria and the Lake District programme, the essential elements will be:

- Ensuring a risk register is opened and maintained to identify and record risks.
- Assign a project owner to each risk
- Mitigate or eliminate identified risks
- Minimise the number of risks that become project issues
- Periodically review the above

Programme and project risks have been identified for Go Cumbria and the Lake District and a comprehensive risk register has been compiled.

2. Risk Identification

The quantified risk register will enable the effective management and communication of potential conflicts, ensuring appropriate mitigation is incorporated into the subsequent design process.

The Risk Register identifies the potential causes and consequences of each risk, the owner and dependencies. The register is a 'live' document which will be maintained and owned by the programme. Project Leads will be responsible on a monthly basis for ensuring that all risks to their project are identified, logged, and where appropriate reviewed. Where the severity of a particular risk impact changes, the Project Leads will recalculate the likely cost and programme implications and agree future actions in accordance with appropriate change management procedures.

3. Risk Assessment

Once a potential risk has been identified it is the responsibility of the Project Lead to appoint a Risk Owner to undertake the Impact Analysis and identify the Mitigation Measures. This analysis will include identifying the following:

- Risk description
- Risk impact: Negligible, Marginal, Critical, Castastrophic
- Risk likelihood: Almost Impossible, Very Low, Low, Significant, High, Very High
- Countermeasures
- Status

The 'Risk Score' is a combination of impact (1-4) and likelihood (1-6) to produce a Risk Score with a maximum of 24.

4. Risk Treatment

The Risk Log will identify the owner of the risk, for example the Project Lead. The risk owner is tasked with either stopping the activity associated with the risk, reducing the risk, transferring the risk to a third party, sharing the risk with a third party, or decide to carry the risk as part of normal operations.

Any changes this has on the overall project will be reflected in the project programme and budget.

Within this framework, management of risk will be undertaken through:

- maintenance and updating of the risk register;
- formal reporting on risks to the project through monthly Checkpoint reports
- raising risks which cannot be resolved by the Project Lead, with the Programme Manager for discussion
- raising risks which the Project Lead and/or Programme Manager cannot resolve, with the Programme Board for the Board to decide course of action.
- .

5. Risk Monitoring and Reporting

An ongoing review process is essential to proactive risk management to ensure the risk is still current and the controls are still relevant and are achieving the desired outcomes. Within the project management framework the following roles and responsibilities are identified in relation to risk management:

Role	**Responsibility**
Project Board	- Manage risks escalated by the Project Lead and Programme Manager within project tolerances. - Report all risks that exceed Cumbria County Council corporate risk tolerance levels.
Project Lead	- Update and review of the risk management strategy and risk register. - Ensure all risks are being identified, assessed and controlled throughout the project life cycle. - Report all risks that exceed the risk tolerance levels set by the Programme Board at the beginning of the project. - Raises any risks which require intervention by Programme Manager or ultimately, Programme Board.

6. Risk Closure

A risk shall be closed in the following circumstances:

- When the probability or the impact of the risk as reflected by its score had been reduced to nil.
- When two or more risks are recognised as being closely related and are and are merged into a single risk. The original risks should be closed and the circumstances recorded in the risk log. The single risk is to be treated as a new risk and will be assessed, treated and monitored in accordance with this plan.
- When the risk had occurred and contingency measures have been implemented.

Appendix B10

Risk Register

Go Cumbria and the Lake District
Risk Log: Programme

Key: CCC Cumbria County Council
LDNPA Lake District National Park Authority

Risk No.	Description	Impact	Likelihood	Risk Score (max. 24)	Owner	Countermeasures	Status	Date Identified
1	Access Fund for Sustainable Travel 'Go Cumbria and the Lake District' bid is unsuccessful. Lack of revenue funding to progress 'Go Cumbria and the Lake District' programme.	4: Catastrophic	4: Significant	16	CCC/LDNPA	Go Cumbria is a package of revenue schemes which will meet the objectives of the Access Fund, vastly increasing more cycling and walking, will improve access to work, training and education, and will encourage economic growth. If not successful, this will reduce the benefit in the short-medium term and partners will need to seek funding from elsewhere.	Amber	06/09/2016
2	There is overspend on the 'Go Cumbria and the Lake District' programme.	3: Critical	3: Low	9	CCC	CCC as the accountable body will ensure that expenditure is kept under regular monitoring and review through the Access Fund Programme Board which will include a Senior CCC Finance Officer. All claims will need to be signed off by the Council's S151 Officer	Green	06/09/2016
3	CCC,and LDNPA, fail to agree & implement revised management structures (building on 'See More' programme for Go Lakes and Cumbria programme).	2: Marginal	2: Very Low	4	CCC/LDNPA	The Go Cumbria and the Lake District programme can be governed and administered through existing See More LSTF structures and Programme Board if required.	Green	06/09/2016
4	Delivery Partners fail to engage on ' Go Cumbria and the Lake District' programme. Unable to secure their support as delivery partners.	3: Critical	3: Low	9	CCC/LDNPA	Risk Owners will seek early engagement of Delivery Partners. There is stron partnership working with them exists and and letters of support are sought.	Green	06/09/2016
5	Go Cumbria and the Lake District ' delivery utilises different staff resource to previous LSTF team: reduced expertise and continuity.	3: Critical	2: Very Low	6	CCC/LDNPA	In house Active Cumbria staff identified to undertake work alongside additional staff to be resourced through bid	Green	06/09/2016
6	Effect of marketing of cycling and walking as a transport choice is diminished by lack of capital funding to improve cycle and walking infrastructure.	2: Marginal	4: Significant	8	CCC/LDNPA	Marketing will seek to maximise awareness and use of many of the cycling and walking infrastructure across Cumbria including the improvements implemented through Go Lakes Travel LSTF programme.	Green	06/09/2016
7	Insufficient time or resources to implement effective marketing campaign.	3: Critical	4: Significant	12	CCC/LDNPA	Lessons learned through See More and Go Lakes LSTF programmes will be applied to ensure that campaign is designed to be effective and delivered in a relatively short timescale but will have longer term legacy.	Amber	06/09/2016
8	Extension and expansion of cycling and walking programmes does not have anticipated impact of raising awareness of and participation in cycling.	2: Marginal	2: Very Low	4	CCC/LDNPA	Delivery Partners will develop a marketing plan specifically for the promotion of cycling and walking programmes.	Green	06/09/2016
9	Delay in award of funding compresses development phase and delivery timescales.	3: Critical	3: Low	6	DfT/ CCC/ LDNPA	DfT sticks to published timeframes for delivery of funding;	Green	06/09/2016
10	Failure to complete project set up prior to commencing business engagement including procurement activity,agreement with providers, contracts,and promotional materials	3: Critical	3: Low	9	CCC	Prepare and deliver project plan from December 2016 to April 2017 to ensure all issues are addressed prior to business engagement	Green	06/09/2016
11	Lack of a strong identifiable brand for the access to work programme	3: Critical	3: Low	9	CCC	Identify a strong a single brand with guidelines for all delivery partners the access to work measures prior to engagement with businesses using monies for marketing in the bid	Green	06/09/2016
12	Failure to source the correct staff for the business engagement team.	3: Critical	3: Low	9	CCC	Identify staff with suitable characteristic and undertake detailed training prior to start of business engagement	Green	06/09/2016
13	Lack of businesses engaging with business toolkit and need for a mixture of small and larger busineses to reflect Cumbria's characteristics	3: Critical	4: Significant	12	CCC	Develop a strong brand together with ensuring trained and correct staff in business engagement team	Amber	06/09/2019
14	Failure to build legacy into cycling and walking and access to work measures of Go Lakes Cumbria and the Lake District programme	3: Critical	3: Low	9	CCC/LDNPA	Develop legacy plans at the outset of the programme	Green	06/09/2016
15	GP surgeries in the Community Active Travel Areas do not buy in to the walking for health programme so a referral system does not get set up	3: Critical	3: Low	9	LDNPA	Work with Cumbria GP Health and Wellbeing Champion so she is key contact with with all other GP's - evidence shows GP's will listen to, and be more influenced by fellow GP's	Green	06/09/2016
16	Participant numbers in cycling and walking programmes are lower than predicted.	3: Critical	3: Low	9	CCC/LDNPA	The previous See More LSTF programme has experimented with a number of different promotional activities to support cycling and walking and the lessons learned will be applied to the programme.	Green	06/09/2016

Appendix D1

Section 151 Officer Letter

Cumbria County Council

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09th September 2016

To Department for Transport,
Great Minster House,
33 Horseferry Road,
London,
SW1P 4DR

Dear Sir/Madam,

Access Fund for Sustainable Travel bid – Go Cumbria and the Lake District

I would like to confirm that a procurement strategy is in place for the Access Fund for Sustainable Travel bid being submitted for the Go Cumbria and the Lake District programme.

The procurement strategy is legally compliant and is likely to achieve the best value for money outcome.

Any cost increase or cost over runs would be met by Cumbria County Council.

Yours faithfully

Julie Crellin
Assistant Director (Finance)
S151 officer