



Cheshire West
and Chester

Appendix 5

Project:	Cheshire West and Chester LSTF Bid (2015/16)	Job No:	60276282
Subject:	Appendix 5 - Economic Appraisal Report	Date:	26 March 2014

1 Overview

1.1 Introduction

This Economic Appraisal Report presents the Economic Case for the package of measures. It details the assumptions included within the appraisal of the LSTF Bid and provides details of the Value-for-Money outputs for the appraisal options, considering the monetised impacts.

1.2 Package Overview

The package includes the appraisal of a series of measures, including the following:

- Capital package associated with improved cycle facilities to access the Thornton Science Park campus;
- A shuttle bus service (to be funded by the University of Chester) which will operate for the first four years of the campus opening (September 2014); and
- An area wide revenue package comprising of travel planning, signing, and marketing and promotional campaign.

Capital Package

A significant amount of benefits are from the 'Journey Ambience' benefits provided by the introduction of the two cycle corridors, along with cycle parking provided at the Thornton Science Park campus. In addition, new users to cycling generate a number of other benefits within the appraisal, including decongestion benefits due to a transfer from car to cycling trips. A reduction in absenteeism and health benefits through increased cycling also generates health benefits. A small level of accident reduction is also included, resulting from a reduction in car accidents due to a transfer to cycling, with existing provision replaced with fully segregated cycle corridors.

Revenue Package

A core element of the LSTF package, which will generate the majority of benefits, is the introduction of a series of revenue measures, which includes travel planning, marketing and promotional campaigns. The resultant sustainable transport users generated by this package will offer absenteeism and health benefits, decongestion benefits and environmental benefits.

Bus Package

In addition, a shuttle bus service is to be introduced for the first four years between Chester and the Thornton Science Park campus, which will generate travel time savings for users of the service.

2 Scheme Costs

This section discusses the development of the Present Value of Costs.

2.1 Investment and Renewals Costs

Investment costs for the scheme comprise of the following:

- Capital Package – £950,000;
- Revenue Package - £635,000.
(2014 prices & values).

In addition, regular renewal of infrastructure is assumed throughout the appraisal period. These values are assumed as a percentage of the overall capital cost, as shown in the table below.

Table 1 Renewals Profile

Year	Renewals Profile
5	5%
10	5%
15	10%
20	5%
25	5%
30	10%

2.2 Operating Costs

A small level of on-going annual cost of £2,000 to cover the maintenance of cycle parking has been included. For the bus package, an annual operating cost of £100,000 has been assumed to cover the running costs of the service (assumed for the first four years of the appraisal).

2.4 Treatment of Costs within the Appraisal

Key assumptions are as follows:

- The appraisal period for the scheme is assumed to be 30 years;
- Benefits resulting from new cyclists due to the scheme a ramp up by 20% increments was assumed over the first 5 years of the scheme; and
- All costs and benefits were discounted to 2010 prices and values in line with recommendations within WebTAG guidance.

Costs – Key Assumptions

- To account for risks in the costs, an optimism bias of 15% was included;
- Construction inflation was assumed to increase by RPI+1% between 2014 and 2030, applied to Investment and renewals costs;
- The Tax correction factor of 1.19 (WebTAG) was applied to all scheme costs; and
- No do minimum costs were assumed.

3 Benefits - Key Assumptions

This section discusses the key assumptions used to determine the Present Value of Benefits within the appraisal.

3.1 Journey Ambience Benefits (Capital Package Only)

Journey ambience benefits represent the safety improvements offered by a scheme which will reduce a cyclist's fear of being involved in a highway accident – these benefits result from the creation of dedicated cycle facilities such as fully segregated cycle routes. Journey Ambience also includes the infrastructure and environmental quality provided by the new route and cycle parking.

Cycle Corridors

Journey ambience benefits for the cycle corridors is a key benefit within the appraisal; these were estimated by applying the unit rates for cycling by type of route from WebTAG A5.1 (see Table 2), against the level of corridor demand. The values were included for each year of the appraisal, assuming an annual increase in the rate per minute, increasing with the Value of Time for Non work time.

Table 2 – Journey Ambience values (WebTAG A5.1 – 2010 prices)

Scheme Type	Value	Unit
Off-road segregated cycle track	7.03	p/min
On-road segregated cycle track	2.99	p/min
On-road non-segregated cycle lane	2.97	p/min
Wider lane	1.81	p/min
shared bus lane	0.77	p/min
secure cycle parking facilities	98.14	p
Changing and shower facilities	20.82	p

The conversion from distance of route to time was based on an average cycle speed of 13kph, assuming cyclists use the entire route. New User benefits were included using the rule of half. The improvements for each of the cycle corridors are shown below in Table 33 and Table 44.

Table 3 – Oil Sites Road Corridor Improvements

Map Ref:	Length (km)	Existing Infrastructure	After Proposed Scheme Improvements	Comment
1	2.5	on road alongside general traffic	on road alongside general traffic	No Change
2	0.3	on road alongside general traffic	off-road segregated cycle track	Improvement
3	1.8	off-road segregated cycle track	off-road segregated cycle track	No Change
4	0.4	on road alongside general traffic	off-road segregated cycle track	Improvement

Table 4 – A5117 School Lane Corridor Improvements

Map Ref:	Length (km)	Existing Infrastructure	After Proposed Scheme Improvements	Comment
1	2.2	on road with advisory cycle lanes	off-road segregated cycle track	Improvement
2	0.7	off-road segregated cycle track	off-road segregated cycle track	No Change
3	0.5	on road with advisory cycle lanes	off-road segregated cycle track	Improvement
4	0.8	on road without any segregation	off-road segregated cycle track	Improvement

Cycle Parking

The provision of high quality cycle parking also has a journey ambience impact. This is due to the safety and security offered to the cyclist through a safe environment in which to leave their bicycle.

Journey ambience benefits for cycle parking were derived for the secure parking facilities for bicycles (50 stands). To determine the level of benefit, rates based on WebTAG Guidance (see Table 2) were used. The guidance suggests 98.14p for fully secure parking, and 20.82p for changing and shower facilities per user. To represent the level of security and changing facilities provided, 50% of security values and 25% of changing values were assumed, resulting in a 54p benefit per user. It was also assumed that these

facilities would be free of charge. A real increase in the rate of benefit was assumed to increase over time in line with the change in non work Value of Time - the rule of half was adopted for new users.

3.2 Cycling Accidents (Capital Package Only)

A reduction in accidents as existing cyclists transfer from un-segregated on highway journeys to fully segregated cycle routes are likely to result in more substantial accident improvements.

An analysis of existing cycling accidents within the study area was undertaken. This included the identification of any existing cycling accidents along the cycle corridors corridor over a 5 year period. This is shown in Table 55.

Table 5 – Existing Cycling Accidents (over 5 years)

Severity	Pedal cyclist casualties
Fatal	0
Serious	4
Slight	14

As the above will exclude those cyclists likely to be cycling to the site under its new use as a university campus, existing cyclist casualty rates per year were generated for nearby Ellesmere Port. These accident rates were applied to the expected cycling demand travelling to the Thornton site. Combining the existing and forecast student values generates a total forecast baseline accident rate (Table 5).

Table 6 – Forecast Baseline Number of Accidents per year

	Pedal cyclist casualties
Fatal	0
Serious	1
Slight	5

A reduction in cycling accidents was assumed at 10% (based on evidence from other studies) due to the transfer of existing cyclists to segregated cycle tracks. Values of accident savings were applied based on rates identified within WebTAG, which are assumed to vary overtime by growth in GDP.

3.3 Physical Fitness Benefits – Health Benefits (Capital & Revenue Packages)

To determine the improvements in health due to long term increases in physical activity due to the scheme, an analysis of the changes in cycling was assessed using the World Health Organisation’s (WHO) Health Economic Assessment Tool (HEAT) as recommended in WebTAG A5.1. This methodology involves calculating the prevention of deaths per person due to taking up moderate exercise such as cycling and walking.

A number of key inputs are required to a series of questions - these include:

- Number of trips observed per day, and proportion which are cyclists (this was based on the Census Journey to Work data);
- It was assumed that 50% of journeys were round trips and that people cycle 173 days per year;
- It was assumed that average trip length for a cycle trip is 5km, which aligns with data from the National Travel Survey;
- It is estimated that as a result of the scheme, the cycling mode share will increase from 1.8 to 2.1 across Cheshire West and Chester;
- It was assumed that 50% of all study area cycle trips are relevant to the scheme.
- This generated an annual value in euros and was based on UK 2010 mortality data.

- The maximum annual value was assumed to be achieved by year 11, a gradual ramp up of benefits was assumed between year 1 and year 10.

An estimation of the level of health benefits was undertaken using the HEAT analysis as recommended in WebTAG guidance. This was undertaken to identify the level of long term health benefits due to cycling for those transferring from other modes. The results of this analysis are presented below in Table 7.

Table 7 HEAT Analysis Results

	Capital Package	Revenue Package
The average annual benefit, averaged over 15 years	3,000EUR (£2,500)	27,000EUR (£22,500)
The total benefits accumulated over 15 years	45,000EUR (£37,500)	399,000EUR (£332,500)
The maximum annual benefit reached by this level of cycling	4,000EUR (£3,333)	38,000EUR (£31,667)

3.4 Physical Fitness Benefits – Absenteeism (Capital & Revenue Packages)

Further physical fitness benefits may be derived from the potential for those taking up cycling experience improved health which could result in reductions in short term periods of absence from work. Cycling absenteeism benefits were estimated for those new to cycling due to the capital and revenue packages. A daily value of absenteeism per day was estimated based on a total of 6.8 average sick days per year, with 95% due to short term sickness (WebTAG A5.1). It was assumed that the scheme will generate a 19% reduction in absenteeism, and is based on a resource cost of £18.24 per hour (based on WebTAG A1.3) and an average working day of 8 hours. The value of absenteeism is assumed to be a business user impact and increases overtime by the Work Value of Time. This was applied to the number of new cyclists per year assumed to use the corridors.

3.5 Decongestion & Environmental Benefits (All Packages)

The generation of new users to cycling will result in a transfer in demand from other modes, such as car. As a result, a small level of decongestion benefits due to the scheme was included. This was calculated by applying the decongestion rates as identified within WebTAG to the reduction in car km due to the scheme. To estimate the reduction in car km, it was assumed that 58% of new users have transferred from car, based on an average car distance of 10km.

Environmental benefits were estimated for all new users to cycling due to a reduction in car use. This is likely to result in a small improvement in environmental benefits, such as reduced noise, greenhouse gasses, and improvements in Air Quality, along with a reduction in car accidents. Benefits due to these elements were included within the appraisal for unit rates (identified in WebTAG), which were applied to the reduction in car km.

3.6 Bus Journey Time Savings (Bus Package Only)

The introduction of a new shuttle bus service is likely to offer substantial benefits for existing bus users accessing the Thornton Science Park campus. This is because existing bus routes to the site are currently poor and require an interchange at Ellesmere Port. It was assumed that the shuttle bus would operated for the first 4 years of the appraisal. To estimate these benefits, value of time rates (as specified in WebTAG) were applied to the change in generalised journey time between the existing bus offer and the new shuttle service for users of the bus service. The rule of a half was assumed for new

users to bus. This was based on the assumption that all bus users are associated with the campus and travel between Chester City Centre and the site.

4 Demand Assumptions

To estimate the level of cycling and bus demands for input into the appraisal, the following assumptions were adopted.

4.1 Assumptions – Cycle Parking (Capital Package)

The cycle parking demand has been derived based on the assumption that the facility will only be used by students and staff at the university campus. The assumptions include:

- The facility comprises of 50 stands within a secure facility, with changing facilities (without showers) available, which can be used only by students and staff;
- It is assumed 40% of students accessing the site by bike will use this facility (assumed to be free);
- It is also assumed that there are 173 term days (excluding weekends);
- The parking facilities will be used by all of the above (over 12,000 uses of the facility per year), which is around 70 cyclists per term day (i.e. some stands are used twice);
- 1/3 of demand is expected to arrive by 2015, ramping up year by year, with all students on site by 2017;
- The change in cycle volumes has been assessed based on local NTEM growth for nearby Ellesmere Port (around 3% growth to 2030); and
- To account for new users a 10% uplift in usage of the facility would be assumed. This was based on a consultants estimate based on similar studies.

4.2 Assumption – Cycle Corridor Demand (Capital Package)

There are two different types of demand - campus related demand, used by students and staff to access the campus site and also non-campus demand, such as those trips travelling between Elton and Helsby to Ellesmere Port. The assumptions used in forecasting both types of demand is discussed below.

Campus Related Demand

- 1,200 students using the site (ramping up between 2015 – 2017, by 400 per year), plus 50 members of staff;
- Average cycle mode share (based on other universities) of 13.9%; therefore 174 return cycle trips per day (students & Staff);
- It is assumed that 75% of cyclists will use the cycle corridors;
- Of this demand, 33% is assumed to use the Oil Sites Road route and 67% is assumed to use the A5117 School Lane route (based on the split of existing users);
- Annual cycling demand for the corridors was estimated by converting to one way trips, and assuming 173 term days per year (excludes weekend & non-term times);
- This results in 45,000 cycle trips per year using the corridors (relating to the new campus); and
- This demand was assumed to increase overtime based on local Ellesmere Port cycle growth assumptions of around 3% up to 2030.

Non-Campus Demand

- In addition to the new campus, non-university based cyclists may also use the corridors. A sample survey of AM peak demand using each corridor was collected.
- These were converted to one way journeys and annualising by 229 for weekdays
- 20% of weekday cycle demand was assumed for a Saturday, Sunday, or Bank holiday.
- This resulted in a total of 24,000 existing cycle journeys per annum.
- This demand was assumed to increase overtime based on local Ellesmere Port cycle growth assumptions of around 3% up to 2030.

4.3 Assumptions – Travel Plans (Revenue Package)

The likely demand changes relating to the new cycle trips generated by travel planning initiatives was assessed. In terms of estimating the volume of new users resulting from Staff Travel Planning for 16,000 staff and the development of 4,000 Personalised Travel Plans, the following assumptions were made:

- Existing cycle mode share within the study area is 2.6%, based on travel to work data from the 2011 Census;
- The introduction of the Personalised Travel Plans is likely to adjust cycle mode share to between 2% - 6% (DfT 2007). It was therefore assumed that the scheme would generate a 3.5% mode share;
- For the Staff Travel Plans, a lower level of change to cycling was assumed, this resulted in an increase in mode share for the 16,000 staff engaged with from 2.6% to 3.1%; and
- This resulted in an estimated 35 new cyclists due to the Personalised Travel Plans, and 70 new cyclists due to the Staff Travel Plans.

4.4 Assumptions – Signing and Promotion of Cycle Routes Ellesmere Port (Revenue Package)

- Existing cycle mode share within Ellesmere Port is 2.1% (based on 2011 Census data), which results in around 900 cyclists;
- It was assumed that the improved signing of cycle routes, combined with a promotional campaign could potentially increase cycling modal share to 2.2% - this would create 45 new cyclists.

4.5 Assumptions – Marketing, Promotional Campaign and delivery of smarter choices within Chester and Cheshire West (Revenue Package)

- Existing cycle mode share within Cheshire West and Chester is 1.8% (based on 2011 Census data), which equates to over 4,000 cyclists.
- It was assumed that the improved signing of cycle routes, combined with a promotional campaign could potentially increase cycling modal share to 2.0%, which would create up to 580 new cyclists within the county.

4.6 Assumptions – Existing Bus Demand (Bus Package)

Existing bus demand for the access to the Thornton Site was based on the 1,200 students and 50 staff expected to use the campus, in conjunction with existing mode share identified at a sample of non-urban university campuses. Without the new bus service, existing public transport mode share is likely to be low - the average sample record was assumed to be 35%.

The annualisation of bus demand assumed the following:

- 1,200 students and 50 staff, with 35% using bus to access the campus;
- 75% of these trips are travelling between Chester City Centre and the campus;
- There are 173 days within university term times per day; and
- The campus will not be used at the weekends or bank holidays; therefore no travel was assumed on these days.

To estimate new users to bus, an elasticity based approach was undertaken (based on black book rates) and the change in bus in-vehicle time between existing and the new shuttle service. Bus demand was also assumed to vary over time in line with local NTEM trends between 2011 and 2030.

5 Scheme Pro-Forma

To support the LSTF Bid, the DfT Scheme Pro-forma template has been populated in Tables 8 to 10.

Table 8 Scheme Pro-Forma: Cycling Impacts

Input Data	Without Scheme	With Scheme	Reference to supporting information
Description of infrastructure/facilities	From On road cycle routes to Off Road segregated cycle routes, enhanced marketing & promotion		
Route length (km)	5.0	5.0	Based on average length of corridor cycle routes
Average trip length (km)	5.0	5.0	Based on the full county, however 11km was assumed for cycle journeys between Chester City Centre and the university campus
Average cycling speed (kph)	13	13	Consultants Estimate (No local data)
Number of users (per day)	4,284	5,072	Assumed for all cycling initiatives, including cycle routes, parking, marketing & promotion, travel planning
Percentage of additional users that would have driven a car otherwise.	n/a	58%	Consultants estimate

Table 9 Scheme Pro-Forma: Highway Impacts

Input Data	Without Scheme	With Scheme	Reference to supporting information
Traffic levels (Vehicle km) in the affected area	2,189,280	2,183,337	Per Day - Based on 2011 Census data, average car km of 10km and average speed of 30mph. With scheme assumptions based on estimation of new users and that 58% have transferred from car
Traffic levels (Vehicle hours) in the affected area	45,610	45,486	
Average Speed in the Morning Peak	30mph	30mph	
Mode share (in person trips)			
Car Driver	74%	74%	Based on Census Journey to work data 2011 (excluding those who do not travel), changes overall changes are small, hence minor impact on overall person mode share
Car Passenger	6%	6%	
Bus passenger	4%	4%	
Rail Passenger	2%	2%	
Cyclist	3%	3%	
Walking	11%	11%	

T +44 (0)161 601 1700
F +44 (0)161 601 1799

6th Floor
One New York Street
Manchester
M1 4HD
United Kingdom

Table 10 Scheme Pro-Forma: Bus Impacts

Input Data	Without Scheme	With Scheme	Reference to supporting information
Annual number of passenger trips	114,613	164,520	Based on assumed number of bus trips for 1200 students and 50 staff, 35% mode share, of which 50% use the corridor, two way journeys for 173 term days per year
Average trip distance (km)	21	13	Based on existing bus timetable information. Existing journey requires an interchange
Average wait time (mins)	10mins (1st Leg) + 30mins (2nd leg)	60	Based on existing bus timetable information. Existing journey requires an interchange
Average fare per trip (£)	2.5	0	Shuttle Bus is assumed to be free
Average in-vehicle time (mins)	56	37	Based on existing bus timetable information. Existing journey requires an interchange
Description of your intervention	The introduction of a new subsidised shuttle bus connecting Chester City Centre and the new university campus at Thornton (near Elton)		

6 Quantitative Scheme Appraisal Results

6.1 Appraisal Overview

This section describes the results from a cost benefit appraisal of the proposed scheme. The appraisal has been undertaken in accordance with the principles set out in the Department for Transport's WebTAG guidance, in particular TAG unit A5.1 Active Mode Appraisal. The key monetised benefits included within the appraisal are:

- Journey Ambience improvement provided by the new cycle corridors;
- Journey Ambience benefits for new cycle parking
- Physical Fitness Health Improvements for new users to cycling
- Physical Fitness Absenteeism Improvements for new users to cycling
- Decongestion benefits due to a transfer from car to cycling trips
- Environmental benefits of Noise, Local Air Quality, and Greenhouse Gases due to a transfer from car to cycling;
- Indirect Tax Revenue impacts due to a change from car to cycling trips;
- Accident reductions due to a transfer from car;
- Accident reductions due to a transfer of existing cyclists to segregated cycle routes; and
- Bus User Time Savings due to the introduction of a new shuttle bus service.

The section above has described the key assumptions to quantify each area of benefits for the scheme. In addition, the following wider appraisal assumptions were applied:

- **Appraisal Period** - For the purpose of assessing the impacts of the cycle scheme, an appraisal period of 30 years has been used to assess scheme benefits against.
- **Ramp Up of Benefits** - For new users to cycling, a five year ramp up period for all benefits has been assumed, this includes increases of 20% increments of benefits until the full level of benefit is achieved by Year 5.

- **Price Base** – The price base within the appraisal was assumed to be 2010 prices and values based on WebTAG 3.5.4
- **Market Prices Adjustment** – All costs and revenues were subject to a 1.19 uplift to account for the tax correction factor (WebTAG 3.5.4)

The analysis of the appraisal results indicates that a significant element of the overall benefits is provided by the revenue package. This is shown below in Figure 1.

Figure 1 - Disaggregation of Benefits by Type of Benefit

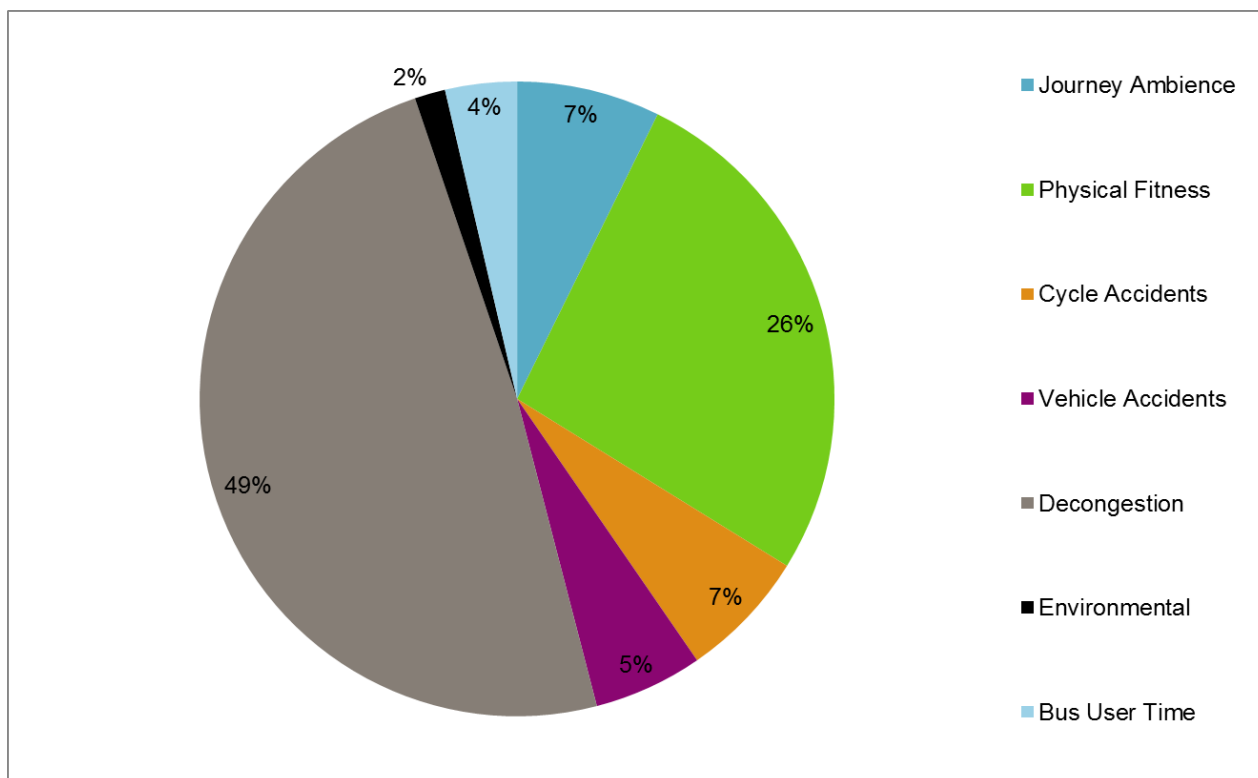
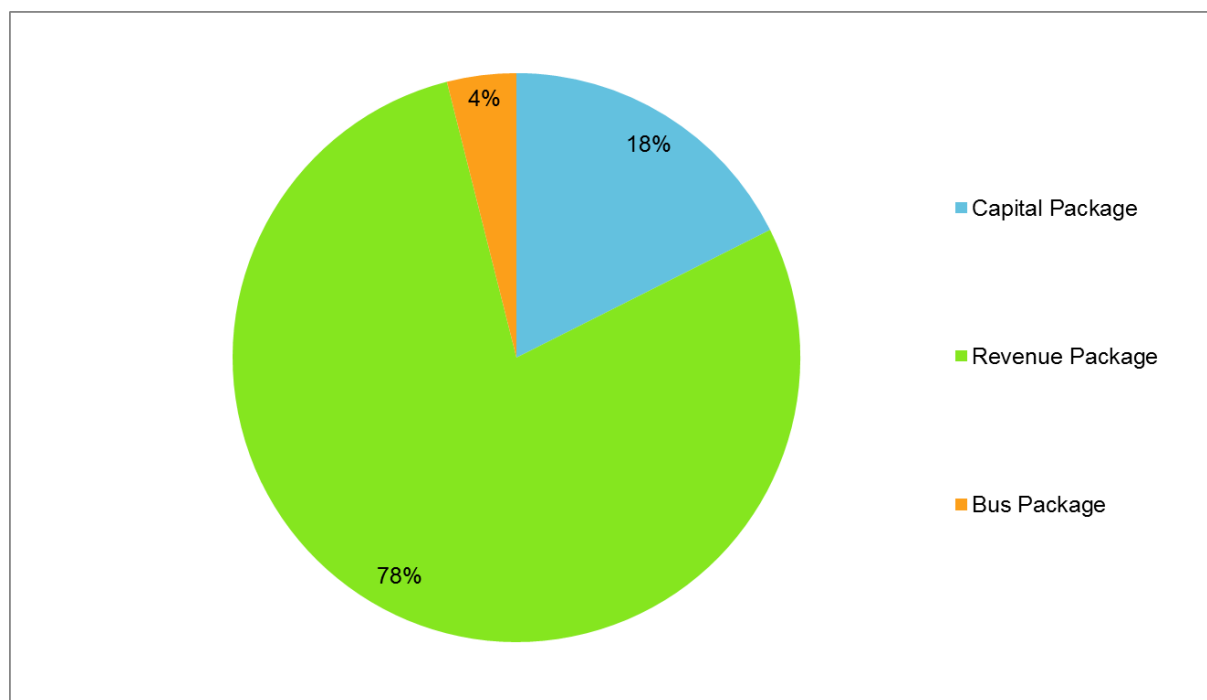


Figure 2 – Disaggregation of Benefits by Package



The main benefit is produced from the revenue package (78%), with both the capital package and bus package comprising 18% and 4% of the benefits respectively.

The greatest benefit from the package will be a result of the reduced congestion in the area due to modal shift from car to bicycle due to the revenue package; this forms 49% of the total benefit. This is followed by benefits due health benefits generated by the revenue package. Health benefits due to physical exercise make up £42,000 of the £3,133,000 benefits (2010 prices).

A reduction in cycle accidents accounts for 7% of total benefits, along with vehicles accident saving due to transfer reform car which accounts for 5% of the benefits.

Environmental benefits make up 2% of the total benefits as there is a slight modal shift to more sustainable forms of transport.

Journey ambiance is a significant capital package benefits - the cycle infrastructure produces 7% of the total scheme benefits.

6.2 TEE, PA and AMCB Tables

The tables below provide details of the appraisal outputs in the form of Transport Economic Efficiency Table, Public Accounts Table and Analysis of Monetised Costs and benefits Table. The Benefit to Cost Ratio for the scheme has therefore been assessed as **4.58:1**, which represents very high value for money.

T +44 (0)161 601 1700
F +44 (0)161 601 1799

6th Floor
One New York Street
Manchester
M1 4HD
United Kingdom

Table 11 Transport Economic Efficiency (TEE) Table

Non-business: Commuting	ALL MODES	ROAD Private Cars and LGVs	BUS and Coach Passengers	RAIL Passengers	OTHER Cyclists and Walking	
User benefits	TOTAL					
Travel time	£1,560	£1,427	£133			
Vehicle operating costs	£0					
User charges	£0					
During Construction & Maintenance	£0					
NET NON-BUSINESS BENEFITS: COMMUTING	£1,560	£1,427	£133	£0	£0	
Non-business: Other	ALL MODES	ROAD Private Cars and LGVs	BUS and Coach Passengers	RAIL Passengers	OTHER	
User benefits	TOTAL					
Travel time	£5,508	£5,146	£362			
Vehicle operating costs	£0					
User charges	£0					
During Construction & Maintenance	£0					
NET NON-BUSINESS BENEFITS: OTHER	£5,508	£5,146	£362	£0	£0	
Business		Goods Vehicles	Business Cars & LGVs	Passengers	Freight	Passengers
User benefits						
Travel time	£318		£299	£19		
Vehicle operating costs	£0					
User charges	£0					
During Construction & Maintenance	£0					
Subtotal	£318		£299	£19		
Private sector provider impacts						
Revenue	£0					
Operating costs	£0					
Investment costs	£0					
Grant/subsidy	£0					
Subtotal	£0					
Other business impacts						
Developer contributions	0					
NET BUSINESS IMPACT	£318					
TOTAL						
Present Value of Transport Economic Efficiency Benefits (TEE)	£7,386					

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.
All entries are discounted present values, in 2010 prices and values.

Table 12 Public Accounts (PA) Table

	ALL MODES TOTAL	ROAD INFRASTRUCTURE	BUS and COACH	RAIL	OTHER Cyclists and Walking
Local Government Funding					
Revenue	£0				
Operating Costs	£394	£394			
Investment Costs	£1,021	£1,021			
Developer and Other Contributions	£0				
Grant/Subsidy Payments	£0				
NET IMPACT	£1,415	£1,415	£0	£0	£0
Central Government Funding: Transport					
Revenue	£0				
Operating Costs	£0				
Investment Costs	£1,486	£1,486			
Developer and Other Contributions	£0				
Grant/Subsidy Payments	£0				
NET IMPACT	£1,486	£1,486	£0	£0	£0
Central Government Funding: Non-Transport					
Indirect Tax Revenues	£780	£780			
TOTALS					
Broad Transport Budget	£2,901				
Wider Public Finances	£780				

Table 13 Analysis of Monetised Costs and Benefits (AMCB) Table

Noise	£53
Local Air Quality	£10
Greenhouse Gases	£157
Journey Ambience	£1,028
Accidents	£1,708
Physical Fitness	£3,731
Consumer Users	£1,560
Consumers User (Other)	£5,508
Business Users and Providers	£318
Reliability	
Wider Public Finances (Indirect Taxation Revenues)	-£780
Option Values	
Present Value of Benefits (see notes) (PVB)	£13,292
Broad Transport Budget	£2,901
Present Value of Costs (see notes) (PVC)	£2,901
OVERALL IMPACTS	
Net Present Value (NPV)	£10,392
Benefit to Cost Ration (BCR)	4.58
<p>Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.</p>	