# Year 1 Evaluation Report Brighton & Hove Permit Scheme

for road and street works

Traffic Management Act 2004



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## **1 EXECUTIVE SUMMARY**

The Brighton & Hove City Council Permit Scheme (BHPS) was introduced on 30<sup>th</sup> March 2015 and has had a successful first year. The purpose of this report is to evaluate the Permit Scheme in respect to these successes and give consideration to the fee structure, the costs and benefits of operating the scheme and whether the permit scheme is meeting key performance indicators where these are set out in the Guidance.

The Permit Scheme designed and developed during 2014 is regarded as a best of breed scheme and has been replicated by 5 other Highway Authorities during the past year. This underpins the outstanding achievement by the Highways Team and is a demonstration of Brighton & Hove's commitment to working effectively with its' stakeholders.

Roadworks are a necessity to enable utilities and highways works to be carried out in order to renew and improve and install infrastructure. As these works take up valuable road space it is important that the impact is minimized as can created congestion and delay.

The Permit Scheme is not intended to prevent activities necessary for the maintenance or improvement of the road network or the services running underneath it. It is designed to make available the necessary resources to achieve an appropriate balance between the interests of the various parties and where possible, bring about effective co-ordination between all the different competing interests.

This is a first year evaluation and there are a wide range of indicators and measures that the industry has been discussing and agreeing that should be analyzed. Some of these are possible to report on and some require further work prepare. This evaluation identifies all the indicators and measures agreed by the industry, through various representative groups..

Over the coming years more and more data will be available and can be analyzed along with benchmarking data from other Permit Schemes. This will allow the Brighton & Hove Permit Scheme to continuously improve and understand the areas it is efficient and effective at and the areas that need improvement.

Although some data is not available currently, the requirement and format has been documented in this evaluation so that it can be identified easily and worked on over the next year.

When the Permit Scheme was being developed a Benefit to Cost Ratio was prepared using predicted costs and volumes of applications. Now there are actual costs and volumes this has been rerun using the same network data and the change is shown below. This indicates that the Permit Scheme is more beneficial to society than originally anticipated.

The Benefit to Cost Ratio for the opening year has slightly reduced from 10.08:1 based on anticipated Utility volumes and costs to 9.26:1 using actual total volumes and costs.

Table 64 Highway Authority Brighton & Hove Cost Benefit results								
Highway Authority Assessment	Opening Year	<b>Opening Year</b>						
5% reduction in works impact	Actuals	Predicted						
Net Present Value of Benefits	£5,233,045	£7,605,555						
Net Present Value of Costs	£565,000	£754,685						
Net Present Value of Permit Scheme	£4,668,045	£6,850,869						
Benefit to Cost Ratio	9.26	10.08						

## 1.1 SUMMARY FINDINGS

A large number of streets had their speed limit reduced to 20mph in 2014 and 2015. This has had an impact on traffic data showing a slight decrease in average traffic speed and a corresponding increase in average journey times. This means that on these measures it is not possible to identify the benefit of the Permit Scheme specifically. It is however safe to say the Permit Scheme has contributed towards the positive developments in Traffic management across the City.

In addition, the 20mph limits have successfully reduced collisions more than the downward trend which has also affected the ability to measure the specific impact of the Permit Scheme on this measure.

It is also of note that traffic flow has not increased. However, there was an overall saving of 6% on carbon emissions resulting from the Permit Scheme and the other initiatives implemented in Brighton & Hove. This is a substantial reduction and a considerable achievement.

During the first year of operation; **12,339** Permit applications were received form Utility Promoters and Highway Authority Promoters. This total includes applications that were granted but subsequently cancelled by the Promoter before the works were undertaken. This is **77%** of the volume indicated by the historical Notice volumes.

11,341 Permits were granted which is 90% of Permit applications received.

**2,067** Permits were refused for various reasons which is **17%** of applications. The Permit team can refuse a Permit application when they consider that elements of the application (e.g. timing, location or conditions) are not acceptable.

**24%** of applications from the Highway Authority were refused and **11%** from Utilities. This need to be observed over the coming years as the lower than expect percentage of Highway Authority work has prevented a clear picture being drawn.

**0** Permits deemed (granted without co-ordination by the Permit team). These deemed Permits do not attract a fee. This is an outstanding achievement by the team.

**3,008** variations requests were received which is more than **3 times the number expected**. Managing this unexpectedly high volume of variations has been a considerable challenge.

2,507 variations to granted Permits were granted which is 95% of requests.

**5,773** conditions were attached to Permits. The Permit Scheme allows for the attaching of conditions to Permits and not all types of conditions will necessarily be applied to all Permits.

Utility Permits were discounted due to positive behaviours but the data has not been available in a reliable form. This requires recording and reporting for future reports.

Collaborative working arrangements between Utilities were arranged but the data has not been available in a reliable form.

**679** site inspections were conducted and **176** failed to meet agreed conditions. A **26%** failure rate which will need further monitoring.

Traffic volume in Brighton & Hove in 2014 was 1,015 million vehicle kilometres (mvkm) and based on the DfT sample data traffic proportions would equate to 137 thousand tonnes of CO2. A **6%** saving in monetary terms would equate to **8.6 thousand tonnes** which equals **£503,000**. It can be concluded that the Permit Scheme, along with other interventions, has made a positive outcome for Brighton & Hove.

**£565,000** of Permit fee income was received. This is in line with the risk managed budget anticipated.

**£527,500** of costs were incurred. This is circa 9% less than the risk managed budget anticipated.

## 1.2 FIRST YEAR ISSUES

Difficulties during the first year of operation have been in one key area, the IT system's ability to produce reports consistent with the industry's agreed indicators and measures.

Recruitment of the team went well and the new members of staff were well trained and supported leading up to the introduction of the Permit Scheme and during the first few months of operation.

A great deal of work has gone in to the IT system with some success and the system has been greatly improved over the year. However, more work is required so the full range of reporting requirements can be met to support further evaluations and analysis.

To further improve the ability to measure the impact of the Permit Scheme a manual recording system has been introduced. This will record a range of impacts such as;

- Agreed traffic management reducing the size of works
- Collaborative works and the number of separate Permit applications saved
- Agreed durations and the days of highway occupancy saved

#### 1.3 NEW STAFF

The risk manged budget following the Cost Benefit Analysis identified **£406,000** of additional new staff costs. **£388,000** of additional new staff costs were incurred.

**8** new staff were employed to increase the resources available to undertake more administration and co-ordination of Permit Applications, which is in line with the requirement identified during the scheme development phase.

#### 1.4 OPERATIONAL COSTS

The risk manged budget identified **£174,000** of potential operational costs. **£92,000** of operational costs were incurred.

## 1.5 EXAMPLES OF OBJECTIVES ACHIEVED

The Permit Team have worked hard on co-ordinating, assessing and responding to all Permit applications to minimise disruption, as shown by the available data below.

Supplied quote form Brighton & Hove Buses:

From the point of view of Brighton & Hove Buses the Permit Scheme has been a great success, with noticeable improvements right from the start.

Prior to the introduction of the scheme we encountered numerous examples of road works appearing without our prior knowledge; often the first we found out about them was from a bus driver spotting a contractor's noticeboard at the side of a road.

There appeared to be no co-ordination between various works and often multiple works were carried out on the same bus route at the same time. We also experienced proposed closures of roads where there was not only no prior notification until a roadside sign appeared but there was no suitable diversionary route for buses. This applied to the City Council's own works as well as that of utility companies.

All that changed almost overnight from 30<sup>th</sup> March 2015. There was a flurry of works in the weeks leading up to the scheme as utility companies tried to beat the deadline, and directly after the scheme came in the City Council's own contractors took a little time to adapt.

But with the appointment of Allan Pike to manage the scheme there has been a step change, and we now work very well together. All issues are discussed in advance and solutions found or problems mitigated as much as possible. Mike Best 21.6.16

Team initiating contact between the Utility companies.

#### Supplied Permit Team quote:

There has been collaborative working between Gas and Water Utilities on Eastern Road that was instigated by the Permit Team. Following that, Water and Electric worked together on St Georges Place and Gas and Water on Stanford Ave. This was all a result of the Permit Team initiating contact between the Utility companies.

## Supplied Permit Team quote:

As part of the Royal Sussex Hospital redevelopment, services for a temporary ward block were required. SWS, SGN and UKPN were invited to discuss collaborative works between all 3 parties in order to save disruption on a key part of the network. It transpired that UKPNs works were not in the same location as SGN and SWS due to the location of their substation however SGN and SWS completed their service connections at the same time within the same traffic management arrangement.

A manual system of recording specific cases is being introduced so that in future years a greater list of examples can be presented demonstrating how the scheme has met it objectives.

## 1.6 CONCLUSIONS

This report provides evaluation findings of key indicators and measures for the Brighton & Hove Permit Scheme after its first year of operation.

Overall, the Brighton & Hove Permit Scheme has been designed and implemented well. A number of other Highway Authorities have adopted the scheme for their areas as it is seen as a best of breed scheme.

The team now co-ordinate all road and street works in Brighton & Hove and take the time to review each and every application and apply conditions to minimise the impact of the works on the users of the network.

Fee income was slightly more than the scheme costs, but was well balanced. Therefore, there is no need to consider an adjustment in fee rates at this time.

There have been difficulties gathering accurate data from the IT system and this is a focus of development over the coming year. However, what has been gathered shows the objectives of the scheme are being met and that society is benefiting from the implementation.

There have been less Utility applications than anticipated which may be a result of incorrect information from the previous system. Future volumes will identify if this was the issue.

There has been a much lower volume of Highway Authority works than expected which may be a result of unrealistic industry assumptions. Future volumes will identify if this was the issue.

Circa 11% of applications were refused. This would appear to be a very reasonable level of refusal but will need to be monitored over the next year and benchmarked against other Permit Schemes.

Collaborative works have been organised which is a very challenging objective to achieve. This is a very positive outcome in the first year of operation but needs to be quantified and measured for future evaluations.

The Permit team have been proactive in early discussions with Promoters to reduce the process by approving early starts. However, the percentage of Highway Authority early starts needs looking at and understanding.

The Permit team and Promoters will continue to work together and make improvements to minimise the impact of works on the highway network.

Discounts on Utility fees for positive working arrangements have been applied successful but needs to be quantified and measured.

Future reports will contain more data and allow greater analysis of the impact of the Permit Scheme.

Now works are being Permitted and co-ordinated effectively has resulted in the network being properly managed, the introduction of the Permit Scheme has led to a better control of the network and of the works undertaken on it.

## 1.7 LOOKING FORWARD

The Permit Scheme will continue to be developed over the next year with a focus on four key areas.

- IT system improvement and data recording and reporting
- Continuing staff training and development
- Utility discounts given and for what behavioural change so the impact can be assessed
- Manual recording of a range of factors such as collaborative working days saved

## 2 DEVELOPING THE PERMIT SCHEME

During 2013 and after an initial high level financial assessment, consideration of the local needs and discussion with internal stakeholders, operational partners, consultants and neighboring Highway Authorities, Brighton & Hove City Council has decided that the most appropriate scheme for Brighton & Hove is one that would operate on all streets.

The Brighton & Hove Permit Scheme has been designed to assist the Council to manage the existing local road network for the benefit of all road users. The Permit Scheme will support existing activities and priorities of the Council and will provide a positive benefit. The Scheme will also encourage the undertakers, including those working for and on behalf of the Highway Authority to work in collaboration.

The Permit Scheme has been operationally and proactively focused on Strategically Significant Streets and to further the overall cultural shift to better management of the network. However, co-ordination of all activities on all streets will be undertaken to deliver effective and proactive management of the entire network and give consideration to the needs of all highway users and stakeholders such as local community bus operators.

Lower fees will be charged for activities on non-traffic sensitive streets and category 3 and 4 roads.

Discounted fees will also be given in the following circumstances:

- Where several Permit applications for works that are of part of the same project but which are carried out on more than one street, but on a scale comparative to one street, are submitted at the same time.
- Where several Promoters are working within the same site submit applications at the same time. Where the Highway Authority Promoter is collaborating with Statutory Undertakers, those Undertakers will be eligible for the discount.
- Where works are undertaken wholly outside of traffic sensitive times on Traffic Sensitive Streets. The improvements in the planning processes will benefit the operational management of the road network and undertakers needing to carry out works.

## 2.1 TRAFFIC SENSITIVE NETWORK

During the first half of 2014the highways team completed a review of the Traffic Sensitive Network in Brighton & Hove.

This was consulted on prior to the introduction of the Permit Scheme.

The Traffic Sensitive network was developed using the guideline criteria identified in Section 5 of the Department for Transport's document 'New Roads and Street Works Act 1991: Code of Practice for the Co-ordination of Street Works and Works for Road Purposes and Related Matters August 2009'.

#### 2.2 PERMIT SCHEME OBJECTIVES

The objectives of the Brighton & Hove Permit Scheme were;

## Working together to deliver a safe, efficient and sustainable highway network for everybody.

All activities on highways have the potential to reduce the width of the street available to traffic, pedestrians and other users and have the potential to also inconvenience businesses and local residents.

The scale of disruption caused is relative to the type of activities being undertaken and the capacity of the street. Activities where the traffic flow is close to, or exceeds, the physical capacity of the street will have the potential to cause congestion, disruption and delays.

The objective of the Brighton & Hove Permit Scheme is to improve the strategic and operational management of the highway network through better planning, scheduling and management of activities to minimise disruption to any road or pavement user.

The Brighton & Hove Permit Scheme will enable better coordination of activities throughout the highway network, ensuring those competing for space or time in the street, including traffic, to be resolved in a positive and constructive way.

The objectives and benefits of the Brighton & Hove Permit Scheme are:

- Reduced disruption on the road network
- Improvements to overall network management

- A reduction in delays to the travelling public
- A reduction in costs to businesses caused by delays
- Promotion of a safer environment
- Reduced carbon emissions

The Permit Scheme objectives will be facilitated by improving performance in line with the Authorities' Network Management Duty in relation to the following key factors:

- Enhanced co-ordination and cooperation
- Encouragement of partnership working between the Permit Authority, all Promoters and key stakeholders
- Provision of more accurate and timely information to be communicated between all stakeholders including members of the public
- Promotion and encouragement of collaborative working
- Improvement in timing and duration of activities particularly in relation to the busiest streets within the network
- Promotion of dialogue with regard to the way activities are to be carried out
- Enhanced programming of activities and better forward planning by all Promoters

## 2.3 ALIGNED OBJECTIVES

The Permit Scheme objectives align with the strategic objectives contained within the Brighton & Hove Local Transport Plan 3 Part B Delivery Plan:

- Being innovative and creative
- Providing and using accurate/robust information
- Involving partners, stakeholders and communities
- Ensuring integration and coordination

The implementation of the Permit Scheme was justified in the Cost Benefit Analysis would incur a 5% reduction on roadworks.

## **3 APPENDIX 1 - EVALUATION BACKGROUND**

#### 3.1 PERMIT SCHEME EVALUATION

Swift Argent Ltd was commissioned by Brighton & Hove City Council (B&HCC) in 2016 to evaluate the performance of the first year of the Brighton & Hove Permit Scheme (B&HPS) as a requirement set out in The Traffic Management Permit Scheme (England) (Amendment) Regulations 2015 regulation 16A.

The B&HPS was implemented on 30<sup>th</sup> March 2015 and the purpose of this report is to evaluate the Permit Scheme in respect to these successes and give consideration to the fee structure, the costs and benefits of operating the Scheme and whether the Permit Scheme is meeting key performance indicators where these are set out in the Guidance.

#### 3.2 SCOPE OF WORK

In order to evaluate the performance of a Permit Scheme a number data items are required to enable analysis.

All data should be readily available within the street works IT system of the respective Highway Authority. Financial information should be available from the Authority finance department and certain data is collected from DfT statistics.

Ideally annual performance data should be collected monthly throughout the year to enable changes and trends to be observed time. This could also be useful to enable regular checks to be made internally against key targets so this can be managed and responded to quickly. The response can include further training of the Permit Team to ensure consistency and outcome focused activities.

The individual data items are set out later in this report for each indicator but will include the following categories.

- Number of Permits granted, modified and refused
- Conditions applied for
- Variations and extensions and early starts
- Location of roadworks
- Permit fees
- Operational costs
- Travel times and reliability
- Carbon Impacts

As part of the initial assessment for the introduction of a Permit Scheme and the subsequent application to the Secretary of State for Transport or preparation of a Local Order, the Highway Authority is required to conduct a Cost Benefit Analysis (CBA) on the likelihood of a Scheme to deliver value for money to society (as a benefit to cost ratio).

This CBA is based on the principles of the Department for Transports New Approach to Transport Appraisals (NATA) framework and include broad assumptions on the costs and benefits of a Permit Scheme. This gives a base in order to make assessment of aims to be achieved.

## 3.3 KEY PERFORMANCE INDICATORS

A set of Key Performance Indicators (KPIs) and Objective Measures (OMs) are set out below to demonstrate parity of treatment between works for road purposes and street works undertaken by statutory undertakers.

Section 20.3 of the Permits Code of Practice states that every Authority that wants to run a Permit Scheme must explain how it intends to demonstrate parity of treatment for promoters in its application.

The Code contains seven KPIs that could be used for this purpose. The recording of KPIs 1 and 2 is a mandatory requirement of all Permit Schemes.

Authorities should select at least two others which they consider will demonstrate parity across their Permit Scheme. Authorities can also include their own KPIs.

- KPI 1 The number of Permit and Permit variation applications received, the number granted and the number refused. (breakdown of the data into applications granted and refused in relation to highway authority works for road purposes and works by utility promoters, and provide a comparison with the percentage of Permits granted Also, the data is further broken down by activity type into applications granted and refused.)
- KPI 2 The number of conditions applied by condition type.
- KPI 3 The number of approved extensions
- KPI 4 The number of occurrences of reducing the application period (early starts).
- KPI 5 The number of agreements to work in Section 58 and Section 58A restrictions. (Details of Section 58 and 58A restrictions will be provided as required under Section 8.3 of the TMA Code of Practice for Permits.)
- KPI 6 The proportion of times that a Permit authority intervenes on applications
- KPI 7 Number of inspections carried out to monitor conditions

The Statutory Guidance for Highway Authority Permit Schemes October 2015 set out Permit Indicators (TPI) for Permit Schemes are additional to the general TMA Performance Indicators (TPIs), which are already being produced. The TPIs focus on occupancy, coordination and inspections, and there for relate mainly to the stages of the works from works start to final conclusion. These additional Permit indicators focus more on the process of Permit applications and responses, prior to the works being carried out.

- TPI1 Works Phases Started (Base Data)
- TPI2 Works Phases Completed (Base Data)
- TPI3 Days Of Occupancy Phases Completed
- TPI4 Average Duration of Works Phases Completed
- TPI5 Phases Completed on time
- TPI6 Number of deemed Permit applications
- TPI7 Number of Phase One Permanent Registrations

In addition to DfT KPIs and HAUC TPIS. The authority can collate its own data. These measures should reflect the business case and objectives put forward in the Scheme submission documentation.

- AM 1 Average duration of works by Permit type
- AM 2 Inspections (% age of total undertaken and failures)
- AM 3 Days of Disruption Saved/ Number of collaborative works
- AM 4 Response Code broken down by promoter

- AM 5 FPNs (Permit Breaches)
- AM 6 Levels of Customer Enquiries
- AM 7 Average Journey Times (as detailed below)
- AM 8 Journey time reliability (as detailed below)
- AM 9 Road Traffic Collisions (as detailed below)
- AM 10 Carbon Emissions (as detailed below)
- AM 11 Profit/Loss (as detailed below)

## 3.4 AVERAGE JOURNEY TIMES

A key benefit of the Permit Scheme will be to improve operation of the transport network through a reduction in journey times per unit distance travelled due to reduction in delay from roadworks. It is expected the level of delay in a dense urban network across 12 hours of operation, 10% is estimated to be due to road works, 10% unplanned incidents and 5% control devices with a non-recurrent delay on roads of 25% of total delay. A 5% reduction in road works would account for a 0.5% reduction in total delay or 10% reduction 1% reduction on total delay.

The DfT publish data quarterly statistical data on road congestion on locally managed 'A' roads and is measured by estimating the average speed achieved by vehicles during the weekday morning peak from 7am to 10am. Average speeds are presented at national, regional and local highway authority level. Analysis by TfL has determined that on average between 07:00 to 19:00 across the network, delay accounts for about one third of journey times, the remaining two thirds approximates to the free flow or unhindered journey component so that a 5% reduction in roadworks would see an expected improvement of 0.17%.

There are two ways to measure average journey times using this data (a) either comparing passed average journey times before the Permit Scheme and during the Permit Scheme for that authority; or (b) compare Permitted authority to non-Permitted authority local to the area with similar characteristics. The later assumes that all network outcomes are equal and any difference is attributable to the Permit Scheme.

## 3.5 JOURNEY TIME RELIABILITY

It is expected that a key benefit of a Permit Scheme will be an improvement in journey time reliability on the network. Journey time reliability is measured using ANPR (Automatic Number Plate Recognition) cameras with some authorities such as TfL, Essex, Bedfordshire that is an accurate mechanism for monitoring journey times to provide a meaningful measure of overall network performance. Although ANPR cameras are becoming more of a necessity for highway authorities to prove that traffic management measures are reducing congestion as part of the TMA (Traffic Management Act) these are generally only used for major roads where there is the most congestion. A further method is to model the relationship between journey time and standard deviation. This method is suggested in WebTAG and would compare the standard deviation of variability between the Permitted and non-Permitted authorities.

#### 3.6 ROAD TRAFFIC COLLISIONS

The presents of roadworks in itself has a higher rate of collisions due to queuing traffic and driver frustration causing erratic behaviour. There are a number of measures that are used to minimise confusion and risk to drivers that can result from better management through a Permit Scheme in addition to the reduction in roadworks themselves. This may include approval of traffic management plans, better signage, diversion routes, average speed cameras, reduced duration and disruption. Accidents on the public highway in Great Britain, reported to the police and which involve personal injury or death are recorded by police officers onto a STATS 19 report form with information relating to that accident. The DfT is responsible for collection of STATS 19 data and forms the basis for annual statistics and is updated quarterly for all local authorities. To measure the effectiveness of a Permit Scheme on road traffic collisions data can be analysed for the Permitted authority before and after the Scheme start and compare trends with non-Permitted authorities.

#### 3.7 CARBON EMISSIONS

An outcome of reduced congestion is the reduction in fuel consumption and CO<sub>2</sub> emissions. The fuel consumption that causes CO<sub>2</sub> emissions is very sensitive to several factors and include driver behaviour, vehicle, road types and traffic conditions. Due to multiple variables a comprehensive carbon model is used as a methodology to accurately estimate how congestion reduction will reduce CO<sub>2</sub>. A typical driving trip consists of idling, accelerating, cruising, and decelerating. An average trip would produce about 330 grams per mile (g/mi) of CO2 emissions. The figure below shows a typical speed emission curve and shows at lower speeds with high accelerating and decelerating in congestion has much higher emissions. As speed increases congestion decreases. On motorways with speeds above 65mph emissions increase as engines are under strain.



#### AVERAGE SPEED OVER CO2 EMISSIONS

Source: TRAFFIC CONGESTION AND GREENHOUSE GASES BY MATTHEW BARTH AND KANOK BORIBOONSOMSIN

The National Transport Model (NTM) is the Department for Transport's main strategic policy testing and forecasting tool used to forecast traffic levels and the subsequent congestion and emissions impacts on the national road network of Great Britain (GB).

Curves for 'ultimate' CO2 emissions can be derived directly from the fuel consumption by converting the units from litre/100km to g fuel/km and applying a simple conversion factor based on the carbon content of petrol and diesel fuels. To calculate fuel consumption as set out in WebTAG the following

Fuel consumption is estimated using a function of the form: L = a/v + b + c.v + d.v2Where:

L = consumption, expressed in litres per kilometre;

v = average speed in kilometres per hour; and

a, b, c, d are parameters defined for each vehicle category.

The revised fuel consumption aggregated equation for WebTAG vehicle groups was derived (TRL unpublished report "Fuel Consumption Equations" dated 29 September 2008) using the results from the New UK Road Vehicle Emission

Parameters for each vehicle category are set out in Tab;e A 1.3.8 of WebTAG as shown on Table 1 below.

Table 1 - WebTAG – Fuel consumption parameter values							
	Fuel cons	sumption p	oarameter v	/alues			
	(litres per	<sup>.</sup> km, 2010)					
	Parameters						
Vehicle Category	а	b	С	d			
Petrol Car	0.96402	0.04145	0.00005	2.01346E-06			
Diesel Car	0.43709	0.05862	0.00052	4.12709E-06			
Petrol LGV	1.55646	0.06425	0.00074	1.00552E-05			
Diesel LGV	1.04527	0.05790	0.00043	8.02520E-06			
OGV1	1.47737	0.24562	0.00357	3.06380E-05			
OGV2	3.39070	0.39438	0.00464	3.59224E-05			
PSV	4.11560	0.30646	0.00421	3.65263E-05			
	Energy co	onsumptio	n paramet	er values			
	(kWh per	km, 2011)					
Electric Car		0.12564					
Electric LGV							
Electric OGV1							
Electric OGV2							
Electric PSV							

The DfT have developed a carbon tool to allow local authorities to assess the potential effects of transport interventions on carbon emissions in their area. The tool will output results on the total change in carbon emissions. The Scheme details are entered into the tool and include the time period, type of road, type of area, region and year affected.

Affected modes are selected and default vehicle mix is used based on speed curves from national derived data. For each affected mode the daily distance and number of vehicles is entered. The vehicle speeds before and after intervention are recorded. This will generate the  $CO_2$  emisions before and after intervention.

## 3.8 PROFIT / LOSS

The Scheme profit / loss is made up of the staff and operational costs and Permit fee. The maximum charge per Permit type is shown on Table 2 below. The Authority sets their own fee structure reflecting on the potential number of Permits and operational costs.

The operational cost includes the initial start-up costs, additional staff administering and coordinating Permit Applications which includes Street Work Officers, Street Work Coordinators and Manager(s).

Table 2 - Statutory Permit Fee rates								
<b>Revised maximum fee structure for each category of works and for a hierarchy of main and minor roads</b> - Road category refers to the reinstatement category of the street under the New Roads and Street Works Act 1991								
	Road Category 0- 2 or Traffic-	Road Category 3- 4 and non traffic-						
Work Type	sensitive	sensitive						
Provisional Advance	£105	£75						
Major works – over 10 days <u>and all</u> major works requiring a traffic regulation order.	£240	£150						
Major works – 4 to 10 days	£130	£75						
Major works – up to 3 days	£65	£45						
Activity Standard	£130	£75						
Activity Minor	£65	£45						
Immediate Activity	£60	£40						
Permit Variation	£45	£35						

The profit loss is the Permit fee revenue minus the operational cost. The result will enable the authority to understand if they are applying the crorrect fee structure or need to review staff levels.

## 3.9 REPORT STRUCTURE

This report summarises available key data. After the Executive Summary and findings, the report is set out as follows:

- APPENDIX 1 EVALUATION BACKGROUND
- APPENDIX 2 KEY PERFORMANCE INDICATOR DATA
- APPENDIX 2a HAUC TPI MEASURES
- APPENDIX 2b PERMIT APPLICATIONS DATA
- APPENDIX 2c AUTHORITY MEASURES
- APPENDIX 3 COSTS, INCOME and DISCOUNTS

## 4 APPENDIX 2 - KEY PERFORMANCE INDICATOR DATA

The Brighton & Hove Scheme Document contains these KPIs;

#### KPI 1

The number of Permit and Permit variation applications received, the number granted and the number refused

This will be measured by Promoter and shown as:

- the total number of Permit and Permit variation applications received, excluding any applications that are subsequently withdrawn
- the number granted as a percentage of the total applications made
- the number refused as a percentage of the total applications made.

#### KPI 2

The number of conditions applied by condition type

This will be measured by Promoter and shown as:

- the number of Permits issued
- the number of conditions applied, broken down into condition types. The number of each type being shown as a percentage of the total Permits issued.

#### KPI 3

#### The number of approved extensions

This will be measured by promoter and shown as:

- the total number of permits issued
- the number of requests for extensions shown as a percentage of permits issued
- the number of agreed extensions as a percentage of extensions applied for.

#### KPI 7

#### Number of inspections carried out to monitor conditions

This will be broken down by promoter and shown as:

- the number of sample permit condition checks carried out as a percentage of the number of permits issued
- the percentage of sample inspections by promoter should also be shown.

#### 4.1 KPI 1

#### The number of Permit and Permit variation applications received, the number granted and the number refused.

Table 3 below shows a breakdown of Permit applications received granted and refused. The data shows that 12% of Permits were refused.

There is no data for deemed Permits although the number is thought to be very low.

Data is further broken down into Permit applications received, granted and refused related to Highway Authority works and Utilities works on Table 4 below.

The data shows that 24% of Permit applications were refused from Highway Authority works and 11% from Utility works were refused.

There was a higher refusal rate for Highway Authority works.

The higher refusal rate for Highway Authority works could be due to a better understanding and closer liaison within Permitting authorities of highway authority promoters work, allowing potential issues for refusal to be identified and addressed in advance of a Permit application.

A greater number of immediate urgent work that is required to be carried out quickly to remove dangers on the highway for Highway Authority works is unlikely to be refused.

Table 3 KPI 1	Table 3 KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded										
Voor 1	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variation	ns	Applications	Variations
Teal I	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed		Superseded	Superseded
Total	12,339	3,008	11,341	2,507	1,069	501	0	0		No Data	No Data
Percentage			88%	81%	12%	19%					
Year 2	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applicat	ions	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Superse	ded	Deemed	Superseded
Total											
Percentage											
Year 3	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applicat	ions	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Superse	ded	Deemed	Superseded
Total											
Percentage											
Table 4 KPI 1	Permit Applicat	ions by Prom	oter (excluding	cancelled afte	er Granted)						
Year 1											
Promoters			Total	Permit Applica	ations	Total Appli	cations Granted		Total	Applications Re	efused
Highway Auth	nority			427			326				101
							76%			24%	
Utility					8,742			7,774			968

		89%		11%
Year 2				
Promoters	Total Permit Applications	Total Applications Granted	Total Applications Refused	
Highway Authority				
Utility				
Year 3				
Promoters	Total Permit Applications	Total Applications Granted	Total Applications Refused	
Highway Authority				
Utility				

Table Pron	Table 5(a) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter									
Pror	Promoter									
	Year 1									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	655	236	547	182	108	54	0	0	No Data	No Data
	7%	9%	84%	77%	16%	23%				
	Year 2									
BT	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	Year 3									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(b) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by										
Promote	Promoter									
Promot	Promoter									
	Year 1									
BUCC	Applications	Variations								
впсс	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	427	356	326	306	101	50	0	0	No Data	No Data

5%	13%	76%	86%	24%	14%				
Year 2									
Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
Year 3									
Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5( Promote	Table 5(c) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter									
Promot	Promoter									
	Year 1									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	564	458	435	375	129	83	0	0	No Data	No Data
	6%	17%	77%	82%	23%	18%				
	Year 2									
UKPN	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	Year 3									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(d) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter Promoter Year 1 Applications Variations Applications Variations Applications Variations Applications Variations Applications Variations Vodafone Received Received Granted Refused Refused Superseded Superseded Granted Deemed Deemed 38 5 15 23 No Data No Data 20 15 0 0

	0%	1%	25%	39%	75%	61%				
	Year 2									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	Year 3									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
Γ										

Table 5(e) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter												
Promo	Promoter											
	Year 1											
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations		
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded		
	18	12	13	9	5	3	0	0	No Data	No Data		
	0%	0%	72%	75%	28%	25%						
	Year 2											
NWR	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications		
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded		
	Year 3											
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications		
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded		

Table 5(f) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by													
Promoter													
Promoter													
	Year 1	Year 1											
Virgin Modio	Applications	Variations											
virgin weula	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded			
	830	308	631	245	199	63	0	0	No Data	No Data			

9%	12%	76%	80%	24%	20%				
Year 2									
Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
Year 3									
Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table Pron	Table 5(g) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter												
Pro	Promoter												
	Year 1												
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations			
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded			
	11	12	6	10	5	2	0	0	No Data	No Data			
	0%	0%	55%	83%	45%	17%							
	Year 2	Year 2											
O2	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications			
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded			
	Year 3												
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications			
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded			

Table 5(h	Table 5(h) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by												
Promoter	Promoter												
Promote	romoter												
Year 1													
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations			
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded			
Bomoo	2	3	0	2	2	1	0	0	No Data	No Data			
Romec	0%	0%	0%	67%	100%	33%							
	Year 2												
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications			
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded			

Year 3									
Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(i) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter

Prom	oter									
	Year 1									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	4	5	1	3	3	2	0	0	No Data	No Data
	0%	0%	25%	60%	75%	40%				
	Year 2									
GTC	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	Year 3									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(j) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded b	y
Promoter	

Promote	r									
	Year 1									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
Orange	2	3	0	2	2	1	0	0	No Data	No Data
	0%	0%	0%	67%	100%	33%				
	Year 2									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Year 3									
Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(k) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter

Promoter												
	Year 1											
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations		
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded		
	15	6	10	5	5	1	0	0	No Data	No Data		
	0%	0%	67%	83%	33%	17%						
	Year 2											
Neoscorp	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications		
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded		
	Year 3											
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications		
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded		

Table 5(I) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by	
Promoter	

Promot	er													
	Year 1													
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations				
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded				
TMob	36	39	15	24	21	15	0	0	No Data	No Data				
	0%	1%	42%	62%	58%	38%								
	Year 2													
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications				
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded				

Year 3									
Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(m) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter

Promo	oter									
	Year 1									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	854	652	721	521	133	131	0	0	No Data	No Data
	9%	25%	84%	80%	16%	20%				
	Year 2									
SGN	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	Year 3									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(n) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by	
Promoter	

Promoter																
	Year 1	Year 1														
	Applications	Variations	Applications	Variations Applications		Variations Applications		Variations	Applications	Variations						
	Received	Received	Granted	Granted Refused		Refused	Refused Deemed		Superseded	Superseded						
Fulerum	5	5	2	3	3	2	0	0	No Data	No Data						
Fulcruiti	0%	0%	40%	60%	60%	40%										
	Year 2															
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications						
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded						

Year 3									
Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(o) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter

Promo	oter									
	Year 1									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Variations
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	5,726	515	5,388	445	338	70	0	0	No Data	No Data
	62%	19%	94%	86%	6%	14%				
	Year 2									
SWS	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
	Year 3									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 5(p) KPI 1 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded by Promoter

Promo	ter									
	Year 1									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded
Total	9,169	2,648	8,100	2,147	1,069	501	0	0	No Data	No Data
TOLAI	Year 2									
	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

	Year 3									
Γ	Applications	Variations	Applications	Variations	Applications	Variations	Applications	Applications	Applications	Applications
	Received	Received	Granted	Granted	Refused	Refused	Deemed	Deemed	Superseded	Superseded

Table 6(a) KPI 1 The number of pern Streets for Utility Works by Activity	nit and per type	mit variatio	ons granted	, number	refused, d	eemed su	persed	ed and c	ancellec	I for Cat	egory 0	-2 and T	raffic Sensi	tive
Year 1														
Activity Type	Permit A Granted	Арр	Permit A Refused	Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		seded ations	Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														
Total														

Table 7(a) KPI 1 The number of p Streets for Utility Works by Activ	permit and perminivity type	t variations	granted, nu	mber refus	ed, deem	ed supe	erseded	and can	celled fo	r Catego	ory 3-4 N	on Traff	ic Sensi	live
Year 1														
Activity Type	Permit Ap	p Granted	Permit A Refused	<b>v</b> pp	Variat Grante	ion d	Variat Refuse	ion ed	Deem Permit Applic	ed ations	Super Applic	seded ations	Cance Aborte	lled / d
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														
Total														

Year 1				-	<b></b>		<b>.</b>						<u> </u>	
Activity Type	Permit App Granted		Permit App Refused		Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Cancelled / Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														
Total					1								Ĩ	

Table 9(a) KPI 1 The number of permit and permit variations granted, number refused, deemed superseded and cancelled for Category 0-2 and Traffic Sensitive Streets for Highway Works by Activity type

Year 1	Year 1													
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Cancelled / Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														
Total														

Year 1														
	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Cancelled / Aborted	
Activity Type	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														1
Total				1										1

Year 1														
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Cancelled / Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														
Total														

Table 12(a) KPI 1 The number Streets for All Works by Act	er of permit and ivity type	l perm	nit variations	grant	ted, number r	efuse	ed, deemed s	uper	seded and ca	ncelled f	or Category (	-2 and Tr	affic Sensitiv	/e
Year 1														
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Cancelled / Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														
Total														
This information is not available at this time.

 Table 13(a) KPI 1 The number of permit and permit variations granted, number refused, deemed superseded and cancelled for Category 3-4 Non Traffic Sensitive

 Streets for All Works by Activity type

 Year 1

Activity Type	Permit Ap	p Granted	Permit A Refused	vpp	Variation Variation Granted Refused		tion ed	Deemed Permit Applications		Superseded Applications		Cancelled / Aborted		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														
Total														

This information is not available at this time.

Year 1	Permit Ap	р	Permit /	Арр	Variation	1	Variatio	n	Deemed	l Permit	Supers	eded	Cancell	ed /
Activity Type	Granted		Refused		Granted		Refused		Applications		Applications		Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance														
Major 10 Days and TRO														
Major 4 to 10 Days														
Major up to 3 Days														
Standard														
Minor														
Immediate														
Permit Variation														
Total														

## 4.2 KPI 2

#### The number of conditions applied by condition type.

Table 15 shows that over 5,500 conditions with the highest being time constraints, work methodology and traffic space dimensions.

96% of conditions attached to applications were attached to Utility works.

Conditions are attached to applications by the Works Promoter or when requested by the Permit Authority and help deliver the Permit Scheme objectives and societal benefits.

Table 15 KPI 2 The nur	Table 15 KPI 2 The number of conditions applied by condition type											
		Year 1			Year 2			Year 3				
Number	Condition	Utility Works	Highway Authority Works	Total	Utility Works	Highway Authority Works	Total	Utility Works	Highway Authority Works	Total		
1	Date Constraints	445	27									
2	Time Constraints	1748	68									
3	Out of Hours Work	224	6									
4	Material and Plant Storage	474	1									
5	Road Occupation Dimensions	566	16									
6	Traffic Space Dimensions	1246	61									
7	Road Closure	39	16									
8	Light Signals and Shuttle Working	58	18									
9	Traffic Management Changes	53	11									
10	Work Methodology	74	2									
11	Consultation and Publicity	549	7									
12	Environmental	8	0									
13	Local	52	4									
	Total	5,536	237	-								

#### 4.3 KPI 3

#### The number of approved extensions

Table 16 below shows the number of agreed extensions and is when the original agreed time constraint condition is extended. It can be seen that at the start of the Scheme that for highway authority works this was at the highest but diminished to zero in some months showing an improvement. This did not follow with utility works the extensions at the same level or increasing. There could be a number of reasons for utility works being extended and include poor programming or unforeseen circumstances such as leaking pipes and poor reinstatements. These instances should be reduced as contribute to further delay and are negative to the objective to the Scheme. Further analysis would identify what Permit types have required extensions. Minor works are of short duration and unlikely to require extension with major works having more delays on different phases.

Table 16	KPI 3 The number of approv	ed extensions								
	Year 1			Year 2			Year 3			
Period	Agreed	Extensions		Agreed Extensions				Agreed Extensions		
	Highway Authority	Utilities	Total	Highway Authority	Utilities	Total	Highway Authority	Utilities	Total	
Apr-15	0	28								
May-15	2	29								
Jun-15	1	40								
Jul-15	8	31								
Aug-15	9	42								
Sep-15	4	39								
Oct-15	6	37								
Nov-15	12	24								
Dec-15	4	33								
Jan-16	13	49								
Feb-16	6	49								
Mar-16	3	41								
Total	68	442	-							

#### 4.4 KPI 7

## Number of inspections carried out to monitor conditions

This KPI is broken down by promoter and shown as the number of sample permit condition checks carried out as a percentage of the number of permits issued.

In addition, the percentage of sample inspections by Promoter will also be shown.

Table 17 KPI 7 N	lumber of inspec	ctions carried out to mo	nitor conditions						
Dremeter	Year 1			Year 2			Year 3		
Promoter	Passed	Non-Compliant	Total	Passed	Non-Compliant	Total	Passed	Non-Compliant	Total
BT	45	36	81						
BHCC	-	3	3						
UKPN	62	17	79						
Vodafone	-	-	-						
NWR	-	-	-						
Virgin Media	12	6	18						
O2	-	-	-						
Romec	-	-	-						
GTC	-	-	-						
Orange	-	-	-						
Neoscorp	2	-	2						
T Mob	-	-	-						
SGN	381	114	495						
Fulcrum	1	-	1						
Total	503	176	679						

## 5 APPENDIX 2a - HAUC TPI MEASURES

#### 5.1 TPI 1 Works Phases Started (Base Data)

Table 18 TPI 1 Works Phases Started (Base Data) by Promoter										
Year 1										
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total				
All Promoters	353	700	6,174	1,483	532	9,242				
Highway Authority	170	188	156	5	9	528				
Utilities	183	512	6,018	1,478	523	8,714				

Table 19 TPI 1 Works Phases Started (Base Data) for H	Table 19 TPI 1 Works Phases Started (Base Data) for Highway Authority Works by Reinstatement Category										
Year 1											
Reinstatement Category Major Standard Minor Urgent Emergency Total											
Cat 1	34	46	51	5	5	141					
Cat 2	11	4	17	0	2	34					
Cat 3	4	10	6	0	2	22					
Cat 4	121	126	78	0	0	325					
Other F/way	0	2	4	0	0	6					

#### 5.2 TPI 2 Works Phases Completed (Base Data)

Table 20 TPI 1 Works Phases Started (Base Data) for U	Table 20 TPI 1 Works Phases Started (Base Data) for Utility Works by Reinstatement Category										
Year 1											
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total					
Cat 1	10	77	500	142	65	794					
Cat 2	7	41	343	73	34	498					
Cat 3	7	21	203	55	25	311					
Cat 4	157	364	4,928	1,192	398	7,039					
Other F/way	2	9	44	16	1	72					

Table 21 TPI 2 Works Phases Completed (Base Data) by Promoter										
Year 1										
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total				
All Promoters	364	710	6,165	1,489	532	9,260				
Highway Authority	167	187	151	5	9	519				
Utilities	197	523	6,014	1,484	523	8,741				

Table 22 TPI 2 Works Phases Completed (Base Data) for Highway Authority Works by Reinstatement Category										
Year 1										
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total				
Cat 1	33	46	48	5	5	137				
Cat 2	12	4	16	0	2	34				
Cat 3	4	10	6	0	2	22				
Cat 4	118	125	77	0	0	320				
Other F/way	0	2	4	0	0	6				

Table 23 TPI 2 Works Phases Completed (Base Data) for	or Utility Works	by Reinstatement Cate	egory						
Year 1									
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total			
Cat 1	10	78	506	144	63	801			
Cat 2	8	44	343	73	35	503			
Cat 3	8	21	202	55	25	311			
Cat 4	169	371	4,919	1,196	399	7,054			
Other F/way	2	9	44	16	1	72			

## 5.3 TPI 3 Days of Occupancy Phases Completed

Table 24 TPI 3 Days Of Occupancy Phases Completed by Promoter										
Year 1										
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total				
All Promoters	15,975	7,129	15,762	8,045	4,983	51,894				
Highway Authority	6,037	1,893	897	2,935	11	11,773				
Utilities	9,938	5,236	14,865	5,110	4,972	40,121				

Table 25(a) TPI 3 Days Of Occupancy Phases Completed for Highway Authority Works by Reinstatement Category and Traffic Sensitivity Street								
Year 1								
Traffic Sensitive								
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total		
Cat 1	298	392	104	7	6	807		
Cat 2	65	30	34	-	3	132		
Cat 3	6	45	16	-	2	69		
Cat 4	265	193	92	-	-	550		
HA f/way	-	-	-	-	-	-		
HD f/way	-	-	-	-	-	-		
Other f/way	-	-	4	-	-	4		

Non Traffic Sensitive								
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total		
Cat 1	594	78	427	1,464	-	2,563		
Cat 2	2,253	-	-	366	-	2,619		
Cat 3	2	26	-	-	-	28		
Cat 4	2,554	1,110	211	1,098	-	4,973		
HA f/way	-	-	-	-	-	-		
HD f/way	-	-	-	-	-	-		
Other f/way	-	19	9	-	-	28		

Table 26(a) TPI 3 Days Of Occupanc	y Phases Completed for Uti	lity Works by Reins	statement Category	and Traffic Sensitivit	ty Street	
Year 1						
Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	125	634	1,141	410	527	2,837
Cat 2	83	338	671	189	315	1,596
Cat 3	41	106	356	90	155	748
Cat 4	805	530	2,034	719	800	4,888
HA f/way	-	-	-	-	-	-
HD f/way	-	-	-	-	-	-
Other f/way	-	22	-	-	-	22
Non Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	125	634	1,141	410	527	2,837
Cat 2	83	338	671	189	315	1,596
Cat 3	41	106	356	90	155	748
Cat 4	805	530	2,034	719	800	4,888
HA f/way	-	-	23	9	-	32
HD f/way	-	-	5	-	-	5
Other f/way	56	433	90	58	5	642

# 5.4 TPI 4 Average Duration of Works Phases Completed

Table 27 TPI 4 Average Duration of Works Phases Completed by Promoter by Activity Type							
Year 1 Year 2 Year 3							
Activity Type	Highway Utility Authority		Highway Authority	Utility	Highway Authority	Utility	
Major	18.91	16.91					

Standard	6.39	5.92		
Minor	1.84	2.1		
Immediate - Urgent	2.52	1.33		
Immediate - Emergency	7.2	1.24		

#### 5.5 TPI 5 Phases Completed on time

This information is not available at this time.

Table 28 TPI 5 Phases Completed on time by Promoter									
Year 1									
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total			
All Promoters	No Data	No Data	No Data	No Data	No Data				
Highway Authority	No Data	No Data	No Data	No Data	No Data				
Utilities	No Data	No Data	No Data	No Data	No Data				

#### 5.6 TPI 6 Number of deemed Permit applications

This information is not available at this time.

Table 29 TPI 6 Number of deemed permit applications by Promoter						
Year 1		Year 2		Year 3		
Highway Authority	Utility	Highway Authority	Utility	Highway Authority	Utility	

## 5.7 TPI 7 Number of Phase One Permanent Registrations

Table 30 TPI7 Number of Phase One Permanent Registrations by Promoter							
Year 1							
Activity Type	Major S	tandard	Minor	Urgent	Emergency	Total	
All Promoters	199	620	3,521	1,391	4	71 6,202	
Highway Authority	52	182	131	5		9 379	
Utilities	147	438	3,390	1,386	4	5,823	
Table 31(a) TPI7 Number of Phase One Per	manent Registratior	ns for Highway Autho	rity Works by Reir	nstatement Categor	y and Traffic Sensitivity St	reet	
Year 1							
Traffic Sensitive							
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total	
Cat 1	6	6 37	36		5 5	89	
Cat 2	(	) 3	10		0 2	15	
Cat 3	(	) 4	3		0 2	9	
Cat 4		1 17	18		0 0	36	
HA f/way	-	-	-	-	-	-	

HD f/way	-	-	-	-	-	-
Other f/way	0	0	0	0	0	0
Non Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	8	7	3	0	0	18
Cat 2	5	1	6	0	0	12
Cat 3	0	5	1	0	0	6
Cat 4	32	106	50	0	0	188
HA f/way	-	-	-	-	-	-
HD f/way	-	-	-	-	-	-
Other f/way	0	2	4	0	0	6

Table 32(a) TPI7 Number of Phase One Permanent Registrations for Utility Works by Reinstatement Category and Traffic Sensitivity Street								
Year 1								
Traffic Sensitive								
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total		
Cat 1	4	53	142	49	51	299		
Cat 2	2	35	77	19	29	162		
Cat 3	2	10	23	7	16	58		
Cat 4	19	61	103	61	78	322		
HA f/way	-	-	-	-	-	-		
HD f/way	-	-	-	-	-	-		
Other f/way	0	0	0	0	0	0		
Non Traffic Sensitive								
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total		
Cat 1	2	8	134	79	0	223		
Cat 2	0	1	92	50	0	143		
Cat 3	5	6	83	42	4	140		
Cat 4	111	257	2713	1064	284	4429		
HA f/way	-	-	-	-	-	-		
HD f/way	-	-	-	-	-	-		
Other f/way	2	7	23	15	0	47		

#### 6 APPENDIX 2b - PERMIT APPLICATIONS DATA

#### 6.1 Number of PAA applications submitted

Table 33 Number of PAA applications submitted						
Year 1 Year 2 Year 3						
345						

#### 6.2 Number of PAA applications granted

This information is not available at this time.

Table 34 Number of PAA applications granted						
Year 1 Year 2 Year 3						

#### 6.3 Number of PAA applications deemed

This information is not available at this time.

Table 35 Number of PAA applications deemed						
Year 1 Year 2 Year 3						

#### 6.4 Number of "initial" permit applications submitted for a works phase

This information is not available at this time.

 Table 36 Number of "initial" permit applications

submitted for a works phase						
Year 1 Year 2 Year 3						

#### 6.5 Number of Permit applications granted on first application submission

This information is not available at this time.

Table 37 Number of Permit applications granted onfirst application submission						
Year 1 Year 2 Year 3						

#### 6.6 Number of "modified" applications submitted prior to Permit being granted or deemed

This information is not available at this time.

Table 38 Number of "modified" applications submitted prior to Permit being granted or deemed						
Year 1 Year 2 Year 3						

#### 6.7 Number of Permit applications deemed

This information is not available at this time.

Table 39 Number of Permit applications deemed					
Year 1 Year 2 Year 3					

#### 6.8 Number of applications cancelled prior to grant / deemed

This information is not available at this time.

Table 40 Number of applications cancelled prior to grant / deemed					
Year 1 Year 2 Year 3					
4,257					

#### 6.9 Number of granted / deemed Permits for which and Actual Start never occurred

This information is not available at this time.

Table 41 Number of granted / deemed Permits for which and Actual Start never occurred						
Year 1 Year 2 Year 3						

#### 6.10 Number of Authority imposed variations / revokes

Table 42 Number of Authority imposed variations / revokes					
Year 1 Year 2 Year 3					
3,393					

#### 6.11 Number of Duration variations after works started

This information is not available at this time.

Table 43 Number of Duration variations after works started						
Year 1 Year 2 Year 3						

#### 6.12 Number of Duration variations refused

This information is not available at this time.

Table 44 Number of Duration variations refused						
Year 1 Year 2 Year 3						

## 6.13 Number of Permit applications with "Collaboration indicator" set

This information is not available at this time.

Table 45 Number of Permit applications with"Collaboration indicator" set						
Year 1 Year 2 Year 3						

## 7 APPENDIX 2c - AUTHORITY MEASURES

#### 7.1 AM 1 - Average duration of works

Table 46 AM 1 Average duration of works by permit type by Promoter by Activity Type								
	Pre-scheme		Year 1		Year 2		Year 3	
Activity Type	Highway Authority	Utility	Highway Authority	Utility	Highway Authority	Utility	Highway Authority	Utility
Major	21.7	28.0	17.19	21.88				
Standard	8.7	9.5	5.92	6.41				
Minor	2.4	2.5	2.08	1.84				
Immediate - Urgent	-	5.1	1.33	2.53				
Immediate - Emergency	1.8	5.1	1.24	7.2				

# 7.2 AM 2 - Inspections

Table 47	able 47(a) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promote	Promoter												
	Year 1 CAT A Done	CAT A Fail	CAT A Failure Rate %	CAT B Done	CAT B Fail	CAT B Failure Rate %	CAT C Done	CAT C Fail	CAT C Failure Rate %	Total Inspections	Total Failure	Total Failure Rate %	
	114	17	15%	59	6	10%	61	3	5%	234	26	11%	
BT	Year 2					•							
	CAT A Done	CAT A Fail	CAT A Failure Rate %	CAT B Done	CAT B Fail	CAT B Failure Rate %	CAT C Done	CAT C Fail	CAT C Failure Rate %	Total Inspections	Total Failue	Total Failure Rate %	
	Year 3		CATA			CATE	CATC			Total	Total	Total	
	Done	CATAFall	Failure Rate %	CAT B Done		Failure Rate %	Done	Fail	Failure Rate %	Inspections	Failue	Failure Rate %	

able 47(b) AM 2 inspections (%; age of total undertaken and failures) by Promoter by Act
--

Table 47	7(b) AM 2 Insp	ections (%;ag	e of total unde	ertaken and failu	ures) by Promo	oter by Activit	у Туре					
Promot	er											
	Year 1											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	-	-	-	-	-	-	-	-	-	-	-	-
	Year 2											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
BHCC	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3		•				•	•				
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 47	7(c) AM 2 Insp	pections (%;ag	e of total und	ertaken and fail	ures) by Prome	oter by Activit	у Туре					
Promot	er											
	Year 1											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	148	15	10%	63	1	2%	60	0	0%	271	16	6%
	Year 2											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
UKPN	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 47(d)	AM 2 Inspect	tions (%;age o	of total undert	aken and failur	es) by Promote	er by Activity	Туре					
Promoter												
	Year 1											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	-	-	-	-	-	-	-	-	-	-	-	-
	Year 2											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
Vodafone	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 4	7(e) AM 2 Ins	pections (%;ag	e of total und	lertaken and fail	ures) by Prom	oter by Activi	ty Type					
Promo	ter											
	Year 1											
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	-	-	-	-	-	-	-	-	-	-	-	-
	Year 2											
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
NWR	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3											
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 47(f) AM	Table 47(f) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type         Promoter												
Promoter													
	Year 1												
	CAT A Done	CAT A Fail	CAT A Failure Rate %	CAT B Done	CAT B Fail	CAT B Failure Rate %	CAT C Done	CAT C Fail	CAT C Failure Rate %	Total Inspections	Total Failue	Total Failure Rate %	
	124	5	4%	60	4	7%	74	4	5%	258	13	5%	
	Year 2												
Virgin Media	CAT A Done	CAT A Fail	CAT A Failure Rate %	CAT B Done	CAT B Fail	CAT B Failure Rate %	CAT C Done	CAT C Fail	CAT C Failure Rate %	Total Inspections	Total Failue	Total Failure Rate %	
	Year 3			-					-		-		
	CAT A Done	CAT A Fail	CAT A Failure Rate %	CAT B Done	CAT B Fail	CAT B Failure Rate %	CAT C Done	CAT C Fail	CAT C Failure Rate %	Total Inspections	Total Failue	Total Failure Rate %	

Tabl	e 47(g) AM 2 Ir	nspections (%;	age of total ur	dertaken and fa	ilures) by Pror	noter by Activ	ity Type					
Pror	noter											
	Year 1											
	CAT A	CAT A Fail	CAT A	CAT B Done	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done		Failure			Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	-	-	-	-	-	-	-	-	-	-	-	-
	Year 2											
	CAT A	CAT A Fail	CAT A	CAT B Done	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
02	Done		Failure			Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3											
	CAT A	CAT A Fail	CAT A	CAT B Done	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done		Failure			Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 47	(h) AM 2 Ins	pections (%;a	ge of total une	dertaken and fa	ailures) by Prome	oter by Activ	vity Type					
Promote	er											
	Year 1											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	-			-		-			-	-	-	-
	Year 2											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
Romec	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3										•	
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 4	47(i) AM 2 Ins	pections (%;ag	e of total und	lertaken and fail	ures) by Prom	oter by Activi	ty Type					
Prom	oter											
	Year 1											
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	1	0	0%	0	0	0%	0	0	0%	3	2	67%
	Year 2											
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
GTC	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3			-								-
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 47(	j) AM 2 Inspe	ctions (%;age	of total under	taken and failur	es) by Promot	er by Activity	/ Туре					
Promote	r											
	Year 1											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	-	-	-	-	-	-	-	-	-	-	-	-
	Year 2											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
Orange	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
Orange I			Rate %			Rate %			Rate %			Rate %
	Year 3											
-	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
i i												

Table 47(k)	AM 2 Inspec	tions (%;age	of total under	taken and failu	ires) by Promote	er by Activit	у Туре					
Promoter												
	Year 1 CAT A Done	CAT A Fail	CAT A Failure Rate %	CAT B Done	CAT B Fail	CAT B Failure Rate %	CAT C Done	CAT C Fail	CAT C Failure Rate %	Total Inspections	Total Failue	Total Failure Rate %
	1	0	0%	1	0	0%	0	0	0%	2	0	0%
Neoscorp	Year 2				•	<u>.</u>		•				
	CAT A Done	CAT A Fail	CAT A Failure Rate %	CAT B Done	CAT B Fail	CAT B Failure Rate %	CAT C Done	CAT C Fail	CAT C Failure Rate %	Total Inspections	Total Failue	Total Failure Rate %
	Year 3									Total	Total	Total
	Done	Fail	Failure Rate %	Done	CATBrail	Failure Rate %	Done	Fail	Failure Rate %	Inspections	Failue	Failure Rate %

Table 47	'(I) AM 2 Ins	pections (%;a	ge of total und	lertaken and fai	lures) by Promo	ter by Activit	у Туре					
Promot	er											
	Year 1											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
			-	-	-	-	-	-	-	-	-	-
	Year 2											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
T Mob	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3								-			-
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 4	47(m) AM 2 In	spections (%;a	ige of total ui	ndertaken and fa	ilures) by Pror	noter by Acti	vity Type					
Promo	oter											
	Year 1											
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	365	29	8%	100	8	8%	100	7	7%	565	44	8%
	Year 2											
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
SGN	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3											
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table (7(n) ANO been attimud (0) and after a lender table a surple table (1)	has Descendent and has A attack
1 able 4/(n) AW Z inspections (% ade of total undertaken and failures).	by Promoter by Activit
	<i>by</i> 1101110101 <i>by</i> 7101111

Table 47(n	n) AM 2 Inspec	tions (%;age	of total under	taken and failu	res) by Promot	ter by Activity	у Туре					
Promoter												
	Year 1											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	2	1	50%	0	0	0%	0	0	0%	2	1	50%
	Year 2											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
Fulcrum	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %
	Year 3											
	CAT A	CAT A	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total
	Done	Fail	Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure
			Rate %			Rate %			Rate %			Rate %

Table 4	able 47(m) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type Promoter													
Promo	oter													
	Year 1													
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total		
	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure		
			Rate %			Rate %			Rate %			Rate %		
	755	67	9%	283	19	7%	295	14	5%	1,335	102	8%		
	Year 2													
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total		
Total	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure		
			Rate %			Rate %			Rate %			Rate %		
	Year 3													
	CAT A	CAT A Fail	CAT A	CAT B	CAT B Fail	CAT B	CAT C	CAT C	CAT C	Total	Total	Total		
	Done		Failure	Done		Failure	Done	Fail	Failure	Inspections	Failue	Failure		
			Rate %			Rate %			Rate %			Rate %		

## 7.3 AM 3 - Days of Disruption Saved/ Number of collaborative works

Table 48 AM 3 Days of D	isruption Saved/ Number	of collaborative work	(S			
	Year 1		Year 2		Year 3	
Туре	Number of Collaborative Works	Days Saved	Number of Collaborative Works	Days Saved	Number of Collaborative Works	Days Saved
Permit	No Data	No Data				
Trench Sharing	No Data	No Data				
Total	28	95				

## 7.4 AM 4 - Response Code

This information is not available at this time.

<b>Fable 49(</b> ?	) AM 4	Response	Code – broken	down by promoter
--------------------	--------	----------	---------------	------------------

Pr	omo	ter																						
	Year 1																							
	N o	REF 01	REF 02	REF 03	REF 04	REF 05	REF 06	REF 07	REF 08	REF 09	REF 10	REF 11	REF 12	REF 13	REF 14	REF 15	REF 16	REF 17	REF 18	REF 19	REF 20	REF 21	REF 22	REF 23
	Ye	ar 2																						
Total	N o	REF 01	REF 02	REF 03	REF 04	REF 05	REF 06	REF 07	REF 08	REF 09	REF 10	REF 11	REF 12	REF 13	REF 14	REF 15	REF 16	REF 17	REF 18	REF 19	REF 20	REF 21	REF 22	REF 23
	Ye	ar 3																						
	N o	REF 01	REF 02	REF 03	REF 04	REF 05	REF 06	REF 07	REF 08	REF 09	REF 10	REF 11	REF 12	REF 13	REF 14	REF 15	REF 16	REF 17	REF 18	REF 19	REF 20	REF 21	REF 22	REF 23

Response Code Descriptions for informa	Response Code Descriptions for information									
Code	Description									
REF01										
REF02										
REF03										
REF04										
REF05										
REF06										
REF07										
REF08										
REF09										
REF10										
REF11										
REF12										
REF13										
REF14										
REF15										
REF16										
REF17										
REF18										
REF19										
REF20										
REF21										
REF22										
REF23										

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#### 7.5 AM 5 – FPNs (Permit Breaches)

Table 50 below shows the number of fixed penalty notices. Under section 74 (7B) failure to give a notice under regulation 74 (charge for occupation of the highway where works unreasonably delayed); under section 19 (1) working without a Permit and under 20 (1) Permit breaches. There were 345.

Tab	le 50(a) AM 5 F	PNs (Permit B	reaches) – bro	ken down by pro	omoter										ble 50(a) AM 5 FPNs (Permit Breaches) – broken down by promoter romoter													
Pro	moter																											
	Year 1					Year 2					Year 3	;																
ВТ	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total													
	12	15	11	54	92																							
ů Š	Year 1					Year 2					Year 3	;																
Я	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total													
В	5	34	12	5	56																							
Z	Year 1	1					Year 2					Year 3																
АР	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total													
	7	19	3	31	-																							
fo	Year 1					Year 2					Year 3	\$																
oda oda	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total													
>	-	3	-	3	-																							
R	Year 1					Year 2					Year 3	,																
≥	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total													
2	-	-	-	-	-																							

The Permit Authority will continue to work with Promoters to reduce the number of FPN's.

Tab	le 50(b) AM 5 F	PNs (Permit B	reaches) – bro	ken down by pro	omoter										
Pro	moter														
in ia	Year 1					Year 2					Year 3				
irg ed	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total
> ≥															
	Year 1					Year 2					Year 3				
0	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total
	-	-	-	-	-										
ec	Year 1					Year 2					Year 3				
E C	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total
Ř	-	-	-	-	-										
ТС	Year 1			Year 2					Year 3						
Ö	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total

	-	-	-	-	-										
ge	Year 1					Year 2					Year 3	i			
an	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total
ō	-	-	-	-	-										

Tab	le 50(c) AM	5 FPNs (Perr	nit Breaches	s) – broken do	wn by promo	ter									
Pro	omoter														
	Year 1					Year 2					Year 3				
eoscorp	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B )	19(1)	20(1)	Total
ž	-	2	-	-	2										
	Year 1					Year 2					Year 3				
T Mob	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B )	19(1)	20(1)	Total
	-	1	-	-	1										
	Year 1	-				Year 2	-	-			Year 3	-			
SGN	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B )	19(1)	20(1)	Total
	16	40	18	89	163										
	Year 1					Year 2					Year 3				
ulcrum	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B )	19(1)	20(1)	Total
ш	2	1	-	1	4	-	-	-	-	-	-	-	-	-	-
	Year 1					Year 2					Year 3				
SWS	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B )	19(1)	20(1)	Total
	2	1	-	1	4	-	-	-	-	-	-	-	-	-	-

Tab	le 50(d) AM 5 F	PNs (Permit B	reaches) – bro	ken down by pro	omoter										
Pro	moter														
B	Year 1					Year 2					Year 3				
oti	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total	70(6)	74(7B)	19(1)	20(1)	Total
-	48	125	46	192	345										

Permit	Breach Code Descriptions
Code	Description
70(6)	Failure to comply with requirements to give notice of completion of reinstatement
74(7B)	Failure to give a notice under regulation 74 (charge for occupation of the highway where works unreasonably delayed)
19(1)	Works without a permit
20(1)	Permit breaches

## 7.6 AM 6 - Levels of Customer Enquiries

This information is not available at this time.

Table 51 AM 6 Levels	s of Customer Enquiries										
Year 1											
Number of instances	Type of Enquiry										

#### 7.7 AM 7 Average Journey Time and AM8 Journey Time Reliability

One of the anticipated key benefits of the Permit Scheme is an increase in journey time reliability that results from a reduction in the delay to traffic caused by road works.

As set out in the scope in Section 3.4 of this Evaluation, for a 5% reduction in delay, there is an expected improvement of 0.17% in journey time savings.

Data has been collected from the DfT for journey times during the weekday morning peak on locally managed 'A' roads for Highway Authorities in the South East Region that do not operate a Permit Scheme and for Brighton & Hove pre-Permit Scheme and post-Permit Scheme for comparison. This is shown on Table 52 below.

For Year 1 the data shows a slight increase in journey times of 1% based on the assumption that all other network outcomes are equal.

As a caveat to this, current data is not available for a whole year, the journey time difference is reducing in latter months from 2% to 1% showing improvements. A major influence to journey time in the City is the introduction of reduction in speed limits to 20mph in 2014-15 with 753 streets reduced in June 2014 and 309 streets reduced in March 2015. This would mean that vehicles would take longer to travel over specific distances.

When considering this It is not possible to accurately measure the impact of the Permit Scheme on vehicle journey times. This will be monitored within later evaluations where data is not influenced by other initiatives.

Journey Time Reliability has been measured using journey time results to see the variability of journey times compared to Highway Authorities in the South East Region that do not operate a Permit Scheme and comparing pre-Permit Scheme and post-Permit Scheme values in Brighton & Hove.

The data in Table 52 shows that the average journey time for Highway Authorities that do not operate a Permit Scheme stayed at 2.65 mpm from April'15 to Jul'15 and rose to 2.66 mpm in Sep'15 it dropped to 2.65 mpm in Oct'15 and Nov'15 and rose to 2.66 mpm in Dec'15.

For Brighton & Hove, the average journey time in April'15 to Jun'15 was 3.73 mpm and rose to 3.74 mpm in Jul'15 to Dec'15. This would suggest there is more journey time variability in Brighton & Hove. In comparing the pre-Permit Scheme data there was a steady increase from 3.63 mpm Apr'14 to 3.73 mpm in Mar'15. This would suggest that the journey time reliability is settling and less variable following the introduction of the Permit Scheme.

Table 52(a)	AM 7 Average Journe	y Times & AM 8	Journey Tir	ne Reliabilit	ty									
Year 1														
			Avera	ge journey f	time (minut	es per mile	e) (Source	DfT Cong	estion &	Reliabilit	ty Statist	ics Table	CGN02	06b)
				Average	journey tim	es during	the weekd	ay mornin	ig peak o	on locally	manage	d 'A' roa	ds:	
Region	Local Authority	ONS area		A	Maria 4.4	I 4.4	1.1.4.4	Sep	Oct-	Nov-	Dec-	Jan-	Feb-	Mar-
		code		Apr-14	May-14	Jun-14	Jul-14	14	14	14	14	15	15	15
								Pre-sc	heme				1	
SOUTH		E12000008	AJT	0.05			0.07	0.07						
EAST		(J)	(mpm)	2.25	2.26	2.26	2.27	2.27	2.28	2.29	2.30	2.30	2.30	2.31
		E06000046	AJT											
	Isle of Wight UA	(00MW)	(mpm)	2.45	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.45	2.45	2.45
		E06000035	AJT											
	Medway UA	(00LC)	(mpm)	2.34	2.35	2.35	2.34	2.36	2.36	2.36	2.36	2.37	2.36	2.37
		E06000044	AJT											
	Portsmouth UA	(00MR)	(mpm)	3.54	3.54	3.55	3.57	3.56	3.57	3.61	3.61	3.63	3.63	3.62
		E06000038	AJT											
	Reading UA	(00MC)	(mpm)	4.37	4.37	4.38	4.40	4.39	4.40	4.39	4.38	4.34	4.26	4.26
	Windsor and	E06000040	AJT											
	Maidenhead UA	(00ME)	(mpm)	2.41	2.43	2.44	2.44	2.43	2.44	2.45	2.45	2.46	2.44	2.43
		E10000014	AJT											
	Hampshire	(24)	(mpm)	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.96	1.96	1.97
		E10000025	AJT											
	Oxfordshire	(38)	(mpm)	1.98	1.98	1.99	1.99	2.01	2.02	2.04	2.04	2.04	2.04	2.04
		E10000032	AJT											
	West Sussex	(45)	(mpm)	1.97	1.97	1.97	1.97	1.98	1.98	1.99	1.99	1.99	1.99	2.00
	Total Average Non-p	permitted												
				2.62	2.63	2.64	2.64	2.64	2.65	2.66	2.66	2.66	2.64	2.64
	Brighton & Hove	E06000043	AJT											
	UA	(00ML)	(mpm)	3.63	3.65	3.66	3.66	3.67	3.68	3.69	3.70	3.72	3.72	3.73

Table 52(b)	AM 7 Averag	e Journey Times	& AM 8 Jour	ney Time Re	liability									
Year 1														
			Average	ອ journey tim joເ	e (minutes p urney times (	per mile) (So during the	ource DfT ( weekday m	Congestior orning pea	n & Reliab ak on loca	ility Statis Ily manag	tics Table ed 'A' roac	CGN020 ls:	6b) Aver	age
Region	Local Authorit	ONS area code		Apr-15	May-15	Jun-15	Jul-15	Sep-15 p	Oct- 15 p	Nov- 15 p	Dec- 15 p	Jan- 16	Feb- 16	Mar- 16
	У							Post-sc	heme					
SOUTH EAST		E12000008 (J)	AJT (mpm)	2.31	2.32	2.32	2.33	2.33	2.33	2.33	2.33			
			% Compare	1.03	1.03	1.03	1.03	1.03	1.02	1.02	1.01			
	Isle of Wight UA	E06000046 (00MW)	AJT (mpm)	2.45	2.45	2.45	2.45	2.45	2.46	2.47	2.47			
			% Compare	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	Medway UA	E06000035 (00LC)	AJT (mpm)	2.37	2.37	2.37	2.38	2.38	2.39	2.40	2.42			
			% Compare	1.01	1.01	1.01	1.02	1.01	1.01	1.02	1.03	Data	not avail	able
	Portsmou	E06000044 (00MR)	AJT (mpm)	3.62	3.61	3.60	3.59	3.59	3.56	3.54	3.54	Data	not avail	able
	th UA		% Compare	1.02	1.02	1.01	1.01	1.01	1.00	0.98	0.98			
	Reading UA	E06000038 (00MC)	AJT (mpm)	4.31	4.34	4.35	4.35	4.36	4.36	4.36	4.36			
			% Compare	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.00			
	Windsor and	E06000040 (00ME)	AJT (mpm)	2.42	2.41	2.40	2.40	2.41	2.41	2.42	2.41			
	Maidenh ead UA		% Compare	1.00	0.99	0.98	0. <u>9</u> 8	0.99	0.99	0.99	0.98			

Table 5	2(c) AM 7 A	verage Journey	Times & AM 8	Journey Time	Reliability									
Year 1														
			Average j	ourney time (	minutes per	mile) (Sour	ce DfT Cong	estion & R	eliability S	Statistics T	able CGN0	0206b) Av	erage jo	urney
					times dur	ing the wee	kday morni	ng peak on	locally m	anaged 'A'	roads:			
_	Local	ONS area						Sep-15	Oct-15	Nov-15	Dec-15	Jan-	Feb-	Mar-
Regio	Authorit	code		Apr-15	May-15	Jun-15	Jul-15	р	р	р	р	16	16	16
n	У							Post-sc	heme	-				
		E10000014	AJT											
	Hampshi	(24)	(mpm)	1.97	1.98	1.99	1.99	2.00	2.01	2.01	2.01			
	re		%											
			Compare	1.02	1.02	1.03	1.03	1.03	1.04	1.04	1.03			
		E10000025	AJT	0.05	0.05	0.05	0.05							
	Oxfordsh	(38)	(mpm)	2.05	2.05	2.05	2.05	2.04	2.03	2.02	2.02			
	Ire		%	4.04	4.04	4.00	1.00	1.01	4 00	0.00	0.00			
	10/	<b>F</b> 4000000	Compare	1.04	1.04	1.03	1.03	1.01	1.00	0.99	0.99			
	West	E10000032	AJ I (mpm)	2.00	2.00	2.00	2.01	2.01	2.01	2.01	2.01			
	Sussex	(43)	(mpm) %	2.00	2.00	2.00	2.01	2.01	2.01	2.01	2.01			
			Compare	1.02	1.02	1.02	1.02	1.02	1.02	1.01	1.01	Data	not avail	able
	Total Ave	rage Non-permit	ted						-					
		0		2.65	2.65	2.65	2.65	2.66	2.65	2.65	2.66			
	% Compa	red to pre-schen	ne											
	_	-		1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00			
	Brighton	E06000043	AJT											
	& Hove	(00ML)	(mpm)	3.73	3.73	3.73	3.74	3.74	3.74	3.74	3.74			
	UA		%											
			Compare	1.03	1.02	1.02	1.02	1.02	1.02	1.01	1.01			
	%	Average Journey	/ Time	-	-	-	-	-	-	-	-			
		increase/decrea	se	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01			
	Total Average							-1%						

#### 7.8 AM 9 - Road Traffic Collisions

Road Traffic collisions have been analyzed for 2014 pre-Permit Scheme and 2015 post-Permit Scheme.

To estimate the predicted collisions post-scheme compared to the actual data collected, trends were analyzed from reported collision statistics from 2010-2014 Personal Injury Accident (PIA) data that shows an annual average reduction of 27 collisions or 2 per month.

The actual data as shown on Table 53 below shows that there has been a decrease of 2% in collisions compared to the 2014 collisions but an increase of 2% based on the predicted trends. It should be noted that there are large fluctuations in collisions in 2013 there were 738 collisions and this rose to 793 in 2014. In 2015 this dropped 778 and the Permit Scheme, along with other interventions, has contributed to collision reduction in Brighton & Hove.

This would indicate a positive benefit of the Permit Scheme on the basis that all other network outcomes are equal. Contributing factors would be reduced disruption of road works by improved traffic management, signage and diversion routes and less variable speeds, all reducing the risks to drivers.

Table 53(a) AM 9 Road Traffic Collision	IS					
Year 1						
Previous Year		Predicted*		Actual		
Month-Year	Total	Month-Year	Total	Month-Year	Total	% Diff
Jan-14	56	Jan-15	54	Jan-15	73	
Feb-14	41	Feb-15	40	Feb-15	47	
Mar-14	56	Mar-15	54	Mar-15	59	
Apr-14	60	Apr-15	58	Apr-15	76	131%
May-14	73	May-15	71	May-15	62	88%
Jun-14	74	Jun-15	71	Jun-15	65	91%
Jul-14	84	Jul-15	81	Jul-15	71	88%
Aug-14	64	Aug-15	62	Aug-15	61	99%
Sep-14	75	Sep-15	72	Sep-15	77	106%
Oct-14	83	Oct-15	80	Oct-15	62	77%
Nov-14	65	Nov-15	63	Nov-15	66	105%
Dec-14	62	Dec-15	60	Dec-15	59	99%
Total	793	Total	766	Total	778	102%

\*Data predicted form Average PIA 2010-2014 54 collision reductions from 2013-2014 double the average reduction

#### 7.9 AM 10 - Carbon Emissions

The result of reduced congestion is a reduction in fuel consumption and CO2 emissions.

Data has been collected from the DfT on traffic flow from sites on major and minor roads in Brighton & Hove. This identifies 63 locations, as shown on Table 54 and 55 with traffic flows by vehicle type. For comparison, data has been collected from Brighton & Hove ATC sites to compare to the DfT data. Both data sets show that traffic levels have not increased from 2014 to 2015.

The average traffic speed sourced from the DfT on Table 56 has been used for comparison.

The DfT carbon tool has also been used, using the traffic flow and average speed to predict carbon emissions which is summarized in Table 57.

Table 58 compares output pre-Permit Scheme and post-Permit Scheme.

The summary shows that there has been decrease in traffic speed of 1% which may be an effect of the implementation of the 20 mph zones.

Due to the differences in the emission profiles of vehicles, the carbon emissions in Brighton & Hove has decreased by 6%.

The total distance travelled in 2014 was 1,015 million vehicle kilometres (mvkm). Therefore, based on the DfT sample data traffic proportions, this would equate to 137 thousand tonnes of CO2.

A 6% saving in monetary terms would equate to 8.6 thousand tonnes which equals £503,000. It can be concluded that the Permit Scheme, along with other interventions, has made a positive outcome for Brighton & Hove.

As the Permit Scheme progresses the Highway Authority will continue to work with Utilities to reduce disruption wherever possible and monitor these elements.

Table	e 54(a) AM	10 Carbon E	Emissions - DfT Tra	affic Cour	nt Sites					
Ref						DfT T	raffic Cour	nt Sites		
No					Road		Northin			LinkLength_k
	СР	Region	Local Authority	Road	Category	Easting	g	Start Junction	End Junction	m
1	6273	South East	Brighton and Hove	A23	PU	531360	104230	A23 Old Steine roundabout	A23 Gloucester Place/Grand Parade	0.50
2	6299	South East	Brighton and Hove	A2010	PU	530970	105000	A259	A270	2.00
3	7551	South East	Brighton and Hove	A2023	PU	528400	105000	A259 KINGSWAY	A270	1.50
4	7762	South East	Brighton and Hove	A270	PU	531000	105400	A2010	A270	0.67

5	8687	South East	Brighton and Hove	A270	PU	526486	105809	A293	A2038	0.20
6	16805	South East	Brighton and Hove	A259	PU	528000	104500	B2193	A2023	2.40
7	17517	South East	Brighton and Hove	A2038	PU	527000	106500	A270	A2023	2.20
8	18236	South East	Brighton and Hove	A270	PU	532000	105739	A23	A270 Lewes Road	0.77
9	26303	South East	Brighton and Hove	A270	PU	530000	105500	A2023	A2010	2.10
10	27602	South East	Brighton and Hove	A2023	PU	528010	107000	A270	A2038	1.40
11	36871	South East	Brighton and Hove	A259	PU	530000	104180	A2023	A2010	2.70
12	37642	South East	Brighton and Hove	A2038	PR	528500	107900	A2023	A27	1.30
13	38765	South East	Brighton and Hove	A293	PU	526370	106000	A270	Hangleton Lane	1.10
14	46301	South East	Brighton and Hove	A270	PU	528000	105950	A2038	A2023	1.90
15	47895	South East	Brighton and Hove	A259	PU	531000	103930	A2010	A23	0.60
16	48748	South East	Brighton and Hove	A23	PR	530100	108920	Church Hill	A27 spur	0.40
17	56267	South East	Brighton and Hove	A270	PU	532210	106000	A270 Fork	A27	4.00
18	56277	South East	Brighton and Hove	A23	PU	531400	105000	A23 St Peter's Place	A270	0.50

Table 54	4(b) AM	10 Carbon Er	nissions - DfT Traff	ic Coun	t Sites					
Ref						DfT Tra	affic Count	Sites		
No				Roa	Road	Eastin	Northin			LinkLength_k
	СР	Region	Local Authority	d	Category	g	g	Start Junction	End Junction	m
	5767	South	Brighton and		PU	532000	105555	A279 Lipper Lewes Road	A23 St. Peters Place	1 10
19	4	East	Hove	A270	10	332000	100000	Azro Opper Lewes Road	Azo ot. 1 eters 1 lace	1.10
	7038	South	Brighton and	^23	DU	531000	105500	A270	٨.23	0.40
20	7	East	Hove	723	FO	331000	103390	A210	A25	0.40
	7038	South	Brighton and	^23	DU	531100	105660	A270	٨.23	0.80
21	8	East	Hove	AZ3	FU	551100	103000	A210	A23	0.80
22	7315	South	Brighton and		PU	533030	103490	A23	B2137	2.10

	0	East	Hove	A259						
23	7315 5	South East	Brighton and Hove	A259	PU	525812	104960	LA Boundary	B2193	0.20
24	7482 4	South East	Brighton and Hove	A23	PU	531240	104000	A259	A23 merge	0.30
25	7482 5	South East	Brighton and Hove	A23	PU	531350	104000	A259	A23 merge	0.20
26	7482 6	South East	Brighton and Hove	A23	PU	531400	104600	A23 Marlborough Place	A23 St Georges Place	0.20
27	7482 7	South East	Brighton and Hove	A23	PU	531450	104620	A23 Marlborough Place	A23 Richmond Place	0.30
28	7482 8	South East	Brighton and Hove	A23	PU	531450	104720	A23 St George's Place	A23 Richmond Place	0.10
29	7482 9	South East	Brighton and Hove	A23	PU	531410	104850	A23 Gloucester Place	A23 St Peter's Place	0.30
30	7483 0	South East	Brighton and Hove	A23	PU	531480	104850	A23 Grand Parade	A270 Lewes Road	0.20
31	7483 1	South East	Brighton and Hove	A23	PU	531470	104950	A23 York Place	A23 Richmond Place	0.10
32	7823 6	South East	Brighton and Hove	A259	PR	535500	102770	B2137 Arundel Rd, Brighton	B2123 High Dt, Rottingdean	3.80
33	7823 7	South East	Brighton and Hove	A259	PU	537500	102070	B2123 High St, Rottingdean	LA Boundary	1.40
34	7823 8	South East	Brighton and Hove	A23	PU	530150	107000	Stanford Avenue	Church Hill	3.50

Table 54(c) AM 10 Carbon Emissions - DfT Traffic Count Sites										
Ref	DfT Traffic Count Sites									
No					Road	Eastin	Northin			LinkLength_k
	СР	Region	Local Authority	Road	Category	g	g	Start Junction	End Junction	m
35	78239	South East	Brighton and Hove	A293	PR	52615 0	107000	Hangleton Lane	A27	0.70
36	80481	South East	Brighton and Hove	A270	PU	53113 7	105254	A270-New England Road	A23 London Road	0.66
37	80482	South East	Brighton and Hove	A23	PU	53149 3	105172	A270-Upper Lewes Road	A270	0.44
38	80485	South East	Brighton and Hove	A270	PU	53133 0	105410	A23	A270	0.30
39	80486	South East	Brighton and Hove	A270	PU	53109 0	105440	A270	A23	0.13
40	81100	South East	Brighton and Hove	A270	PU	52611 0	105840	A293	A293	0.70
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41	81101	South East	Brighton and Hove	A270	PU	52551 0	105850	LA Boundary	A293	0.40
42	81102	South East	Brighton and Hove	A293	PU	52580 0	105450	A270	A259	0.90
43	94479 4	South East	Brighton and Hove	B2066 (Western Road)	BU	52931 9	104660	The Drive	Montpelier Road	1.10
44	94479 6	South East	Brighton and Hove	C (Warren Road)	CR	53323 6	105440	A270	Bear Road	2.00
45	94479 9	South East	Brighton and Hove	C (Dyke Road Avenue)	CU	52874 4	107937	A2038	A270	3.30
46	94480 0	South East	Brighton and Hove	C (Stanford Avenue)	CU	53134 0	106398	A23	Ditchling Road	1.00
47	94480 2	South East	Brighton and Hove	U (Hythe Road)	UU	53122 4	106645	Lowther Road	Ditchling Road	0.40
48	94480 3	South East	Brighton and Hove	U (Brownleaf Road)	UU	53632 6	104901	B2123 Falmer Road	Broad Green	0.50
49	94480 8	South East	Brighton and Hove	U (Elrington Road)	UU	52944 4	106228	Hove Park Road	The Droveway	0.20
50	94481 0	South East	Brighton and Hove	U (Saltdean Park Road)	UU	53810 5	102061	A259	Arundel Drive West	0.30
51	94481 1	South East	Brighton and Hove	U (Barrhill Avenue)	UU	53060 1	109071	Warmdene Avenue	Craignair Avenue	0.40
52	94481 2	South East	Brighton and Hove	U (Ladies Mile Road)	UU	53094 6	108829	Warmdene Road	Dale Crescent	0.35

Table 5	4(d) AM 1	0 Carbon En	nissions - DfT Traff	ic Count Sites						
Ref					DfT Traffic Co	ount Sites				
No					Road	Eastin	Northin			LinkLength_k
	СР	Region	Local Authority	Road	Category	g	g	Start Junction	End Junction	m
53	94481 4	South East	Brighton and Hove	U (Channel View Road)	UU	53477 4	105707	Warren Road	Warren Rise	0.40
54	94481 5	South East	Brighton and Hove	U (Gladstone Road)	UU	52568 9	105359	Gardner Road	B2193 Church Road	0.26
55	94481 6	South East	Brighton and Hove	U (Stafford Road)	UU	53039 4	105610	Port Hall Road	Buxton Road	0.24
56	94481 7	South East	Brighton and Hove	U (Lenham Avenue)	UU	53784 0	102539	Chorley Avenue	Saltdean Drive	0.60
57	94481	South	Brighton and	U (Second Avenue)	UU	52918	104520	A259	Western Road	0.35

	8	East	Hove			1		KINGSWAY		
58	94482 5	South East	Brighton and Hove	U (Northease Drive)	UU	52675 6	106898	Hangleton Way	Poplar Avenue	0.45
59	94482 8	South East	Brighton and Hove	U (Chalfont Drive)	UU	52933 3	107121	Dyke Road Avenue	Dyke Road Avenue	0.35
60	94483 0	South East	Brighton and Hove	U (Crescent Drive South)	UU	53653 6	105233	Downs Valley Road	Cowley Drive	0.50
61	94483 2	South East	Brighton and Hove	U (Buckingham Road)	UU	53078 1	104740	Leopold Road	Albert Road	0.16
62	94483 6	South East	Brighton and Hove	U (Old London Road)	UU	53021 6	108764	Ladies Mile Road	A23 London Road	0.17
63	94483 9	South East	Brighton and Hove	U (Danehill Road)	UU	53380 8	104388	Wilson Avenue	Ticehurst Road	0.08
									Totals	58.58

Table	55(a) AM 10	Carbon En	nissions -	Traffic Count	Data								
-							Year 1						
							2014 Flow Da	ita					
Ref No	Pedal Cycles	Motorcy cles	Cars Taxis	Buses Coaches	LightGoodsV ehicles	V2AxleRigi dHGV	V3AxleRigi dHGV	e V4or5AxleRi gidHGV	V3or4AxleAr ticHGV	V5AxleArti cHGV	V6orMoreAxleA rticHGV	AllH GVs	AllMotorVe hicles
1	1,182	345	14,527	2,083	2,936	218	64	19	26	14	10	351	20,241
2	323	114	8,257	383	1,810	92	7	3	-	1	-	103	10,666
3	141	35	6,823	226	1,340	109	12	13	2	7	5	148	8,571
4	691	314	12,245	90	3,684	245	64	21	2	6	3	342	16,674
5	178	322	22,801	309	4,111	203	41	28	17	34	31	353	27,896
6	1,843	393	16,362	165	3,270	321	73	140	5	10	21	570	20,760
7	72	83	9,759	85	1,949	129	24	1	1	5	2	162	12,038
8	893	194	5,125	26	1,281	71	17	11	1	1	2	104	6,730
9	195	295	12,641	50	2,643	127	29	4	1	2	1	165	15,794
10	14	56	6,041	15	1,194	147	17	26	6	11	6	213	7,520
11	1,833	503	20,905	107	4,245	235	69	100	5	8	7	423	26,183
12	18	187	18,279	48	3,874	254	39	42	10	29	17	390	22,779
13	36	134	19,040	233	3,162	299	63	256	24	76	146	863	23,432
14	145	216	18,081	193	3,732	155	27	13	6	17	12	230	22,452
15	1,223	595	26,310	137	4,771	363	60	54	11	9	6	503	32,317
16	68	204	20,610	257	3,821	270	55	24	18	35	31	432	25,324
17	940	325	15,900	736	3,876	221	61	25	11	16	33	368	21,205
18	651	53	4,489	1,255	871	91	18	17	4	12	2	144	6,812

Table	55(b) AM 10	) Carbon Er	nissions -	Traffic Count	Data								
							Year 1	_					
							2014 Flow Da	ata e					
Ref	PedalCy	Motorcy	CarsTa	BusesCo	LightGoodsV	V2AxleRigi	V3AxleRigi	V4or5AxleRi	V3or4AxleAr	V5AxleArti	V6orMoreAxleA	AIIH	AllMotorVe
No	cles	cles	xis	aches	ehicles	dHGV	dHGV	gidHGV	ticHGV	cHGV	rticHGV	GVs	hicles
19	1,472	312	11,070	723	2,929	181	45	10	1	1	3	240	15,274
20	287	227	9,368	248	2,058	169	29	21	6	18	9	253	12,155
21	530	156	11,744	292	2,437	185	37	14	5	10	16	266	14,895
22	203	228	16,501	406	2,965	154	30	9	6	10	5	214	20,315
23	324	332	13,707	220	3,434	426	88	65	10	19	17	625	18,318
24	406	121	6,322	649	1,039	123	26	5	22	5	7	188	8,319
25	406	121	6,322	649	1,039	123	26	5	22	5	7	188	8,319
26	500	217	9,667	1,384	1,954	189	44	14	14	13	7	281	13,501
27	770	165	10,844	56	2,882	199	47	27	4	9	10	297	14,244
28	500	217	9,667	1,384	1,954	189	44	14	14	13	7	281	13,501
29	457	45	5,571	1,222	1,157	126	26	13	6	11	7	189	8,185
30	1,703	358	15,491	356	3,419	279	46	34	6	10	19	394	20,017
31	319	84	9,220	200	1,527	118	18	9	2	10	9	166	11,197
32	83	419	20,675	515	3,486	240	47	33	10	16	26	372	25,468
33	56	378	19,675	418	4,035	293	40	172	3	5	7	519	25,025
34	321	289	18,765	372	3,861	241	56	21	28	35	42	422	23,711
35	33	122	17,326	212	2,877	272	58	233	22	69	133	786	21,323
36	587	159	8,686	74	1,361	91	9	2	6	3	1	112	10,391

Table	55(c) AM 10	) Carbon Er	nissions -	Traffic Count	Data								
							Year 1						
							2014 Flow Da	ata					
Ref	PedalCv	Motorcy	CarsTa	BusesCo	LightGoodsV	V2AxleRigi	V3AxleRigi	e V4or5AxleRi	V3or4AxleAr	V5AxleArti	V6orMoreAxleA	ΔΙΙΗ	AllMotorVe
No	cles	cles	xis	aches	ehicles	dHGV	dHGV	gidHGV	ticHGV	cHGV	rticHGV	GVs	hicles
37	327	163	8,055	438	1,224	110	22	14	13	6	13	179	10,059
38	268	243	11,852	61	2,459	139	27	12	14	11	10	214	14,828
39	1,254	287	11,375	59	2,514	125	19	13	4	13	-	175	14,410
40	119	238	20,426	201	4,288	275	64	220	18	64	69	710	25,862
41	65	264	18,887	115	3,353	234	59	52	17	22	55	440	23,058
42	114	91	8,999	226	2,345	191	39	202	19	73	80	604	12,266
43	1,140	91	7,096	1,011	1,653	66	14	1	8	-	2	91	9,942
44	104	131	6,697	144	1,131	45	5	9	-	3	1	63	8,166
45	142	180	11,947	142	2,145	148	27	23	18	3	3	222	14,637
46	52	38	2,246	26	469	19	11	3	-	-	-	33	2,812
47	11	3	504		127	5	-	1	-	-	-	5	639
48	4	1	265		54	1	-	1	-	-	-	2	322
49	17	-	504	-	42	3	1	-	-	-	-	4	550
50	44	14	1,141	23	159	3	2	-	-	-	-	6	1,343
51	4	6	594	60	171	5	4	-	-	-	-	8	840
52	15	22	1,556	17	244	8	-	-	-	-	-	8	1,846
53	2	4	466	-	89	3	-	-	-	-	-	3	561
54	98	51	2,482	1	619	20	-	1	-	-	1	22	3,174

Table	55(d) AM 10	0 Carbon E	missions -	Traffic Count	t Data								
							Year 1						
							2014 Flow Da	ata					
Ref No	PedalCy cles	Motorcy cles	CarsTa xis	BusesCo aches	LightGoodsV ehicles	V2AxleRigi dHGV	V3AxleRigi dHGV	e V4or5AxleRi gidHGV	V3or4AxleAr ticHGV	V5AxleArti cHGV	V6orMoreAxleA rticHGV	AllH GVs	AllMotorVe hicles
55	2	8	226	2	57	-	-	1	-	-	-	1	294
56	1	10	772	1	119	2	-	-	-	-	-	2	904
57	161	36	1,762	1	382	18	3	-	-	-	-	21	2,202
58	13	15	1,837	132	232	6	3	-	-	-	-	9	2,225
59	1	1	125	-	19	5	1	-	-	-	-	6	151
60	5	3	831	_	165	1	2	1	-	-	-	4	1,003
61	38	20	1,252	19	277	12	4	-	-	-	-	16	1,583
62	16	24	2,124	3	404	5	2	2	-	-	-	10	2,564
63	4	4	273	1	48	2	-	-	-	-	-	2	328
Tota Is	23,424	10,266	603,11 0	18,461	121,773	8,599	1,765	2,054	448	750	901	14,51 7	768,121

Table	55(e) AM 10	) Carbon Er	nissions -	Traffic Count	Data								
							Year 1						
							2015 Flow Da	ata					
Ref	PedalCv	Motorcy	CarsTa	BusesCo	LightGoodsV	V2AxleRigi	V3AxleRigi	V4or5AxleRi	V3or4AxleAr	V5AxleArti	V6orMoreAxleA	ΔΙΙΗ	AllMotorVe
No	cles	cles	xis	aches	ehicles	dHGV	dHGV	gidHGV	ticHGV	cHGV	rticHGV	GVs	hicles
1	1,099	351	14,261	2,065	3,088	212	67	18	32	13	10	353	20,117
2	383	127	4,246	572	929	52	6	-	1	1	-	60	5,934
3	131	31	6,959	243	1,405	104	12	12	2	7	5	142	8,779
4	643	277	12,487	97	3,864	233	66	20	2	6	3	330	17,054
5	166	327	22,383	306	4,324	198	43	27	20	33	31	352	27,692
6	1,713	399	16,061	164	3,440	312	76	137	6	10	21	562	20,627
7	100	87	9,389	45	1,842	81	25	6	1	3	4	120	11,484
8	831	171	5,227	28	1,343	67	18	11	2	1	2	100	6,869
9	525	122	8,332	74	1,348	74	29	5	1	1	2	113	9,989
10	13	49	6,161	17	1,252	140	18	24	7	11	6	205	7,684
11	1,704	512	20,522	106	4,465	228	73	97	6	8	7	418	26,022
12	34	184	19,814	29	3,525	227	37	30	27	43	12	376	23,927
13	34	137	18,690	231	3,326	291	67	249	29	74	144	854	23,237
14	135	220	17,749	192	3,925	150	28	12	8	17	12	228	22,313
15	1,137	605	25,827	136	5,019	353	63	53	13	9	6	497	32,084
16	68	211	21,231	253	4,247	282	62	25	24	36	32	460	26,402
17	874	331	15,608	729	4,077	215	64	25	14	16	33	366	21,112
18	605	47	4,578	1,352	913	86	19	16	5	11	2	140	7,029

Table	55(f) AM 10	Carbon Em	nissions - 1	Traffic Count	Data								
							Year 1	-					
							2015 Flow Da						
Ref	PedalCv	Motorcy	CarsTa	BusesCo	LightGoodsV	V2AxleRigi	V3AxleRigi	V4or5AxleRi	V3or4AxleAr	V5AxleArti	V6orMoreAxleA	AIIH	AllMotorVe
No	cles	cles	xis	aches	ehicles	dHGV	dHGV	gidHGV	ticHGV	cHGV	rticHGV	GVs	hicles
19	1,368	275	11,289	779	3,071	171	46	9	2	1	3	231	15,646
20	267	201	9,554	268	2,158	160	30	20	8	17	9	244	12,424
21	493	138	11,976	315	2,556	175	38	13	5	10	15	257	15,241
22	189	232	16,198	403	3,119	150	32	8	8	9	5	212	20,165
23	302	293	13,978	237	3,601	404	90	62	12	18	17	603	18,712
24	378	107	6,448	699	1,089	117	27	5	26	5	7	186	8,529
25	378	107	6,448	699	1,089	117	27	5	26	5	7	186	8,529
26	465	191	9,858	1,491	2,049	179	45	13	16	12	6	273	13,862
27	716	146	11,058	60	3,023	189	48	26	5	9	10	286	14,573
28	465	191	9,858	1,491	2,049	179	45	13	16	12	6	273	13,862
29	425	40	5,681	1,317	1,214	120	27	12	7	11	7	183	8,434
30	2,258	435	14,683	300	2,598	294	40	7	13	14	15	383	18,399
31	297	74	9,403	216	1,602	112	19	8	3	9	9	160	11,453
32	82	433	21,298	506	3,875	250	54	34	13	17	27	395	26,509
33	51	273	17,584	436	3,301	179	21	15	8	1	6	230	21,824
34	299	294	18,421	369	4,062	234	59	20	34	35	42	423	23,569
35	31	124	17,008	210	3,027	265	61	226	26	68	131	777	21,146
36	546	140	8,858	79	1,427	86	9	2	7	3	1	108	10,612

Table	55(g) AM 10	) Carbon Er	nissions -	Traffic Count	Data								
							Year 1						
							2015 Flow Da	ata					
Ref	PedalCv	Motorcy	CarsTa	BusesCo	LightGoodsV	V2AxleRigi	V3AxleRigi	V4or5AxleRi	V3or4AxleAr	V5AxleArti	V6orMoreAxleA	AIIH	AllMotorVe
No	cles	cles	xis	aches	ehicles	dHGV	dHGV	gidHGV	ticHGV	cHGV	rticHGV	GVs	hicles
37	304	144	8,214	472	1,284	105	22	14	16	6	13	175	10,289
38	249	214	12,086	66	2,578	132	28	12	17	11	10	209	15,154
39	1,166	254	11,600	64	2,636	118	20	12	5	13	-	169	14,722
40	110	242	20,052	199	4,510	268	67	214	22	63	68	702	25,704
41	60	268	18,541	114	3,527	228	62	51	20	22	54	437	22,887
42	106	81	9,177	244	2,459	181	40	191	23	70	77	583	12,544
43	1,917	115	7,159	897	1,608	74	10	3	4	1	-	91	9,870
44	160	190	7,739	151	1,264	44	8	5	4	1	1	63	9,407
45	64	98	18,584	59	3,162	184	29	13	17	8	5	257	22,160
46	55	53	2,261	22	543	52	13	1	-	-	-	66	2,945
47	9	11	629		134	6	1	-	-	-	-	7	780
48	3	3	297		39	-	-	-	-	-	-	-	339
49	17	3	520	-	50	2	-	-	-	-	-	2	574
50	68	9	1,207	36	135	19	3	-	2	-	-	25	1,412
51	9	15	552	51	140	15	1	-	-	-	-	16	774
52	26	14	1,527	23	212	8	2	-	-	-	-	10	1,786
53	4	9	664	2	138	2	1	-	-	-	-	3	816
54	112	40	1,856	2	444	28	-	-	-	-	-	28	2,370

Table	55(h) AM 10	0 Carbon E	missions -	Traffic Count	t Data								
							Year 1						
							2015 Flow Da	ata					
Pof	PodalCv	Motorey	CareTa	BusasCa	LightGoodsV	V2AvloBigi	Post-schen	10 VAcr5AxIoPi	V2or4AxloAr	V5 Axlo Arti	VeerMoreAvieA		
No	cles	cles	xis	aches	ehicles	dHGV	dHGV	gidHGV	ticHGV	cHGV	rticHGV	GVs	hicles
55	12	4	159	_	60	-	1	-	-	-	-	1	224
56	4	3	224	-	41	3	-	-	-	-	-	3	272
57	173	47	1,755	2	343	27	5	-	-	-	-	33	2,180
58	9	12	1,770	119	272	14	1	-	-	-	-	16	2,188
59	1	-	92	-	19	-	1	1	-	-	-	2	112
60	5	4	858	5	104	18	1	-	-	-	-	19	990
61	37	17	1,260	20	283	12	4	-	-	-	-	16	1,595
62	19	9	2,377	-	414	15	2	-	-	-	-	17	2,817
63	2	4	286	2	47	2	3	-	-	-	-	5	344
Tota Is	23,906	9,745	600,57 2	19,064	123,688	8,243	1,816	1,782	565	751	883	14,04 1	767,099

Table	55(q) AM 10 Carbon Emis	sions - BHCC Traffic (	Count Sites												
BHCC	Traffic Count Sites		-	P	re-scheme	Traffic Fl	ows	F	Post-schem	e Traffic I	lows		Comp	arison	
Site Ref	Road	Start Junction	End Junction	Direct ion	Flow	Direct ion	Flow	Direct ion	Flow	Direct ion	Flow	Direct ion	%	Direct ion	%
5	A270 Old Shoreham Rd, Hove	west of Benfield Cres		East	169226	West	169226	East	169278	West	169278	East	100%	West	100%
22	A259 Wellington Road	Middle St	Clarence St	East	114884	West	116048	East	117,817	West	118,050	East	103%	West	102%
23	A259 Marine Drive	Roedean Rd	Greenways	East	137230	West	136965	East	138,084	West	137,047	East	101%	West	100%
74	A270 New England Rd	rail bridges	Argyle Rd	East	80736	West	102745	East	81,868	West	91,519	East	101%	West	89%
97	ROAD TELSCOMBE CLIFFS			East	132295	West	5598	East	133,779	West	5,360	East	101%	West	96%
509	London Road	Cedar Gdns	Leakhurst Court Rd	North	139826	South	140881	North	139,675	South	139,575	North	100%	South	99%
606	King George VI Avenue	just west of Dyke Rd Ave rbt		North	125185	South	131731	North	135,859	South	140,705	North	109%	South	107%
607	Dyke Road Avenue	Hilltop	Woodland Drive	North	142014	South	131109	North	144,733	South	131,920	North	102%	South	101%
608	A23 London Road south of A23T / A27T interchange	south of A23T / A27T interchange		North	133717	South	136935	North	135,815	South	138,823	North	102%	South	101%
614	A259 Marine Drive	west of Chailey Avenue		East	150337	West	143571	East	149,785	West	144,808	East	100%	West	101%
620	A270 Lewes Road	Coldean Lane	Stanmer Park	-	183106	-	0	-	169,349	-	-	-	92%	-	-
622	Stanmer Park	access road outside the Lower Lodge		-	14347	-	0	-	18,951	-	-	-	132%	-	-
800	A259 Kings Road	Oriental Pl	Cavendish Pl	East	168462	West	178213	East	168,531	West	172,598	East	100%	West	97%
809	A23 Preston Road	Argyle Rd	Springfield Rd	North	99902	South	0	North	111,211	South	-	North	111%	South	-
810	Beaconsfield Rd	Ditchling Ri	Springfield Rd	North	174802	South	0	North	165,300	South	-	North	95%	South	-
813	A270 Lewes Road	Bear Rd	Coombe Rd	North	122689	South	119098	North	124,547	South	122,016	North	102%	South	102%
825	A259 Marine Parade	Madeira Pl	Camelford St	North	177613	South	150759	North	170,156	South	146,404	North	96%	South	97%
				Total	2266371		1662879		2274738		1658103		100%		100%

Table 56 AM 10 Carbon Emissions - Traffic Speed

						Year 1					
Average tr	affic speed (m	iles per mile)	(Source DfT	Congestion 8	Reliability S	tatistics Table	CGN0206a)	Average traffic	speeds during	g the weekday	morning peak
					on locally in	Period	ads:				
Apr-14	May-14	.lun-14	.lul-14	Sep 14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Average
	indy 14	Vull 14	our 14		Pre-schem	e	200 14		10010		Average
16.5	16.5	16.4	16.4	16.4	16.3	16.3	16.2	16.2	16.1	16.1	16.3
Average tr	affic speed (m	iles per mile)	(Source DfT	Congestion 8	Reliability S	tatistics Table	CGN0206a)	Average traffic	speeds during	g the weekday	morning peak
on locally managed 'A' roads:											
Period											
Apr-15	May-15	Jun-15	Jul-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Average
	-			-	Post-schem	ne		1		1	
16.1	16.1	16.1	16.1	16.0	16.0	16.1	16.1	No Data	No Data	No Data	16.1
	<i>((</i> )		(0 D/T	0		Year 2	00110000				
Average tr	affic speed (m	illes per mile)	(Source Df I	Congestion 8	Reliability S	tatistics lable	CGNU206a) A	Average traffic	speeds during	g the weekday	morning peak
on locally managed 'A' roads:											
Δpr-16	May-16	Jun-16	Jul-16	Sen-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Average
7,0110	inay io	oun ro	04110		Post-schem	ne	20010	oun n	100 11		Average
						.•					
						Year 3					
Average tr	affic speed (m	iles per mile)	(Source DfT	Congestion 8	Reliability S	tatistics Table	CGN0206a)	Average traffic	speeds during	g the weekday	morning peak
on locally managed 'A' roads:										•	
Period											
Apr-17	May-17	Jun-17	Jul-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Average
					Post-schem	ne					

Table	57(a) AM	10 Carbor	n Emissio	ons - DfT Sit	es									
	Year 1													
					2	014 Total Em	issions (thou	isand tonnes C	:02)					
	Pre-scheme													
Ref	PedalC	Motorc	CarsT	BusesC	LightGoods	V2AxleRi	V3AxleRi	V4or5AxleR	V3or4AxleA	V5AxleAr	V6orMoreAxle	AIIH	AllMotorV	
NO	ycies	ycies	axis	oacnes	venicies	giangy	giangv	IgidHGV	rtichgv	tichgy	ArtichGV	GVS	enicies	
1	0.00	0.03	0.31	0.21	0.08	0.03	0.03	0.03	0.01	0.01	0.01	0.12	0.67	
2	0.00	0.04	0.70	0.16	0.20	0.04	0.04	0.04	0.00	0.00	0.00	0.13	1.14	
3	0.00	0.01	0.43	0.07	0.11	0.04	0.04	0.04	0.01	0.01	0.01	0.15	0.67	
4	0.00	0.04	0.35	0.01	0.14	0.05	0.05	0.05	0.00	0.00	0.00	0.15	0.58	
5	0.00	0.01	0.19	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.28	
6	0.00	0.17	1.66	0.08	0.44	0.28	0.28	0.28	0.03	0.03	0.03	0.92	2.65	
7	0.00	0.03	0.91	0.04	0.24	0.07	0.07	0.07	0.01	0.01	0.01	0.24	1.30	
8	0.00	0.03	0.17	0.00	0.05	0.02	0.02	0.02	0.00	0.00	0.00	0.05	0.27	
9	0.00	0.11	1.12	0.02	0.31	0.07	0.07	0.07	0.00	0.00	0.00	0.23	1.64	
10	0.00	0.01	0.36	0.00	0.09	0.06	0.06	0.06	0.01	0.01	0.01	0.20	0.54	
11	0.00	0.24	2.39	0.06	0.64	0.24	0.24	0.24	0.02	0.02	0.02	0.76	3.58	
12	0.00	0.04	1.01	0.01	0.28	0.09	0.09	0.09	0.02	0.02	0.02	0.35	1.46	
13	0.00	0.03	0.89	0.05	0.19	0.15	0.15	0.15	0.09	0.09	0.09	0.70	1.39	
14	0.00	0.07	1.46	0.08	0.39	0.08	0.08	0.08	0.02	0.02	0.02	0.30	2.10	
15	0.00	0.06	0.67	0.02	0.16	0.06	0.06	0.06	0.00	0.00	0.00	0.20	0.97	
16	0.00	0.01	0.35	0.02	0.08	0.03	0.03	0.03	0.01	0.01	0.01	0.12	0.51	
17	0.00	0.23	2.70	0.61	0.86	0.27	0.27	0.27	0.08	0.08	0.08	1.03	4.73	
18	0.00	0.00	0.10	0.13	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.27	

Table	e 57(b) AM	10 Carbon	n Emissio	ons - DfT Sit	es									
	Year 1													
					2	014 Total Em	issions (thou	isand tonnes C	:02)					
	Pre-scheme													
Ref	tef PedalC Motorc CarsT BusesC LightGoods V2AxleRi V3AxleRi V4or5AxleR V3or4AxleA V5AxleAr V6orMoreAxle AllH AllMotorV No vcles vcles axis oaches Vehicles gidHGV gidHGV igidHGV rticHGV ticHGV ArticHGV ARticHGV GVs ehicles													
NO	ycles	ycles	axis	oaches	venicles	gidHGV	gidHGV	IgidHGV	rtichgv	tichgv	Artichgy	GVS	enicles	
19	0.00	0.06	0.52	0.16	0.18	0.06	0.06	0.06	0.00	0.00	0.00	0.17	0.98	
20	0.00	0.02	0.16	0.02	0.05	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.26	
21	0.00	0.02	0.40	0.05	0.11	0.04	0.04	0.04	0.01	0.01	0.01	0.15	0.63	
22	0.00	0.08	1.47	0.18	0.35	0.09	0.09	0.09	0.01	0.01	0.01	0.31	2.18	
23	0.00	0.01	0.12	0.01	0.04	0.03	0.03	0.03	0.00	0.00	0.00	0.08	0.20	
24	0.00	0.01	0.08	0.04	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.16	
25	0.00	0.00	0.05	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.10	
26	0.00	0.01	0.08	0.06	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.18	
27	0.00	0.01	0.14	0.00	0.05	0.02	0.02	0.02	0.00	0.00	0.00	0.06	0.22	
28	0.00	0.00	0.04	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.09	
29	0.00	0.00	0.07	0.08	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.18	
30	0.00	0.01	0.13	0.01	0.04	0.02	0.02	0.02	0.00	0.00	0.00	0.05	0.21	
31	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	
32	0.00	0.28	3.33	0.40	0.74	0.26	0.26	0.26	0.06	0.06	0.06	0.98	5.07	
33	0.00	0.09	1.17	0.12	0.31	0.15	0.15	0.15	0.01	0.01	0.01	0.48	1.85	
34	0.00	0.18	2.78	0.27	0.75	0.24	0.24	0.24	0.12	0.12	0.12	1.07	4.34	
35	0.00	0.02	0.51	0.03	0.11	0.09	0.09	0.09	0.05	0.05	0.05	0.41	0.81	
36	0.00	0.02	0.24	0.01	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.34	

Table	57(c) AM	10 Carbor	n Emissio	ons - DfT Sit	es									
	Year 1													
					2	014 Total Em	issions (thou	isand tonnes C	:02)					
	Pre-scheme													
Ref	PedalC	Motorc	CarsT	BusesC	LightGoods	V2AxleRi	V3AxleRi	V4or5AxleR	V3or4AxleA	V5AxleAr	V6orMoreAxle	AIIH	AllMotorV	
NO	ycies	ycies	axis	oacnes	venicles	gidHGV	gidHGV	IgidHGV	rtichgv	tichgv	Artichgy	GVS	enicles	
37	0.00	0.01	0.15	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.06	0.25	
38	0.00	0.01	0.15	0.00	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.22	
39	0.00	0.01	0.06	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.09	
40	0.00	0.03	0.61	0.03	0.17	0.08	0.08	0.08	0.03	0.03	0.03	0.36	0.95	
41	0.00	0.02	0.32	0.01	0.07	0.03	0.03	0.03	0.01	0.01	0.01	0.13	0.46	
42	0.00	0.01	0.34	0.04	0.12	0.08	0.08	0.08	0.05	0.05	0.05	0.40	0.65	
43	0.00	0.02	0.33	0.23	0.10	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.70	
44	0.00	0.05	0.57	0.06	0.13	0.03	0.03	0.03	0.00	0.00	0.00	0.08	0.83	
45	0.00	0.10	1.67	0.10	0.39	0.14	0.14	0.14	0.03	0.03	0.03	0.50	2.43	
46	0.00	0.01	0.10	0.01	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.14	
47	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
48	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
50	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
51	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
52	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
53	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
54	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	

Table	Table 57(d) AM 10 Carbon Emissions - DfT Sites												
	Year 1												
	2014 Total Emissions (thousand tonnes CO2)												
	Pre-scheme												
Ref No	ef PedalC Motorc CarsT BusesC LightGoods V2AxleRi V3AxleRi V4or5AxleR V3or4AxleA V5AxleAr V6orMoreAxle AllH AllMotorV o ycles axis oaches Vehicles gidHGV gidHGV igidHGV rticHGV ticHGV ArticHGV GVs ehicles												
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
57	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
58	0.00	0.00	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
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
60	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
61	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
62	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot												11.3	
als	0.00	2.22	31.10	3.46	8.16	3.06	3.06	3.06	0.73	0.73	0.73	5	48.72

Table	57(e) AM	10 Carbor	n Emissio	ons - DfT Sit	es									
	Year 1													
					2	015 Total Em	issions (thou	isand tonnes C	:02)					
	Post-scheme													
Ref	PedalC	Motorc	CarsT	BusesC	LightGoods	V2AxleRi	V3AxleRi	V4or5AxleR	V3or4AxleA	V5AxleAr	V6orMoreAxle	AIIH	AllMotorV	
No	ycles	ycles	axis	oaches	Vehicles	gidHGV	gidHGV	igidHGV	rticHGV	ticHGV	ArticHGV	GVs	ehicles	
1	0.00	0.03	0.30	0.21	0.09	0.03	0.03	0.03	0.01	0.01	0.01	0.12	0.68	
2	0.00	0.05	0.36	0.24	0.10	0.03	0.03	0.03	0.00	0.00	0.00	0.08	0.77	
3	0.00	0.01	0.45	0.08	0.12	0.04	0.04	0.04	0.01	0.01	0.01	0.15	0.70	
4	0.00	0.03	0.36	0.01	0.14	0.05	0.05	0.05	0.00	0.00	0.00	0.15	0.60	
5	0.00	0.01	0.19	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.28	
6	0.00	0.17	1.64	0.08	0.46	0.28	0.28	0.28	0.03	0.03	0.03	0.91	2.66	
7	0.00	0.03	0.88	0.02	0.23	0.05	0.05	0.05	0.01	0.01	0.01	0.18	1.22	
8	0.00	0.02	0.17	0.00	0.06	0.02	0.02	0.02	0.00	0.00	0.00	0.05	0.27	
9	0.00	0.05	0.75	0.03	0.16	0.05	0.05	0.05	0.00	0.00	0.00	0.16	1.03	
10	0.00	0.01	0.37	0.00	0.10	0.06	0.06	0.06	0.01	0.01	0.01	0.20	0.55	
11	0.00	0.25	2.36	0.06	0.67	0.23	0.23	0.23	0.02	0.02	0.02	0.76	3.59	
12	0.00	0.04	1.10	0.01	0.26	0.08	0.08	0.08	0.03	0.03	0.03	0.35	1.52	
13	0.00	0.03	1.04	0.06	0.24	0.17	0.17	0.17	0.10	0.10	0.10	0.82	1.65	
14	0.00	0.04	0.83	0.04	0.24	0.05	0.05	0.05	0.01	0.01	0.01	0.18	1.22	
15	0.00	0.20	2.09	0.05	0.53	0.19	0.19	0.19	0.02	0.02	0.02	0.63	3.09	
16	0.00	0.02	0.54	0.03	0.14	0.05	0.05	0.05	0.02	0.02	0.02	0.20	0.81	
17	0.00	0.02	0.27	0.06	0.09	0.03	0.03	0.03	0.01	0.01	0.01	0.10	0.48	
18	0.00	0.00	0.10	0.14	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.28	

Table	e 57(f) AM ´	10 Carbon	Emissio	ns - DfT Site	es									
	Year 1													
					2	015 Total Em	issions (thou	sand tonnes C	:02)					
	Post-scheme Ref PedalC Motorc CarsT BusesC LightGoods V2AxIeRi V3AxIeRi V4or5AxIeR V3or4AxIeA V5AxIeAr V6orMoreAxIe AllH AllMotorV													
Ref	PedalC	Motorc	CarsT	BusesC	LightGoods	V2AxleRi	V3AxleRi	V4or5AxleR	V3or4AxleA	V5AxleAr	V6orMoreAxle	AIIH	AllMotorV	
No	ycles	ycles	axis	oaches	Vehicles	gidHGV	gidHGV	igidHGV	rticHGV	ticHGV	ArticHGV	GVs	ehicles	
19	0.00	0.05	0.53	0.18	0.19	0.05	0.05	0.05	0.00	0.00	0.00	0.17	1.01	
20	0.00	0.01	0.16	0.02	0.05	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.27	
21	0.00	0.02	0.41	0.05	0.11	0.04	0.04	0.04	0.01	0.01	0.01	0.14	0.64	
22	0.00	0.09	1.45	0.18	0.37	0.09	0.09	0.09	0.01	0.01	0.01	0.31	2.18	
23	0.00	0.01	0.12	0.01	0.04	0.02	0.02	0.02	0.00	0.00	0.00	0.08	0.21	
24	0.00	0.01	0.08	0.04	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.16	
25	0.00	0.00	0.05	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.11	
26	0.00	0.01	0.08	0.06	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.19	
27	0.00	0.01	0.14	0.00	0.05	0.02	0.02	0.02	0.00	0.00	0.00	0.06	0.22	
28	0.00	0.00	0.04	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.09	
29	0.00	0.00	0.07	0.08	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.19	
30	0.00	0.02	0.13	0.01	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.20	
31	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	
32	0.00	0.29	3.45	0.40	0.82	0.28	0.28	0.28	0.07	0.07	0.07	1.05	5.31	
33	0.00	0.07	1.05	0.13	0.26	0.07	0.07	0.07	0.01	0.01	0.01	0.22	1.57	
34	0.00	0.18	2.75	0.27	0.79	0.24	0.24	0.24	0.12	0.12	0.12	1.09	4.36	
35	0.00	0.02	0.51	0.03	0.12	0.08	0.08	0.08	0.05	0.05	0.05	0.40	0.81	
36	0.00	0.02	0.25	0.01	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.35	

Table	57(g) AM	10 Carbor	n Emissio	ons - DfT Sit	es									
	Year 1													
					2	015 Total Em	issions (thou	isand tonnes C	:02)					
	Post-scheme													
Ref	PedalC	Motorc	CarsT	BusesC	LightGoods	V2AxleRi	V3AxleRi	V4or5AxleR	V3or4AxleA	V5AxleAr	V6orMoreAxle	AIIH	AllMotorV	
No	ycles	ycles	axis	oaches	Vehicles	gidHGV	gidHGV	igidHGV	rticHGV	ticHGV	ArticHGV	GVs	ehicles	
37	0.00	0.01	0.15	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.06	0.26	
38	0.00	0.01	0.15	0.00	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.23	
39	0.00	0.01	0.06	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.10	
40	0.00	0.03	0.60	0.03	0.18	0.08	0.08	0.08	0.03	0.03	0.03	0.35	0.95	
41	0.00	0.02	0.32	0.01	0.08	0.03	0.03	0.03	0.01	0.01	0.01	0.13	0.47	
42	0.00	0.01	0.35	0.05	0.12	0.08	0.08	0.08	0.05	0.05	0.05	0.39	0.66	
43	0.00	0.02	0.34	0.20	0.10	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.68	
44	0.00	0.07	0.66	0.06	0.14	0.02	0.02	0.02	0.00	0.00	0.00	0.09	0.96	
45	0.00	0.06	2.61	0.04	0.58	0.16	0.16	0.16	0.03	0.03	0.03	0.58	3.49	
46	0.00	0.01	0.10	0.00	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.16	
47	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
48	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
50	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
51	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
52	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
53	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
54	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	

Table	Table 57(h) AM 10 Carbon Emissions - DfT Sites												
	Year 1												
	2015 Total Emissions (thousand tonnes CO2)												
	Post-scheme												
Ref	ef PedalC Motorc CarsT BusesC LightGoods V2AxleRi V3AxleRi V4or5AxleR V3or4AxleA V5AxleAr V6orMoreAxle AllH AllMotorV												
No	ycles	ycles	axis	oaches	Vehicles	gidHGV	gidHGV	igidHGV	rticHGV	ticHGV	ArticHGV	GVs	ehicles
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
57	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04
58	0.00	0.00	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
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
60	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
61	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
62	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot												10.4	
als	0.00	2.00	29.69	3.16	7.76	2.77	2.77	2.77	0.71	0.71	0.71	5	45.66

Table 58 AM	10 Carbor	n Emissio	ns - Sum	mary									
							Year 1						
						2014 (	Carbon Outp	ut					
				-	-	P	re-scheme	-	-	-		-	
Period	Pedal Cycles	Motor cycles	Cars Taxis	BusesC oaches	LightGood sVehicles	V2AxleRi gidHGV	V3AxleRi gidHGV	V4or5Axle RigidHGV	V3or4Axle ArticHGV	V5AxleA rticHGV	V6orMoreAxI eArticHGV	AllH GVs	AllMotor Vehicles
Flow	23424	10266	6031 10	18461	121773	8599	1765	2054	448	750	901	1451 7	768121
Average speed		10.0	40.0	46.0	10.0	46.0	46.0	10.0	10.0	46.0	10.0	40.0	10.0
(mpn)		16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
CO <sub>2</sub> / km)	0.00	2.22	31.10	3.46	8.16	3.06	3.06	3.06	0.73	0.73	0.73	11.3 5	48.72
2015 Carbon Output													
Post-scheme													
Flow	23906	9745	6005 72	19064	123688	8243	1816	1782	565	751	883	1404 1	767099
Average speed (mph)		16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
Emission (g CO <sub>2</sub> / km)	0.00	2.00	29.69	3.16	7.76	2.77	2.77	2.77	0.71	0.71	0.71	10.4 5	45.66
Carbon Output Comparison													
Traffic Flow (+/-) %	2%	-5%	0%	3%	2%	-4%	3%	-13%	26%	0%	-2%	-3%	0%
Speed (+/-) %		-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Emission (g CO <sub>2</sub> / km) (+/-) %	0%	-10%	-5%	-9%	-5%	-9%	-9%	-9%	-2%	-2%	-2%	-8%	-6%

### 7.10 KPI 4

This KPI shows where promoters start their works without having to comply with the minimum Permit application lead-in period, commonly known as early start agreements. In total 30% of Highway Authority works and 3% of Utility works received early start agreement.

Both Promoters should be treated on an equal standing.

The data indicates that the Highway Authority works had a great number of Early Starts.

Table 59 K	PI 4 The number of	f occurrences of re	educing the applicati	on period (early s	tarts)				
	Year 1			Year 2			Year 3		
Period	E	arly Starts Agreen	nents	Ear	ly Starts Agreeme	ents	Early S	Starts Agreemen	its
Tenou	Highway Authority	Utilities	Total	Highway Authority	Utilities	Total	Highway Authority	Utilities	Total
Apr-15	5	7							
May-15	10	7							
Jun-15	5	14							
Jul-15	15	35							
Aug-15	3	21							
Sep-15	16	28							
Oct-15	5	27							
Nov-15	4	23							
Dec-15	9	13							
Jan-16	12	17							
Feb-16	9	21							
Mar-16	7	12							
Total	100	225	-						

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#### 7.11 KPI 5

This information is not available at this time.

Table 60 KPI 5 The number of agreements to work in Section 58 and Section 58A restrictions

Year 1	Year 2	Year 3	
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## 7.12 KPI 6

This information is not available at this time.

Table 61 KPI 6 The proportion of times that a permit authority intervenes on applications							
Year 1		Year 2		Year 3			

# 8 APPENDIX 3 – COSTS, INCOME and DISCOUNTS

There are two elements to the Permit Scheme costs:

- Start-up costs; and
- Ongoing costs.

#### 8.1 START-UP COSTS

The one-off costs required to establish the Permit Scheme were recorded at £128,366.

### 8.2 FEE INCOME

£565,000 of Permit fee income was received. This is circa 2% less than the risk managed budget anticipated so is in line with expectations.

## 8.3 COSTS BUDGETS AND ACTUALS

Due to the risk associated with the amount of fee income being directly affected by operational decisions by Utility companies a budget was established that was less that the amount identified in the DfT Fees Matrix.

The volume of Permits was less than expectations and fee income was in line with what would be expected for this volume. The risk management applied to fee income and costs allowed for this.

Further analysis of this is required and will be possible when IT System reporting improves.

Table 62 – Costs Budgets Against Actuals						
Cost Centre (Approximate Risk Managed Budget Figures)	Year 1 + Risk Budget	Year 1 + Actual				
KPI Production	£30,000	£30,000				
Invoicing	£50,000	£50,000				
IT support	£24,000	£7,000				
Unathorised / Abandoned works	£40,000	£20,000				
Management Overhead	£30,000	£30,000				
Training		£2,500				
Staff including NI, Pen, OH	£406,000	£388,000				
Totals	£580,000	£527,500				

#### 8.4 AVERAGE PERMIT COST

By dividing the number of Utility Permits granted by the Permit Scheme cost an average cost per Permit can be calculated.

This is a useful indicator of the general scheme costs to Utilities and can be compared to other schemes to show a general financial efficiency level.

Table 63 AM 11 – Average Permit Cost to Utilities						
Promoters	Total Permit Applications (Granted and completed)	Total Scheme Cost	Average Permit Cost			
Utility	8,742	£565,000	£64.63			

END