



**Brighton & Hove
City Council**

ENVIRONMENT, TRANSPORT & SUSTAINABILITY COMMITTEE

SUPPORTING INFORMATION

Year 2 Evaluation Report

Brighton & Hove Permit Scheme

for road and street works

Traffic Management Act 2004



Brighton & Hove
City Council

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1 EXECUTIVE SUMMARY

The Brighton & Hove City Council Permit Scheme (B&HPS) was introduced on 30th March 2015 and had a successful first year. The second year has built on that success. The volume of works managed by the scheme has increased substantially, however, due to effective management, forward planning, recruitment and training, this has been dealt with efficiently.

The purpose of this report is to evaluate the previous year's operation of the Permit Scheme against its objectives and give consideration to the fee structure, the costs and benefits of operating the scheme and detail key performance indicators contained in Guidance.

The Permit Scheme is regarded as a best of breed scheme and has been replicated by 7 other Highway Authorities since its inception.

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 an evaluation of the second year of operation and there are a wide range of indicators and measures that the industry has been discussing and agreeing that should be reported on. Some of these are possible to report on and some require further systems capability outside the control of the Permit team. 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 if possible produced in future years.

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.

Now the Permit Scheme is established it indicates that the Permit Scheme is more beneficial to society than originally anticipated.

1.1 COST BENEFIT ANALYSIS COMPARISON

Table 1 Brighton and Hove Cost Benefit Analysis results			
5% reduction in works impact	Opening Year Predicted	First Year Actuals	Second Year Actuals
Net Present Value of Benefits	£7,605,555	£5,233,045	£5,233,045
Net Present Value of Costs	£754,685	£565,000	£480,000
Net Present Value of Permit Scheme	£6,850,869	£4,668,045	£4,753,045
Benefit to Cost Ratio	10.08	9.26	10.90

1.2 SUMMARY FINDINGS

Traffic volume in Brighton & Hove in 2014 was 1,015 million vehicle kilometres (mvkm), in 2015 was 1,008 million vehicle kilometres (mvkm) and in 2016 was 1,024 million vehicle kilometres (mvkm) so has increased over the three years by 1%.

In the City, average traffic speeds during the weekday morning has decrease from 16.3mph to 16.1mph or 1.2%, against and national figures 17.0mph to 16.7mph or a 1.8% decrease. Therefore, it can be concluded that the reduction in speed is slightly less than the national average and a positive result. This may be a result of the implementation of the 20 mph zones in 2014 and 2015 and the increase in vehicle volumes. However, there has also been a substantial increase in works which would be expected to cause a greater decrease in average speeds. The effective management of the highway network has mitigated this and is a considerable achievement by the team.

Regarding Journey Times, in the pre-scheme period there was a steady increase from 3.63 minutes per mile (mpm) from April 2014 to 3.73 mpm to March 2015. The average journey time in April 2015 to June 2015 was 3.73 mpm and rose to 3.74 mpm in July 2015 to December 2015. This would suggest that the journey time reliability is settling following the recent two initiatives and is now less variable.

Due to the differences in the emission profiles of vehicles, carbon emissions decreased by 6% in the previous year. This year, carbon emissions have increased by 4% due to a slight reduction in vehicle speeds. The reduction in the speed of HGVs has reduced their associated carbon levels but as they represent only 2% of traffic volumes this has had a minimal effect.

Collision data shows that there has been no reduction in collisions in comparing 2016 to 2015 even though this is still 4% higher than predicted trends. However, there has been an increase in the number of works in the City so it would be reasonable to conclude that these works have been managed better, so the potential increase in collisions has not been realized.

During the 2nd year of operation; 13,896 Permit applications were received from Utility Promoters and Highway Authority Promoters. This is 52% increase and the majority came from Utility Promoters. This total includes applications that were granted but subsequently cancelled by the Promoter before the works were undertaken.

Due to increases in volumes economies of scale were realised and the average Utility cost of a Permit reduced by circa 5%.

Of particular note is the average duration of works. Major works undertaken by Utility Promoters has reduced from 22 days to 14 days making a significant impact on the level of disruption caused.

12,110 Permits were granted which is 87% of applications, down 3% on last year.

1,420 Permits were refused for various reasons which is 10% of applications down from 12% of applications last year. 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. Less Permits being refused would indicate that the quality of applications and uses of information such as online maps has improved the quality of application.

5% of applications from the Highway Authority were refused, down from 24% last year. 11% of Utility applications were refused, the same as last year. Therefore, the overall reduction in refusals is due to Highway Authority improvements. This need to be observed over the coming years parity of treatment is maintained.

1 Highway Authority Permit 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.

2,936 variations requests were received which is still some 3 times the number originally expected using DfT calculations. Managing this continued high volume of variations has been a considerable challenge which has been met by the team.

2,352 variations to granted Permits were granted which is 80% of requests.

6,754 conditions were attached to Permits which is an increase of 17% over last year. The Permit Scheme allows for the attaching of conditions to Permits and not all types of conditions will necessarily be applied to all Permits.

There were 46 occasions of collaborative working in the City, 45 by the Utility Promoters. This collaborative working saved the City 159 days of works saving in excess of £100,000.

There were 73 cases of working in the City without a Permit and 257 breaches of agreed conditions were identified. These are offences and resulted in a Fixed Penalty Notices being issued. This situation need further monitoring and analysis.

1.3 SECOND YEAR ISSUES

There were difficulties during the first year of operation with the IT system's ability to produce reports consistent with the industry's agreed indicators and measures. A new system has been procured from a different supplier and the impact of this will be seen in future reports.

Recruitment of the team went well during the lead up to, and during the first year of operation. This has continued. The Permit Scheme is fully resourced, and the members of staff are well trained, well managed and supported.

1.4 NEW STAFF

Staff costs have increased by over 10% to accommodate the increase volume of works that have been managed by the Permit team.

The original risk managed budget following the Cost Benefit Analysis identified £406,000 of additional new staff costs. £388,000 of additional new staff costs were incurred in the first year and this has grown to £430,000 for the second year.

Additional money has also been spent on training the team to maintain a high level of skill essential to the effective operation of the Permit Scheme.

1.5 OPERATIONAL COSTS

Operational costs have increased from **£92,000 to £214,551** which included improvements in IT systems and to accommodate the increase volume of works that have been managed by the Permit team.

1.6 CONCLUSIONS

This report provides evaluation findings of key indicators and measures for the Brighton & Hove Permit Scheme after its second 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 due to effective management and unexpected volume increases but is still well balanced. Therefore, there is no need to consider an adjustment in fee rates at this time.

There are still some difficulties gathering accurate data from the IT system but this has improved over the previous year. However, what has been gathered shows the objectives of the scheme are being met and that society is benefiting from the ongoing operation of the Permit Scheme.

In the first year there were less Utility Promoter applications than anticipated which may be a result of incorrect information from the previous system. The volume has increased substantially in the second year.

11% of Utility Promoter applications were refused which is the same as the previous year. 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.

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 successfully but needs to be quantified and measured.

Future reports will continue to add more data and allow greater analysis of the impact of the Permit Scheme.

Works are being Permitted and co-ordinated effectively and this 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 show but the data contained within this report.

1.7 LOOKING FORWARD

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

- Embedding the new IT system and improving data recording and reporting
- Continuing staff training and development
- Monitoring of Utility discounts given and the behavioural changes that have resulted so the impact can be assessed
- How the Permit Team can support other initiatives within the Highway Department such as programmes to assess the level of compliance with Specification of the Reinstatement of Openings in Highways (SROH).

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 2014 the 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 are;

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 key 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 co-ordination 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 Brighton & Hove Permit Scheme (B&HPS) each year of operation, as a requirement set out in The Traffic Management Permit Scheme (England) (Amendment) Regulations 2015 regulation 16A.

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 traffic and street data is collected from DfT data and 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 Transport's 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, co-ordination 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 is improved operation of the transport network through a reduction in journey times per unit distance travelled due to reduction in delay from works.

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%.

3.5 JOURNEY TIME RELIABILITY

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.

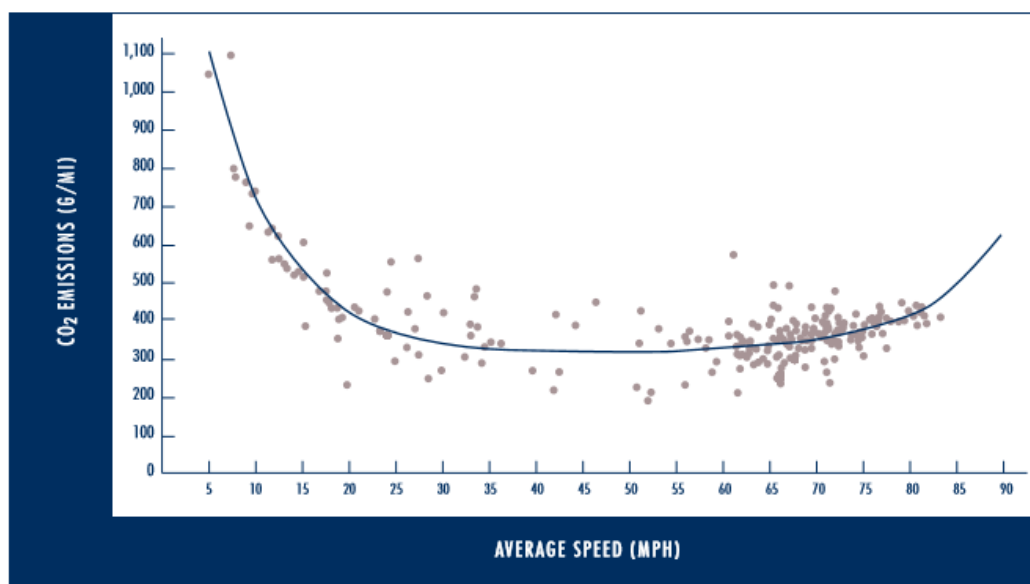
3.7 CARBON EMISSIONS

An outcome of reduced congestion is the reduction in fuel consumption and CO₂ emissions. The fuel consumption that causes CO₂ 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 CO₂.

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: $L = a/v + b + c.v + d.v^2$

Where:

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 Table A 1.3.8 of WebTAG as shown on Table 1 below.

Table 1 - WebTAG – Fuel consumption parameter values				
Fuel consumption parameter values (litres per km, 2010)				
Parameters				
Vehicle Category	a	b	c	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 consumption parameter 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 CO₂ emissions 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 co-ordinating Permit Applications which includes Street Work Officers, Street Work Co-ordinators and Manager(s).

Table 2 - Statutory Permit Fee rates		
Revised maximum fee structure for each category of works and for a hierarchy of main and minor roads - Road category refers to the reinstatement category of the street under the New Roads and Street Works Act 1991		
Work Type	Road Category 0-2 or Traffic-sensitive	Road Category 3-4 and non traffic-sensitive
Provisional Advance	£105	£75
Major works – over 10 days <u>and</u> all 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 correct 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

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- 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
<i>The number of Permit and Permit variation applications received, the number granted and the number refused</i>
<p>This will be measured by Promoter and shown as:</p> <ul style="list-style-type: none"> • 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
<i>The number of conditions applied by condition type</i>
<p>This will be measured by Promoter and shown as:</p> <ul style="list-style-type: none"> • 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
<i>The number of approved extensions</i>
<p>This will be measured by promoter and shown as:</p> <ul style="list-style-type: none"> • 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
<i>Number of inspections carried out to monitor conditions</i>
<p>This will be broken down by promoter and shown as:</p> <ul style="list-style-type: none"> • 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 The number of permit and permit variation applications received, the number granted and the number refused, deemed and superseded										
Year 1	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
Total	9,169	2,648	8,100	2,147	1,069	501	0	No Data	No Data	No Data
Percentage			88%	81%	12%	19%				
Year 2	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Superseded	Applications Deemed	Applications Superseded
Total	13,896	2,936	12,110	2,352	1,420	438	1	No Data	No Data	No Data
Percentage			87%	80%	10%	15%				

Table 4 KPI 1 Permit Applications by Promoter			
Year 1			
Promoters	Total Permit Applications	Total Applications Granted	Total Applications Refused
Highway Authority	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	1,580	1,460	79
		92%	5%
Utility	12,316	10,650	1,341
		86%	11%

Table 5(a) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
BT	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	655	236	547	182	108	54	No Data	No Data	No Data	No Data
	7%	9%	84%	77%	16%	23%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	995	404	645	287	300	102	No Data	No Data	No Data	No Data
	7%	14%	65%	71%	30%	25%				

Table 5(b) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
BHCC	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	427	356	326	306	101	50	No Data	No Data	No Data	No Data
	5%	13%	76%	86%	24%	14%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	1580	304	1460	256	79	28	No Data	No Data	No Data	No Data
	11%	10%	92%	84%	5%	9%				

Table 5(c) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
UKPN	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	564	458	435	375	129	83	No Data	No Data	No Data	No Data
	6%	17%	77%	82%	23%	18%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	594					45	No Data	No Data	No Data	No Data
	4%	16%	77%	87%	19%	9%				

Table 5(d) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
Vodafone	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	20	38	5	15	15	23	No Data	No Data	No Data	No Data
	0%	1%	25%	39%	75%	61%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	15						No Data	No Data	No Data	No Data
	0%	1%	27%	69%	73%	25%				

Table 5(e) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
NWR	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	18	12	13	9	5	3	No Data	No Data	No Data	No Data
	0%	0%	72%	75%	28%	25%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	24					1	No Data	No Data	No Data	No Data
	0%	0%	88%	75%	13%	13%				

Table 5(f) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
Virgin Media	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	830	308	631	245	199	63	No Data	No Data	No Data	No Data
	9%	12%	76%	80%	24%	20%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	1,856	528	1,412	414	395	93	No Data	No Data	No Data	No Data
	13%	18%	76%	78%	21%	18%				

Table 5(g) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
O2	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	11	12	6	10	5	2	No Data	No Data	No Data	No Data
	0%	0%	55%	83%	45%	17%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	18	14	11	9	6	4	No Data	No Data	No Data	No Data
	0%	0%	61%	64%	33%	29%				

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

Table 5(i) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
GTC	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	4	5	1	3	3	2	No Data	No Data	No Data	No Data
	0%	0%	25%	60%	75%	40%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	4	6	3	3	1	2	No Data	No Data	No Data	No Data
	0%	0%	75%	50%	25%	33%				

Table 5(j) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
Orange	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	2	3	0	2	2	1	No Data	No Data	No Data	No Data
	0%	0%	0%	67%	100%	33%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	22					3	No Data	No Data	No Data	No Data
	0%	0%	73%	73%	23%	27%				

Table 5(k) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
Neoscorp	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	15	6	10	5	5	1	No Data	No Data	No Data	No Data
	0%	0%	67%	83%	33%	17%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	-		-		-	-	No Data	No Data	No Data	No Data

Table 5(l) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
T Mob	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	36	39	15	24	21	15	No Data	No Data	No Data	No Data
	0%	1%	42%	62%	58%	38%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	98					3	No Data	No Data	No Data	No Data
	1%	1%	71%	81%	21%	8%				

Table 5(m) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
SGN	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	854	652	721	521	133	131	No Data	No Data	No Data	No Data
	9%	25%	84%	80%	16%	20%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	1,061					96	No Data	No Data	No Data	No Data
	8%	22%	84%	79%	11%	15%				

Table 5(n) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
Fulcrum	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	5	5	2	3	3	2	No Data	No Data	No Data	No Data
	0%	0%	40%	60%	60%	40%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	8					-	No Data	No Data	No Data	No Data
	0%	0%	75%	100%	25%	0%				

Table 5(o) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
SWS	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	5,726	515	5,388	445	338	70	No Data	No Data	No Data	No Data
	62%	19%	94%	86%	6%	14%				
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	7,605					56	No Data	No Data	No Data	No Data
	55%	16%	93%	84%	5%	12%				

Table 5(p) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
Verizon	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	-	-	-	-	-	-	No Data	No Data	No Data	No Data
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	3	-	3	-	-	-	No Data	No Data	No Data	No Data
	0%	0%	100%		0%	-				

Table 5(q) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
ES Pipelines	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	-	-	-	-	-	-	No Data	No Data	No Data	No Data
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	2	2	-	1	1	1	No Data	No Data	No Data	No Data
	0%	0%	0%	50%	50%	50%				

Table 5(r) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
SSE	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Variations Deemed	Applications Superseded	Variations Superseded
	-	-	-	-	-	-	No Data	No Data	No Data	No Data
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	8	5	6	3	2	-	No Data	No Data	No Data	No Data
	0%	0%	75%	60%	25%	0%				

Table 5(n) KPI 1 The number of permit and permit variation applications received, granted, refused, deemed and superseded by Promoter										
Promoter										
Total	Year 1									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	9,169	2,648	8,100	2,147	1,069	501	No Data	No Data	No Data	No Data
	Year 2									
	Applications Received	Variations Received	Applications Granted	Variations Granted	Applications Refused	Variations Refused	Applications Deemed	Applications Deemed	Applications Superseded	Applications Superseded
	13,896					438	No Data	No Data	No Data	No Data

Table 6(a) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 0-2 and Traffic Sensitive Streets for Utility Works by Activity type																		
Year 1																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 6(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 0-2 and Traffic Sensitive Streets for Utility Works by Activity type																		
Year 2																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 7(a) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 3-4 Non Traffic Sensitive Streets for Utility Works by Activity type																		
Year 1																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 7(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 3-4 Non Traffic Sensitive																		
Year 2																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.		No.		No.		No.		No.		No.		No.		No.		No.	
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 8(a) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Utility Works by Activity type																		
Year 1																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 8(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Utility Works by Activity type																		
Year 2																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.		No.		No.		No.		No.		No.		No.		No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 9(a) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 0-2 and Traffic Sensitive Streets for Highway Works by Activity type																	
Year 1																	
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Total																	

Table 9(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 0-2 and Traffic Sensitive Streets for Highway Works by Activity type																	
Year 2																	
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Total																	

Table 10(a) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 3-4 Non Traffic Sensitive Streets for Highway Works by Activity type																		
Year 1																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 10(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 3-4 Non Traffic Sensitive Streets for Highway Works by Activity type																		
Year 2																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 11(a) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Highway Works by Activity type																		
Year 1																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 11(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Highway Works by Activity type																		
Year 2																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 12(a) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 0-2 and Traffic Sensitive Streets for All Works by Activity type																		
Year 1																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 12(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 0-2 and Traffic Sensitive Streets for All Works by Activity type																		
Year 2																		
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data	
Total																		

Table 13(a) KPI 1 The number of permit and permit variation 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 App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Total																	

Table 13(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for Category 3-4 Non Traffic Sensitive Streets for All Works by Activity type																	
Year 2																	
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Total																	

Table 14(a) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for All Works by Activity type																	
Year 1																	
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Total																	

Table 14(b) KPI 1 The number of permit and permit variation granted, number refused, deemed superseded and cancelled for All Works by Activity type																	
Year 2																	
Activity Type	Permit App Granted		Permit App Refused		Variation Granted		Variation Refused		Deemed Permit Applications		Superseded Applications		Deemed Permit Variations		Superseded Variations		Cancelled /Aborted
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Provisional Advance	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Major	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Standard	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Minor	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Immediate	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
Permit Variation	No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data		No Data
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 number of conditions applied by condition type										
Number	Condition	Year 1			Year 2			Year 3		
		Utility Works	Highway Authority Works	Total	Utility Works	Highway Authority Works	Total	Utility Works	Highway Authority Works	Total
1	Date Constraints	445	27	472	559	7	566			
2	Time Constraints	1748	68	1,816	1,441	665	2,106			
3	Out of Hours Work	224	6	228	151	10	161			
4	Material and Plant Storage	474	1	475	334	-	334			
5	Road Occupation Dimensions	566	16	582	648	27	675			
6	Traffic Space Dimensions	1,246	61	1,307	1,568	44	1,612			
7	Road Closure	39	16	55	70	22	92			
8	Light Signals and Shuttle Working	58	18	76	125	214	339			
9	Traffic Management Changes	53	11	64	146	5	151			
10	Work Methodology	74	2	76	186	1	187			
11	Consultation and Publicity	549	7	556	416	4	420			
12	Environmental	8	0	8	6	-	6			
13	Local	52	4	56	105	-	105			
	Total	5,536	237	5771	5,755	999	6,754			

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 approved extensions									
Period	Year 1			Year 2			Year 3		
	Agreed Extensions			Agreed Extensions			Agreed Extensions		
	Highway Authority	Utilities	Total	Highway Authority	Utilities	Total	Highway Authority	Utilities	Total
Apr-15	0	28	28	559	7	566			
May-15	2	29	31	1,441	665	2,106			
Jun-15	1	40	41	151	10	161			
Jul-15	8	31	39	334	-	334			
Aug-15	9	42	51	648	27	675			
Sep-15	4	39	43	1,568	44	1,612			
Oct-15	6	37	43	70	22	92			
Nov-15	12	24	36	125	214	339			
Dec-15	4	33	37	146	5	151			

Jan-16	13	49	62	186	1	187			
Feb-16	6	49	55	416	4	420			
Mar-16	3	41	44	6	-	6			
Total	68	442	510	105	-	105			

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 Number of inspections carried out to monitor conditions									
Promoter	Year 1			Year 2			Year 3		
	Passed	Non-Compliant	Total	Passed	Non-Compliant	Total	Passed	Non-Compliant	Total
BT	45	36	81	108	32	140			
BHCC	-	3	3	36	8	44			
UKPN	62	17	79	289	28	317			
Vodafone	-	-	-	1	-	1			
NWR	-	-	-	1	1	2			
Virgin Media	12	6	18	41	40	81			
O2	-	-	-	5	-	5			
Romec	-	-	-			-			
GTC	-	-	-	2	-	2			

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Orange	-	-	-	2	1	3			
Neoscorp	2	-	2	-	-	-			
T Mob	-	-	-	16	4	20			
SGN	381	114	495	568	74	642			
Fulcrum	1	-	1	6	-	6			
Neoscorp	-	-	-	-	-	-			
SWS	-	-	-	577	102	679			
SSE	-	-	-	1	-	1			
Total	503	176	679	1,075	188	1,263			

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
Year 2						
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total
All Promoters	207	673	6,155	1,910	1,102	10,047
Highway Authority	43	131	344	415	553	1,486
Utilities	164	542	5,811	1,495	549	8,561
Year 3						
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total
All Promoters						
Highway Authority						
Utilities						

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
Year 2						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	14	29	126	72	121	362
Cat 2	2	10	43	36	47	138
Cat 3	6	6	24	13	34	83
Cat 4	21	86	150	294	347	898
Other F/way	-	-	1	-	4	5

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
Year 2						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	28	61	563	155	73	880
Cat 2	18	33	308	61	43	463
Cat 3	12	27	226	62	23	350
Cat 4	103	417	4,668	1,195	408	6,791
Other F/way	3	4	46	22	2	77

5.2 TPI 2 Works Phases Completed (Base Data)

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
Year 2						
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total
All Promoters	203	670	6,151	1,911	1,108	10,043
Highway Authority	44	131	345	415	553	1,488
Utilities	159	539	5,806	1,496	555	8,555

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
Year 2						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	13	29	127	72	121	362
Cat 2	2	9	43	36	47	137
Cat 3	6	6	24	13	34	83
Cat 4	23	87	150	294	347	901
Other F/way	-	-	1	-	4	5

Table 23 TPI 2 Works Phases Completed (Base Data) for Utility Works by Reinstatement Category						
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
Year 2						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	27	60	562	154	75	878
Cat 2	18	34	309	62	42	465
Cat 3	12	27	223	62	23	347
Cat 4	99	414	4,666	1,196	413	6,788
Other F/way	3	4	46	22	2	77

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
Year 2						
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total
All Promoters	4,768	6,173	18,440	9,417	4,957	43,755
Highway Authority	907	1,546	1,295	3,358	592	7,698
Utilities	3,861	4,627	17,145	6,059	4,365	36,057
Year 3						
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total
All Promoters						
Highway Authority						
Utilities						

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 25(b) TPI 3 Days Of Occupancy Phases Completed for Highway Authority Works by Reinstatement Category and Traffic Sensitivity Street						
Year 2						
Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	192	274	187	79	129	861
Cat 2	36	81	55	39	58	269
Cat 3	35	92	27	16	39	209
Cat 4	43	125	131	71	83	453
HA f/way	-	-	-	-	-	-
HD f/way	-	-	-	-	-	-
Other f/way	-	-	-	-	-	-
Non Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	477	181	730	1,460	-	2,848
Cat 2	-	4	-	365	-	369
Cat 3	3	-	1	-	4	8
Cat 4	121	789	163	1,328	275	2,676
HA f/way	-	-	-	-	-	-
HD f/way	-	-	-	-	2	2
Other f/way	-	-	1	-	2	3

Table 26(a) TPI 3 Days Of Occupancy Phases Completed for Utility Works by Reinstatement Category and Traffic Sensitivity 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

Table 26(b) TPI 3 Days Of Occupancy Phases Completed for Utility Works by Reinstatement Category and Traffic Sensitivity Street						
Year 2						
Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	363	436	1,329	525	563	3,216
Cat 2	71	232	678	255	349	1,585
Cat 3	111	179	467	166	165	1,088
Cat 4	422	743	2,583	778	713	5,239
HA f/way	-	-	-	-	-	-
HD f/way	-	-	-	-	-	-
Other f/way	-	-	-	-	-	-
Non Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	120	16	11	12	43	202
Cat 2	25	9	2	4	20	60
Cat 3	5	16	90	44	36	191
Cat 4	2,658	2,603	11,874	4,187	2,464	23,786
HA f/way	-	-	-	-	-	-
HD f/way	-	-	16	19	5	40
Other f/way	86	393	95	69	7	650

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						
Activity Type	Year 1		Year 2		Year 3	
	Highway Authority	Utility	Highway Authority	Utility	Highway Authority	Utility
Major	18.91	16.91	13.79	14.06		
Standard	6.39	5.92	8.56	8.11		
Minor	1.84	2.1	1.69	2.10		
Immediate - Urgent	2.52	1.33	1.18	4.10		
Immediate - Emergency	7.2	1.24	1.06	4.70		

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	
Year 2						
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 TPI6 Number of deemed permit applications by Promoter					
Year 1		Year 2		Year 3	
Highway Authority	Utility	Highway Authority	Utility	Highway Authority	Utility
No Data	No Data	1	-	No Data	No Data

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	Standard	Minor	Urgent	Emergency	Total
All Promoters	199	620	3,521	1,391	471	6,202
Highway Authority	52	182	131	5	9	379
Utilities	147	438	3,390	1,386	462	5,823
Year 2						
Activity Type	Major	Standard	Minor	Urgent	Emergency	Total
All Promoters	149	585	3,281	1,789	1,066	6,870
Highway Authority	43	128	330	415	552	1,468
Utilities	106	457	2,951	1,374	514	5,402

Table 31(a) TPI7 Number of Phase One Permanent Registrations 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	6	37	36	5	5	89
Cat 2	0	3	10	0	2	15
Cat 3	0	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 31(b) TPI7 Number of Phase One Permanent Registrations for Highway Authority Works by Reinstatement Category and Traffic Sensitivity Street						
Year 2						
Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	11	22	110	71	118	332
Cat 2	2	6	38	36	47	129
Cat 3	2	4	19	13	28	66
Cat 4	10	3	55	70	78	216
HA f/way	-	-	-	-	-	-
HD f/way	-	-	-	-	-	-
Other f/way	-	-	-	-	-	-
Non Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	2	6	8	1	2	19
Cat 2	-	3	4	-	-	7
Cat 3	4	2	5	-	6	17
Cat 4	12	82	90	224	269	677
HA f/way	-	-	-	-	-	-
HD f/way	-	-	-	-	2	2
Other f/way	-	-	1	-	2	3

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

Table 32(b) TPI7 Number of Phase One Permanent Registrations for Utility Works by Reinstatement Category and Traffic Sensitivity Street						
Year 2						
Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	14	33	143	26	67	283
Cat 2	3	23	73	11	39	149
Cat 3	5	18	37	8	18	86
Cat 4	16	48	130	30	89	313
HA f/way	-	-	-	-	-	-
HD f/way	-	-	-	-	-	-
Other f/way	-	-	1	-	-	1
Non Traffic Sensitive						
Reinstatement Category	Major	Standard	Minor	Urgent	Emergency	Total
Cat 1	4	17	118	115	1	255
Cat 2	8	6	80	44	-	138
Cat 3	1	6	74	52	4	137
Cat 4	53	303	2,271	1,067	294	3,988
HA f/way	-	-	-	-	-	-
HD f/way	-	-	6	5	1	12
Other f/way	2	3	18	16	1	40

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	No Data	

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
No Data	No Data	

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
No Data	No Data	

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
No Data	No Data	

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 on first application submission		
Year 1	Year 2	Year 3
No Data	No Data	

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
No Data	No Data	

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
0	1	

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	No Data	

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
No Data	No Data	

6.10 Number of Authority imposed variations / revokes

Table 42 Number of Authority imposed variations / revokes		
Year 1	Year 2	Year 3
3,393	No Data	

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
No Data	No Data	

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
No Data	No Data	

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
No Data	No Data	

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								
Activity Type	Pre-scheme		Year 1		Year 2		Year 3	
	Highway	Utility	Highway	Utility	Highway	Utility	Highway	Utility
Major	21.7	28.0	17.19	21.88	7.49	14.02		
Standard	8.7	9.5	5.92	6.41	6.79	5.69		
Minor	2.4	2.5	2.08	1.84	1.51	2.07		
Immediate - Urgent	-	5.1	1.33	2.53	1.12	2.76		
Immediate - Emergency	1.8	5.1	1.24	7.2	1.03	5.81		

7.2 AM 2 - Inspections

Table 47(a) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
BT	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%
	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 Failure	Total Failure Rate %
	162	24	15%	47	4	9%	51	3	6%	260	31	12%

Table 47(b) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
BHCC	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 %
	-	-	-	-	-	-	-	-	-	-	-	-
	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 Failure	Total Failure Rate %
	-	-	-	-	-	-	-	-	-	-	-	-

Table 47(c) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
UKPN	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 %
	148	15	10%	63	1	2%	60	0	0%	271	16	6%
	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 Failure	Total Failure Rate %
	314	12	4%	46	2	4%	53	-	0%	413	14	3%

Table 47(d) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
Vodafone	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 %
	-	-	-	-	-	-	-	-	-	-	-	-
	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 Failure	Total Failure Rate %
	2	-	0%	-	-		-	-		2	-	0%

Table 47(e) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
NWR	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 %
	-	-	-	-	-	-	-	-	-	-	-	-
	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 Failure	Total Failure Rate %
	-	-	-	-	-	-	-	-	-	-	-	-

Table 47(f) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
Virgin Media	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 %
	124	5	4%	60	4	7%	74	4	5%	258	13	5%
	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 Failure	Total Failure Rate %
	172	28	16%	59	5	8%	56	1	2%	287	34	12%

Table 47(g) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
O2	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 %
	-	-	-	-	-	-	-	-	-	-	-	-
	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 Failure	Total Failure Rate %
	8	-	0%	1	1	100%	-	-		9	1	11%

Table 47(h) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
Romec	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 %
	-	-	-	-	-	-	-	-	-	-	-	-
	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 Failure	Total Failure Rate %
	-	-	-	-	-	-	-	-	-	-	-	-

Table 47(i) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
GTC	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 %
	1	0	0%	0	0	0%	0	0	0%	3	2	67%
	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 Failure	Total Failure Rate %
	1	-	0%	-	-		-	-		1	-	0%

Table 47(j) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
Orange	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 %
	-	-	-	-	-	-	-	-	-	-	-	-
	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 Failure	Total Failure Rate %
	1	1	100%	-	-		-	-				

Table 47(k) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
Neoscorp	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 %
	1	0	0%	1	0	0%	0	0	0%	2	0	0%
	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 Failure	Total Failure Rate %
	-	-	-	-	-	-	-	-	-	-	-	-

Table 47(l) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
T Mob	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
	-	-	-	-	-	-	-	-	-	-	-	-
	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 Failure	Total Failure Rate %
	31	2	6%	2	-	0%	2	-		5	2	6%

Table 47(m) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
SGN	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 %
	365	29	8%	100	8	8%	100	7	7%	565	44	8%
	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 Failure	Total Failure Rate %
	655	32	5%	104	14	13%	105	1	1%	864	47	5%

Table 47(n) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
Fulcrum	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 %
	2	1	50%	0	0	0%	0	0	0%	2	1	50%
	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 Failure	Total Failure Rate %
	6	-	0%	-	-		1	-	0%	7	-	0%

Table 47(o) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
SWS	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 %
	-	-		-	-		-	-		-	-	
	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 Failure	Total Failure Rate %
	1,498	23	2%	401	25	6%	415	17	4%	2,314	65	3%

Table 47(p) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
Verizon	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 %
	-	-		-	-		-	-		-	-	
	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 Failure	Total Failure Rate %
	-	-		-	-		-	-		-	-	

Table 47(q) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
ES Pipelines	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 %
	-	-		-	-		-	-		-	-	
	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 Failure	Total Failure Rate %
	-	-		-	-		-	-		-	-	

Table 47(r) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
SSE	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 %
	-	-		-	-		-	-		-	-	
	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 Failure	Total Failure Rate %
	1	1	100%	-	-		1	-	0%	2	1	50%

Table 47(s) AM 2 Inspections (%;age of total undertaken and failures) by Promoter by Activity Type												
Promoter												
Total	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 %
	755	67	9%	283	19	7%	295	14	5%	1,335	102	8%
	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 Failure	Total Failure Rate %
	2,851	123	4%	660	51	8%	684	22	3%	4,194	195	5%

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

Table 48 AM 3 Days of Disruption Saved/ Number of collaborative works						
Type	Year 1		Year 2		Year 3	
	Number of Collaborative Works	Days Saved	Number of Collaborative Works	Days Saved	Number of Collaborative Works	Days Saved
Permit	No Data	No Data	21	66		
Trench Sharing	No Data	No Data	6	27		
Total	28	95	27	93		

7.4 AM 4 - Response Code

This information is not available at this time.

Table 49(r) AM 4 Response Code – broken down by promoter																									
Promoter																									
Total	Year 1																								
	No	RE F01	RE F02	RE F03	RE F04	RE F05	RE F06	RE F07	RE F08	RE F09	RE F10	RE F11	RE F12	RE F13	RE F14	RE F15	RE F16	RE F17	RE F18	RE F19	RE F20	RE F21	RE F22	RE F23	
	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	
	Year 2																								
	No	RE F01	RE F02	RE F03	RE F04	RE F05	RE F06	RE F07	RE F08	RE F09	RE F10	RE F11	RE F12	RE F13	RE F14	RE F15	RE F16	RE F17	RE F18	RE F19	RE F20	RE F21	RE F22	RE F23	
	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a	No Data a
	Year 3																								
	No	RE F01	RE F02	RE F03	RE F04	RE F05	RE F06	RE F07	RE F08	RE F09	RE F10	RE F11	RE F12	RE F13	RE F14	RE F15	RE F16	RE F17	RE F18	RE F19	RE F20	RE F21	RE F22	RE F23	

Response Code Descriptions	
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	

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 622.

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

Table 50(a) AM 5 FPNs (Permit Breaches) – broken down by promoter															
Promoter															
BT	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
	12	15	11	54	92	11	28	7	34	80					
BHCC	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
	5	34	12	5	56	6	19	6	7	38					
UKPN	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
	7	19	3	31	60	2	47	8	28	85					
Vodafone	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
	-	3	-	3	6	3	-	-	1	4					
NWR	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
	-	-	-	-	-	-	1	1	1	3					

Table 50(b) AM 5 FPNs (Permit Breaches) – broken down by promoter															
Promoter															
Virgin Media	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
	4	9	2	8	23	17	35	21	30	103					
O2	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
	-	-	-	-	-	1	2	-	-	3					
Romec	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
	-	-	-	-	-	-	-	-	-	-					
GTC	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
	-	-	-	-	-	-	-	-	-	-					
Orange	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
	-	-	-	-	-	-	-	-	1	1					

Table 50(c) AM 5 FPNs (Permit Breaches) – broken down by promoter															
Promoter															
Neoscorp	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	-	-	2	-	-	-	-	-					
T Mob	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
	-	1	-	-	1	1	-	-	5	6					
SGN	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
	16	40	18	89	163	17	30	11	70	128					
Fulcrum	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	1	-	1	4	1	-	-	-	1					
SWS	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	1	-	1	4	20	50	18	80	168					

Table 50(d) AM 5 FPNs (Permit Breaches) – broken down by promoter															
Promoter															
Verizon	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
	-	-	-	-	-	-	-	-	-	-					
ES Pipelines	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
	-	-	-	-	-	-	-	-	-	-					
SSE	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
	-	-	-	-	-	-	1	1	-	2					
Total	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
	48	125	46	192	411	79	213	73	257	622					

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 of Customer Enquiries	
Year 1	
Number of instances	Type of Enquiry
No Data	No Data
No Data	No Data
No Data	No Data
No Data	No Data
No Data	No Data
Year 2	
Number of instances	Type of Enquiry
No Data	No Data
No Data	No Data
No Data	No Data
No Data	No Data
No Data	No Data

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 traffic speeds as a result of a reduction in 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 and Hove pre-scheme and post-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 in June 2014 and 309 streets in March 2015 that would mean that vehicles would take longer to travel over distances.

It is not possible to accurately measure the impact of the scheme on vehicle journey times to show a reduced daily and will be monitored at later evaluations where this 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-scheme and post-scheme values in Brighton and 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 and 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 better journey time variability in Brighton and Hove. In comparing the pre-scheme 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 post-scheme.

Since September 2015 DfT purchases data about vehicle speeds and journey times from Trafficmaster.

This data is generated through in-vehicle GPS units as part of the satellite navigation and stolen vehicle tracking services Trafficmaster provides to their customers. The specific raw data used to derive the Department's journey time statistics consist of 10-second GPS location reports for these vehicles for the period during which their ignition is on.

As part of the service provided to the Department, Trafficmaster map these GPS location reports to the Ordnance Survey ITN (described earlier) and then use this information to reconstruct the routes taken by their customers as they move through the road network.

These reconstructed journeys, combined with the time stamps on the associated GPS location reports, allow Trafficmaster to estimate the time taken by these vehicles to traverse each ITN link. The data also allows journey times to be associated with a particular link direction if the ITN link in question can be traversed in either direction. Where the 10-second GPS location reports don't fall exactly on the start and end of each link, interpolation is used to estimate the time taken by the vehicles to complete each link.

Only data generated from cars, light goods vehicles and heavy goods vehicles are used to estimate journey times. All public service vehicles (e.g. buses) are excluded from the statistics as their frequent stopping/starting would report much slower journey times than actually prevailing the road.

In addition, in order to make the data representative of conditions during the most congested times, data is only included for journeys made during the morning peak, defined as 7am to 10am, and weekends and school holiday periods were excluded from the statistics.

The individual link journey times were then averaged for each ITN link and for all relevant journeys made during each month. ITN links were then matched for the representative period from September 2015 to March 2017. This process resulted in a single average journey time, in minutes, for each link.

The complete network for England consists of around 3.4 million separate 'links' and gives an extremely accurate dataset. In Brighton and Hove there are over 44,000 links with live data collected continuously. Due to the huge amount of data collected the data is aggregated to every 15 minutes AGPS (Aggregated Global Positioning System Data). For analysis data for A roads has been used as has the greatest impact with the most traffic flow.

For Year 2 Table 52 shows a slight increase of 0.2% on journey times based on the assumption that all other network outcomes are equal. Although traffic flow levels are 1% lower on 58(d) the permit volumes have increased considerably by 50% between Yr1 and Yr2 that would significantly increase the amount of delay experienced. We are able to make an assumption on how the permit scheme has been performing based on the expectation that the permit scheme is expected to reduce delay by 5% and the expected improvement of 0.17% in journey time savings as described in Section 3.4. If the permits have increased by 50% using this hypothesis we would expect that journey times would increase by 1.53%. Therefore with an increase of only 0.2% would suggest that the permit scheme is performing well. If we look at the journey

time reliability this shows a steady increase from 2.61 mpm in April 2016 to 2.64 mpm in July 2016, from September to December 2016 there are higher increases after which journey time decreases to April levels and then decrease further.

Table 52(a) AM 7 Average Journey Times & AM 8 Journey Time Reliability														
Year 1														
			Average journey time (minutes per mile) (Source DfT Congestion & Reliability Statistics Table											
Region	Local Authority	ONS area code		Apr-14	May-14	Jun-14	Jul-14	Sep 14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
				Pre-scheme										
SOUTH EAST		E12000008 (J)	AJT	2.25	2.26	2.26	2.27	2.27	2.28	2.29	2.30	2.30	2.30	2.31
	Isle of Wight UA	E06000046	AJT	2.45	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.45	2.45	2.45
	Medway UA	E06000035	AJT	2.34	2.35	2.35	2.34	2.36	2.36	2.36	2.36	2.37	2.36	2.37
	Portsmouth UA	E06000044	AJT	3.54	3.54	3.55	3.57	3.56	3.57	3.61	3.61	3.63	3.63	3.62
	Reading UA	E06000038	AJT	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	2.41	2.43	2.44	2.44	2.43	2.44	2.45	2.45	2.46	2.44	2.43
	Hampshire	E10000014	AJT	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.96	1.96	1.97
	Oxfordshire	E10000025	AJT	1.98	1.98	1.99	1.99	2.01	2.02	2.04	2.04	2.04	2.04	2.04
	West Sussex	E10000032	AJT	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-permitted			2.62	2.63	2.64	2.64	2.64	2.65	2.66	2.66	2.66	2.66	2.64
Brighton and Hove		E06000043	AJT	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 Average Journey Times & AM 8 Journey Time Reliability														
Year 1														
			Average journey time (minutes per mile) (Source DfT Congestion & Reliability Statistics Table CGN0206b) Average											
Region	Local Authority	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
				Post-scheme										
SOUTH EAST		E12000008 (J)	AJT	2.31	2.32	2.32	2.33	2.33	2.33	2.33	2.33	Data not available		
			%	1.03	1.03	1.03	1.03	1.03	1.02	1.02	1.01			
	Isle of Wight UA	E06000046 (00MW)	AJT	2.45	2.45	2.45	2.45	2.45	2.46	2.47	2.47			
			%	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
	Medway UA	E06000035 (00LC)	AJT	2.37	2.37	2.37	2.38	2.38	2.39	2.40	2.42			
			%	1.01	1.01	1.01	1.02	1.01	1.01	1.02	1.03			
			AJT	3.62	3.61	3.60	3.59	3.59	3.56	3.54	3.54			

		<i>E06000044</i>	%	1.02	1.02	1.01	1.01	1.01	1.00	0.98	0.98
Reading	UA	<i>E06000038</i> <i>(00MC)</i>	AJT	4.31	4.34	4.35	4.35	4.36	4.36	4.36	4.36
			%	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.00
Windsor	and	<i>E06000040</i> <i>(00ME)</i>	AJT	2.42	2.41	2.40	2.40	2.41	2.41	2.42	2.41
			%	1.00	0.99	0.98	0.98	0.99	0.99	0.99	0.98

Table 52(c) AM 7 Average Journey Times & AM 8 Journey Time Reliability														
Year 1														
			Average journey time (minutes per mile) (Source DfT Congestion & Reliability Statistics Table CGN0206b) Average journey times during the weekday morning peak on locally managed 'A' roads:											
Region	Local Authority	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
				Post-scheme										
	Hampshire	<i>E10000014 (24)</i>	AJT (mpm)	1.97	1.98	1.99	1.99	2.00	2.01	2.01	2.01	Data not available		
			% Compare	1.02	1.02	1.03	1.03	1.03	1.04	1.04	1.03			
	Oxfordshire	<i>E10000025 (38)</i>	AJT (mpm)	2.05	2.05	2.05	2.05	2.04	2.03	2.02	2.02			
			% Compare	1.04	1.04	1.03	1.03	1.01	1.00	0.99	0.99			
	West Sussex	<i>E10000032 (45)</i>	AJT (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			
	Total Average Non-permitted			2.65	2.65	2.65	2.65	2.66	2.65	2.65	2.66			
	% Compared to pre-scheme			1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00			
	Brighton and Hove UA	<i>E06000043 (00ML)</i>	AJT (mpm)	3.73	3.73	3.73	3.74	3.74	3.74	3.74	3.74			
			% Compare	1.03	1.02	1.02	1.02	1.02	1.02	1.01	1.01			
% Average Journey Time increase/decrease				-0.02	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01			

Table 52(d) AM 7 Average Journey Times & AM 8 Journey Time Reliability															
Year 2															
Average journey time (minutes per mile) (Source Trafficmaster AGPS) Average journey times all vehicles on locally managed 'A' roads:															
Local Authority	ONS area code		Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	
			Post-scheme												
Brighton and Hove UA	E06000043 (00ML)	AJT (mpm)	-	-	-	-	-	2.62	2.64	2.65	2.62	2.64	2.60	2.59	
		%	-	-	-	-	-	0.99	1.00	1.00	0.99	1.00	0.98	0.98	
% Average Journey Time			-	-	-	-	-	0.02	0.00	0.00	0.04	0.01	0.04	0.05	
Local Authority	ONS area code		Apr-	May-	Jun-	Jul-	Aug-	Sep-	Oct-	Nov-	Dec-	Jan-	Feb-	Mar-	
			Post-scheme												
Brighton and Hove UA	E06000043 (00ML)	AJT (mpm)	2.61	2.63	2.63	2.64	2.63	2.69	2.65	2.69	2.67	2.61	2.60	2.59	
		%	1.00	1.00	1.00	1.01	1.00	1.02	1.00	1.01	1.02	0.99	1.00	1.00	
% Average Journey Time			0.03	0.02	0.01	0.01	0.02	-0.03	-0.00	-0.01	-0.03	0.01	-0.02	-0.01	
Total			-0.20%												

7.8 AM 9 - Road Traffic Collisions

Road Traffic collisions have been analysed 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 analysed from reported collision statistics from 2010-2014 PIA 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 is a large fluctuation in collisions in 2013 there were 738 collisions and this rose to 793 in 2014. In 2015 this dropped 778 and the permit scheme with other interventions has contributed to collision reduction in the city.

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

For Year 2 on Table 53(b) the collision data shows that there has been no reduction in collisions in comparing 2016 to 2015 data but a 4% increase against predicted trends. There is no conclusion that can be drawn from this analysis based on the large increase in works in 2016 on the network.

Table 53(a) AM 9 Road Traffic Collisions						
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%

Table 53(b) AM 9 Road Traffic Collisions						
Year 2						
Previous Year		Predicted		Actual		
Month-Year	Total	Month-Year	Total	Month-Year	Total	% Diff
Jan-15	73	Jan-16	70	Jan-16	66	94%
Feb-15	47	Feb-16	45	Feb-16	51	113%
Mar-15	59	Mar-16	57	Mar-16	59	104%
Apr-15	76	Apr-16	73	Apr-16	63	86%
May-15	62	May-16	60	May-16	63	105%
Jun-15	65	Jun-16	63	Jun-16	60	95%
Jul-15	71	Jul-16	69	Jul-16	81	117%
Aug-15	61	Aug-16	59	Aug-16	57	97%
Sep-15	77	Sep-16	74	Sep-16	65	88%
Oct-15	62	Oct-16	60	Oct-16	74	123%
Nov-15	66	Nov-16	64	Nov-16	81	127%
Dec-15	59	Dec-16	57	Dec-16	59	104%
Total	778	Total	751	Total	779	104%

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 sites on major and minor roads that identifies 63 locations as shown on Table 54 and 55 with traffic flows by vehicle type. For comparison data has been collected from Brighton and 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 from the DfT on Table 56 has been used for comparison. The DfT carbon tool has been used using the traffic flow and average speed to predict carbon emissions that 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% and may be an effect of the implementation of the 20 mph zone.

Due to the differences in the emission profiles of vehicles the carbon emissions have decreased by 6%. The total distance travelled 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 be 8.6 thousand tonnes that equals £503k. The permit scheme with other interventions has made a positive outcome for Brighton and Hove.

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

For Year 2 Table 56 so a reduction in traffic speed of 1.8% from 2015 to 2016.

Carbon Emissions are shown on Table 58(b) and show an increase of 4% due to an increase in the number of cars and hgvs on the network.

Table 54(a) AM 10 Carbon Emissions - DfT Traffic Count Sites										
Ref No	DfT Traffic Count Sites									
	CP	Region	Local Authority	Road	Road Category	Easting	Northing	Start Junction	End Junction	Link Length km
1	6273	South	Brighton and Hove	A23	PU	531360	104230	A23 Old Steine	A23 Gloucester Place/Grand Parade	0.50
2	6299	South	Brighton and Hove	A2010	PU	530970	105000	A259	A270	2.00
3	7551	South	Brighton and Hove	A2023	PU	528400	105000	A259 KINGSWAY	A270	1.50
4	7762	South	Brighton and Hove	A270	PU	531000	105400	A2010	A270	0.67
5	8687	South	Brighton and Hove	A270	PU	526486	105809	A293	A2038	0.20
6	16805	South	Brighton and Hove	A259	PU	528000	104500	B2193	A2023	2.40
7	17517	South	Brighton and Hove	A2038	PU	527000	106500	A270	A2023	2.20
8	18236	South	Brighton and Hove	A270	PU	532000	105739	A23	A270 Lewes Road	0.77
9	26303	South	Brighton and Hove	A270	PU	530000	105500	A2023	A2010	2.10
10	27602	South	Brighton and Hove	A2023	PU	528010	107000	A270	A2038	1.40
11	36871	South	Brighton and Hove	A259	PU	530000	104180	A2023	A2010	2.70
12	37642	South	Brighton and Hove	A2038	PR	528500	107900	A2023	A27	1.30
13	38765	South	Brighton and Hove	A293	PU	526370	106000	A270	Hangleton Lane	1.10
14	46301	South	Brighton and Hove	A270	PU	528000	105950	A2038	A2023	1.90
15	47895	South	Brighton and Hove	A259	PU	531000	103930	A2010	A23	0.60
16	48748	South	Brighton and Hove	A23	PR	530100	108920	Church Hill	A27 spur	0.40
17	56267	South	Brighton and Hove	A270	PU	532210	106000	A270 Fork	A27	4.00
18	56277	South	Brighton and Hove	A23	PU	531400	105000	A23 St Peter's Place	A270	0.50

Table 54(b) AM 10 Carbon Emissions - DfT Traffic Count Sites										
Ref No	DfT Traffic Count Sites									
	CP	Region	Local Authority	Road	Road Category	Easting	Northing	Start Junction	End Junction	Link Length _km
19	5767	South	Brighton and		PU	532000	105555	A279 Upper Lewes	A23 St. Peters Place	1.10
20	7038	South	Brighton and	A23	PU	531000	105590	A270	A23	0.40
21	7038	South	Brighton and	A23	PU	531100	105660	A270	A23	0.80
22	7315	South	Brighton and		PU	533030	103490	A23	B2137	2.10
23	7315	South	Brighton and		PU	525812	104960	LA Boundary	B2193	0.20
24	7482	South	Brighton and	A23	PU	531240	104000	A259	A23 merge	0.30
25	7482	South	Brighton and	A23	PU	531350	104000	A259	A23 merge	0.20
26	7482	South	Brighton and	A23	PU	531400	104600	A23 Marlborough	A23 St Georges Place	0.20
27	7482	South	Brighton and	A23	PU	531450	104620	A23 Marlborough	A23 Richmond Place	0.30
28	7482	South	Brighton and	A23	PU	531450	104720	A23 St George's	A23 Richmond Place	0.10
29	7482	South	Brighton and	A23	PU	531410	104850	A23 Gloucester	A23 St Peter's Place	0.30
30	7483	South	Brighton and	A23	PU	531480	104850	A23 Grand Parade	A270 Lewes Road	0.20
31	7483	South	Brighton and	A23	PU	531470	104950	A23 York Place	A23 Richmond Place	0.10
32	7823	South	Brighton and		PR	535500	102770	B2137 Arundel Rd,	B2123 High Dt, Rottingdean	3.80
33	7823	South	Brighton and		PU	537500	102070	B2123 High St,	LA Boundary	1.40
34	7823	South	Brighton and	A23	PU	530150	107000	Stanford Avenue	Church Hill	3.50

Table 54(c) AM 10 Carbon Emissions - DfT Traffic Count Sites										
Ref No	DfT Traffic Count Sites									
	CP	Region	Local Authority	Road	Road Category	Easting	Northing	Start Junction	End Junction	Link Length _km
35	78239	South	Brighton and Hove	A293	PR	526150	107000	Hangleton Lane	A27	0.70
36	80481	South	Brighton and Hove	A270	PU	531137	105254	A270-New England	A23 London Road	0.66
37	80482	South	Brighton and Hove	A23	PU	531493	105172	A270-Upper Lewes	A270	0.44
38	80485	South	Brighton and Hove	A270	PU	531330	105410	A23	A270	0.30
39	80486	South	Brighton and Hove	A270	PU	531090	105440	A270	A23	0.13
40	81100	South	Brighton and Hove	A270	PU	526110	105840	A293	A293	0.70
41	81101	South	Brighton and Hove	A270	PU	525510	105850	LA Boundary	A293	0.40
42	81102	South	Brighton and Hove	A293	PU	525800	105450	A270	A259	0.90
43	94479	South	Brighton and Hove	B2066 (Western Road)	BU	529319	104660	The Drive	Montpelier Road	1.10
44	94479	South	Brighton and Hove	C (Warren Road)	CR	533236	105440	A270	Bear Road	2.00
45	94479	South	Brighton and Hove	C (Dyke Road Avenue)	CU	528744	107937	A2038	A270	3.30
46	94480	South	Brighton and Hove	C (Stanford Avenue)	CU	531340	106398	A23	Ditchling Road	1.00
47	94480	South	Brighton and Hove	U (Hythe Road)	UU	531224	106645	Lowther Road	Ditchling Road	0.40
48	94480	South	Brighton and Hove	U (Brownleaf Road)	UU	536326	104901	B2123 Falmer Road	Broad Green	0.50
49	94480	South	Brighton and Hove	U (Elrington Road)	UU	529444	106228	Hove Park Road	The Droveway	0.20
50	94481	South	Brighton and Hove	U (Saltdean Park	UU	538105	102061	A259	Arundel Drive	0.30
51	94481	South	Brighton and Hove	U (Barrhill Avenue)	UU	530601	109071	Warmdene Avenue	Craignair Avenue	0.40
52	94481	South	Brighton and Hove	U (Ladies Mile Road)	UU	530946	108829	Warmdene Road	Dale Crescent	0.35

Table 54(d) AM 10 Carbon Emissions - DfT Traffic Count Sites										
Ref No	DfT Traffic Count Sites									
	CP	Region	Local Authority	Road	Road Category	Easting	Northing	Start Junction	End Junction	Link Length km
53	94481	South	Brighton and Hove	U (Channel View Road)	UU	534774	105707	Warren Road	Warren Rise	0.40
54	94481	South	Brighton and Hove	U (Gladstone Road)	UU	525689	105359	Gardner Road	B2193 Church	0.26
55	94481	South	Brighton and Hove	U (Stafford Road)	UU	530394	105610	Port Hall Road	Buxton Road	0.24
56	94481	South	Brighton and Hove	U (Lenham Avenue)	UU	537840	102539	Chorley Avenue	Saltdean Drive	0.60
57	94481	South	Brighton and Hove	U (Second Avenue)	UU	529181	104520	A259 KINGSWAY	Western Road	0.35
58	94482	South	Brighton and Hove	U (Northeast Drive)	UU	526756	106898	Hangleton Way	Poplar Avenue	0.45
59	94482	South	Brighton and Hove	U (Chalfont Drive)	UU	529333	107121	Dyke Road Avenue	Dyke Road	0.35
60	94483	South	Brighton and Hove	U (Crescent Drive)	UU	536536	105233	Downs Valley Road	Cowley Drive	0.50
61	94483	South	Brighton and Hove	U (Buckingham Road)	UU	530781	104740	Leopold Road	Albert Road	0.16
62	94483	South	Brighton and Hove	U (Old London Road)	UU	530216	108764	Ladies Mile Road	A23 London	0.17
63	94483	South	Brighton and Hove	U (Danehill Road)	UU	533808	104388	Wilson Avenue	Ticehurst Road	0.08
									Totals	58.58

Table 55(a) AM 10 Carbon Emissions - Traffic Count Data													
Year 1													
2014 Flow Data													
Pre-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4Axle ArticHGV	V5Axle ArticHGV	V6orMoreAxle ArticHGV	AllHGVs	AllMotorVehicles
1	1,182	345	14,52	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	12,24	90	3,684	245	64	21	2	6	3	342	16,674
5	178	322	22,80	309	4,111	203	41	28	17	34	31	353	27,896
6	1,843	393	16,36	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	12,64	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	20,90	107	4,245	235	69	100	5	8	7	423	26,183
12	18	187	18,27	48	3,874	254	39	42	10	29	17	390	22,779
13	36	134	19,04	233	3,162	299	63	256	24	76	146	863	23,432
14	145	216	18,08	193	3,732	155	27	13	6	17	12	230	22,452
15	1,223	595	26,31	137	4,771	363	60	54	11	9	6	503	32,317
16	68	204	20,61	257	3,821	270	55	24	18	35	31	432	25,324
17	940	325	15,90	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 Emissions - Traffic Count Data													
Year 1													
2014 Flow Data													
Pre-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4Axle ArticHGV	V5Axle ArticHGV	V6orMoreAxle ArticHGV	AllHGVs	AllMotorVehicles
19	1,472	312	11,07	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	11,74	292	2,437	185	37	14	5	10	16	266	14,895
22	203	228	16,50	406	2,965	154	30	9	6	10	5	214	20,315
23	324	332	13,70	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	10,84	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	15,49	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	20,67	515	3,486	240	47	33	10	16	26	372	25,468
33	56	378	19,67	418	4,035	293	40	172	3	5	7	519	25,025
34	321	289	18,76	372	3,861	241	56	21	28	35	42	422	23,711
35	33	122	17,32	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 Emissions - Traffic Count Data													
Year 1													
2014 Flow Data													
Pre-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
37	327	163	8,055	438	1,224	110	22	14	13	6	13	179	10,059
38	268	243	11,85	61	2,459	139	27	12	14	11	10	214	14,828
39	1,254	287	11,37	59	2,514	125	19	13	4	13	-	175	14,410
40	119	238	20,42	201	4,288	275	64	220	18	64	69	710	25,862
41	65	264	18,88	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	11,94	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 Carbon Emissions - Traffic Count Data													
Year 1													
2014 Flow Data													
Pre-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
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
Tot	23,424	10,266	603,1	18,461	121,773	8,599	1,765	2,054	448	750	901	14,5	768,121

Table 55(e) AM 10 Carbon Emissions - Traffic Count Data													
Year 1													
2015 Flow Data													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4Axle ArticHGV	V5Axle ArticHGV	V6orMoreAxle ArticHGV	AllHGVs	AllMotorVehicles
1	1,099	351	14,26	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	12,48	97	3,864	233	66	20	2	6	3	330	17,054
5	166	327	22,38	306	4,324	198	43	27	20	33	31	352	27,692
6	1,713	399	16,06	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	20,52	106	4,465	228	73	97	6	8	7	418	26,022
12	34	184	19,81	29	3,525	227	37	30	27	43	12	376	23,927
13	34	137	18,69	231	3,326	291	67	249	29	74	144	854	23,237
14	135	220	17,74	192	3,925	150	28	12	8	17	12	228	22,313
15	1,137	605	25,82	136	5,019	353	63	53	13	9	6	497	32,084
16	68	211	21,23	253	4,247	282	62	25	24	36	32	460	26,402
17	874	331	15,60	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 Emissions - Traffic Count Data													
Year 1													
2015 Flow Data													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
19	1,368	275	11,28	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	11,97	315	2,556	175	38	13	5	10	15	257	15,241
22	189	232	16,19	403	3,119	150	32	8	8	9	5	212	20,165
23	302	293	13,97	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	11,05	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	14,68	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	21,29	506	3,875	250	54	34	13	17	27	395	26,509
33	51	273	17,58	436	3,301	179	21	15	8	1	6	230	21,824
34	299	294	18,42	369	4,062	234	59	20	34	35	42	423	23,569
35	31	124	17,00	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 Emissions - Traffic Count Data													
Year 1													
2015 Flow Data													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
37	304	144	8,214	472	1,284	105	22	14	16	6	13	175	10,289
38	249	214	12,08	66	2,578	132	28	12	17	11	10	209	15,154
39	1,166	254	11,60	64	2,636	118	20	12	5	13	-	169	14,722
40	110	242	20,05	199	4,510	268	67	214	22	63	68	702	25,704
41	60	268	18,54	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	18,58	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 Carbon Emissions - Traffic Count Data													
Year 1													
2015 Flow Data													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
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
Tot	23,906	9,745	600,5	19,064	123,688	8,243	1,816	1,782	565	751	883	14,0	767,099

Table 55(i) AM 10 Carbon Emissions - Traffic Count Data													
Year 2													
2016 Flow Data													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
1	1018	346	13935	2074	3318	210	62	19	26	12	10	341	20013
2	354	122	4347	568	997	53	6	0	1	1	0	62	6096
3	121	29	7125	241	1509	107	12	13	2	7	6	147	9051
4	824	263	10719	31	2603	122	37	5	4	8	1	177	13793
5	154	323	21872	307	4646	196	40	28	17	30	31	342	27490
6	2357	463	17275	170	3572	179	48	76	9	11	10	333	21812
7	93	83	9613	45	1978	84	25	6	1	3	4	124	11843
8	769	163	5351	28	1442	70	17	12	2	1	2	103	7089
9	487	116	8531	74	1447	77	28	6	1	1	3	116	10284
10	12	47	6308	16	1345	145	17	26	6	11	7	212	7929
11	3304	750	21556	76	4139	169	64	50	7	5	6	302	26822
12	35	185	20363	29	3751	239	36	33	23	40	13	383	24711
13	23	279	17574	157	3470	294	87	209	7	78	166	840	22320
14	342	268	16921	193	3172	132	26	8	11	12	18	207	20761
15	1054	597	25238	137	5392	351	58	55	11	8	6	489	31853
16	74	157	15682	283	2894	203	32	34	26	28	20	343	19359
17	810	326	15252	732	4381	214	60	26	11	14	33	358	21050
18	560	45	4687	1343	981	89	18	18	5	12	3	144	7199

Table 55(j) AM 10 Carbon Emissions - Traffic Count Data													
Year 2													
2016 Flow Data													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
19	1409	245	8893	740	2072	131	33	12	5	2	2	186	12136
20	247	192	9782	266	2318	166	29	22	7	18	10	252	12809
21	457	132	12262	313	2744	181	37	15	5	10	17	265	15716
22	175	229	15828	404	3351	149	29	9	6	9	6	207	20021
23	361	226	13712	148	2920	222	37	58	19	25	51	413	17421
24	350	102	6602	695	1169	121	26	5	24	5	8	189	8757
25	350	102	6602	695	1169	121	26	5	24	5	8	189	8757
26	431	183	10093	1481	2200	186	44	15	15	13	8	280	14236
27	1277	375	8804	68	1888	142	26	6	5	6	9	195	11330
28	431	183	10093	1481	2200	186	44	15	15	13	8	280	14236
29	393	38	5817	1308	1303	124	26	13	6	11	8	189	8655
30	2091	416	15033	298	2790	305	38	7	12	15	17	394	18932
31	275	71	9627	214	1720	116	18	9	3	10	10	165	11797
32	199	285	19614	494	3451	140	38	41	13	9	0	240	24084
33	47	269	17183	438	3547	177	19	15	7	1	7	226	21663
34	277	290	18000	371	4364	232	54	21	28	32	43	410	23435
35	21	254	15993	143	3157	267	79	190	7	71	151	765	20312
36	506	134	9069	79	1532	89	9	2	6	3	1	111	10925

Table 55(k) AM 10 Carbon Emissions - Traffic Count Data													
Year 2													
2016 Flow Data													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
37	282	138	8410	469	1379	108	21	15	15	6	15	180	10576
38	231	205	12375	65	2769	137	27	13	16	11	11	214	15628
39	1080	243	11877	63	2831	123	19	13	5	13	0	174	15187
40	102	238	19594	200	4846	266	63	223	18	57	70	697	25574
41	56	265	18117	114	3789	226	57	53	17	20	55	429	22715
42	98	77	9396	242	2640	188	39	209	21	73	89	619	12975
43	1660	229	6527	1008	1484	68	9	0	2	1	1	82	9329
44	81	107	7357	158	1175	39	10	8	3	3	1	63	8861
45	120	236	19789	73	3571	175	42	51	16	2	4	290	23958
46	65	54	2464	27	516	26	8	2	0	1	0	36	3097
47	20	9	493	0	132	1	1	0	0	0	0	2	636
48	6	3	262	0	79	1	1	0	0	0	0	2	346
49	31	3	424	0	35	0	0	0	0	0	0	0	462
50	29	1	1115	26	194	14	5	3	1	2	0	25	1360
51	6	7	557	64	113	2	2	0	0	0	0	3	745
52	12	9	1541	17	242	6	4	1	0	0	0	10	1820
53	1	4	688	0	192	7	2	0	0	0	0	9	892
54	114	80	2131	0	400	14	1	2	1	1	0	19	2630

Table 55(l) AM 10 Carbon Emissions - Traffic Count Data													
Year 2													
2016 Flow Data													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4Axle ArticHGV	V5Axle ArticHGV	V6orMoreAxle ArticHGV	AllHGVs	AllMotorVehicles
55	5	8	200	0	47	1	1	0	0	0	0	2	257
56	3	2	205	0	49	2	2	0	0	0	0	4	259
57	127	24	1485	0	352	5	5	0	0	0	0	9	1871
58	20	20	1821	121	249	6	2	0	0	0	0	8	2219
59	0	0	125	0	25	0	1	0	0	0	0	1	151
60	2	1	910	3	144	3	2	0	0	0	0	5	1063
61	56	46	4475	103	922	40	7	0	4	0	0	50	5597
62	15	29	2258	1	402	7	3	1	1	0	0	12	2702
63	9	2	283	0	60	0	1	0	0	0	0	1	346
Tot	25,919	10,328	590,2	18,894	123,569	7,454	1,620	1,678	497	730	949	12,9	755,953

Table 56 AM 10 Carbon Emissions - Traffic Speed													
Year 1													
Average traffic speed (miles per mile) (Source DfT Congestion & Reliability Statistics Table CGN0206a) Average traffic speeds during the weekday morning													
Period													
Apr-14	May-14	Jun-14	Jul-14	Sep 14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Average		
Pre-scheme												16.3	
16.5	16.5	16.4	16.4	16.4	16.3	16.3	16.2	16.2	16.1	16.1			
Average traffic speed (miles per mile) (Source DfT Congestion & Reliability Statistics Table CGN0206a) Average traffic speeds during the weekday morning													
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-scheme												16.1	
16.1	16.1	16.1	16.1	16.0	16.0	16.1	16.1	No Data	No Data	No Data			

Year 2		Year 3	
Average traffic speed (miles per mile) (Source DfT Congestion & Reliability Statistics Table CGN0501b) Average traffic speeds on local 'A' roads		Average traffic speed (miles per mile) (Source DfT Congestion & Reliability Statistics Table CGN0501b) Average traffic speeds on local 'A' roads	
Period		Period	
2015	2016	2016	2017
Post-scheme		Post-scheme	
17.0	16.7	16.7	

Table 57(a) AM 10 Carbon Emissions - DfT Sites													
Year 1													
2014 Total Emissions (thousand tonnes CO2)													
Pre-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
1	0.00	0.03	0.31	0.21	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.67
2	0.00	0.04	0.70	0.16	0.20	0.01	0.01	0.01	0.00	0.00	0.00	0.04	1.14
3	0.00	0.01	0.43	0.07	0.11	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.67
4	0.00	0.04	0.35	0.01	0.14	0.02	0.02	0.02	0.00	0.00	0.00	0.05	0.58
5	0.00	0.01	0.19	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.28
6	0.00	0.17	1.66	0.08	0.44	0.09	0.09	0.09	0.01	0.01	0.01	0.31	2.65
7	0.00	0.03	0.91	0.04	0.24	0.02	0.02	0.02	0.00	0.00	0.00	0.08	1.30
8	0.00	0.03	0.17	0.00	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.27
9	0.00	0.11	1.12	0.02	0.31	0.02	0.02	0.02	0.00	0.00	0.00	0.08	1.64
10	0.00	0.01	0.36	0.00	0.09	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.54
11	0.00	0.24	2.39	0.06	0.64	0.08	0.08	0.08	0.01	0.01	0.01	0.25	3.58
12	0.00	0.04	1.01	0.01	0.28	0.03	0.03	0.03	0.01	0.01	0.01	0.12	1.46
13	0.00	0.03	0.89	0.05	0.19	0.05	0.05	0.05	0.03	0.03	0.03	0.23	1.39
14	0.00	0.07	1.46	0.08	0.39	0.03	0.03	0.03	0.01	0.01	0.01	0.10	2.10
15	0.00	0.06	0.67	0.02	0.16	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.97
16	0.00	0.01	0.35	0.02	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.51
17	0.00	0.23	2.70	0.61	0.86	0.09	0.09	0.09	0.03	0.03	0.03	0.34	4.73
18	0.00	0.00	0.10	0.13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.27

Table 57(b) AM 10 Carbon Emissions - DfT Sites													
Year 1													
2014 Total Emissions (thousand tonnes CO2)													
Pre-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
19	0.00	0.06	0.52	0.16	0.18	0.02	0.02	0.02	0.00	0.00	0.00	0.06	0.98
20	0.00	0.02	0.16	0.02	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.26
21	0.00	0.02	0.40	0.05	0.11	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.63
22	0.00	0.08	1.47	0.18	0.35	0.03	0.03	0.03	0.00	0.00	0.00	0.10	2.18
23	0.00	0.01	0.12	0.01	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.20
24	0.00	0.01	0.08	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.16
25	0.00	0.00	0.05	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.10
26	0.00	0.01	0.08	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18
27	0.00	0.01	0.14	0.00	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.22
28	0.00	0.00	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.09
29	0.00	0.00	0.07	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18
30	0.00	0.01	0.13	0.01	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.02	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	0.00	0.06
32	0.00	0.28	3.33	0.40	0.74	0.09	0.09	0.09	0.02	0.02	0.02	0.33	5.07
33	0.00	0.09	1.17	0.12	0.31	0.05	0.05	0.05	0.00	0.00	0.00	0.16	1.85
34	0.00	0.18	2.78	0.27	0.75	0.08	0.08	0.08	0.04	0.04	0.04	0.36	4.34
35	0.00	0.02	0.51	0.03	0.11	0.03	0.03	0.03	0.02	0.02	0.02	0.14	0.81
36	0.00	0.02	0.24	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.34

Table 57(c) AM 10 Carbon Emissions - DfT Sites													
Year 1													
2014 Total Emissions (thousand tonnes CO2)													
Pre-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
37	0.00	0.01	0.15	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.25
38	0.00	0.01	0.15	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.01	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	0.01	0.09
40	0.00	0.03	0.61	0.03	0.17	0.03	0.03	0.03	0.01	0.01	0.01	0.12	0.95
41	0.00	0.02	0.32	0.01	0.07	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.46
42	0.00	0.01	0.34	0.04	0.12	0.03	0.03	0.03	0.02	0.02	0.02	0.13	0.65
43	0.00	0.02	0.33	0.23	0.10	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.70
44	0.00	0.05	0.57	0.06	0.13	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.83
45	0.00	0.10	1.67	0.10	0.39	0.05	0.05	0.05	0.01	0.01	0.01	0.17	2.43
46	0.00	0.01	0.10	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.15
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 57(d) AM 10 Carbon Emissions - DfT Sites													
Year 1													
2014 Total Emissions (thousand tonnes CO2)													
Pre-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
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	0.00	2.22	31.10	3.46	8.16	1.02	1.02	1.02	0.24	0.24	0.24	3.80	48.74

Table 57(e) AM 10 Carbon Emissions - DfT Sites													
Year 1													
2015 Total Emissions (thousand tonnes CO2)													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
1	0.00	0.03	0.30	0.21	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.66
2	0.00	0.04	0.35	0.23	0.10	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.75
3	0.00	0.01	0.43	0.07	0.11	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.67
4	0.00	0.03	0.35	0.01	0.14	0.02	0.02	0.02	0.00	0.00	0.00	0.05	0.58
5	0.00	0.01	0.19	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.28
6	0.00	0.16	1.60	0.08	0.45	0.09	0.09	0.09	0.01	0.01	0.01	0.30	2.59
7	0.00	0.03	0.86	0.02	0.22	0.02	0.02	0.02	0.00	0.00	0.00	0.06	1.19
8	0.00	0.02	0.17	0.00	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.27
9	0.00	0.04	0.73	0.03	0.15	0.02	0.02	0.02	0.00	0.00	0.00	0.05	1.00
10	0.00	0.01	0.36	0.00	0.10	0.02	0.02	0.02	0.00	0.00	0.00	0.06	0.53
11	0.00	0.24	2.30	0.06	0.65	0.08	0.08	0.08	0.01	0.01	0.01	0.25	3.50
12	0.00	0.04	1.07	0.01	0.25	0.03	0.03	0.03	0.01	0.01	0.01	0.11	1.48
13	0.00	0.03	0.85	0.05	0.20	0.05	0.05	0.05	0.03	0.03	0.03	0.23	1.36
14	0.00	0.07	1.40	0.07	0.40	0.03	0.03	0.03	0.01	0.01	0.01	0.10	2.04
15	0.00	0.06	0.64	0.02	0.16	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.95
16	0.00	0.01	0.35	0.02	0.09	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.51
17	0.00	0.23	2.59	0.58	0.89	0.09	0.09	0.09	0.03	0.03	0.03	0.34	4.63
18	0.00	0.00	0.10	0.14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.28

Table 57(f) AM 10 Carbon Emissions - DfT Sites													
Year 1													
2015 Total Emissions (thousand tonnes CO2)													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
19	0.00	0.05	0.52	0.17	0.18	0.02	0.02	0.02	0.00	0.00	0.00	0.05	0.97
20	0.00	0.01	0.16	0.02	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.26
21	0.00	0.02	0.40	0.05	0.11	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.63
22	0.00	0.08	1.41	0.17	0.36	0.03	0.03	0.03	0.00	0.00	0.00	0.10	2.12
23	0.00	0.01	0.12	0.01	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.21
24	0.00	0.01	0.08	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.16
25	0.00	0.00	0.05	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.10
26	0.00	0.00	0.08	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.17
27	0.00	0.01	0.14	0.00	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.22
28	0.00	0.00	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.09
29	0.00	0.00	0.07	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18
30	0.00	0.01	0.12	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19
31	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
32	0.00	0.28	3.36	0.39	0.80	0.09	0.09	0.09	0.02	0.02	0.02	0.34	5.17
33	0.00	0.07	1.02	0.12	0.25	0.02	0.02	0.02	0.00	0.00	0.00	0.07	1.53
34	0.00	0.18	2.68	0.26	0.77	0.08	0.08	0.08	0.04	0.04	0.04	0.35	4.24
35	0.00	0.01	0.49	0.03	0.12	0.03	0.03	0.03	0.02	0.02	0.02	0.13	0.78
36	0.00	0.02	0.24	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.34

Table 57(g) AM 10 Carbon Emissions - DfT Sites													
Year 1													
2015 Total Emissions (thousand tonnes CO2)													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
37	0.00	0.01	0.15	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.25
38	0.00	0.01	0.15	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.21
39	0.00	0.01	0.06	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
40	0.00	0.03	0.58	0.03	0.17	0.03	0.03	0.03	0.01	0.01	0.01	0.11	0.92
41	0.00	0.02	0.31	0.01	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.46
42	0.00	0.01	0.34	0.04	0.12	0.03	0.03	0.03	0.02	0.02	0.02	0.13	0.64
43	0.00	0.02	0.33	0.20	0.10	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.67
44	0.00	0.07	0.64	0.06	0.14	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.94
45	0.00	0.06	2.55	0.04	0.57	0.05	0.05	0.05	0.01	0.01	0.01	0.19	3.41
46	0.00	0.01	0.09	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	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	0.02	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	0.01
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	0.02
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	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

Table 57(h) AM 10 Carbon Emissions - DfT Sites													
Year 1													
2015 Total Emissions (thousand tonnes CO2)													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
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	0.00	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	0.00	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	0.00	1.98	30.11	3.52	8.06	0.93	0.93	0.93	0.25	0.25	0.25	3.53	46.78

Table 57(i) AM 10 Carbon Emissions - DfT Sites													
Year 2													
2016 Total Emissions (thousand tonnes CO2)													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4Axle ArticHGV	V5Axle ArticHGV	V6orMoreAxle ArticHGV	AllHGVs	AllMotorVehicles
1	0.00	0.03	0.29	0.21	0.09	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.66
2	0.00	0.04	0.36	0.23	0.11	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.77
3	0.00	0.01	0.45	0.07	0.12	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.70
4	0.00	0.03	0.30	0.00	0.10	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.46
5	0.00	0.01	0.18	0.01	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.27
6	0.00	0.19	1.74	0.08	0.47	0.05	0.05	0.05	0.01	0.01	0.01	0.18	2.66
7	0.00	0.03	0.89	0.02	0.24	0.02	0.02	0.02	0.00	0.00	0.00	0.06	1.24
8	0.00	0.02	0.17	0.00	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.27
9	0.00	0.04	0.75	0.03	0.17	0.02	0.02	0.02	0.00	0.00	0.00	0.05	1.04
10	0.00	0.01	0.37	0.00	0.10	0.02	0.02	0.02	0.00	0.00	0.00	0.07	0.55
11	0.00	0.35	2.44	0.04	0.61	0.05	0.05	0.05	0.01	0.01	0.01	0.18	3.62
12	0.00	0.04	1.11	0.01	0.27	0.03	0.03	0.03	0.01	0.01	0.01	0.12	1.55
13	0.00	0.05	0.81	0.03	0.21	0.05	0.05	0.05	0.03	0.03	0.03	0.23	1.33
14	0.00	0.09	1.35	0.07	0.33	0.02	0.02	0.02	0.01	0.01	0.01	0.09	1.93
15	0.00	0.06	0.63	0.02	0.18	0.02	0.02	0.02	0.00	0.00	0.00	0.06	0.95
16	0.00	0.01	0.26	0.02	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.38
17	0.00	0.23	2.56	0.59	0.96	0.09	0.09	0.09	0.02	0.02	0.02	0.33	4.67
18	0.00	0.00	0.10	0.14	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.29

Table 57(j) AM 10 Carbon Emissions - DfT Sites													
Year 2													
2016 Total Emissions (thousand tonnes CO2)													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
19	0.00	0.05	0.41	0.16	0.12	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.78
20	0.00	0.01	0.16	0.02	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.26
21	0.00	0.02	0.41	0.05	0.12	0.01	0.01	0.01	0.00	0.00	0.00	0.05	0.65
22	0.00	0.08	1.39	0.17	0.39	0.03	0.03	0.03	0.00	0.00	0.00	0.10	2.13
23	0.00	0.01	0.11	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.18
24	0.00	0.01	0.08	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.16
25	0.00	0.00	0.06	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.11
26	0.00	0.01	0.08	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18
27	0.00	0.02	0.11	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.17
28	0.00	0.00	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.09
29	0.00	0.00	0.07	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18
30	0.00	0.01	0.13	0.01	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.02	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	0.00	0.05
32	0.00	0.19	3.12	0.38	0.72	0.06	0.06	0.06	0.01	0.01	0.01	0.20	4.61
33	0.00	0.07	1.01	0.12	0.27	0.02	0.02	0.02	0.00	0.00	0.00	0.07	1.54
34	0.00	0.18	2.64	0.26	0.84	0.08	0.08	0.08	0.04	0.04	0.04	0.34	4.26
35	0.00	0.03	0.47	0.02	0.12	0.03	0.03	0.03	0.02	0.02	0.02	0.13	0.77
36	0.00	0.02	0.25	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.36

Table 57(k) AM 10 Carbon Emissions - DfT Sites													
Year 2													
2016 Total Emissions (thousand tonnes CO2)													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
37	0.00	0.01	0.15	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.25
38	0.00	0.01	0.16	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.01	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	0.01	0.10
40	0.00	0.03	0.57	0.03	0.19	0.03	0.03	0.03	0.01	0.01	0.01	0.11	0.93
41	0.00	0.02	0.30	0.01	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.04	0.45
42	0.00	0.01	0.35	0.04	0.13	0.03	0.03	0.03	0.02	0.02	0.02	0.14	0.67
43	0.00	0.04	0.30	0.22	0.09	0.01	0.01	0.01	0.00	0.00	0.00	0.02	0.67
44	0.00	0.04	0.62	0.06	0.13	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.88
45	0.00	0.14	2.74	0.05	0.65	0.06	0.06	0.06	0.01	0.01	0.01	0.21	3.79
46	0.00	0.01	0.10	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	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	0.01
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	0.01
51	0.00	0.00	0.01	0.01	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	0.02
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	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03

Table 57(l) AM 10 Carbon Emissions - DfT Sites													
Year 2													
2016 Total Emissions (thousand tonnes CO2)													
Post-scheme													
Ref No	PedalCycles	Motorcycles	Cars Taxis	BusesCoaches	LightGoods Vehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotorVehicles
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	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
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	0.00	0.02
61	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
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	0.00	2.27	30.91	3.50	8.47	0.86	0.86	0.86	0.23	0.23	0.23	3.28	48.43

Table 58 (a) AM 10 Carbon Emissions - Summary													
Year 1													
2014 Carbon Output													
Pre-scheme													
Period	Pedal Cycles	Motor cycles	Cars Taxis	BusesCoaches	LightGoodsVehicles	V2AxleRigidHGV	V3AxleRigidHGV	V4or5AxleRigidHGV	V3or4AxleArticHGV	V5AxleArticHGV	V6orMoreAxleArticHGV	AllHGVs	AllMotor Vehicles
Flow	23424	10266	6031	18461	121773	8599	1765	2054	448	750	901	145	768121
Average speed (mph)		16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
Emission (CO ₂ thousand tonnes)	0.00	2.22	31.10	3.46	8.16	1.02	1.02	1.02	0.24	0.24	0.24	3.80	48.74
2015 Carbon Output													
Post-scheme													
Flow	23906	9745	6005	19064	123688	8243	1816	1782	565	751	883	140	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 (CO ₂ thousand tonnes)	0.00	1.98	30.11	3.52	8.06	0.93	0.93	0.93	0.25	0.25	0.25	3.53	46.78
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 ₂ / km) (+/-) %	0%	-11%	-3%	2%	-1%	-9%	-9%	-9%	1%	1%	1%	-7%	-4%

Table 58 (b) AM 10 Carbon Emissions - Summary													
Year 2													
2015 Carbon Output													
Pre-scheme													
Period	Pedal	Motor	Cars	BusesC	LightGood	V2AxleRi	V3AxleRi	V4or5Axle	V3or4Axle	V5AxleA	V6orMoreAxl	AllH	AllMotor
Flow	23906	9745	6005	19064	123688	8243	1816	1782	565	751	883	140	767099
Average speed (mph)		17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Emission (CO ₂ thousand tonnes)	0.00	1.98	30.11	3.52	8.06	0.93	0.93	0.93	0.25	0.25	0.25	3.53	46.78
2016 Carbon Output													
Post-scheme													
Flow	25919	10328	5902	18894	123569	7454	1620	1678	497	730	949	129	755953
Average speed (mph)		16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7
Emission (CO ₂ thousand tonnes)	0.00	2.27	30.91	3.50	8.47	0.86	0.86	0.86	0.23	0.23	0.23	3.28	48.43
Carbon Output Comparison													
Traffic Flow (+/-) %	8%	6%	-2%	-1%	0%	-10%	-11%	-6%	-12%	-3%	7%	-8%	-1%
Speed (+/-) %		-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%
Emission (g CO ₂ / km) (+/-) %	0%	15%	3%	-1%	5%	-7%	-7%	-7%	-6%	-6%	-6%	-7%	4%

Table 58 (c) AM 10 Carbon Emissions - Summary													
Year 3													
2016 Carbon Output													
Pre-scheme													
Period	Pedal	Motor	Cars	BusesC	LightGood	V2AxleRi	V3AxleRi	V4or5Axle	V3or4Axle	V5AxleA	V6orMoreAxl	AllH	AllMotor
Flow	25919	10328	5902	18894	123569	7454	1620	1678	497	730	949	129	755953
Average speed (mph)		16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7
Emission (CO ₂ thousand tonnes)	0	2.27	30.91	3.50	8.47	0.86	0.86	0.86	0.23	0.23	0.23	3.28	48.43
2017 Carbon Output													
Post-scheme													
Flow													
Average speed (mph)													
Emission (CO ₂ thousand tonnes)													
Carbon Output Comparison													
Traffic Flow (+/-) %													
Speed (+/-) %													
Emission (g CO ₂ / km) (+/-) %													

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 KPI 4 The number of occurrences of reducing the application period (early starts)									
Period	Year 1			Year 2			Year 3		
	Early Starts Agreements			Early Starts Agreements			Early Starts Agreements		
	Highway Authority	Utilities	Total	Highway Authority	Utilities	Total	Highway Authority	Utilities	Total
Apr-15	5	7	12	7	16	23			
May-15	10	7	17	27	12	39			
Jun-15	5	14	19	13	6	19			
Jul-15	15	35	50	9	10	19			
Aug-15	3	21	24	15	10	25			
Sep-15	16	28	44	11	7	18			
Oct-15	5	27	32	12	5	17			
Nov-15	4	23	27	15	26	41			
Dec-15	9	13	22	6	1	7			
Jan-16	12	17	29	8	8	16			
Feb-16	9	21	30	27	8	35			
Mar-16	7	12	19	26	14	40			
Total	100	225	325	176	123	299			

Table 60 KPI 5 The number of agreements to work in Section 58 and Section 58A restrictions			
Year 1	12	Year 2	8

Table 61 KPI 6 The proportion of times that a permit authority intervenes on applications			
Year 1	No Data	Year 2	No Data

8 APPENDIX 3 – COSTS and INCOME

8.1 FEE INCOME

£715,042 of Permit fee income was received.

8.2 COSTS BUDGETS AND ACTUALS

The volume of Permits increased in the second year and fee income was in line with what would be expected for this unexpected volume increase.

Due to increases in volumes economies of scale were realised and the average cost of a Permit reduced by circa 5%.

Table 62 AM 11 – Costs Budgets Against Actuals						
Start up Cost Centre	Year 1 + Risk Budget	Year 1 + Actual	Year 2 + Risk Budget	Year 2 + Actual	Year 3 + Risk	Year 3 + Actual
KPI Production	30,000	30,000	30,000	£37,624		
Invoicing	50,000	2,500	50,000	£0		
IT support	24,000	7,000	£25,000	£93,678		
Unauthorised / Management	40,000	20,000	£40,000	£40,000		
Training	30,000	30,000	£30,000	£27,140		
Staff	406,000	388,000	400,000	428,947		
Totals	580,000	480,000	585,000	643,498	-	-

8.3 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			
Year 1			
Promoters	Total Permit Applications	Total Scheme Cost	Average Permit Cost
Utility	8,742	£480,000	54.91
Year 2			
Promoters	Total Permit Applications	Total Scheme Cost	Average Permit Cost
Utility	12,316	£643,498	52.25

END

