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1 EXECUTIVE SUMMARY

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

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

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

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

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

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

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

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

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

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

1.1 SUMMARY FINDINGS

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

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

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

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

- 11,341 Permits were granted which is 90% of Permit applications received.
- **2,067** Permits were refused for various reasons which is **17%** of applications. The Permit team can refuse a Permit application when they consider that elements of the application (e.g. timing, location or conditions) are not acceptable.
- **24%** of applications from the Highway Authority were refused and **11%** from Utilities. This need to be observed over the coming years as the lower than expect percentage of Highway Authority work has prevented a clear picture being drawn.
- **0** Permits deemed (granted without co-ordination by the Permit team). These deemed Permits do not attract a fee. This is an outstanding achievement by the team.
- **3,008** variations requests were received which is more than **3 times the number expected**. Managing this unexpectedly high volume of variations has been a considerable challenge.
- **2,507** variations to granted Permits were granted which is **95%** of requests.
- **5,773** conditions were attached to Permits. The Permit Scheme allows for the attaching of conditions to Permits and not all types of conditions will necessarily be applied to all Permits.

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

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

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

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

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

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

1.2 FIRST YEAR ISSUES

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

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

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

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

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

1.3 NEW STAFF

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

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

1.4 OPERATIONAL COSTS

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

1.5 EXAMPLES OF OBJECTIVES ACHIEVED

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

Supplied quote form Brighton & Hove Buses:

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

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

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

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

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

Team initiating contact between the Utility companies.

Supplied Permit Team quote:

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

Supplied Permit Team quote:

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

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

1.6 CONCLUSIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.7 LOOKING FORWARD

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

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

2 DEVELOPING THE PERMIT SCHEME

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

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

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

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

Discounted fees will also be given in the following circumstances:

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

2.1 TRAFFIC SENSITIVE NETWORK

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

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

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

2.2 PERMIT SCHEME OBJECTIVES

The objectives of the Brighton & Hove Permit Scheme were;

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

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

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

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

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

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

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

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

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

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

2.3 ALIGNED OBJECTIVES

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

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

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

3 APPENDIX 1 - EVALUATION BACKGROUND

3.1 PERMIT SCHEME EVALUATION

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

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

3.2 SCOPE OF WORK

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

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

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

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

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

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

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

3.3 KEY PERFORMANCE INDICATORS

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

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

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

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

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

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

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

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

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

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

3.4 AVERAGE JOURNEY TIMES

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

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

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

3.5 JOURNEY TIME RELIABILITY

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

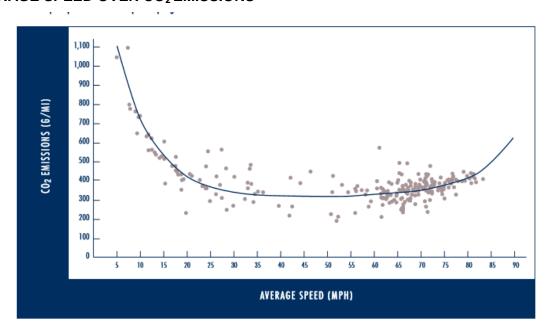
3.6 ROAD TRAFFIC COLLISIONS

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

3.7 CARBON EMISSIONS

An outcome of reduced congestion is the reduction in fuel consumption and CO_2 emissions. The fuel consumption that causes CO_2 emissions is very sensitive to several factors and include driver behaviour, vehicle, road types and traffic conditions. Due to multiple variables a comprehensive carbon model is used as a methodology to accurately estimate how congestion reduction will reduce CO_2 . A typical driving trip consists of idling, accelerating, cruising, and decelerating. An average trip would produce about 330 grams per mile (g/mi) of CO_2 emissions. The figure below shows a typical speed emission curve and shows at lower speeds with high accelerating and decelerating in congestion has much higher emissions. As speed increases congestion decreases. On motorways with speeds above 65mph emissions increase as engines are under strain.

AVERAGE SPEED OVER CO2 EMISSIONS



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

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

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

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

L = consumption, expressed in litres per kilometre;

v = average speed in kilometres per hour; and

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

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

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

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

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

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

3.8 PROFIT / LOSS

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

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

Table 2 - Statutory Permit Fee rates

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

| | Road Category 0- 2 or Traffic- | Road Category 3-4 and non traffic- |
|---|-----------------------------------|------------------------------------|
| Work Type | sensitive | sensitive |
| Provisional Advance | £105 | £75 |
| Major works – over 10 days <u>and all</u> major works requiring a traffic regulation order. | £240 | £150 |
| Major works – 4 to 10 days | £130 | £75 |
| Major works – up to 3 days | £65 | £45 |
| Activity Standard | £130 | £75 |
| Activity Minor | £65 | £45 |
| Immediate Activity | £60 | £40 |
| Permit Variation | £45 | £35 |

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

3.9 REPORT STRUCTURE

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

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

4 APPENDIX 3 – COSTS, INCOME and DISCOUNTS

There are two elements to the Permit Scheme costs:

- Start-up costs; and
- Ongoing costs.

4.1 START-UP COSTS

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

4.2 FEE INCOME

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

4.3 COSTS BUDGETS AND ACTUALS

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

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

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

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

4.4 AVERAGE PERMIT COST

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

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

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

END