



The St. Helens Council Permit Scheme for Road and Street Activities

Annual Report 05 2016 – 2017



1 INTRODUCTION

1.1 Background

1.1.1 St Helens Council (SHC) has been operating a Permit Scheme since 10th April 2012. The Scheme operates as The St Helens Council Permit Scheme for Road and Street Activities since 1st October 2015. Prior to this date, the scheme was known as MAPS – Merseyside Authorities Permit Scheme.

1.1.2 The statutory 12-month Annual Review and report to DfT was completed in 2013 following the first full 12 months of operating the Permit Scheme, '*St Helens Council Annual Report 01, 2012-13*'.

1.1.3 The purpose of the 12-month Annual review was to;

- Demonstrate a reduction in the duration of works.
- Demonstrate a reduction in the number of Permit applications (through an increase in collaborative working).
- Report the monitored Key Performance Indicators (KPI 1, KPI 2, KPI 3 & KPI 7).
- Re-evaluate the Cost Benefit Assessment to show an economic return on the investment.
- Report the annual scheme benefit to all road users.

1.1.4 The introduction of the Permit Scheme reduced the average duration of works by 20% and reduced the calculated cost of delays encountered at traffic management by 33%. The calculated Scheme benefit was 4 times greater than value for money threshold required by the Department for Transport (DfT).

1.1.5 At the end of the second and third years, further reviews were carried out. This is a lower level review to monitor key performance indicators and identify and report any significant changes year on year.

1.1.6 The performance of the Scheme in subsequent years shows slight variation in the average duration, but generally shows the benefits to be maintained around the level achieved in year 1.

1.2 Year 5 review

1.2.1 The Council plan to undertake this review annually. This report presents the year 5 review, '*St Helens Council Annual Report 05, 2016-17*'.

1.2.2 The objectives of the year 5 review are to;

- Report the total number of Permit applications.
- Evaluate key performance measures (e.g. average duration of works, number by works category/traffic management type, etc.) and identify any significant changes from year 1.
- Report the monitored Key Performance Indicators (KPI 1, KPI 2, KPI 3 & KPI 7).

1.3 Report Structure

- 1.3.1 The analysis of the permit applications is presented in Chapter 2. The KPI review is reported in Chapter 3.
- 1.3.2 A review of the performance of the Scheme against the Scheme objectives is discussed in Chapter 4.
- 1.3.3 A summary and report conclusions and recommendations are presented in Chapter 5.

2 PERMIT APPLICATIONS

2.1 Methodology

2.1.1 Data sources available for this review are:

- Permit Scheme work stops notices, April 2016 - March 2017
- Previous year Permit Scheme work stops notices, April 2012 - March 2016

2.1.2 This review assesses the year on year change in the number of Permit applications and to monitor the key performance indicators. The purpose of the review is to identify any significant changes from the year 1 performance. Any large changes will be investigated in more detail and the potential impact on the Scheme performance and value will be considered.

2.1.3 The intention is to carry out a review annually and benchmark the Scheme performance against the first year of operation each time. The key metrics are also compared with the previous year, to monitor changes and avoid a small creeping increase going unnoticed for several years.

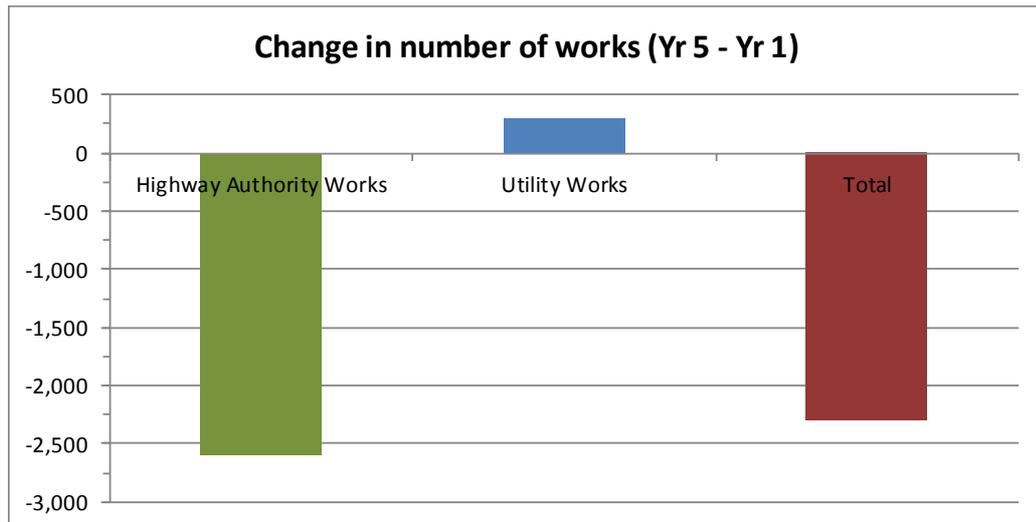
2.2 All works

2.2.1 The following series of charts and tables present a comparison of the year 5 2016-17 data and the year 1 and 3 data, 2012-13 and 2014-15. The year 3 data has been selected due to a possible reporting error in year 4.

2.2.2 The total number of Permit applications and a breakdown by highway authority and utility company is shown in Table 1 and the accompanying chart.

Table 1 Number of Permit applications

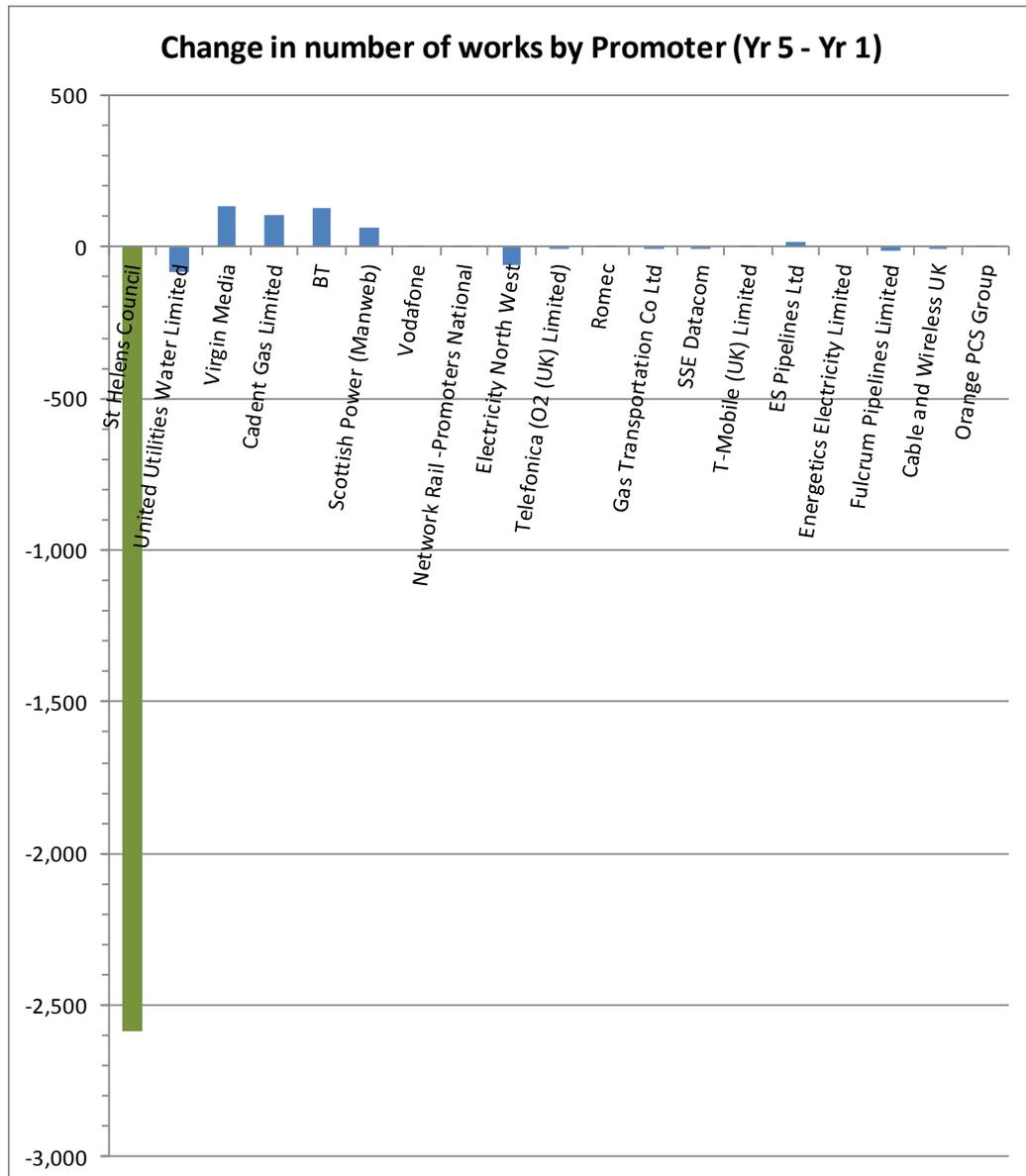
PROMOTER TYPE	First Year 2012-13	Third Year 2014-15	Fifth Year 2016-17	Change (Yr 5 - Yr 1)
Highway Authority Works	10,281	8,217	7,694	-2,587
Utility Works	4,050	4,514	4,340	290
Total	14,331	12,731	12,034	-2,297



- 2.2.3 The biggest change is a 2,500 reduction in highway authority works, compared with year 1. This is a 25% reduction in highway works. The number of highway works completed has reduced by 500 (6%) compared with year 3.
- 2.2.4 There is a small increase in utility company works, up 300 from year 1 and 200 lower than year 3. The trend year on year has generally been a small increase in utility works; therefore, this slight reduction is not thought to be significant.
- 2.2.5 The change in number of Permit applications by works promoter is presented in Table 2 and the accompanying chart.

Table 2 Change by works promoter

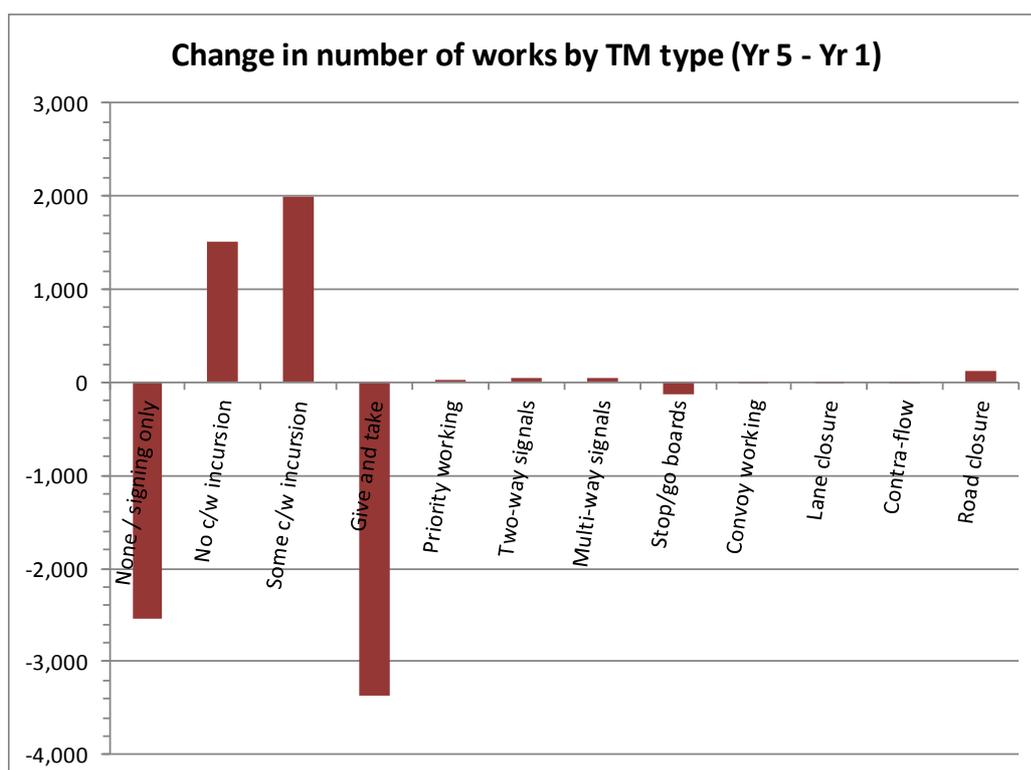
PROMOTER	First Year 2012-13	Third Year 2014-15	Fifth Year 2016-17	Change (Yr 5 - Yr 1)
St Helens Council	10,281	8,217	7,694	-2,587
United Utilities Water Limited	1,622	1,581	1,541	-81
Virgin Media	652	825	786	134
Cadent Gas Limited	640	637	743	103
BT	367	541	496	129
Scottish Power (Manweb)	474	558	537	63
Vodafone	3	25	6	3
Network Rail -Promoters National	39	20	45	6
Electricity North West	208	253	148	-60
Telefonica (O2 (UK) Limited)	5	27	1	-4
Romec		2	1	1
Gas Transportation Co Ltd	2		1	-1
SSE Datacom	6			-6
T-Mobile (UK) Limited		4	7	7
ES Pipelines Ltd	2	6	17	15
Energetics Electricity Limited	2	13	2	
Fulcrum Pipelines Limited	19	14	7	-12
Cable and Wireless UK	9			-9
Orange PCS Group			2	2
Total	14,331	12,723	12,034	-2,297



- 2.2.6 The number of works completed each year by utility companies is generally very consistent.
- 2.2.7 The changes are not felt to be significant and are generally indicative of annual fluctuations in promoter works numbers to be expected year on year.
- 2.2.8 The following detailed analysis is presented for works closed by all works promoters. The same analysis is presented separately in Appendix A for highway authority works and utility company works.
- 2.2.9 Table 3 and the accompanying chart presents a comparison of the change in number of all works applications by traffic management type.

Table 3 Number of applications by traffic management type

TRAFFIC MANAGEMENT TYPE	First Year 2012-13	Third Year 2014-15	Fifth Year 2016-17	Change (Yr 5 - Yr 1)
None / signing only	2,535	2		-2,535
No c/w incursion		2,370	1,516	1,516
Some c/w incursion		1,143	1,992	1,992
Give and take	10,855	8,394	7,489	-3,366
Priority working	4	17	18	14
Two-way signals	320	270	369	49
Multi-way signals	148	144	201	53
Stop/go boards	230	150	103	-127
Convoy working	2		1	-1
Lane closure	143	105	138	-5
Contra-flow	2		1	-1
Road closure	92	136	206	114
Blank				
Total	14,331	12,731	12,034	-2,297



2.2.10 The large shift to no and some carriageway incursion is a result of the change in EToN6 from none / signing only.

2.2.11 Changes since year 3 include a shift towards works operating with some carriageway incursion, from no carriageway incursion or give and take.

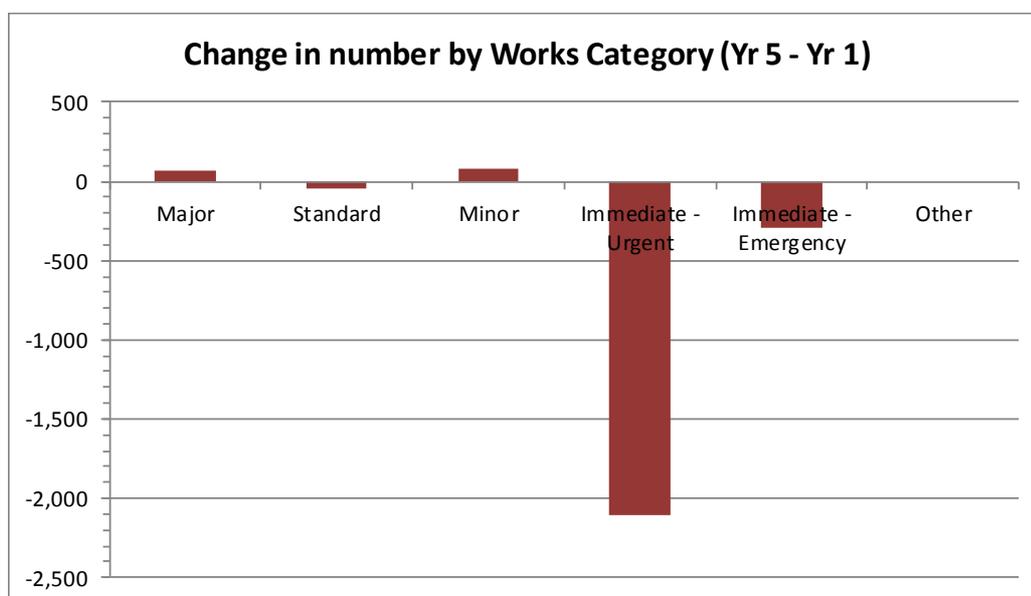
2.2.12 Other changes include an increase in the number of works operating with temporary traffic signal control or road closures. There is a corresponding reduction in works operating with stop/go boards.

2.2.13 These changes since year 3 are not thought to be significant.

2.2.14 The total number of Permit applications by Works Category is shown in Table 4 and the accompanying chart.

Table 4 Applications by works category

WORKS STOPPED	First Year 2012-13	Third Year 2014-15	Fifth Year 2016-17	Change (Yr 5 - Yr 1)
Major	254	615	326	72
Standard	616	607	570	-46
Minor	2,801	3,094	2,880	79
Immediate - Urgent	10,045	7,970	7,937	-2,108
Immediate - Emergency	615	445	321	-294
Other				
Total	14,331	12,731	12,034	-2,297



2.2.15 The big change compared with year 1 is a result of the large reduction in the number of highway authority works. Changes between year 3 and year 5 are not significant for either highway authority works or utility works (see detailed analysis in Appendix A.2 and A.3).

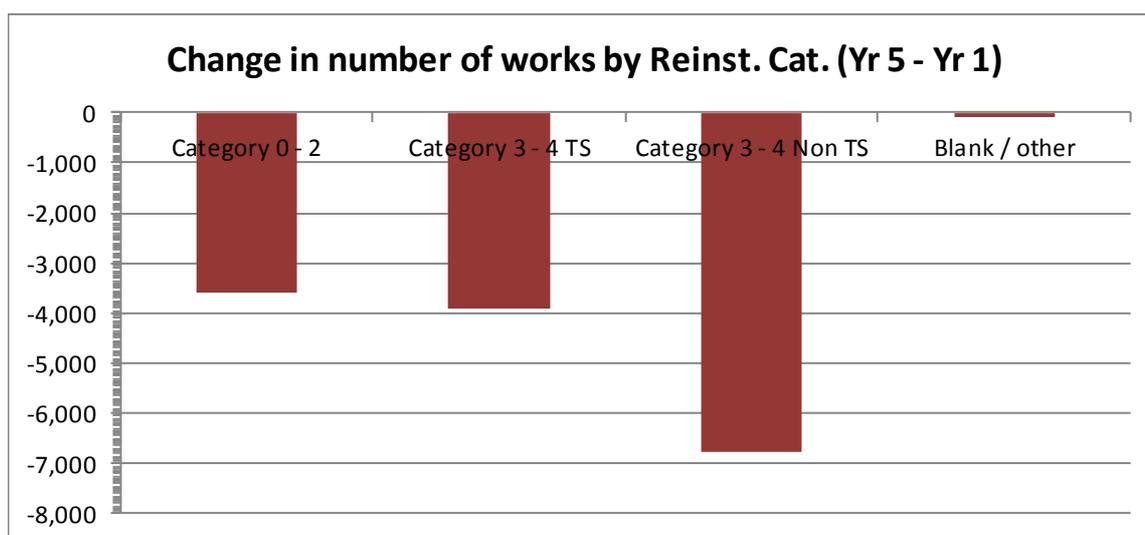
2.2.16 The only significant change is a reduction in the number of Major works undertaken during year; down from 395 in year 3 to 137 in year 5.

2.2.17 In year 3, the Council maintained carriageway surfaces with a preventative slurry sealant treatment, requiring a Major works permit for the length of a street rather than Immediate works permits for individual pot hole repairs along the streets treated. This explains the increase in Major works permit applications in year 3.

2.2.18 The total number of Permit applications by reinstatement category type is shown in Table 5 and the accompanying chart.

Table 5 Number by reinstatement category type

REINSTATEMENT CATEGORY	First Year 2012-13	Third Year 2014-15	Fifth Year 2016-17	Change (Yr 5 - Yr 1)
Category 0 - 2	3,598	3,074		-3,598
Category 3 - 4 TS	3,890	3,414		-3,890
Category 3 - 4 Non TS	6,755	6,145		-6,755
Blank / other	88	98		-88
All works	14,331	12,731		-14,331



2.2.19 The change in number of permits on each road type is consistent with the overall 5,300 reduction in permit applications. This is a primarily a result of the suspected under-reporting of highway permit applications.

2.2.20 Table 6 shows a comparison of the average works duration for all works.

Table 6 Average works duration

DURATION	First Year 2012-13	Third Year 2014-15	Fifth Year 2016-17	Change (Yr 5 - Yr 1)
Average duration (days)	2.6	2.4	2.7	0.1
Total number of days worked	37,841	30,257	33,039	-4,802

2.2.21 The overall average duration of 2.7 days is the same as year 1 but a larger increase compared with year 3. There were 4,800 fewer days worked compared with year 1 but 2,800 more days worked compared with year 3.

2.2.22 The detailed analysis in Appendix A shows no significant change in the average duration for utility works. Average duration for highway works increases from 1.7 days to 2.2 between year 3 and year 5.

2.2.23 Analysis of each permit report shows there are 6,629 highway works with a repair REP prefix. These are typically short duration repairs (e.g. patching and pothole repairs) and should have a duration of no more than 1 day.

2.2.24 1,668 records have a duration greater than 1 day. A review of these records identified many that did not start on the start date but were postponed to the next day – for example, if parked cars prevent the works being carried out. In these cases, the actual start date is not adjusted accordingly.

2.2.25 These increase the average duration for repair works to 1.98 days and the average duration of all works to 2.2 days from 2.7 days

Recommendation 01: Monitor highway authority repair works reported durations in year 6 and correct actual start or stop dates if necessary.

2.2.26 An associated recommendation from previous years to monitor highway works duration is also related and should be carried into year 6.

Recommendation 02 (ongoing): Monitor highway authority works durations in year 6 to maintain durations at their already low levels.

2.2.27 Reviewing the utility company works durations (Appendix A.3) shows no change in duration compared with year 3, at 3.7 days.

2.2.28 Overall, the number of days worked on utilities schemes reduced by 650 compared with year 3.

2.2.29 The average duration by works category statistics show a slight increase in the average duration of Major works (from 13.8 to 15.3 days) and Immediate Emergency works (from 5.2 to 5.5 days). Neither of these changes are significant in terms of the total number of days worked.

2.3 Scheme Benefits

2.3.1 The reduction in number of works across the network is significant at 16% compared with year 1. There is no significant change in the number of utility works on the network compared with the typical year selected under Noticing.

2.3.2 Figure 1 presents the number of works per annum under Noticing and during the first full year of operation following the introduction of the Permit Scheme.

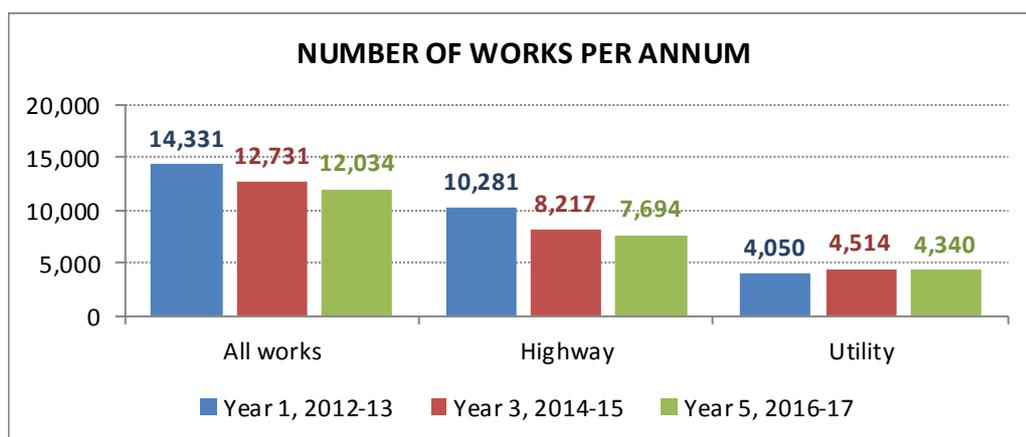


Figure 1 Number of works per annum

2.3.3 The reduction in the number of works has resulted in an overall 13% reduction in number of days worked on the road network. This equates to nearly 4,800 fewer days worked on the network in the last year.

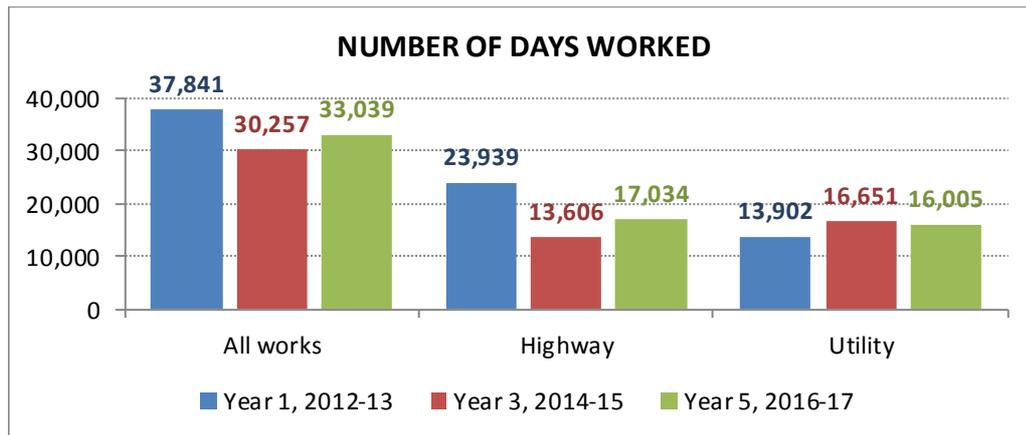


Figure 2 Number of days worked per annum

2.3.4 The benefits achieved in year 1 of the Permit Scheme have been more or less maintained in year 5. As stated in paras 2.2.23 to 2.2.25, the duration of highway authority repair works may be over-stated in some cases. If the average duration of these works is closer to 1 day than 2 days, then the number of days worked would reduce by a further 6,000 and would result in significant benefits over those already achieved in year 1.

2.4 Conclusions

2.4.1 The biggest change is a 2,500 reduction in highway authority works, compared with year 1. This is a 25% reduction in highway works. The number of highway works completed has reduced by 500 (6%) compared with year 3.

2.4.2 There is a small increase in utility company works, up 300 from year 1 and 200 lower than year 3. The trend year on year has generally been a small increase in utility works, therefore this slight reduction is not thought to be significant.

2.4.3 The overall average duration of 2.7 days is the same as year 1 but a larger increase compared with year 3. There were 4,800 fewer days worked compared with year 1 but 2,800 more days worked compared with year 3.

2.4.4 Average duration for highway works increases from 1.7 days to 2.2 between year 3 and year 5.

2.4.5 Reviewing the utility company works durations (Appendix A.3) shows no change in duration compared with year 3, at 3.7 days. Overall, the number of days worked on utilities schemes reduced by 650 compared with year 3.

3 KPI MONITORING

3.1 Introduction

3.1.1 The four Key Performance Indicators committed for inclusion in the annual review are;

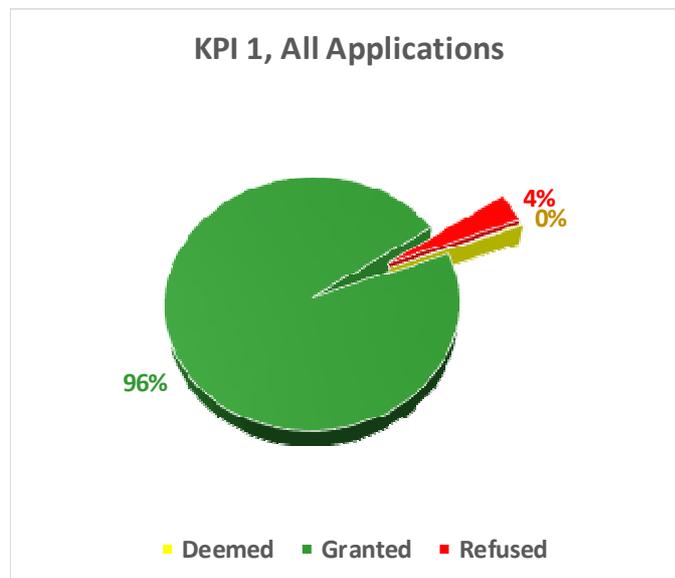
- **KPI 1**, the number of Permit and Permit Variation applications received and a breakdown of the number granted and refused
- **KPI 2**, the number of conditions applied by condition type
- **KPI 3**, the number of approved Permit variations (extensions)
- **KPI 7**, the number of inspections carried out to monitor conditions

3.1.2 The above data should be presented separately for highway authority and utility company applications to demonstrate parity in the application of the Scheme.

3.2 KPI review

3.2.1 The following figure shows the number and proportion of Permit and Permit Variation applications received and refused (KPI 1).

3.2.2 KPI 1 – Approximately one eleventh (9%) of all permit and permit variation applications by statutory undertakers were refused. 4% of all applications are refused. This is a reduction from the previous year, where 13% of statutory undertaker applications and 8% of all applications were refused.



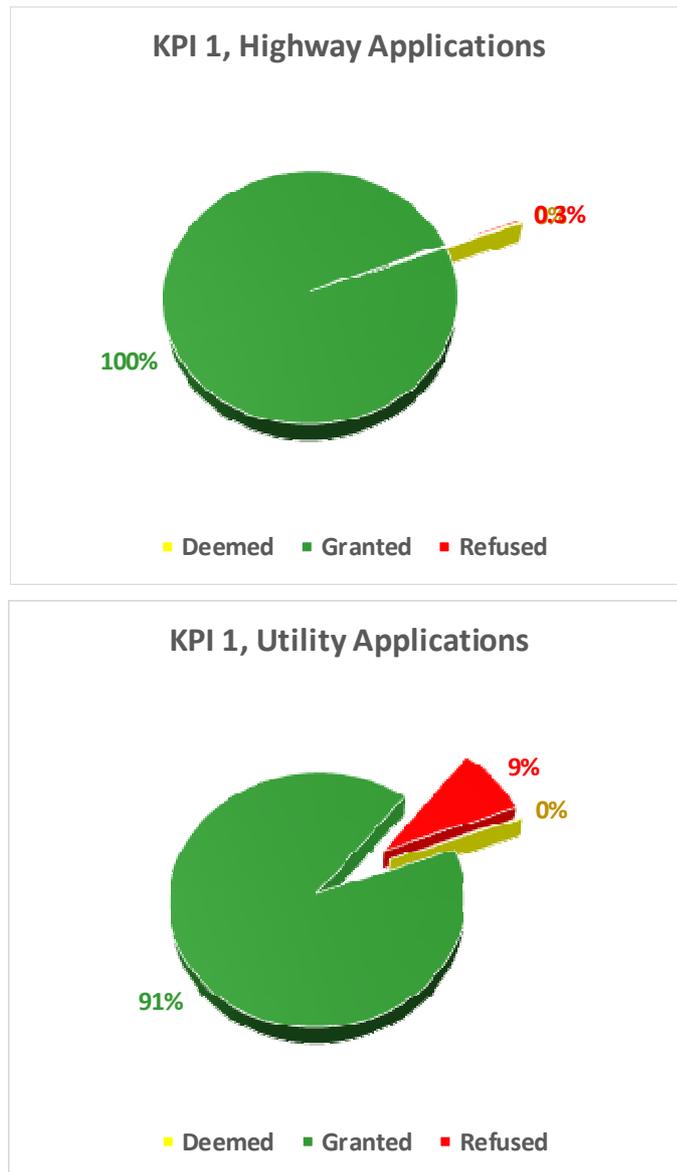


Figure 3: KPI 1, Permit and Variation Applications

- 3.2.3 Most of the applications refused (96%) are made by statutory undertakers. There is no incentive to refuse statutory undertakers and not Highway Authority works, as the Council are unable to charge a permit fee and it creates more work.
- 3.2.4 Table 7 shows the number of permits granted, deemed and refused for highway authority and public utility works promoters.

Table 7 KPI 1 Permit and Variation Applications

Promoter	Granted	Deemed	Refused	% Refused
Highway authority	9,449	21	25	0.3%
Utility	5,888	15	568	8.8%
ALL	15,337	36	593	3.7%

- 3.2.5 KPI 2 – number of permit conditions applied by conditions type;
- 3.2.6 Table 8 shows the total number of each standard condition applied to highway authority and public utility works promoters.

Table 8 KPI 2 Number and Type of Conditions Applied

Condition	Condition Description	Utility	Highway	All
NCT02a	Date constraints	8,838	1,776	10,614
NCT02b	Time constraints	4,052	170	4,222
NCT04a	Material & plant removal	686	0	686
NCT04b	Material & plant storage	1,328	0	1,328
NCT05a	Road occupation dimensions	910	0	910
NCT06a	Traffic space dimensions	6,824	80	6,904
NCT07a	Road closure	268	320	588
NCT08a	Light signals - tm request	1,672	348	2,020
NCT08b	Light signals - manual control	734	148	882
NCT09a	Traffic management changes - notify	1,346	20	1,366
NCT09b	Traffic management changes - directed	226	4	230
NCT09c	Traffic management changes - signal removal	1,112	20	1,132
NCT10a	Work methodology	2,568	12	2,580
NCT11b	Consultation & publicity	1,122	972	2,094
NCT12a	Environmental - limit timing of activities	0	0	0
NCT13	Local condition	62	0	62
	TOTAL	31,748	3,870	35,618

- 3.2.7 89% of all permit conditions are applied by utility works promoters. This is higher than the 73% percentage from the previous year.
- 3.2.8 The conditions are evenly spread across most condition types, other than a large number of NCT10a work methodology conditions being selected.
- 3.2.9 Conditions applied to highway works generally relate to date constraints, road closures, temporary traffic signals and consultation/publicity.
- 3.2.10 The number applied by condition type are shown in Figure 4. The blue bars show utility permits and green show highway authority permits.

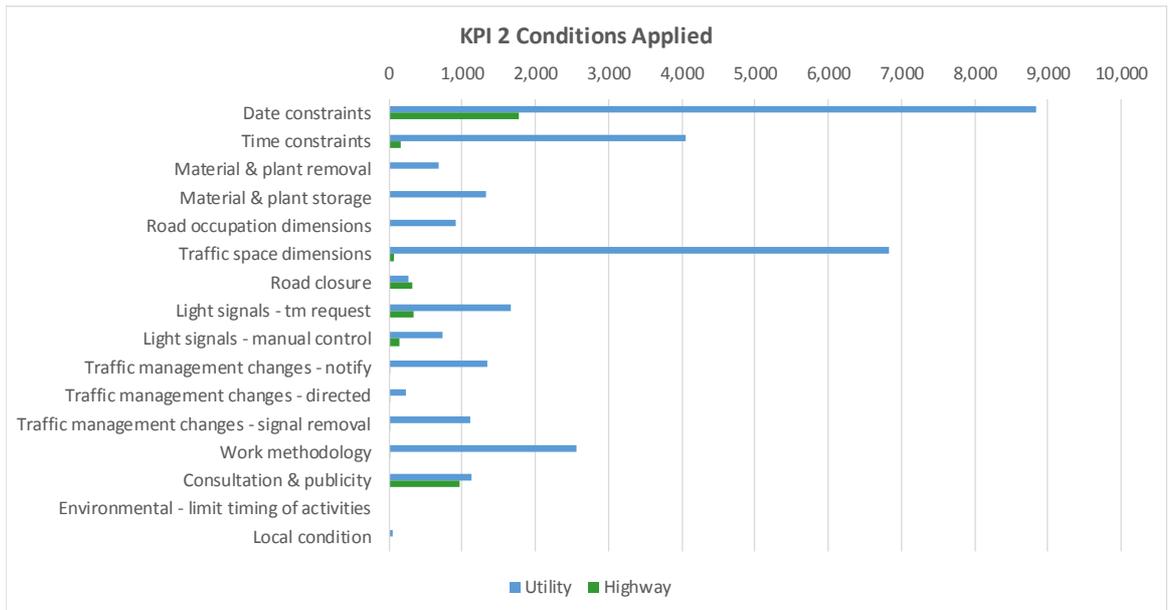
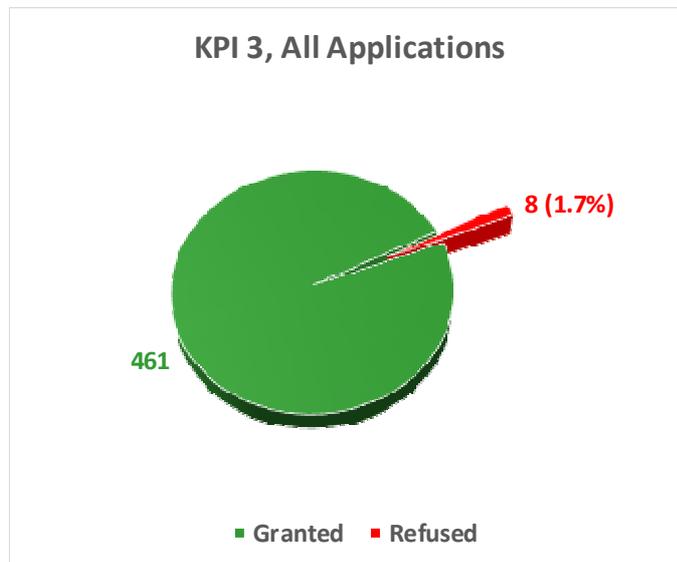


Figure 4: KPI 2, Conditions Applied

- 3.2.11 KPI 3 - The following charts show the number of extensions granted and refused, for all promoters and for statutory undertakers only (KPI 3).
- 3.2.12 Like last year, approximately 75% of permit extensions granted were for statutory undertakers. This year only 8 extension requests were refused (2%) compared with 17 requests (5%) refused last year. All 8 were submitted by statutory undertakers.



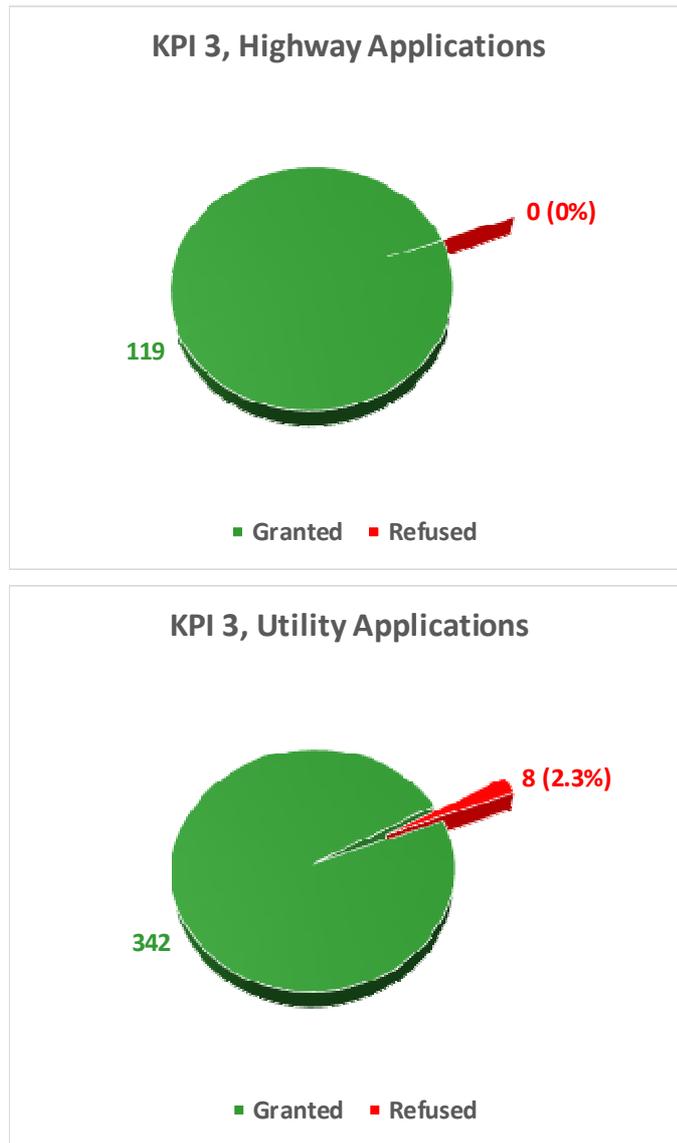


Figure 5: KPI 3, Permit Extensions

3.2.13 KPI 7 - the Number of Inspections carried out to monitor conditions.

3.2.14 Table 9 shows the number of inspections carried out to monitor permit conditions.

Table 9 Permit Inspections

Permit Condition Inspections	Passed	Non-Compliant	Number of Inspections	Fail %
ALL	188	139	327	43%

3.2.15 43% of 327 inspections failed.

3.2.16 131 Fixed Penalty Notices were given during the course of the year (6 for working without a permit and 125 for a breach of permit conditions). This is an increase of 57 from the previous year.

3.2.17 The number of fixed penalty notices given by type are shown in Figure 6.

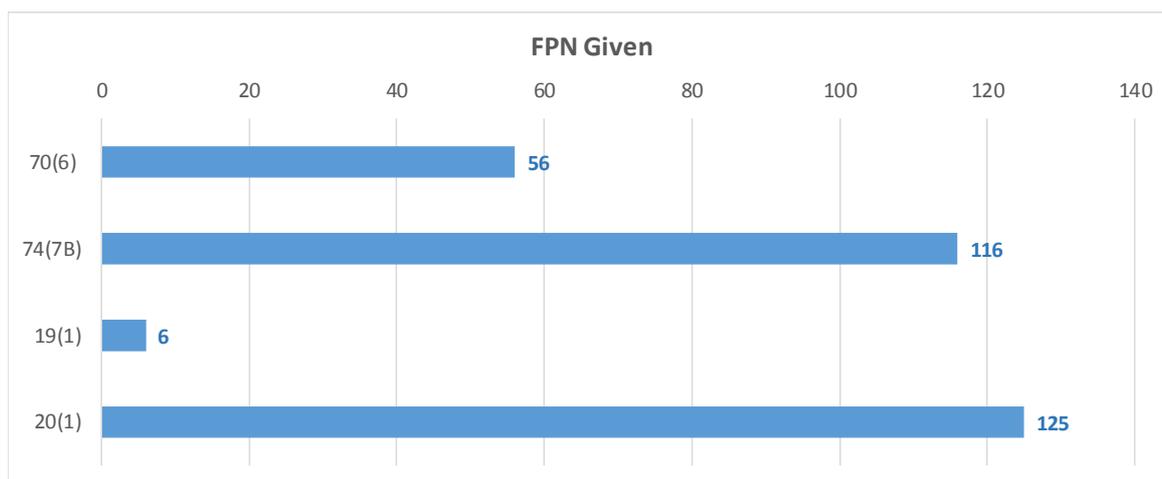


Figure 6: KPI 7, FPN Given

3.2.18 Summarised as;

- Errors with Actual Start and Works Stop Notices
- Failure to update the permit with the correct information when in progress
- Incorrect Registration Information

Recommendation 03 (ongoing): Monitor site inspection failures and FPN given for breach of permit conditions to determine if the year 5 increase is a result of a drop in standards. Meet with poor performing utilities if necessary, to promote performance improvements.

3.3 Conclusions

3.3.1 The analysis demonstrates that only a small proportion of permit and permit variation applications are refused. Approximately 9% of all permit and permit variation applications by statutory undertakers were refused. This is a further 4% reduction compared with the previous year.

3.3.2 Approximately 75% of permit extensions granted were for statutory undertakers. Only 8 extension requests were refused (2%). All 8 were submitted by statutory undertakers.

3.3.3 131 Fixed Penalty Notices were given during the course of the year (6 for working without a permit and 125 for a breach of permit conditions). This is an increase of 57 from the previous year.

4 OBJECTIVES

4.1 Objective of the Permit Scheme

4.1.1 The St Helens Council Permit Scheme for Road and Street Activities has been prepared in accordance with achieving the overriding statutory objectives and duties under the TMA 2004 and NRSWA 1991. It is an important aspect of the duties and policies for the permit authority to manage activities in the street, so as to minimise the impact of those activities, while allowing essential activities to take place.

4.1.2 The specific objectives of the Permit Scheme are as follows:

- Reduce occupation of the highway to benefit all road users
- Obtain greater control of all activities on the public highway
- Minimise/avoid/manage delays to all road users
- Enhance co-ordination of all activities on the highway
- Achieve an improvement in air quality
- Enhance safety of all road users at road and street activities
- Reduce potential incidents/accidents at road activities
- Improve public perception of managing road activities
- Enhance reliability of journey times
- Enhance journey experience
- Reduce long-term damage to the highway asset
- Encourage collaborative activities between all activity promoters
- Enhance reliability of activities taking place at a particular time, especially on the strategic road network
- Promote best practices across St Helens
- Promote common activity practices across the region to ensure ease of operation for activity promoters
- Enhanced cross-boundary co-operation
- Demonstrate parity for all activity promoters
- Reduce instances of customer complaints regarding road and street activities
- Reduce the impact of noise on residents by having greater control of timing of activities

4.2 Benefits

4.2.1 A framework has been developed to help quantify the level of benefit achieved in terms of each objective.

4.2.2 Since many are difficult to quantify and the benefits are subjective in nature, a weighting system has been applied to assess the benefits as; slight 1, moderate 2 or substantial 3.

- 4.2.3 The aim of this review is to identify those objectives where further benefits could be achieved and assist in setting actions to work towards meeting all the objectives more fully.
- 4.2.4 The objectives are assessed against 6 categories;
- Benefits achieved through a reduction in road occupancy
 - Benefits achieved by providing more control over the timing and type of traffic management used
 - Having fuller control over the days and time worked
 - The benefits achieved with a fuller inspection regime
 - Opportunities to co-operate with neighbouring authorities
 - Benefits or actions set following the annual monitoring of Key Performance Indicators (KPI)
- 4.2.5 In summary, the significant reduction in road occupancy in each year since the introduction of the Scheme results in substantial benefits relating to occupancy, reducing delays to road users and enhancing safety by reducing exposure to the works. There are other less substantial benefits relating to enhancing journey time reliability, enhancing the journey experience, reducing noise impacts and improving the public perception of road and street activities.
- 4.2.6 Monitoring delays at key locations would help to quantify the level of benefit being achieved and should be considered in future years. Also recording road traffic accidents that take place within or on the approach to works would provide a measure of the benefits that can be achieved.
- 4.2.7 The Scheme has offered greater control over the type of traffic management and timing of works in relation to day of week and time of day. Further benefits could be achieved by considering the impact of major works on non-motorised users (e.g. cyclists and pedestrians) and local air quality (avoiding stationary or stop-start traffic at busy times) when selecting appropriate traffic management control.
- 4.2.8 Regular permit inspections have improved the standard of works, evidenced by the reduction in number of FPN given. By evaluating accidents recorded works, it may be possible to further improve the safety to all network users.
- 4.2.9 The Liverpool City Region will control the Key Route Network across the city region. Reviewing the National Street Gazetteers for each authority to ensure a consistent approach to road category, traffic sensitivity status and periodicity will assist in standardising the approach in each authority area. There could also be additional benefits if the same approach is applied across the strategic road network within each authority area.
- 4.2.10 Annual monitoring of the KPI records performance of each works promoter and helps ensure parity of approach across all. It can also highlight specific issues relating to a specific promoter and recommend steps to improve their performance in subsequent years.
- 4.2.11 It is the Council's intention to carry out this performance review at the end of each year and to monitor the success of steps taken to implement the actions to further improve performance.

5 CONCLUSIONS

5.1 Summary

- 5.1.1 St Helens Council (SHC) has been operating a Permit Scheme since 10th April 2012. The Scheme operates as The St Helens Council Permit Scheme for Road and Street Activities since 1st October 2015. Prior to this date the scheme was known as MAPS – Merseyside Authorities Permit Scheme.
- 5.1.2 The statutory 12-month Annual Review and report to DfT was completed in 2013 following the first full 12 months of operating the Permit Scheme, *'St Helens Council Annual Report 01, 2012-13'*.
- 5.1.3 The purpose of the 12-month Annual review was to;
- Demonstrate a reduction in the duration of works.
 - Demonstrate a reduction in the number of Permit applications (through an increase in collaborative working).
 - Report the monitored Key Performance Indicators (KPI 1, KPI 2, KPI 3 & KPI 7).
 - Re-evaluate the Cost Benefit Assessment to show an economic return on the investment.
 - Report the annual scheme benefit to all road users.
- 5.1.4 The introduction of the Permit Scheme reduced the average duration of works by 20% and reduced the calculated cost of delays encountered at traffic management by 33%. The calculated Scheme benefit was 4 times greater than value for money threshold required by the Department for Transport (DfT).
- 5.1.5 The biggest change is a 2,500 reduction in highway authority works, compared with year 1. This is a 25% reduction in highway works. The number of highway works completed has reduced by 500 (6%) compared with year 3.
- 5.1.6 There is a small increase in utility company works, up 300 from year 1 and 200 lower than year 3. The trend year on year has generally been a small increase in utility works, therefore this slight reduction is not thought to be significant.

5.2 Scheme benefits

- 5.2.1 The overall average duration of 2.7 days is the same as year 1 but a larger increase compared with year 3. There were 4,800 fewer days worked compared with year 1 but 2,800 more days worked compared with year 3.
- 5.2.2 The benefits achieved in year 1 of the Permit Scheme have been more or less maintained in year 5. However, the duration of highway authority repair works may be over-stated in some cases. If the average duration of these works is closer to 1 day than 2 days, then the number of days worked would reduce by a further 6,000 and would result in significant benefits over those already achieved in year 1.

5.3 Recommendations

- 5.3.1 Whilst none of the issues identified during the review are thought to be significant in terms of the calculated Scheme benefits, three recommendations have been made to

monitor performance during year 6 to prevent the impact of works increasing in subsequent years;

Recommendation 01: Monitor highway authority repair works reported durations in year 6 and correct actual start or stop dates if necessary.

Recommendation 02 (ongoing): Monitor highway authority works durations in year 6 to maintain durations at their already low levels.

Recommendation 03 (ongoing): Monitor site inspection failures and FPN given for breach of permit conditions to determine if the year 5 increase is a result of a drop in standards. Meet with poor performing utilities if necessary, to promote performance improvements.

5.3.2 Recommendations 02 and 03 have been carried forward from the previous year.

5.4 Conclusions

5.4.1 Monitoring the key performance indicators and evidence gained from the second year of operation demonstrates that the Permit Scheme continues to;

- improve coordination of activities
- improve safety at road and street works
- improve communication between authority and utility companies
- reduce occupancy of the highway
- improve accuracy of works records recorded in the Register
- reduce customer complaints

5.4.2 An appraisal of the qualitative benefits achieved with the Scheme has been undertaken and demonstrated that substantial or moderate benefits have been achieved on most of the 19 objectives listed in the Scheme document. Further steps to record and monitor performance of delays and safety have traffic managed sites and to consider the impacts of traffic management on air quality and non-motorised road users have been recommended.

5.4.3 Objectives requiring further work to demonstrate benefits include; encouraging collaborative working, re-evaluating road categories to reduce the likelihood to long-term damage to the road network, defining a strategic road network and co-ordinating the timing and type of activities on strategic routes and working towards improved co-ordination with neighbouring authorities.

5.4.4 This review has demonstrated that Scheme continues to meet its objectives, as defined in the Scheme document.