



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

Annual Report 09 – 2020 / 21



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1 INTRODUCTION

1.1 Background

1.1.1 St Helens Council (SHC) has been operating a Street Works Permit Scheme since April 2012. The Scheme operates as the St Helens Council Permit Scheme for Road and Street Activities.

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 each subsequent year, further reviews have been carried out and reported. 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 9 review

1.2.1 The Council plan to undertake this review annually. This report presents the year 9 review, '*St Helens Council Annual Report 09, 2020-21*'.

1.2.2 The objectives of the year 9 review are to;

- Review the scheme against the stated scheme objectives.
- 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 and the previous year.
- Report the monitored Key Performance Indicators (KPI 1, KPI 2, KPI 3 & KPI 7).
- Review the staff resource required to process applications in year 9.



1.3 Report Structure

1.3.1 Following the eight anniversary of the Permit Scheme in April 2020, GK-TC has been commissioned to undertake a detailed review of the operation during year 9 and to determine whether benefits achieved in the first four have been maintained.

1.3.2 The following chapters present the results of the review with respect to:

- Scheme objectives
- Duration of works
- Key Performance Indicators
- Staffing & resources



2 OBJECTIVES

2.1 Scheme Objectives

2.1.1 The specific objectives as set out in the 'The St Helens Council Permit Scheme for Road and Street Activities' scheme document are:

- 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.

2.1.2 Many of these objectives are subjective in nature, but where they can be objectively evaluated, the annual review will report on the impact towards achieving the stated objectives, for example;

- The reduction in occupancy of the highway to benefit all road users by reducing works duration (Chapter 3)
- Minimise/avoid/manage delays to all road users by reducing works duration and providing more effective control of the appropriate traffic management practices (Chapter 3)
- Demonstrating parity for all activity promoters by presenting approval and refusal rates for all applications (Chapter 4)



2.1.3 Others will require to be evaluated over several years of the scheme to identify changes and progress towards the objective, for example;

- Demonstrate a year-on-year increase in collaborative working between works promoters
- Enhancing reliability of activities taking place at a particular time, especially on the strategic road network
- Reducing long-term damage to the highway asset
- Enhancing safety of all road users at road and street activities



3 PERMIT APPLICATIONS

3.1 Methodology

3.1.1 Data sources available for this review are:

- Permit Scheme work stops notices, April 2020 - March 2021
- Previous year Permit Scheme work stops notices, April 2012 - March 2020

3.1.2 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 performance in year 1 and the previous year 8. Any large changes will be investigated in more detail and the potential impact on the Scheme performance and value will be considered.

3.1.3 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.

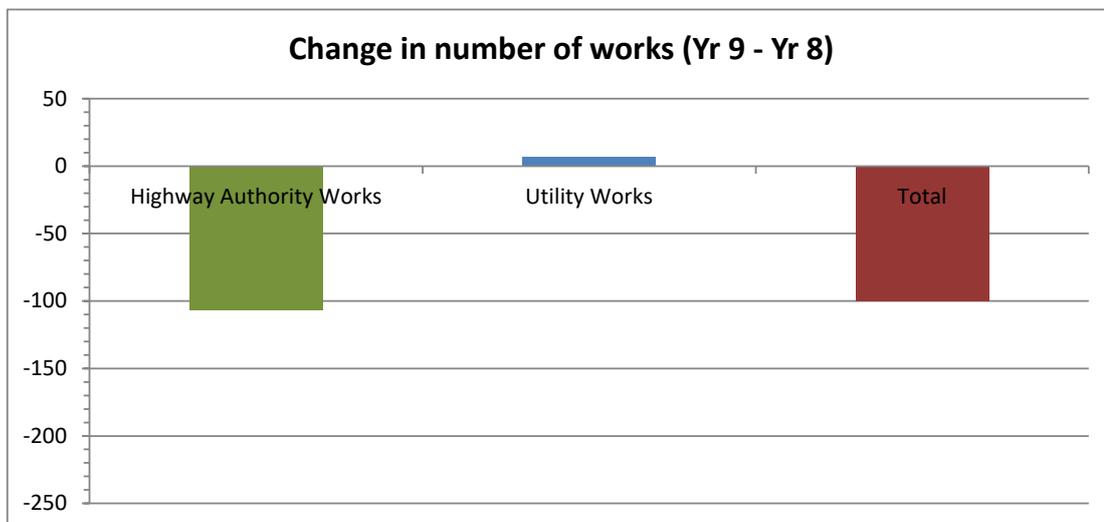
3.2 All works

3.2.1 The following series of charts and tables present a comparison of the year 9 2020-21 data and the year 1 and 8 data, 2012-13 and 2019-20.

3.2.2 The total number of works completed 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	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 8)
Highway Authority Works	10,281	5,519	5,412	-107
Utility Works	4,050	3,789	3,796	7
Total	14,331	9,308	9,208	-100

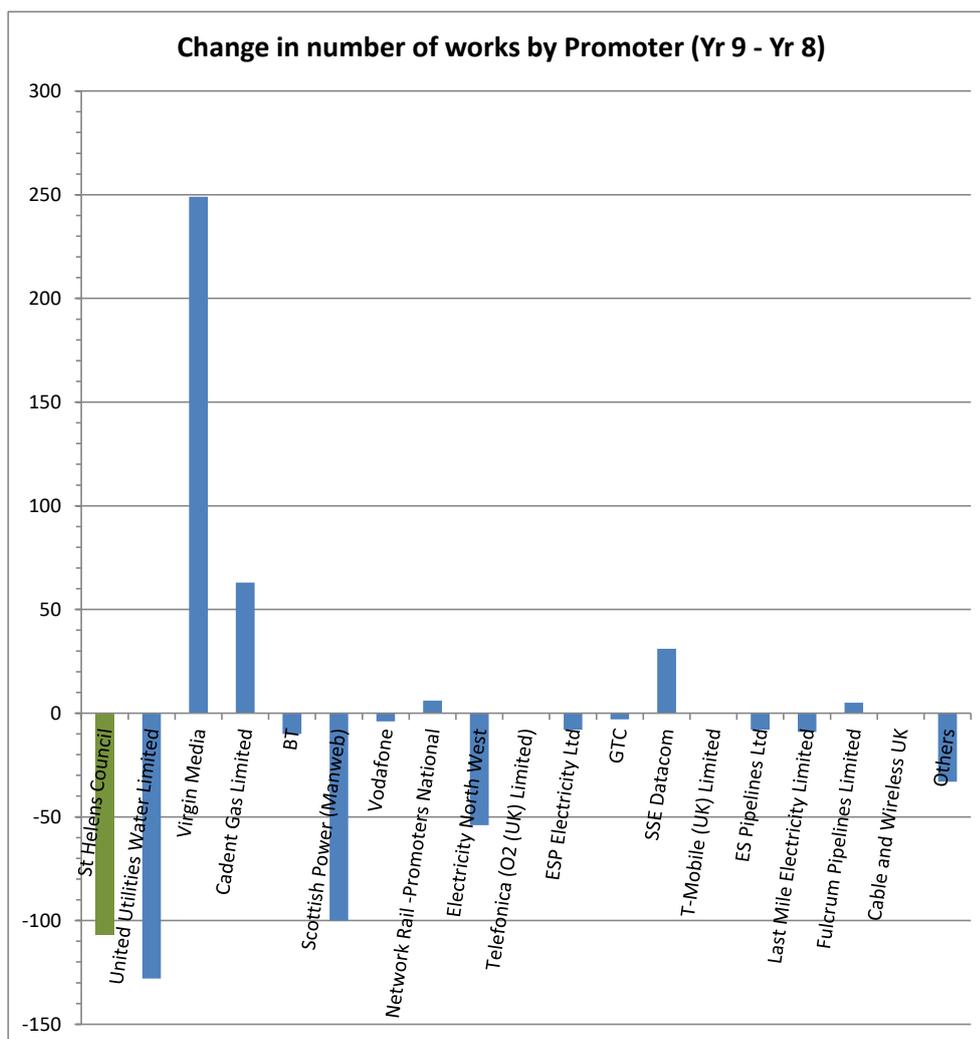




- 3.2.3 The number of works permitted has steadily reduced over the 9-year life of the scheme, from a high in year 1 of 14,331 permits completed to 9,208 in year 9. Highway authority permits have reduced by a factor of 2, but still account for more than 50% of all permits granted.
- 3.2.4 Utility works completed have generally ranged between 4,000 and 4,800 in each year. However, the number of works completed in years 8 and 9 are two of the lowest recorded at 3,789 and 3,796, respectively. This is approximately 7% lower than the number recorded in year 1 of the scheme.
- 3.2.5 The change in number of works completed by works promoter is presented in Table 2 and the accompanying chart.

Table 2 Change by works promoter

PROMOTER	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 8)
St Helens Council	10,281	5,519	5,412	-107
United Utilities Water Limited	1,622	1,484	1,356	-128
Virgin Media	652	392	641	249
Cadent Gas Limited	640	536	599	63
BT	367	568	558	-10
Scottish Power (Manweb)	474	528	428	-100
Vodafone	3	17	13	-4
Network Rail -Promoters National	39	11	17	6
Electricity North West	208	180	126	-54
Telefonica (O2 (UK) Limited)	5			
ESP Electricity Ltd		10	2	-8
GTC	2	4	1	-3
SSE Datacom	6	1	32	31
T-Mobile (UK) Limited		4	4	
ES Pipelines Ltd	2	10	2	-8
Last Mile Electricity Limited	2	11	2	-9
Fulcrum Pipelines Limited	19	4	9	5
Cable and Wireless UK	9			
Others		39	6	-33
Total	14,331	9,318	9,208	-110



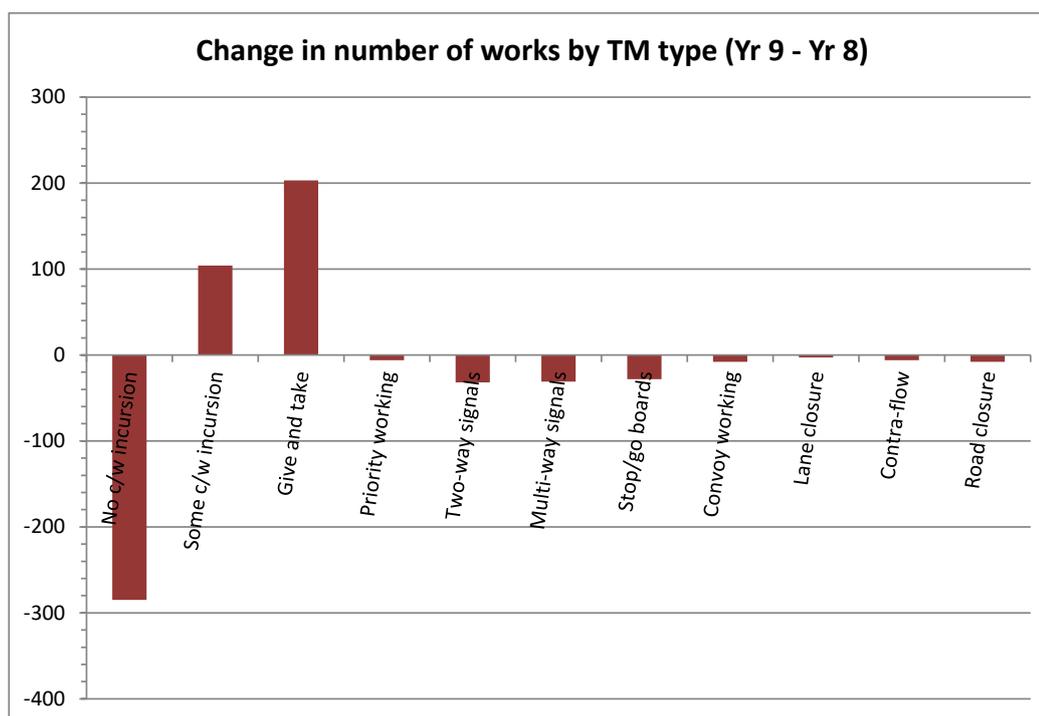
- 3.2.6 The biggest change is a large increase in the number of works completed in year 9 by Virgin Media; increasing by 249 or 63% compared with year 8. The number of works has returned to a level comparable with the year 1 records, following a reduction in year 8.
- 3.2.7 The number of highway works completed has further reduced by 100 compared with the previous year. The number of highway works has been relatively consistent over the last four years, following large reductions in years 3 and 4. Highway works still account for almost 60% of all works permitted.
- 3.2.8 Other notable changes from year 8 are 128 fewer works completed by United Utilities Water and 100 fewer works completed by Scottish Power (Manweb).
- 3.2.9 The summary analysis in this section is presented for works completed by all works promoters. A more detailed analysis is presented in Appendix A for all works, and separately for highway authority works and utility company works.



3.2.10 Table 3 and the accompanying chart presents a comparison of the change in number of all works completed by traffic management type.

Table 3 Number of applications by traffic management type

TRAFFIC MANAGEMENT TYPE	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 8)
None / signing only	2,535			
No c/w incursion		992	707	-285
Some c/w incursion		2,066	2,170	104
Give and take	10,855	5,170	5,373	203
Priority working	4	11	5	-6
Two-way signals	320	365	333	-32
Multi-way signals	148	315	284	-31
Stop/go boards	230	73	45	-28
Convoy working	2	17	9	-8
Lane closure	143	131	128	-3
Contra-flow	2	9	3	-6
Road closure	92	159	151	-8
Blank				
Total	14,331	9,308	9,208	-100



3.2.11 There is a near 300 reduction in the number of works specified as operating with no carriageway incursion. There is a corresponding increase in the number of works operating with some carriageway incursion or give & take traffic management.

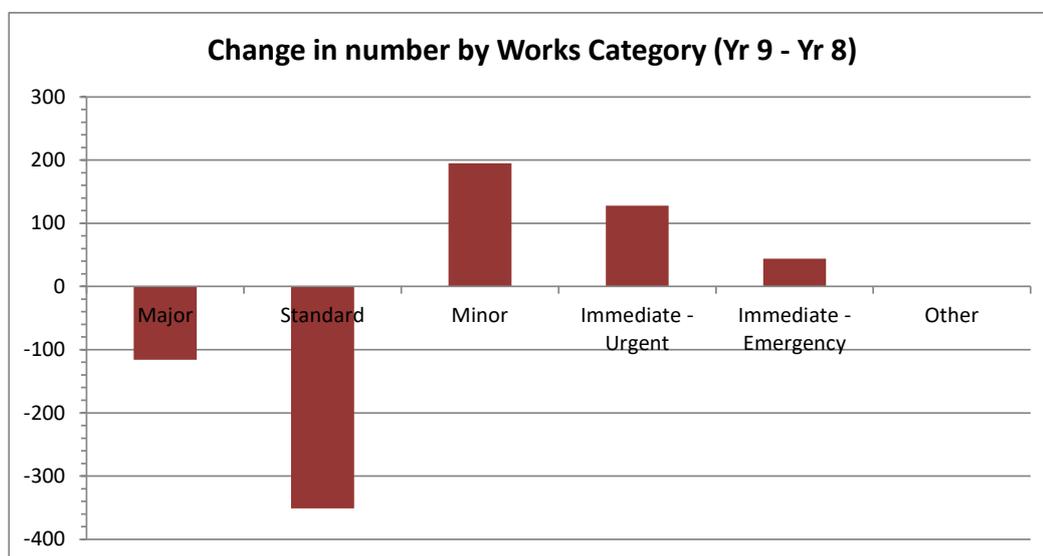
3.2.12 There are only very small changes for works operating under active traffic control – temporary signals, stop/go boards lane closures and road closures.



3.2.13 The total number of works completed by Works Category is shown in Table 4 and the accompanying chart.

Table 4 Applications by works category

WORKS STOPPED	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 8)
Major	254	362	246	-116
Standard	616	666	315	-351
Minor	2,801	2,175	2,370	195
Immediate - Urgent	10,045	5,907	6,035	128
Immediate - Emergency	615	198	242	44
Other				
Total	14,331	9,308	9,208	-100



3.2.14 Major and standard works have reduced by 32% and 53%, respectively, from the previous year.

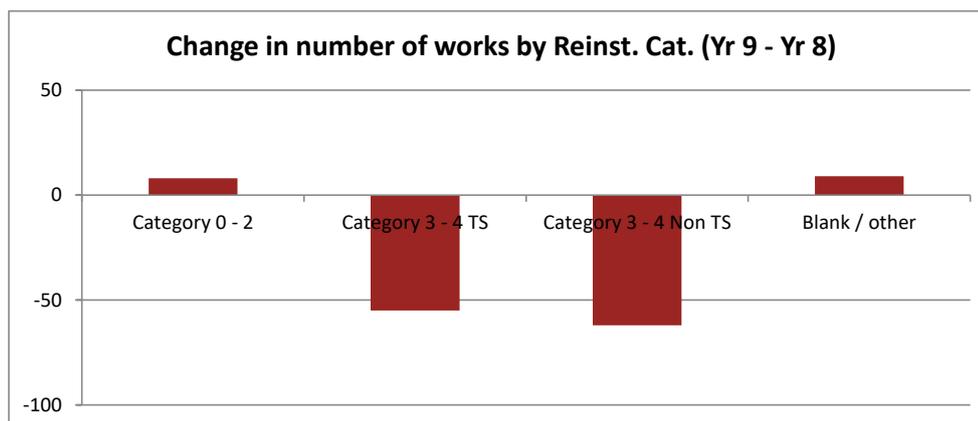
3.2.15 The increase in the number of Minor and Immediate works almost cancel out the reduction in the number of other categories.

3.2.16 The total number of works completed by reinstatement category type is shown in Table 5 and the accompanying chart.



Table 5 Number by reinstatement category type

REINSTATEMENT CATEGORY	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 8)
Category 0 - 2	3,598	2,796	2,804	8
Category 3 - 4 TS	3,890	2,385	2,330	-55
Category 3 - 4 Non TS	6,755	4,053	3,991	-62
Blank / other	88	74	83	9
All works	14,331	9,308	9,208	-100



3.2.17 There are only small changes in the number of works completed for each reinstatement category proportionately.

3.2.18 Table 6 shows a comparison of the average duration for all works completed in year 9.

Table 6 Average works duration

DURATION	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 8)
Average duration (days)	2.6	2.7	2.4	-0.3
Total number of days worked	37,841	25,449	21,877	-3,572

3.2.19 The average duration reduced to 2.4 days in year 9, following a small increase to 2.7 days the previous year. This is the lowest average duration since year 3 of the scheme.

3.2.20 There were 15,964 fewer days worked compared with year 1 – a 42% reduction overall due to the reduction in number of works recorded.

3.2.21 The average duration for highway works reduced from 2.0 days to 1.8 days. Utility works average duration shows a large reduction from 3.8 days in year 8 to 3.2 days in year 9.

3.2.22 A detailed analysis of the average duration of works by traffic management type and works category is shown in Appendix B for the 7 principal works promoters.

3.3 Scheme Benefits

3.3.1 Figure 1 presents the number of works per annum during the first full year of operation of the Permit Scheme and during years 8 and 9.

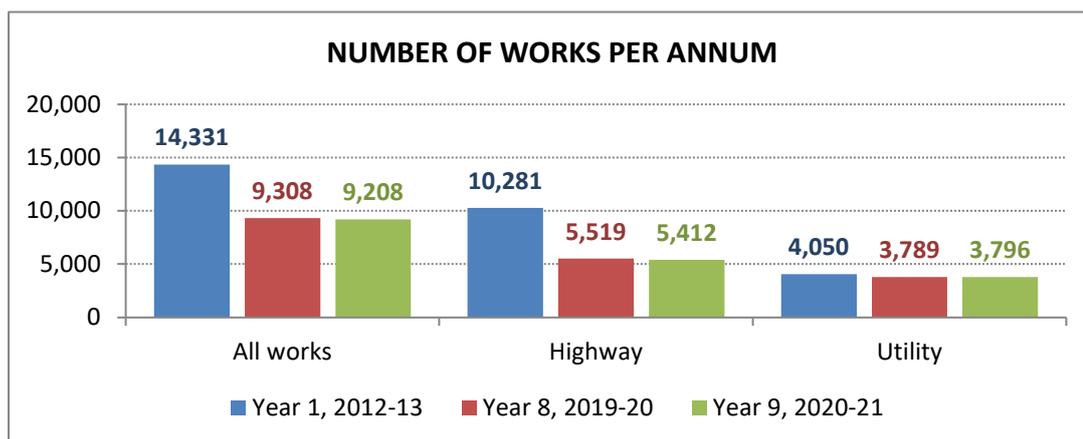


Figure 1 Number of works completed annually

- 3.3.2 The reduction in number of works across the network is significant at 35% compared with year 1 but only 1% lower than year 8.
- 3.3.3 Utility works are at the lowest level recorded since the introduction of the Permit Scheme.
- 3.3.4 A comparison of the average duration of works completed is presented in Figure 2.

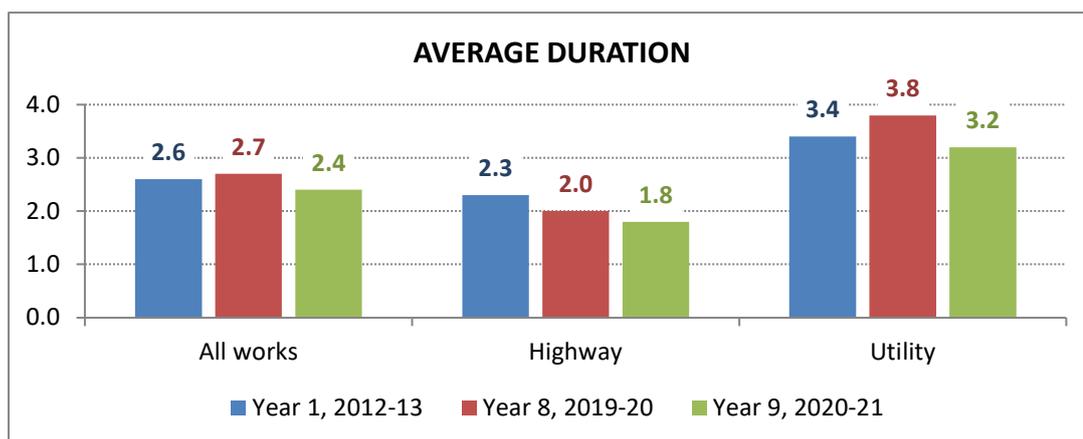


Figure 2 Average duration of completed works

- 3.3.5 Average durations have been relatively consistent year on year. The average duration for all categories has reduced in year 9, following an increase for utility works in year 8.
- 3.3.6 The total occupancy of the network (total number of days worked in any year) is compared in Figure 3.

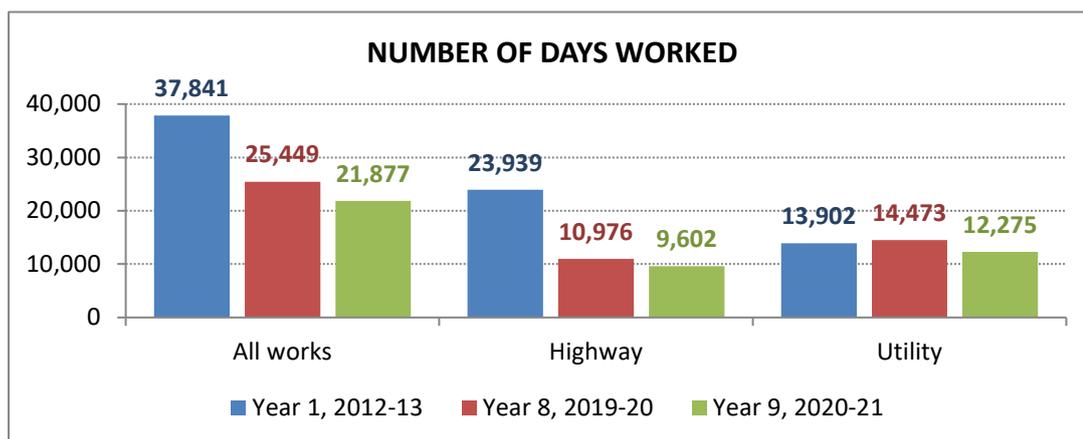


Figure 3 Number of days worked per annum

- 3.3.7 The total number of days worked has reduced by 42% since year 1 due to a small reduction in the average duration and a 36% reduction in the number of works recorded. The overall scheme benefit is further improved in year 9.
- 3.3.8 The reduction in number of highway works has resulted in a corresponding reduction in the number of days worked.
- 3.3.9 The number of utility works has reduced by 6% compared with year 1, but resulted in 12% reduction in the number of days worked overall. The reduction in average duration to 3.2 days in year 9 has contributed to this additional benefit.

3.4 Conclusions

- 3.4.1 The number of works permitted has steadily reduced over the 8-year life of the scheme, from a high in year 1 of 14,331 permits completed to 9,208 in year 9. Highway authority permits have reduced by a factor of 2, but still account for more than 50% of all permits granted.
- 3.4.2 Notable changes from year 8 is a 249 increase in works completed by Virgin Media and 128 and 100 fewer works completed by United Utilities Water Limited and Scottish Power (Manweb). The former has returned to a level comparable with the year 1 records, following a reduction in year 8.
- 3.4.3 The overall average duration of 2.4 days is the lowest duration since the introduction of the scheme and 0.3 days lower than the previous four years.
- 3.4.4 There were 15,964 fewer days worked compared with year 1 – a 42% reduction overall due to a small reduction in the average duration and a 36% reduction in the number of works recorded.
- 3.4.5 The benefits achieved in the first year of the Permit Scheme have been further improved in year 9.



4 KPI MONITORING

4.1 Introduction

4.1.1 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

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

4.2 KPI review

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

4.2.2 **KPI 1** – The number of all permit and permit variation applications by statutory undertakers refused increased to 10% in year 9. The proportion of all applications refused also increased slightly, from 3% in the previous year to 5%.

4.2.3 The proportion of permit and permit variation applications granted, refused and deemed are shown in Figure 4.

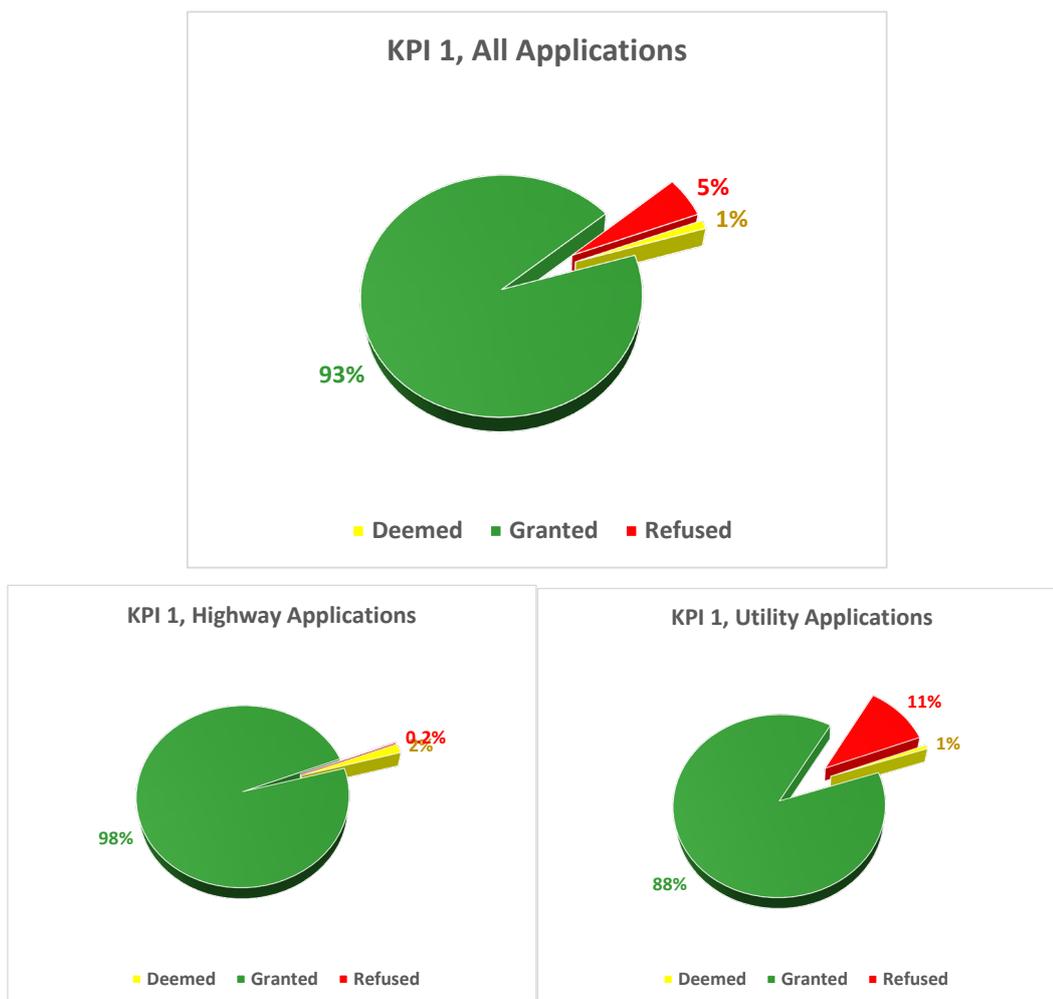


Figure 4: KPI 1, Permit and Variation Applications

- 4.2.4 667 of the applications refused were submitted by utility works promoters.
- 4.2.5 13 applications for highway works were refused; a refusal rate of 0.2%. The refusal rate for highway applications is lower as the department sits together in the same office, so liaise closely before applications are submitted.
- 4.2.6 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	6,235	104	13	0.2%
Utility	5,388	42	667	10.9%
ALL	11,623	146	680	5.5%

- 4.2.7 A relatively high number of deemed permits in year 9 was due to a Symology API / Street Manager issue following the introduction of Street Manager in July 2021.
- 4.2.8 With regards to KPI 1, the high amount of granted permits does not reflect the actual amount of work involved by St Helens permit coordinators, as they only refuse permits



where the activity promoters fail to update the permit. Permit modification requests are issued in the first instance to avoid permit refusals.

- 4.2.9 If this process was not applied by the permit authority, then there would have been a much higher percentage of refused permits.
- 4.2.10 **KPI 2** – number of permit conditions applied by conditions type; Table 8 shows the total number of each standard condition applied to highway authority and public utility works promoters.
- 4.2.11 The number of conditions applied to highway and utility permits is shown in Table 8.

Table 8 KPI 2 Permit Conditions

All Conditions	Utility	Highway	All
TOTAL	6,518	393	6,911
	94%	6%	

- 4.2.12 The number of conditions applied in year 9 are very similar to the number applied in the previous year.
- 4.2.13 A breakdown for each condition is shown in Table 9.

Table 9 KPI 2 Number and Type of Conditions Applied

Condition	Condition Description	Utility	Highway	All
NCT02a	Date constraints	1,986	329	2,315
NCT02b	Time constraints	442	7	449
NCT04a	Material & plant removal	195	0	195
NCT04b	Material & plant storage	275	0	275
NCT05a	Road occupation dimensions	129	0	129
NCT06a	Traffic space dimensions	920	0	920
NCT07a	Road closure	123	18	141
NCT08a	Light signals - tm request	511	19	530
NCT08b	Light signals - manual control	333	5	338
NCT09a	Traffic management changes - notify	324	0	324
NCT09b	Traffic management changes - directed	17	0	17
NCT09c	Traffic management changes - signal removal	239	0	239
NCT10a	Work methodology	351	0	351
NCT11b	Consultation & publicity	612	14	626
NCT12a	Environmental - limit timing of activities	7	0	7
NCT13	Local condition	54	1	55
	TOTAL	6,518	393	6,911

- 4.2.14 94% of all permit conditions were applied by public utility works promoters.
- 4.2.15 The conditions are evenly spread across most condition types, other than a large number of condition NCT02a date constraints and NCT06a traffic space dimensions being selected.



- 4.2.16 Conditions applied to highway works generally relate to date constraints, road closures, temporary traffic signals and consultation/publicity.
- 4.2.17 The number applied by condition type are shown in Figure 5. The blue bars show public utility permits and green show highway authority permits.

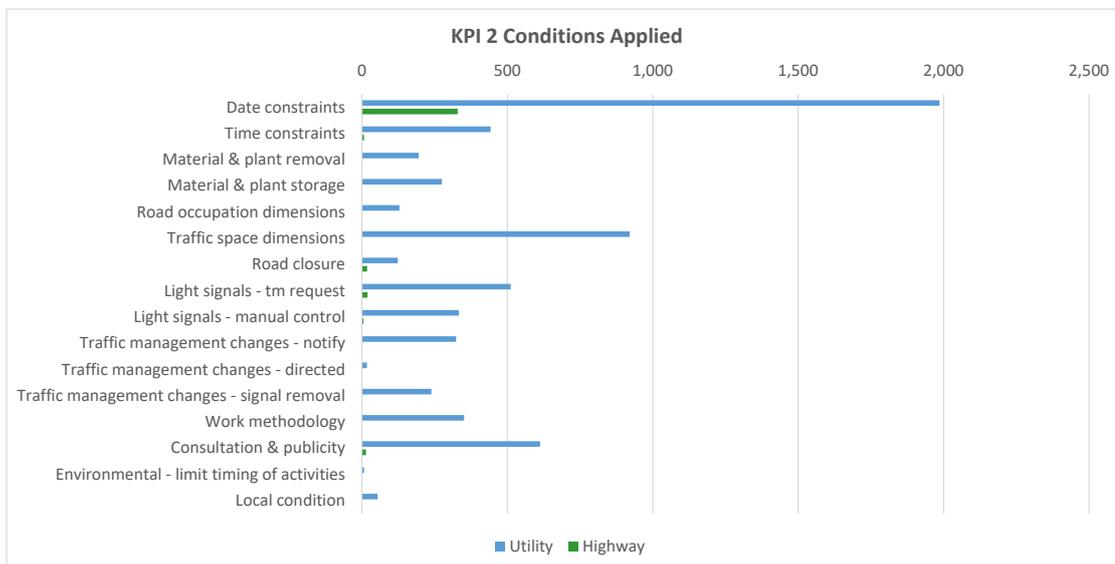
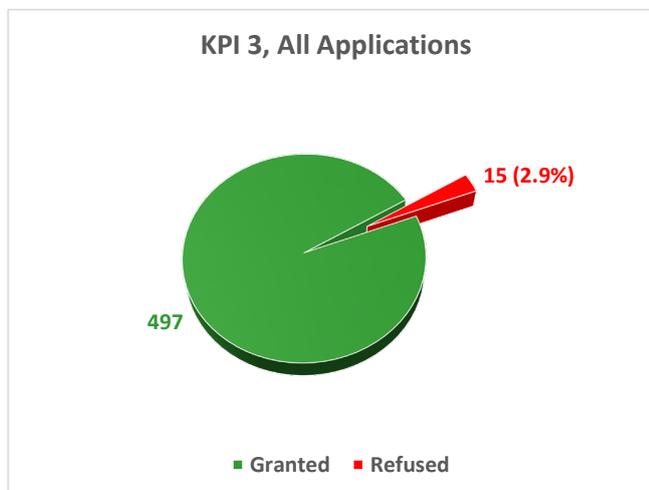


Figure 5: KPI 2, Conditions Applied

- 4.2.18 KPI 3 - The following charts show the number of extensions granted and refused, for all promoters and for statutory undertakers only (KPI 3).



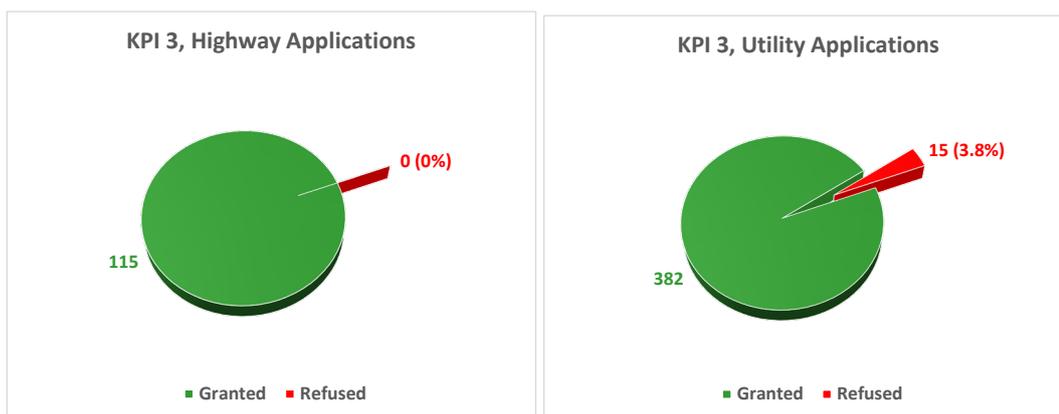


Figure 6: KPI 3, Permit Extensions

- 4.2.19 Year 9 saw 512 applications to extend the duration of a permit; down from 626 in year 8. This is a result of a reduction in the number of extension requests submitted by public utilities, from 511 in year 8 to 397 last year.
- 4.2.20 In general, permit extension requests are not refused, but are granted and any requests that are not deemed to be acceptable are duration challenged back to the original duration.
- 4.2.21 Last year only 15 extension requests were refused (3.8%) compared with 2 requests (0.3%) refused in year 8. All were submitted by statutory undertakers. This change is not thought to be significant.
- 4.2.22 Table 10 shows the number of requests to extend the permit duration and the number granted and refused.

Table 10 KPI 3 Duration Extension Requests

Promoter	Applications	Granted	Refused	% Refused
Highway authority	115	115	0	0.0%
Utility	397	382	15	3.8%
ALL	512	497	15	2.9%

- 4.2.23 **KPI 7** - the Number of Inspections carried out to monitor conditions.
- 4.2.24 Table 11 shows the number of inspections carried out to monitor permit conditions.

Table 11 Permit Inspections

Permit Condition Inspections	Passed	Non-Compliant	Abortive	Number of Inspections	Fail %
Highway authority	2	4	0	6	67%
Utility	609	402	0	1,011	40%
ALL	611	406	0	1,017	40%

- 4.2.25 The number of permit inspections recorded has increased significantly compared with previous years, from 81 in year 7, 478 in year 8 to 1,017 in year 9.
- 4.2.26 The failure rate has reduced, from 17% of to 40% last year.



- 4.2.27 137 Fixed Penalty Notices for a breach of permit conditions were given during the course of the year; 21 for working without a permit (19(1)) and 116 for a breach of permit conditions (20(1)).
- 4.2.28 This is an increase on the 98 FPN given for a non-compliance found on a permit inspection in year 8.
- 4.2.29 The number of fixed penalty notices given by type are shown in Figure 7.

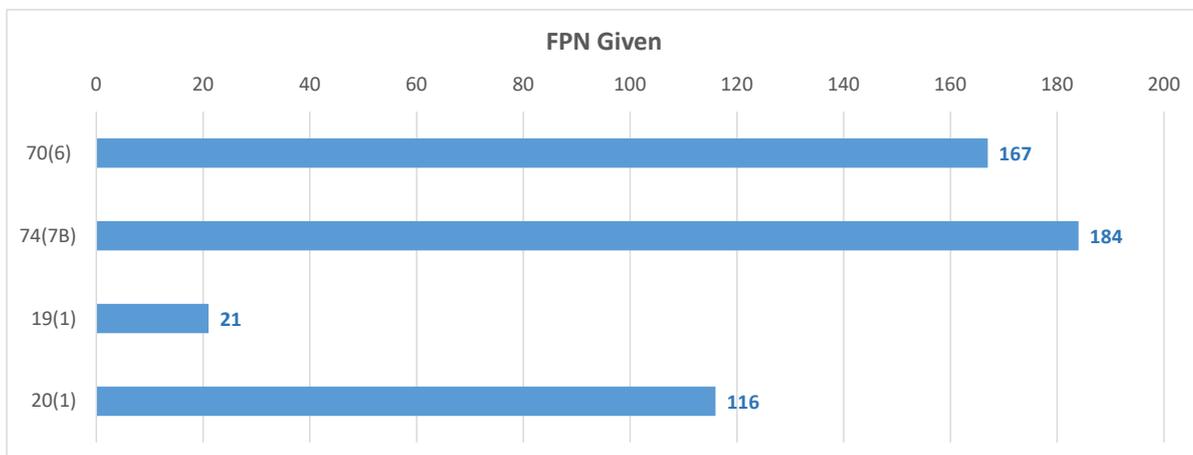


Figure 7: KPI 7, FPN Given

- 4.2.30 Overall, the number of FPN given has increased from 205 in year 8 to 488 last year.
- 4.2.31 The FPN rate for each works promoter is shown in Figure 8. The number shown alongside each bar is the number of permits granted.

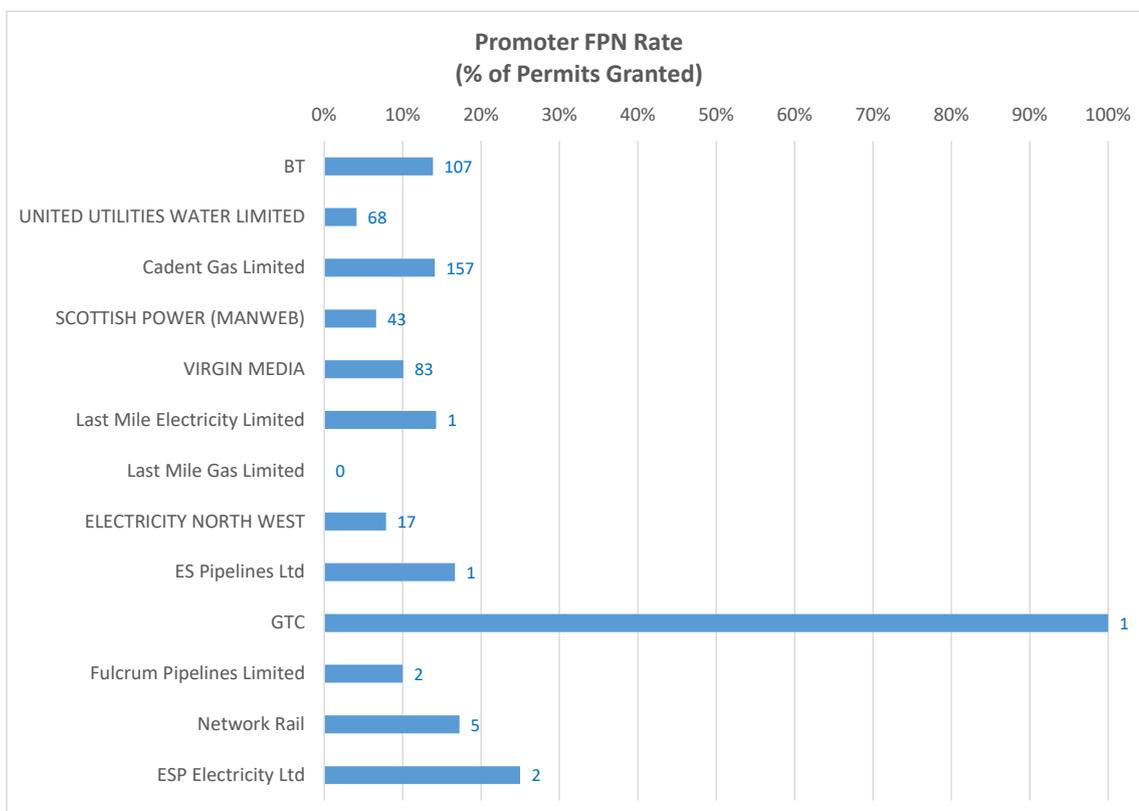


Figure 8: KPI 7, Promoter FPN Rate



- 4.2.32 The issue rate for FPN is generally below 20% for promoters, other than GTC where the 100% rate is skewed by 1 FPN being given for only 1 permit granted.
- 4.2.33 Table 12 shows the number of inspections carried out in each year since the introduction of the Permit Scheme in 2012.

Table 12 Permit Inspections – Annual Comparison

Permit Condition Inspections	Passed	Non-Compliant	Abortive	Number of Inspections	Fail %
YEAR 1	838	237	0	1,075	22%
YEAR 2	831	253	1	1,085	23%
YEAR 3	451	144	1	596	24%
YEAR 4	N/A	N/A	N/A	N/A	
YEAR 5	188	139	0	327	43%
YEAR 6	143	90	0	233	39%
YEAR 7	51	38	0	89	43%
YEAR 8	399	79	0	478	17%
YEAR 9	611	406	0	1,017	40%

- 4.2.34 A change in how permit inspections were carried out and recorded in year 8 shows a significant increase in the number recorded, with the number of inspections recorded last year returning to the level recorded during the first two years of the scheme.
- 4.2.35 The non-compliance rate is relatively high at 40%.

4.3 Conclusions

- 4.3.1 The analysis demonstrates that only a small proportion of permit and permit variation applications are refused.
- 4.3.2 The number of all permit and permit variation applications by statutory undertakers refused increased to 10% in year 9. The proportion of all applications refused also increased slightly, from 3% in the previous year to 5%.
- 4.3.3 Year 9 saw 512 applications to extend the duration of a permit; down from 626 in year 8. This is a result of a reduction in the number of extension requests submitted by public utilities, from 511 in year 8 to 397 last year.
- 4.3.4 Last year only 15 extension requests were refused (3.8%) compared with 2 requests (0.3%) refused in year 8. All were submitted by statutory undertakers. This change is not thought to be significant.
- 4.3.5 137 Fixed Penalty Notices for a breach of permit conditions were given during the course of the year; 21 for working without a permit (19(1)) and 116 for a breach of permit conditions (20(1)). This is an increase on the 98 FPN given for a non-compliance found on a permit inspection in year 8.



4.3.6 A change in how permit inspections were carried out and recorded in year 8 shows a significant increase in the number recorded, with the number of inspections recorded last year returning to the level recorded during the first two years of the scheme. The non-compliance rate is relatively high at 40%.



5 STAFFING & RESOURCE

5.1 Summary

- 5.1.1 The DfT Fees Matrix used to estimate staff numbers and set the permit fee charges for the original CBA business case, has been re-run with the actual number of permit applications granted in year 9, to determine whether the staff numbers forecast in the business case are still appropriate.
- 5.1.2 Overall, the number of works completed in year 9 is lower than originally forecast in the 2010 business case, at 9,208 compared with 14,209 forecast in 2010.
- 5.1.3 Utility works have been relatively consistent, varying by +/- 10% from an average of 4,400 works in the first 9 years of the scheme. However, the number recorded in years 8 and 9 have been more than 10% lower than the average since the scheme started in 2012. 3,796 utility works were completed in year 9.
- 5.1.4 Highway works have reduced from 10,281 in the first year to 5,412 in year 9.
- 5.1.5 The ratio of highway : utility works has changed from 72:28 to 55:45 in later years.
- 5.1.6 Symology reported 56 highway permits and 628 utility permits granted were cancelled before work started. This amounts to less than 6% of all permits granted; 1% of highway permits granted and 11% of utility permits granted.
- 5.1.7 These have been included in the Fees Matrix assessment of resource and operating cost, since staff resource was allocated to review and grant the permits and a permit fee charged.
- 5.1.8 The assessment is based on the following inputs:
 - 4,424 permits granted for utility works promoters (4,050 in 2010 CBA)
 - 5,468 permits granted for highway authority promoters (10,281 in 2010 CBA)
 - Permit variation applications granted at 24% of total permits granted

5.2 Staff Resource

- 5.2.1 The DfT Fees Matrix calculates the number of staff required to process the granted permit applications.
- 5.2.2 The original business case assessment carried out for the Cost Benefit Assessment forecast the number of staff required to process the estimated number of permit applications at 9.0 full time equivalent (FTE) staff (Table 13).

Table 13 CBA business case forecast, 2010-11

PERSONNEL LEVEL	All Works	Utilities
Street Works Officer	4.1	1.2
Street Works Co-ordinator	3.5	1.0
Traffic Manager	1.4	0.4
Total employees	8.99	2.56



- 5.2.3 The high number of staff required was due to the large number of highway works applications anticipated. 2.6 FTE staff were calculated to be required to process utility applications.
- 5.2.4 Using the actual number of utility and highway authority permit applications recorded in year 9, the same Fees Matrix spreadsheet calculates the total number of FTE staff requirement at 5.8 (Table 14).

Table 14 Year 9 staff resource, 2020-21

PERSONNEL LEVEL	All Works	Utilities
Street Works Officer	2.6	1.3
Street Works Co-ordinator	2.3	1.1
Traffic Manager	0.9	0.5
Total employees	5.83	2.83

- 5.2.5 The number of staff required to process utility permits has increased slightly – to 2.8 FTE. This calculation has reduced in years 8 and 9 following the reduction in number of utility works from the high recorded in year 6.
- 5.2.6 The requirement for staff to process highway applications has reduced by 3.4 FTE over the first 9 years of the scheme. This has been a relatively steady year on year reduction in staff numbers from year 3 of the scheme.
- 5.2.7 The reduction in staff resource required to process highway permit applications will be reflected in a lower overall cost to the Council to operate the full scheme.

5.3 Operating Cost

- 5.3.1 Using the same Fees Matrix spreadsheet, the cost to process all permit applications granted in year 9 is £645,446.
- 5.3.2 The cost to process utility permits granted is £315,418. This broken down to £238,795 for staff costs to process utility permit applications granted and £37,145 for the additional fees charged for permit variations.
- 5.3.3 The permit fees charged in all years includes a surcharge to cover the utilities’ share of the allowable operational costs. This surcharge recovered £39,478 in year 9 and is approximately 12% of the total annual income.

Table 15 Year 9 Operating costs, 2020-21

	NUMBER OF STAFF	SCHEME COST	EMPLOYEE COSTS		OTHER COSTS
			PERMIT APPLICATIONS	VARIATIONS	OVERHEADS
All works	5.8	£645,446	£485,228	£79,366	£80,852
Utility works only	2.8	£315,418	£238,795	£37,145	£39,478



5.4 Fee Income

5.4.1 Permit fee income in year 9 was £301,473, with £261,071 charged for permit applications granted and £40,402 charged for variations to the granted permits.

5.4.2 The above analysis shows that a small operating loss of £13,945 was incurred in year 9.

5.4.3 The fee income billed for each month in the year is shown in Figure 9 below.

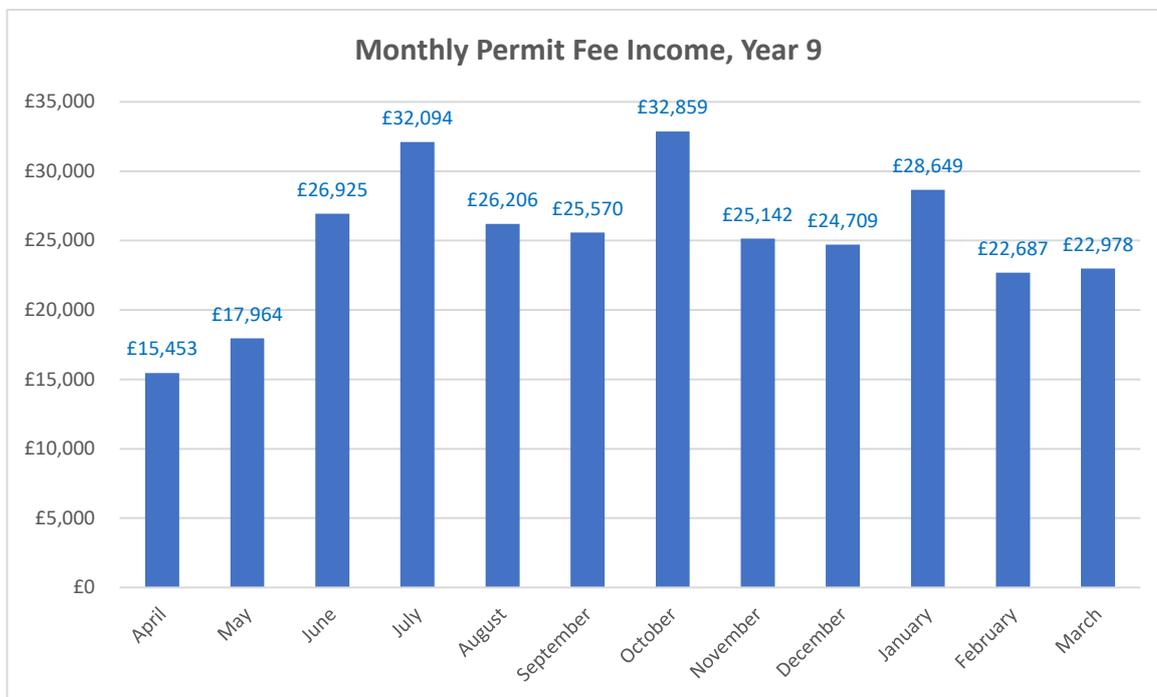


Figure 9: Monthly Fee Income

5.4.4 Fee income was clearly impacted for the first 2 months of lockdown last year, with values around £10,000 to £15,000 lower than would normally be expected.

5.4.5 Therefore, it has been decided to leave fee income unchanged and review again at the end of next year.



6 CONCLUSIONS

6.1 Summary

- 6.1.1 St Helens Council (SHC) has been operating a Street Works Permit Scheme since April 2012. The Scheme operates as the St Helens (October 2015) Permit Scheme (MAPS). An approved Common Scheme currently operated by SHC only.
- 6.1.2 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*'.
- 6.1.3 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.
- 6.1.4 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).
- 6.1.5 At the end of each subsequent year, further reviews have been carried out and reported. This is a lower level review to monitor key performance indicators and identify and report any significant changes year on year.
- 6.1.6 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.
- 6.1.7 The number of works permitted has steadily reduced over the 8-year life of the scheme, from a high in year 1 of 14,331 permits completed to 9,308 in year 8. Highway authority permits have reduced by a factor of 2, but still account for more than 50% of all permits granted.
- 6.1.8 Utility works permits have been relatively consistent year on year, varying by +/- 10% from an average of 4,400 works.

6.2 Scheme benefits

- 6.2.1 The overall average duration of 2.4 days is the lowest duration since the introduction of the scheme and 0.3 days lower than the previous four years.
- 6.2.2 There were 15,964 fewer days worked compared with year 1 – a 42% reduction overall due to a small reduction in the average duration and a 36% reduction in the number of works recorded.
- 6.2.3 The benefits achieved in the first year of the Permit Scheme have been further improved in year 9.



6.3 Recommendations

- 6.3.1 None of the issues identified during the review are thought to be significant in terms of the calculated Scheme benefits.
- 6.3.2 All recommendations made following previous reviews have been satisfactorily addressed during year 9. Therefore, no recommendations or interventions are required in the current year.
- 6.3.3 This is the first year a review of a North West permit scheme has concluded with no recommendations to mitigate issues required, and demonstrates the successful application of the scheme in achieving the performance benefits. This is a result of the experience gained from successfully running the scheme over many years.

6.4 Permit Fees

- 6.4.1 A review of permit fee income and operating costs has identified a small operating loss of under £14,000 or less than 5% of fee income.
- 6.4.2 Given that fee income was clearly impacted for the first 2 months of lockdown last year, with values around £10,000 to £15,000 lower than would normally be expected, it has been decided to leave fee income unchanged and review again at the end of next year.

6.5 Conclusions

- 6.5.1 Monitoring the key performance indicators and evidence gained from the ninth 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
- 6.5.2 This review has demonstrated that Scheme continues to meet its key objectives, as defined in the Scheme document.

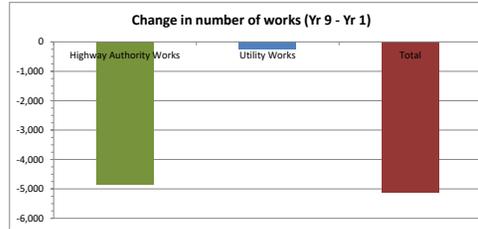
A. PERMIT APPLICATIONS 2020-21

A.1 All works permits

Works Stopped Permits, Duration Analysis
All Works Permits

Table A.1: Number of works p.a., year on year comparison

PROMOTER TYPE	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
Highway Authority Works	10,281	5,519	5,412	-4,869	-47.4%
Utility Works	4,050	3,789	3,796	-254	-6.3%
Total	14,331	9,308	9,208	-5,123	-35.7%



Change (Yr 9 - Yr 8)	% Change
-107	-1.9%
7	0.2%
-100	-1.1%

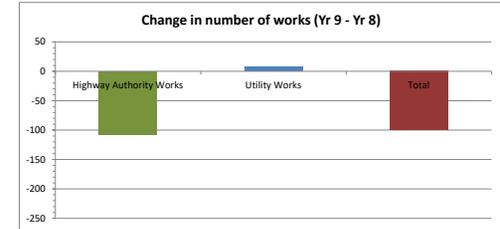
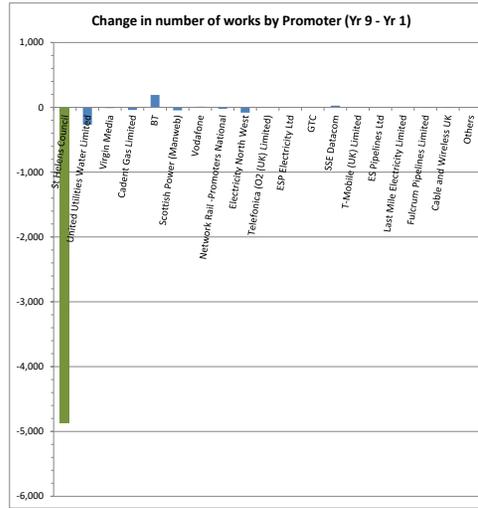


Table A.2: Number of works by Promoter, year on year comparison

PROMOTER	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
St Helens Council	10,281	5,519	5,412	-4,869	-47.4%
United Utilities Water Limited	1,622	1,484	1,356	-266	-16.4%
Virgin Media	652	392	641	-11	-1.7%
Cadent Gas Limited	640	536	599	-41	-6.4%
BT	367	568	558	191	52.0%
Scottish Power (Manweb)	474	528	428	-46	-9.7%
Vodafone	3	17	13	10	333.3%
Network Rail -Promoters National	39	11	17	-22	-56.4%
Electricity North West	208	180	126	-82	-39.4%
Telefonica (O2 (UK) Limited)	5			-5	-100.0%
ESP Electricity Ltd		10	2	2	
GTC	2	4	1	-1	-50.0%
SSE Datacom	6	1	32	26	433.3%
T-Mobile (UK) Limited		4	4	4	
ES Pipelines Ltd	2	10	2		
Last Mile Electricity Limited	2	11	2		
Fulcrum Pipelines Limited	19	4	9	-10	-52.6%
Cable and Wireless UK	9			-9	-100.0%
Others		39	6	6	
Total	14,331	9,318	9,208	-5,123	-35.7%



Change (Yr 9 - Yr 8)	% Change
-107	-1.9%
-128	-8.6%
249	63.5%
63	11.8%
-10	-1.8%
-100	-18.9%
-4	-23.5%
6	54.5%
-54	-30.0%
-8	-80.0%
-3	-75.0%
31	3100.0%
-8	-80.0%
-9	-81.8%
5	125.0%
-33	-84.6%
-110	-1.2%

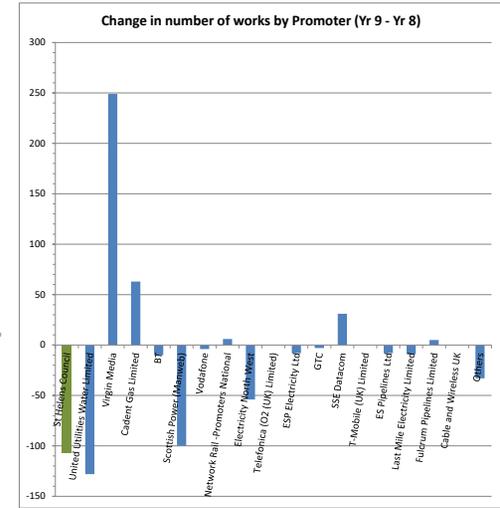
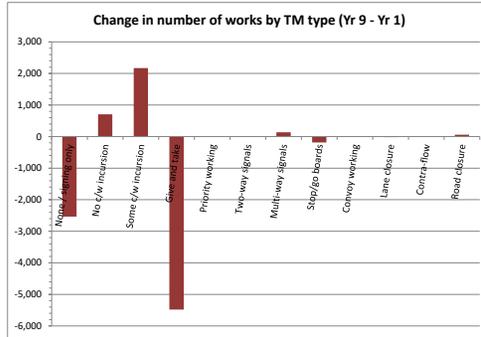


Table A.3: Number of works by traffic management type, year on year comparison

TRAFFIC MANAGEMENT TYPE	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
None / signing only	2,535			-2,535	-100.0%
No c/w incursion		992	707	707	
Some c/w incursion		2,066	2,170	2,170	
Give and take	10,855	5,170	5,373	-5,482	-50.5%
Priority working	4	11	5	1	25.0%
Two-way signals	320	365	333	13	4.1%
Multi-way signals	148	315	284	136	91.9%
Stop/go boards	230	73	45	-185	-80.4%
Convoy working	2	17	9	7	350.0%
Lane closure	143	131	128	-15	-10.5%
Contra-flow	2	9	3	1	50.0%
Road closure	92	159	151	59	64.1%
Blank					
Total	14,331	9,308	9,208	-5,123	-35.7%



Change (Yr 9 - Yr 8)	
-285	-28.7%
104	5.0%
203	3.9%
-6	-54.5%
-32	-8.8%
-28	-38.4%
-8	-47.1%
-3	-2.3%
-6	-66.7%
-8	-5.0%
-100	-1.1%

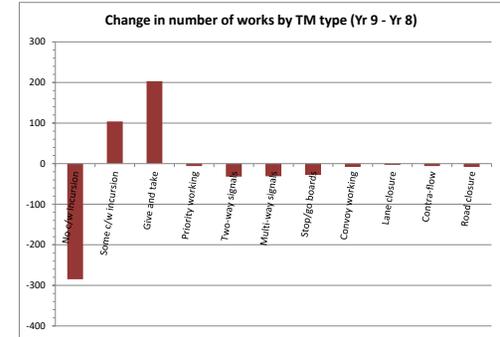
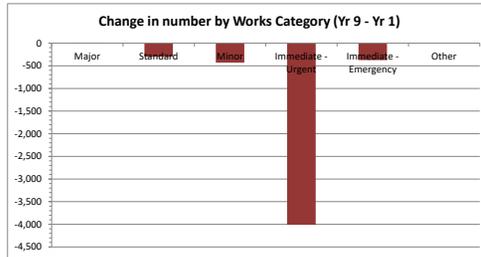


Table A.4: Number of works by works category, year on year comparison

WORKS STOPPED	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
Major	254	362	246	-8	-3.1%
Standard	616	666	315	-301	-48.9%
Minor	2,801	2,175	2,370	-431	-15.4%
Immediate - Urgent	10,045	5,907	6,035	-4,010	-39.9%
Immediate - Emergency	615	198	242	-373	-60.7%
Other					
Total	14,331	9,308	9,208	-5,123	-35.7%



Change (Yr 9 - Yr 8)	
-116	-32.0%
-351	-52.7%
195	9.0%
128	2.2%
44	22.2%
-100	-1.1%

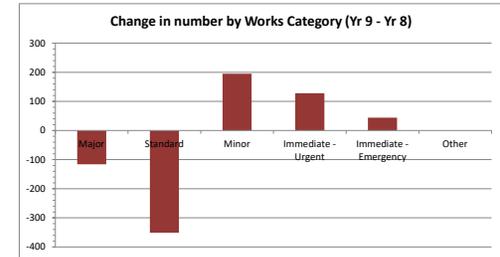
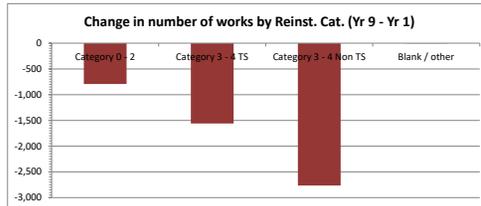


Table A.5: Traffic sensitivity, year on year comparison

REINSTATEMENT CATEGORY	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
Category 0 - 2	3,598	2,796	2,804	-794	-22.1%
Category 3 - 4 TS	3,890	2,385	2,330	-1,560	-40.1%
Category 3 - 4 Non TS	6,755	4,053	3,991	-2,764	-40.9%
Blank / other	88	74	83	-5	-5.7%
All works	14,331	9,308	9,208	-5,123	-35.7%



Change (Yr 9 - Yr 8)	
8	0.3%
-55	-2.3%
-62	-1.5%
9	12.2%
-100	-1.1%

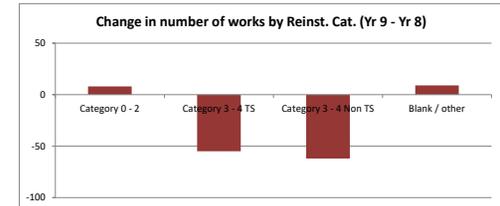


Table A.6: Average works duration, year on year comparison

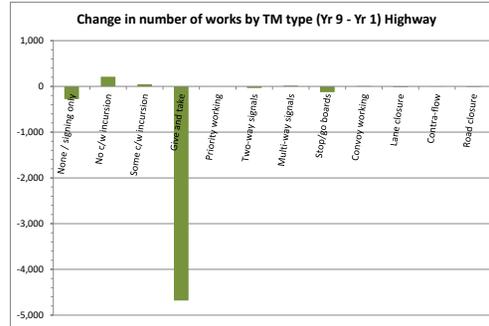
DURATION	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
Average duration (days)	2.6	2.7	2.4	-0.2	-9.1%
Total number of days worked	37,841	25,449	21,877	-15,964	-42.2%

Change (Yr 9 - Yr 8)	
-0.3	-11.1%
-3,572	-14.0%

A.2 Highway authority works permits

Table A.7: Number of works by traffic management type, year on year comparison

TRAFFIC MANAGEMENT TYPE	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
None / signing only	278			-278	-100.0%
No c/w incursion		314	211	211	
Some c/w incursion		121	48	48	
Give and take	9,537	4,665	4,856	-4,681	-49.1%
Priority working		1			
Two-way signals	135	113	98	-37	-27.4%
Multi-way signals	25	67	40	15	60.0%
Stop/go boards	132	37	7	-125	-94.7%
Convoy working	2	15	9	7	350.0%
Lane closure	111	97	94	-17	-15.3%
Contra-flow	1	2		-1	-100.0%
Road closure	60	87	49	-11	-18.3%
Blank					
Total	10,281	5,519	5,412	-4,869	-47.4%



Change (Yr 9 - Yr 8)	
-103	-32.8%
-73	-60.3%
191	4.1%
-1	-100.0%
-15	-13.3%
-27	-40.3%
-30	-81.1%
-6	-40.0%
-3	-3.1%
-2	-100.0%
-38	-43.7%
-107	-1.9%

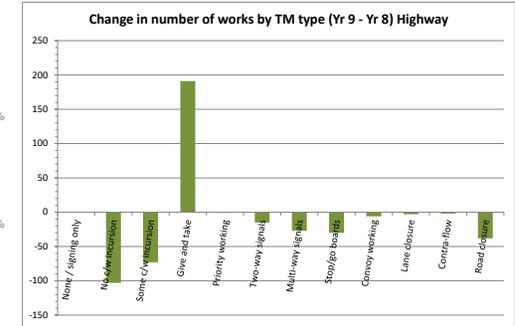
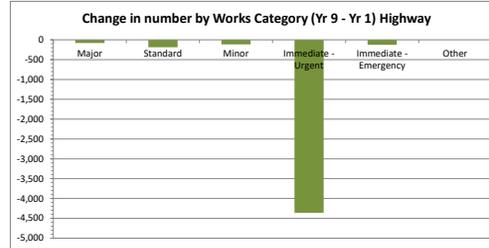


Table A.8: Number of works by works category, year on year comparison

WORKS STOPPED	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
Major	161	207	79	-82	-50.9%
Standard	279	219	93	-186	-66.7%
Minor	542	470	426	-116	-21.4%
Immediate - Urgent	9,168	4,615	4,809	-4,359	-47.5%
Immediate - Emergency	131	8	5	-126	-96.2%
Other					
Total	10,281	5,519	5,412	-4,869	-47.4%



Change (Yr 9 - Yr 8)	
-128	-61.8%
-126	-57.5%
-44	-9.4%
194	4.2%
-3	-37.5%
-107	-1.9%

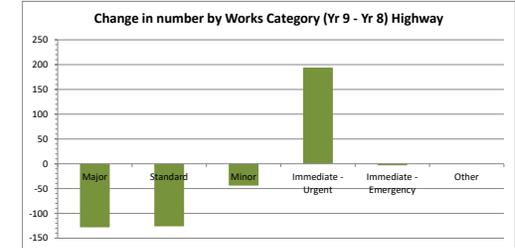


Table A.9: Average works duration, year on year comparison

DURATION	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
Average duration (days)	2.3	2.0	1.8	-0.5	-22.7%
Total number of days worked	23,939	10,976	9,602	-14,337	-59.9%

Year 9, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
40.9	8.9	1.3	1.0	2.6
3,229	828	550	4,982	13

Change (Yr 9 - Yr 8)	
-0.2	-10.0%
-1,374	-12.5%

Year 9, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
40.9	8.9	1.3	1.0	2.6
3,229	828	550	4,982	13

Year 1, 2012-13, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
13.8	5.5	2.4	2.0	4.8
2,214	1,541	1,325	18,225	634

Year 8, 2019-20, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
19.7	6.9	1.6	1.0	2.4
4,080	1,512	741	4,624	19

Difference, Year 9 - Year 1

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
27.1	3.4	-1.1	-1.0	-2.2
1,015	-713	-775	-13,243	-621

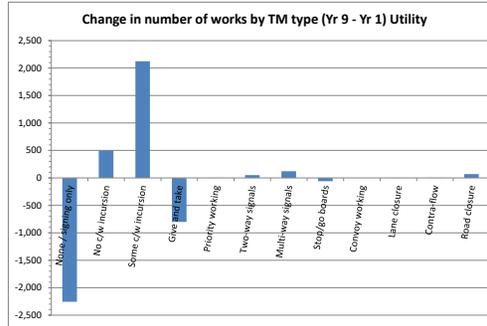
Difference, Year 9 - Year 8

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
21.2	2.0	-0.3		0.2
-851	-684	-191	358	-6

A.3 Utility works permits

Table A.10: Number of works by traffic management type, year on year comparison

TRAFFIC MANAGEMENT TYPE	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
None / signing only	2,257			-2,257	-100.0%
No c/w incursion		678	496	496	
Some c/w incursion		1,945	2,122	2,122	
Give and take	1,318	505	517	-801	-60.8%
Priority working	4	10	5	1	25.0%
Two-way signals	185	252	235	50	27.0%
Multi-way signals	123	248	244	121	98.4%
Stop/go boards	98	36	38	-60	-61.2%
Convoy working		2		2	
Lane closure	32	34	34	2	6.3%
Contra-flow	1	7	3	2	200.0%
Road closure	32	72	102	70	218.8%
Total	4,050	3,789	3,796	-254	-6.3%



Change (Yr 9 - Yr 8)	
-182	-26.8%
177	9.1%
12	2.4%
-5	-50.0%
-17	-6.7%
-4	-1.6%
2	5.6%
-2	-100.0%
-4	-57.1%
30	41.7%
7	0.2%

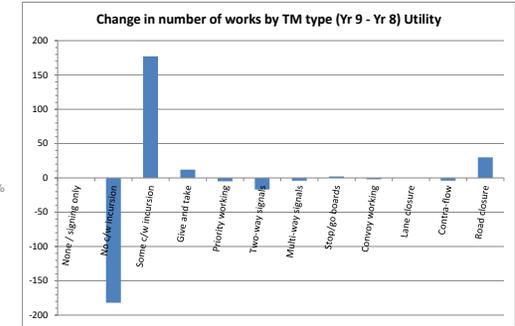
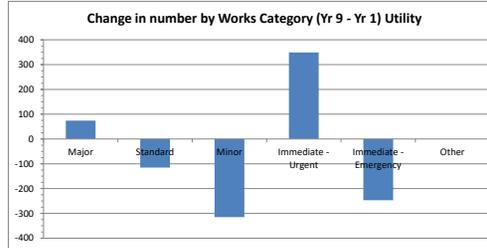


Table A.11: Number of works by works category, year on year comparison

WORKS STOPPED	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
Major	93	155	167	74	79.6%
Standard	337	447	222	-115	-34.1%
Minor	2,259	1,705	1,944	-315	-13.9%
Immediate - Urgent	877	1,292	1,226	349	39.8%
Immediate - Emergency	484	190	237	-247	-51.0%
Other					
Total	4,050	3,789	3,796	-254	-6.3%



Change (Yr 9 - Yr 8)	
12	7.7%
-225	-50.3%
239	14.0%
-66	-5.1%
47	24.7%
7	0.2%

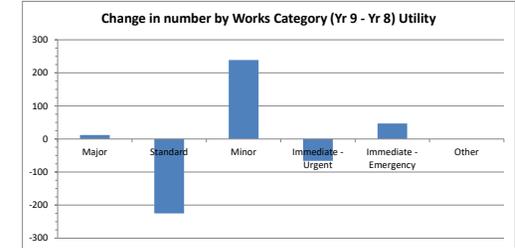


Table A.12: Average works duration, year on year comparison

DURATION	Year 1 2012-13	Year 8 2019-20	Year 9 2020-21	Change (Yr 9 - Yr 1)	
Average duration (days)	3.4	3.8	3.2	-0.2	-6.8%
Total number of days worked	13,902	14,473	12,275	-1,627	-11.7%

Year 9, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
11.7	5.8	1.7	3.7	4.8
1,948	1,281	3,339	4,556	1,148

Change (Yr 9 - Yr 8)	
-0.6	-15.8%
-2,198	-15.2%

Year 1, 2012-13, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
19.6	5.9	1.7	4.6	4.6
1,822	1,978	3,851	4,018	2,233

Difference, Year 9 - Year 1

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
-7.9	-0.1	0.0	-0.9	0.2
126	-697	-512	538	-1,085

Year 9, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
11.7	5.8	1.7	3.7	4.8
1,948	1,281	3,339	4,556	1,148

Year 8, 2019-20, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
15.6	6.5	1.9	3.8	5.4
2,420	2,913	3,170	4,952	1,018

Difference, Year 9 - Year 8

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
-3.9	-0.7	-0.2	-0.1	-0.6
-472	-1,632	169	-396	130

B. PROMOTER DURATION ANALYSIS

Works Promoter Duration Analysis

TRAFFIC MANAGEMENT & DURATION, ST HELENS COUNCIL

NO C/W INCURSION	SOME C/W INCURSION	STOP/GO BOARDS	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	GIVE & TAKE	PRIORITY WORKING	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
2.2	22.7	2.6	3.3	6.2	1.1	#DIV/0!	1.3	21.9	#DIV/0!	5.2
Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum
92.0	287.0	6.0	98.0	126.0	58.0		2.0	202.0		126.0

>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
2	12		2	2	6			16		2
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
1	6		1	2	2			14		1
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
1	3		1	1				13		1
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180
	2							4		

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 464 | 1,088 | 18 | 320 | 249 | 5,133 | | 12 | 2,061 | | 257 |

| Number |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 211 | 48 | 7 | 98 | 40 | 4,856 | | 9 | 94 | | 49 |

Total Number of Works

5,412

Average Duration

1.8

Total Number of Days Worked

9,602

WORKS CATEGORIES, ST HELENS COUNCIL

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
40.9	8.9	1.3	1.0	2.6
Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	1.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum
287.0	163.0	10.0	98.0	5.0

>15	>15	>15	>15	>15
30	9		3	
>30	>30	>30	>30	>30
23	3		1	
>60	>60	>60	>60	>60
18	1		1	
>180	>180	>180	>180	>180
6				

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|
| 3,229 | 828 | 550 | 4,982 | 13 |

Number	Number	Number	Number	Number
79	93	426	4,809	5

Works Promoter Duration Analysis

TRAFFIC MANAGEMENT & DURATION, UNITED UTILITIES WATER PLC (HZ)

NO C/W INCURSION	SOME C/W INCURSION	STOP/GO BOARDS	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	GIVE & TAKE	PRIORITY WORKING	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
3.3	2.7	1.4	2.5	1.9	3.4	1.7	#DIV/0!	3.0	4.0	2.6
Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum
17.0	9.0	4.0	5.0	5.0	10.0	2.0		5.0	4.0	7.0

>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
1										
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 209 | 2,011 | 13 | 210 | 177 | 1,012 | 5 | | 24 | 4 | 131 |

| Number |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 64 | 746 | 9 | 85 | 94 | 296 | 3 | | 8 | 1 | 50 |

Total Number of Works

1,356

Average Duration

2.8

Total Number of Days Worked

3,796

WORKS CATEGORIES UNITED UTILITIES WATER PLC (HZ)

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
2.2	4.0	1.9	3.5	1.7
Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	1.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum
8.0	9.0	7.0	17.0	4.0

>15	>15	>15	>15	>15
			1	
>30	>30	>30	>30	>30
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|
| 53 | 88 | 1,069 | 2,561 | 25 |

Number	Number	Number	Number	Number
24	22	561	734	15

Works Promoter Duration Analysis

TRAFFIC MANAGEMENT & DURATION, CADENT GAS LIMITED (AZ)

NO C/W INCURSION	SOME C/W INCURSION	STOP/GO BOARDS	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	GIVE & TAKE	PRIORITY WORKING	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
4.1	6.0	1.0	7.0	8.1	5.9	#DIV/0!	#DIV/0!	16.5	#DIV/0!	15.8
Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	1.0	1.0	1.0			5.0		3.0
Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum
16.0	60.0	1.0	38.0	32.0	37.0			50.0		49.0

>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
2	18		1	2	6			1		1
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
	2		1	1	1			1		1
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 393 | 2,186 | 1 | 153 | 300 | 413 | | | 66 | | 79 |

| Number |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 95 | 365 | 1 | 22 | 37 | 70 | | | 4 | | 5 |

Total Number of Works

599

Average Duration

6.0

Total Number of Days Worked

3,591

WORKS CATEGORIES CADENT GAS LIMITED (AZ)

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
14.3	6.8	2.0	4.7	5.6
Minimum	Minimum	Minimum	Minimum	Minimum
3.0	3.0	1.0	1.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum
60.0	17.0	5.0	20.0	28.0

>15	>15	>15	>15	>15
27	1		1	2
>30	>30	>30	>30	>30
7				
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|
| 1,401 | 490 | 368 | 266 | 1,066 |

Number	Number	Number	Number	Number
98	72	181	57	191

Works Promoter Duration Analysis

TRAFFIC MANAGEMENT & DURATION, BT (BC)

NO C/W INCURSION	SOME C/W INCURSION	STOP/GO BOARDS	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	GIVE & TAKE	PRIORITY WORKING	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
2.0	1.9	1.7	1.6	1.8	1.9	2.0	#DIV/0!	1.8	2.0	1.3
Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum
8.0	5.0	3.0	5.0	3.0	7.0	3.0		3.0	2.0	3.0

>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 172 | 475 | 19 | 68 | 100 | 182 | 4 | | 11 | 2 | 8 |
| Number |
| 86 | 252 | 11 | 43 | 55 | 96 | 2 | | 6 | 1 | 6 |

Total Number of Works

558

Average Duration

1.9

Total Number of Days Worked

1,041

WORKS CATEGORIES BT (BC)

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
1.0	4.6	1.8	1.9	2.1
Minimum	Minimum	Minimum	Minimum	Minimum
1.0	2.0	1.0	1.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum
1.0	8.0	7.0	5.0	3.0

>15	>15	>15	>15	>15
>30	>30	>30	>30	>30
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|
| 4 | 23 | 767 | 214 | 33 |
| Number | Number | Number | Number | Number |
| 4 | 5 | 422 | 111 | 16 |

Works Promoter Duration Analysis

TRAFFIC MANAGEMENT & DURATION, SCOTTISH POWER MANWEB (GY)										
NO C/W INCURSION	SOME C/W INCURSION	STOP/GO BOARDS	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	GIVE & TAKE	PRIORITY WORKING	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
3.6	4.6	1.0	4.7	5.1	5.4	#DIV/0!	#DIV/0!	3.4	2.0	4.8
Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	2.0	2.0	2.0			2.0	2.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum
7.0	9.0	1.0	11.0	10.0	12.0			5.0	2.0	10.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180

WORKS CATEGORIES SCOTTISH POWER MANWEB (GY)				
Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
5.3	4.9	2.5	4.8	1.0
Minimum	Minimum	Minimum	Minimum	Minimum
2.0	1.0	1.0	1.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum
10.0	11.0	4.0	12.0	1.0
>15	>15	>15	>15	>15
>30	>30	>30	>30	>30
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 506 | 683 | 1 | 187 | 231 | 145 | | | 27 | 2 | 76 |
| Number |
| 142 | 147 | 1 | 40 | 45 | 27 | | | 8 | 1 | 16 |

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|
| 42 | 402 | 214 | 1,196 | 4 |
| Number | Number | Number | Number | Number |
| 8 | 82 | 85 | 248 | 4 |

Total Number of Works

427

Average Duration

4.4

Total Number of Days Worked

1,858

Works Promoter Duration Analysis

TRAFFIC MANAGEMENT & DURATION, VIRGIN MEDIA (NK)										
NO C/W INCURSION	SOME C/W INCURSION	STOP/GO BOARDS	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	GIVE & TAKE	PRIORITY WORKING	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
1.4	1.2	1.9	1.7	4.0	2.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	1.0	4.0	1.0					
Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum
3.0	3.0	3.0	2.0	4.0	3.0					
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 102 | 665 | 15 | 5 | 4 | 32 | | | | | |
| Number |
| 75 | 538 | 8 | 3 | 1 | 16 | | | | | |

Total Number of Works

641

Average Duration

1.3

Total Number of Days Worked

823

WORKS CATEGORIES VIRGIN MEDIA (NK)				
Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
#DIV/0!	2.5	1.3	1.7	1.7
Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	1.0	1.0	1.0
Maximum	Maximum	Maximum	Maximum	Maximum
4.0	4.0	3.0	3.0	3.0
>15	>15	>15	>15	>15
>30	>30	>30	>30	>30
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180

| Days Worked |
|-------------|-------------|-------------|-------------|-------------|
| 5 | 777 | 26 | 15 | |
| Number | Number | Number | Number | Number |
| 2 | 615 | 15 | 9 | |

Works Promoter Duration Analysis

TRAFFIC MANAGEMENT & DURATION, ELECTRICITY NORTH WEST (JG)										
NO C/W INCURSION	SOME C/W INCURSION	STOP/GO BOARDS	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	GIVE & TAKE	PRIORITY WORKING	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
3.6	4.7	2.0	6.6	8.6	5.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	10.3
Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
1.0	1.0	2.0	1.0	2.0	4.0					1.0
Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum
7.0	12.0	2.0	26.0	26.0	9.0					23.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
			2	1						3
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
36	258	4	192	43	59					154
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
10	55	2	29	5	10					15

Total Number of Works

126

Average Duration

5.9

Total Number of Days Worked

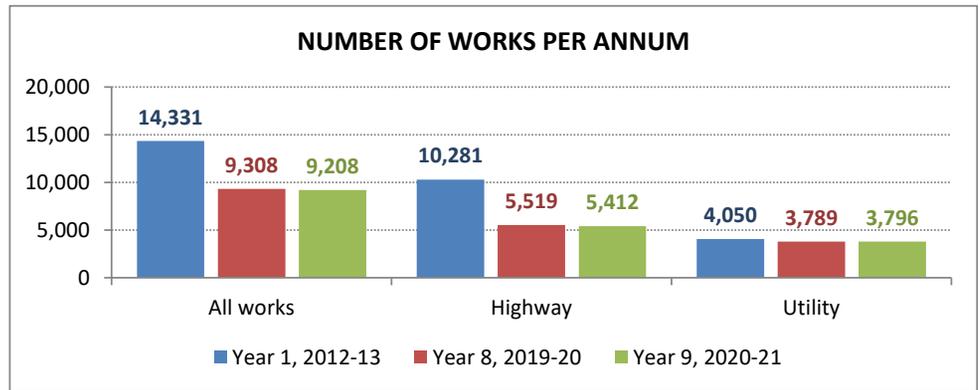
746

WORKS CATEGORIES ELECTRICITY NORTH WEST (JG)				
Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
13.8	7.0	1.8	4.9	#DIV/0!
Minimum	Minimum	Minimum	Minimum	Minimum
1.0	2.0	1.0	3.0	
Maximum	Maximum	Maximum	Maximum	Maximum
26.0	12.0	3.0	9.0	
>15	>15	>15	>15	>15
6				
>30	>30	>30	>30	>30
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
235	175	44	292	
Number	Number	Number	Number	Number
17	25	24	60	

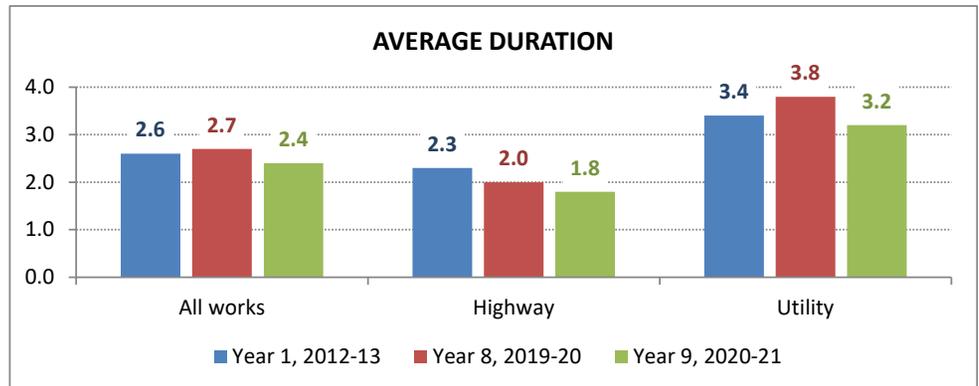
C. SCHEME BENEFITS

SCHEME BENEFITS

NUMBER OF WORKS (number)			
	All works	Highway	Utility
Year 1, 2012-13	14,331	10,281	4,050
Year 8, 2019-20	9,308	5,519	3,789
Year 9, 2020-21	9,208	5,412	3,796
Change, Year 9 - Year 8	-100	-107	7
Change (%)	-1.1%	-1.9%	0.2%



AVERAGE DURATION (days)			
	All works	Highway	Utility
Year 1, 2012-13	2.6	2.3	3.4
Year 8, 2019-20	2.7	2.0	3.8
Year 9, 2020-21	2.4	1.8	3.2
Change (days), Year 9 - Year 8	-0.3	-0.2	-0.6



DAYS WORKED (days)			
	All works	Highway	Utility
Year 1, 2012-13	37,841	23,939	13,902
Year 8, 2019-20	25,449	10,976	14,473
Year 9, 2020-21	21,877	9,602	12,275
Change, Year 9 - Year 8	-3,572	-1,374	-2,198
Change (%)	-14.0%	-12.5%	-15.2%

