

Cumbria County Council

**Permit Scheme for Road and Street Works Activities
12 Month Review, 2020-21**

December 2021



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1 INTRODUCTION

1.1 Background

1.1.1 The Cumbria County Council Permit Scheme went live in April 2020.

1.1.2 The Permit Scheme legislation requires an annual review of Scheme performance in the first 3 years of operation and every 3 years thereafter.

1.1.3 The purpose of the annual review is to;

- Compare the scheme against the stated Scheme Objectives
- 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).
- Review 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 purpose of this review is to monitor the performance of the Scheme in the first 12 months of operation and to recommend measures to further improve the performance of the Scheme in terms of the objectives stated in 1.1.3 above.

1.1.5 The operating costs and fee income will be reviewed at the end of year 3 with fees charged adjusted accordingly in the event of a loss or surplus.

1.2 Report structure

1.2.1 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 objectives as set out in the 'Cumbria County Council Permit Scheme for Road and Street Works Activities' scheme document are:

- a reduction in safety hazards and incidents in and around works sites;
- a reduction in the adverse impact of works on local residents and/or businesses;
- a reduction in the adverse impact of works on disabled people and/or public transport users;
- targeted work to help delivery of a national infrastructure project;
- protection of the structure of the street and apparatus within it, in a way that helps manage long-term maintenance costs;
- better information for road users about works in the highway;
- greater compliance with highways legislation by works promoters;
- greater cooperation and collaboration between different works promoters;
- greater adoption of minimally invasive works methods, and measures to mitigate the impact of excavations;
- reduction in the environmental impact of works (less noise, greater cleanliness, more recycling of materials etc.);
- increased productivity of the local authority's own highway service teams.

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 objectives stated above, for example;

- Demonstrating scheme parity for all promoters by presenting approval and refusal rates for all applications.

2.1.3 Others will require to be evaluated over the initial 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,
- Reducing occupancy of the highway during the peak holiday seasons,
- Improve safety for all road users by driving down non-compliance during inspections and FPN rates for signing and lighting failures, for example.

2.1.4 The review will also objectively monitor the impact of street works on road users, by monitoring the reduction in works duration and occupancy of the network.



3 WORKS DURATION

3.1 Methodology

3.1.1 Data sources available for this review are:

- Permit Scheme work stops notices, April 2020 – March 2021 (Symology database)
- Key Performance Indicators (KPI) reports, April 2020 – March 2021
- NRSWA Noticing work stops notices, 2017 – 2018 (WDM database)

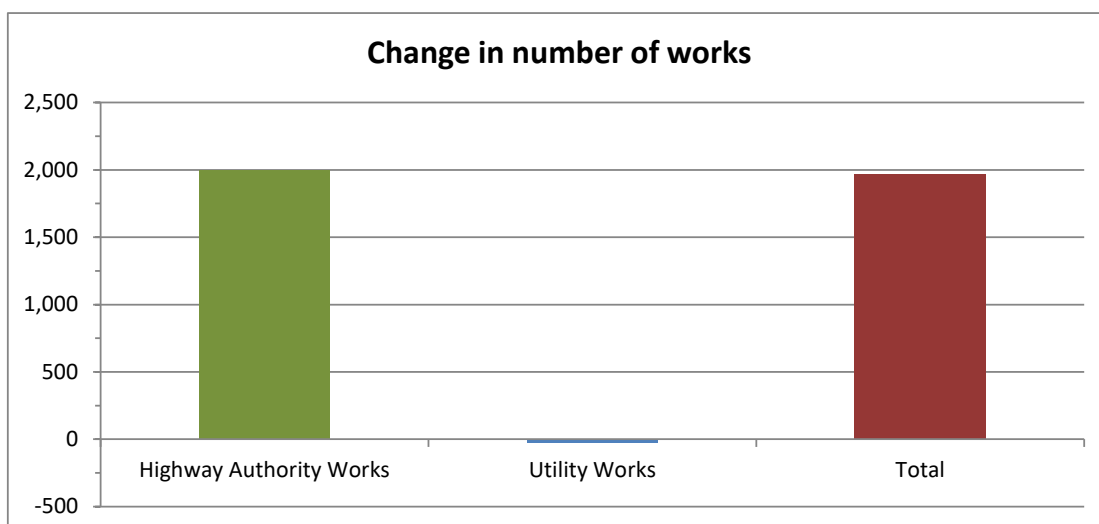
3.1.2 The purpose of this review is to quantify the benefit of the Permit Scheme in terms of a reduction in number of days worked on the road network during the first 12 months of the scheme.

3.2 All works

3.2.1 The number of completed works is compared with the number of Notices recorded for an equivalent 12 month period in Table 1 and the accompanying chart.

Table 1 Number of works closed

PROMOTER TYPE	Noticing, 2017-18	Year 1 2020-21		Difference
Highway Authority Works	383	2,375		1,992
Utility Works	13,048	13,026		-22
Total	13,431	15,401		1,970



3.2.2 The number of highway authority works recorded in the first year increased sixfold compared with the Noticing benchmark period, from 383 to 2,375 works completed. This amounts to 15% of all works completed in the first year.

3.2.3 There was no significant change in the number of utility works recorded, reducing only by 22 works or 0.2%.



- 3.2.4 Overall, the number of works completed in the first 12 months of the scheme is 15% higher than under Noticing.
- 3.2.5 A further 3,315 permit applications were granted in the first year but abandoned before the proposed start date. 1,214 by the Council and 2,074 by utility works promoters; taking the total number of permits and permit variations granted to 22,621.

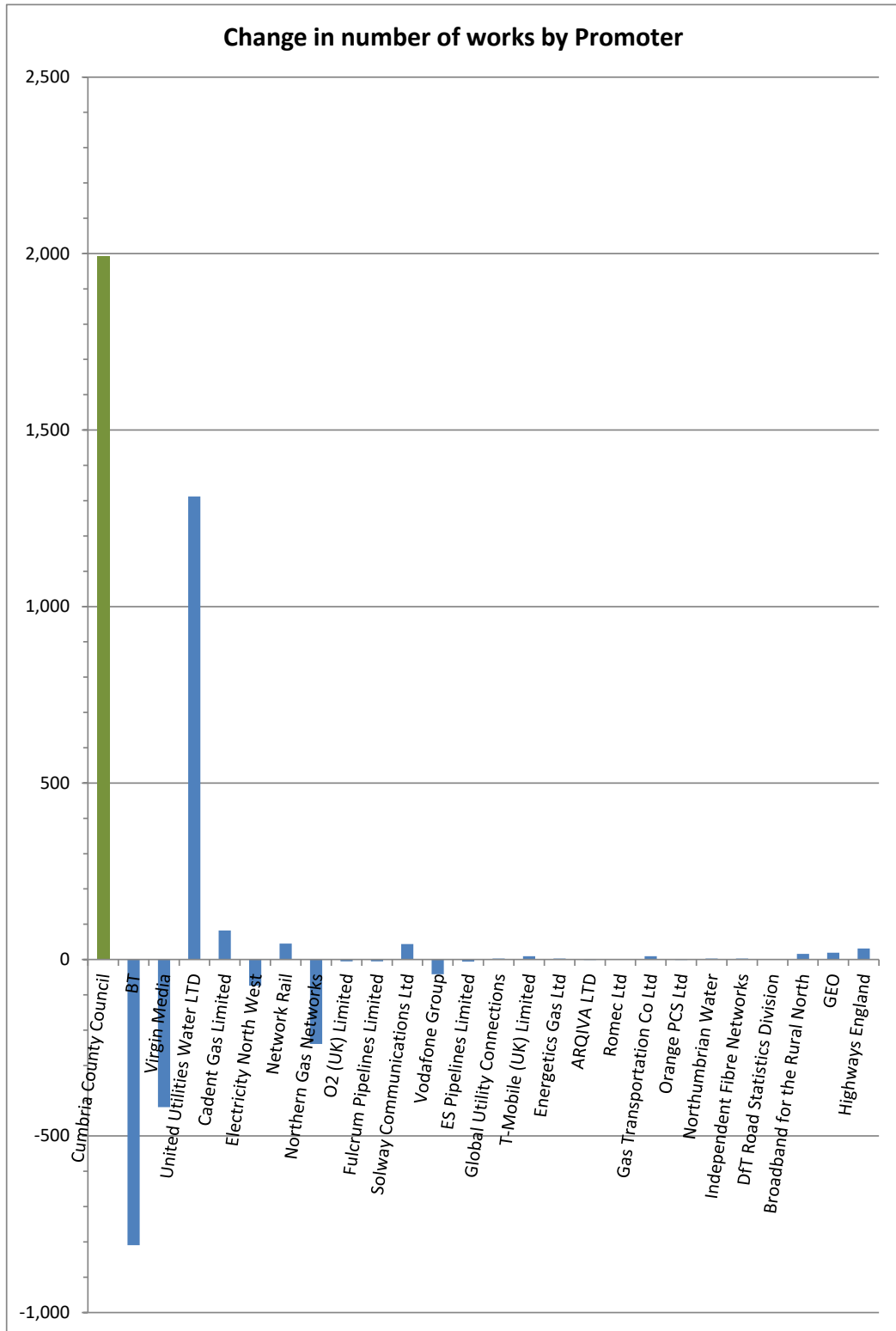
Table 2 Granted permits subsequently cancelled

Granted but Cancelled/Never Started	Granted	Cancelled / Never Started	%
Highway authority	4,359	1,241	28.5%
Utility	18,262	2,074	11.4%
ALL	22,621	3,315	14.7%

- 3.2.6 The utility rate at 11% is on a par with other neighbouring schemes. The cancellation rate for highway works at 28% is a little higher than other schemes.
- 3.2.7 Lockdown and the need for teams to self-isolate when one of the team is symptomatic or has a positive COVID test has been reported by other authorities as a reason for higher than normal cancellations or requests for extensions.
- 3.2.8 The breakdown of works completed by works promoter is shown in Table 3 and the accompanying chart.
- 3.2.9 The number of works completed by United Utilities Water Ltd increased significantly in the first year, from 4,888 to 6,200, an increase of 27%.
- 3.2.10 This increase was offset by a reduction in the number of works completed by BT, Virgin Media and Northern Gas Networks; reductions of 19%, 72% and 26% respectively.
- 3.2.11 The number of works completed by other works promoters show only small changes from the Noticing benchmark period.

**Table 3 Permits completed by works promoter**

PROMOTER	Noticing, 2017-18	Year 1 2020-21		Difference
Cumbria County Council	383	2,375		1,992
BT	4,271	3,462		-809
Virgin Media	579	161		-418
United Utilities Water LTD	4,888	6,200		1,312
Cadent Gas Limited	618	700		82
Electricity North West	1,517	1,443		-74
Network Rail	97	142		45
Northern Gas Networks	917	678		-239
O2 (UK) Limited	5			-5
Fulcrum Pipelines Limited	11	6		-5
Solway Communications Ltd	16	60		44
Vodafone Group	53	11		-42
ES Pipelines Limited	10	4		-6
Global Utility Connections		3		3
T-Mobile (UK) Limited	23	32		9
Energetics Gas Ltd	2	5		3
ARQIVA LTD	5	4		-1
Romec Ltd	1	2		1
Gas Transportation Co Ltd	4	13		9
Orange PCS Ltd	1			-1
Northumbrian Water	2	5		3
Independent Fibre Networks		3		3
DfT Road Statistics Division	1	2		1
Broadband for the Rural North	20	36		16
GEO		19		19
Highways England		31		31
Utility Distribution Networks Ltd		2		2
Others	7	2		-5
Total	13,431	15,401		1,970

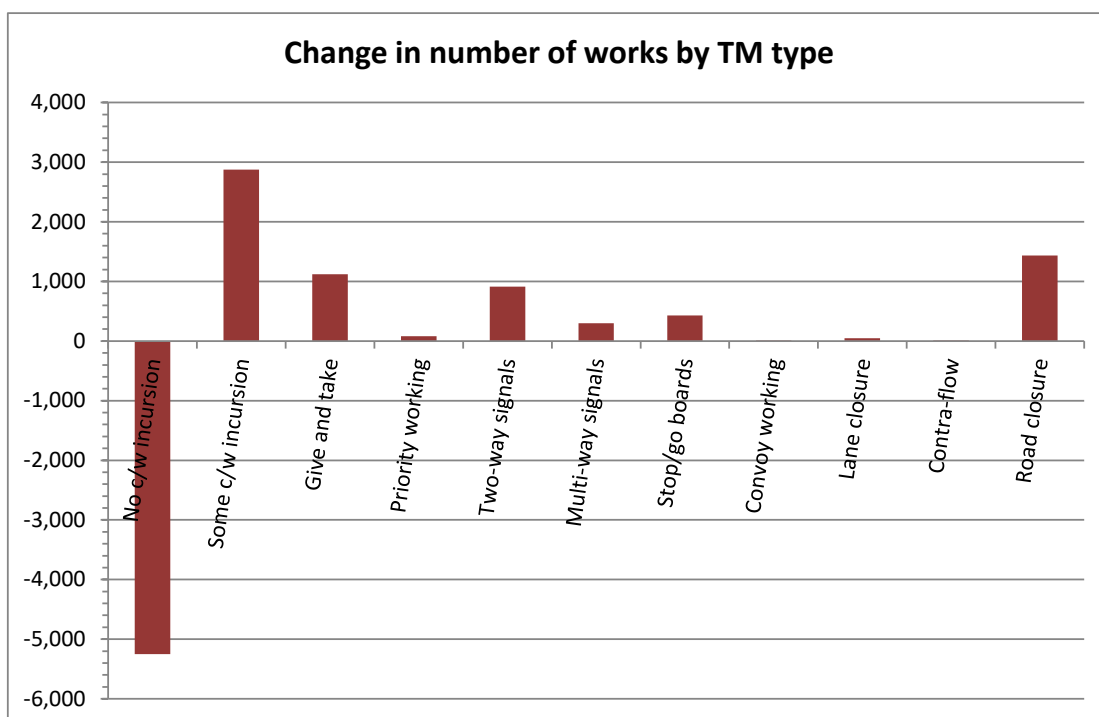


3.2.12 The breakdown of works by traffic management type is shown in Table 4 and the accompanying chart.



Table 4 Traffic management type

TRAFFIC MANAGEMENT TYPE	Noticing, 2017-18	Year 1 2020-21		Difference
No c/w incursion	5,988	737		-5,251
Some c/w incursion	1,593	4,467		2,874
Give and take	1,380	2,501		1,121
Priority working	87	166		79
Two-way signals	2,179	3,090		911
Multi-way signals	1,110	1,409		299
Stop/go boards	282	711		429
Convoy working	1	11		10
Lane closure	119	167		48
Contra-flow	1	10		9
Road closure	696	2,132		1,436
Blank				
Total	13,436	15,401		1,965

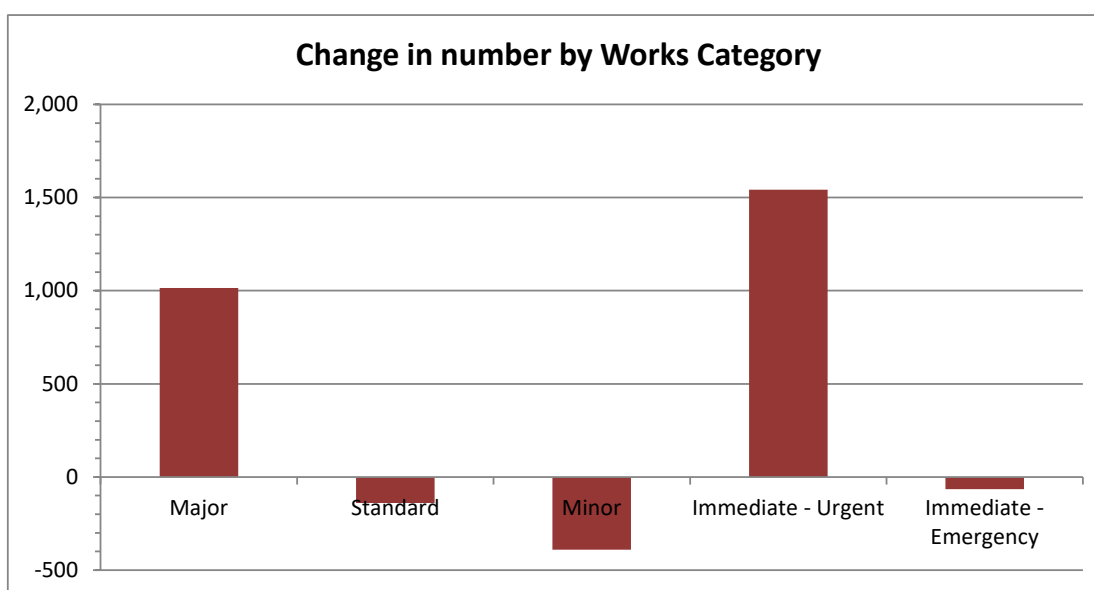


- 3.2.13 The changes in traffic management types following the introduction of the permit scheme are generally consistent with the changes found for other schemes.
- 3.2.14 There is a large reduction in the number of works categorised as having no carriageway intrusion, from 5,988 to 737, a 88% reduction.
- 3.2.15 There are corresponding increases for the other traffic management types. This is likely to be a result of the better or more accurate recording of traffic management types, rather than a significant change in how works are delivered on-site.
- 3.2.16 The number of works completed for each works category is shown in Table 5 and the accompanying chart.



Table 5 Works category

WORKS STOPPED	Noticing, 2017-18	Year 1 2020-21		Difference
Major	606	1,621		1,015
Standard	1,630	1,491		-139
Minor	6,498	6,108		-390
Immediate - Urgent	4,042	5,584		1,542
Immediate - Emergency	660	595		-65
Other		2		2
Total	13,436	15,401		1,965



3.2.17 There is a 1,015 increase in the number of Major works completed in the first year of the scheme, a 168% increase. Highway works accounted for approximately 700 of this increase and utility works for the remaining 300.

3.2.18 Immediate Urgent works have increased by 38% from 4,042 to 5,584. Almost all of this increase is accounted for by a 36% increase in the number of utility works submitted as Immediate Urgent.

3.2.19 While there is a relatively small reduction in Minor works recorded - a 6% reduction only – a tenfold increase in highway Minor works from 93 to 1,001 offsets a very large reduction in the number of utility Minor works, reducing by 1,296 or 20%.

Recommendation Yr1-01: Monitor the increase in Immediate – Urgent works applications submitted by utilities to determine if this is a genuine increase or an action to avoid the longer notification periods required.

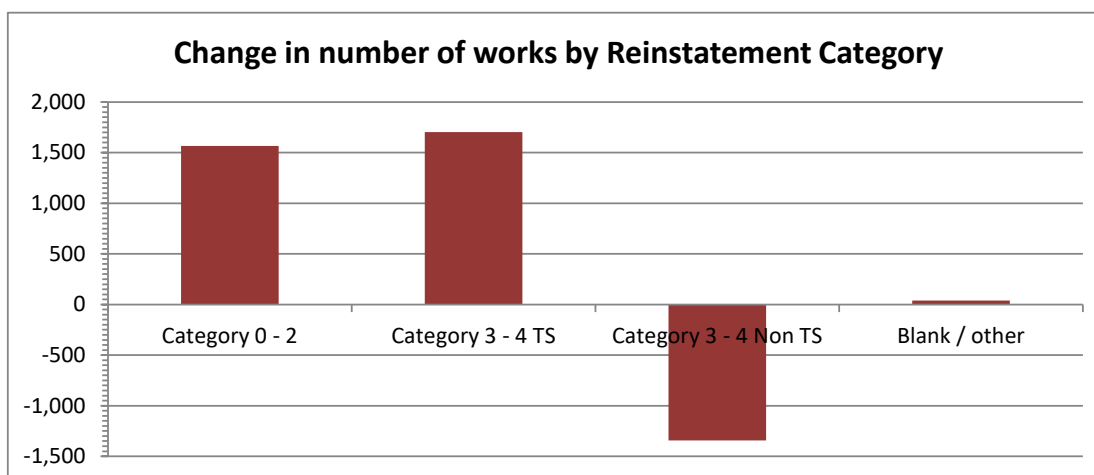
3.2.20 The change in the number of Standard and Immediate – Emergency works is lower than 10% and not thought to be significant.

3.2.21 The breakdown of works by reinstatement category grouping is shown in Table 6 and the accompanying chart.



Table 6 Reinstatement category & traffic sensitivity

REINSTATEMENT CATEGORY	Noticing, 2017-18	Year 1 2020-21		Difference
Category 0 - 2	1,300	2,867		1,567
Category 3 - 4 TS	843	2,545		1,702
Category 3 - 4 Non TS	11,053	9,709		-1,344
Blank / other	240	280		40
All works	13,436	15,401		1,965



- 3.2.22 The number of works recorded on Traffic Sensitive (TS) streets – both categories 0 to 2 and 3 to 4 – has increased more than twofold in both cases. Works on Non-TS have reduced by 12%.
- 3.2.23 This change is a result of the combination of the increase in reported highway works and the review of the National Streets Gazetteer (NSG) review carried out whilst the permit scheme was being developed and prior to the scheme consultation.
- 3.2.24 The NSG review increased the number of Traffic Sensitive (TS) streets to fill gaps in the TS network. The review increased the TS coverage from 7.8% to 31.1% and adding 1,011 traffic sensitive streets or 1,900 kilometres to the 639 kilometres already defined as traffic sensitive.
- 3.2.25 The impact of this review on the staff resource required to review permit applications and the cost and fee income forecast to be recovered was included in the business case assessment for the permit scheme CBA.
- 3.2.26 The change in number of days worked on the network in each 6 month period is shown in Table 7.

Table 7 Average duration and total days worked

DURATION	Noticing, 2017-18	Year 1 2020-21		Difference
Average duration (days)	4.3	3.6		-0.7
Total number of days worked	57,860	54,845		-3,015



- 3.2.27 Average duration has reduced from 4.3 days to 3.6 days under Permitting - a reduction of more than 15%.
- 3.2.28 Whilst the total number of days occupation of the network has only reduced by 5% or 3,015 days from 57,860 to 54,485, this should be considered against the 15% increase in the number of works and the inclusion of just over 11,000 days occupancy for the additional highway works recorded.
- 3.2.29 Utility works occupancy has reduced by 25% or 14,078 days, as a result of a reduction in average duration from 4.3 days to 3.2 days.
- 3.2.30 A detailed breakdown of the analysis for highway works and utility works promoters is shown in Appendix A.

3.3 Highway works

- 3.3.1 Only 383 highway works were recorded during the 2017-18 Noticing period selected as the benchmark period against which to evaluate the performance of the permit scheme.
- 3.3.2 The average works duration was 6.1 days, with a total occupancy of 2,344 days.
- 3.3.3 Average durations and total occupancy for highway works are compared in Table 8 below.

Table 8 Average duration and total days worked - highway works

DURATION	Noticing, 2017-18	Year 1 2020-21		Difference
Average duration (days)	6.1	5.6		-0.5
Total number of days worked	2,344	13,407		11,063

- 3.3.4 2,375 highway works were recorded in the first 12 months of the permit scheme.
- 3.3.5 The average duration reduced from 6.1 days to 5.6 days, however, the total occupancy for all highway works recorded increased by over 11,000 to 13,407 days.
- 3.3.6 Average durations for each works category are shown in Table 9.
- 3.3.7 The average duration for Major works has increased from 7 days to 9.8 days. The near 700 increase in the number of Major works recorded accounts for more than half of the increase in occupancy – an increase of 6,778 days.
- 3.3.8 The average duration of Standard and Minor works has reduced, with the average duration for Minor works reducing by almost half to 1.9 days.



Table 9 Average duration and occupancy by category - highway works

Year 1, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
9.8	6.6	1.9	8.6	8.9
6,792	3,685	1,852	704	374

Noticing, 2017-18, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
7.0	6.9	3.7	3.0	
14	1,973	348	9	

Difference, Year 1 - Noticing

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
2.8	-0.3	-1.8	5.6	8.9
6,778	1,712	1,504	695	374

3.4 Utility works

3.4.1 The change in number of days recorded on the network for utility works is shown below in Table 10.

Table 10 Average duration and total days worked – utility works

DURATION	Noticing, 2017-18	Year 1 2020-21		Difference
Average duration (days)	4.3	3.2		-1.1
Total number of days worked	55,516	41,438		-14,078

3.4.2 The average duration of utility works has reduced significantly from 4.3 days to 3.2 days – a 25% reduction resulting in 14,078 fewer days occupancy recorded under the first year of the permit scheme.

3.4.3 Average durations for each works category are shown in Table 11.



Table 11 Average duration and occupancy by category - utility works

Year 1, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
10.7	6.4	1.7	2.6	4.9
9,944	5,931	8,615	14,239	2,709

Noticing, 2017-18, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
25.3	6.7	1.9	3.8	5.2
15,267	9,025	12,370	15,402	3,452

Difference, Year 1 - Noticing

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
-14.6	-0.3	-0.2	-1.2	-0.3
-5,323	-3,094	-3,755	-1,163	-743

- 3.4.4 The average durations for all works categories have reduced. The biggest reduction is recorded against Major works, reducing from 25.3 days to 10.7 days.
- 3.4.5 Average durations for Standard and Minor works are very close to the minimum expected for these work categories, at 6.4 days and 1.7 days, respectively.
- 3.4.6 A detailed breakdown of average duration by traffic management type and works category is shown in Appendix B for each of the works promoters with more than 100 permits per year.

3.5 Scheme Benefits

- 3.5.1 Figure 1 presents a comparison of the number of works per annum during the first twelve months of operation following the introduction of the Permit Scheme. The scheme benefits analysis is summarised in Appendix C.
- 3.5.2 There is a 15% increase in the number of all works recorded but only a 0.2% change in the number of utility works recorded compared with Noticing records for an equivalent 12 month period.
- 3.5.3 The number of highway works recorded in the first 12 months of the scheme increased sixfold from 383 during the Noticing benchmark period to 2,375.

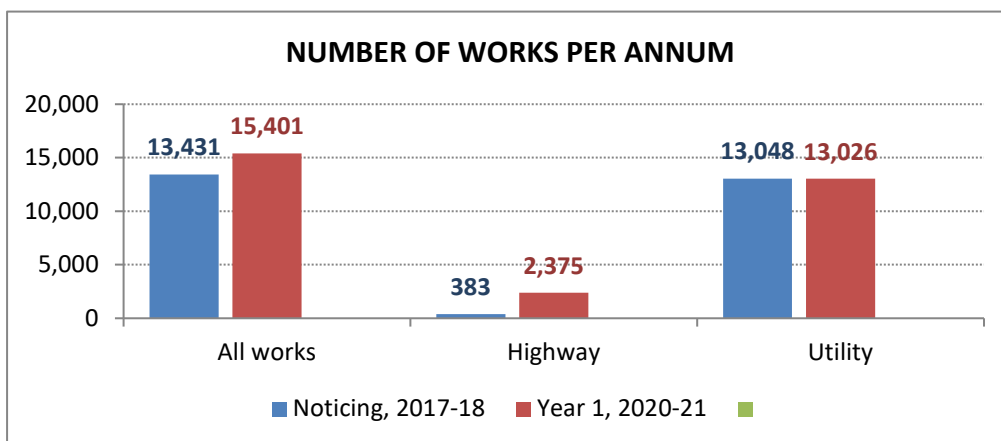


Figure 1 Number of works per annum

3.5.4 Figure 2 presents a comparison of the average duration of works.

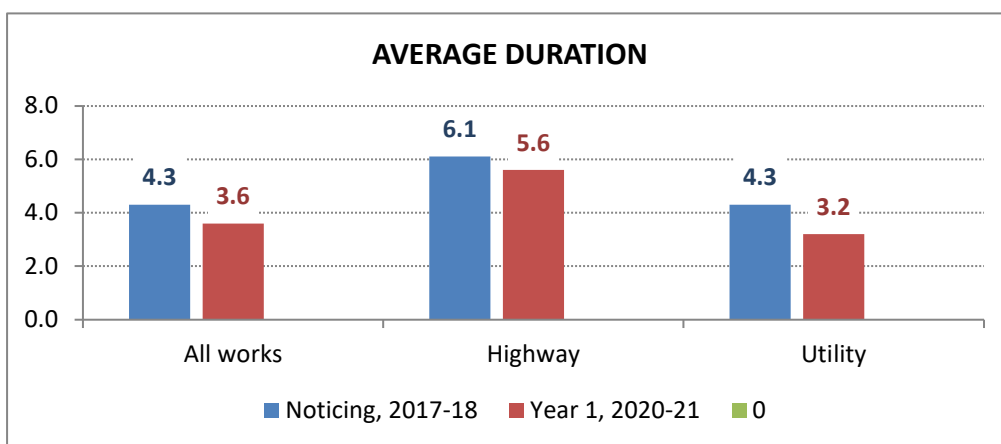


Figure 2 Average duration of works

3.5.5 The average duration has reduced for all categories, with the duration for all works reducing from 4.3 days to 3.6 days.

3.5.6 A comparison of the total number of days occupancy is shown in Figure 3.

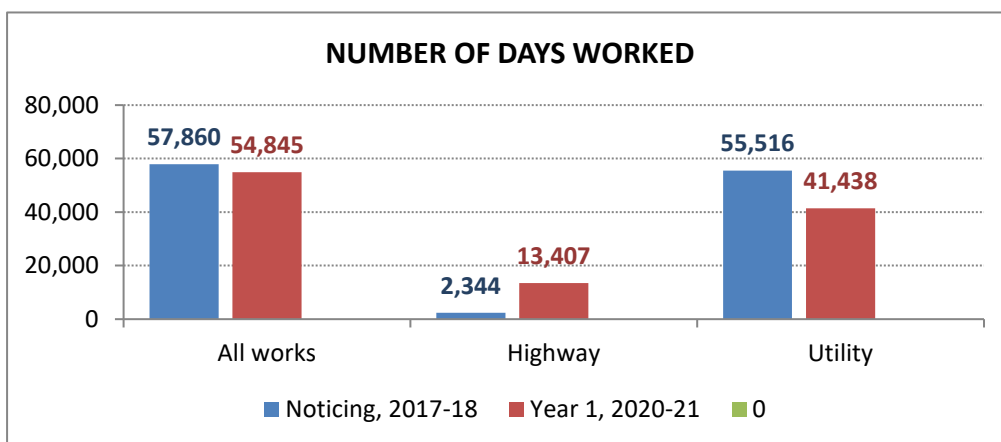


Figure 3 Number of days worked per annum



- 3.5.7 The number of working days recorded on the network in the first 12 months has reduced by 3,015 or 15%.
- 3.5.8 The significant reduction in average duration for utility works resulted in a 25% reduction in occupancy with more than 14,000 fewer days recorded in the first 12 months of the scheme.
- 3.5.9 This more than offsets the 11,063 increase in number of days recorded for highway works.
- 3.5.10 The cost benefit of the scheme converted the reduction in working days to a monetary value for all road users. The assessment calculated to the total cost of delays and route diversions at roadworks during the Noticing benchmark period at £28.5M (quoted at 2010 values).
- 3.5.11 A 5% reduction in occupancy was predicted to achieve a benefit to cost ratio (BCR) of 2.3 with a Net Present Value (NPV) of £0.5M. The Department for Transport value for money threshold for investment in transport schemes is 2.0.
- 3.5.12 The first year of the scheme achieved an overall 5% reduction in occupancy, despite a 15% increase in the number of works recorded.
- 3.5.13 The increase in number of works was due to a larger number of highway works being recorded following the introduction of the scheme.
- 3.5.14 Utility works recorded a 25% reduction in occupancy in the first year of the scheme.
- 3.5.15 The CBA calculated the average cost of impact per day worked at £298 (based on £1,280 average cost for all works and average duration of 4.3 days).
- 3.5.16 Therefore, the actual saving for all works recorded in the first 12 months of the permit scheme is **£0.9M**, or a **3.2%** saving against the £28.5M calculated annual cost of roadworks.
- 3.5.17 However, this calculation includes the 11,063 extra days worked on the network on highway works. This was not a true increase in occupancy on the network, as the reported increase in highway works was due to the recording of a higher proportion of works already being carried out each year.
- 3.5.18 A better indication of the effective benefit of the scheme is reduction in occupancy recorded for utility works. The 25% reduction in occupancy amounts to an **effective saving of £4.2M** in the first year or a **15%** saving in the annual cost of roadworks compared with the noticing benchmark case.
- 3.5.19 This is significantly higher than the 5% minimum reduction required to demonstrate value for money in the DfT guidelines.



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 **KPI 1** - the number and proportion of Permit and Permit Variation applications received and refused; a breakdown of refusal rate is presented below.

4.2.2 Table 12 and Figure 4 shows the breakdown of number of permit applications and permit variation requests received and the refusal rate.

Table 12 KPI 1, Permit & variation applications received and refused

Promoter	Received	Granted	Refused	Deemed	% Refused
Highway authority	4,530	4,359	8	163	0.2%
Utility	20,892	18,262	2,126	504	10.2%
ALL	25,422	22,621	2,134	667	8.4%

4.2.3 10.2% of all permit applications by statutory undertakers were refused. Less than one percent of applications submitted by the highway authority were refused.

4.2.4 The low refusal rate for highway authority permit applications is a result of the permit team having dedicated personnel process paper applications provided by the highways teams, review the content and submit to the system for approval. The pre-sifting of proposed works resulted in very few permit applications being refused on submission.

4.2.5 This process was agreed for the first year to allow the highways teams to focus on work scheduling and to give time for the teams to train staff to submit permit applications directly. This direct support has reduced in the second year, so a change in the refusal rate is likely at the end of year 2.

4.2.6 This relatively low refusal rate overall for permit applications is a result of the Council actively working with Utility companies on their permits and how they are submitted. An open and frank dialogue is applied daily through the team; the aspiration is if a Permit is submitted it should be in a form and set up to be granted.

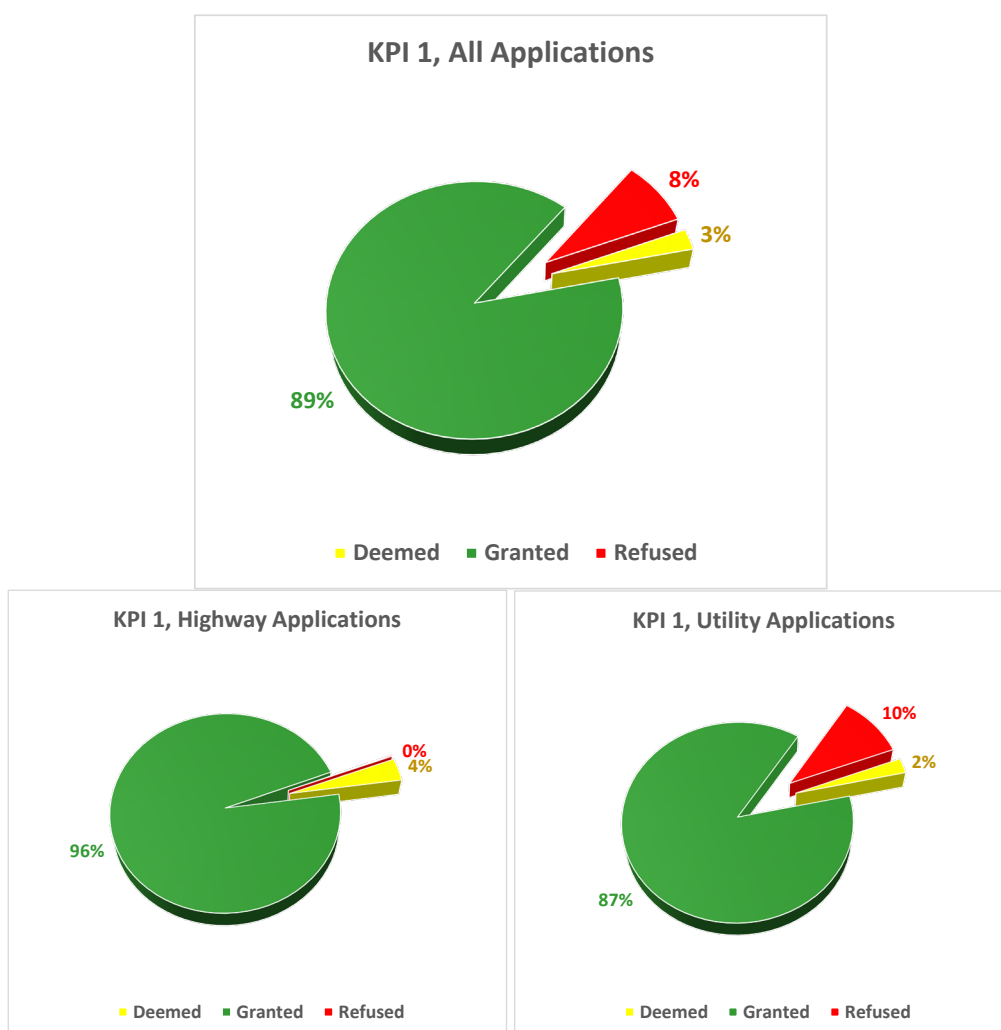


Figure 4: KPI 1, Permit & Permit Variation Applications

- 4.2.7 Only 5 permit applications were deemed in the first 12 months.
- 4.2.8 There were 3,588 permit variations granted for granted utility permits in the first year. This is 25% of all permits granted and is in the typical range evident on other permit schemes.
- 4.2.9 There were 1,421 change requests for highway authority permits submitted during year 1. 301 were requests for a duration extension and 8 changes imposed by the HA. The 1,112 permit variation requests submitted by the highway authority promoter amount to 34% of permits granted.
- 4.2.10 The number of permit variations submitted by the highways works promoter in year 2 to date has increased to 1,342.
- 4.2.11 Processing all permit variations has a significant impact on the resource available to process permit applications.

Recommendation Yr1-02: Monitor the number of permit variations submitted by the highway authority works promoter in year 2 with a view to reducing the number submitted and reducing the time spent by permit team members on highway applications.



4.2.12 **KPI 2** – the number of conditions applied by condition type; a breakdown of the number of conditions applied by condition type for highway and utility permit applications is shown in Table 13 and Figure 5.

Table 13 KPI 2, Permit conditions

Condition	Condition Description	Utility	Highway	All
NCT02a	Date constraints	3,947	2,164	6,111
NCT02b	Time constraints	1,672	0	1,672
NCT04a	Material & plant removal	87	0	87
NCT04b	Material & plant storage	95	0	95
NCT05a	Road occupation dimensions	1,582	5	1,587
NCT06a	Traffic space dimensions	4,286	42	4,328
NCT07a	Road closure	1,450	167	1,617
NCT08a	Light signals - tm request	5,327	62	5,389
NCT08b	Light signals - manual control	1,503	113	1,616
NCT09a	Traffic management changes - notify	470	1	471
NCT09b	Traffic management changes - directed	78	2	80
NCT09c	Traffic management changes - signal r	2,187	7	2,194
NCT10a	Work methodology	2,226	15	2,241
NCT11b	Consultation & publicity	1,122	35	1,157
NCT12a	Environmental - limit timing of activities	16	0	16
NCT13	Local condition	31	17	48
	TOTAL	26,079	2,630	28,709
	All Conditions	Utility	Highway	All
	TOTAL	26,079	2,630	28,709
		91%	9%	

4.2.13 Approximately 10% of all conditions were applied to highways permits is similar to the rate evident on similar schemes. Utilities generally apply more conditions due to a larger proportion of works requiring traffic management.

4.2.14 The ratio of highway to utility works completed is 15:85 – and nearer 20:80 by the time granted but subsequently cancelled works are accounted for.

4.2.15 The majority of highway applications applied relate to date constraints.

4.2.16 Utility permits include a broader range of conditions, including time constraints, road and traffic space dimensions, traffic management notifications and consultation.

Recommendation Yr1-03: Review whether more conditions should be applied to highway permit applications.

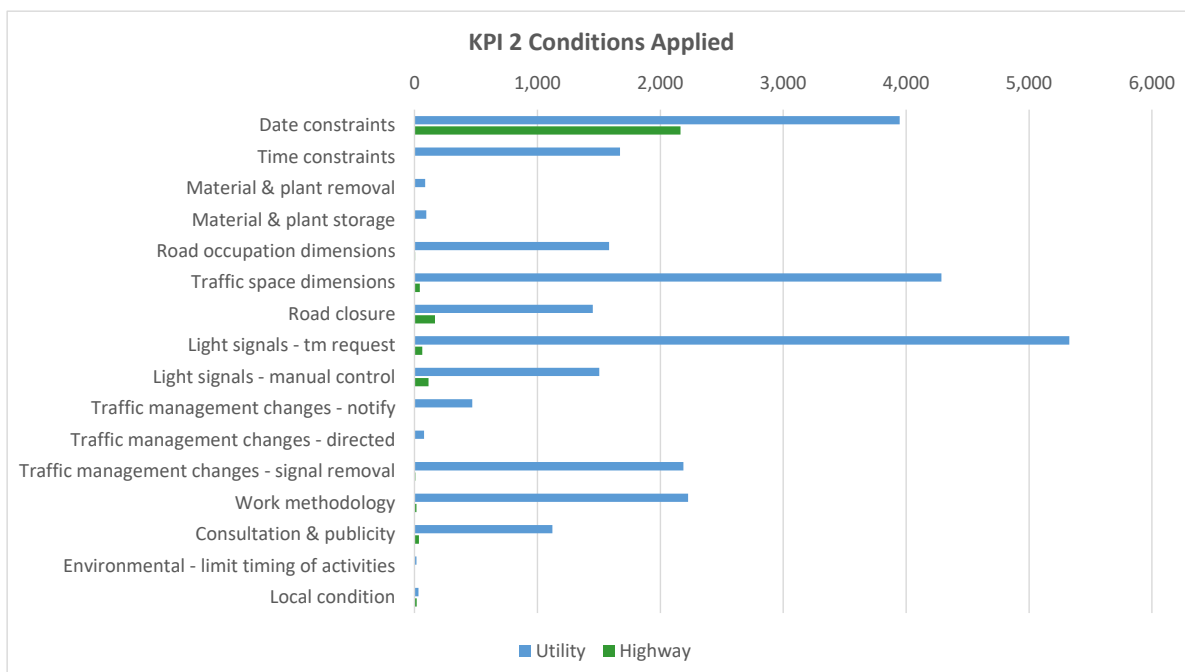


Figure 5: KPI 2, Conditions Applied

4.2.17 There is a broad range of number of conditions per permit between works promoters. Several promoters have submitted fewer than 1 condition per permit, while others have submitted 2 to 3 conditions per permit.

Recommendation Yr1-04: Review whether conditions are being correctly applied by all works promoters, particularly Major and Standard works and where temporary signals or road/lane closures are proposed.

4.2.18 **KPI 3** – number of approved extensions; the following figures show the number of extensions granted and refused, for all promoters, and separately for highway authority applications and for statutory undertakers.

Table 14 KPI 3, Duration extension requests

Promoter	Received	Granted	Refused	% Refused
Highway authority	306	306	0	0.0%
Utility	1,563	1,528	35	2.2%
ALL	1,869	1,834	35	1.9%

4.2.19 All but 35 requests for an extension to works duration were agreed in the first year – 1.9% of the 1,869 extension requests submitted.

4.2.20 The majority of extension requests were submitted by utilities, but the relative split is similar to the proportion of permits granted for utility and highway works promoters.

4.2.21 The number of extension requests is relatively high, at more than 10% of the number of works completed in the first year.

Recommendation Yr1-05: Monitor requests for duration extensions to ensure all requests are appropriate.

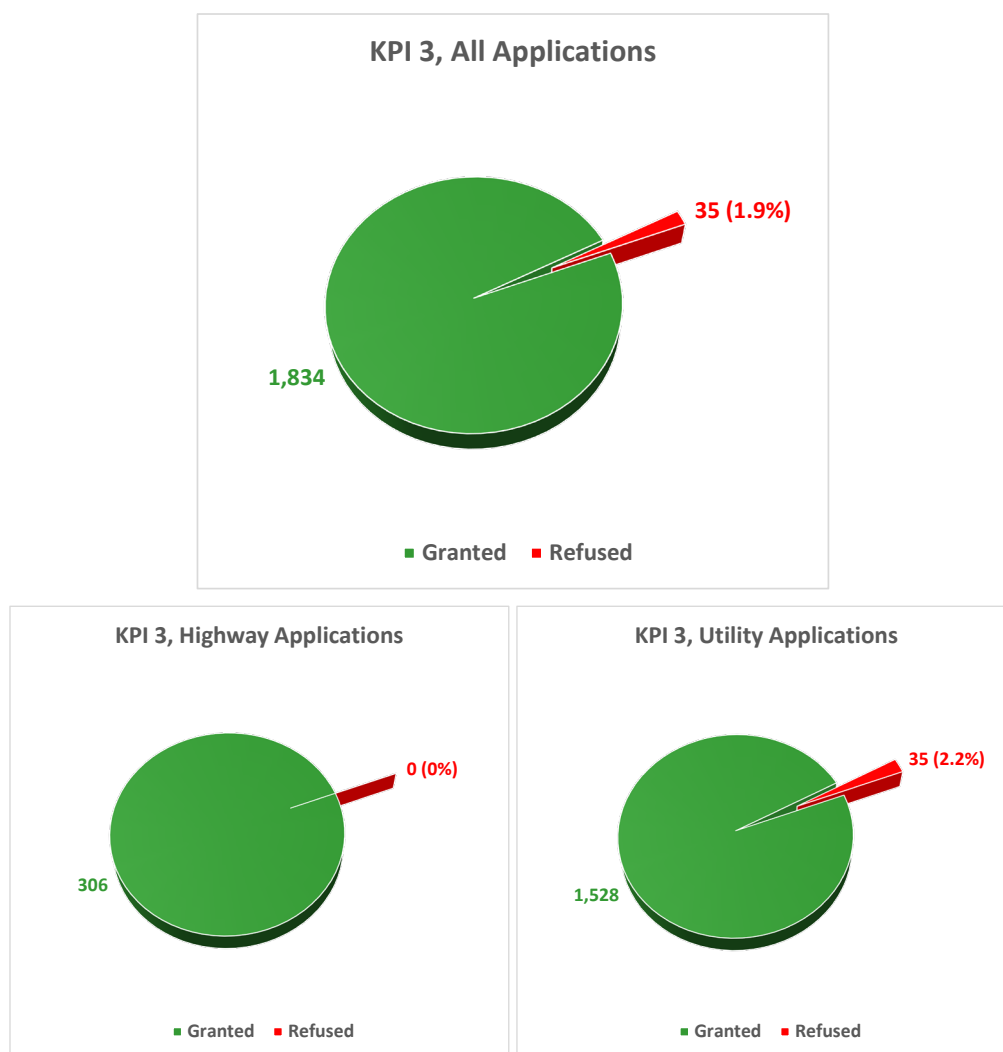


Figure 6: KPI 3, Permit Extensions

- 4.2.22 **KPI 7** - the Number of Inspections carried out to monitor conditions.
- 4.2.23 No data available for permit compliance inspections.
- 4.2.24 Compliance inspections of highway works are undertaken but not recorded in the same way. The Council's in-house site management remit includes a comprehensive inspection process, daily compliance checks (in all aspects) and depending on the size of the scheme, weekly progress inspections (reinstatement / progression of works).
- 4.2.25 The highway inspections are recorded against the site logs and performance information.
- 4.2.26 130 Fixed Penalty Notices (FPN) were given for non-compliance following a permit inspection in the first 12 months of the scheme. Of these, 89 were given for offence code 19(1) (working without a permit) and 41 for offence code 20(1) (a breach of permit conditions).
- 4.2.27 The number of FPN given for a breach of permit conditions (Section 20(1) non-compliance) is relatively low.



Recommendation Yr1-06: Review the inspection processes to ensure all non-compliances found are recorded and reported in the Symology system.

4.2.28 The chart in Figure 7 shows the FPN rate (%) for each works promoter as a proportion of the number of permits granted.

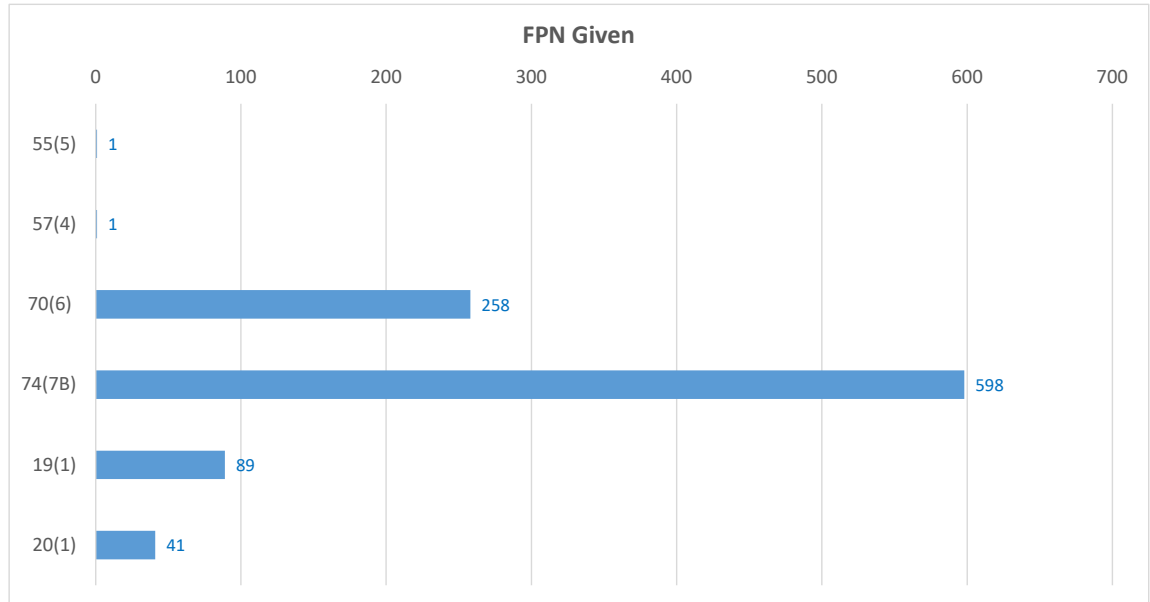


Figure 7: Fixed Penalty Notices Rate



5 STAFFING & RESOURCE

5.1 Summary

- 5.1.1 The DfT Fees Matrix used to estimate staff numbers and set the permit fee charges has been re-run with the actual number of permit applications granted in the first 12 months, to determine whether the staff numbers forecast in the business case are still appropriate.
- 5.1.2 Overall, the number of works are slightly higher than forecast, at 17,304 compared with 15,181 forecast in 2019.
- 5.1.3 The number of utility permits is approximately 9% higher than forecast at 14,259 due to the number of permits granted and subsequently cancelled before the start date.
- 5.1.4 The remainder of the difference is due to a higher number of highway permits than forecast – 3,045 rather than 2,133 forecast.
- 5.1.5 A big change from the CBA forecast is the number of Major permits granted in the first year. The Noticing data recorded 606 Major works in 2017-18 with another 233 forecast from the additional highway permits anticipated.
- 5.1.6 The first year of the scheme recorded 1,988 Major permits granted. This has significantly increased the number of staff required to process permit applications, the cost to process and the projected fee income.

5.2 Staff Resource

- 5.2.1 The DfT Fees Matrix calculates the number of staff required to process the revised permit applications forecast.
- 5.2.2 The forecast permit activity used in the 2019 business case estimated a total number of full time equivalent (FTE) staff of 9.2 (shown in Table 15). 6.8 FTE staff would be required to process utility permit applications and 2.4 FTE staff to process highway applications.

Table 15 2019 Business case staff resource projection

PERSONNEL LEVEL	All Works	Utilities
Street Works Officer	4.5	3.5
Street Works Co-ordinator	3.5	2.5
Traffic Manager	1.2	0.8
Total employees	9.2	6.8

- 5.2.3 Using the actual number of utility and highway authority permit applications granted in the first 12 months, the same Fees Matrix spreadsheet calculates the total number of FTE staff requirement at 11.8 (Table 16) – an increase of 2.6 FTE staff.



Table 16 Year 1 staff resource, 2020-21

PERSONNEL LEVEL	All Works	Utilities
Street Works Officer	5.5	4.0
Street Works Co-ordinator	4.5	3.1
Traffic Manager	1.8	1.1
Total employees	11.8	8.3

5.2.4 The number of staff required to process highway permits has increased – from 2.4 FTE to 3.5 FTE staff.

5.2.5 An additional 1.5 FTE staff are required to process utility permit applications.

5.2.6 Both are a result of an increase in the proportion of permits submitted on traffic sensitive streets (requiring additional time to process and co-ordinate) and the more than twofold increase in the number of Major permit applications submitted.

Recommendation Yr1-07: Review the structure and number of staff available to process permits in view of the higher number of permits submitted than forecast and the large increase in the number of Major permits submitted.

5.2.7 The additional resource required to process permit applications is reflected in a higher cost to the Council operate the scheme.

5.3 Operating costs

5.3.1 Using the same Fees Matrix spreadsheet, the operating costs to process all permits granted in the first year are shown in Table 17.

Table 17 Year 1 operating costs, 2020-21

	NUMBER OF STAFF	SCHEME COST	EMPLOYEE COSTS		OTHER COSTS
			PERMIT APPLICATIONS	VARIATIONS	OVERHEADS
All works	11.8	£1,295,298	£1,048,456	£123,471	£123,371
Utility works only	8.3	£957,053	£741,273	£124,265	£91,516

5.3.2 The total cost to process all permits granted in year 1 is £1,295,298. This is broken down to £1,048,456 employee costs to process permit applications, £123,471 to process granted permit variations and £123,371 towards the allowable overheads to run the scheme.

5.3.3 The total cost to process utility permit applications granted in the first year is £957,053. This is broken down to £741,273 employee costs to process permit applications, £124,265 to process granted permit variations and £91,516 towards the costs for the utilities share of the allowable overheads to run the scheme.

5.3.4 The utilities share of the allowable overheads is recovered via a surcharge on the permit fees billed. This surcharge is approximately 8.5% of the total annual income.



5.4 Fee income

- 5.4.1 The total permit fees billed in the first year, after applying discounts for major works with duration less than 10 days and for working at non-traffic sensitive times, is £880,397.
- 5.4.2 The operating costs show a small loss of £76,657 or 8.7% of the fees billed. The loss is a result of the discounts offered in the first year.
- 5.4.3 The Council plan to monitor fees and costs in the second year, and plan to carry out a full review of permit fee income and total costs to operate the scheme at the end of year 3, in line with advice in the Department for Transport *“Statutory Guidance for Highway Authority Permit Schemes”*, July 2020.



6 CONCLUSIONS

6.1 Summary

- 6.1.1 The Cumbria County Council Permit Scheme went live in April 2020.
- 6.1.2 The Permit Scheme legislation requires an annual review of Scheme performance in the first 3 years of operation and every 3 years thereafter.
- 6.1.3 The purpose of this review is to monitor the performance of the Scheme in the first 12 months of operation and to recommend measures to further improve the performance of the Scheme in terms of the stated objectives.
- 6.1.4 The operating costs and fee income will be fully reviewed at the end of year 3 with fees charged adjusted accordingly in the event of an accumulated loss or surplus.

6.2 Scheme benefits

- 6.2.1 The number of highway authority works recorded in the first year increased sixfold compared with the Noticing benchmark period, from 383 to 2,375 works completed. This amounts to 15% of all works completed in the first year.
- 6.2.2 There was no significant change in the number of utility works recorded, reducing only by 22 works or 0.2%.
- 6.2.3 Overall, the number of works completed in the first 12 months of the scheme is 15% higher than under Noticing.
- 6.2.4 Average duration has reduced from 4.3 days to 3.6 days under Permitting - a reduction of more than 15%.
- 6.2.5 Whilst the total number of days occupation of the network has only reduced by 5% or 3,015 days from 57,860 to 54,485, this should be considered against the 15% increase in the number of works and the inclusion of just over 11,000 days occupancy for the additional highway works recorded.
- 6.2.6 Utility works occupancy has reduced by 25% or 14,078 days, as a result of a reduction in average duration from 4.3 days to 3.2 days.
- 6.2.7 The cost benefit assessment completed prior to the introduction of the scheme converted the reduction in working days to a monetary value for all road users.
- 6.2.8 The assessment calculated to the total cost of delays and route diversions at roadworks during the Noticing benchmark period at £28.5M (quoted at 2010 values). The CBA calculated the average cost of impact per day worked at £298 (based on £1,280 average cost for all works and average duration of 4.3 days).
- 6.2.9 The first year of the scheme achieved an overall 5% reduction in occupancy, despite a 15% increase in the number of works recorded.
- 6.2.10 Therefore, the actual saving for all works recorded in the first 12 months of the permit scheme is **£0.9M**, or a **3.2%** saving against the £28.5M calculated annual cost for roadworks.
- 6.2.11 However, this calculation includes the 11,063 extra days worked on the network on highway works. A better indication of the effective benefit of the scheme is reduction in occupancy recorded for utility works.



- 6.2.12 The 25% reduction in occupancy for utility works amounts to an **effective saving of £4.2M** in the first year or a **15%** saving in the annual cost of roadworks compared with the noticing benchmark case.
- 6.2.13 This is significantly higher than the 5% minimum reduction required to demonstrate value for money in the DfT guidelines.

6.3 Recommendations

- 6.3.1 Five recommendations have been made to further improve the scheme performance during year 2, as follows;

Monitor the increase in Immediate – Urgent works applications submitted by utilities to determine if this is a genuine increase or an action to avoid the longer notification periods required (Recommendation Yr1-01).

Monitor the number of permit variations submitted by the highway authority works promoter in year 2 with a view to reducing the number submitted and reducing the time spent by permit team members on highway applications (Recommendation Yr1-02).

Monitor highway permit applications in year 2 to ensure parity when processing all applications (Recommendation Yr1-02).

Review whether more conditions should be applied to highway permit applications (Recommendation Yr1-03).

Review whether conditions are being correctly applied by all works promoters, particularly Major and Standard works and where temporary signals or road/lane closures are proposed (Recommendation Yr1-04).

Monitor requests for duration extensions to ensure all requests are appropriate (Recommendation Yr1-05).

Review the inspection processes to ensure all non-compliances found are recorded and reported in the Symology system (Recommendation Yr1-06).

Review the structure and number of staff available to process permits in view of the higher number of permits submitted than forecast and the large increase in the number of Major permits submitted (Recommendation Yr1-07).

6.4 Fee income

- 6.4.1 The total permit fees billed in the first year, after applying discounts for major works with duration less than 10 days and for working at non-traffic sensitive times, is £880,397.
- 6.4.2 The operating costs show a small loss of £76,657 or 8.7% of the fees billed. The loss is a result of the discounts offered in the first year.
- 6.4.3 The Council plan to monitor fees and costs in the second year, and plan to carry out a full review of permit fee income and total costs to operate the scheme at the end of year 3.



6.5 Conclusions

6.5.1 Monitoring the key performance indicators and evidence gained from the first year of operation demonstrates that the Permit Scheme is contributing towards the scheme's key objectives by improvements to the following;

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

6.5.2 This review has demonstrated that Scheme has exceeded the operational benefits specified in the permit scheme guidance documents.

A. PERMIT APPLICATIONS 2020-21

A.1 All works permits

ALL WORKS PROMOTERS

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

PROMOTER TYPE	Noticing, 2017-18	Year 1 2020-21		Difference
Highway Authority Works	383	2,375		1,992
Utility Works	13,048	13,026		-22
Total	13,431	15,401		1,970

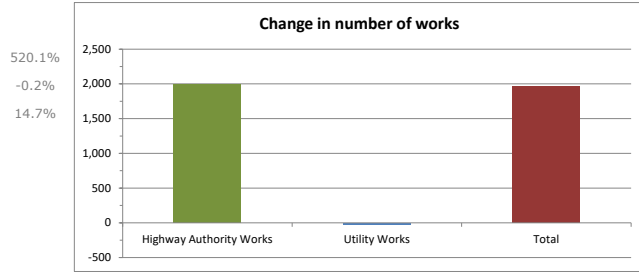
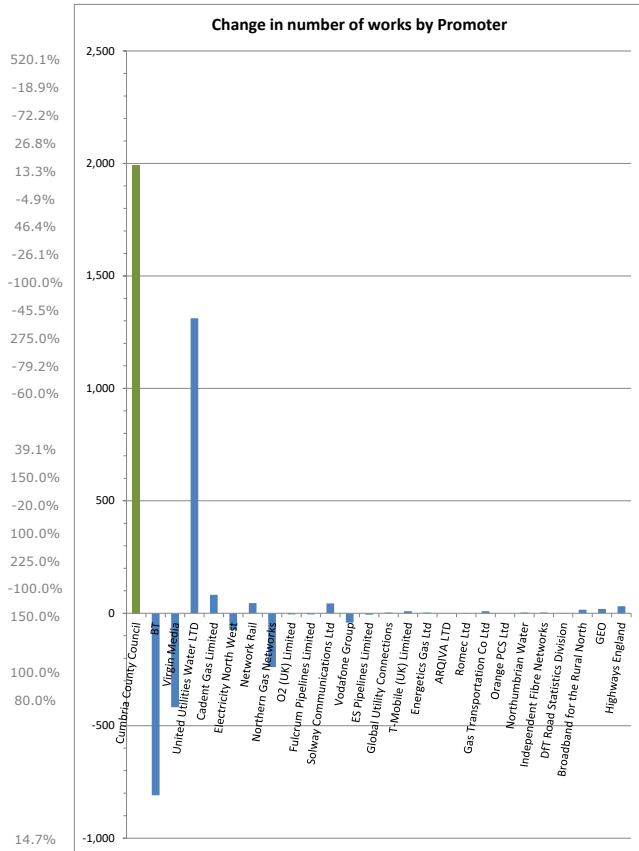


Table 2: Number of works by Promoter, year on year comparison

PROMOTER	Noticing, 2017-18	Year 1 2020-21		Difference
Cumbria County Council	383	2,375		1,992
BT	4,271	3,462		-809
Virgin Media	579	161		-418
United Utilities Water LTD	4,888	6,200		1,312
Cadent Gas Limited	618	700		82
Electricity North West	1,517	1,443		-74
Network Rail	97	142		45
Northern Gas Networks	917	678		-239
O2 (UK) Limited	5	6		-5
Fulcrum Pipelines Limited	11	6		-5
Solway Communications Ltd	16	60		44
Vodafone Group	53	11		-42
ES Pipelines Limited	10	4		-6
Global Utility Connections		3		3
T-Mobile (UK) Limited	23	32		9
Energetics Gas Ltd	2	5		3
ARQIVA LTD	5	4		-1
Romec Ltd	1	2		1
Gas Transportation Co Ltd	4	13		9
Orange PCS Ltd	1	1		-1
Northumbrian Water	2	5		3
Independent Fibre Networks		3		3
DfT Road Statistics Division	1	2		1
Broadband for the Rural North	20	36		16
GEO		19		19
Highways England		31		31
Utility Distribution Networks Ltd		2		2
Others	7	2		-5
Total	13,431	15,401		1,970



ALL WORKS PROMOTERS

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

TRAFFIC MANAGEMENT TYPE	Noticing, 2017-18	Year 1 2020-21		Difference
No c/w incursion	5,988	737		-5,251
Some c/w incursion	1,593	4,467		2,874
Give and take	1,380	2,501		1,121
Priority working	87	166		79
Two-way signals	2,179	3,090		911
Multi-way signals	1,110	1,409		299
Stop/go boards	282	711		429
Convoy working	1	11		10
Lane closure	119	167		48
Contra-flow	1	10		9
Road closure	696	2,132		1,436
Blank				
Total	13,436	15,401		1,965

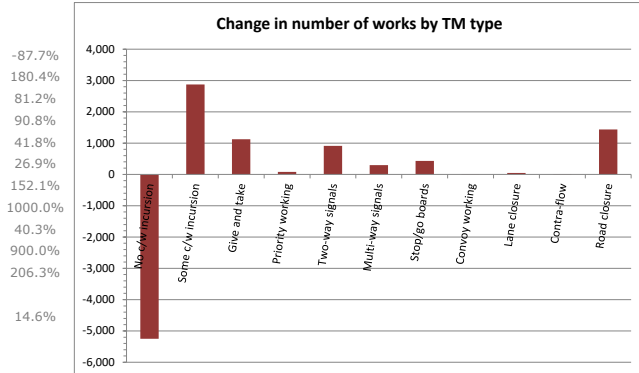


Table 4: Number of works by works category, year on year comparison

WORKS STOPPED	Noticing, 2017-18	Year 1 2020-21		Difference
Major	606	1,621		1,015
Standard	1,630	1,491		-139
Minor	6,498	6,108		-390
Immediate - Urgent	4,042	5,584		1,542
Immediate - Emergency	660	595		-65
Other		2		2
Total	13,436	15,401		1,965

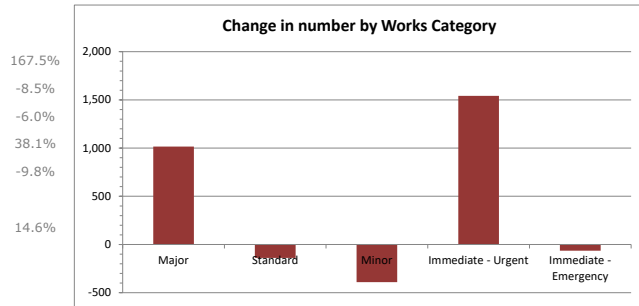


Table 5: Traffic sensitivity, year on year comparison

REINSTATEMENT CATEGORY	Noticing, 2017-18	Year 1 2020-21		Difference
Category 0 - 2	1,300	2,867		1,567
Category 3 - 4 TS	843	2,545		1,702
Category 3 - 4 Non TS	11,053	9,709		-1,344
Blank / other	240	280		40
All works	13,436	15,401		1,965

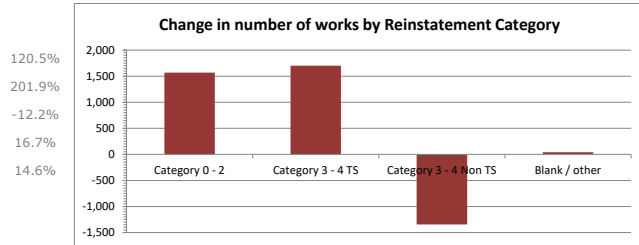


Table 6: Average works duration, year on year comparison

DURATION	Noticing, 2017-18	Year 1 2020-21		Difference
Average duration (days)	4.3	3.6		-0.7
Total number of days worked	57,860	54,845		-3,015

-16.3%
-5.2%

A.2 Highway authority works permits

HIGHWAY AUTHORITY WORKS

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

TRAFFIC MANAGEMENT TYPE	Noticing, 2017-18	Year 1 2020-21		Difference
No c/w incursion	339	36		-303
Some c/w incursion		171		171
Give and take	14	204		190
Priority working	1	42		41
Two-way signals	26	587		561
Multi-way signals		191		191
Stop/go boards		434		434
Convoy working		10		10
Lane closure	1	51		50
Contra-flow		1		1
Road closure	2	648		646
Blank				
Total	383	2,375		1,992

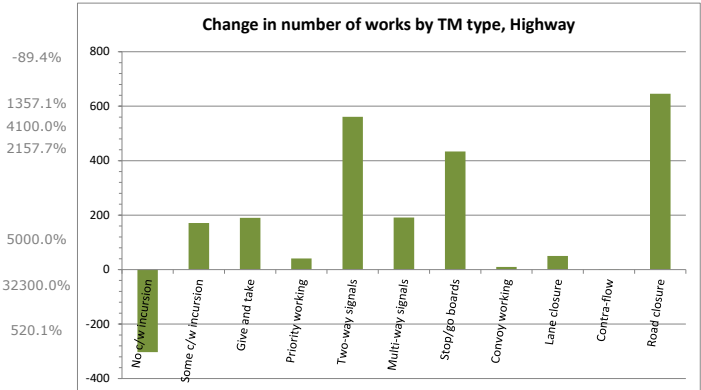


Table 8: Number of works by works category, year on year comparison

WORKS STOPPED	Noticing, 2017-18	Year 1 2020-21		Difference
Major	2	690		688
Standard	285	558		273
Minor	93	1,001		908
Immediate - Urgent	3	82		79
Immediate - Emergency		42		42
Other		2		2
Total	383	2,375		1,992

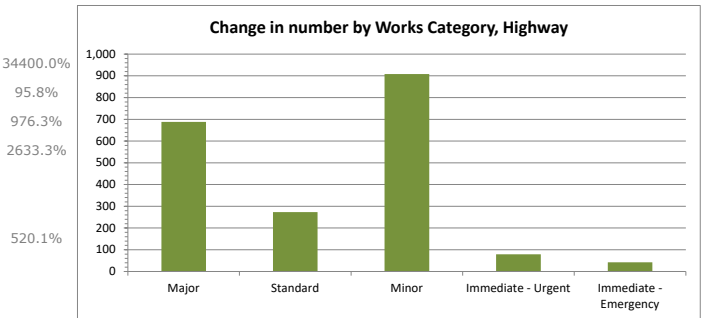


Table 9: Average works duration, year on year comparison

DURATION	Noticing, 2017-18	Year 1 2020-21		Difference
Average duration (days)	6.1	5.6		-0.5
Total number of days worked	2,344	13,407		11,063

Year 1, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
9.8	6.6	1.9	8.6	8.9
6,792	3,685	1,852	704	374

Noticing, 2017-18, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
7.0	6.9	3.7	3.0	
14	1,973	348	9	

Difference, Year 1 - Noticing

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
2.8	-0.3	-1.8	5.6	8.9
6,778	1,712	1,504	695	374

A.3 Utility works permits

UTILITY COMPANY WORKS

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

TRAFFIC MANAGEMENT TYPE	Noticing, 2017-18	Year 1 2020-21		Difference
No c/w incursion	5,644	701		-4,943
Some c/w incursion	1,593	4,296		2,703
Give and take	1,366	2,297		931
Priority working	86	124		38
Two-way signals	2,153	2,503		350
Multi-way signals	1,110	1,218		108
Stop/go boards	282	277		-5
Convoy working	1	1		
Lane closure	118	116		-2
Contra-flow	1	9		8
Road closure	694	1,484		790
Blank				
Total	13,048	13,026		-22

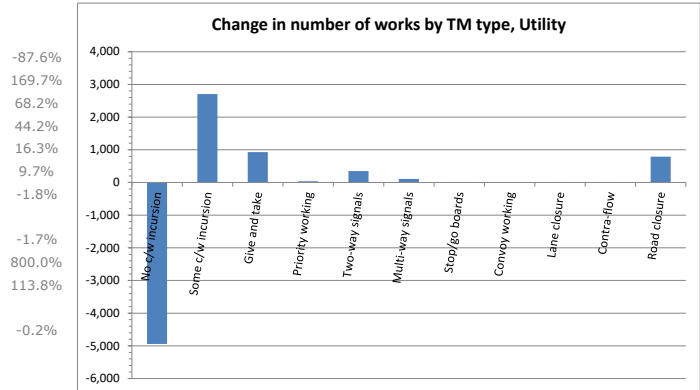


Table 11: Number of works by works category, year on year comparison

WORKS STOPPED	Noticing, 2017-18	Year 1 2020-21		Difference
Major	604	931		327
Standard	1,342	933		-409
Minor	6,403	5,107		-1,296
Immediate - Urgent	4,039	5,502		1,463
Immediate - Emergency	660	553		-107
Other				
Total	13,048	13,026		-22

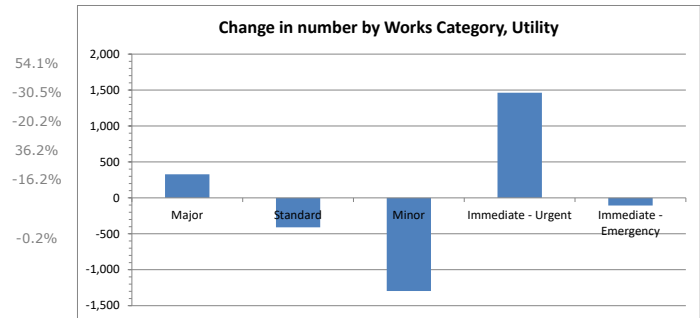


Table 12: Average works duration, year on year comparison

DURATION	Noticing, 2017-18	Year 1 2020-21		Difference
Average duration (days)	4.3	3.2		-1.1
Total number of days worked	55,516	41,438		-14,078

-25.6%
-25.4%

Year 1, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
10.7	6.4	1.7	2.6	4.9
9,944	5,931	8,615	14,239	2,709

Noticing, 2017-18, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
25.3	6.7	1.9	3.8	5.2
15,267	9,025	12,370	15,402	3,452

Difference, Year 1 - Noticing

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
-14.6	-0.3	-0.2	-1.2	-0.3
-5,323	-3,094	-3,755	-1,163	-743

B. PROMOTER DURATION ANALYSIS

CUMBRIA COUNTY COUNCIL, PERMIT SCHEME REVIEW,
PROMOTER WORKS DURATIONS

TRAFFIC MANAGEMENT & DURATION, PROMOTER BT (BC)

NO C/W INCURSION	SOME C/W INCURSION	GIVE & TAKE	PRIORITY WORKING	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	STOP/GO BOARDS	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave
1.4	1.6	1.6	1.8	1.6	2.1	1.8	#DIV/0!	2.0	3.0	2.2
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
			1.0						3.0	
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
7.0	27.0	9.0	9.0	23.0	14.0	10.0		6.0	3.0	22.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
	1			4						4
>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
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
260	644	503	51	962	570	120		27	2	323
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
374	1,046	803	93	1,582	1,171	215		54	6	696

TOTAL WORKS
3,462

WORKS CATEGORIES, BT (BC)

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
3.3	6.3	1.6	1.3	1.9
Minimum	Minimum	Minimum	Minimum	Minimum
	1.0			
Maximum	Maximum	Maximum	Maximum	Maximum
27.0	17.0	23.0	9.0	5.0
>30	>30	>30	>30	>30
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180
>365	>365	>365	>365	>365
Number	Number	Number	Number	Number
153	125	1,962	1,168	54
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
507	782	3,176	1,472	103

CUMBRIA COUNTY COUNCIL, PERMIT SCHEME REVIEW,
PROMOTER WORKS DURATIONS

TRAFFIC MANAGEMENT & DURATION, PROMOTER UNITED UTILITIES WATER LTD (HZ)

NO C/W INCURSION	SOME C/W INCURSION	GIVE & TAKE	PRIORITY WORKING	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	STOP/GO BOARDS	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave
3.7	2.4	2.7	2.2	3.0	3.3	2.2	#DIV/0!	10.1	1.0	3.7
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
									1.0	
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
118.0	112.0	63.0	5.0	48.0	101.0	49.0		47.0	1.0	106.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
3	9	7		11	6	1		10		16
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
2	5	5		4	2	1		9		9
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
1	2	1			1					2
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
174	2,289	1,426	28	1,024	319	71		48	5	816
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
639	5,407	3,820	62	3,025	1,065	158		486	5	3,016

TOTAL WORKS
6,200

WORKS CATEGORIES, UNITED UTILITIES WATER LTD (HZ)

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
9.7	7.0	1.7	2.8	3.4
Minimum	Minimum	Minimum	Minimum	Minimum
	1.0			
Maximum	Maximum	Maximum	Maximum	Maximum
118.0	35.0	13.0	72.0	49.0
>30	>30	>30	>30	>30
32	1		2	2
>60	>60	>60	>60	>60
6			1	
>180	>180	>180	>180	>180
>365	>365	>365	>365	>365
Number	Number	Number	Number	Number
320	122	2,115	3,584	59
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
3,089	851	3,655	9,886	202

CUMBRIA COUNTY COUNCIL, PERMIT SCHEME REVIEW,
PROMOTER WORKS DURATIONS

TRAFFIC MANAGEMENT & DURATION, PROMOTER ELECTRICITY NORTH WEST (JG)

NO C/W INCURSION	SOME C/W INCURSION	GIVE & TAKE	PRIORITY WORKING	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	STOP/GO BOARDS	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave
3.4	3.6	3.4	4.4	3.7	4.7	1.4	#DIV/0!	3.3	#DIV/0!	5.8
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
		1.0	3.0					1.0		
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
15.0	39.0	19.0	7.0	26.0	24.0	5.0		6.0		38.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
	4	1		1	1					8
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
	1									2
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
19	668	197	7	208	136	56		7		145
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
65	2,383	669	31	770	636	79		23		845

TOTAL WORKS
1,443

WORKS CATEGORIES, ELECTRICITY NORTH WEST (JG)

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
7.4	5.6	1.8	4.0	3.5
Minimum	Minimum	Minimum	Minimum	Minimum
	1.0			3.0
Maximum	Maximum	Maximum	Maximum	Maximum
38.0	39.0	10.0	25.0	4.0
>30	>30	>30	>30	>30
2	1			
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180
>365	>365	>365	>365	>365
Number	Number	Number	Number	Number
100	269	461	611	2
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
736	1,496	811	2,451	7

CUMBRIA COUNTY COUNCIL, PERMIT SCHEME REVIEW,
PROMOTER WORKS DURATIONS

TRAFFIC MANAGEMENT & DURATION, CADENT GAS LIMITED (AZ)

NO C/W INCURSION	SOME C/W INCURSION	GIVE & TAKE	PRIORITY WORKING	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	STOP/GO BOARDS	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave
2.9	6.3	6.9	#DIV/0!	6.9	18.5	2.5	#DIV/0!	8.8	3.0	17.7
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
						2.0		5.0	3.0	2.0
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
13.0	49.0	39.0		51.0	130.0	3.0		16.0	3.0	118.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
	30	11		8	43			1		6
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
	7	2		3	9					1
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
					4					1
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
64	343	103		67	95	4		4	1	19
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
188	2,156	709		465	1,755	10		35	3	337

TOTAL WORKS
700

WORKS CATEGORIES, CADENT GAS LIMITED (AZ)

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
23.7	7.9	2.0	5.4	5.0
Minimum	Minimum	Minimum	Minimum	Minimum
2.0			2.0	
Maximum	Maximum	Maximum	Maximum	Maximum
130.0	61.0	26.0	49.0	23.0
>30	>30	>30	>30	>30
20	1		1	
>60	>60	>60	>60	>60
4	1			
>180	>180	>180	>180	>180
>365	>365	>365	>365	>365
Number	Number	Number	Number	Number
124	150	213	58	155
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
2,943	1,187	436	312	780

CUMBRIA COUNTY COUNCIL, PERMIT SCHEME REVIEW,
PROMOTER WORKS DURATIONS

TRAFFIC MANAGEMENT & DURATION, PROMOTER NORTHERN GAS NETWORKS (XX)

NO C/W INCURSION	SOME C/W INCURSION	GIVE & TAKE	PRIORITY WORKING	TWO-WAY SIGNALS	MULTI-WAY SIGNALS	STOP/GO BOARDS	CONVOY WORKING	LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE
Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave	Duration Ave
5.6	6.2	3.9	2.7	5.5	10.7	0.9	#DIV/0!	8.5	#DIV/0!	7.8
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min
1.0		1.0	1.0					1.0		
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
52.0	43.0	23.0	9.0	30.0	42.0	2.0		34.0		38.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15
2	19	1		5	11			4		11
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30
1	5				3			1		3
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
80	247	57	6	113	55	14		24		82
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
451	1,530	225	16	624	589	12		204		641

TOTAL WORKS
678

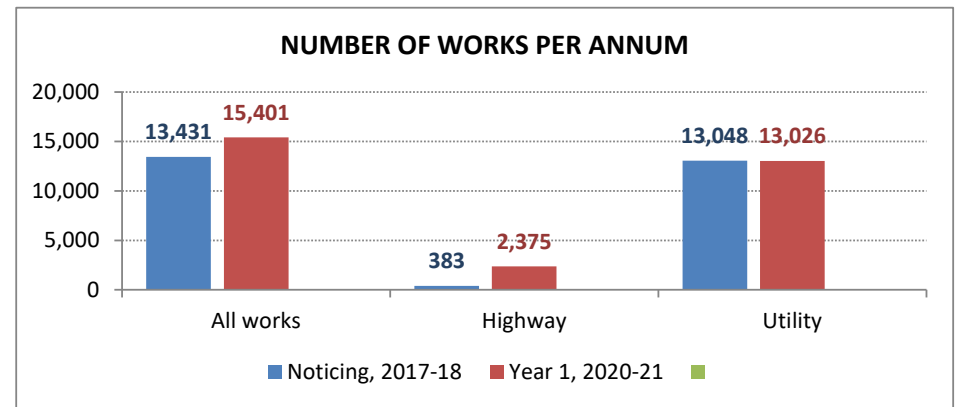
WORKS CATEGORIES, NORTHERN GAS NETWORKS (XX)

Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Average	Average	Average	Average	Average
14.3	5.5	1.5	4.3	5.7
Minimum	Minimum	Minimum	Minimum	Minimum
	1.0		2.0	
Maximum	Maximum	Maximum	Maximum	Maximum
52.0	25.0	5.0	8.0	40.0
>30	>30	>30	>30	>30
12				1
>60	>60	>60	>60	>60
>180	>180	>180	>180	>180
>365	>365	>365	>365	>365
Number	Number	Number	Number	Number
107	195	109	3	264
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
1,526	1,078	163	13	1,512

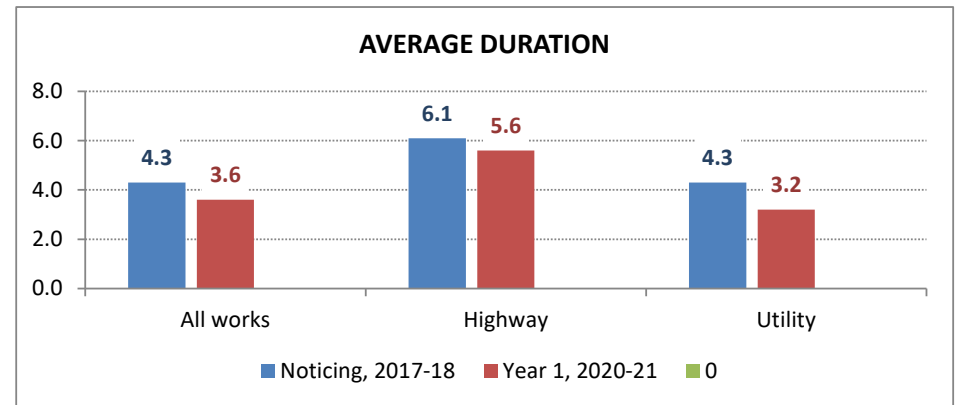
C. SCHEME BENEFITS

SCHEME BENEFITS

NUMBER OF WORKS (number)			
	All works	Highway	Utility
Noticing, 2017-18	13,431	383	13,048
Year 1, 2020-21	15,401	2,375	13,026
Change, Year 1 - Noticing	1,970	1,992	-22
Change (%)	14.7%	520.1%	-0.2%



DURATION (days)			
	All works	Highway	Utility
Noticing, 2017-18	4.3	6.1	4.3
Year 1, 2020-21	3.6	5.6	3.2
Change (days)	-0.7	-0.5	-1.1



DAYS WORKED (days)			
	All works	Highway	Utility
Noticing, 2017-18	57,860	2,344	55,516
Year 1, 2020-21	54,845	13,407	41,438
Change, Year 1 - Noticing	-3,015	11,063	-14,078
Change (%)	-5.2%	472.0%	-25.4%

