



# **The Lancashire Permit Scheme for Road & Street Activities**

**Year 5 Review, 2019-20**



*Lancashire County Council Permit Scheme,  
Year 5 Review, 2019-20*

Contents:		Page
Chapter 1	<b>INTRODUCTION .....</b>	<b>1</b>
Chapter 2	<b>SCHEME OBJECTIVES .....</b>	<b>2</b>
Chapter 3	<b>PERMIT APPLICATIONS.....</b>	<b>4</b>
Chapter 4	<b>KPI MONITORING .....</b>	<b>14</b>
Chapter 5	<b>STAFFING &amp; RESOURCE .....</b>	<b>20</b>
Chapter 6	<b>CONCLUSIONS.....</b>	<b>23</b>
Appendix A	<b>PERMIT APPLICATIONS 2019-20</b>	
A.1	All works	
A.2	Highway authority works	
A.3	Utility works	
Appendix B	<b>SCHEME BENEFITS</b>	



## 1 INTRODUCTION

### 1.1 Background

- 1.1.1 The Lancashire County Council (LCC) Permit Scheme went live on 2<sup>nd</sup> March 2015.
- 1.1.2 The operation of the first year of the Scheme was evaluated and reported in the *'Lancashire County Council 12 Month review, 2015-16'*.
- 1.1.3 The purpose of the 12-month 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 reduction in number of works across the network was not significant at 3%; but combined with a significant reduction in average works durations, resulted in an overall 17% reduction in number of days worked on the road network. This equated to nearly 28,000 fewer days worked on the network in the first year.
- 1.1.5 The financial benefit to road users of the Permit Scheme in year 1 is calculated at **£16.4M per annum**. This saving equated to approximately 23% of the overall cost of works calculated in the CBA (£72.0M per annum total cost to road users).
- 1.1.6 The financial benefit to road users of the Permit Scheme in years 2 to 4 was calculated at between **£10.6M and £23.4M per annum**; from a saving of 18,000 to 39,591 days compared with the Noticing baseline.
- 1.1.7 The evaluation of the operation during years 2, 3 and 4 was reported in the reports:
- *'Lancashire County Council Year 2 Review, 2016-17'*
  - *'Lancashire County Council Year 3 Review, 2017-18'*
  - *'Lancashire County Council Year 4 Review, 2018-19'*

### 1.2 Year 5 Review

- 1.2.1 Following the fifth anniversary of the Permit Scheme on 2<sup>nd</sup> February 2020, GK-TC has been commissioned to undertake a detailed review of the operation during year 5 and to determine whether benefits achieved in the first four years have been maintained.
- 1.2.2 Chapter 2 presents the key objectives stated in the permit scheme document. The analysis of the permit applications and network occupancy is presented in Chapter 3. A review of the key performance indicators (KPI and TPI) is reported in Chapter 4.
- 1.2.3 A review of staff resource required to process the actual number of permit applications granted in year 5 is reported in Chapter 5 together with the calculated operating costs and fee income. Chapter 6 presents the report summary, conclusions and recommended actions to consider during year 6.



## 2 SCHEME OBJECTIVES

### 2.1 Key objectives

2.1.1 The objectives as set out in the 'The Lancashire Permit Scheme for Road & Street Activities' scheme document are:

1. Reduce occupation of the highway to benefit all road users.
2. Obtain greater control of all activities on the public highway.
3. Minimise/avoid/manage delays to all road users.
4. Enhance co-ordination of all activities on the highway.
5. Achieve an improvement in air quality.
6. Enhance safety of all road users at road and street activities.
7. Reduce potential incidents/accidents at road activities.
8. Improve public perception of managing road activities.
9. Enhance reliability of journey times.
10. Enhance journey experience.
11. Reduce long-term damage to the highway asset.
12. Encourage collaborative activities between all activity promoters.
13. Enhance reliability of activities taking place at a particular time, especially on the strategic road network.
14. Promote best practices across the North West.
15. Promote common activity practices across the region to ensure ease of operation for activity promoters.
16. Enhanced cross-boundary co-operation.
17. Demonstrate parity for all activity promoters.
18. Reduce instances of customer complaints regarding road and street activities.
19. 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:

- Reduce occupation of the highway to benefit all road users.
- Minimise/avoid/manage delays to all road users by reducing occupation of the highway and ensuring the most appropriate traffic management is used.
- Encourage collaborative activities between all activity promoters.
- Demonstrate parity for all activity promoters.



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

- Improve safety for all road users by driving down non-compliance during inspections and FPN rates for signing and lighting failures, for example.
- Reduce the impact of noise on residents by having greater control of timing of activities.
- Enhance reliability of journey times.
- Enhance reliability of activities taking place at a particular time, especially on the strategic road network.



### 3 PERMIT APPLICATIONS

#### 3.1 Methodology

3.1.1 Data sources available for the year 5 review are:

- Permit Scheme work stops notices, February 2019 - February 2020 (Symology system).
- Key Performance Indicator reports February 2019 – February 2020 (Symology system).
- TPI reports; days of occupancy, average duration of works, overrun days, FPN given.

3.1.2 This review will assess the year-on-year change in the number of Permit applications and to review the breakdown of key metrics. The purpose of the review is to quantify the benefit of the Permit Scheme in terms of a reduction in number of days worked on the road network.

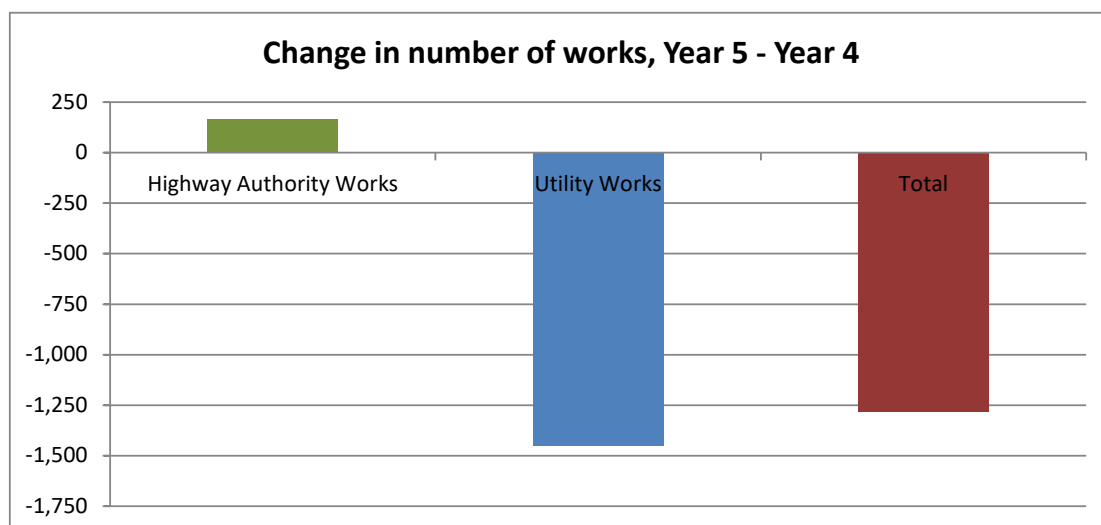
#### 3.2 All works

3.2.1 The following series of charts and tables present a comparison of the year 5 performance against the previous year - year 4 - and the first year of operation.

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

**Table 1 Number of Permit applications**

PROMOTER TYPE	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Highway Authority Works	2,116	2,514	2,682	168
Utility Works	26,176	27,841	26,390	-1,451
<b>Total</b>	<b>28,292</b>	<b>30,355</b>	<b>29,072</b>	<b>-1,283</b>

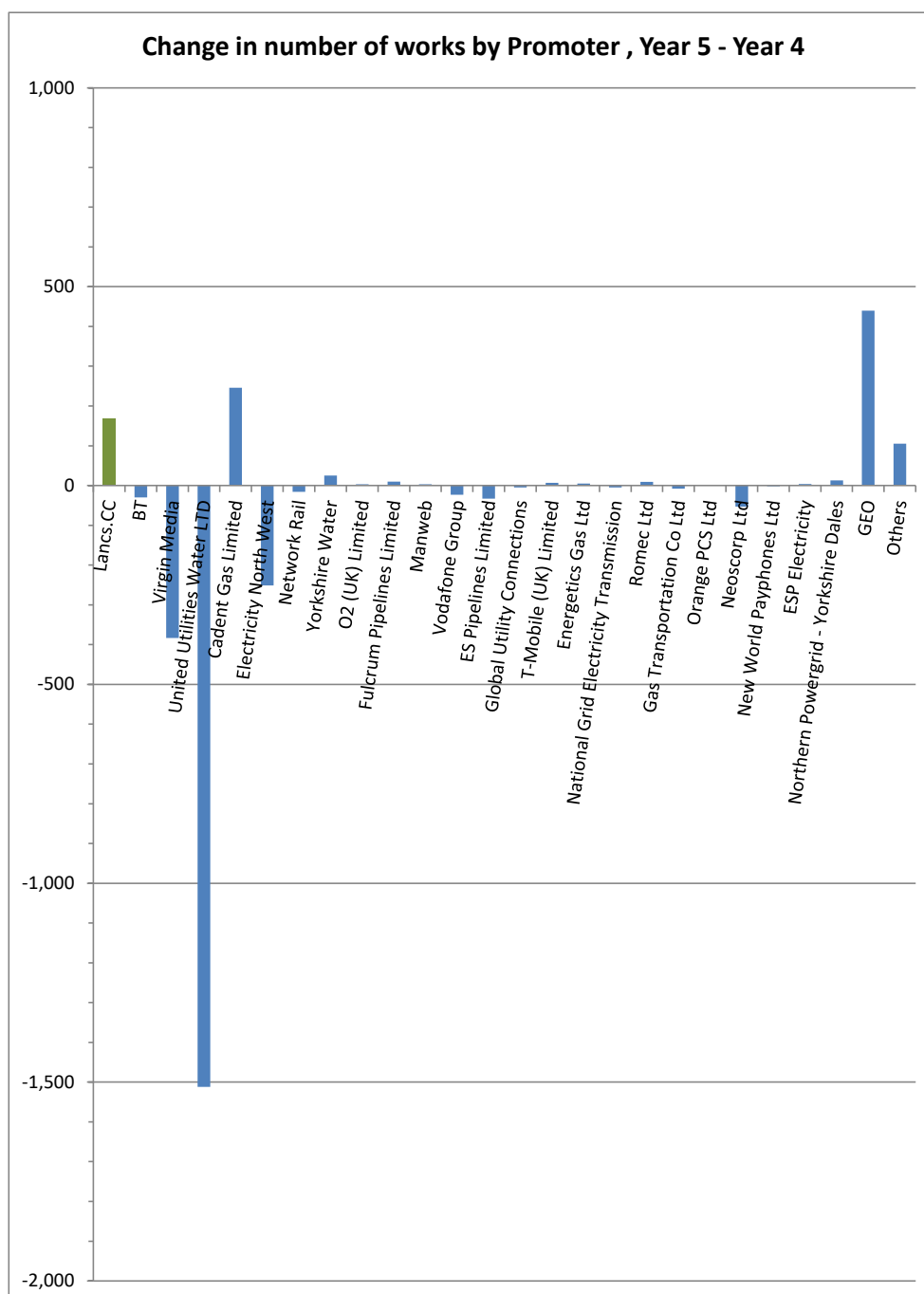




- 3.2.3 The number of works completed during year 5 reduced by 4% or 1,283 works compared with the previous year. But at 29,072 works completed, the permit activity is slightly higher than the average number of works completed during the first 5 years of the scheme (average years 1 to 5 28,778 works).
- 3.2.4 Highway works permits increased by 168 or 6.7% compared with year 4. Utility works reduced by 1,451 or 5.2% in year 5.
- 3.2.5 The change in number of Permit applications by works promoter is presented in Table 2 and the accompanying chart.

**Table 2 Change by works promoter**

PROMOTER	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Lancs.CC	2,116	2,514	2,682	168
BT	6,482	5,614	5,584	-30
Virgin Media	2,518	2,909	2,526	-383
United Utilities Water LTD	9,662	11,830	10,318	-1,512
Cadent Gas Limited	3,396	3,064	3,310	246
Electricity North West	3,240	3,512	3,261	-251
Network Rail	152	199	183	-16
Yorkshire Water	94	139	164	25
O2 (UK) Limited	10	5	8	3
Fulcrum Pipelines Limited	57	58	68	10
Manweb	45	49	52	3
Vodafone Group	193	82	59	-23
ES Pipelines Limited	51	49	16	-33
Global Utility Connections	47	45	40	-5
T-Mobile (UK) Limited	42	18	25	7
Energetics Gas Ltd	28	13	18	5
National Grid Electricity Transmission	1	6	1	-5
Romec Ltd	9	13	22	9
Gas Transportation Co Ltd	26	38	30	-8
Orange PCS Ltd	5			
Neoscorp Ltd	2	55	2	-53
New World Payphones Ltd	7	10	8	-2
ESP Electricity	8	14	18	4
Northern Powergrid - Yorkshire Dales	101	74	87	13
GEO			440	440
Others		45	150	105
<b>Total</b>	<b>28,292</b>	<b>30,355</b>	<b>29,072</b>	<b>-1,283</b>



- 3.2.6 The biggest changes from year 4 are 13% reductions in permits for United Utilities Water Ltd (1,512 fewer in year 5) and Virgin Media (383 fewer).
- 3.2.7 The number of United Utilities works completed has returned to a level more representative of the first three years, following a 13% increase to 11,830 in year 4.
- 3.2.8 The Virgin Media works have returned to the level of the first two years, from a large peak in year 3 permits.
- 3.2.9 The changes for other works promoters are not felt to be significant and are generally within the range of changes expected year on year.



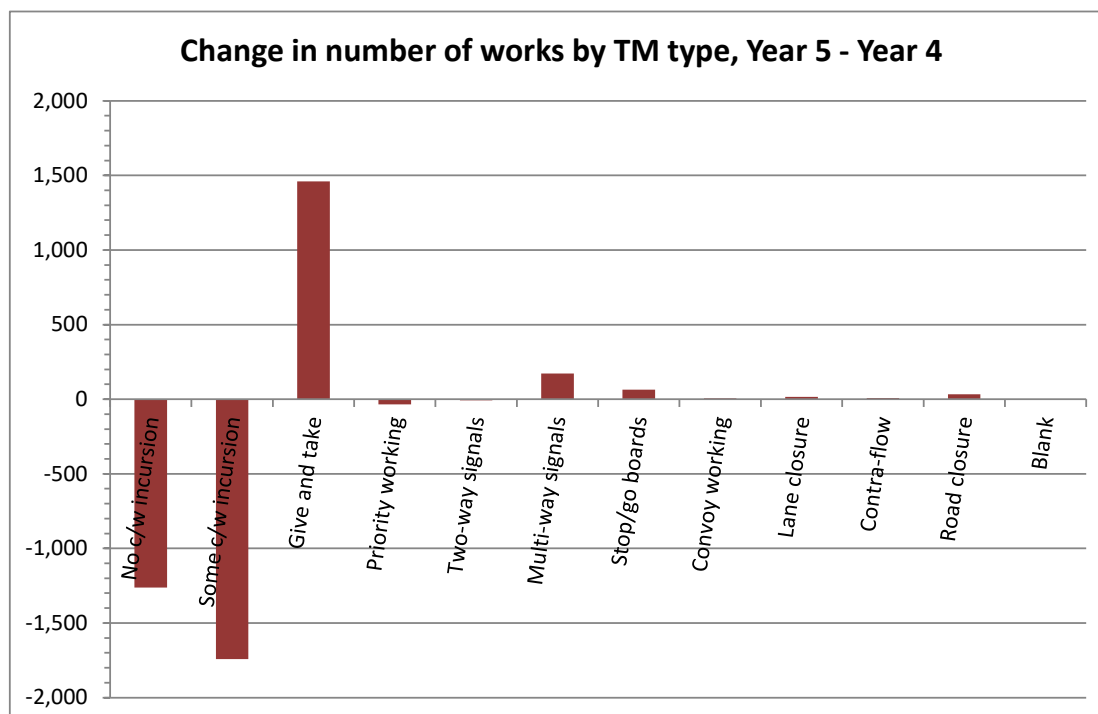


3.2.10 The following detailed analysis is presented for applications by all works promoters. The same analysis is presented separately in Appendix A for highway authority works and utility company works.

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

**Table 3 Number of applications by traffic management type**

TRAFFIC MANAGEMENT TYPE	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
No c/w incursion	6,784	5,690	4,428	-1,262
Some c/w incursion	8,836	13,550	11,808	-1,742
Give and take	5,441	3,446	4,907	1,461
Priority working	334	151	117	-34
Two-way signals	3,111	3,183	3,176	-7
Multi-way signals	1,045	1,972	2,145	173
Stop/go boards	730	449	514	65
Convoy working	12		6	6
Lane closure	268	350	366	16
Contra-flow	7	14	22	8
Road closure	1,499	1,550	1,583	33
Blank	225			
<b>Total</b>	<b>28,292</b>	<b>30,355</b>	<b>29,072</b>	<b>-1,283</b>



3.2.12 The number of works recorded as operating with give & take traffic management has increased in year 5 to the level reported in years 1 and 2, following a significant reduction

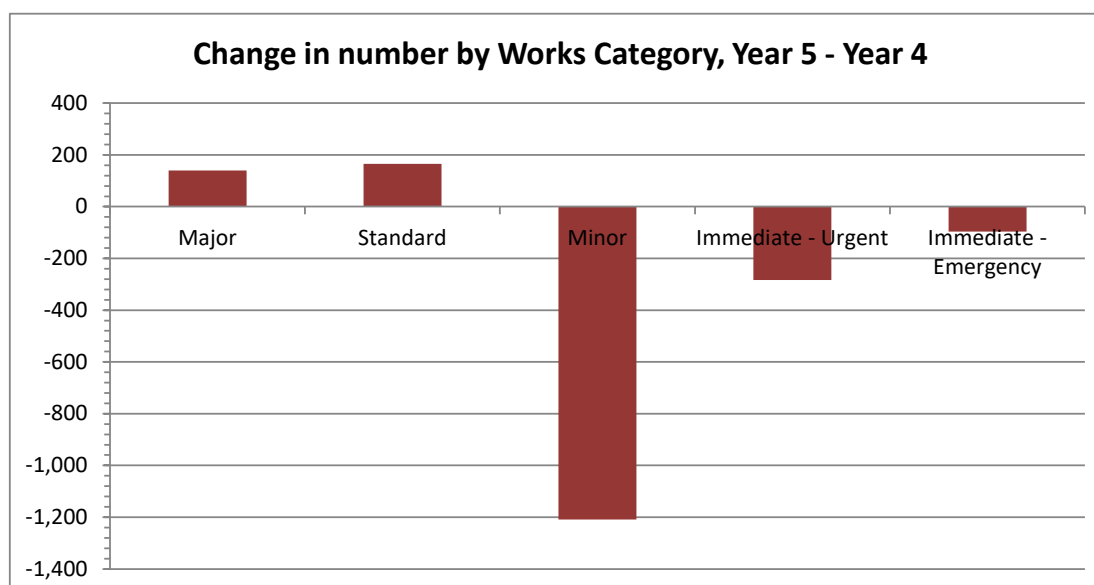


reported in years 3 and 4. This is likely to be the more accurate recording of traffic management type used, rather than a change in how works are managed on-site.

- 3.2.13 There is a further small increase in the number of works operating with multi-phase temporary traffic signals. The trend has been small year on year increases recorded from years 2 through to year 5, following a near doubling of works recorded with this tm type between years 1 and 2.
- 3.2.14 There are no significant changes in number of works for the other traffic management types.
- 3.2.15 The changes are broadly similar for utility works promoters (see Appendix A.3). The changes for highway works reverse this trend, with an increase in works operating with no or some carriageway incursion, a corresponding reduction in give & take works and relatively significant 15% reduction in the number of road closures.
- 3.2.16 The total number of completed works permits by works category is shown in Table 4 and the accompanying chart.

**Table 4 Applications by works category**

WORKS STOPPED	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Major	1,595	1,528	1,668	140
Standard	3,340	3,782	3,947	165
Minor	13,433	14,033	12,824	-1,209
Immediate - Urgent	8,127	9,604	9,321	-283
Immediate - Emergency	1,572	1,408	1,312	-96
Intention to Issue Licence	225			
<b>Total</b>	<b>28,292</b>	<b>30,355</b>	<b>29,072</b>	<b>-1,283</b>

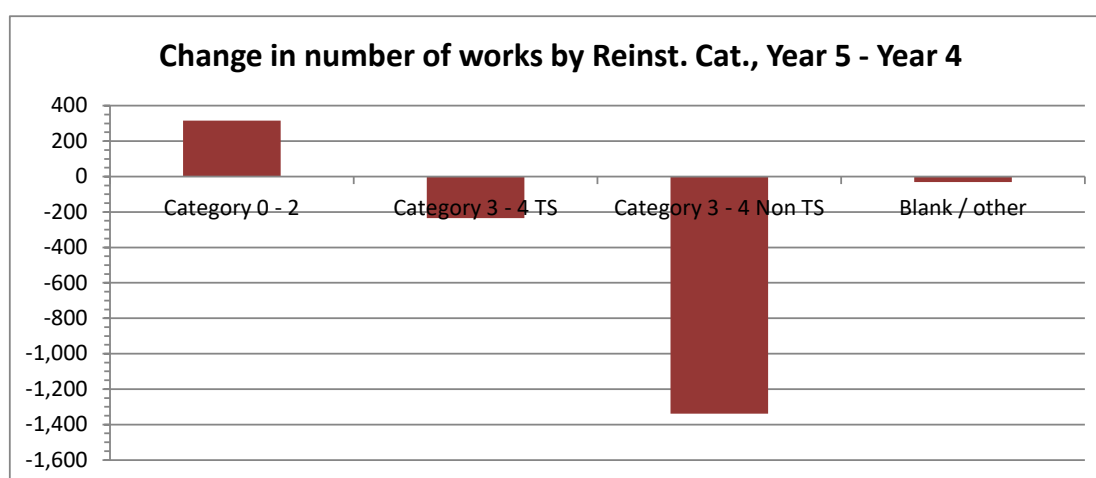




- 3.2.17 There is small, but not significant, increases in the number of Major and Standard works in year 5.
- 3.2.18 Utility works show a 20% increase in the number of Major works (to the highest number recorded in the first five years of the permit scheme). Highway works show a large (25%) increase in the number of Standard works and a smaller reduction in the number of Major works.
- 3.2.19 The variation in the number of works under other categories is not thought to be significant, given the overall reduction in number of works completed in year 5.
- 3.2.20 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 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Category 0 - 2	6,464	6,535	6,851	316
Category 3 - 4 TS	5,338	5,587	5,352	-235
Category 3 - 4 Non TS	15,942	17,745	16,406	-1,339
Blank / other	548	488	457	-31
<b>All works</b>	<b>28,292</b>	<b>30,355</b>	<b>29,066</b>	<b>-1,289</b>



- 3.2.21 The change in works by road type is not significant. The number of works has changed by +/-7% for all categories.
- 3.2.22 Table 6 shows a comparison of the average works duration for all works.

**Table 6 Average works duration**

DURATION	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Average duration (days)	4.7	4.1	4.3	0.2
<b>Total number of days worked</b>	<b>133,791</b>	<b>125,121</b>	<b>126,125</b>	<b>1,004</b>



- 3.2.23 Overall, the average works duration has increased slightly from 4.1 days in year 4 to 4.3 days in year 5. This is the highest the overall average duration has been since year 2.
- 3.2.24 The number of days worked has increased slightly by 1,004 days or 0.8% compared with year 4 despite a 4% reduction in the number of works completed. Network occupancy in year 5 is still at a very low level compared with the noticing benchmark period (which was 35,000 days higher) and the first two years of the scheme (which were 7,000 to 17,000 days higher, respectively).
- 3.2.25 The duration of utility works follows the same trend as the overall data, with a 5% reduction in the number of works resulting in a small 0.5% increase in number of days worked. The biggest contributor to the occupancy increase as an increase in the average duration of Major works from 12.9 days to 15 days, resulting in an additional 4,689 days occupancy compared with year 4.

***Recommendation Yr 05 – 01: Monitor the proposed duration of Major works undertaken by utility works promoters and challenge durations where appropriate to help drive down the average duration of Major works in year 6.***

- 3.2.26 The other utilities’ works categories show only small fluctuations in average duration (see Table 7).

**Table 7 Utility works duration by works category**

**Year 5, 2019-20, Duration by works category**

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
15.0	6.9	2.0	3.6	6.2
<b>16,714</b>	<b>18,314</b>	<b>24,392</b>	<b>33,760</b>	<b>7,583</b>

**Year 4, 2018-19, Duration by works category**

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
12.9	6.7	2.0	3.8	6.1
<b>12,025</b>	<b>18,243</b>	<b>26,121</b>	<b>35,959</b>	<b>7,902</b>

**Difference, Year 4 - Year 3**

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
2.1	0.2		-0.2	0.1
<b>4,689</b>	<b>71</b>	<b>-1,729</b>	<b>-2,199</b>	<b>-319</b>

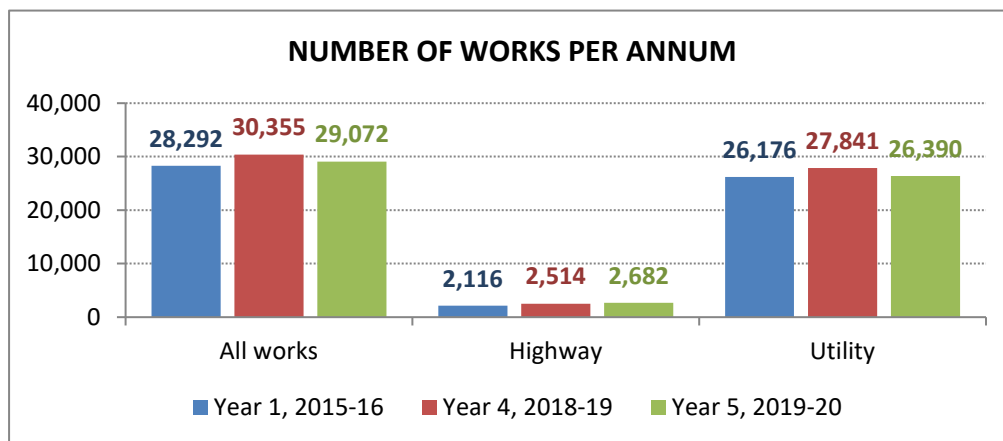
- 3.2.27 Highway works show only a very small increase in total number of days worked (491 extra days or 2% increase). This is a result of an increase in the average duration of Major works, from 14.4 days in year 4 to 20 days in year 5.



3.2.28 Average duration for all works categories has reduced from 9.9 days to 9.5 days. The biggest change from year 4 is a reduction in average duration for Minor works, from 9.1 days to 4.0 days.

### 3.3 Scheme Benefit

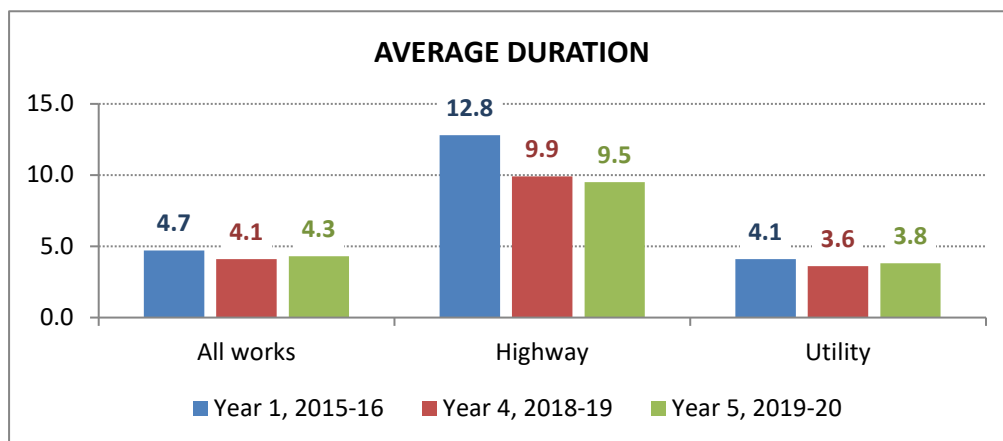
3.3.1 Figure 1 presents the number of works per annum in years 1, 4 and 5.



**Figure 1 Number of works per annum**

3.3.2 The number of works across the network is relatively consistent since the scheme inception. The number of highway works requiring a permit has steadily increased year-on-year. Utility works are generally consistent, with small fluctuations between years evident.

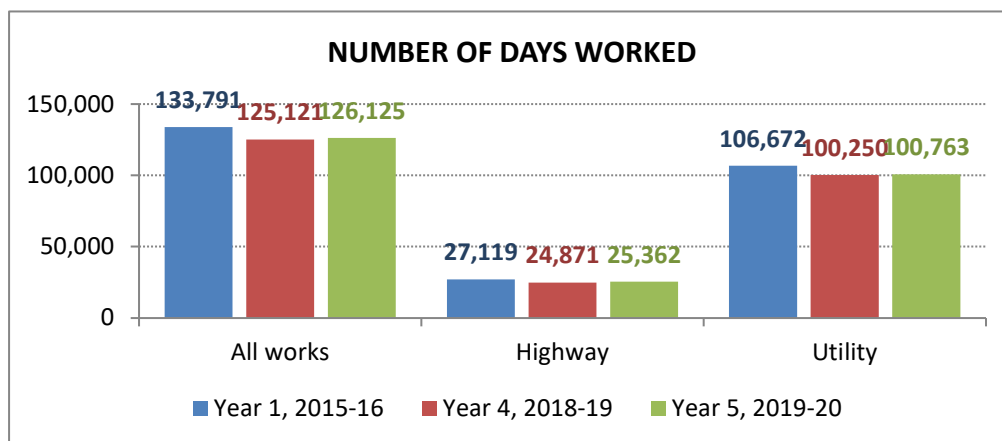
3.3.3 Figure 2 presents a comparison of the average duration of works.



**Figure 2 Average duration of works**

3.3.4 The average duration of works has steadily fallen since the inception of the scheme, helping to maintain the significant benefits achieved in the first year of the scheme. Average duration has very slightly increased in year 5 compared with years 3 and 4.

3.3.5 Figure 3 presents a comparison of the total number of days worked.



**Figure 3 Number of days worked per annum**

- 3.3.6 Occupation of the highway has been consistently low since year 3 when a large reduction from the opening years was achieved.
- 3.3.7 The benefit of the scheme is assessed against the benchmark prior to the introduction of the Permit Scheme. Year 5 shows a 35,462 reduction in number of days worked compared with the Noticing baseline (126,125 days compared with 161,587 days).
- 3.3.8 The CBA business case calculated the cost per day for each traffic management type on each street type. Since the majority of the reduction in days worked numbers is accounted for across all traffic management types, the financial benefit to road users of the Permit Scheme in year 4 is calculated as:
- Average monetary cost of works per day, £592 (source: CBA report 2010 prices, average cost of impact for all works involving some form give & take traffic management)
  - Number of days saved under Permit Scheme, 35,462
  - **Monetary benefit to road users, £21.0M per annum**
- 3.3.9 This saving equates to approximately 29% of the overall cost of works calculated in the CBA (£72.0M per annum total cost to road users).

### 3.4 Conclusions

- 3.4.1 The year 5 data shows a slight reduction in the number of permit applications following a high in year 4.
- 3.4.2 Overall, the average works duration has increased slightly from 4.1 days in year 4 to 4.3 days in year 5. This is the highest the overall average duration has been since year 2.
- 3.4.3 The biggest contributor to the occupancy increase as an increase in the average duration of Major works from 12.9 days to 15 days, resulting in an additional 4,689 days occupancy compared with year 4.
- 3.4.4 The introduction of the permit scheme reduced the total number of days worked across the network by almost 28,000 in year 1. Further reductions in average duration in year 5 saves another 7,666 days or 5.7%, compared with year 1, despite a 3% increase in the number of works recorded.



- 3.4.5 The CBA business case calculated the cost per day for each traffic management type on each street type. The financial benefit to road users of the Permit Scheme in year 5 is calculated at **£21.0M per annum** - a very slight reduction from year 4. This saving equates to 29% of the overall cost of works calculated in the CBA (£72.0M per annum total cost to road users).
- 3.4.6 The 22% reduction in number of days worked since Noticing is substantially higher than the 5% benefit specified in the DfT guidelines for the business case justification for a move to Permit Schemes.
- 3.4.7 The benefit achieved in year 5 is only very slightly lower than that achieved in year 4. A recommendation has been made to monitor the duration of Major works undertaken by utility works promoters in year 6 to help drive down the average duration of works to the level achieved in year 4.



## 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 7 and Figure 3 shows the breakdown of number of permit applications and permit variation requests received and the refusal rate.

**Table 7 KPI 1, Permit and Variation applications received and refused**

KPI 1: Permit & Permit Variation Applications	Received	Granted	Refused	Deemed	% Refused
Highway authority	3,747	3,388	351	8	9.4%
Utility	43,472	38,668	4,795	9	11.0%
ALL	47,219	42,056	5,146	17	10.9%

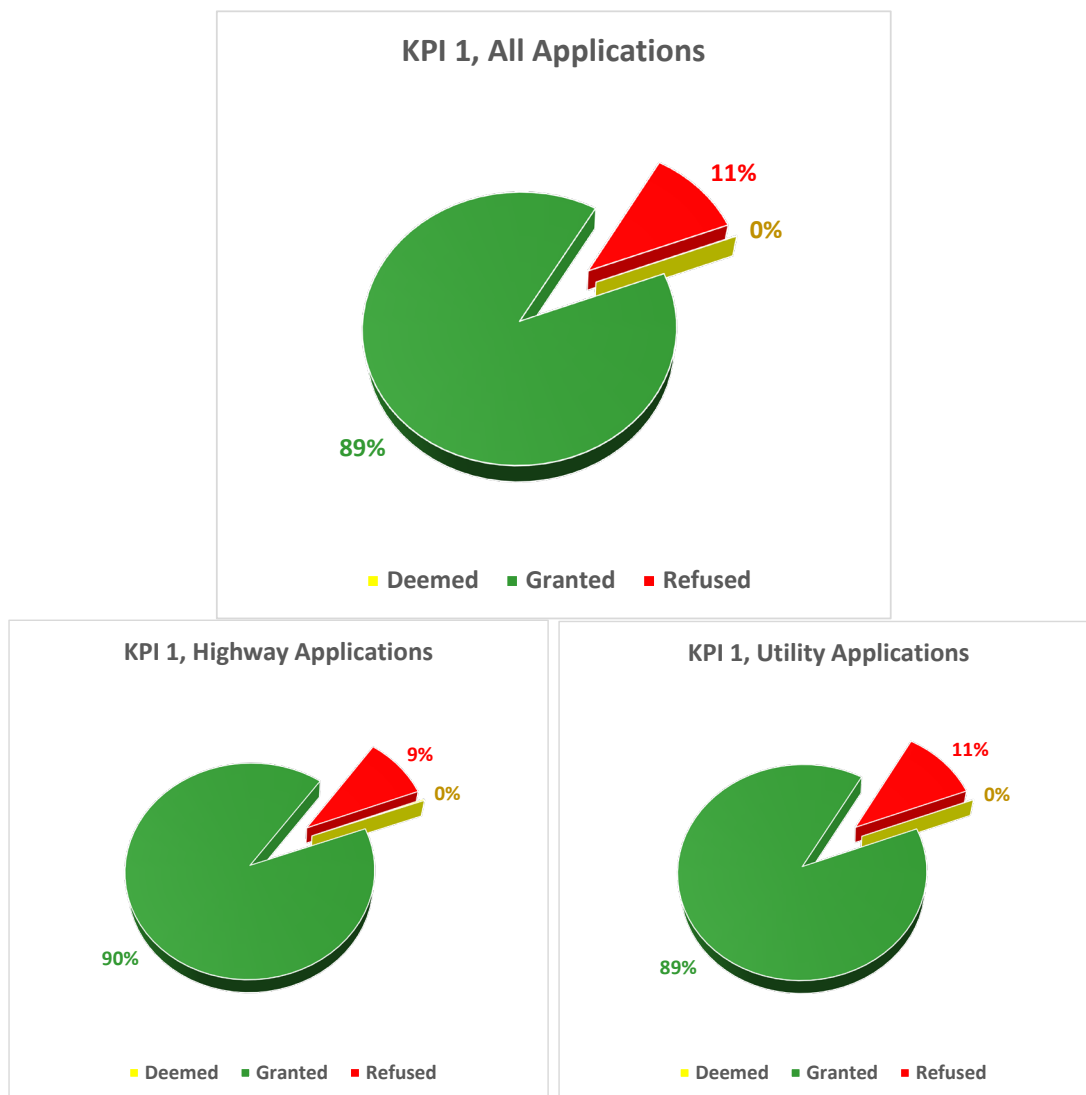
4.2.3 The refusal rate for permit applications has reduced slightly compared with year 4.

4.2.4 The number of utility applications refused has reduced from 5,079 to 4,795, with a slight drop from 11.3% refusal rate to 11.0%.

4.2.5 The refusal rate for highway authority applications has reduced from a high of 14.3% in year 4 to 9.4%. 351 of the 3,747 applications received were refused, compared with 481 of the 3,355 applications received in year 4.

4.2.6 Only 17 applications were deemed during year 5; 8 for highway promoter applications and 9 for utility promoters.





**Figure 3: KPI 1, Permit and Variation Applications**

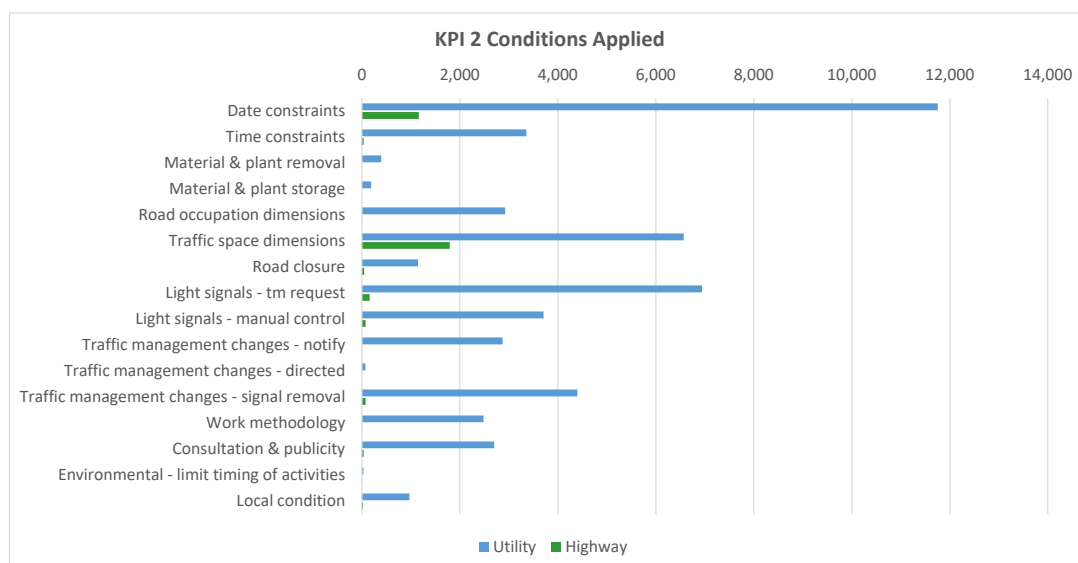
4.2.7 KPI 2 – the number of conditions applied by condition type; a breakdown of the number of conditions applied by condition type for highway and utility permit applications is shown in Table 8 and Figure 4.

**Table 8 KPI 2, Conditions applied, number and type**

All Conditions	Utility	Highway	All
TOTAL	50,523	3,421	53,944
	94%	6%	



Condition	Condition Description	Utility	Highway	All
NCT02a	Date constraints	11,753	1,163	12,916
NCT02b	Time constraints	3,359	37	3,396
NCT04a	Material & plant removal	396	0	396
NCT04b	Material & plant storage	191	0	191
NCT05a	Road occupation dimensions	2,924	6	2,930
NCT06a	Traffic space dimensions	6,569	1,793	8,362
NCT07a	Road closure	1,150	50	1,200
NCT08a	Light signals - tm request	6,943	158	7,101
NCT08b	Light signals - manual control	3,710	75	3,785
NCT09a	Traffic management changes - notify	2,874	2	2,876
NCT09b	Traffic management changes - directed	71	0	71
NCT09c	Traffic management changes - signal removal	4,397	75	4,472
NCT10a	Work methodology	2,482	1	2,483
NCT11b	Consultation & publicity	2,702	39	2,741
NCT12a	Environmental - limit timing of activities	32	1	33
NCT13	Local condition	970	21	991
	<b>TOTAL</b>	<b>50,523</b>	<b>3,421</b>	<b>53,944</b>



**Figure 4: KPI 2, Conditions Applied**

- 4.2.8 Year 5 sees a further 20% increase in the number of conditions applied to almost 54,000; following a 30% slight increase from 37,000 in year 3 to over 41,000 in year 4.
- 4.2.9 The ratio of utility conditions to highway conditions is unchanged and the ratio of each condition type is broadly consistent with previous years.
- 4.2.10 Conditions are more widely spread for utility applications, with date constraints, traffic space dimensions, traffic signal conditions and consultation/publicity still accounting for the bulk of the increase.



- 4.2.11 BT and United Utilities Water continue to account for around 50% of the conditions applied.
- 4.2.12 The number of conditions applied by Cadent Gas Limited doubled in year 5; increasing from 3,135 in year 4 to 7,056.
- 4.2.13 Conditions applied by other works promoters generally increased in line with the overall 30% in number of conditions.
- 4.2.14 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.

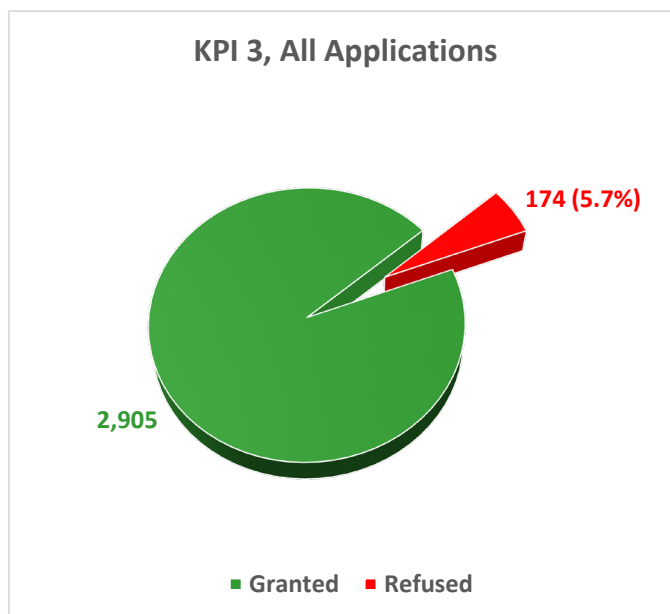
**Table 9 KPI 3, Number of approved extensions**

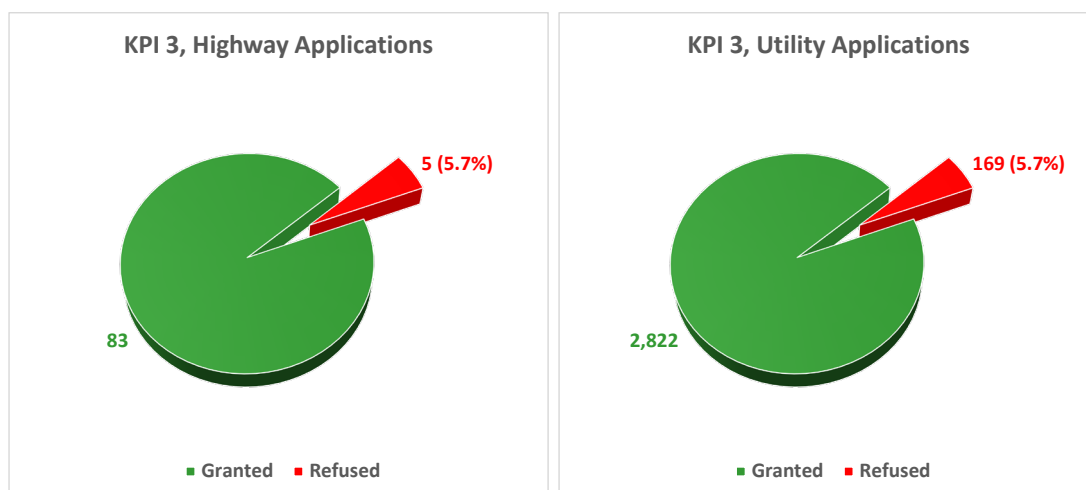
KPI 3: Duration Extension Requests	Received	Refused	%
Highway authority	88	5	5.7%
Utility	2,991	169	5.7%
ALL	3,079	174	5.7%

- 4.2.15 The number of applications to extend permit duration saw a further increase in year 5, from 2,661 to 3,079 – following an increase from 1,710 in year 3.

***Recommendation Yr 05 – 02: Monitor the number of applications to extend the permit in year 6, to identify the reasons for this on-going increase.***

- 4.2.16 The number of highway authority extension requests halved from year 4. Extension requests from utility works promoters saw a further increase from 2,504 in year 4 to 2,991 (20% more).
- 4.2.17 The refusal rate is consistent between highway and utility works promoters, at 5.7%, and slightly lower than the overall refusal rate in year 4.



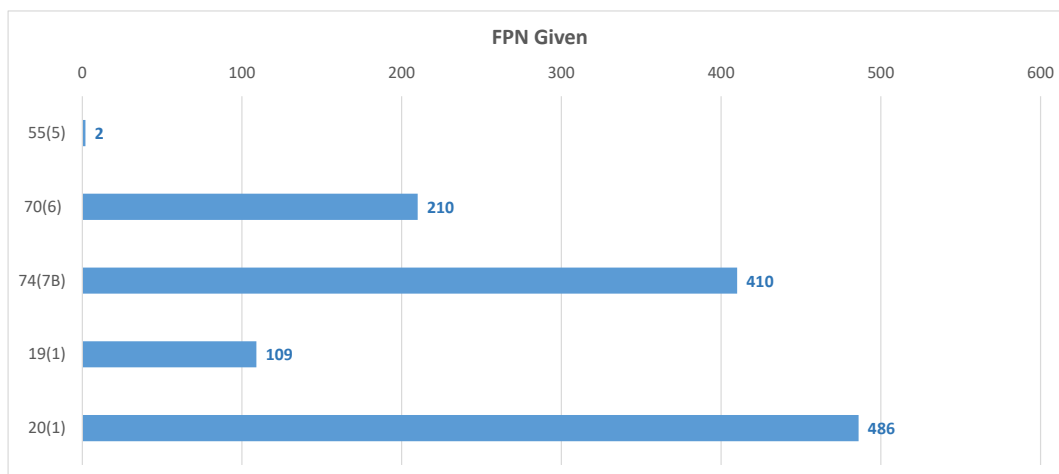


**Figure 5: KPI 3, Permit Extensions**

- 4.2.18 KPI 7 - the Number of Inspections carried out to monitor conditions. No specific data was available for permit inspections in year 5.
- 4.2.19 The number of FPN given for a non-compliance with permit conditions (section 20(1)) and working without a valid permit (section 20(1)) are shown in Table 10 and Figure 6.

**Table 10 Number of FPN given**

	FPN's Given					Total	Permits	
	55(5)	70(6)	74(7B)	19(1)	20(1)		Granted	%
BT [30]		12	76	6	24	118	8,060	1%
Cadent Gas Limited [10]		67	172	23	184	446	6,475	7%
Electricity North West [7005]		11	8	1	78	98	4,960	2%
Network Rail - Promoters National [7093]			12		1	13	238	5%
United Utilities Water Limited [9102]		29	79	62	120	290	12,787	2%
Virgin Media [7160]	2	46	29	9	39	123	4,291	3%
GEO [7304]		23	13	3	16	55	710	8%
Fulcrum Pipelines Limited [7294]			10	1	6	17	100	17%
Others	0	22	11	4	18	55	88	63%
<b>TOTAL</b>	<b>2</b>	<b>210</b>	<b>410</b>	<b>109</b>	<b>486</b>	<b>1,215</b>	<b>38,668</b>	



**Figure 6: Number of FPN given**

4.2.20 109 FPN were given for working without a valid permit in year 5 along with 486 FPN for a breach of permit conditions.

### 4.3 Conclusions

4.3.1 **KPI 1**, the number of Permit and Permit Variation applications received and a breakdown of the number granted and refused; the refusal rate for permit applications has reduced slightly compared with year 4, with approximately 11% of all permit and permit variation applications by all works promoters refused.

4.3.2 **KPI 2**, the number of conditions applied by condition type; all but 5% of the conditions applied relate to applications by utility promoters. The number of conditions reported has further increased in year 5 to almost 54,000 from 41,000 in the previous year and 37,000 in year 3. The ratio of utility conditions to highway conditions is unchanged and the ratio of each condition type is broadly consistent with the previous year. BT and United Utilities Water continue to account for over 50% of the conditions applied.

4.3.3 **KPI 3**, the number of approved Permit variations (extensions); the number of applications to extend permit duration saw a further increase in year 5, from 2,661 to 3,079 – following an increase from 1,710 in year 3. The refusal rate is consistent between highway and utility works promoters, at 5.7%, and slightly lower than the overall refusal rate in year 4.

4.3.4 It is recommended that the number of and justification for the year-on-year increase in applications to extend the permit duration be monitored in year 6.

4.3.5 **KPI 7**, the number of inspections carried out to monitor conditions; no specific data was available for permit inspections in year 5. The number of FPN given for a non-compliance with permit conditions (section 20(1)) and working without a valid permit (section 20(1)) has been reported.



## 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 each year since the introduction of the scheme, to determine whether the staff numbers forecast in the business case are still appropriate.
- 5.1.2 Overall, the number of works completed are very similar than forecast in the business case CBA, at 29,072 compared with 28,885 forecast in 2016.
- 5.1.3 The number of utility permits is higher than forecast at 26,390 compared with 26,498. Highway permit numbers are also very similar to the forecast – 2,682 compared with 2,387.
- 5.1.4 A number of permits granted are subsequently cancelled or never completed. The KPI 1 report records the number of utility permits granted but cancelled or never started at 4,331 or 9% of the total number of permits and permit variations. The number of highway permits cancelled is lower at 754, but a higher percentage of the number of highway permits (19%).
- 5.1.5 These permits have been included in the assessment of staff resource as since they have been granted, a permit fee is charged and time is spent by the permit team processing the applications.
- 5.1.6 Including cancellations increases the total number of permits granted to 32,086; split utility 28,819 and highway 3,267.

### 5.2 Staff Resource

- 5.2.1 The DfT Fees Matrix calculated the number of staff required to process the forecast number of permit applications in the first year of the scheme and set the permit fees to match the costs incurred to process utilities permit applications.
- 5.2.2 The forecast permit activity used in the 2014 business case estimated a total number of full time equivalent (FTE) staff of 18.0 (shown in Table 11). 14.7 FTE staff would be required to process utility permit applications and 3.3 staff to process highway applications.

**Table 11 2014 Business case staff resource projection**

PERSONNEL LEVEL	All Works	Utilities
Street Works Officer	8.9	7.4
Street Works Co-ordinator	7.3	6.0
Traffic Manager	1.7	1.4
<b>Total employees</b>	<b>18.0</b>	<b>14.7</b>

- 5.2.3 Using the actual number of utility and highway authority permit applications recorded in year 5, the same Fees Matrix spreadsheet calculates the total number of FTE staff requirement at 21.7 (Table 12).



**Table 12 Year 5 staff resource, 2019-20**

PERSONNEL LEVEL	All Works	Utilities
Street Works Officer	10.7	8.9
Street Works Co-ordinator	8.8	7.2
Traffic Manager	2.2	1.8
<b>Total employees</b>	<b>21.7</b>	<b>17.9</b>

- 5.2.4 Three additional staff are required to process utility works permit applications. The number of staff required to process highway permits is only very slightly higher – 3.8 FTE compared with 3.3.
- 5.2.5 The increase in staff required is a result of a higher proportion of permits being for works undertaken on traffic sensitive streets; 42% compared with 27% recorded in the Noticing data records. Applications for works on Category 0, 1 and 2 and other traffic sensitive streets require additional time to process.
- 5.2.6 The additional resource required to process permit applications will be reflected in a higher cost to the Council operate the scheme. Fee income will be higher also due to the cost of permits on traffic sensitive streets being more expensive.

### 5.3 Fee Income

- 5.3.1 Using the same Fees Matrix spreadsheet, the projected fee income for the actual number of permit applications processed in year 5 is £1,628,561.
- 5.3.2 This broken down to £1,445,352 for permit applications and £62,174 for the additional fees charged for permit variations (Table 13).
- 5.3.3 The permit fees charged in the first year include a surcharge to cover the utilities’ share of the allowable operational costs. This surcharge would recover £121,035 of the calculated overheads of £145,109, and is approximately 7.4% of the total annual income.

**Table 13 Year 5 DfT Fees Matrix outputs, 2019-20**

	NUMBER OF STAFF	SCHEME COST	EMPLOYEE COSTS		OTHER COSTS
			PERMIT APPLICATIONS	VARIATIONS	OVERHEADS
All works	21.7	£1,954,725			£145,109
Utility works only	17.9	£1,628,561	£1,445,352	£62,174	£121,035

- 5.3.4 The Council has reviewed permit fee income and total costs to operate the scheme at the end of year 3 and will be review again at the end of year 6; in line with advice in the Department for Transport "Advice Note, For local highway authorities developing new or varying existing permit schemes", June 2016, recommending consideration is given to reviewing fees every 3 years.



- 5.3.5 No action was taken to recover a small accumulated loss during the first three years of the scheme.
- 5.3.6 A decision will be taken following the next full review of fees and income on whether fees should be adjusted.





## 6 CONCLUSIONS

### 6.1 Summary

- 6.1.1 The Lancashire County Council (LCC) Permit Scheme went live on 2<sup>nd</sup> March 2015.
- 6.1.2 Following the fifth anniversary of the Permit Scheme on 2<sup>nd</sup> February 2020, GK-TC has been commissioned to undertake a detailed review of the operation during year 5 and to determine whether benefits achieved in the first three years have been maintained.
- 6.1.3 The operation of the fourth year of operation is evaluated and reported in this report '*Lancashire County Council Year 5 Review, 2019-20*'.

### 6.2 Scheme benefits

- 6.2.1 The year 5 data shows a slight reduction in the number of permit applications following a high in year 4.
- 6.2.2 Overall, the average works duration has increased slightly from 4.1 days in year 4 to 4.3 days in year 5. This is the highest the overall average duration has been since year 2.
- 6.2.3 The biggest contributor to the occupancy increase is an increase in the average duration of Major works from 12.9 days to 15 days, resulting in an additional 4,689 days occupancy compared with year 4.
- 6.2.4 The introduction of the permit scheme reduced the total number of days worked across the network by almost 28,000 in year 1. Further reductions in average duration in year 5 saves another 7,666 days or 5.7%, compared with year 1, despite a 3% increase in the number of works recorded.
- 6.2.5 The CBA business case calculated the cost per day for each traffic management type on each street type. The financial benefit to road users of the Permit Scheme in year 5 is calculated at **£21.0M per annum** - a very slight reduction from year 4. This saving equates to 29% of the overall cost of works calculated in the CBA (£72.0M per annum total cost to road users).
- 6.2.6 The benefit achieved in year 5 is only very slightly lower than that achieved in year 4. A recommendation has been made to monitor the duration of Major works undertaken by utility works promoters in year 6 to help drive down the average duration of works to the level achieved in year 4.

### 6.3 Recommendations

- 6.3.1 Two recommendations have been made, to monitor Major works durations and the number of and justification for the year-on-year increase in applications to extend the permit duration;

***Recommendation Yr 05 – 01: Monitor the proposed duration of Major works undertaken by utility works promoters and challenge durations where appropriate to help drive down the average duration of Major works in year 6.***

***Recommendation Yr 05 – 02: Monitor the number of applications to extend the permit in year 6, to identify the reasons for this on-going increase.***



## **6.4 Conclusions**

6.4.1 Monitoring the key performance indicators and empirical evidence gained from the first 5 years of operation demonstrates that the Permit Scheme;

- 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

6.4.2 This review has demonstrated that Scheme has achieved its objectives in the fifth year, as defined in the application documents.

6.4.3 The 22% reduction in number of days worked since Noticing is substantially higher than the 5% benefit specified in the DfT guidelines for the business case justification for a move to Permit Schemes.

**A. PERMIT APPLICATIONS 2019-20**

**A.1 All works**

**LANCASHIRE COUNTY COUNCIL PERMIT SCHEME ANNUAL REVIEW,  
YEAR 5 2019 - 2020  
ALL WORKS**

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

PROMOTER TYPE	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Highway Authority Works	2,116	2,514	2,682	168
Utility Works	26,176	27,841	26,390	-1,451
<b>Total</b>	<b>28,292</b>	<b>30,355</b>	<b>29,072</b>	<b>-1,283</b>

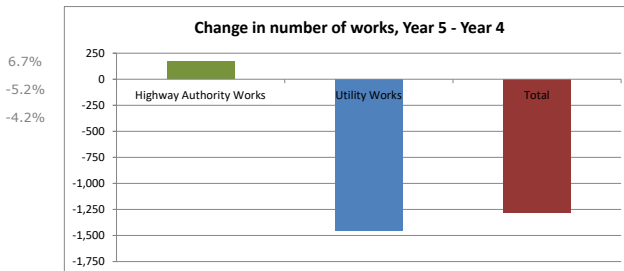
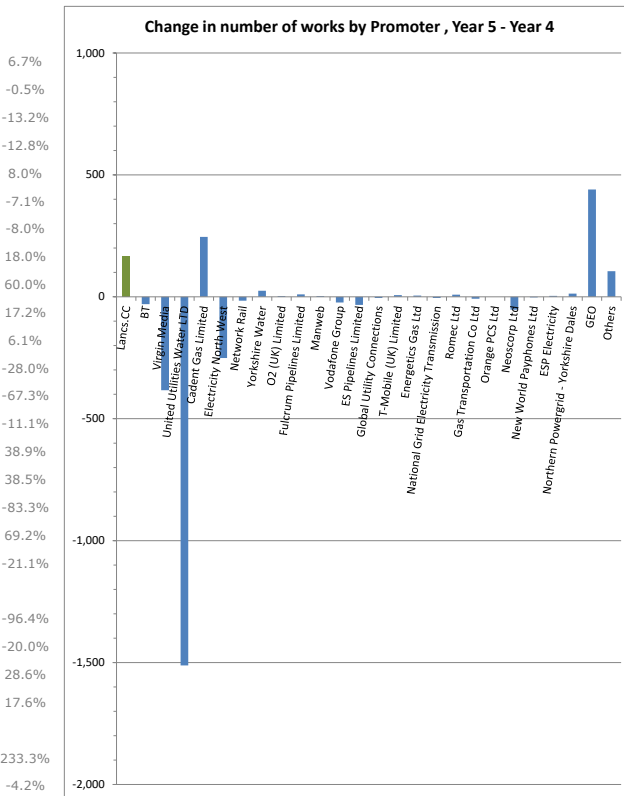


Table 2: Number of works by Promoter, year on year comparison

PROMOTER	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Lancs.CC	2,116	2,514	2,682	168
BT	6,482	5,614	5,584	-30
Virgin Media	2,518	2,909	2,526	-383
United Utilities Water LTD	9,662	11,830	10,318	-1,512
Cadent Gas Limited	3,396	3,064	3,310	246
Electricity North West	3,240	3,512	3,261	-251
Network Rail	152	199	183	-16
Yorkshire Water	94	139	164	25
O2 (UK) Limited	10	5	8	3
Fulcrum Pipelines Limited	57	58	68	10
Manweb	45	49	52	3
Vodafone Group	193	82	59	-23
ES Pipelines Limited	51	49	16	-33
Global Utility Connections	47	45	40	-5
T-Mobile (UK) Limited	42	18	25	7
Energetics Gas Ltd	28	13	18	5
National Grid Electricity Transmission	1	6	1	-5
Romec Ltd	9	13	22	9
Gas Transportation Co Ltd	26	38	30	-8
Orange PCS Ltd	5			
Neoscorp Ltd	2	55	2	-53
New World Payphones Ltd	7	10	8	-2
ESP Electricity	8	14	18	4
Northern Powergrid - Yorkshire Dales	101	74	87	13
GEO			440	440
Others		45	150	105
<b>Total</b>	<b>28,292</b>	<b>30,355</b>	<b>29,072</b>	<b>-1,283</b>



**LANCASHIRE COUNTY COUNCIL PERMIT SCHEME ANNUAL REVIEW,  
YEAR 5 2019 - 2020  
ALL WORKS**

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

TRAFFIC MANAGEMENT TYPE	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
No c/w incursion	6,784	5,690	4,428	-1,262
Some c/w incursion	8,836	13,550	11,808	-1,742
Give and take	5,441	3,446	4,907	1,461
Priority working	334	151	117	-34
Two-way signals	3,111	3,183	3,176	-7
Multi-way signals	1,045	1,972	2,145	173
Stop/go boards	730	449	514	65
Convoy working	12	6	6	0
Lane closure	268	350	366	16
Contra-flow	7	14	22	8
Road closure	1,499	1,550	1,583	33
Blank	225			
<b>Total</b>	<b>28,292</b>	<b>30,355</b>	<b>29,072</b>	<b>-1,283</b>

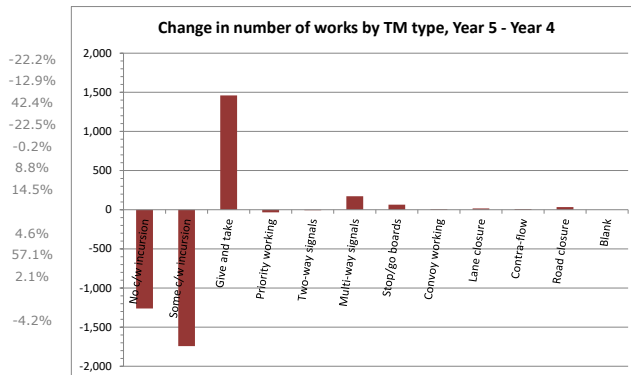


Table 4: Number of works by works category, year on year comparison

WORKS STOPPED	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Major	1,595	1,528	1,668	140
Standard	3,340	3,782	3,947	165
Minor	13,433	14,033	12,824	-1,209
Immediate - Urgent	8,127	9,604	9,321	-283
Immediate - Emergency	1,572	1,408	1,312	-96
Intention to Issue Licence	225			
<b>Total</b>	<b>28,292</b>	<b>30,355</b>	<b>29,072</b>	<b>-1,283</b>

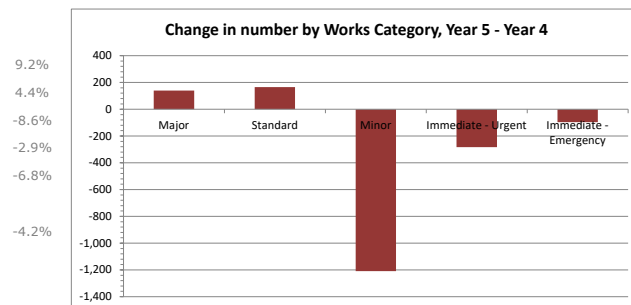


Table 5: Traffic sensitivity, year on year comparison

REINSTATEMENT CATEGORY	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Category 0 - 2	6,464	6,535	6,851	316
Category 3 - 4 TS	5,338	5,587	5,352	-235
Category 3 - 4 Non TS	15,942	17,745	16,406	-1,339
Blank / other	548	488	457	-31
<b>All works</b>	<b>28,292</b>	<b>30,355</b>	<b>29,066</b>	<b>-1,289</b>

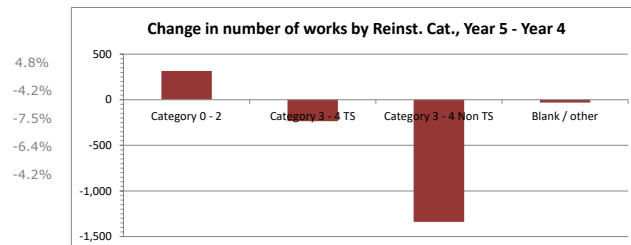


Table 6: Average works duration, year on year comparison

DURATION	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Average duration (days)	4.7	4.1	4.3	0.2
<b>Total number of days worked</b>	<b>133,791</b>	<b>125,121</b>	<b>126,125</b>	<b>1,004</b>

4.9%  
0.8%

## **A.2 Highway authority works**

**LANCASHIRE COUNTY COUNCIL PERMIT SCHEME ANNUAL REVIEW,  
YEAR 5 2019 - 2020  
HIGHWAY AUTHORITY WORKS**

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

TRAFFIC MANAGEMENT TYPE	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
No c/w incursion	126	893	1,051	158
Some c/w incursion	201	411	483	72
Give and take	328	177	126	-51
Priority working	13	12	3	-9
Two-way signals	231	205	230	25
Multi-way signals	62	59	87	28
Stop/go boards	230	134	164	30
Convoy working	1		1	1
Lane closure	82	90	82	-8
Contra-flow	1	1	1	
Road closure	616	532	454	-78
Blank	225			
<b>Total</b>	<b>2,116</b>	<b>2,514</b>	<b>2,682</b>	<b>168</b>

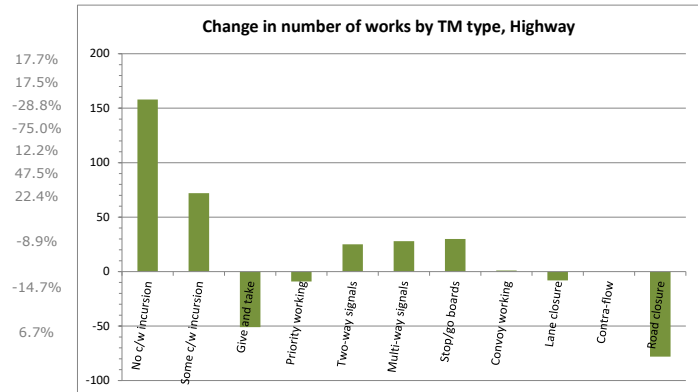


Table 8: Number of works by works category, year on year comparison

WORKS STOPPED	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Major	768	599	554	-45
Standard	574	1,045	1,299	254
Minor	443	702	666	-36
Immediate - Urgent	63	51	70	19
Immediate - Emergency	43	117	93	-24
Intention to Issue Licence	225			
<b>Total</b>	<b>2,116</b>	<b>2,514</b>	<b>2,682</b>	<b>168</b>

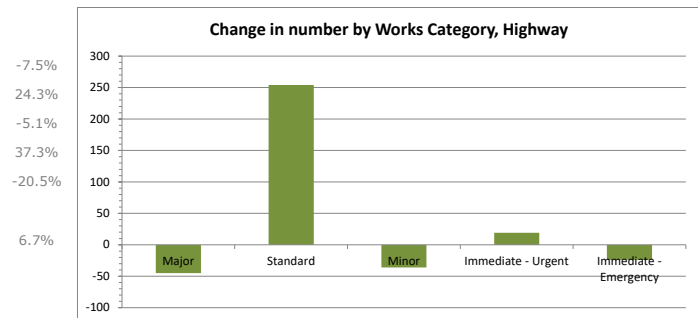


Table 9: Average works duration, year on year comparison

DURATION	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Average duration (days)	12.8	9.9	9.5	-0.4
<b>Total number of days worked</b>	<b>27,119</b>	<b>24,871</b>	<b>25,362</b>	<b>491</b>

-4.0%  
2.0%

Year 5, 2019-20, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
20.0	7.1	4.0	4.7	22.0
<b>11,065</b>	<b>9,234</b>	<b>2,690</b>	<b>331</b>	<b>2,042</b>

Year 4, 2018-19, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
14.4	7.6	9.1	11.4	11.8
<b>8,646</b>	<b>7,909</b>	<b>6,362</b>	<b>579</b>	<b>1,375</b>

Difference, Year 4 - Year 3

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
5.6	-0.5	-5.1	-6.7	10.2
<b>2,419</b>	<b>1,325</b>	<b>-3,672</b>	<b>-248</b>	<b>667</b>

### **A.3 Utility works**



**LANCASHIRE COUNTY COUNCIL PERMIT SCHEME ANNUAL REVIEW,  
YEAR 5 2019 - 2020  
UTILITY COMPANY WORKS**

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

TRAFFIC MANAGEMENT TYPE	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
No c/w incursion	6,658	4,797	3,377	-1,420
Some c/w incursion	8,635	13,139	11,325	-1,814
Give and take	5,113	3,269	4,781	1,512
Priority working	321	139	114	-25
Two-way signals	2,880	2,978	2,946	-32
Multi-way signals	983	1,913	2,058	145
Stop/go boards	500	315	350	35
Convoy working	11		5	5
Lane closure	186	260	284	24
Contra-flow	6	13	21	8
Road closure	883	1,018	1,129	111
Blank				
<b>Total</b>	<b>26,176</b>	<b>27,841</b>	<b>26,390</b>	<b>-1,451</b>

-29.6%  
-13.8%  
46.3%  
-18.0%  
-1.1%  
7.6%  
11.1%  
9.2%  
61.5%  
10.9%  
-5.2%

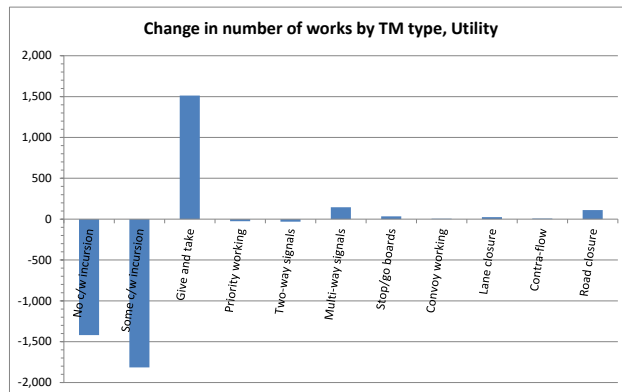


Table 11: Number of works by works category, year on year comparison

WORKS STOPPED	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Major	827	929	1,114	185
Standard	2,766	2,737	2,648	-89
Minor	12,990	13,331	12,158	-1,173
Immediate - Urgent	8,064	9,553	9,251	-302
Immediate - Emergency	1,529	1,291	1,219	-72
Other				
<b>Total</b>	<b>26,176</b>	<b>27,841</b>	<b>26,390</b>	<b>-1,451</b>

19.9%  
-3.3%  
-8.8%  
-3.2%  
-5.6%  
-5.2%

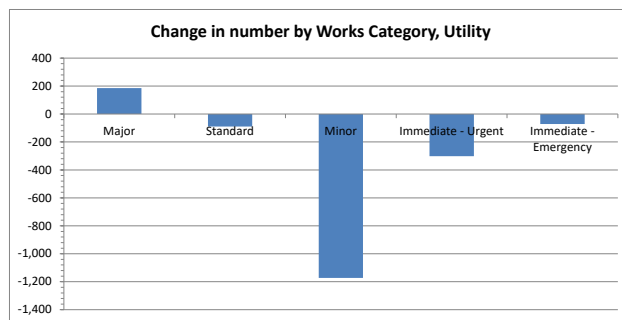


Table 12: Average works duration, year on year comparison

DURATION	Year 1 2015-16	Year 4 2018-19	Year 5 2019-20	Diff Yr 5 - Yr 4
Average duration (days)	4.1	3.6	3.8	0.2
<b>Total number of days worked</b>	<b>106,672</b>	<b>100,250</b>	<b>100,763</b>	<b>513</b>

5.6%  
0.5%

Year 5, 2019-20, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
15.0	6.9	2.0	3.6	6.2
<b>16,714</b>	<b>18,314</b>	<b>24,392</b>	<b>33,760</b>	<b>7,583</b>

Year 4, 2018-19, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
12.9	6.7	2.0	3.8	6.1
<b>12,025</b>	<b>18,243</b>	<b>26,121</b>	<b>35,959</b>	<b>7,902</b>

Difference, Year 4 - Year 3

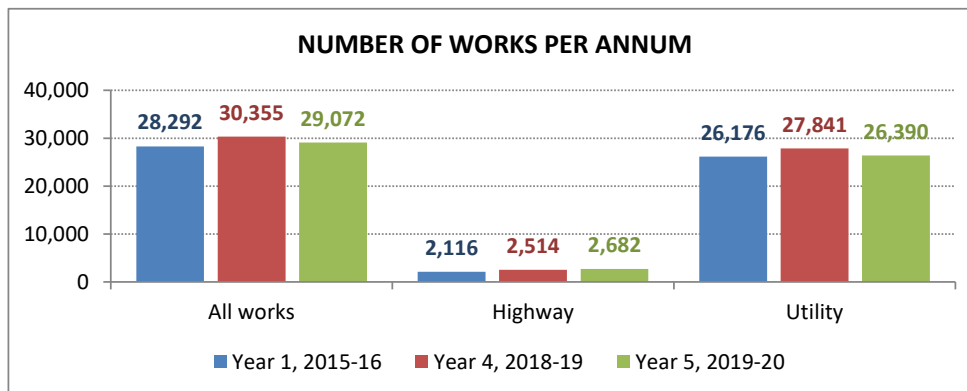
MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
2.1	0.2		-0.2	0.1
<b>4,689</b>	<b>71</b>	<b>-1,729</b>	<b>-2,199</b>	<b>-319</b>

**B. SCHEME BENEFITS**

## SCHEME BENEFITS

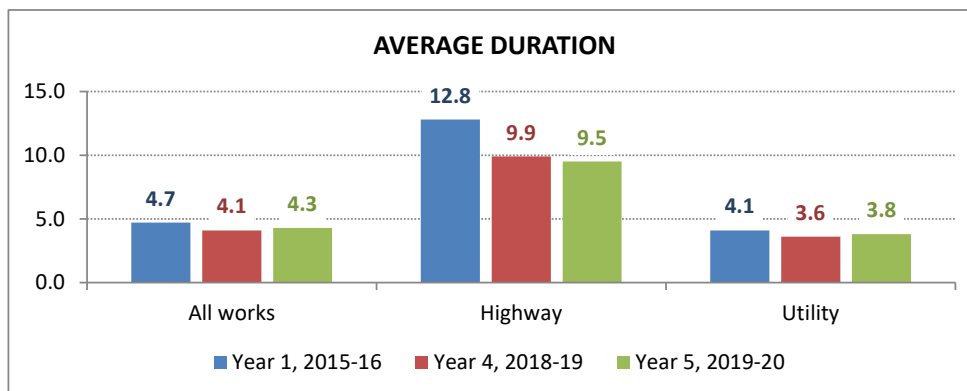
### NUMBER OF WORKS (number)

	All works	Highway	Utility
Year 1, 2015-16	28,292	2,116	26,176
Year 4, 2018-19	30,355	2,514	27,841
Year 5, 2019-20	29,072	2,682	26,390
Change, Year 5 - Year 4	-1,283	168	-1,451
Change (%)	-4.2%	6.7%	-5.2%



### DURATION (days)

	All works	Highway	Utility
Year 1, 2015-16	4.7	12.8	4.1
Year 4, 2018-19	4.1	9.9	3.6
Year 5, 2019-20	4.3	9.5	3.8
Change (days)	0.2	-0.4	0.2



### DAYS WORKED (days)

	All works	Highway	Utility
Year 1, 2015-16	133,791	27,119	106,672
Year 4, 2018-19	125,121	24,871	100,250
Year 5, 2019-20	126,125	25,362	100,763
Change, Year 5 - Year 4	1,004	491	513
Change (%)	0.8%	2.0%	0.5%

