

The Lancashire Permit Scheme for Road & Street Activities

Year 6 Review, 2020-21





Lancashire County Council Permit Scheme, Year 6 Review, 2020-21

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1 INTRODUCTION

1.1 Background

- 1.1.1 The Lancashire County Council (LCC) Permit Scheme went live on 2nd 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 5 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. Overall, the benefits have been maintained at or above the level achieved in year 1 over the last 4 years.
- 1.1.7 The evaluation of the operation during years 2 to 5 has been reported annually. This report presents the evaluation of the scheme operation for year 6 covering the period March 2020 to February 2021.

1.2 Year 6 Review

- 1.2.1 Following the sixth anniversary of the Permit Scheme on 2nd February 2021, GK-TC has been commissioned to undertake a detailed review of the operation during year 6 and to determine whether benefits achieved in the first five years have been maintained. A full review of the costs and income during years 4 to 6 will also be undertaken.
- 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 6 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

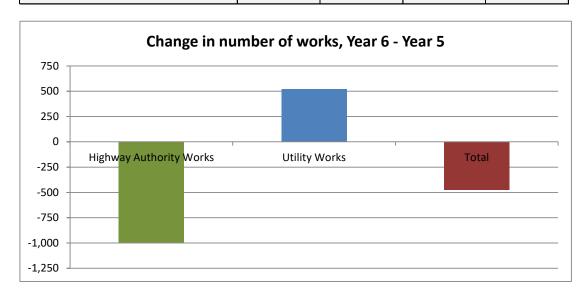
- 3.1.1 Data sources available for the year 6 review are:
 - Permit Scheme work stops notices, February 2020 February 2021 (Symology system).
 - Key Performance Indicator reports February 2020 February 2021 (Symology system).
 - TPI reports; days of occupancy, average duration of works, overrun days, 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 6 performance against the previous year year 5 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

Total	28,292	29,072	28,597	-475
Utility Works	26,176	26,390	26,913	523
Highway Authority Works	2,116	2,682	1,684	-998
PROMOTER TYPE	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5

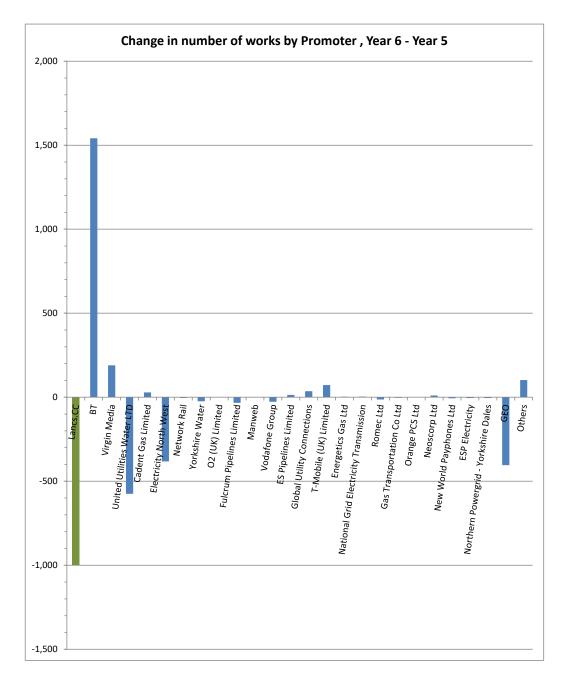




- 3.2.3 The number of works completed during year 6 reduced very slightly by 1.6% or 475 works compared with the previous year.
- 3.2.4 A reduction in highway works completed of just under 1,000 or 37% was offset to a degree by an additional 523 utility works completed in year 6.
- 3.2.5 The change in 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 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5
Lancs.CC	2,116	2,682	1,684	-998
ВТ	6,482	5,584	7,125	1,541
Virgin Media	2,518	2,526	2,716	190
United Utilities Water LTD	9,662	10,318	9,743	-575
Cadent Gas Limited	3,396	3,310	3,339	29
Electricity North West	3,240	3,261	2,879	-382
Network Rail	152	183	179	-4
Yorkshire Water	94	164	140	-24
O2 (UK) Limited	10	8	9	1
Fulcrum Pipelines Limited	57	68	35	-33
Manweb	45	52	54	2
Vodafone Group	193	59	32	-27
ES Pipelines Limited	51	16	30	14
Global Utility Connections	47	40	76	36
T-Mobile (UK) Limited	42	25	97	72
Energetics Gas Ltd	28	18	21	3
National Grid Electricity Transmission	1	1	5	4
Romec Ltd	9	22	9	-13
Gas Transportation Co Ltd	26	30	27	-3
Orange PCS Ltd	5			
Neoscorp Ltd	2	2	12	10
New World Payphones Ltd	7	8	2	-6
ESP Electricity	8	18	13	-5
Northern Powergrid - Yorkshire Dales	101	87	82	-5
GEO		440	36	-404
Others		150	252	102
Total	28,292	29,072	28,597	-475



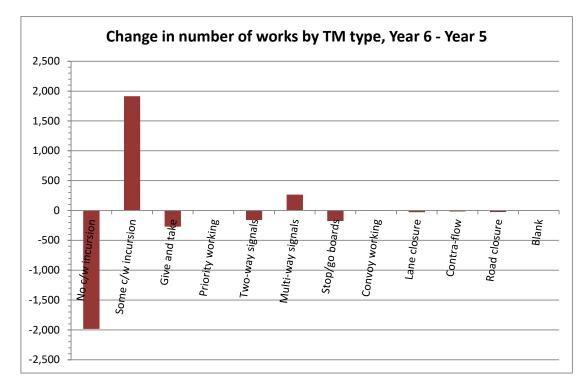
- 3.2.6 The data shows a large increase in the number of BT works completed a 28% increase amounting to more than 1,500 additional works. Smaller reductions in works carried out by United Utilities Water Ltd (575 and 6% fewer in year 6), Electricity North West (382 and 12% fewer) and GEO (404 fewer works or a 92% reduction) offset most of this increase.
- 3.2.7 The changes for other works promoters are not felt to be significant and are generally within the range of changes expected year on year.
- 3.2.8 The detailed analysis presented in the following paragraphs is for applications by all works promoters.
- 3.2.9 The same analysis is presented separately in Appendix A for highway authority works and utility company works.



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

Table 3 Number of applications by traffic management type

TRAFFIC MANAGEMENT TYPE	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5
No c/w incursion	6,784	4,428	2,444	-1,984
Some c/w incursion	8,836	11,808	13,723	1,915
Give and take	5,441	4,907	4,637	-270
Priority working	334	117	123	6
Two-way signals	3,111	3,176	3,018	-158
Multi-way signals	1,045	2,145	2,412	267
Stop/go boards	730	514	339	-175
Convoy working	12	6	1	-5
Lane closure	268	366	338	-28
Contra-flow	7	22	5	-17
Road closure	1,499	1,583	1,557	-26
Blank	225			
Total	28,292	29,072	28,597	-475



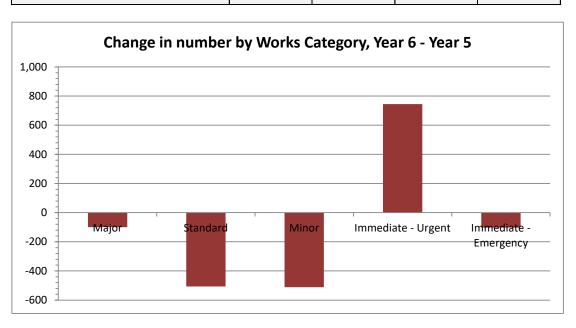
3.2.11 Year 6 sees a further significant reduction in the number of works described as having no incursion into the carriageway. The near 2,000 reduction in works with no carriageway incursion is offset by a similar increase in the number of works having some incursion into the carriageway. This is likely to be due more accurate reporting of the impact of works on traffic, rather than a change in working practices.



- 3.2.12 There has been a steady reduction in the number of works labelled with no carriageway incursion, with 25% of works defined with this category of traffic management in the first year of the scheme. Year 6 sees fewer than 10% of works described as having no impact on traffic flows.
- 3.2.13 There is a further increase in the number of works operating with multi-phase temporary traffic signals for both highway and utility works. The trend has been small year on year increases recorded from years 2 through to year 6, 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 total number of completed works permits by works category is shown in Table 4 and the accompanying chart.

Year 1 Year 5 Year 6 Diff WORKS STOPPED 2015-16 2019-20 2020-21 Yr 6 - Yr 5 1,595 -100 Major 1,668 1,568 Standard 3,947 -506 3,340 3,441 Minor 13,433 12,824 12,313 -511 Immediate - Urgent 8,127 9,321 10,066 745 Immediate - Emergency 1,572 1,312 1,209 -103 Intention to Issue Licence 225 Total 28,292 29,072 28,597 -475

Table 4 Applications by works category

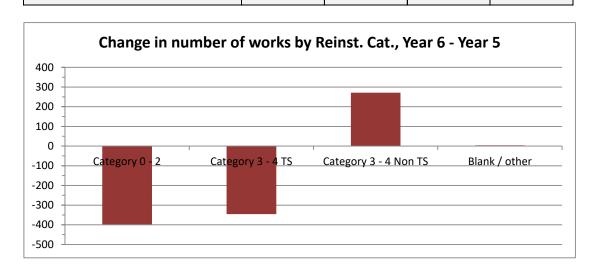


3.2.16 There number of works completed for each works category has broadly consistent year on year since the introduction of the scheme. The annual differences generally amount to a less than 10% change year on year.

- 3.2.17 However, the number of Immediate Urgent works has increased in years 5 and 6, with similar reductions in the number of Minor works.
 - Recommendation Yr 06 01: Monitor the number of applications for Immediate Urgent works to identify whether all fall within the criteria for Immediate works, as opposed to avoiding the need for a notification period for Minor works.
- 3.2.18 There has been a further 14% increase in the number of Major works completed by utility works promoters (following a 20% increase in year 5). A relatively large reduction in the number of Major Highway works (46% fewer than year 5) has offset this increase.
- 3.2.19 The total number of works completed by reinstatement category type is shown in Table 5 and the accompanying chart.

Year 1 Year 5 Year 6 Diff REINSTATEMENT CATEGORY 2015-16 2019-20 2020-21 Yr 6 - Yr 5 Category 0 - 2 6,464 6,851 6,453 -398 Category 3 - 4 TS 5,338 5,352 5,006 -346 Category 3 - 4 Non TS 15,942 16,406 16,677 271 Blank / other 548 457 4 461 All works 28,292 29,066 28,597 -469

Table 5 Number by reinstatement category type



- 3.2.20 The spread of works completed across the three road category groups has been broadly consistent year on year. The year 6 data shows a slight increase in the number of works on Non-Traffic Sensitive streets and a corresponding reduction in works on Traffic Sensitive streets.
- 3.2.21 This will have a slight impact on the staff resource required to process permit applications and on the fee income charged.
- 3.2.22 However, the changes are within 5% or 6% of the previous year, so not thought to be significant.



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

Table 6 Average works duration

DURATION	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5
Average duration (days)	4.7	4.3	4.2	-0.1
Total number of days worked	133,791	126,125	121,053	-5,072

- 3.2.24 Overall, the average works duration has reduced slightly from 4.3 days in year 5 to 4.2 days in year 6. This follows an increase from 4.1 days average in year 4 the lowest average duration since the introduction of the scheme.
- 3.2.25 The average duration of highway works continues to fall year on year, from 12.8 days in year 1 to 9.2 days last year. This is in part due to a reduction in the number of longer duration Major and Standard works completed. The number of days worked on highway schemes is at its lowest level since Noticing, when fewer than 1,000 highway works were recorded.
- 3.2.26 The average duration of utility works has increased slightly in years 5 and 6, following a steady reduction in duration from year 1 to year 4. This is in part due to an increase in the number of Major works undertaken and an increase in the average duration for these works adding almost 5,500 days worked to the total of 105,553 days worked on completed utility works.

Recommendation Yr 06 - 02: 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 7.

(Continuation of Recommendation Year 05 – 01 from the previous year review).

3.2.27 The other utilities' works categories show only small fluctuations in average duration (see Table 7).

Table 7 Utility works duration by works category

Year 6, 2020-21, Duration by works category

22,146	18,277	22,277	36,399	6,454
17.5	6.7	1.9	3.7	5.5
MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)

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
16,714	18,314	24,392	33,760	7,583

Difference, Year 6 - Year 5

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
2.5	-0.2	-0.1	0.1	-0.7
5,432	-37	-2,115	2,639	-1,129

3.3 Scheme Benefit

3.3.1 Figure 1 presents the number of works per annum in years 1, 5 and 6.

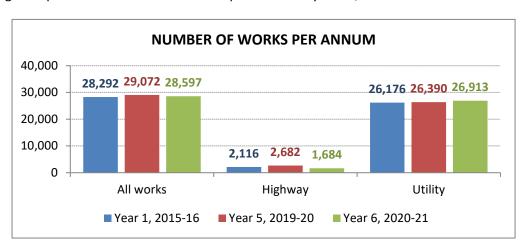


Figure 1 Number of works per annum

- 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 had steadily increased year-on-year, until year 6, which saw a large reduction in the number of Major and Standard works with both reducing by more than 40%.
- 3.3.3 Utility works are generally consistent, with small fluctuations between years evident.
- 3.3.4 Figure 2 presents a comparison of the average duration of works.

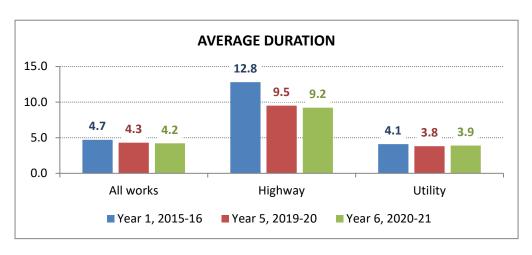


Figure 2 Average duration of works

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

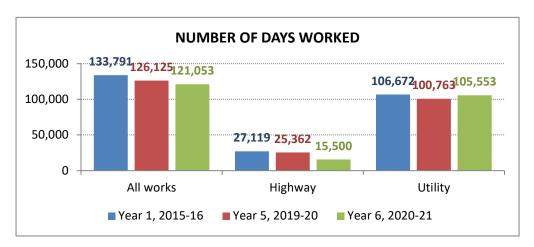


Figure 3 Number of days worked per annum

- 3.3.7 Occupation of the highway has been consistently low since year 3 when a large reduction from the opening years was achieved.
- 3.3.8 The benefit of the scheme is assessed against the benchmark prior to the introduction of the Permit Scheme. Year 6 shows a 40,534 reduction in number of days worked compared with the Noticing baseline (121,053 days compared with 161,587 days).



- 3.3.9 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 6 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, 40,534
 - Monetary benefit to road users, £24.0M per annum
- 3.3.10 This saving equates to approximately 33% 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 6 data shows a further slight reduction in the number of permits granted following a high in year 4.
- 3.4.2 Overall, the average works duration has reduced from 4.3 days in year 5 to 4.2 days in year 6.
- 3.4.3 Utility works show a very slight increase in average duration from 3.8 days to 3.9 days. This is predominantly a result of an increase in the average duration of Major utility works, adding 5,432 additional days to the annual total, and continues a pattern identified I the year 5 data records.
- 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 12,738 days or 9.5%, compared with year 1, despite a 1% 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 6 is calculated at £24.0M per annum a further reduction from year 5. This saving equates to 33% of the overall cost of works calculated in the CBA (£72.0M per annum total cost to road users).
- 3.4.6 The 25% 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 6 is the highest achieved since the introduction of the scheme. Despite this, a recommendation has been made to monitor the duration of Major works undertaken by utility works promoters in year 7 to help drive down the occupancy of the road network.

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

Table 8 KPI 1, Permit and Variation applications received and refused

KPI 1: Permit & Permit Variation Applications	Received	Granted	Refused	Deemed	% Refused
Highway authority	2,620	2,447	167	6	6.4%
Utility	43,343	39,051	4,254	38	9.8%
ALL	45,963	41,498	4,421	44	9.6%

- 4.2.3 The refusal rate for permit applications has reduced again slightly compared with previous years.
- 4.2.4 The number of utility applications refused has reduced from 4,795 to 4,254, with a further drop from 11.0% refusal rate to 9.8%.
- 4.2.5 The refusal rate for highway authority applications has further reduced from a high of 14.3% in year 4 to 6.4%. 167 of the 2,620 applications received were refused, compared with 481 of the 3,355 applications received in year 4.
- 4.2.6 44 applications were deemed during year 6; 6 for highway promoter applications and 38 for utility promoters. It is likely that the impact of COVID lockdown and the transition to working from home for most staff contributed to the increase last year.

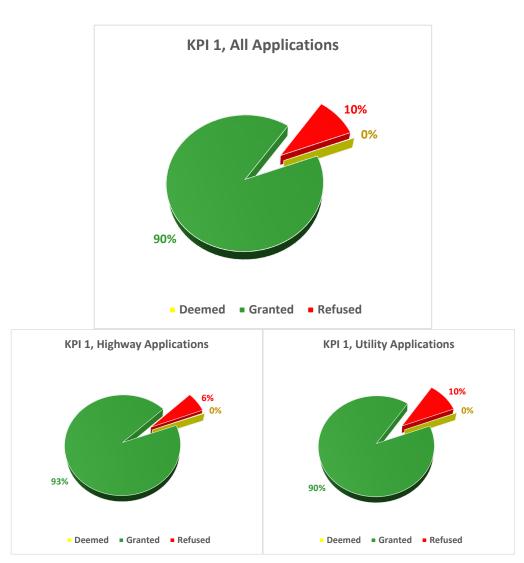


Figure 4: KPI 1, Permit and Variation Applications

4.2.7 Approximately 12% of all permits granted were subsequently cancelled or never started in year 6. The total number of permits cancelled and the split between highway and utility permits is very similar to year 5 (Table 9).

Table 9 Permits granted but cancelled or never started

PROMOTER	Permits Granted	Cancelled/Never Started	%
Highway authority	2,447	822	33.6%
Utility	39,051	4,219	10.8%
ALL	41,498	5,041	12.1%

4.2.8 The above permits have been included in the assessment of staff resource and cost to process as staff resource has been allocated to process and a permit fee charged following granting.



4.2.9 **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 10 and Figure 5.

Table 10 KPI 2, Conditions applied, number and type

All Conditions	Utility	Highway	All
TOTAL	47,968	1,674	49,642
	97%	3%	

Condition	Condition Description	Utility	Highway	All
NCT02a	Date constraints	10,251	392	10,643
NCT02b	Time constraints	3,610	58	3,668
NCT04a	Material & plant removal	395	0	395
NCT04b	Material & plant storage	584	0	584
NCT05a	Road occupation dimensions	1,676	1	1,677
NCT06a	Traffic space dimensions	6,284	888	7,172
NCT07a	Road closure	1,166	74	1,240
NCT08a	Light signals - tm request	6,877	140	7,017
NCT08b	Light signals - manual control	3,646	21	3,667
NCT09a	Traffic management changes - notify	2,122	3	2,125
NCT09b	Traffic management changes - directed	674	0	674
NCT09c	Traffic management changes - signal removal	4,295	19	4,314
NCT10a	Work methodology	2,789	0	2,789
NCT11b	Consultation & publicity	3,403	49	3,452
NCT12a	Environmental - limit timing of activities	13	3	16
NCT13	Local condition	183	26	209
	TOTAL	47,968	1,674	49,642

- 4.2.10 Year 6 sees a reduction in the number of conditions applied to almost 50,000; following an increase to a high of almost 54,000 in year 5.
- 4.2.11 Most of this reduction is due to fewer conditions applied to the reduced number of highway permit applications submitted. As a result, the ratio of utility conditions to highway conditions has changed from 94:6 to 97:3.

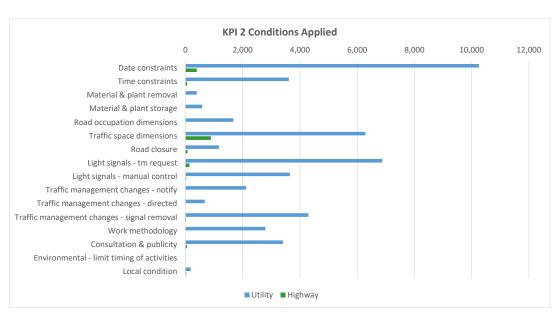


Figure 5: KPI 2, Conditions Applied

- 4.2.12 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.
- 4.2.13 BT and United Utilities Water continue to account for more than 50% of the conditions applied.
- 4.2.14 The number of conditions applied by Cadent Gas Limited increased further in year 6; from 3,135 in year 4 to 7,056 in year 5 and 9,790 in year 6.
- 4.2.15 **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 11 KPI 3, Number of approved extensions

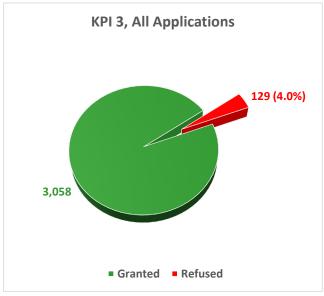
KPI 3: Duration Extension Requests	Received	Refused	%
Highway authority	68	2	2.9%
Utility	3,119	127	4.1%
ALL	3,187	129	4.0%

4.2.16 The number of applications to extend permit duration saw a further small increase in year 6, from 3,079 to 3,187– following an increase from 2,661 in year 4.

Recommendation Yr 06 - 03: Monitor the number of applications to extend the permit in year 7, to identify the reasons for this on-going increase.

4.2.17 The number of highway authority extension requests have reduced in year 6. Extension requests from utility works promoters saw a further increase from 2,991 in year 5 to 3,119 (4% more).

4.2.18 The refusal rate is consistent between highway and utility works promoters, at 3% to 4%, and slightly lower than the overall refusal rate in years 4 and 5.



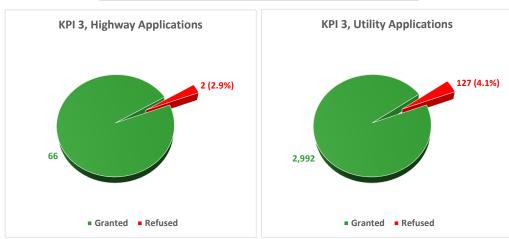


Figure 6: KPI 3, Permit Extensions

4.2.19 **KPI 7** - the Number of Inspections carried out to monitor conditions. 3,752 permit condition inspections were recorded in year 6 (Table 12).

Table 12 KPI 7, Number of permit inspections

Permit Condition Inspections	Passed	Non- Compliant	Abortive	Number of Inspections	Fail %
Highway authority	33	2		35	5.7%
Utility	3,308	406	3	3,717	10.9%
ALL	3,341	408	3	3,752	10.9%

4.2.20 408 or 11% of the inspections were found to be non-compliant.



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 again slightly compared with years 4 and 5, with approximately 10% 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 3% of the conditions applied relate to applications by utility promoters. Year 6 sees a reduction in the number of conditions applied to almost 50,000; following an increase to a high of almost 54,000 in year 5. Most of this reduction is due to fewer conditions applied to the reduced number of highway permit applications submitted. As a result, the ratio of utility conditions to highway conditions has changed from 94:6 to 97:3.
- 4.3.3 **KPI 3**, the number of approved Permit variations (extensions); the number of applications to extend permit duration saw a further small increase in year 6, from 3,079 to 3,187–following an increase from 2,661 in year 4. The refusal rate is consistent between highway and utility works promoters, at 3% to 4%, and slightly lower than the overall refusal rate in years 4 and 5.
- 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 7.
- 4.3.5 **KPI 7**, the number of inspections carried out to monitor conditions; 3,752 permit condition inspections were recorded in year 6. 408 or 11% of the inspections were found to be non-compliant.

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 28,597 compared with 28,885 forecast in 2016.
- 5.1.3 The number of utility permits is slightly higher than forecast at 26,913 compared with 26,498. Highway permit numbers are lower than forecast and lower than any previous year 1,684 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 4,219 or 10.8% of the total number of permits and permit variations. The number of highway permits cancelled is lower at 822, but a higher percentage of the number of highway permits (34%).
- 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 31,944; split utility 29,637 and highway 2,307.

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 12). 14.7 FTE staff would be required to process utility permit applications and 3.3 staff to process highway applications.

Table 12 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
Total employees	18.0	14.7

5.2.3 Using the actual number of utility and highway authority permit applications recorded in year 6, the same Fees Matrix spreadsheet calculates the total number of staff required at 20.9 (Table 13).



Table 13 Year 6 staff resource, 2020-21

PERSONNEL LEVEL	All Works	Utilities
Street Works Officer	10.4	9.1
Street Works Co-ordinator	8.5	7.5
Traffic Manager	2.1	1.8
Total employees	20.9	18.5

- 5.2.5 The number of staff required to process highway permits has reduced from 3.3 to 2.4 in year 6. This is a result of 500 fewer permits granted in year 6 compared with the CBA forecast.
- 5.2.6 Conversely, the number of staff required to process utility applications is 3.8 FTE higher than the CBA forecast. This is a combination of a higher proportion of works taking place on the traffic sensitive network 40% compared with 27% recorded in the Noticing data records and almost 3,000 more permits granted in year 6.
- 5.2.7 While the total number of staff required to process all granted permits in year 6 has reduced compared with the previous year (a reduction of 0.8 FTE) the staff required to process utility applications has increased by 0.6 FTE. This is a result of an additional 800 permits granted (600 extra works completed and an additional 200 permits granted but subsequently cancelled).
- 5.2.8 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 cost to process granted utility permits in year 6 is £1,858,676.
- 5.3.2 This broken down to £1,656,864 for permit applications and £63,722 for the additional fees charged for permit variations (Table 14).
- 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 £138,090 of the calculated overheads of £154,431 and is approximately 7.4% of the total annual income.
- 5.3.4 The year 6 cost to process is approximately £188,000 higher than calculated in year 5. This is primarily a result of an additional 160 Major permits granted, together with the time required to process PAA (Provisional Advanced Authorisation) and the associated additional fee charged.



Table 14 Year 6 DfT Fees Matrix outputs, 2020-21

	NUMBER OF	COLUENTE COCT	EMPLOY	EE COSTS	OTHER COSTS
	STAFF	SCHEME COST	PERMIT APPLICATIONS	VARIATIONS	OVERHEADS
All works	20.9	£2,080,852	£1,880,786	£45,635	£154,431
Utility works only	18.5	£1,858,676	£1,656,864	£63,722	£138,090

- 5.3.5 The Council has reviewed permit fee income and total costs to operate the scheme at the end of year 3 and plan to review again following completion of the year 6 review; 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.
- 5.3.6 No action was taken to recover a small accumulated loss during the first three years of the scheme.
- 5.3.7 A decision will be taken following the next full review of fees and income on whether fees should be adjusted during year 7.

6 CONCLUSIONS

6.1 Summary

- 6.1.1 The Lancashire County Council (LCC) Permit Scheme went live on 2nd March 2015.
- 6.1.2 Following the sixth anniversary of the Permit Scheme on 2nd February 2021, GK-TC has been commissioned to undertake a detailed review of the operation during year 6 and to determine whether benefits achieved in the first three years have been maintained.
- 6.1.3 The operation of the sixth year of operation is evaluated and reported in this report *'Lancashire County Council Year 6 Review, 2020-21'*.

6.2 Scheme benefits

- 6.2.1 The year 6 data shows a further slight reduction in the number of permits granted following a high in year 4.
- 6.2.2 Overall, the average works duration has reduced from 4.3 days in year 5 to 4.2 days in year
- 6.2.3 Utility works show a very slight increase in average duration from 3.8 days to 3.9 days. This is predominantly a result of an increase in the average duration of Major utility works, adding 5,432 additional days to the annual total, and continues a pattern identified I the year 5 data records.
- 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 12,738 days or 9.5%, compared with year 1, despite a 1% 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 6 is calculated at £24.0M per annum a further reduction from year 5. This saving equates to 33% 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 6 is the highest achieved since the introduction of the scheme. Despite this, a recommendation has been made to monitor the duration of Major works undertaken by utility works promoters in year 7 to help drive down the occupancy of the road network.

6.3 Recommendations

6.3.1 Three recommendations have been made, to monitor Major works durations and the number of and justification for the increase in Immediate – Urgent works and requests for duration extensions;

Recommendation Yr 06 - 01: Monitor the number of applications for Immediate – Urgent works to identify whether all fall within the criteria for Immediate works, as opposed to avoiding the need for a notification period for Minor works.



Recommendation Yr 06 - 02: 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 7.

Recommendation Yr 06 - 03: Monitor the number of applications to extend the permit in year 7, to identify the reasons for this on-going increase.

6.3.2 Recommendations 02 and 03 are continuations of recommendations made in the year 5 review.

6.4 Conclusions

- 6.4.1 Monitoring the key performance indicators and empirical evidence gained from the first 6 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 sixth year, as defined in the application documents.
- 6.4.3 The 25% 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 2020-21
- A.1 All works

LANCASHIRE COUNTY COUNCIL PERMIT SCHEME ANNUAL REVIEW, ALL WORKS

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

PROMOTER TYPE	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5
Highway Authority Works	2,116	2,682	1,684	-998
Utility Works	26,176	26,390	26,913	523
Total	28,292	29,072	28,597	-475

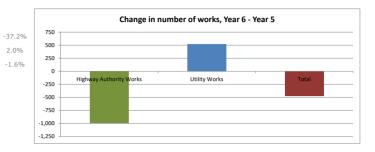
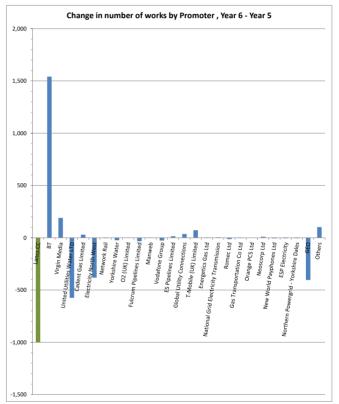


Table 2: Number of works by Promoter, year on year comparison

PROMOTER	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5	
Lancs.CC	2,116	2,682	1,684	-998	-37.2%
вт	6,482	5,584	7,125	1,541	27.6%
Virgin Media	2,518	2,526	2,716	190	7.5%
United Utilities Water LTD	9,662	10,318	9,743	-575	-5.6%
Cadent Gas Limited	3,396	3,310	3,339	29	0.9%
Electricity North West	3,240	3,261	2,879	-382	-11.7%
Network Rail	152	183	179	-4	-2.2%
Yorkshire Water	94	164	140	-24	-14.6%
O2 (UK) Limited	10	8	9	1	12.5%
Fulcrum Pipelines Limited	57	68	35	-33	-48.5%
Manweb	45	52	54	2	3.8%
Vodafone Group	193	59	32	-27	-45.8%
ES Pipelines Limited	51	16	30	14	87.5%
Global Utility Connections	47	40	76	36	90.0%
T-Mobile (UK) Limited	42	25	97	72	288.0%
Energetics Gas Ltd	28	18	21	3	16.7%
National Grid Electricity Transmission	1	1	5	4	400.0%
Romec Ltd	9	22	9	-13	-59.1%
Gas Transportation Co Ltd	26	30	27	-3	-10.0%
Orange PCS Ltd	5				
Neoscorp Ltd	2	2	12	10	500.0%
New World Payphones Ltd	7	8	2	-6	-75.0%
ESP Electricity	8	18	13	-5	-27.8%
Northern Powergrid - Yorkshire Dales	101	87	82	-5	-5.7%
GEO		440	36	-404	-91.8%
Others		150	252	102	68.0%
Total	28,292	29,072	28,597	-475	-1.6%



LANCASHIRE COUNTY COUNCIL PERMIT SCHEME ANNUAL REVIEW, ALL WORKS

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

Total	28,292	29,072	28,597	-475
Blank	225			
Road closure	1,499	1,583	1,557	-26
Contra-flow	7	22	5	-17
Lane closure	268	366	338	-28
Convoy working	12	6	1	-5
Stop/go boards	730	514	339	-175
Multi-way signals	1,045	2,145	2,412	267
Two-way signals	3,111	3,176	3,018	-158
Priority working	334	117	123	6
Give and take	5,441	4,907	4,637	-270
Some c/w incursion	8,836	11,808	13,723	1,915
No c/w incursion	6,784	4,428	2,444	-1,984
TRAFFIC MANAGEMENT TYPE	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5

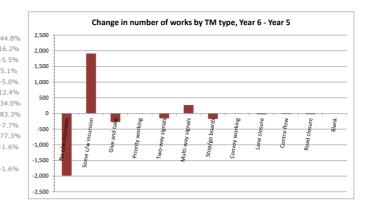


Table 4: Number of works by works category, year on year comparison

Total	28,292	29,072	28,597	-475
Intention to Issue Licence	225			
Immediate - Emergency	1,572	1,312	1,209	-103
Immediate - Urgent	8,127	9,321	10,066	745
Minor	13,433	12,824	12,313	-511
Standard	3,340	3,947	3,441	-506
Major	1,595	1,668	1,568	-100
WORKS STOPPED	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5

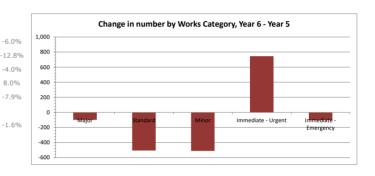
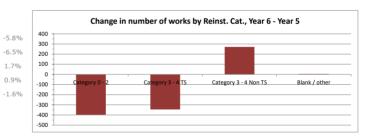


Table 5: Traffic sensitivity, year on year comparison

All works	28,292	29,066	28,597	-469
Blank / other	548	457	461	4
Category 3 - 4 Non TS	15,942	16,406	16,677	271
Category 3 - 4 TS	5,338	5,352	5,006	-346
Category 0 - 2	6,464	6,851	6,453	-398
REINSTATEMENT CATEGORY	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5



IMMED. (URGENT)

3.7

37,327

IMMED.

(EMERG.)

6.3

Table 6: Average works duration, year on year comparison

Total number of days worked	133,791	126,125	121,053	-5,072
Average duration (days)	4.7	4.3	4.2	-0.1
DURATION	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5
Tubic o. Average works duration,	year on year	companison		

Year 6, 2020-21, Duration by works category

STANDARD

7.3

24,987

MAJOR

17.0

26,734

-2.3%

-4.0%

16.7 7.0 2.1 3.7	7.3
MAJOR STANDARD MINOR IMMED. (URGENT)	IMMED. (EMERG.)

MINOR

2.0

24,387

Difference, Year 6 - Year 5

-1,045	-2,561	-2,695	3,236	-2,007
0.3	0.3	-0.1		-1.0
MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)

A.2 Highway authority works

LANCASHIRE COUNTY COUNCIL PERMIT SCHEME ANNUAL REVIEW, HIGHWAY AUTHORITY WORKS

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

Total	2,116	2,682	1,684	-998
Blank	225			
Road closure	616	454	310	-144
Contra-flow	1	1	1	
Lane closure	82	82	65	-17
Convoy working	1	1		-1
Stop/go boards	230	164	103	-61
Multi-way signals	62	87	116	29
Two-way signals	231	230	133	-97
Priority working	13	3	9	6
Give and take	328	126	107	-19
Some c/w incursion	201	483	212	-271
No c/w incursion	126	1,051	628	-423
TRAFFIC MANAGEMENT TYPE	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5

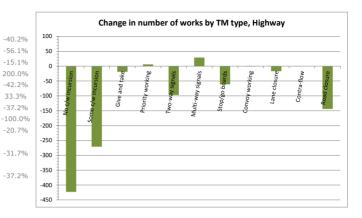


Table 8: Number of works by works category, year on year comparison

Total	2,116	2,682	1,684	-998	
Intention to Issue Licence	225				Ì
Immediate - Emergency	43	93	40	-53	
Immediate - Urgent	63	70	144	74	
Minor	443	666	499	-167	
Standard	574	1,299	702	-597	
Major	768	554	299	-255	
WORKS STOPPED	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5	

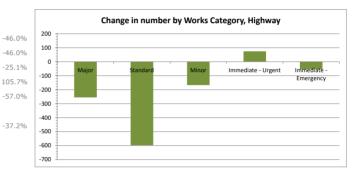


Table 9: Average works duration, year on year comparison

Total number of days worked	27,119	25,362	15,500	-9,862
Average duration (days)	12.8	9.5	9.2	-0.3
DURATION	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5

Year 6, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
15.3	9.6	4.2	6.4	29.1
4,588	6,710	2,110	928	1,164

Year 5, 2019-20, Duration by works category

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

Difference, Year 6 - Year 5

-3.2% -38.9%

Difference,	billerence, real 0 - real 5						
MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)			
-4.7	2.5	0.2	1.7	7.1			
-6,477	-2,524	-580	597	-878			

A.3 Utility works

LANCASHIRE COUNTY COUNCIL PERMIT SCHEME ANNUAL REVIEW, **UTILITY COMPANY WORKS**

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

Total	26,176	26,390	26,913	523
Blank				
Road closure	883	1,129	1,247	118
Contra-flow	6	21	4	-17
Lane closure	186	284	273	-11
Convoy working	11	5	1	-4
Stop/go boards	500	350	236	-114
Multi-way signals	983	2,058	2,296	238
Two-way signals	2,880	2,946	2,885	-61
Priority working	321	114	114	
Give and take	5,113	4,781	4,530	-251
Some c/w incursion	8,635	11,325	13,511	2,186
No c/w incursion	6,658	3,377	1,816	-1,561
TRAFFIC MANAGEMENT TYPE	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5

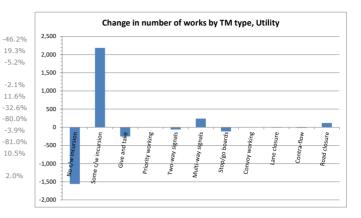


Table 11: Number of works by works category, year on year comparison

WORKS STOPPED	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5	
Major	827	1,114	1,269	155	13.99
Standard	2,766	2,648	2,739	91	3.4%
Minor	12,990	12,158	11,814	-344	-2.89
Immediate - Urgent	8,064	9,251	9,922	671	7.3%
Immediate - Emergency	1,529	1,219	1,169	-50	-4.19
Other					
Total	26,176	26,390	26,913	523	2.0%

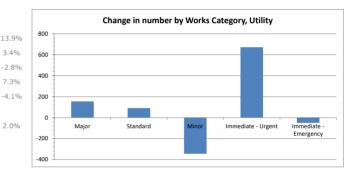


Table 12: Average works duration, year on year comparison

Total number of days worked	106,672	100,763	105,553	4,790
Average duration (days)	4.1	3.8	3.9	0.1
DURATION	Year 1 2015-16	Year 5 2019-20	Year 6 2020-21	Diff Yr 6 - Yr 5

Year 6, 2020-21, Duration by works category

MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
17.5	6.7	1.9	3.7	5.5
22,146	18,277	22,277	36,399	6,454

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
16,714	18,314	24,392	33,760	7,583

Difference Year 6 - Year 5

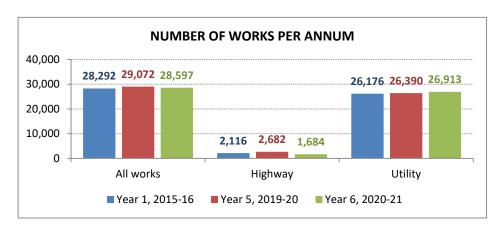
2.6% 4.8%

Difference,	ieai o - ieai	<u> </u>		
MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
2.5	-0.2	-0.1	0.1	-0.7
5,432	-37	-2,115	2,639	-1,129

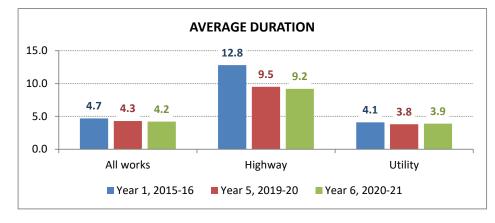
B. SCHEME BENEFITS

SCHEME BENEFITS

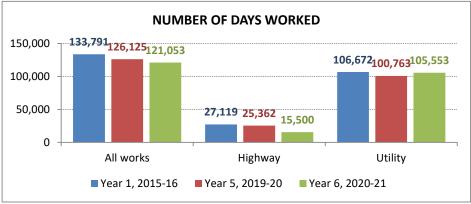
NUMBER OF WORKS		(number)	
	All works	Highway	Utility
Year 1, 2015-16	28,292	2,116	26,176
Year 5, 2019-20	29,072	2,682	26,390
Year 6, 2020-21	28,597	1,684	26,913
Change, Year 6 - Year 5	-475	-998	523
Change (%)	-1.6%	-37.2%	2.0%



DURATION		(days)	
	All works	Highway	Utility
Year 1, 2015-16	4.7	12.8	4.1
Year 5, 2019-20	4.3	9.5	3.8
Year 6, 2020-21	4.2	9.2	3.9
Change (days)	-0.1	-0.3	0.1



DAYS WORKED		(days)	
	All works	Highway	Utility
Year 1, 2015-16	133,791	27,119	106,672
Year 5, 2019-20	126,125	25,362	100,763
Year 6, 2020-21	121,053	15,500	105,553
Change, Year 6 - Year 5	-5,072	-9,862	4,790
Change (%)	-4.0%	-38.9%	4.8%



C. PROMOTER DURATION ANALYSIS

TRAFFIC MANAG	FFIC MANAGEMENT & DURATION, PROMOTER BT (BC)										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	Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration					
Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Average	Average	Average	Average	Average
1.9	2.5	2.7	2.0	1.7	2.6	3.4	5.0	2.3	2.0	1.5	6.5	6.3	1.9	1.8	2.0
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Minimum	Minimum	Minimum	Minimum	Minimum
			1.0				5.0		2.0			1.0			
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Maximum	Maximum	Maximum	Maximum	Maximum
15.0	26.0	55.0	6.0	10.0	17.0	14.0	5.0	10.0	2.0	20.0	55.0	26.0	26.0	7.0	6.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>30	>30	>30	>30	>30
/13	4	13	>15	>15	1	>15	/13	>13	715	1	7	/30	>30	/30	>30
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>60	>60	>60	>60	>60
/30	/30	7	/30	/30	/30	/30	/30	>30	/30	/30	>00	>00	>00	>00	>00
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>180	>180	>180	>180	>180
>00	>00	>00	>00	>00	>00	>00	>00	>00	>00	>00	>100	>180	>100	>100	>100
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>365	>365	>365	>365	>365
>180	>100	>100	>100	>100	>100	>100	>180	>180	>100	>100	>303	>303	>303	>303	>303
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
362	3,363	1,047		860	1,119	104	Number 1	50	Number	180	101			1,711	
362	3,363	1,047	38	800	1,119	104	1	50	I	100	101	749	4,466	1,/11	98
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
691	8,393	2,838	77	1,439	2,902	356	5	117	2	268	653	4,683	8,418	3,140	194

TOTAL WORKS 7,125

TRAFFIC MANAG	TRAFFIC MANAGEMENT & DURATION, PROMOTER VIRGIN MEDIA (NK)										PROMOTER VIRG	IN MEDIA (NK)			
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	Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration					
Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Average	Average	Average	Average	Average
1.6	1.6	9.2	3.0	5.0	4.0	2.8	#DIV/0!	2.6	1.0	7.5	17.8	9.1	1.6	1.6	2.2
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Minimum	Minimum	Minimum	Minimum	Minimum
			3.0		1.0				1.0		1.0	2.0		1.0	1.0
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Maximum	Maximum	Maximum	Maximum	Maximum
10.0	46.0	40.0	3.0	39.0	15.0	9.0		10.0	1.0	10.0	46.0	20.0	6.0	6.0	4.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>30	>30	>30	>30	>30
- 10	7	121	- 15	5	- 15	- 15	- 13	- 15	- 15	- 15	22	100	- 50	- 50	- 50
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>60	>60	>60	>60	>60
	1	20		1											
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>180	>180	>180	>180	>180
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>365	>365	>365	>365	>365
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
227	1,806	557	1	49	22	33		16	1	4	251	62	2,328	55	20
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
362	2,874	5,146	3	247	88	93		41	1	30	4,469	565	3,721	86	44

TOTAL WORKS

TRAFFIC MANAGEMENT & DURATION, PROMOTER UNITED UTILITIES WATER LIMITED (HZ)											PROMOTER UNIT	ED UTILITIES WAT	ER LIMITED (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	Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration					
Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Average	Average	Average	Average	Average
3.6	3.1	3.8	3.0	3.6	3.4	1.3	#DIV/0!	3.2	5.0	3.7	9.6	6.5	2.0	3.8	2.6
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Minimum	Minimum	Minimum	Minimum	Minimum
									5.0			1.0			1.0
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Maximum	Maximum	Maximum	Maximum	Maximum
14.0	54.0	138.0	9.0	123.0	68.0	10.0		49.0	5.0	110.0	110.0	27.0	12.0	138.0	9.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>30	>30	>30	>30	>30
	3	6		8	5			1		5	10			4	
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>60	>60	>60	>60	>60
	1	4		2	3			1		3	2			2	
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>180	>180	>180	>180	>180
		1		1	1					1					
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>365	>365	>365	>365	>365
										_					
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
399	4,670	1,992	40	1,125	601	63		105	1	747	94	277	3,102	6,215	55
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
1,421	14,584	7,550	121	4,024	2,041	81	Days Worked	336	5	2,746	900	1,800	6,164	23,903	142
1,421	14,584	7,350	121	4,024	2,041	01		330	3	2,740	900	1,800	0,164	25,905	142

TOTAL WORKS 9,743

NOCING N	TRAFFIC MANAG	SEMENT & DURAT	TION, CADENT GA	S LIMITED (AZ)								PROMOTER CADENT GAS LIMITED (AZ)					
Ave Ave Ave Ave Ave Ave Ave Ave Average Avera			GIVE & TAKE		_				LANE CLOSURE	CONTRA-FLOW	ROAD CLOSURE	Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.	
4.1 7.0 9.6 18.2 7.7 16.7 2.5 BDIV/OI 15.5 BDIV/OI 15.7 Min													_	_			
Min Minimum Minimum <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td></t<>													_				
Max																	
Max Max <td>Min</td> <td>Min</td> <td>Min</td> <td></td> <td>Min</td> <td>Min</td> <td>Min</td> <td>Min</td> <td>Min</td> <td>Min</td> <td>Min</td> <td>Minimum</td> <td>Minimum</td> <td>Minimum</td> <td>Minimum</td> <td></td>	Min	Min	Min		Min	Min	Min	Min	Min	Min	Min	Minimum	Minimum	Minimum	Minimum		
27.0																	
Signature Sign		Max	Max	Max			Max	Max	Max	Max	Max	Maximum	Maximum	Maximum	Maximum	Maximum	
7 129 113 2 35 89 IO 10 19 95 1 1 7 >30 >30 >30 >30 >30 >30 >30 >30 >30 >60 >80 >80 >180	27.0	113.0	94.0	54.0	53.0	235.0	5.0		114.0		235.0	235.0	29.0	32.0	30.0	59.0	
7 129 113 2 35 89 IO 10 19 95 1 1 7 >30 >30 >30 >30 >30 >30 >30 >30 >30 >60 >80 >80 >180																	
Sal	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>30	>30	>30	>30	>30	
Number N	7	129	113	2	35	89			10		19	95		1		7	
>60 >60 >60 >60 >60 >60 >60 >60 >60 >60 >60 >60 >60 >60 2 3	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>60	>60	>60	>60	>60	
Number N		31	22	1	7	31			2		9	15					
>180 >180 >180 >180 >180 >180 >180 >180 >180 >180 >180 >180 >180 >180 >180 >180 >180 >365 365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 >365 365 >365 365 >365 365 365 365 365 365 365 365 365 365 365 365 365 365	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>180	>180	>180	>180	>180	
Number S10 1,635 547 5 268 265 2 34 73 566 637 872 314 950 Days Worked Days		3	2			6			2		2	2					
Number Nu	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>365	>365	>365	>365	>365	
510 1,635 547 5 268 265 2 34 73 566 637 872 314 950 Days Worked D						1					1						
Days Worked Days W	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	
	510	1,635	547	5	268	265	2		34		73	566	637	872	314	950	
2,086 11,505 5,246 91 2,067 4,423 5 526 1,144 12,550 4,911 2,180 1,564 5,888	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	
	2,086	11,505	5,246	91	2,067	4,423	5		526		1,144	12,550	4,911	2,180	1,564	5,888	

TOTAL WORKS

TRAFFIC MANAG	TRAFFIC MANAGEMENT & DURATION, PROMOTER ELECTRICITY NORTH WEST (JG)											TRICITY NORTH W	EST (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	Major	Standard	Minor	Immed. (Urgent)	Immed. (Emerg.)
Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration	Duration					
Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Average	Average	Average	Average	Average
5.5	4.7	4.8	4.3	5.9	8.0	2.8	#DIV/0!	5.0	#DIV/0!	7.3	19.2	6.1	1.6	4.8	4.3
Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Min	Minimum	Minimum	Minimum	Minimum	Minimum
1.0			1.0								1.0	1.0			4.0
Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Maximum	Maximum	Maximum	Maximum	Maximum
13.0	34.0	30.0	7.0	100.0	106.0	10.0		22.0		69.0	106.0	30.0	8.0	30.0	5.0
>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>15	>30	>30	>30	>30	>30
>15	13		>15	16	15	>15	>15	2	>15	7	17	>30	>30	>30	>30
- 20		2	- 20			- 20	- 20		. 20			. 60	- 60	. 60	
>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>30	>60	>60	>60	>60	>60
- 50	1		. 50	6	9	. 60	. 50		. 50	1	8	. 100	. 100	. 100	. 100
>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>60	>180	>180	>180	>180	>180
100	. 100	. 100	. 100	4	3	. 100	. 100	. 100	. 100	1	265	265	265	. 265	. 265
>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>180	>365	>365	>365	>365	>365
Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
116	1,764	246	9	375	191	25	ivuilibei	50	ivailibei	103	109	822	487	1,457	4
110	1,764	240	9	3/3	191	23		30		103	109	022	407	1,457	4
Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked	Days Worked
636	8,241	1,173	39	2,217	1,526	69		251		751	2,096	5,000	764	7,026	17

TOTAL WORKS