

The Knowsley Permit Scheme for Road & Street Activities

Annual Review, Years 7 to 9 2021-24





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1 INTRODUCTION

1.1 Background

- 1.1.1 The Knowsley Council (KMBC) Permit Scheme went live on 1st March 2015, with the first month operating as a trial with no charges applied. Permit charges were applied from 1st April 2015.
- 1.1.2 The operation of the permit scheme has been evaluated annually since its introduction in February 2015.
- 1.1.3 The purpose of the annual review is 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).
 - Report the annual scheme benefit to all road users.
 - Calculate the cost to the Council to process applications submitted by utility works promoters
- 1.1.4 The 12 Month Review found an overall reduction in number of works across the network in the first year; with occupancy on utility works reducing by 60% overall. This equated to over 15,600 fewer days worked on the network in year 1. The financial benefit to road users of the Permit Scheme in year 1 is calculated at £3.1M per annum.

1.2 Annual Reviews

- 1.2.1 The Council has commissioned a full review of the scheme at the end of each year since, with the following reports available:
 - 'Knowsley Council Permit Scheme, Year 2 Review, 2016-17'
 - 'Knowsley Council Permit Scheme, Year 3 Review, 2017-18'
 - 'Knowsley Council Permit Scheme, Year 4 Review, 2018-19'
 - 'Knowsley Council Permit Scheme, Year 5 Review, 2019-20'
 - 'Knowsley Council Permit Scheme, Year 6 Review, 2020-21'
- 1.2.2 The reviews identified the benefits reported in year 1 had been maintained in subsequent years. Since then, the benefits have been maintained at 12,000 to 15,000 days saving compared with the Noticing benchmark period.
- 1.2.3 This saving equates to between 20% and 25% of the overall cost of works calculated in the CBA (£13.1M per annum total cost to road users). The reported financial benefit to road users have been reported at £2.4M to £3.2M per annum.

1.3 Year 7-9 Review

- 1.3.1 Following the ninth anniversary of the Permit Scheme on 1st April 2024, GK-TC has been commissioned to undertake a detailed review of the operation during Years 7 to 9 and to determine whether benefits achieved in the first 6 years has been maintained.
- 1.3.2 This report presents the results of the three year review covering the period Years 7 to 9, 1st April 2021 to 31st March 2024 and satisfies the requirements in the legislation to undertake and report a review at least every three years after the third year anniversary of the scheme.
- 1.3.3 A full review of scheme operation and costs since the last fee change was implemented on 1st April 2019 has been carried out and is also included in this review.

2 FORMAT OF REVIEW

2.1 Methodology

- 2.1.1 The full three year review considers and reports on four key areas:
 - 1. High level review of scheme benefits and cost benefit of scheme
 - 2. Detailed review of works durations
 - 3. KPI analysis to demonstrate parity
 - 4. Presenting scheme operating costs and fee income in Years 7 to 9
- 2.1.2 The report also includes recommendations to further improve scheme performance in these key areas.

2.2 Data Sources

- 2.2.1 Data sources available for this review are:
 - Permit Scheme work stops notices, April 2021 March 2024, Years 7 to 9 (Symology database)
 - Key Performance Indicator (KPI) reports, April 2021 March 2024, Years 7 to 9 (Symology database)
- 2.2.2 This review assesses the year-on-year change in the number of Permit applications and reviews 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.

2.3 Scheme Objectives

- 2.3.1 The objectives as set out in the 'The Knowsley 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.
- 2.3.2 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.
- 2.3.3 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 SCHEME BENEFITS

3.1 Summary of Benefits

3.1.1 Figure 1 presents the number of works per annum during Years 7 to 9 of the Permit Scheme.

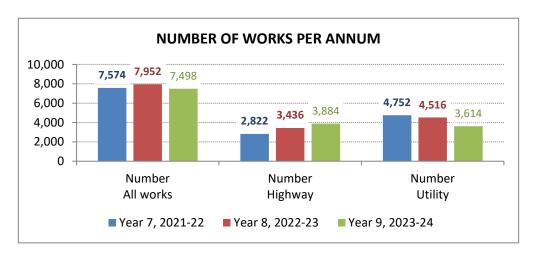


Figure 1 Number of works per annum

- 3.1.2 The total number of works completed across the network has been relatively stable over the last three years, varying by less than 5% year on year. The number has increased significantly compared with previous years, with the average increasing from 5,447 between Years 4 and 6 to 7,675 over the last three years, an increase of 41%.
- 3.1.3 The number of highway works have more than doubled in the last two years compared with the early years. Utility works have also increased, with the highest number recorded in Year 7 over 50% higher than the average number recorded in the first six years. The number has fallen back to 16% higher than the six year average in the ninth year.
- 3.1.4 The average duration of works for during Years 7 to 9 are shown in Figure 2.

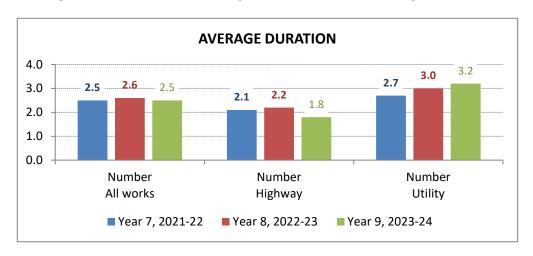


Figure 2 Average duration of works

The average duration has increased for utility works has increased year on year since Year 7. However, the average of 3.2 is still lower than any recorded in the previous six years.

- 3.1.6 Highway works recorded the lowest average duration in Year 9.
- 3.1.7 Figure 3 shows the total number of working days in each year.

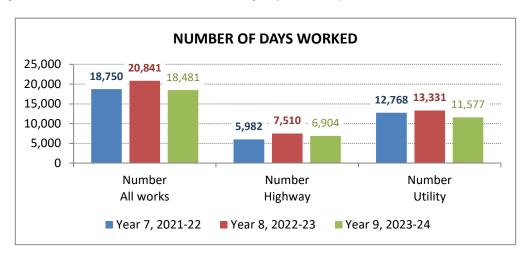


Figure 3 Number of days worked per annum

- 3.1.8 The number of days worked on utility works has been relatively consistent year on year, despite the significant increase in the number of works completed over the last three years. This is a result of the reduction in average duration.
- 3.1.9 The same is true for highway works, with the large reduction in average duration offsetting the doubling of the number of works recorded as complete in the last three years.

3.2 Cost Benefit

- 3.2.1 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 Years 7 to 9 is calculated as:
 - Average monetary cost of works per day, £199 (source: CBA report 2010 prices, works with some form of give and take management)
 - Number of days saved on utility works under Permit Scheme, 13,254, 12,691 and 14,445 (Years 7, 8 and 9, respectively, compared with 14,964 days in Year 6)
 - Monetary benefit to road users, £2.5M to £2.9M per annum (Years 7 to 9)
- 3.2.2 This saving equates to approximately 19% to 22% of the overall cost of works calculated in the CBA (£13.1M per annum total cost to road users). This is comparable with the benefits reported for previous years.
- 3.2.3 The 49% to 55% reduction in number of days worked compared with Noticing is substantially higher than the 5% benefit specified in the DfT guidelines for the business case justification for a move to Permit Schemes.

4 WORKS DURATION

4.1 Presentation Format

- 4.1.1 This section presents a breakdown of the works completed by promoter, work category and traffic management type. A detailed analysis of the duration of each works category is also presented.
- 4.1.2 The data is presented for all works combined and then key metrics are presented separately for highway works and utility works.

4.2 All Works

- 4.2.1 The following series of charts and tables present a comparison of the Years 7 to 9 data records.
- 4.2.2 The total number of works completed and a breakdown by highway authority and utility company is shown in Table 1 and the accompanying chart.

Table 1 Number of works completed

PROMOTER TYPE	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 9 - Yr 8
Highway Authority Works	2,822	3,436	3,884	448
Utility Works	4,753	4,516	3,614	-902
Total	7,575	7,952	7,498	-454

- 4.2.3 The number of highway works completed has increased year on year since Year 7. The number of utility works peaked to the maximum recorded in Year 7 and has reduced by over 1,000 in Year 9.
- 4.2.4 Figure 4 presents the total number of works completed across the network in each year.

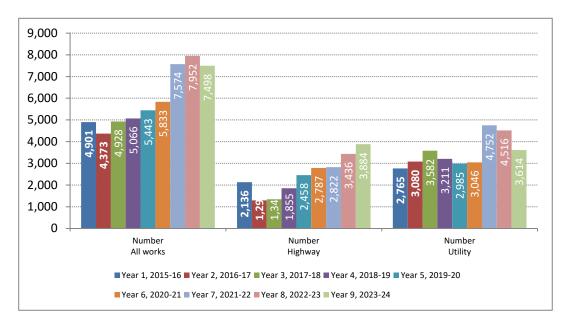


Figure 4 Number of woks completed in each year since 2015

4.2.5 A comparison of the average number of works completed between Years 4 to 6 and Years 7 to 9 is shown in Figure 5.

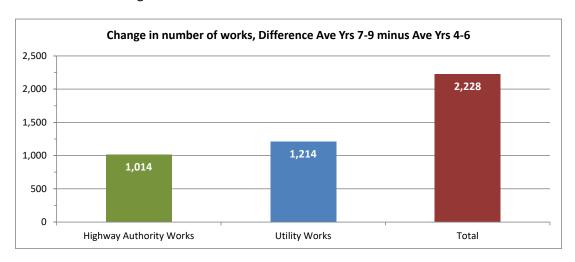


Figure 5 Number of works comparison, three year averages

- 4.2.6 Permit activity has increased over the last three years. Highway works have increased by 1,014 or 43% compared with the average over the previous three years. Utility works have increased by a similar rate with a 40% increase or 1,214 works completed on average between Years 7 and 9.
- 4.2.7 Overall, the number of works recorded in the last three years is 40% higher than recorded between Years 4 and 6.
- 4.2.8 A comparison of the average number of works completed by each promoter between Years 7 to 9 and Years 4 to 6 is shown in Figure 6.

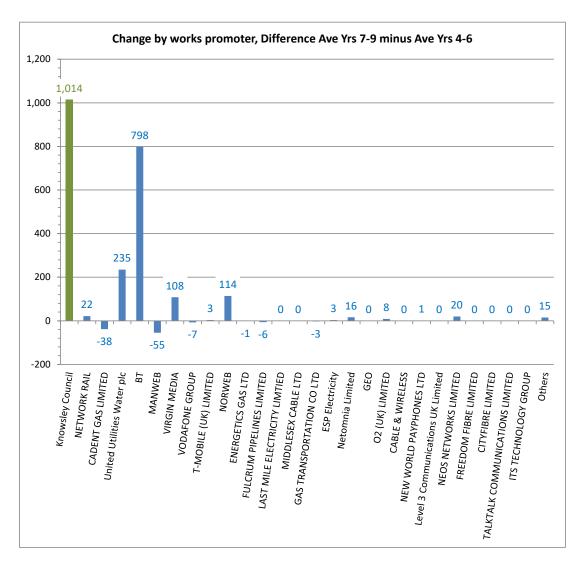


Figure 6 Change in number of works by promoter, three year averages

- 4.2.9 The biggest changes are a 43% increase in the number of works completed by the Council and a 150% increase in the number of works completed by BT.
- 4.2.10 The BT change in particular is distorted by a very large increase in Years 7 and 8 followed by a return to a more typical number in Year 9. 1,925 peak in Year 7 and 616 works completed in Year 9.
- 4.2.11 The average number of works completed by BT between Years 4 and 6 was 530.
- 4.2.12 This may be a result of a backlog of works during the COVID-19 lockdown periods being completed in 2-21-22 and/or the roll out of fibre broadband services to households across the authority area.
- 4.2.13 The remaining detailed analysis contained in the section is presented for all works promoters. The same analysis is presented separately in Appendix A for highway authority works and utility company works.
- 4.2.14 Table 2 and the accompanying chart presents a comparison of the change in number of all works applications by traffic management type.

Year 7 Year 8 Year 9 Diff TRAFFIC MANAGEMENT TYPE 2021-22 2023-24 Yr 9 - Yr 8 2022-23 No c/w incursion 1,612 1,375 1,532 157 Some c/w incursion 3,174 3,599 3,211 -388 Give and take 759 943 1,011 -68 Priority working 10 8 6 -2 Two-way signals 374 376 440 64 Multi-way signals 620 589 529 -60 Stop/go boards 339 274 137 -137 Convoy working 1 -1 Lane closure 383 459 365 -94 Contra-flow 3 1 5 4 Road closure 300 259 235 -24 Temp obstruction 15 min delay 95 95

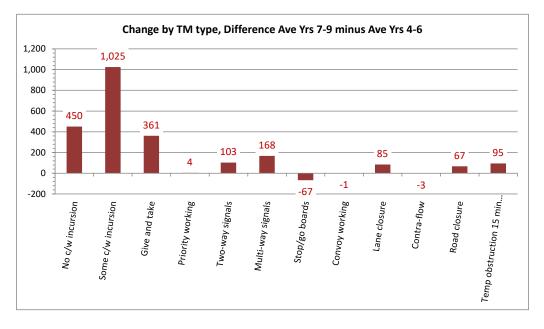
7,952

7,498

-454

7,574

Table 2 Number of applications by traffic management type

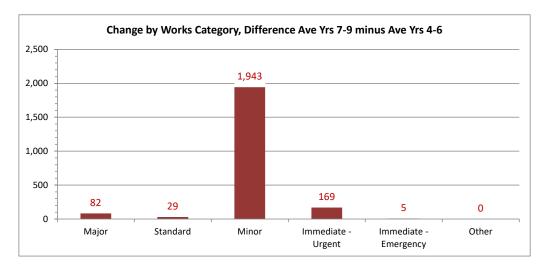


- 4.2.15 The number of works carried out with each traffic management type has been consistent over the last three years.
- 4.2.16 The chart above compares the average in each three year period and shows the 40% increase in number of works completed since Year 7 has been spread across most traffic management types.
- 4.2.17 The total number of Permit applications by Works Category is shown in Table 3 and the accompanying chart.

Total

Table 3	Applications	by works	category
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Total	7,575	7,952	7,498	-454
Other				
Immediate - Emergency	153	187	142	-45
Immediate - Urgent	802	765	914	149
Minor	5,780	6,157	5,605	-552
Standard	461	494	527	33
Major	379	349	310	-39
WORKS STOPPED	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 9 - Yr 8



- 4.2.18 While the number of Major works has reduced steadily in Years 8 and 9, the three year average still shows an increase of 31%, compared with the average for Years 4 to 6.
- 4.2.19 The average number of Minor works has increased by 50% compared with the average between Years 4 and 6.
- 4.2.20 Table 4 shows a comparison of the average works duration and total number of days worked in each of the last three years.

Table 4 Average works duration & occupancy

DURATION	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 9 - Yr 8
Average duration (days)	2.5	2.6	2.5	-0.1
Total number of days worked	18,752	20,843	18,483	-2,360

- 4.2.21 The overall average works duration has been very consistent over the last three years at 2.5 to 2.6 days.
- 4.2.22 The number of working days in Year 8 was 11% higher than Years 7 and 9. Due to a 5% increase in the number of works and a slightly higher average duration at 2.6 days.

4.3 Highway works

4.3.1 Average durations and total occupancy for highway works since the scheme was introduced are compared in Table 5.

Table 5 Average duration and total days worked - highway works

Average duration (days)	2021-22	2022-23	2023-24 1.8	Yr 9 - Yr 8 -0.4
Total number of days worked	5,982	7,510	6,904	-606

- 4.3.2 The average duration of highway works has reduced in Year 9, from 2.1 to 2.2 days in previous years to 1.8 days. This is in part due to an increase in the proportion of shorter duration Minor works in the ninth year.
- 4.3.3 Table 6 shows the average duration and occupancy for highway works by category for each of the last three years.

Table 6 Average duration and occupancy by category - highway works

Permitting	Year 9,	2023-24
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Total number of days worked	1,997	938	3,854	19	96
Average duration (days)	11.5	7.1	1.1	1.1	6.0
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)

Permitting	Vear 8	2022-23
remmunig	rear o	, 2022-23

DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
Average duration (days)	18.0	7.2	1.0	2.7	1.4
Total number of days worked	3,492	709	3,267	35	7

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Total number of days worked	2,406	885	2,621	61	9
Average duration (days)	9.4	9.5	1.1	2.0	1.3
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)

- 4.3.4 The average duration of Major works reduced from 18.0 days in Year 8 to 11.5 days.
- 4.3.5 The biggest change in working days is a result of the large increase in the number of Minor works recorded in Years 8 and 9. This alone has added 600 to 1,200 days to the highway occupancy.

4.4 Utility works

4.4.1 Average durations and total occupancy for utility works since the scheme was introduced are compared in Table 7.

Table 7 Average duration and total days worked – utility works

Total number of days worked	12,768	13,331	11,577	-1,754
Average duration (days)	2.7	3.0	3.2	0.2
DURATION	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 9 - Yr 8

- 4.4.2 The average duration of utility works has increased over the last three years, from 2.7 days in Year 7 to 3.2 days last year.
- 4.4.3 This is due to an increase in the average duration of Major and Standard works and a 32% reduction in the number of shorter duration Minor works.
- 4.4.4 Despite the increase in average duration the total number of days worked reduced by 13% in Year 9. This is due to a 20% reduction in the number of utility works completed last year.
- 4.4.5 Table 8 shows the average duration and occupancy for utility works by category for each of the last three years.

Table 8 Average duration and occupancy by category - utility works

Permitting	Year 9	. 2023-24
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Total number of days worked	2,402	2,326	3,235	2,749	865
Average duration (days)	17.5	5.9	1.6	3.1	6.9
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)

Permitting Year 8, 2022-23

DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
Average duration (days)	15.1	5.5	1.7	3.7	5.1
Total number of days worked	2,335	2,166	5,103	2,798	929

Permitting Year 7, 2021-22

DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
Average duration (days)	14.7	4.9	1.7	3.8	3.0
Total number of days worked	1,798	1,791	5,799	2,943	437

- 4.4.6 The average duration of Major works has increased from 14.7 days in Year 7 to 17.5 days in Year 9.
- 4.4.7 A small reduction in the number and average duration of Minor works in Year 9 has reduced the occupancy for this works category by over 2,000 days.
- 4.4.8 There is very little variation in occupancy for the other categories in each year.

5 KPI MONITORING

5.1 Introduction

- 5.1.1 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
- 5.1.2 The above data should be presented separately for highway authority and utility company applications to demonstrate parity in the application of the Scheme.

5.2 KPI 1

- 5.2.1 The number and proportion of Permit and Permit Variation applications received and refused; a breakdown of refusal rate is presented below.
- 5.2.2 Table 9 and Figure 7 shows the breakdown of number of permit applications received and the refusal rate.

Table 9 KPI 1, Permit applications received and refused

PROMOTER TYPE		Year 7		Year 8			Year 9		
PROMOTER TYPE	Granted	Refused	Refused %	Granted	Refused	Refused %	Granted	Refused	Refused %
Highway Authority	3,801	40	1.0%	4,210	121	2.8%	5,427	359	6.2%
Utility	6,812	870	11.3%	6,831	1,121	14.1%	5,374	1,345	19.9%
ALL PROMOTERS	10,613	910	7.9%	11,041	1,242	10.1%	10,801	1,704	13.6%

- 5.2.3 The refusal rate for highway authority permits has increased in each year, from 1% in Year 7 to 6.2% in Year 9. The refusal rate for utility permits has also increased from 11.3% in Year 7 to 13.6% in Year 9.
- 5.2.4 With regards to KPI 1, the high amount of granted permits does not reflect the actual amount of work involved by Scheme co-ordinators, as they only refuse permits where the activity promoters fail to update the permit.

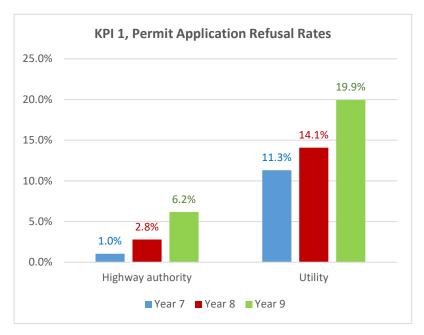


Figure 7: KPI 1, Permit application refusal rates

5.2.5 In addition to the works completed during each year, between 1,285 and 1,455 permit applications were granted but then subsequently cancelled (see Table 10).

Table 10 Granted permit applications subsequently cancelled

PROMOTER TYPE		Year 7		Year 8				Year 9	Year 9		
PROMOTER TIPE	Granted	Cancelled	Cancelled %	Granted	Cancelled	Cancelled %	Granted	Cancelled	Cancelled %		
Highway Authority	3,801	500	13.2%	4,210	572	13.6%	5,427	909	16.7%		
Utility	6,812	785	11.5%	6,831	874	12.8%	5,374	546	10.2%		
ALL PROMOTERS	10,613	1,285	12.1%	11,041	1,446	13.1%	10,801	1,455	13.5%		

5.2.6 This equates to 12% to 13% of all permits granted. The cancellation rate for highway permits granted is slightly higher than for utility permits.

5.3 KPI 2

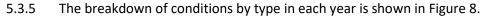
5.3.1 The number of conditions applied by condition type; a breakdown of the number of conditions applied by condition type for highway and utility permit applications is shown in Table 11 and Figure 8.

Table 11 KPI 2, Number of permit conditions applied

All Conditions		Year 7			Year 8			Year 9	
All Conditions	НА	PU	All	НА	PU	All	НА	PU	All
TOTAL	6,094	11,635	17,729	5,636	11,451	17,087	8,281	8,485	16,766
	34%	66%		33%	67%		49%	51%	

- 5.3.2 The number of conditions has been very consistent between Years 7 and 9.
- 5.3.3 The number of conditions submitted with utility applications reduced significantly in Year 9, from over 11,000 in previous years to 8,485.

5.3.4 This reduction is offset by a similar increase in the number of conditions associated with highway permit applications. The change in number of conditions matches the change in the number of permits granted for each.



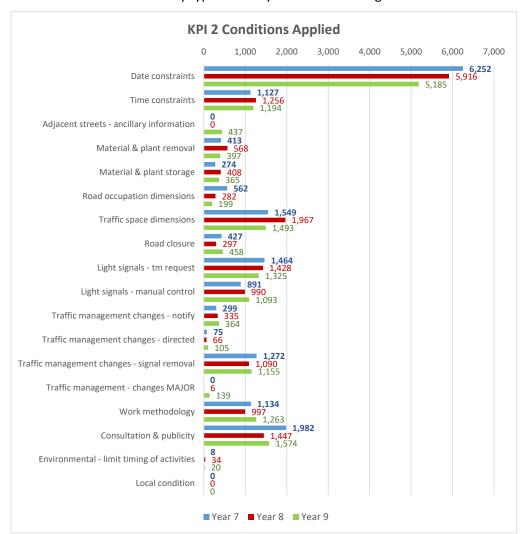


Figure 8: KPI 2, Conditions applied

5.3.6 The number of conditions by type is very similar in each year.

5.4 KPI 3

- 5.4.1 The number of approved extensions; the following figure shows the number of extensions granted and refused, for all promoters, and separately for highway authority applications and for statutory undertakers.
- 5.4.2 The number of extension requests and refusal rate in each year is shown in Table 12 and Figure 9.

PROMOTER TYPE		Year 7			Year 8			Year 9	
PROMOTER TYPE	Requests	Agreed	Refused %	Requests	Agreed	Refused %	Requests	Agreed	Refused %
Highway Authority	85	85	0.0%	75	75	0.0%	80	79	1.3%
Utility	387	382	1.3%	614	606	1.3%	563	533	5.3%
ALL PROMOTERS	472	467	1.1%	689	681	1.2%	643	612	4.8%

Table 12 KPI 3, Permit extension request refusal rates

- 5.4.3 The number of extension requests submitted has increased in Years 8 and 9, with utility permits showing more variation in the last three years.
- 5.4.4 The number of extension requests refused has increased in recent years, from only 5 requests refused in Year 7 to 31 in Year 9. More than 19 in every 20 requests are granted however.

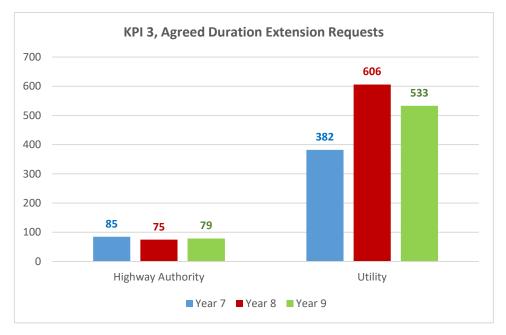


Figure 9: KPI 3, Permit extension requests agreed

5.5 KPI 7

5.5.1 The KPI 7 permit inspection report does not include any details for non-compliant permit inspections.

Recommendation Yr9 - 01: Review permit inspection data to identify if compliant and non-compliant inspection details are recorded elsewhere outside of Symology.

5.6 FPN Given

5.6.1 The number of FPN given in each year is shown in Figure 10.

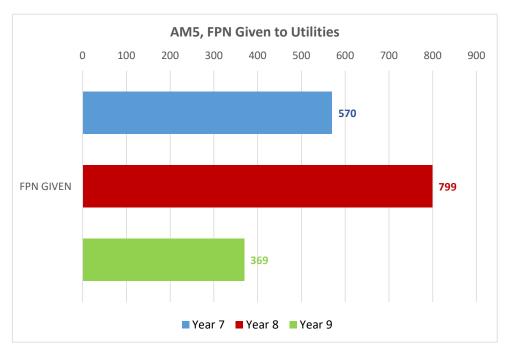


Figure 10: Fixed Penalty Notices given

5.6.2 The number of FPN given in Year 9 more than halved from 369 to 799 given the previous year. The higher number of FPN given in Years 7 and 8 coincides with the increase in permit activity by external works promoters.

5.7 Deemed Applications

5.7.1 The number of permit applications deemed in each year is shown in Figure 11.

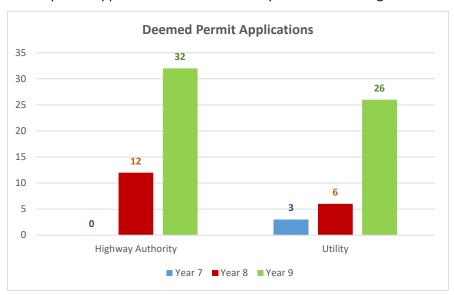


Figure 11: Number of applications deemed

- 5.7.2 The number deemed has increased year on year from only 3 applications in Year 7 to 58 last year. This compares with 48 permit applications deemed in Year 6.
- 5.7.3 Deemed permit applications account for fewer than 0.5% of all permits granted in each year.

6 STAFFING & RESOURCE

6.1 Summary

- 6.1.1 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.
- 6.1.2 The number of permits granted in each year since Year 6 is shown in Figure 12.

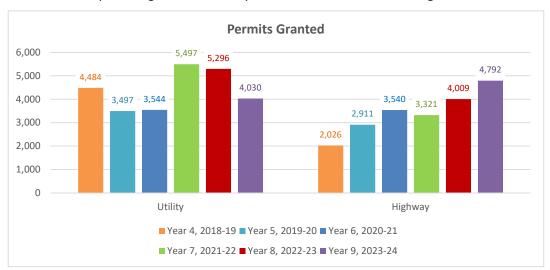


Figure 12: External promoter permits granted

- 6.1.3 Overall, the number of permits granted in Years 7 to 9 have increased, to between 8,818 and 9,305 compared with 7,084 granted in Year 6.
- 6.1.4 While the number of utility works completed reduced in Year 9, the number of highway works has increased by a similar amount.

6.2 Staff Resource

- 6.2.1 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.
- 6.2.2 The forecast permit activity used in the 2014 business case estimated a total number of full time equivalent (FTE) staff of 6.1, with 2.7 FTE staff required to process utility permit applications and 3.4 staff to process highway applications.
- 6.2.3 Using the actual number of utility and highway authority permit applications granted in each year, the same Fees Matrix spreadsheet calculates the total number of FTE staff required at 5.6 to 5.9 FTE in each year (Table 13).

	Highway Works			Utilities		
PERSONNEL LEVEL	Year 7	Year 8	Year 9	Year 7	Year 8	Year 9
Street Works Officer	1.1	1.3	1.5	1.5	1.5	1.2
Street Works Co-ordinator	1.3	1.4	1.6	1.6	1.5	1.2
Traffic Manager	0.1	0.1	0.1	0.1	0.1	0.1
Total employees	2.5	2.7	3.1	3.2	3.1	2.5

Table 13 Years 7 to 9 staff resource, 2021-24

- 6.2.4 The overall staff numbers are very similar to the original forecast.
- 6.2.5 The number of staff required to process utility applications are slightly higher in Years 7 and 8, due to the increase in permit activity. Conversely, the number of staff required to process highway authority applications are lower than forecast, all but cancelling out the difference.
- 6.2.6 The year-on-year change in FTE staff required since the scheme went live in 2015 is shown in Figure 13.

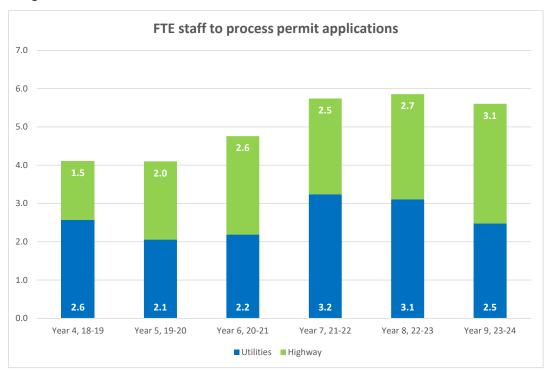


Figure 13: FTE Staff Required 2018-24

6.2.7 The overall cost to the Council to operate the scheme has reduced from the 2014 forecast. However, the cost to process utility works promoter applications and the permit fee income charged is higher than forecast in the 2014 CBA.

6.3 Operating Cost Factors

6.3.1 Scheme costs have increased significantly over the last six years, with upwards pressure on many fronts, including:

- Staff costs salaries and employer contributions to NI and pension payments
- Overhead costs following the introduction of Street Manager in 2020 and associated Symology API modules required to interface with it
- Volume of permit applications the number of permits granted increasing significantly since 2021
- 6.3.2 Staff salaries have increase by, on average 26% between 2018 and 2024. In the last two years alone, salaries have increase by an average of 12%. Over the same period, there has been a small increase in employer contributions to National Insurance and pension payments.
- 6.3.3 The introduction of the Street Manager system to manage permit applications and the associated Symology API modules required to interface with Street Manager has increased overhead costs by more than £25,000 in each year since 2021.
- 6.3.4 Furthermore, the Council has reviewed the impact of changes affecting the calculation of the staff cost multiplier over the same period. The Department for Transport Fees Matrix spreadsheet applies a multiplier to staff costs to cover the departments contribution towards a share of other Council overheads, for example, legal services, HR, payroll, directorate, office accommodation, indemnity and liability insurance cover.
- 6.3.5 This review has considered the effect of any changes in the above overhead costs to quantify, for example, the impact of changes in working practices since COVID-19 lockdown measures were removed in 2021.
- 6.3.6 This review concluded that a reset of the multiplier to 2.0 from 2.47 is appropriate from April 2020 (Year 6 of the scheme). This is in line with the multiplier included in the calculation of staff hourly rates for works undertaken by Council staff and charged to external/third parties.
- 6.3.7 The scheme costs have been calculated in the Fees Matrix on the basis of this change to the cost multiplier. The change to the cost multiplier has offset the impact of increases in the cost of staff and allowable overheads.

6.4 Scheme Cost

- 6.4.1 Using the same Fees Matrix spreadsheet, total cost to the Council to operate the scheme is between £560,000 to £650,000 between Years 7 and 9 increasing from £430,000 to £480,000 between Years 4 and 6, due to the increase in the number of permits granted in the last three years.
- 6.4.2 The annual operating costs calculated to process utility permits granted for each year since 2018 are shown in Table 14.

Table 14 Annual scheme operating cost, utility permits 2018-24

Year	Adjusted Cost	% Change
Year 4, 2018-19	£283,748	-
Year 5, 2019-20	£229,947	-19.0%
Year 6, 2020-21	£231,798	0.8%
Sub-total, Years 4 to 6	£745,492	
Year 7, 2021-22	£336,782	45.3%
Year 8, 2022-23	£349,989	3.9%
Year 9, 2023-24	£304,402	-13.0%
Sub-total, Years 7 to 9	£991,173	33.0%

6.4.3 The total cost to process utility permit applications over the last three years has increased by 33% compared with the previous three year period.

6.5 Fee Income

6.5.1 Permit fees were adjusted on 1st April 2019 to recover losses accumulated in the first three years of the scheme. The Council plans to undertake another review of costs and permit fee income this year on completion of the Year 9 annual review.

Table 22 Permit fee income, 2018-24

Year	Fee income	% Change
Year 4, 2018-19	£227,839	-
Year 5, 2019-20	£227,839	0.0%
Year 6, 2020-21	£244,205	7.2%
Sub-total, Years 4 to 6	£699,884	
Year 7, 2021-22	£346,814	42.0%
Year 8, 2022-23	£359,517	3.7%
Year 9, 2023-24	£277,306	-22.9%
Sub-total, Years 7 to 9	£983,637	40.5%

- 6.5.2 Fee income has increased by 40% over the last three years compared with the previous three year period. This is slightly higher than the 33% increase in operating cost reported in para. 6.4.3.
- 6.5.3 The impact of the fee increase introduced in April 2019 can be seen in the following chart showing the annual loss or surplus reported in each year. Losses in Year 5 reduced by over £22,000 compared with the previous year and the scheme reported a small surplus in each of the next three years.

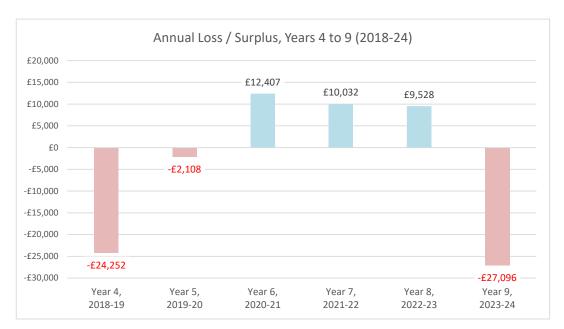


Figure 14: Annual scheme loss/surplus, 2018-24

- 6.5.4 The loss in Year 9 is the highest reported over the last six years and is due to further increases in staff salaries and the software costs associated with Symology and Street Manager software systems. Discounts and incentives offered for working wholly outside of Traffic Sensitive times and for Major works with a duration lower than 10 days, for example, have also contributed to the losses reported.
- 6.5.5 The Year 9 loss equates to 9.8% of the annual fee income.
- 6.5.6 Given the increasing losses reported in Year 9, it is recommended that a full review of fees charged is carried out as soon as possible, with a view to adjusting fees to prevent further on-going losses accruing.

Recommendation Yr9 - 02: Review fee income and reported losses to the end of Year 9 and adjust permit fees accordingly in 2024.

7 CONCLUSIONS

7.1 Summary

- 7.1.1 The Knowsley Council (KMBC) Permit Scheme went live on 1st March 2015, with the first month operating as a trial with no charges applied. Permit charges were applied from 1st April 2015.
- 7.1.2 The operation of the permit scheme has been evaluated annually since its introduction in 2015.
- 7.1.3 The purpose of the annual review is 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).
 - Report the annual scheme benefit to all road users.
 - Calculate the cost to the Council to process applications submitted by utility works promoters
- 7.1.4 The 12 Month Review found an overall reduction in number of works across the network in the first year; with occupancy on utility works reducing by 60% overall. This equated to over 15,600 fewer days worked on the network in year 1. The financial benefit to road users of the Permit Scheme in year 1 is calculated at £3.1M per annum.
- 7.1.5 The reviews identified the benefits reported in year 1 had been maintained in subsequent years. Since then, the benefits have been maintained at 12,000 to 15,000 days saving compared with the Noticing benchmark period. This saving equates to between 20% and 25% of the overall cost of works calculated in the CBA (£13.1M per annum total cost to road users). The reported financial benefit to road users have been reported at £2.4M to £3.2M per annum.

7.2 Scheme Benefits

- 7.2.1 The total number of works completed across the network has been relatively stable over the last three years, varying by less than 5% year on year. The number has increased significantly compared with previous years, with the average increasing from 5,447 between Years 4 and 6 to 7,675 over the last three years, an increase of 41%.
- 7.2.2 The number of highway works have more than doubled in the last two years compared with the early years. Utility works have also increased, with the highest number recorded in Year 7 over 50% higher than the average number recorded in the first six years. The number has fallen back to 16% higher than the six year average in the ninth year.
- 7.2.3 The biggest changes are a 43% increase in the number of works completed by the Council and a 150% increase in the number of works completed by BT.
- 7.2.4 The overall average works duration has been very consistent over the last three years at 2.5 to 2.6 days.

- 7.2.5 The number of days worked on utility works has been relatively consistent year on year, despite the significant increase in the number of works completed over the last three years. This is a result of the reduction in average duration.
- 7.2.6 The same is true for highway works, with the large reduction in average duration offsetting the doubling of the number of works recorded as complete in the last three years.
- 7.2.7 The total number of days worked is between 12,691 and 14,445 fewer than under Noticing, a 49% to 55% reduction than under Noticing, despite an average 15% increase in the number of utility works completed.
- 7.2.8 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 Years 7 to 9 is calculated at £2.5M to £2.9M per annum. This saving equates to approximately 19% to 22% of the overall cost of works calculated in the CBA (£13.1M per annum total cost to road users).
- 7.2.9 The 49% to 55% reduction in number of days worked compared with Noticing is substantially higher than the 5% benefit specified in the DfT guidelines for the business case justification for a move to Permit Schemes.

7.3 Recommendations

7.3.1 Following the Year 7 to 9 review, a further two recommendations have been included for consideration during the current year;

KPIs;

Recommendation Yr9 - 01: Review permit inspection data to identify if compliant and non-compliant inspection details are recorded elsewhere outside of Symology.

Permit Fees;

Recommendation Yr9 - 02: Review fee income and reported losses to the end of Year 9 and adjust permit fees accordingly in 2024.

7.3.2 The recommendations seek to monitor the scheme performance as COVID lockdown measures are removed and to further improve the already excellent performance evident in the first eight years under the scheme.

7.4 Conclusions

- 7.4.1 Monitoring the key performance indicators and evidence gained from the first five 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

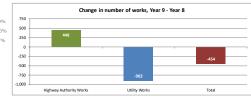
7.4.2 This review has demonstrated that Scheme has continued to achieve its stated objectives in Years 7 to 9, as defined in the permit scheme document.

APPENDIX A. YEARS 7-9 DETAILED ANALYSIS

All works promoters

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

PROMOTER TYPE	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 8 - Yr 7			(Change in I
Highway Authority Works	2,822	3,436	3,884	448	13.0%	750		
Utility Works	4,753	4,516	3,614	-902	-20.0%	500	448	
Total	7,575	7,952	7,498	-454	-5.7%	250		
						0 -		
						-250		



Total	5,447	7,675	2,228
Utility Works	3,081	4,294	1,214
Highway Authority Works	2,367	3,381	1,014
PROMOTER TYPE	Average Yrs 4-6 2018-21	Average Yrs 7-9 2021-24	Diff

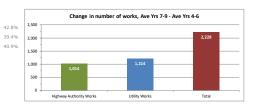
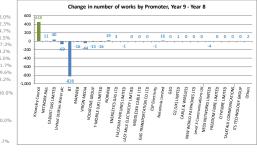


Table 2:	Number of	works by	Promoter	vear o	n voar	romnaricon

Others	23	60	62	- 2
				2
ITS TECHNOLOGY GROUP		l	1	
TALKTALK COMMUNICATIONS LIMITED		l	1	
CITYFIBRE LIMITED		l	1	
FREEDOM FIBRE LIMITED		l	1	
NEOS NETWORKS LIMITED	35	4		-4
Level 3 Communications UK Limited		l	1	
NEW WORLD PAYPHONES LTD	1	l	1	
CABLE & WIRELESS		l	1	
02 (UK) LIMITED	16	13	14	1
GEO		l	1	
Netomnia Limited		l	16	16
ESP Electricity	6	2	1	-1
GAS TRANSPORTATION CO LTD	6	1	1	
MIDDLESEX CABLE LTD		l	1	
LAST MILE ELECTRICITY LIMTIED		l	1	
FULCRUM PIPELINES LIMITED	3	1	1	-1
ENERGETICS GAS LTD	2		3	3
NORWEB	11	156	175	19
T-MOBILE (UK) LIMITED	27	23	7	-16
VODAFONE GROUP	29	29	14	-15
VIRGIN MEDIA	641	730	686	-44
MANWEB	581	498	482	-16
BT	1,925	1,444	616	-828
United Utilities Water plc	1,163	1,257	1,188	-69
CADENT GAS LIMITED	259	272	312	40
NETWORK RAIL	25	26	37	11
Knowsley Council	2,822	3,436	3,884	448
PROMOTER	2021-22	2022-23	2023-24	Yr 8 - Yr 7



Total	5,447	7,694	2,247
Others	33	48	15
ITS TECHNOLOGY GROUP			
TALKTALK COMMUNICATIONS LIMITED			
CITYFIBRE LIMITED			
FREEDOM FIBRE LIMITED			
NAT. GRID ELECTRICITY TRANSMISSIO		20	20
Level 3 Communications UK Limited			
NEW WORLD PAYPHONES LTD		1	1
CABLE & WIRELESS			
02 (UK) LIMITED	6	14	8
GEO			
Netomnia Limited		16	16
ESP Electricity	2	3	3
GAS TRANSPORTATION COLITO	5	3	-3
MIDDLESEX CABLE LTD			
LAST MILE ELECTRICITY LIMITED	3	-	· ·
FULCEUM PIPELINES LIMITED	8	2	-6
ENERGETICS GAS LTD	3	3	-1
NORWER		114	114
T-MOBILE (UK) LIMITED	16	19	3
VODAFONE GROUP	31	24	-7
VIRGIN MEDIA	578	686	108
MANWER	575	520	-55
BT	530	1,328	798
United Utilities Water plc	968	1.203	235
CADENT GAS LIMITED	319	281	-38
NETWORK RATI	8	29	22
Knowslev Council	2.367	3.381	1.014
PROMOTER	2018-21	Average Yrs 7-9 2021-24	Diff

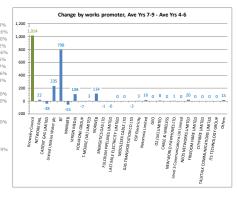
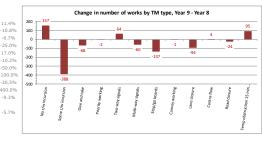
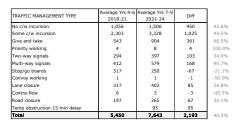


Table 3: Number of works by traffic management type, year on year comparison

Total	7,574	7,952	7,498	-454
Temp obstruction 15 min delay			95	95
Road closure	300	259	235	-24
Contra-flow	3	1	5	4
Lane closure	383	459	365	-94
Convoy working		1		-1
Stop/go boards	339	274	137	-137
Multi-way signals	620	589	529	-60
Two-way signals	374	376	440	64
Priority working	10	8	6	-2
Give and take	759	1,011	943	-68
Some c/w incursion	3,174	3,599	3,211	-388
No c/w incursion	1,612	1,375	1,532	157
TRAFFIC MANAGEMENT TYPE	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 8 - Yr 7





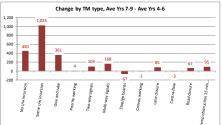
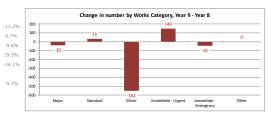


Table 4:	Number of works by works category, year on year comparison	
rubic -i.	reamber of works by works eategory, year on year comparison	

Total	7,575	7,952	7,498	-454
Other				
Immediate - Emergency	153	187	142	-45
Immediate - Urgent	802	765	914	149
Minor	5,780	6,157	5,605	-552
Standard	461	494	527	33
Major	379	349	310	-39
WORKS STOPPED	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 8 - Yr 7



Total	5,447	7,675	2,228
Other			
Immediate - Emergency	156	161	5
Immediate - Urgent	658	827	169
Minor	3,904	5,847	1,943
Standard	465	494	29
Major	264	346	82
WORKS STOPPED	Average Yrs 4-6 2018-21	Average Yrs 7-9 2021-24	Diff

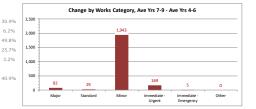


Table 6: Average works duration, year on year comparison (working days)

Average duration (days) 2.5 2.6 2.5	
LULT LL LULL LS LULS	24 110 117
DURATION Year 7 Year 8 Year 2021-22 2022-23 2023	

	Permitting Year 9, 2023-24					
	DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
-3.8%	Average duration (days)	14.2	6.2	1.3	3.0	6.8
-11.3%	Total number of days worked	4,399	3,264	7,089	2,768	961

Total number of days worked	5,827	2,875	8,370	2,833	936
Average duration (days)	16.7	5.8	1.4	3.7	5.0
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
Permitting Year 8, 2022-23					

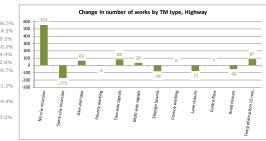
Permitting Year 7, 2021-22					
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
Average duration (days)	11.1	5.8	1.5	3.7	2.9
Total number of days worked	4,204	2,676	8,420	3,004	446

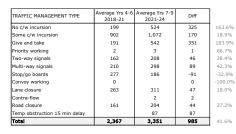
Total number of days worked	17,201	19,359	2,159	12.5%
Average duration (days)	3.2	2.5	-0.6	-20.0%
DURATION	Average Yrs 4-6 2018-21	Average Yrs 7-9 2021-24	Diff	

Highway authority works promoter

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

Total	2,822	3,436	3,883	447
Temp obstruction 15 min delay			87	87
Road closure	253	205	155	-50
Contra-flow	2		5	5
Lane closure	283	363	286	-77
Convoy working	l			
Stop/go boards	239	199	120	-79
Multi-way signals	289	285	321	36
Two-way signals	167	187	270	83
Priority working	4	4	2	-2
Give and take	366	599	662	63
Some c/w incursion	1,011	1,189	1,017	-172
No c/w incursion	208	405	958	553
TRAFFIC MANAGEMENT TYPE	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 8 - Yr 7





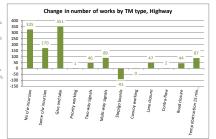
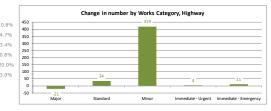
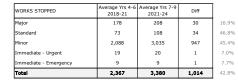


Table 8: Number of works by works category, year on year comparison

Total	2,822	3,436	3,883	447
Immediate - Emergency	7	5	16	11
Immediate - Urgent	31	13	17	4
Minor	2,434	3,126	3,545	419
Standard	93	98	132	34
Major	257	194	173	-21
WORKS STOPPED	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 8 - Yr 7





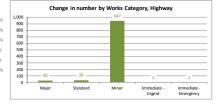


Table 9: Average works duration,	year on year comparison	(working days)

Total number of days worked	5.982	7.510	6.904	-606
Average duration (days)	2.1	2.2	1.8	-0.4
DURATION	2021-22	2022-23	2023-24	Yr 8 - Yr 7
	Year 7	Year 8	Year 9	Diff

ò	Total number of days worked	1,997	938	3,854	19	96
16	Average duration (days)	11.5	7.1	1.1	1.1	6.0
	DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
	Permitting Year 9, 2023-24					

Average duration (days)	18.0	7.2	1.0	2.7	1.4
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)

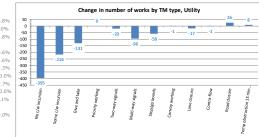
Permitting Year 7, 2021-22					
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)
Average duration (days)	9.4	9.5	1.1	2.0	1.3
Total number of days worked	2 406	905	2 621	61	

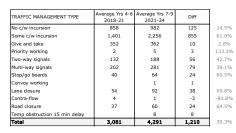
Total number of days worked	5,911	6,799	888	15.0%
Average duration (days)	2.5	2.0	-0.5	-18.7%
DURATION	Average Yrs 4-6 2018-21	Average Yrs 7-9 2021-24	Diff	

Utility works promoters

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

Total	4,752	4,515	3,614	-901
Temp obstruction 15 min delay			8	8
Road closure	47	54	80	26
Contra-flow	1	1	ĺ	-1
Lane closure	100	96	79	-17
Convoy working	1	1	ĺ	-1
Stop/go boards	99	75	17	-58
Multi-way signals	331	304	208	-96
Two-way signals	207	189	169	-20
Priority working	6	4	4	
Give and take	393	412	281	-131
Some c/w incursion	2,163	2,410	2,194	-216
No c/w incursion	1,404	969	574	-395
TRAFFIC MANAGEMENT TYPE	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 8 - Yr 7





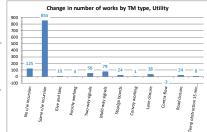


Table 11: Number of works by works category, year on year comparison

Total	4,752	4,515	3,614	-901
Immediate - Emergency	146	182	126	-56
Immediate - Urgent	771	752	897	145
Minor	3,345	3,030	2,059	-971
Standard	368	396	395	-1
Major	122	155	137	-18
WORKS STOPPED	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 8 - Yr 7

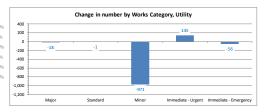






Table 12:	Average	works duration,	year	on year	comparison	(working	days)

Total number of days worked	12,768	13.331	11,577	-1.754
Average duration (days)	2.7	3.0	3.2	0.2
DURATION	Year 7 2021-22	Year 8 2022-23	Year 9 2023-24	Diff Yr 8 - Yr 7

	Permitting Year 9, 2023-24							
	DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)		
	Average duration (days)	17.5	5.9	1.6	3.1	6.9		
6	Total number of days worked	2,402	2,326	3,235	2,749	865		

Total number of days worked	2,402	2,326	3,235	2,749	865	Total numi	oer of da
Permitting Year 8, 2022-23							
DURATION	MAJOR	STANDARD	MINOR	IMMED.	IMMED.		

Total number of days worked	11,290	12,559	1,269	
Average duration (days)	3.7	3.0	-0.7	
DURATION	2018-21	2021-24	Diff	

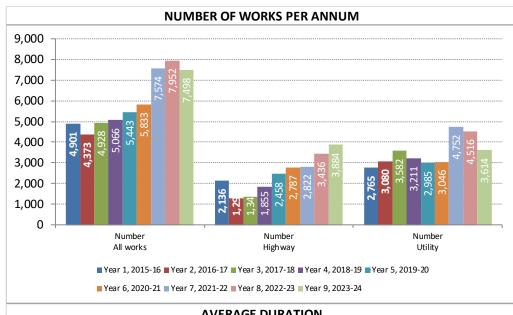
-19.1% 11.2%

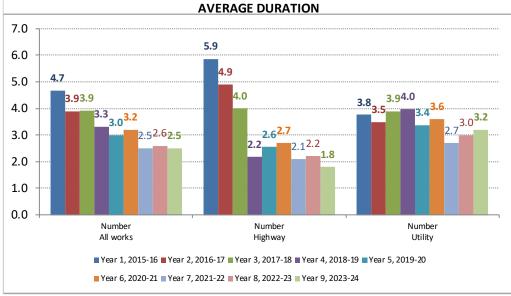
Total number of days worked	2,335	2,166	5,103	2,798	929
Average duration (days)	15.1	5.5	1.7	3.7	5.1
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)

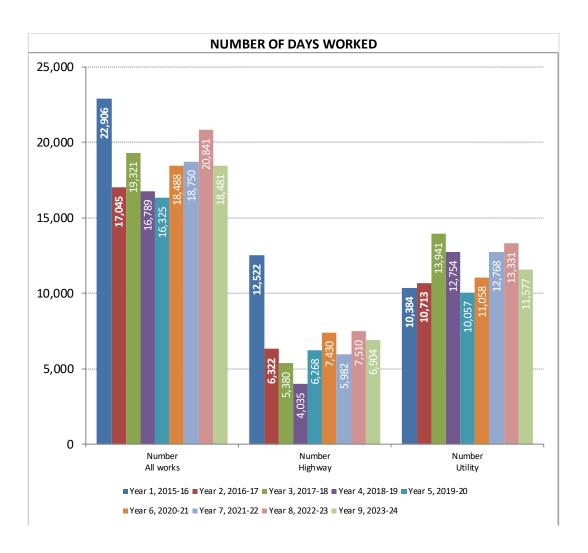
Permitting Year 7, 2021-22							
DURATION	MAJOR	STANDARD	MINOR	IMMED. (URGENT)	IMMED. (EMERG.)		
Average duration (days)	14.7	4.9	1.7	3.8	3.0		
Total number of days worked	1,798	1,791	5,799	2,943	437		

APPENDIX B. SCHEME BENEFIT SUMMARY









Version: 1 – 09/07/24 (Draft)