



# Hertfordshire County Council Permit Scheme Evaluation - Year 5

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Completion of the fifth year of operation of the permit scheme within Hertfordshire marks a significant milestone for me. A great believer in small manageable chunks, a half decade for me is a reasonable amount of time to see change and more importantly to reach a level of stability and normalness. After the great change in 2012 that brought Hertfordshire, and the other highway authorities in the East of England, a permit scheme. It was a great change for the highway authority and for works promoters to no longer just say they are turning up and working on the highway that turned into a two-way dialogue to ask for permission to work, and have conditions on that work, and more importantly to co-ordinate all those works to help reduce congestion and the overall impact of all works, and events, on the highway.

Nowadays this is business as usual for works promoters and co-ordinators in Hertfordshire. It's hard to remember days before the permit scheme, indeed many of our co-ordinators really don't know about life before co-ordination of works.

So, there's our change and stability, but on top of that we continue to evolve and make things better. Each year we say what Hertfordshire will do to improve. There's again a pretty impressive summary in this report of the actions completed, or commenced, during year 5, and themes and actions that will be the focus of the Permit Scheme Performance Framework during year 6 (Nov-17 to Oct-18)

The report itself is in a new format thanks to the comprehensive and thorough data reports now available through the Tableau software. These can be displayed in easily understandable formats to enable the reader to quickly recognise the results. Trends are now being established and, in my view, a five-year period is an ideal length of time to show trends and helps with the revised and improved performance measuring and management outlined in this report.

In summary I'd like to recognise the collaborative work that the highway authority Network Management co-ordinators and works promoters do together. I look forward to year 6 when Hertfordshire will report in line with the DfT timescales for reporting on the operation of permit schemes.

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January 2018

The Performance Measurement and Management of the Permit Scheme has undergone a significant review during year 5 of the scheme operation. This has included the deployment of monthly analysis of data for both Highway Works and Statutory Undertakers, highlighting areas of performance that need addressing, capturing actions taken and monitoring improvements. Additionally, monthly Permit Scheme performance feedback is sought from Highways Works Promoters and Permit Scheme performance is discussed with the Statutory Undertakers at the quarterly Coordination Meetings.

The design and content of this report has also undergone review with consideration to focusing on permit scheme related metrics and the desire to demonstrate benefits to the Network that have resulted from *permit scheme related activities only*.

These include: -

1. A summary of completed actions during year 5;
2. A summary of themes and actions for year 6;
3. Renumbering of performance indicators;
4. Displaying measures in a more logical flow i.e. to match the lifecycle of works;
5. Inclusion of year on year trends, where beneficial;
6. Exclusion of non-permit scheme related measures.

Whilst we have considered the HAUC Report Template for the Evaluation of Permit Schemes, HCC feel that some of the measures within that document do not relate to permit schemes and/or are reported elsewhere via standard Network Management/NRSWA reporting channels. Equally, other beneficial measures are excluded from the HAUC Report Template for the Evaluation of Permit Schemes and are included in this report.

## Year 5 Summary

A summary of the actions completed, or commenced, during year 5

ACTION	OUTCOME	LINK TO PERMIT SCHEME MEASURE
Review of the Performance Measurement and Management of the Permit Scheme Deployment of monthly analysis of data, highlighting areas of performance that need addressing and capturing actions taken. Additionally, monthly Permit Scheme performance feedback is sought from Highways Works Promoters and Permit Scheme performance is discussed with the Statutory Undertakers at the quarterly Coordination Meetings.	Complete.	All
Focus on measuring actions and processes directly related to the operation of the scheme and delivery Permit Scheme Benefits & Objectives including only measuring permit scheme related data and actions.	Complete	All
Ensure compliance to all relevant areas of the HAUC guidance for the operation of permit schemes and that these are measured and monitored. Including: - <ul style="list-style-type: none"> <li>• Permit fee discount for works on TS street wholly outside TS times</li> <li>• Responses to duration extensions on 'in-progress' works'</li> <li>• Correct fees applied to PAAs</li> </ul>	Complete	PSPI-9 PSPI-11 PSPI-9
Focus on operational areas of the Permit Scheme that can reduce the administrative burden on the Authority and Works Promoter. These include: - <ul style="list-style-type: none"> <li>• Response to AIVs on immediate works</li> <li>• Unnecessary conditions</li> <li>• Promoting a "right first time" approach</li> <li>• Review and analysis of response codes</li> </ul>	Ongoing	PSPI-12 PSPI-8  PSPI-5
Identify use of NCT codes applied to granted permits	Complete. Required to support action 9 in year 6	PSPI-8
Resolve issue of late submission of PAA Applications for certain types of Highways works.	Ongoing	PSPI-2
Review and reduce instances of no response code and RC31 (clash of works) being applied to refused permits.	Complete	PSPI-5

ACTION	OUTCOME	LINK TO PERMIT SCHEME MEASURE
<p>Identify and issue volumes, days planned occupation and monetary value of permits cancelled after grant. HCC has shared this data with the Statutory Undertakers over the second half of this permit scheme year but there has been little change. HCC will continue to press for the submission of cancellation notices to be subject to the same rules &amp; penalties under NRSWA that apply to the submission of start and stop notices. Network users rely on accurate information in order to plan their journeys and the late notification of cancelled works has a significant impact on these decisions.</p>	Ongoing	PSPI-10
<p>Late submission of Works Extensions Requests - during the second half of this year, the issue has been raised with all works promoters.</p>	Ongoing	PSPI-11

## Themes and Action Plan for Year 6

The themes and actions below will be the focus of the Permit Scheme Performance Framework during year 6 (Nov-17 to Oct-18)

No.	THEME	LINK TO PERMIT SCHEME MEASURE
1	Focus on measuring, and improving, actions and processes directly related to the operation of the scheme and delivery of the Permit Scheme Benefits & Objectives.	All
2	Focus on operational areas of the Permit Scheme that can reduce the administrative burden on the Authority and Works Promoter.	All
3	Develop the measurement framework to include the economic impact of works, including economic benefit of positive coordination activities, including a cost benefit analysis of alternative delivery methods and proactive modelling of key junctions, routes and areas.	All
No.	ACTION	LINK TO PERMIT SCHEME MEASURE
1	Complete an updated Cost Benefit Analysis (regulatory requirement)	N/A
2	Provide a detailed income/costs statement (regulatory requirement)	N/A
3	Review the discounts available to permit fees to determine if they are fit for purpose and help to deliver the Permit Scheme Benefits & Objectives and adding additional discounts where appropriate, that will drive behaviour change. This may be subject to consultation and/or variation of the Scheme.	N/A
4	Ensure any relevant recommendations from the DfT Permit Scheme Review Report are incorporated into the scheme operation and performance measurement framework.	N/A
5	HCC wish to apply a monetary cost to the economy of the impact of street and road works. This is required by works type, street type, works duration and traffic management type. The only figure available in the industry is a flat rate £'s per day which is of little use. This requirement will be incorporated into the engagement with a third-party organisation (Open Road Associates). The outputs can be used to measure and demonstrate the positive benefit of coordination actions within the Permit Scheme e.g. the application of conditions, hours and times of working, changes to traffic management.	N/A
6	PAA Lead Time – continue to resolve the issue of late submission of PAA Applications of certain Highways Works types	PSPI-2
7	Unnecessary or Missing Condition (RC11) – the application of RC11 to permit applications is considerable (32,3% of all RC codes used). Work will be undertaken to identify the promoters and/or contractors most at fault and to set improvement plans with the aim of reducing unnecessary administration.	PSPI-5

No.	ACTION	LINK TO PERMIT SCHEME MEASURE
8	Variations – The overall trend of increasing volumes of variations will be investigated to identify any opportunities to reduce these volumes, including a focus on promoting a “right first time” policy.	PSPI-7
9	HCC recognise that the correct application and use of conditions is the biggest single contributor to delivering benefits from the operation of a permit scheme. In year 5, we have introduced a process that captures the NCT codes within the condition text field of EToN. The next stage is to introduce the ability to analyse the free text data with a view to capturing the benefits from applied conditions e.g. moving works from TS to Non-TS times, working hours. This requirement will be incorporated into the engagement with a third-party organisation (Open Road Associates).	PSPI-8
10	Cancelled Road Space – continue to issue volumes, days planned occupation not used and monetary value of permits cancelled after grant to Statutory Undertakers and Highways Works promoters.	PSPI-10
11	Works Durations - work will commence to identify average duration for works, considering the works type, promoter and text analysis of the works description and the coordination teams will use this information when considering permit applications (text analysis of job works description is also part of the engagement with Open Road Associates).	PSPI-13
12	Late submission of Works Extensions Requests – during the second half of year 5, the issue was raised with all works promoters. If there is no significant improvement in the first quarter of year 6, improvement notices will be issued where required and more direct action taken if found to be appropriate.	PSPI-11
13	Works Data Variations Immediate Works - The HAUC Guidance for the Operation of Permit Schemes states that there is no requirement to respond to AIVs on Immediate works unless there is an issue. Some promoters have embraced this, greatly reducing unnecessary administration, however other promoters are still submitting high volumes of WDV's in response to AIVs on immediate permits. Work will be undertaken with all works promoters, to address this unnecessary administrative burden on both parties.	PSPI-12
14	Permit Compliance Inspections - plans are being formulated to increase the number of NRSWA and Permit inspections for HCC Framework sites from April 2018.	PSPI-16

### *Individual Performance Measures*

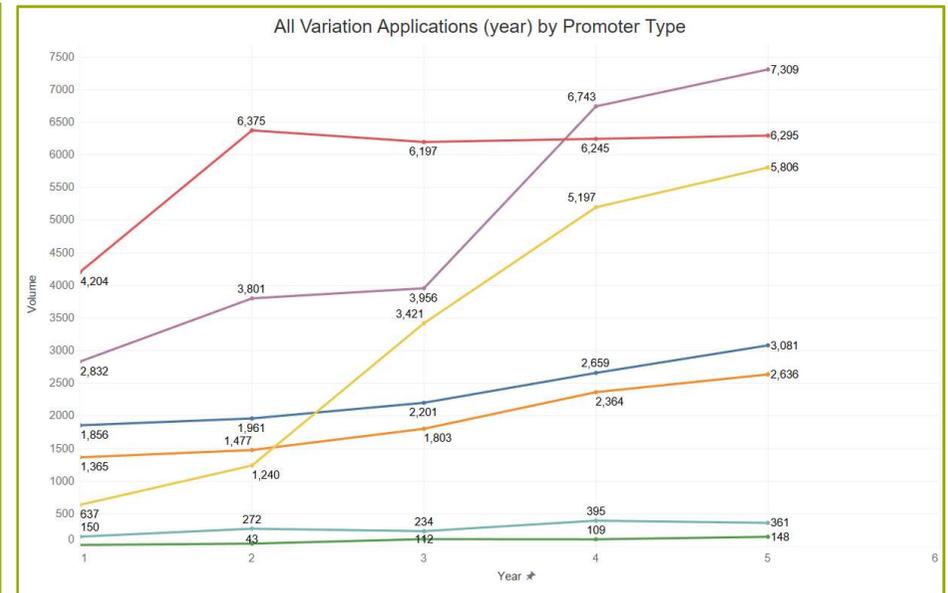
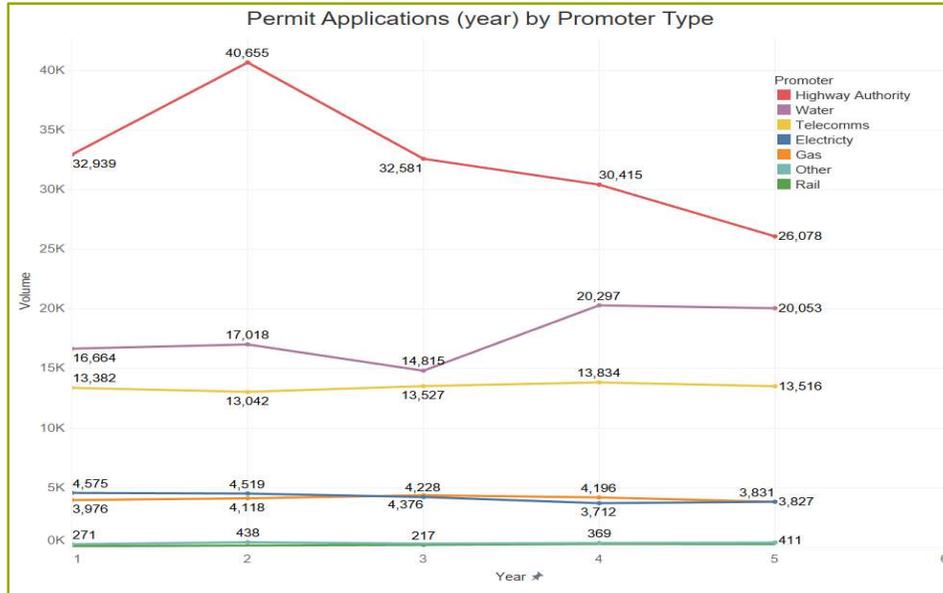
The remainder of this report contains data and analysis for each of the Permit Scheme Performance Indicators (PSPI). Measures should be considered on their individual merits and not necessarily linked together. This is due to the desire to include measures that demonstrate how the objectives and benefits of the scheme are being delivered. Additionally, the data constraints of EToN, for example the separate number of PAAs, Permits or Variations that are refused cannot be determined due to one EToN transaction for all refusals.

Description

The number of Permit and Variation Applications received by works type and promoter type (year 5)

		Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
Major	Application	4,456	370	712	157	562	1,369	106	7,732
	Variation	1,542	128	469	69	201	649	42	3,100
Standard	Application	1,763	879	753	17	848	522	150	4,932
	Variation	1,381	1,069	717	19	605	569	205	4,565
Minor	Application	5,025	539	1,105	97	10,534	10,458	144	27,902
	Variation	2,382	523	600	59	4,848	4,261	114	12,787
Immediate	Application	14,834	2,043	1,257	6	1,572	7,704	11	27,427
	Variation	990	1,361	850	1	152	1,830		5,184
<b>Total</b>		<b>32,373</b>	<b>6,912</b>	<b>6,463</b>	<b>425</b>	<b>19,322</b>	<b>27,362</b>	<b>772</b>	<b>93,629</b>

Yearly Summary



Analysis

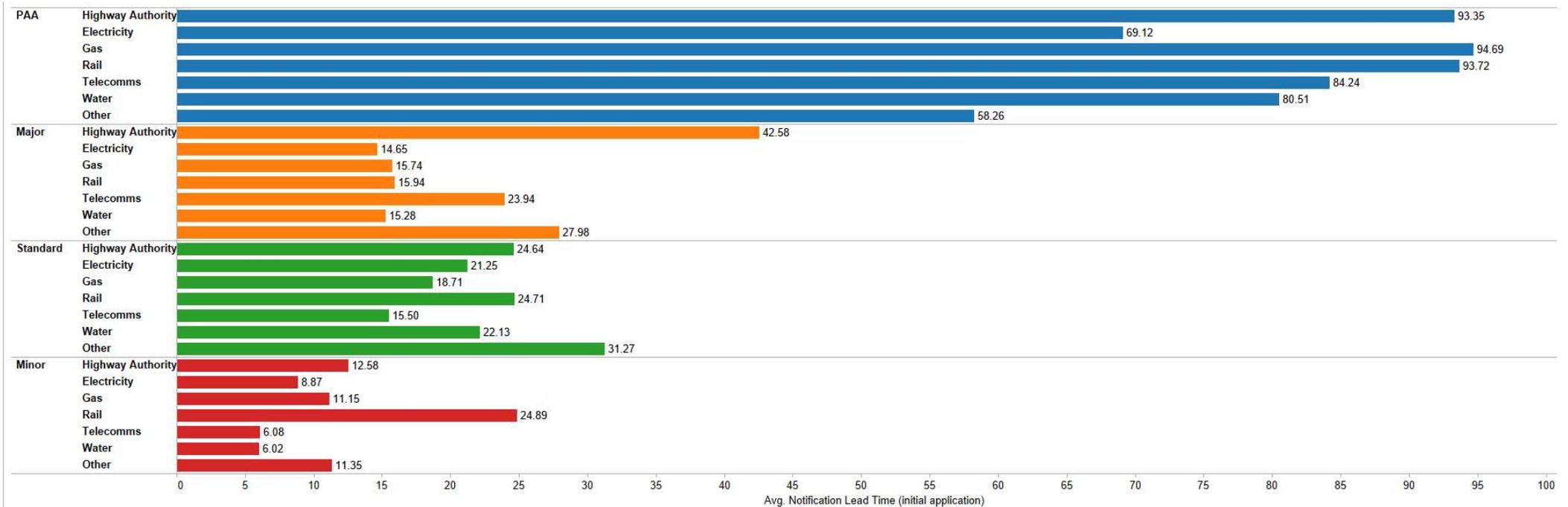
Applications - no meaningful analysis can be drawn from these volumes as there are numerous factors, outside the control of the Permit Scheme, that will influence the number of works carried out on the Highway. The dip in Highways Works volumes is attributable to a clarification of what works are registrable e.g. pot hole make-safe with no Traffic Management.

Variations – it is disappointing to see a significant increase in the overall volume of variation applications received, particularly from certain Statutory Undertakers. Further analysis and actions are noted within PSPI 7.

## PSPI-2 Application Lead Time

### Description

The average lead time for Permit Applications by works type and promoter type (year 5)

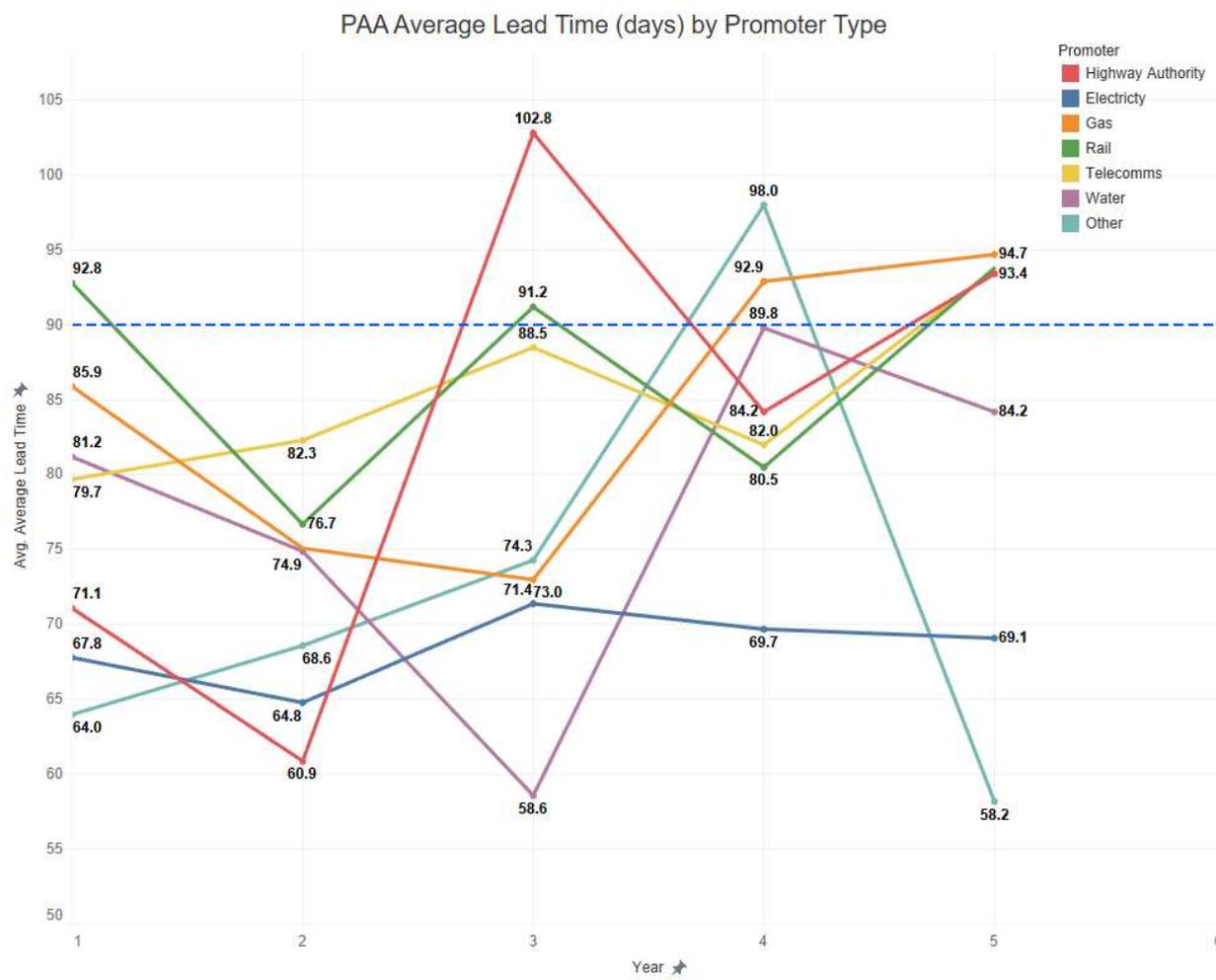


### Analysis

Whilst the overall year's averages are acceptable, there are significant variations within the monthly data for PAA Applications for Highway Authority Works. The issue has been escalated internally, with senior manager ownership, for resolution.

PAA applications from "Electricity" and "Other" promoter types continue to be below target although the number of applications are low and therefore the impact is low.

Yearly Summary



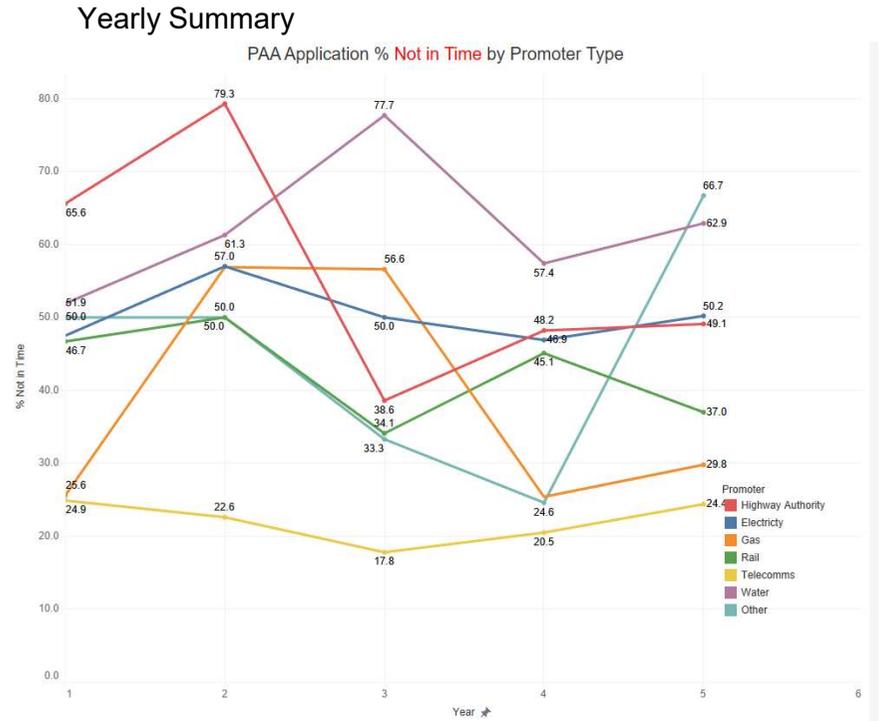
## PSPI-3 Reducing the Application Period (Early Starts)

### Description

The volume and % of applications received either 'in-time' or 'not in time' by works type and promoter type.

Year 5

		Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
PAA	In Time	1,269 50.9%	130 49.8%	294 70.2%	58 63.0%	263 75.6%	331 37.1%	22 33.3%	2,367 51.8%
	Not in Time	1,223 49.1%	131 50.2%	125 29.8%	34 37.0%	85 24.4%	560 62.9%	44 66.7%	2,202 48.2%
Major	In Time	1,695 86.3%	80 73.4%	212 72.4%	60 92.3%	178 83.2%	333 69.7%	30 75.0%	2,588 81.8%
	Not in Time	269 13.7%	29 26.6%	81 27.6%	5 7.7%	36 16.8%	145 30.3%	10 25.0%	575 18.2%
Standard	In Time	1,438 81.6%	811 92.3%	727 96.5%	16 94.1%	749 88.3%	427 81.8%	140 93.3%	4,308 87.3%
	Not in Time	325 18.4%	68 7.7%	26 3.5%	1 5.9%	99 11.7%	95 18.2%	10 6.7%	624 12.7%
Minor	In Time	4,827 96.1%	519 96.3%	1,100 99.5%	94 96.9%	10,416 98.9%	10,313 98.6%	140 97.2%	27,409 98.2%
	Not in Time	198 3.9%	20 3.7%	5 0.5%	3 3.1%	118 1.1%	145 1.4%	4 2.8%	493 1.8%
Immediate	In Time	13,941 94.0%	1,985 97.2%	1,170 93.1%	6 100.0%	1,507 95.9%	7,301 94.8%	10 90.9%	25,920 94.5%
	Not in Time	893 6.0%	58 2.8%	87 6.9%		65 4.1%	403 5.2%	1 9.1%	1,507 5.5%



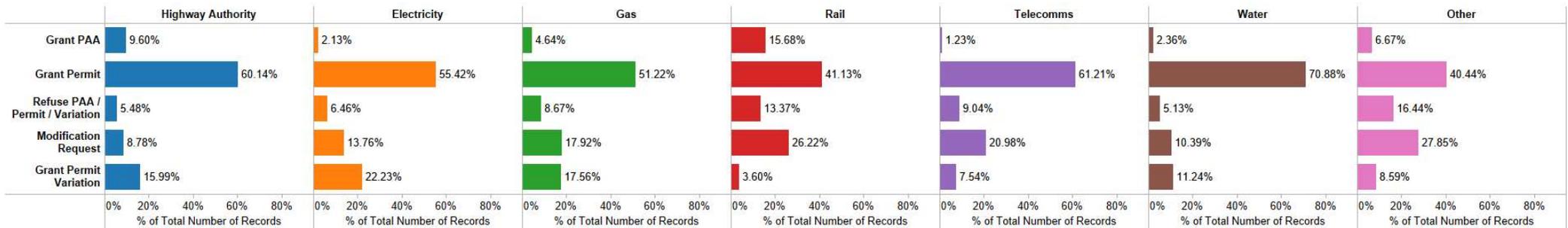
### Analysis

The percentage of PAA Applications received not in time for the Highway Authority and Water promoter groups is cause for concern, particularly when the volume of applications, and their locations, are considered and the subsequent impact to the network in terms of communication, journey planning and collaboration opportunities.

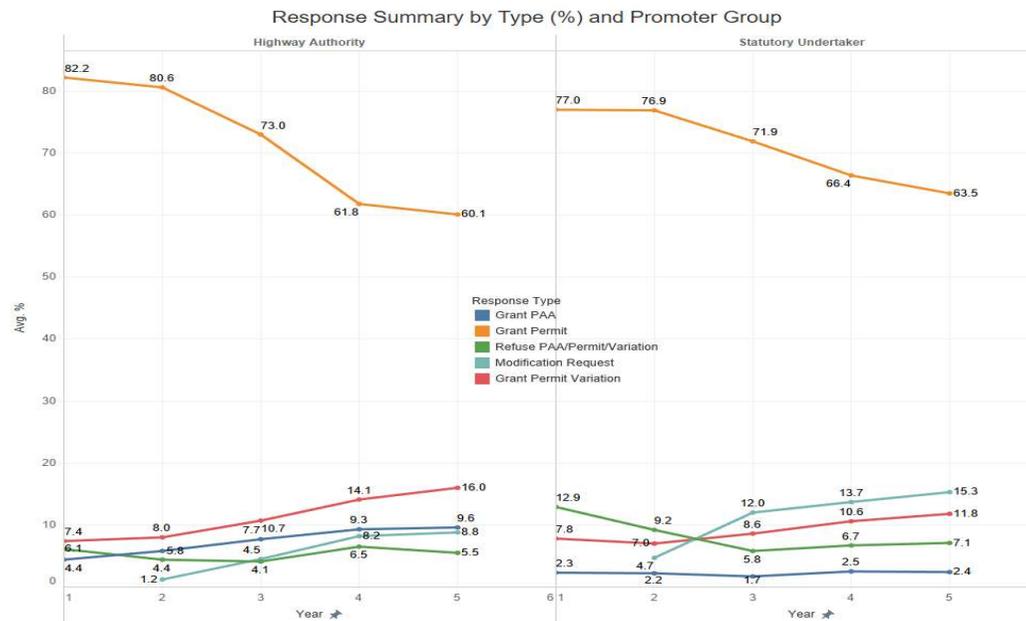
## PSPI-4 Application Responses - Summary

### Description

This measure focuses on the overall responses to all applications and is designed to show the effect of positive coordination by the Network Management team. The data is shown by percentage response type used and should not be considered by application type e.g. 9.6% of all responses of all application types from Highways were Grant PAA not 9.6% of Highways PAAs were granted.



### Yearly Summary



Description

This shows the data above for year 5 broken down by works type and includes volumes.

		Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
Major	Grant PAA	1,841 34.91%	124 31.63%	268 26.30%	61 29.47%	216 32.93%	579 33.01%	45 34.88%	3,134 33.23%
	Grant Permit	1,851 35.10%	93 23.72%	240 23.55%	57 27.54%	137 20.88%	409 23.32%	36 27.91%	2,823 29.94%
	Refuse PAA / Permit / Variation	366 6.94%	92 23.47%	169 16.58%	33 15.94%	171 26.07%	275 15.68%	20 15.50%	1,126 11.94%
	Modification Request	340 6.45%	49 12.50%	140 13.74%	49 23.67%	103 15.70%	182 10.38%	12 9.30%	875 9.28%
	Grant Permit Variation	875 16.59%	34 8.67%	202 19.82%	7 3.38%	29 4.42%	309 17.62%	16 12.40%	1,472 15.61%
Standard	Grant Permit	1,641 57.24%	792 44.90%	566 42.56%	14 40.00%	525 39.36%	402 41.79%	124 39.62%	4,064 47.23%
	Refuse PAA / Permit / Variation	207 7.22%	179 10.15%	175 13.16%	7 20.00%	267 20.01%	134 13.93%	54 17.25%	1,023 11.89%
	Modification Request	419 14.61%	460 26.08%	437 32.86%	13 37.14%	325 24.36%	259 26.92%	103 32.91%	2,016 23.43%
	Grant Permit Variation	600 20.93%	333 18.88%	152 11.43%	1 2.86%	217 16.27%	167 17.36%	32 10.22%	1,502 17.45%
Minor	Grant Permit	4,597 68.96%	473 50.27%	942 59.81%	86 60.14%	8,835 62.11%	9,529 70.36%	107 47.14%	24,569 65.83%
	Refuse PAA / Permit / Variation	468 7.02%	90 9.56%	131 8.32%	12 8.39%	1,154 8.11%	805 5.94%	37 16.30%	2,697 7.23%
	Modification Request	916 13.74%	271 28.80%	439 27.87%	40 27.97%	3,267 22.97%	2,074 15.31%	73 32.16%	7,080 18.97%
	Grant Permit Variation	685 10.28%	107 11.37%	63 4.00%	5 3.50%	968 6.81%	1,136 8.39%	10 4.41%	2,974 7.97%
Immediate	Grant Permit	3,440 78.83%	1,876 68.52%	1,213 65.32%	3 75.00%	1,293 91.38%	7,084 85.11%	6 100.00%	14,915 79.73%
	Refuse PAA / Permit / Variation	10 0.23%	16 0.58%	26 1.40%		2 0.14%	47 0.56%		101 0.54%
	Modification Request	9 0.21%	23 0.84%	20 1.08%		4 0.28%	40 0.48%		96 0.51%
	Grant Permit Variation	905 20.74%	823 30.06%	598 32.20%	1 25.00%	116 8.20%	1,152 13.84%		3,595 19.22%

Analysis

The decrease in the % of granted permits, coupled with the increase in modification requests, reflects the initiatives deployed by the coordination team to ensure compliance and accuracy of granted permits in addition to using good coordination practices. This includes removing unnecessary conditions, removing ambiguous data, challenging traffic management types and ensuring compliance to the National Conditions.

## PSPI-5 Permit Response Codes

### Description

HCC introduced the Standard Permit Responses codes in December 2015 (year 4). Data is displayed by volume and type for year 5. NCU denotes no code used in response comment.

	Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
NCU	103	66	54	9	145	108	19	504
RC10	362	231	214	46	571	589	35	2,048
RC11	600	387	490	43	2,097	1,106	122	4,845
RC12	19	28	57		151	67	25	347
RC20	21	2	5	1	6	15	1	51
RC21					1	1		2
RC22	172	27	47	5	126	137		514
RC23	114	52	52	1	245	283	4	751
RC30	58	16	31		74	78	2	259
RC31	452	107	156	17	704	491	28	1,955
RC32	43	34	49	3	66	49	2	246
RC33	35	20	29	1	66	48	5	204
RC40	41	11	31	1	39	33	2	158
RC41	252	53	90	7	334	259	21	1,016
RC42	4	1	5		10	14		34
RC44	24	11	43		32	26	3	139
RC50	430	133	181	20	624	506	30	1,924
Total	2,730	1,179	1,534	154	5,291	3,810	299	14,997

	Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
NCU	3.77%	5.60%	3.52%	5.84%	2.74%	2.83%	6.35%	3.36%
RC10	13.26%	19.59%	13.95%	29.87%	10.79%	15.46%	11.71%	13.66%
RC11	21.98%	32.82%	31.94%	27.92%	39.63%	29.03%	40.80%	32.31%
RC12	0.70%	2.37%	3.72%		2.85%	1.76%	8.36%	2.31%
RC20	0.77%	0.17%	0.33%	0.65%	0.11%	0.39%	0.33%	0.34%
RC21					0.02%	0.03%		0.01%
RC22	6.30%	2.29%	3.06%	3.25%	2.38%	3.60%		3.43%
RC23	4.18%	4.41%	3.39%	0.65%	4.63%	7.43%	1.34%	5.01%
RC30	2.12%	1.36%	2.02%		1.40%	2.05%	0.67%	1.73%
RC31	16.56%	9.08%	10.17%	11.04%	13.31%	12.89%	9.36%	13.04%
RC32	1.58%	2.88%	3.19%	1.95%	1.25%	1.29%	0.67%	1.64%
RC33	1.28%	1.70%	1.89%	0.65%	1.25%	1.26%	1.67%	1.36%
RC40	1.50%	0.93%	2.02%	0.65%	0.74%	0.87%	0.67%	1.05%
RC41	9.23%	4.50%	5.87%	4.55%	6.31%	6.80%	7.02%	6.77%
RC42	0.15%	0.08%	0.33%		0.19%	0.37%		0.23%
RC44	0.88%	0.93%	2.80%		0.60%	0.68%	1.00%	0.93%
RC50	15.75%	11.28%	11.80%	12.99%	11.79%	13.28%	10.03%	12.83%

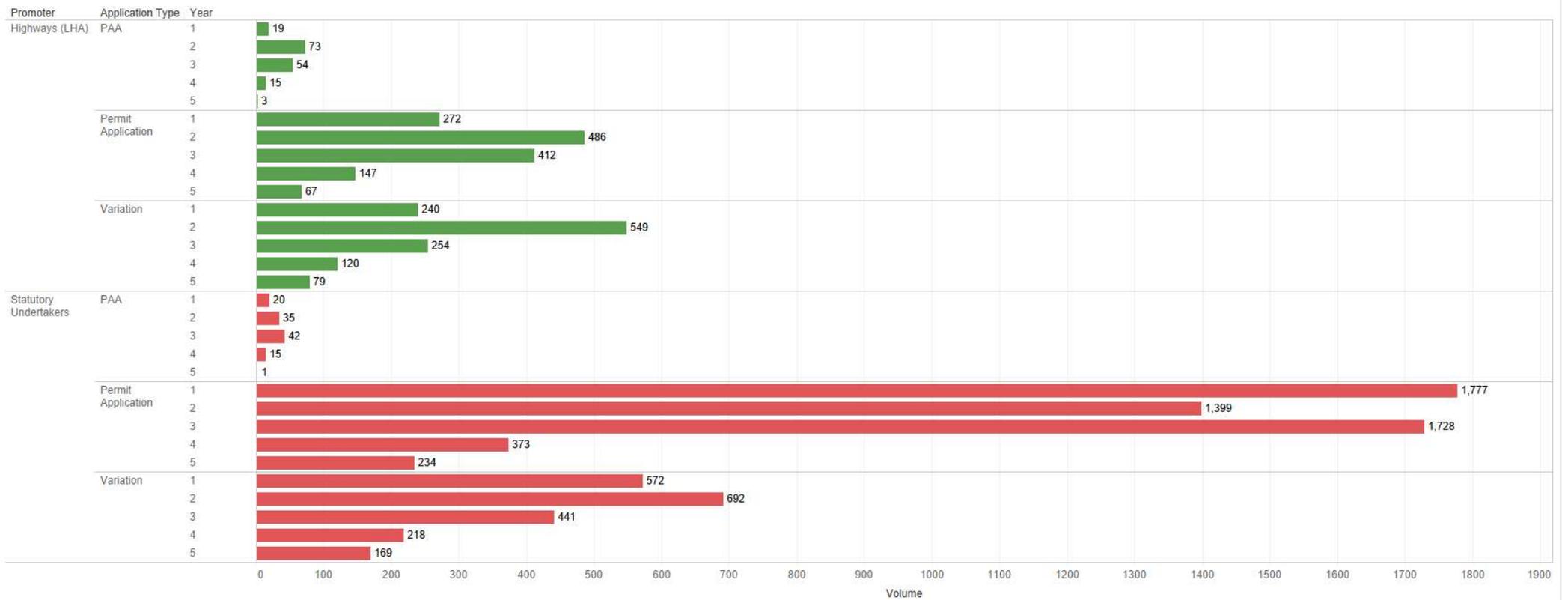
### Analysis

Works has continued through year 5 to reduce the volume of responses where no code has been used and the instances of RC31 (Clash of Works) has been closely monitored - by promoter – and high volumes have been flagged to the relevant promoters. RC11 (Condition Not Provided/Not Necessary) continues to remain high. This is disappointing considering Works Promoters have had 2 years to comply to the use of National Conditions. Work will be undertaken in year 6 to identify the promoters and/or contractors most at fault and to set improvement plans.

## PSPI-6 Deemed Applications

### Description

The volume of deemed items



### Analysis

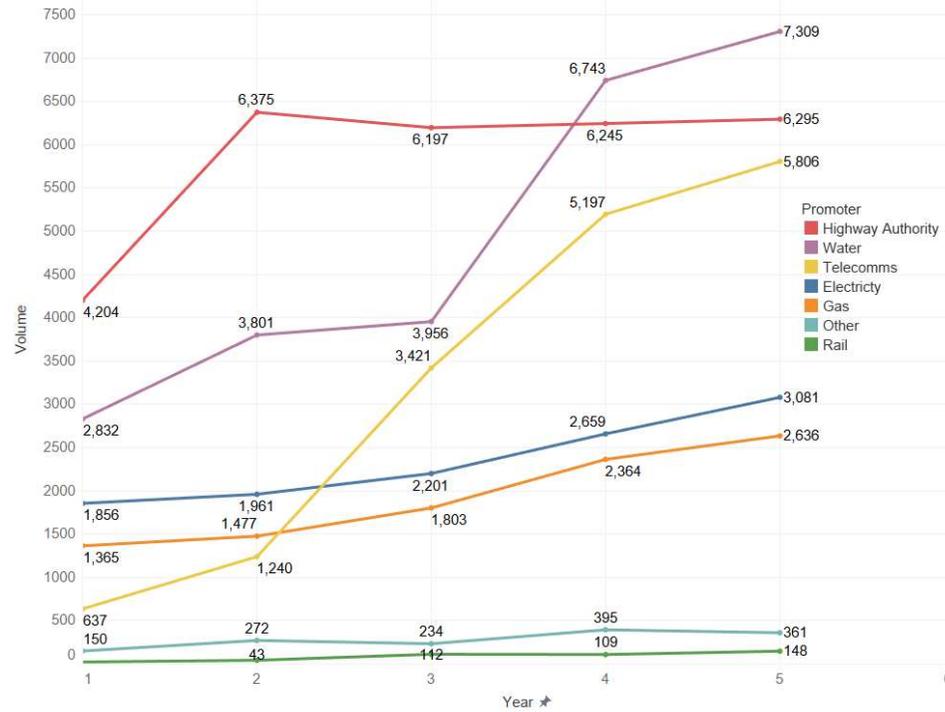
The volume of deemed items continues to reduce and is closely monitored on a monthly basis. This ensures that our network is effectively managed.

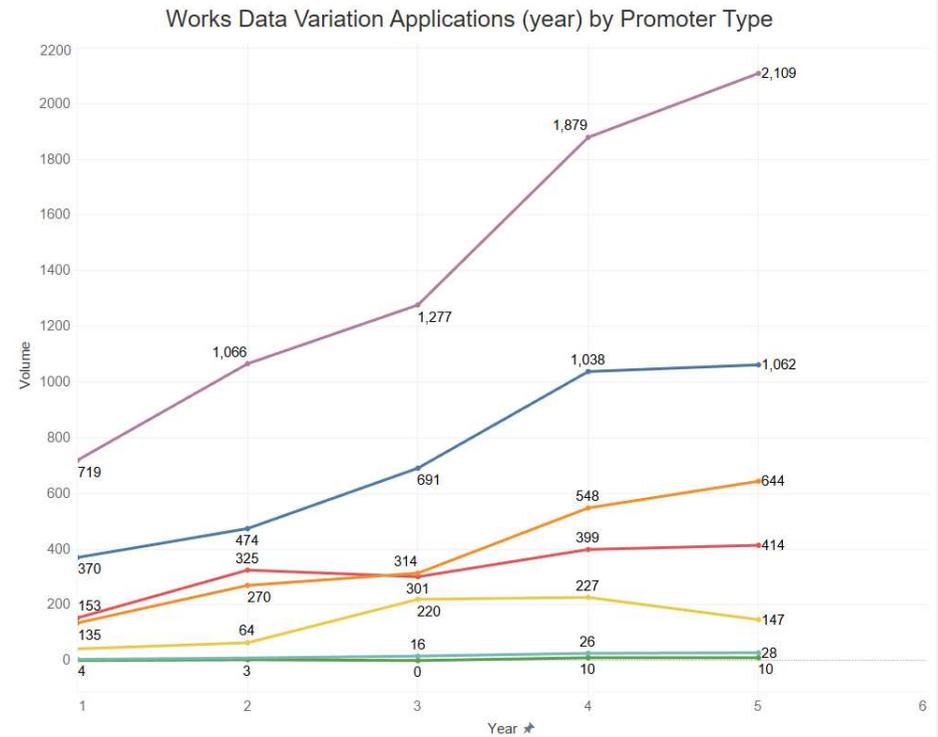
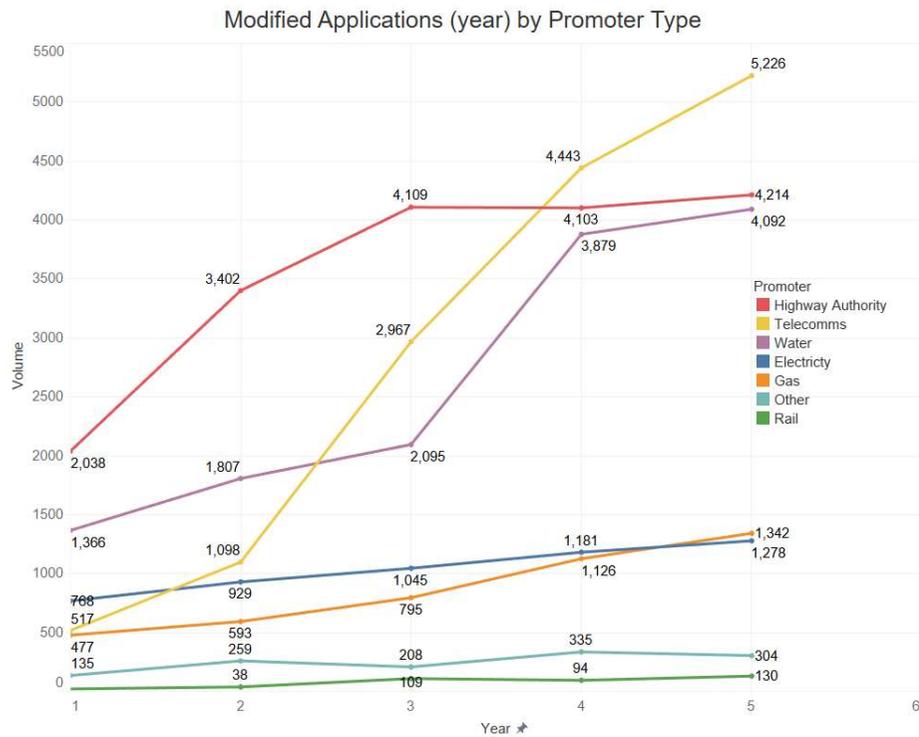
Description

The number of variation applications, by type and works promoter (year 5)

		Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
Modified Application	Major	1,110	95	267	59	174	337	24	2,066
	Standard	1,033	732	556	14	460	414	172	3,381
	Minor	2,069	451	519	57	4,587	3,339	108	11,130
	Immediate	2				5	2		9
Works Data Variation (WIP)	Major	195	11	60	3	10	138	5	422
	Standard	43	168	72	5	42	97	20	447
	Minor	155	28	42	2	41	631	3	902
	Immediate	21	855	470		54	1,243		2,643
Duration Variation Application (WIP)	Major	237	22	142	7	17	174	13	612
	Standard	305	169	89		103	58	13	737
	Minor	158	44	39		220	291	3	755
	Immediate	967	506	380	1	93	585		2,532
<b>Total</b>		<b>6,295</b>	<b>3,081</b>	<b>2,636</b>	<b>148</b>	<b>5,806</b>	<b>7,309</b>	<b>361</b>	<b>25,636</b>

All Variation Applications (year) by Promoter Type





Refer to PSPI-11 for Duration Extension data

### Analysis

The overall trend of increasing volumes of variations will be investigated in year 6 to identify any opportunities to reduce these volumes, including a focus on promoting a “right first time” policy.

**PSPI-8 Conditions**

Description

The volume of granted permits and total conditions applied is shown along with the % of permits with one or more condition type applied in year 5. Additionally, a breakdown of the NCT codes applied is shown.

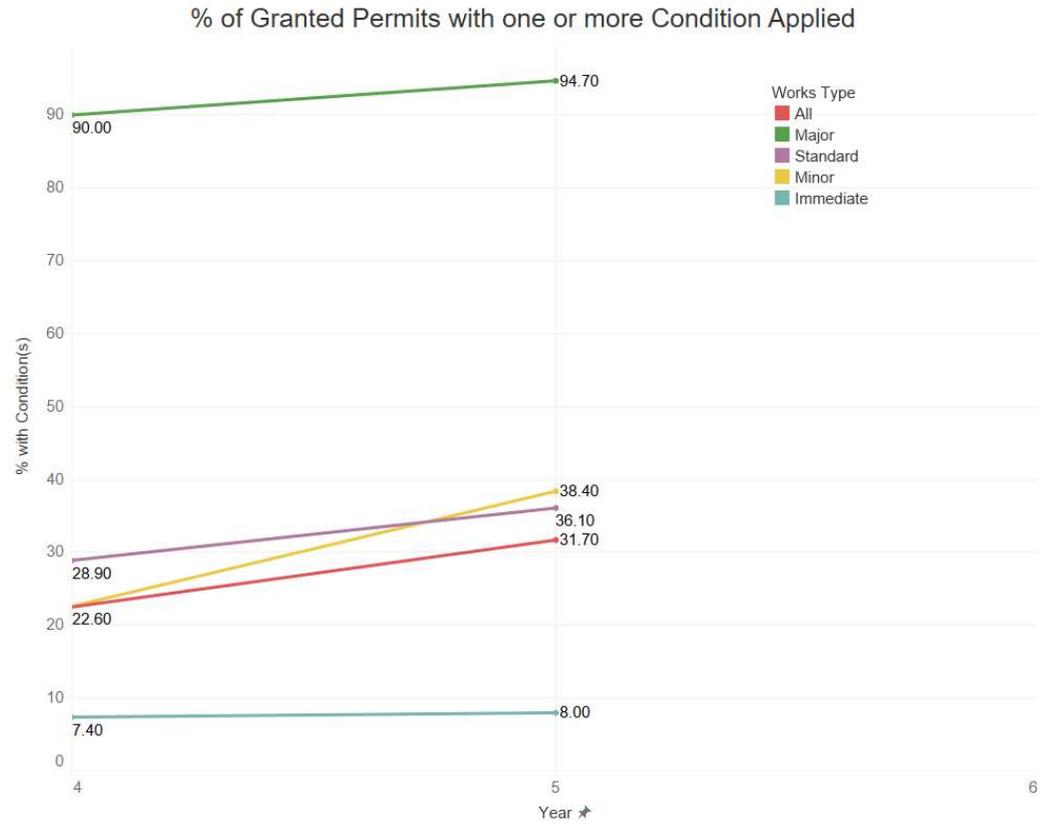
		Highway	Electricity	Gas	Rail	Telecom..	Water	Other	Total
		Authority							
<b>Major</b>	<b>Granted Permits</b>	1,851	93	240	57	137	409	36	<b>2,823</b>
	<b>Total Codes Applied</b>	2,309	221	537	140	426	1,444	107	<b>5,184</b>
	<b>Permits with Condition(s) %</b>	94.0%	96.8%	92.1%	96.5%	98.5%	97.1%	91.7%	<b>94.6%</b>
<b>Standard</b>	<b>Granted Permits</b>	1,641	792	566	14	525	402	124	<b>4,064</b>
	<b>Total Codes Applied</b>	385	584	423	38	719	828	254	<b>3,231</b>
	<b>Permits with Condition(s) %</b>	16.5%	37.5%	35.7%	100.0%	58.9%	70.6%	78.2%	<b>36.2%</b>
<b>Minor</b>	<b>Granted Permits</b>	4,597	473	942	86	8,835	9,529	107	<b>24,569</b>
	<b>Total Codes Applied</b>	1,919	478	607	217	7,598	4,194	163	<b>15,176</b>
	<b>Permits with Condition(s) %</b>	33.4%	51.4%	35.2%	94.2%	48.3%	30.1%	73.8%	<b>38.3%</b>
<b>Immediate</b>	<b>Granted Permits</b>	3,440	1,876	1,213	3	1,293	7,084	6	<b>14,915</b>
	<b>Total Codes Applied</b>	110	79	15	8	680	1,296	4	<b>2,192</b>
	<b>Permits with Condition(s) %</b>	3.1%	3.8%	0.7%	100.0%	20.9%	10.6%	33.3%	<b>8.1%</b>
<b>Total</b>	<b>Granted Permits</b>	<b>11,529</b>	<b>3,234</b>	<b>2,961</b>	<b>160</b>	<b>10,790</b>	<b>17,424</b>	<b>273</b>	<b>46,371</b>
	<b>Total Codes Applied</b>	<b>4,723</b>	<b>1,362</b>	<b>1,582</b>	<b>403</b>	<b>9,423</b>	<b>7,762</b>	<b>528</b>	<b>25,783</b>
	<b>Permits with Condition(s) %</b>	<b>31.7%</b>	<b>21.7%</b>	<b>25.8%</b>	<b>95.6%</b>	<b>46.1%</b>	<b>24.7%</b>	<b>77.3%</b>	<b>31.8%</b>

All Streets

	Major	Standard	Minor	Immediate	Total
<b>Granted Permits</b>	2,626	3,714	22,242	13,864	42,446
NCT01a	15	22	213	248	498
NCT01b	2	0	14	10	26
NCT02a	568	653	5,723	203	7,147
NCT02b	153	148	682	41	1,024
NCT04a	159	141	280	40	620
NCT04b	100	51	122	87	360
NCT05a	176	99	658	195	1,128
NCT06a	66	198	1,162	416	1,842
NCT07a	253	3	0	71	327
NCT08a	87	361	1,047	151	1,646
NCT08b	73	172	360	54	659
NCT09a	148	89	188	15	440
NCT09b	10	8	46	1	65
NCT09c	102	459	1,792	218	2,571
NCT10a	193	191	325	46	755
NCT11a	69	76	598	253	996
NCT11b	2,304	172	112	2	2,590
NCT12a	345	85	390	2	822
Nct03	0	1	4	0	5
Nct13	0	0	6	1	7
<b>Total Codes Applied</b>	<b>4,823</b>	<b>2,929</b>	<b>13,722</b>	<b>2,054</b>	<b>23,528</b>

Traffic Sensitive Streets Only

	Major	Standard	Minor	Immediate	Total
<b>Granted Permits</b>	1,162	2,087	11,244	6,467	20,960
NCT01a	11	15	169	105	300
NCT01b	0	0	7	7	14
NCT02a	321	573	5,532	166	6,592
NCT02b	49	83	416	17	565
NCT04a	54	97	225	19	395
NCT04b	25	32	84	46	187
NCT05a	53	66	425	130	674
NCT06a	25	141	883	214	1,263
NCT07a	132	2	0	44	178
NCT08a	72	310	1,017	146	1,545
NCT08b	70	181	393	62	706
NCT09a	80	62	109	11	262
NCT09b	10	5	34	0	49
NCT09c	85	415	1,770	225	2,495
NCT10a	73	127	272	24	496
NCT11a	34	61	344	111	550
NCT11b	961	107	82	2	1,152
NCT12a	99	54	196	2	351
Nct03	0	1	5	0	6
Nct13	0	0	6	1	7
<b>Total Codes Applied</b>	<b>2,154</b>	<b>2,332</b>	<b>11,969</b>	<b>1,332</b>	<b>17,787</b>



Analysis

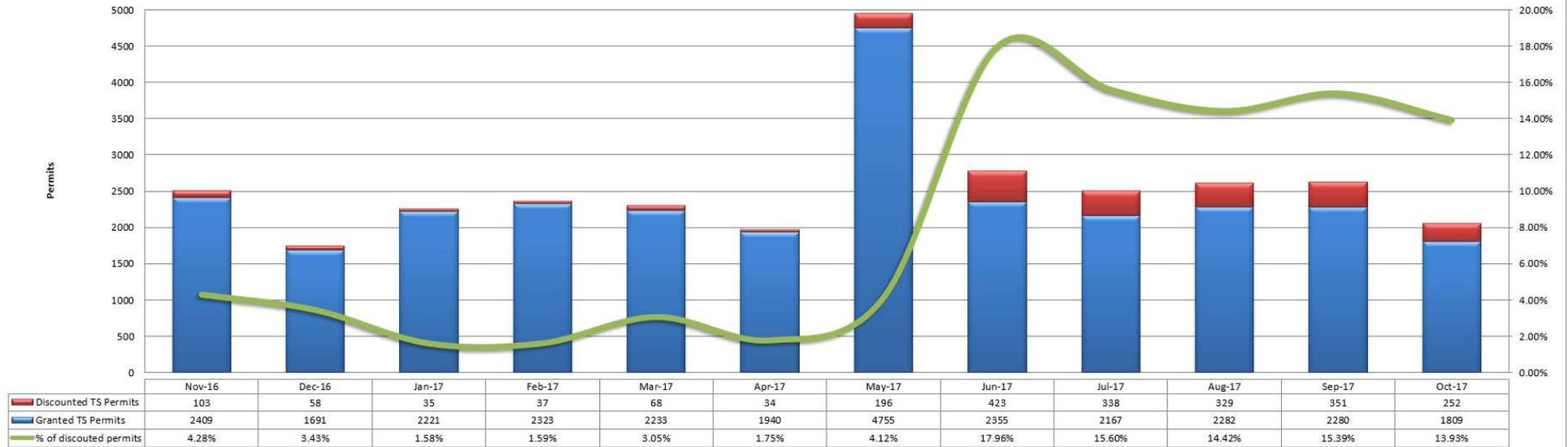
Major works continue to have a high volume of conditions applied which reflects the high-impact nature of these works. The coordination team continue to challenge applications with unnecessary or ambiguous conditions attached and also look for alternative ways of delivering works to meet the needs of the users of the Network.

HCC recognise that the correct application and use of conditions is the biggest single contributor to delivering benefits from the operation of a permit scheme. In year 5, we have introduced a process that captures the NCT codes within the condition text field of EToN. The next stage is to engage with an external supplier to introduce the ability to analyse the free text data with a view to capturing the benefits from applied conditions e.g. moving works from TS to Non-TS times and eventually cost benefit analysis of alternative types of TM and times and their impacts on the economy.

## PSPI-9 Working Outside TS Times on TS Streets

### Description

The volume of granted permits on TS streets, and the volume and percentage qualifying for a discount on the permit fee is shown for year 5.



### Analysis

HCC have been giving a discount on the permit fee for works on TS streets that are carried out wholly outside TS times since November 2015. This was formally introduced with the HAUC Guidance for the Operation of Permit Schemes. As shown in the data, the volume of discounted works increased in line with the introduction of the HAUC guidance, with very few works promoters taking the opportunity for the discount prior to this time.

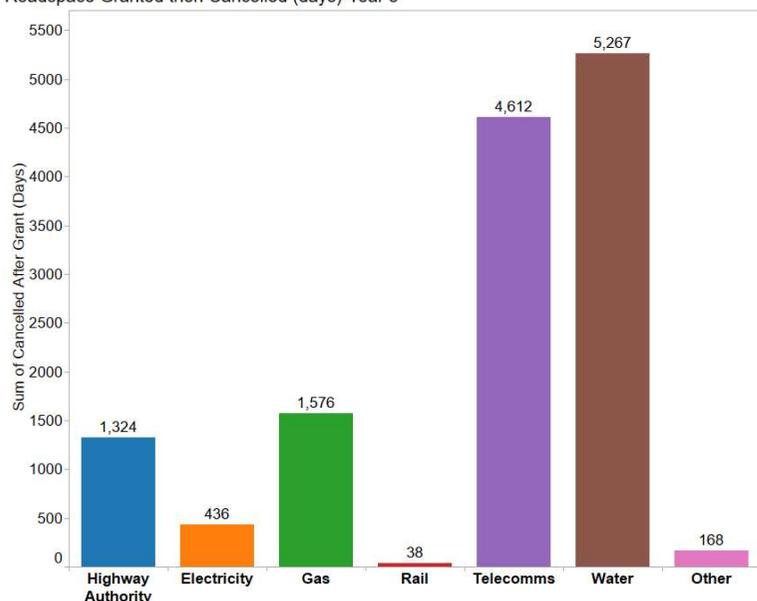
## PSPI-10 Cancelled Road Space

### Description

The % of cancellation notifications received in time or not in time is shown by works type and promotor type for year 5. 'In time' is before works are due to start on site, 'not in time' is on or after the agreed works start date.

		Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
Major	In Time	69.69%	91.11%	71.30%	92.86%	68.47%	73.47%	79.31%	72.07%
	Not in Time	30.31%	8.89%	28.70%	7.14%	31.53%	26.53%	20.69%	27.93%
Standard	In Time	54.01%	50.31%	57.40%	80.00%	61.48%	69.68%	57.81%	58.64%
	Not in Time	45.99%	49.69%	42.60%	20.00%	38.52%	30.32%	42.19%	41.36%
Minor	In Time	36.13%	30.95%	34.93%	82.93%	28.79%	29.51%	31.25%	30.40%
	Not in Time	63.87%	69.05%	65.07%	17.07%	71.21%	70.49%	68.75%	69.60%

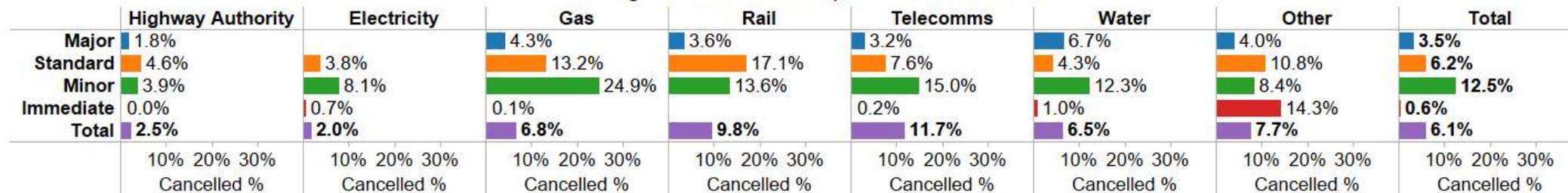
Roadspace Granted then Cancelled (days)-Year 5



Monetary Value of Granted Permit Fees for Roadspace Granted then Cancelled-Year 5

	Electricity	Gas	Rail	Telecomms	Water	Other	Total
Major	£0	£4,710	£690	£1,245	£12,450	£570	£19,665
Standard	£4,690	£9,885	£390	£5,365	£2,160	£1,510	£24,000
Minor	£2,830	£14,635	£1,370	£94,700	£76,615	£655	£190,805
Immediate	£900	£40		£200	£4,580	£60	£5,780
<b>Total</b>	<b>£8,420</b>	<b>£29,270</b>	<b>£2,450</b>	<b>£101,510</b>	<b>£95,805</b>	<b>£2,795</b>	<b>£240,250</b>

Percentage of Granted Roadspace Cancelled-Year 5



### Monetary Value of Permits Cancelled after Grant-all years



### Monetary Value of Permits Cancelled after Grant-all years

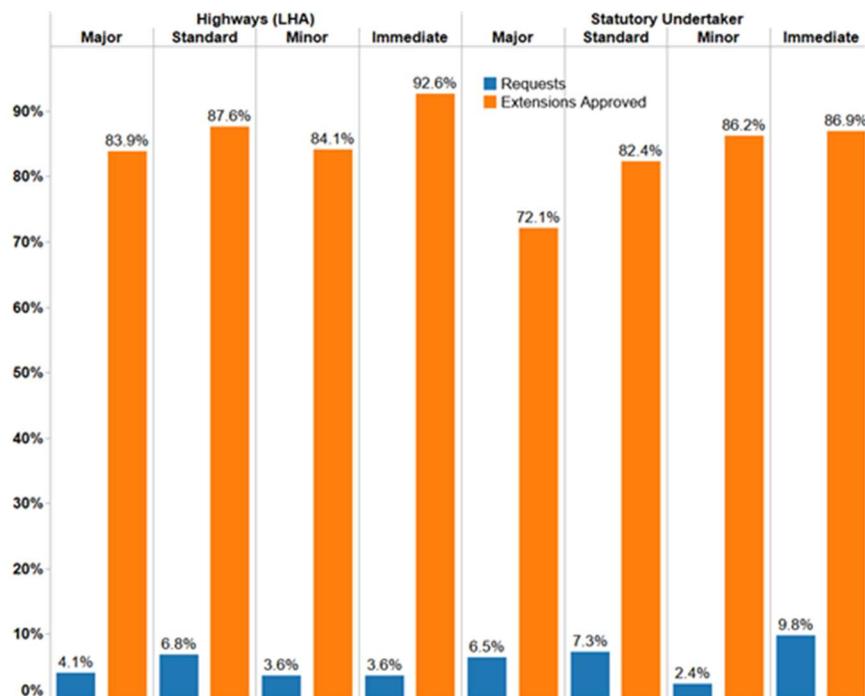
	Electricity	Gas	Rail	Telecomms	Water	Other	Total
1	£23,810	£31,940	£350	£52,800	£121,845	£3,580	£234,325
2	£14,655	£57,770	£455	£73,940	£103,935	£3,640	£254,395
3	£15,945	£77,455	£820	£84,825	£117,670	£3,355	£300,070
4	£12,480	£60,450	£1,520	£107,595	£133,550	£3,750	£319,345
5	£8,420	£29,270	£2,450	£101,510	£95,805	£2,795	£240,250
<b>Total</b>	<b>£75,310</b>	<b>£256,885</b>	<b>£5,595</b>	<b>£420,670</b>	<b>£572,805</b>	<b>£17,120</b>	<b>£1,348,385</b>

### Analysis

Whilst the notification of cancelled road space is not part of the permit scheme, this data indicates a lack of planning and affects the authority's abilities to coordinate works. It is included to demonstrate the late notification of cancellations and the monetary value of granted permits that are then subject to cancellation. HCC has shared this data with the Statutory Undertakers over the second half of this permit scheme year but there has been little change. HCC will continue to press for the submission of cancellation notices to be subject to the same rules & penalties under NRSWA that apply to the submission of start and stop notices. Network users rely on accurate information in order to plan their journeys and the late notification of cancelled works has a significant impact on these decisions.

## PSPI-11 Works Extensions and Duration Variation Applications

The graph displays the % of works, by works type and promoter group, that had an extension request and the percentage of those requests that were approved for year 5.



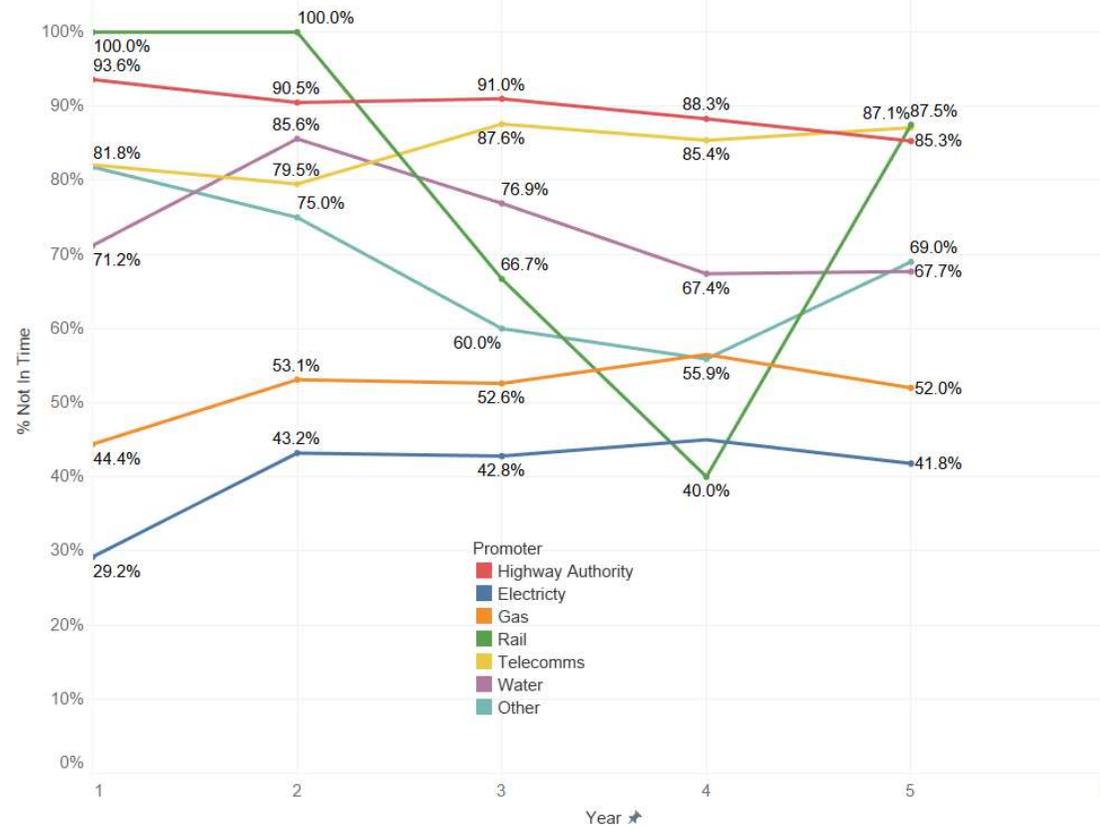
The table shows the percentage of Duration Variation Applications received 'in time' or 'not in time' by works type and promoter type for year 5

		Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
Major	In Time	39.7%	31.8%	48.6%	14.3%	35.3%	55.7%	30.8%	45.4%
	Not in Time	60.3%	68.2%	51.4%	85.7%	64.7%	44.3%	69.2%	54.6%
Standard	In Time	38.4%	55.6%	50.6%		32.0%	58.6%	38.5%	44.5%
	Not in Time	61.6%	44.4%	49.4%		68.0%	41.4%	61.5%	55.5%
Minor	In Time	11.4%	22.7%	46.2%		5.0%	16.2%		13.8%
	Not in Time	88.6%	77.3%	53.8%		95.0%	83.8%	100.0%	86.2%
Immediate	In Time	1.7%	63.2%	47.4%		6.5%	30.8%		27.7%
	Not in Time	98.3%	36.8%	52.6%	100.0%	93.5%	69.2%		72.3%

% of Granted Works with a Duration Request & % Approved-all years

		Y1		Y2		Y3		Y4		Y5	
		Requests of Granted Works (%)	Extensions Approved (%)	Requests of Granted Works (%)	Extensions Approved (%)	Requests of Granted Works (%)	Extensions Approved (%)	Requests of Granted Works (%)	Extensions Approved (%)	Requests of Granted Works (%)	Extensions Approved (%)
Highways (LHA)	Major	32.8%	86.0%	26.6%	77.1%	22.5%	86.1%	16.6%	88.6%	4.1%	83.9%
	Standard	11.2%	72.8%	14.5%	64.7%	13.1%	98.6%	13.7%	81.5%	6.8%	87.6%
	Minor	1.9%	73.7%	5.4%	81.0%	8.3%	90.0%	4.9%	85.3%	3.6%	84.1%
	Immediate	7.7%	90.1%	6.8%	77.3%	6.6%	93.8%	18.5%	92.4%	3.6%	92.6%
Statutory Undertakers	Major	36.2%	84.6%	48.5%	77.0%	60.6%	91.2%	41.0%	94.0%	6.5%	72.1%
	Standard	13.9%	75.6%	12.8%	85.9%	19.5%	82.7%	18.6%	91.2%	7.3%	82.4%
	Minor	2.0%	76.5%	2.3%	89.2%	2.1%	95.3%	2.4%	94.3%	2.4%	86.2%
	Immediate	15.9%	91.4%	12.8%	89.2%	13.0%	85.9%	11.0%	88.0%	9.8%	86.9%

Percentage of Duration Variation Application received Not in Time-all years



Analysis

The percentage of works with an extension has dropped in year 5 to more acceptable levels. Whilst recognising there will be a small percentage of works that will have unforeseen circumstances that prevent an extension request being submitted within the minimum time, the current percentages of duration variation requests received ‘not in time’ is at an unacceptably high level. With the exception of some Highway Authority works (make safes), this applies to all works promoters. During the second half of this year, the issue has been raised with all works promoters. If there is no significant improvement in the first quarter of year 6, improvement notices will be issued where required.

## PSPI-12 Authority Imposed Variations and Revoked Permits

### Description

The volume of Authority Imposed Variations and Revoked permits is displayed by works type and promoter type for year 5.

		Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Total
<b>Major</b>	Authority Imposed Variation	25	6	11	3	7	21	1	74
	Revoke Permit	11		7		4	11		33
<b>Standard</b>	Authority Imposed Variation	9	15	24	1	11	12	9	81
	Revoke Permit	8	6	7		4	4	1	30
<b>Minor</b>	Authority Imposed Variation	18	3	13	2	44	43	4	127
	Revoke Permit	17		1	1	16	13		48
<b>Immediate</b>	Authority Imposed Variation	183	374	325		148	1,182	2	2,214
	Revoke Permit		1	3		1	7		12
<b>Total</b>		<b>271</b>	<b>405</b>	<b>391</b>	<b>7</b>	<b>235</b>	<b>1,293</b>	<b>17</b>	<b>2,619</b>

### Analysis

The volume of works data variations received *and granted* against AIVs on immediate permits is 1008 (45.5% of all WDV's received on immediate permits). The HAUC Guidance for the Operation of Permit Schemes states that there is no requirement to respond to these AIVs unless there is an issue. Some promoters have embraced this, greatly reducing unnecessary administration, however other promoters are still submitting high volumes of WDV's in response to AIVs on immediate permits. Work will be undertaken in year 6 to address this unnecessary administrative burden on both parties. Additionally, a manual process needs to take place to identify these responses and to remove the subsequent permit fee, again, an unnecessary administrative task.

Description

The average duration of works, throughout their lifecycle, is shown by works type and promoter type for year 5. Duration is derived from the estimated or actual start and stop dates within the EToN transaction types. Days are calendar days.

		Highway Authority	Electricity	Gas	Rail	Telecomms	Water	Other	Average
<b>Major</b>	PAA Application	15.0	11.2	21.8	2.3	14.0	19.7	26.8	<b>16.2</b>
	Grant PAA	15.5	10.9	22.3	2.6	14.4	19.0	25.8	<b>16.4</b>
	Application (Major)	9.0	10.5	22.9	2.7	13.0	18.9	26.1	<b>12.2</b>
	Grant Permit	8.8	10.1	22.7	2.9	8.2	19.3	25.0	<b>11.6</b>
	Actual Start Date	9.3	10.1	22.3	3.2	8.1	19.9	25.3	<b>11.8</b>
	Works Stop	6.2	9.6	28.0	3.1	8.2	21.9	24.4	<b>10.6</b>
<b>Standard</b>	Application (Standard)	7.9	7.8	7.0	5.2	10.8	9.0	8.1	<b>8.4</b>
	Grant Permit	7.8	7.7	7.0	5.0	10.9	8.6	7.7	<b>8.1</b>
	Actual Start Date	16.0	7.7	7.0	5.2	11.0	8.3	7.3	<b>11.5</b>
	Works Stop	15.3	7.3	7.5	4.8	11.0	9.0	7.3	<b>11.2</b>
<b>Minor</b>	Application (Minor)	3.7	2.9	3.5	1.6	3.2	3.7	3.2	<b>3.4</b>
	Grant Permit	2.5	2.9	3.5	1.7	3.1	3.6	3.0	<b>3.2</b>
	Actual Start Date	2.7	3.0	3.6	1.7	3.0	3.5	2.9	<b>3.2</b>
	Works Stop	2.3	2.7	3.3	1.6	2.8	3.4	2.6	<b>2.9</b>
<b>Immediate</b>	Application (Immediate)	3.3	6.8	8.7	2.0	3.6	4.8	1.1	<b>4.3</b>
	Grant Permit	3.5	6.9	8.7	2.0	3.8	4.9	1.2	<b>5.0</b>
	Works Stop	1.6	5.6	8.5	2.3	3.2	4.6	1.0	<b>3.2</b>

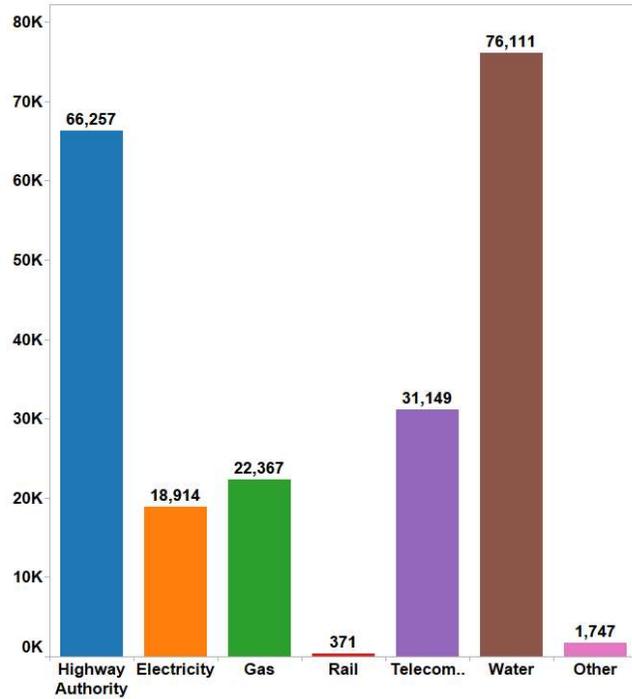
Analysis

The variation in duration for Highways major works is explained by local process for phased works. Work will commence in year 6 to identify average duration for works, considering the works type, promoter and text analysis of the works description and the coordination teams will use this information when considering permit applications. This in turn should have a positive influence on the 'Network Occupancy' measure (PSPI-14).

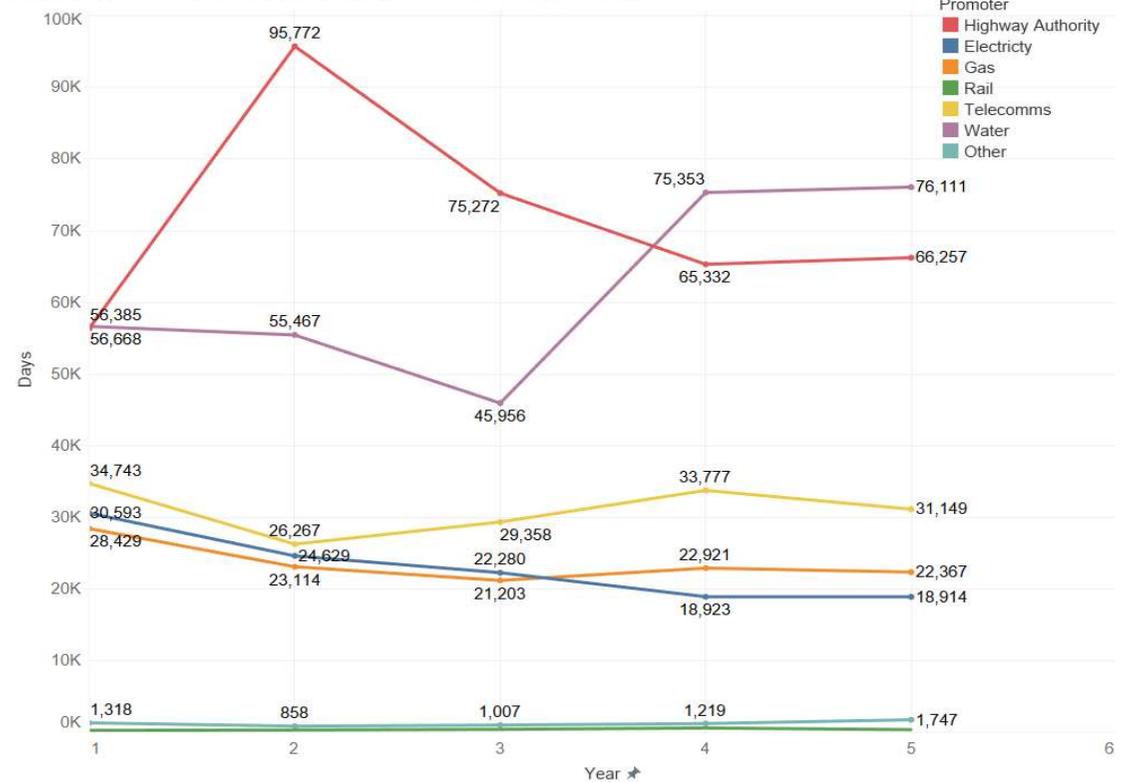
## PSPI-14 Network Occupancy

### Description

The highway occupation (days) by promoter type for year 5 (based on completed works). Days are calendar days i.e. all occupation of the network.



Highway Occupation (days) by Promoter Type-all years

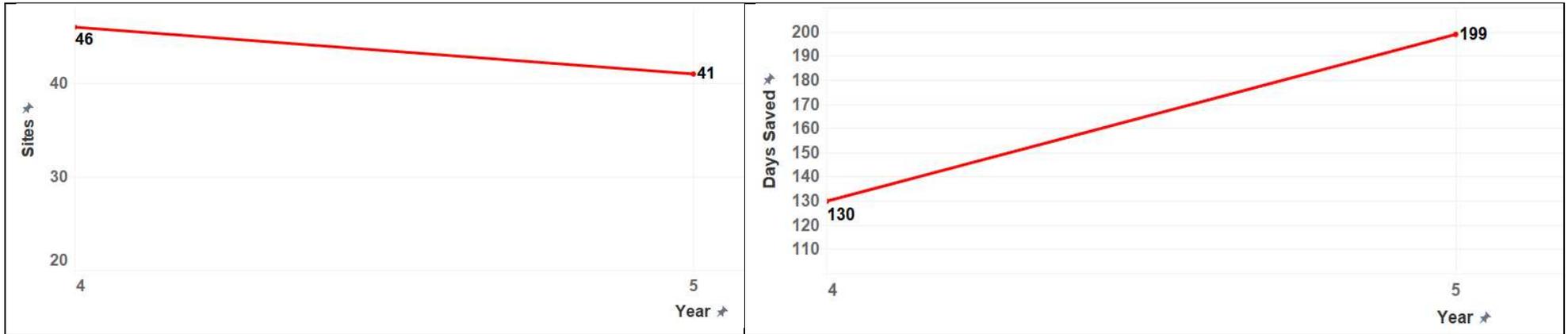


### Analysis

The total days occupation for the last two years has remained broadly consistent. This reflects the permit applications described in PSPI-1.

Description

The number of sites and days saved from collaborative or contiguous working.



Analysis

It remains disappointing that there is very low number of collaborative working sites. Works promoters remain reluctant to collaborate. A revised method of manually recording instances of collaborative working has been introduced for year 6, due to the inability of EToN systems to provide this data.

Case Study

*“We received several permit applications from multiple utilities and third-party contractors looking to work in St Marys Road, Hemel Hempstead over various dates. Traffic management would have ranged from temporary traffic signals to road closures. A decision was made to coordinate the jobs together to minimise impact on the network. We notified the relevant third party and utilities of our intention to arrange collaborative working between them. Having agreed a utility to take overall ownership of the traffic management and reinstatement, we worked closely to arrange contact between the relevant parties and ensure works went ahead as intended”.*

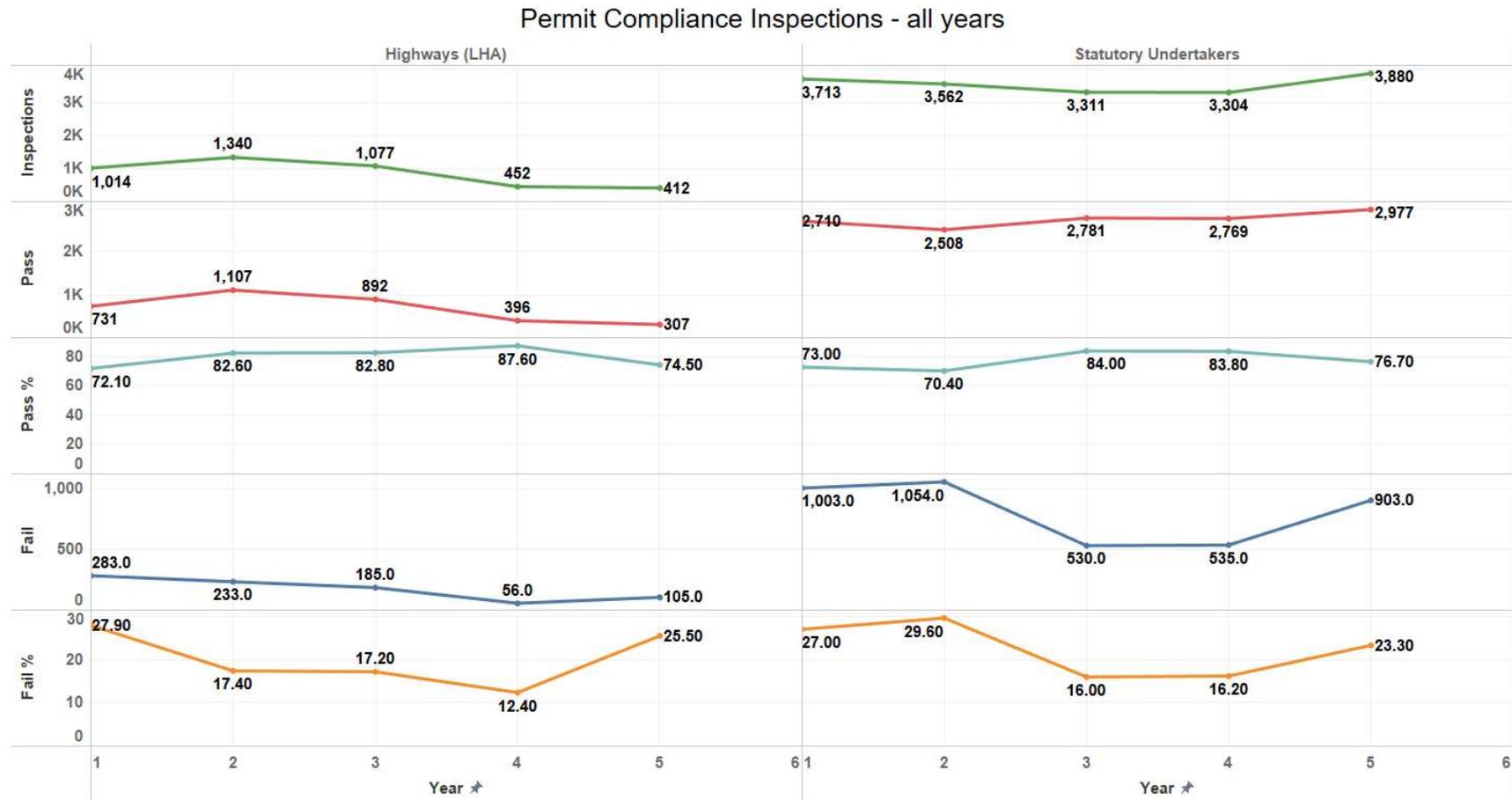
*Network Officer – Watford & Hemel Hempstead*

This coordination activity resulted in saving 4 further separate occupations of the highway, totalling 19 days.

## PSPI-16 Permit Compliance Inspections

### Description

The number of inspections, numbers passed and fail and % pass and fail of Permit Compliance Inspections is shown by Promoter group and year.



### Analysis

Volumes of inspection and % pass and fail rates remain broadly consistent. Plans are being formulated to increase the number of NRSWA specific inspections for HCC Framework sites, subject to contractual constraints, from April 2018.

## PSPI-17 Fixed Penalty Notices (Permit Scheme)

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### Description

The reasons for Fixed Penalty Notices (PS01 - Working Without a Permit and PS02 - Working in Breach of Conditions) for all Works Promoters

	Year		Total
	4	5	
Working Without a Permit	111	109	220
Footway	9	11	20
Incorrect or No Permit Number Displayed	260	343	603
Methodology	1	3	4
Number of Records	1	1	2
Publicity		2	2
Storage		3	3
Traffic Management	153	310	463
Working Past End Date	89	118	207
Working in TS Times	28	25	53
Total	651	924	1,575

### Analysis

Instances of 'incorrect or no permit number displayed' and 'traffic management' issues accounted for 70% of FPNs issued for Working in Breach of Condition.