



Essex Permit Scheme

End of Year 2 review

January 2018

Document Control Sheet

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Table of revisions

Original Version Produced	Sam Guiver	20/02/2018	Issue 1
Reviewed	Liz Burr	01/03/2018	Issue 2
Reviewed	Cllr Grundy	20/04/2018	Issue 3
Published	Sam Guiver	09/05/2018	Issue 4

Distribution

Organisation	Contact	Number of Copies
All - Electornic	Essex Highways Website	1

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1 Executive Summary

This is the second Essex county Council Permit Scheme report, covering the financial year for 2016/17. The report details the income, expenditure, KPIs and successes demonstrated through the management of Streetworks in Essex.

Overall Highlights

197 instances of collaboration were recorded this year (6 more than in the previous year) saving a total of 425 days of highway occupation. Due to a change in the way in which this figure is calculated by ECC, this figure is lower than that reported in 2015/16. However, if a like for like comparison is made, the figure for 2016/17 would be 1149 days saved, compared to the 2015/16 figure of 879 days. Therefore, this would be a 31% increase on year one.

89,871 total permits and permit variations were processed this year; a 12% increase in volume in comparison to year 1 (79,934).

67,427 permits and permit variations were granted this year; **75%** of all applications received.

22,444 permits (and permit variations) were refused this year; **25%** of all applications received.

21% of applications from the Highway Authority were refused, and **26%** from Utilities, demonstrating parity of treatment between all Promoters working within Essex.

27,880 variation requests were made this year, a **33%** increase on the previous year (where 20,874 variations were received); of these variations **21,412** were granted (**77%** of requests; 80% last year).

0 permits/permit variations were classified by our Streetworks system as deemed (to be granted as response time missed) this year, meaning **100%** of works were reviewed by the permit team within the defined timeframe.

90,174 conditions were applied this year (a decrease on the previous 90,961). This is due to an increased understanding of when conditions should be applied to permits in order to improve the journey time reliability for all highway users.

15% of duration variation applications were denied this year for all work promoters, wherein promoters were unable to complete works within their given time frame due to complications and as a result of poor planning.

7,325 condition inspections were conducted, of which **1,326** were found to be non-compliant. This is an 18.1% failure rate, which (considering the higher volume of inspections) is an improvement on last year's 19%.

5,389 Utility Permits were offered a 15% discount for working wholly outside Traffic Sensitive times. This is seen as positive behaviour that further minimized disruption, furthermore, this equates to £106,420 of savings to the Utility companies involved.

0.8% is the average deviation from our draft statement to final invoice, which shows the commitment to the Invoicing Team's accuracy and ability to deliver under the demanding volumes. The team review all grants and variations to ensure correct discounts are added and the correct charge is applied to permits.

2 Introduction

This report sets out an overview of Essex County Council's Permit Scheme operational performance in its second year (2016/17) since commencement in 16th March 2015. The report provides detailed scrutiny of the available data in relation to street works and activities in Essex as outlined in Section 1 of the Permit Scheme Document.

3 Objectives of the Essex County Council Permit Scheme

The objectives of Essex County Council's Permit Scheme were laid out in Section 2 of the Permit Scheme Document. These are summarised below along with a description of how they have been met.

- To proactively manage the local highway network to maximise the safe and efficient use of road space.
 - Essex County Council (ECC), have been able to proactively manage the highway network by having the ability/authority to Grant, Permit Modification Request (PMR), Refuse and apply conditions to permit applications which ECC receives. This has enabled ECC to have site meetings to discuss the method of a work activity which is going to take place; taking into consideration all highway users. As such, ECC applied the majority of conditions to works in advance of the permits' submission which has allowed site meeting agreements to be formalised and provided a commitment from the works promoters who are looking to use the Highway Network.

- To improve the quality and timeliness of information and compliance with highway legislation from all activity promoters.
 - Essex County Council implemented a target response objective on the Permit Team for received permits, with the aim to respond to work promoters with a reduced response time against the maximum time allowed by legislation. This target response objective was set out to encourage work promoters – as well as to provide the Permit Authority with minimum legislative application time – thus avoiding early starts and encouraging further quality of planned works. Although this is an ongoing target, residents have also benefited through an online portal (www.roadworks.org) which is increasing its accuracy as a result of ECC's efforts.

- To improve the information available to the public to help provide and inform reliable journey times.
 - Essex County Council actively applies the National Condition NCT11a to work activities to allow for proactive notification for works which may have a significant or large impact on Highway Users, for example; If a road closure is being deployed on the network, ECC may impose NCT11a to allow for formal notification to be displayed in advance to improve the information provided to Highway Users. Another example of this is for Emergency work activities which may impact Highway Users' normal route during peak periods (causing congestion on the network), ECC would look to utilise the national condition(s) that a works promoter must provide regular updates if Traffic Management is going to change to ECC's Traffic Control Centre and/or the Permit Team, allowing the information to be shared out through multiple media channels (i.e. Radio, Twitter, Elgin (www.roadworks.org), etc.) and be presented to Highway Users, thus improving the timeliness and quality of information.

- To ensure the safety of those using the street and those working on activities that fall under the scheme, with particular emphasis on people with disabilities.
 - One of the outcomes of the Permit Scheme is the ability to further reduce the occupation/duration of work activities as more resources are available to investigate submitted work applications. Furthermore, with the provision of national conditions which enable Permit Authorities to impose conditions, we are able to stipulate remaining widths to be available to Highway Users over and above the minimums outlined in the codes of practice. These things affect all Highway Users and therefore reducing exposure to

Roadworks/Streetworks and ensuring remaining widths during works activities is considered during the review process of permits.

- To protect the structure of the street and the integrity of the apparatus in it.
 - Improved performance meetings alongside the enhanced checks undertaken at the planning stage (i.e. permit co-ordinates and proposed route of apparatus). ECC still undertakes its duties under NSRWA in the protection of the Asset, however, the enhanced elements undertaken within the Permit Scheme improve the outcome
- To ensure parity of treatment for all activity promoters particularly between statutory undertakers and highway authority works and activities
 - Essex County Council, undertake the same checks for all work promoters to ensure parity treatment on our network. ECC works with its integrated partner through KPI's to drive improvements. All promoters have performance reviews to establish any trends to aid improvement and betterment of the co-ordination/delivery of works on the ECC network.

4 Fee structure

The Permit Scheme fee structure in Essex will continued to be assessed by the Permit Manager and other ECC Officers, to ensure the scheme is recovering all allowable associated costs to ensure the scheme remains cost neutral. This stance was outlined in Essex County Council's cost benefit analysis to enable all baseline data to be reviewed. However, Essex County Council have reviewed year 2 (2016/17) operational expenditure and income received for this period and the scheme still demonstrates that the Essex Permit Scheme is charging fees correctly to ensure that income is not exceeding prescribed costs in accordance with the requirements of the Permit Scheme.

5 Costs and Benefits

The Essex Permit Scheme generated a revenue of just over £2,233,456 against an expenditure of £2,032,601 during the operational year of 2016/17 with a minimal surplus generated of £200,000. The small surplus was anticipated through ECC's commitment and continuing investment in apprenticeships (Supporting the next generation to take a up a career within the Streetworks Industry) and ring-fencing full time roles which attract a lower salary during the apprenticeship and the initial training stage before coming a fully costed permit officer. The cost of the permit team will increase through 2017/18 as the stepped approach to recruitment and apprentices continues which will ultimately increase expenditure resulting in a cost neutral scheme

The benefits the scheme has delivered in 2016/17 are highlighted below:

- **197** instances of collaboration were recorded this year (6 more than in the previous year). A total of 425 days were saved through these instances of collaboration – 454 days less than previously reported. This decrease in days is due to the introduction of an alternate calculation method by ECC, which represents the number of overlapped days in collaborative permits, rather than the duration of the collaborative permits as a whole. Therefore if this year's data was reported as previous, 1149 days would have been recorded as collaborative (+31% on year one; 879 days).
- **89,871 total** permits and permit variations were processed this year; a 12% increase in volume in comparison to year 1 (79,934).
- **67,427** permits and permit variations were granted this year; **75%** of all applications received.

- **22,444** permits (and permit variations) were refused this year; **25%** of all applications received.
- **21%** of applications from the Highway Authority were refused, and **26%** from Utilities, demonstrating a drive for parity of treatment between all Promoters working within Essex.
- **27,880** variation requests were made this year, a **33%** increase on the previous year (where 20,874 variations were received); of these variations **21,412** were granted (**77%** of requests; 80% last year).
- **0** permits/permit variations were classified by our Streetworks system as deemed (to be granted as response time missed) this year, meaning **100%** of works were reviewed by the Essex permit team which is an outstanding achievement.
- **90,174** conditions were applied this year (a decrease on the previous (90,961). This is likely due to an increased understanding of when a condition should be applied to a permit in order to improve the journey time reliability for all highway users.
- **15%** of duration variation applications were denied this year for all work promoters, wherein promoters were unable to complete works within their given time frame as a result of poor planning.
- **7,325** condition inspections were conducted, of which **1,326** were found to be non-compliant. This is an 18.1% failure rate, which (considering the higher volume of inspections) is an improvement on last year's 19%.
- **5,389** Utility Permits were offered a 15% discount for working wholly outside Traffic Sensitive times. This is seen as positive behaviour that further minimized disruption, furthermore, this equates to £106,420 of savings to the Utility companies involved.
- **0.8% is the** average deviation from our draft statement to final invoice, which shows the commitment to the Invoicing Team's accuracy and ability to deliver under the demanding volumes. The team review all grants and variations to ensure correct discounts are added and the correct charge is applied to permits.

6 Performance Indicators

The Essex Permit Scheme describes in Section 4 of the Scheme document the Key Performance Indicators that will be reported on as follows:

There are 2 mandatory KPIs that each permit scheme must include.

KPI 1 - The number of permit and permit variation applications received, the number granted and the number refused;

KPI 2 – The number of conditions applied by condition type.

Essex County Council further adopted KPIs 3, 4 and 5 to demonstrate parity of treatment between their own road works and streets works undertaken by statutory undertakers:

KPI 3 – The number of approved extensions;

KPI 4 – The number of occurrences of reducing the application period.

KPI 5 – The number of agreements to work in Section 58 & Section 58A NRSWA restrictions.

The Permit Authority will supplement these KPI's with additional local indicators.

KPI 6 - Cancelled permit requests.

KPI 7 - Collaborative working.

During the course of the year due to various system issues it has not been possible to report on all of these indicators. In addition, Essex County Council have not undertaken a Coring Programme this year and therefore there are no results to present for KPI 9. Furthermore, there were only 2 Section 58's in place this year, however, moving forward over future years it is anticipated that this will increase throughout Essex.

6.1 KPI1 The number of permit and permit variation applications

The number of permits and permit variation applications received, the number granted and the number refused are shown below:

- Total number of permit and permit variation applications received, excluding any applications that are subsequently withdrawn
- The number of applications granted as a percentage of the total applications made

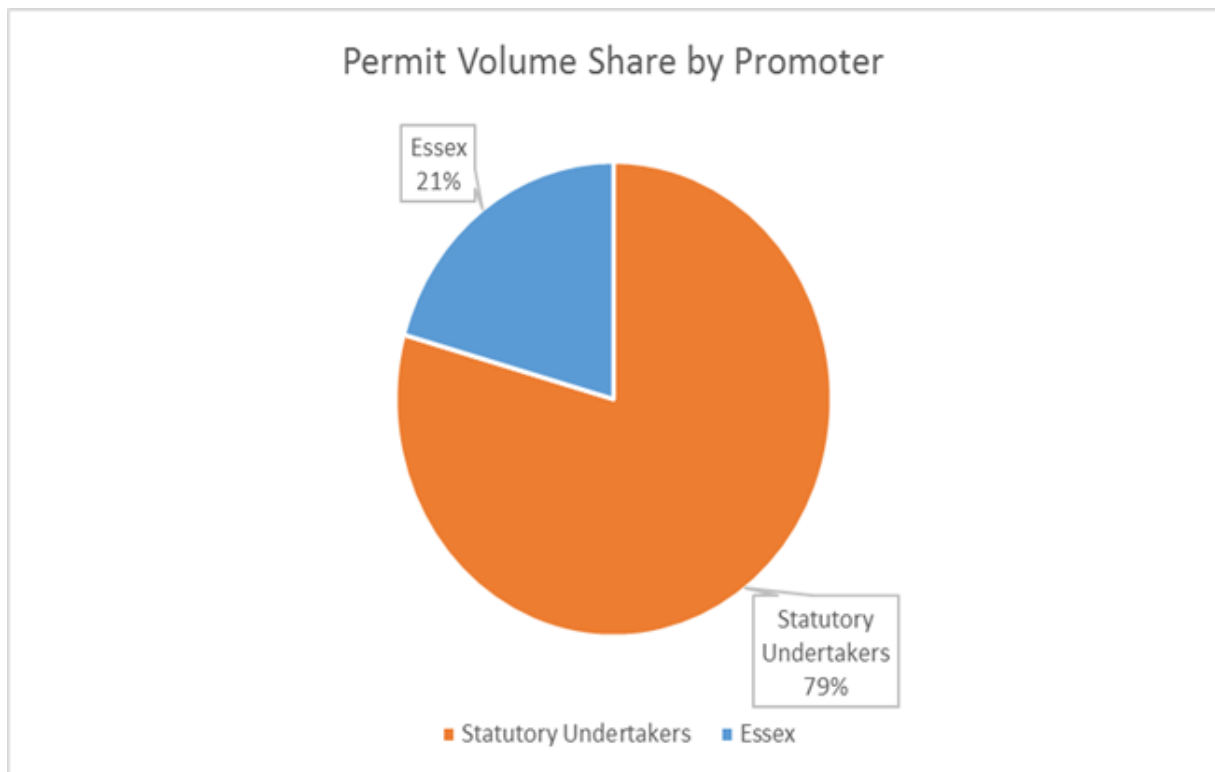
- The number of applications refused as a percentage of the total applications made.

6.1.1 Results Permits Granted and Refused

These are explored in more detail in tables 1 & 2 of Appendixes A(i) & A(ii) and shows a breakdown of permit applications received, granted and refused for the second year of operation in Essex County Council. The complete summary of the data can be found in Appendixes A(i), A(ii) & A(iii). Furthermore, the data provided in the Appendix A(i), A(ii) & A(iii) has been collated from the Essex County Council permitting system.

Number of Permit Applications

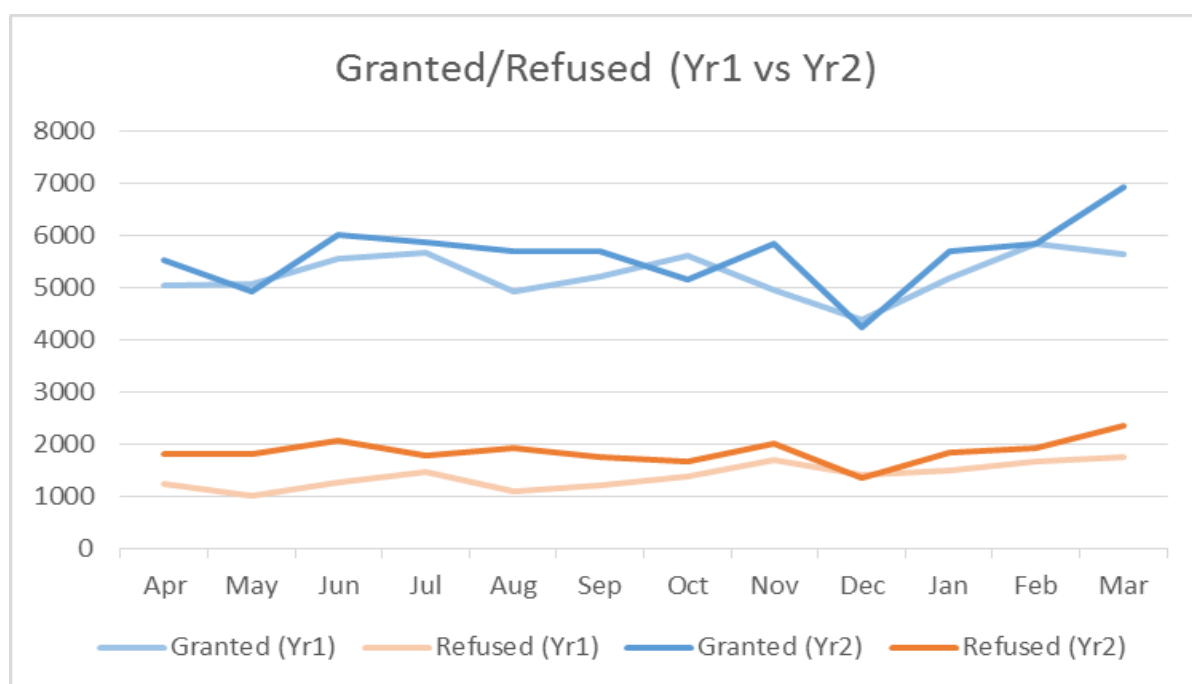
The chart below shows the split of permit applications received from both highway authority and utility promoters. On average, highway authorities generated 21% and utility promoters 79% of the applications received.



6.1.2 Analysis

Permits Granted and Refused

The chart below shows a comparison of permits granted and refused for year 1 and 2. The full results are in Appendixes A(i), A(ii) & A(iii).



The Volumes processed has increased in Yr2 overall, also the number of refused applications is slightly higher than Yr1 which includes permit modification requests within the refusals. However, the refusal line trends more closely between Yr1 and Yr2 which highlights a consistent approach which Essex County Council is applying to the review of permits and further shows that despite the increase in the overall volume, therefore work promoters are also getting better in achieving a granted permit through the process. Essex County Council would still like to reduce the amount of refusals and is supporting work which is being undertaken by HAUC (England) to produce a new Guidance Document for operating and working within permit schemes.

6.2 KPI2 The number of conditions applied by condition type.

This will be measured by promoter and shown as:

- The number of permits granted
- The number of conditions applied, broken down into condition types.
- The number of each type being shown as a percentage of the total permits Issued.

6.2.1 Results

The tables in Appendixes B(i), B(ii) & B(iii) show the percentage of permit conditions applied against permits in relation to works for road purposes and streets works undertaken on the basis of the 13 standard EToN conditions.

6.2.2 Analysis

The below table shows a comparison of the volume of conditions applied to permits during Yr1 and Yr2. The table shows a reduction of 810 less applied in Yr2 compared with Yr1, due to a deeper understanding of conditions across all involved parties which supports the approach of “Applying conditions when they are required, over and above existing requirements”.

PERMIT CONDITIONS	Yr1	Yr2
1. Date Constraints	6752	3192
2. Time Constraints	19957	17625
3. Out of Hours Work	4804	4327
4. Material and Plant Storage	4401	3954
5. Road Occupation Dimensions	3314	2952
6. Traffic Space Dimensions	15981	15118
7. Road Closure	4137	5153
8. Light Signals and Shuttle Working	9005	9375
9. Traffic Management Changes	6955	11148
10. Works Methodology	4847	5225
11. Consultation and Publicity	9236	10812
12. Environmental	1072	1060
13. Local	500	210
TOTAL	90961	90151
Difference between Yr1 vs Yr2		-810

6.3 The number of approved revised durations

This will be measured by promoter and shown as:

- The total number of permits granted
- The number of requests for revised durations shown as a percentage of permits issued
- The number of agreed revised durations as a percentage of revised durations applied for

6.3.1 Results

The results are fully explored in Appendix C(i) for the current operational year (Yr2).

COMBINED (2016/17)	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	March	Total
Permits Vs Requests %	5%	4%	5%	4%	5%	6%	6%	6%	5%	5%	5%	5%	5%
Permits Vs Approved %	4%	4%	5%	4%	4%	5%	5%	5%	4%	4%	4%	4%	4%

6.3.2 Analysis

The results shows that out of all the permits issued only 5% on average which were issued (Granted), ultimately resulted in a request for an extension by a work promoter. Furthermore, out of the 5% requested extensions, resulted in 85% of requests by promoters to be approved and only 15% were refused. Therefore, 4% of extensions against the total volume of Permits issued were approved which shows ECC's commitment to work towards the new HAUC Operational Guidance document for operating permit schemes.

6.4 The number of occurrences of reducing the application period

Also known as “early starts”, this will be measured by promoter and shown as:

- The total number of permit and permit variation applications made
- The number of requests to reduce the notification period as a percentage of total applications made
- The number of agreements to reduce the notification period as a percentage of requests made.

6.4.1 Results

The results are further explored in Appendixes D(i) & D(ii).

Year 1 total Number of Early Start Agreements as previously reported: **5,645**

Year 2 total Number of Early Start Agreements: **9,299**

6.4.2 Analysis

This measure records the number of times promoters were allowed to start their works without having to comply with the minimum permit application lead-in period, commonly known as an early start agreement. The Permit Scheme Document and the forthcoming HAUC Operational Guidance Document provides a framework for Essex County Council to treat all activities and activity promoters covered by the scheme on an equal basis. The above data shows that largely to be the case. Early start requests are considered individually on their own merits by Essex County Council and are never refused without a valid reason.

The volume increase in year is mainly due to the significant amount of projects which have both national and local interest for example and not limited to;

- The Lighting Project
- BDUK
- Water Meter replacement projects
- The Gas 30/30 programme

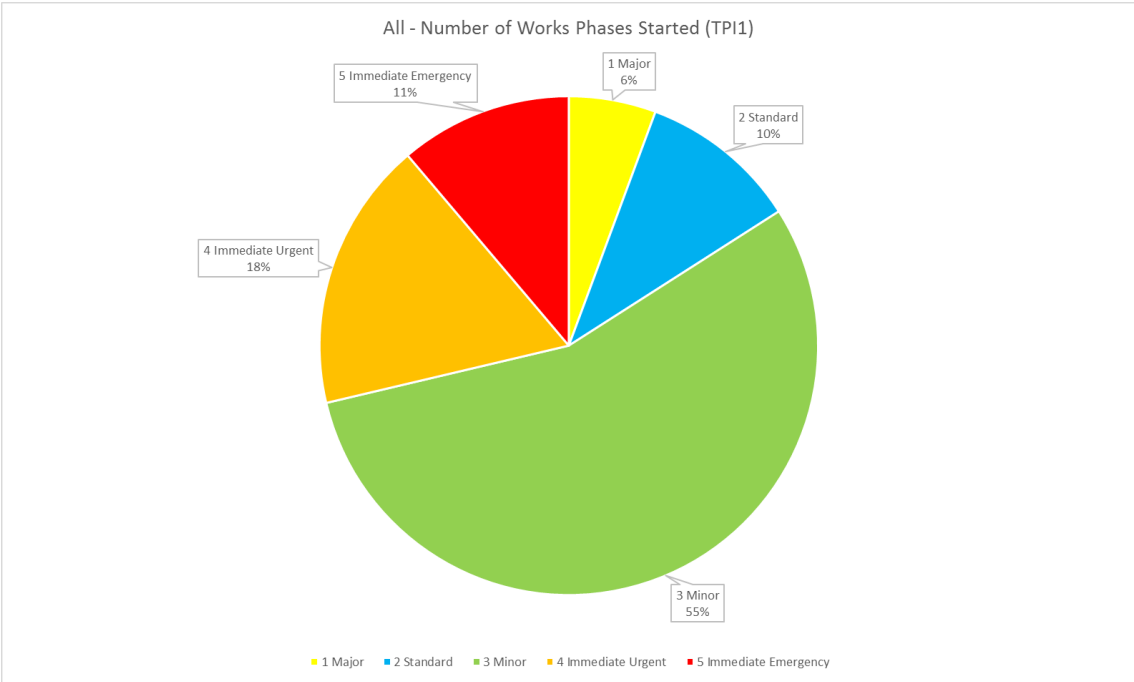
The permit scheme aims to facilitate the works as it is a fine balance between encouraging expansion/maintenance of existing infrastructure and encouraging projects resulting in economic growth within the County (Some listed above), however, this balance also needs to take into consideration the planning of these works as the volume has raised by 61% from the first year of operation of the

amount of early start requests, which is not sustainable and ECC will look to reduce this in the coming years as well as striking a balance between facilitating works around the County.

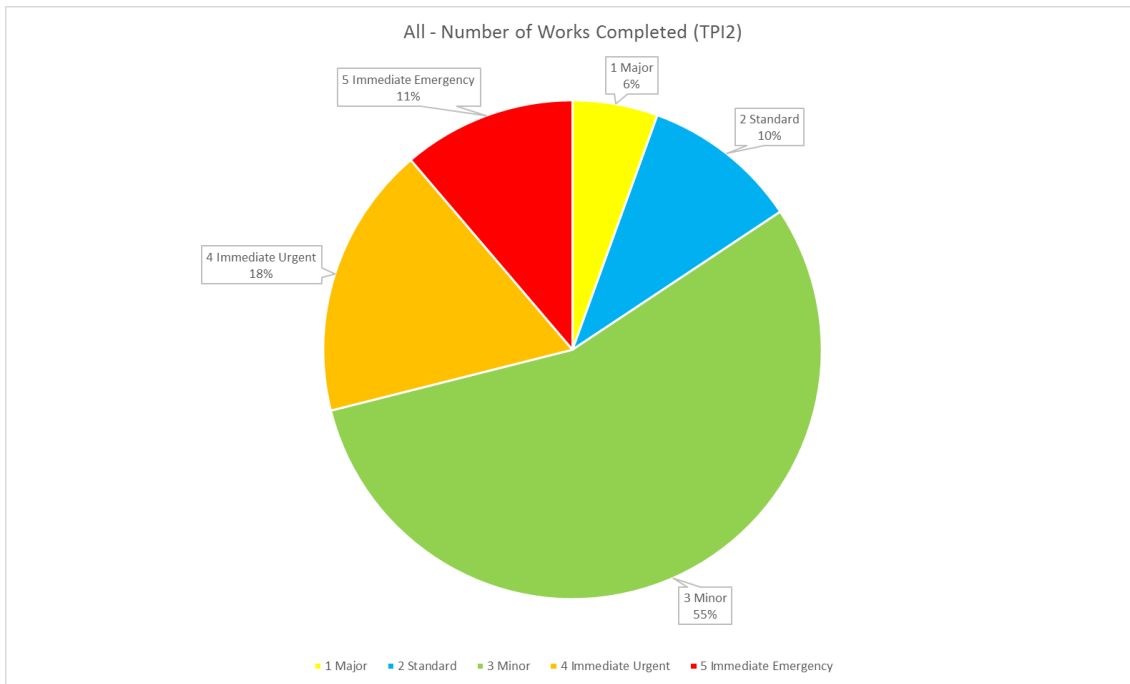
7 TPI Measures

This section outlines the Permit Indicators (TPI) contained as Appendix E(i) – E(ii) within the Statutory Guidance for Highway Authority Permit Schemes. These indicators for permit schemes are additional to the general TMA Performance Indicators (KPIs & AMs, which are already being produced).

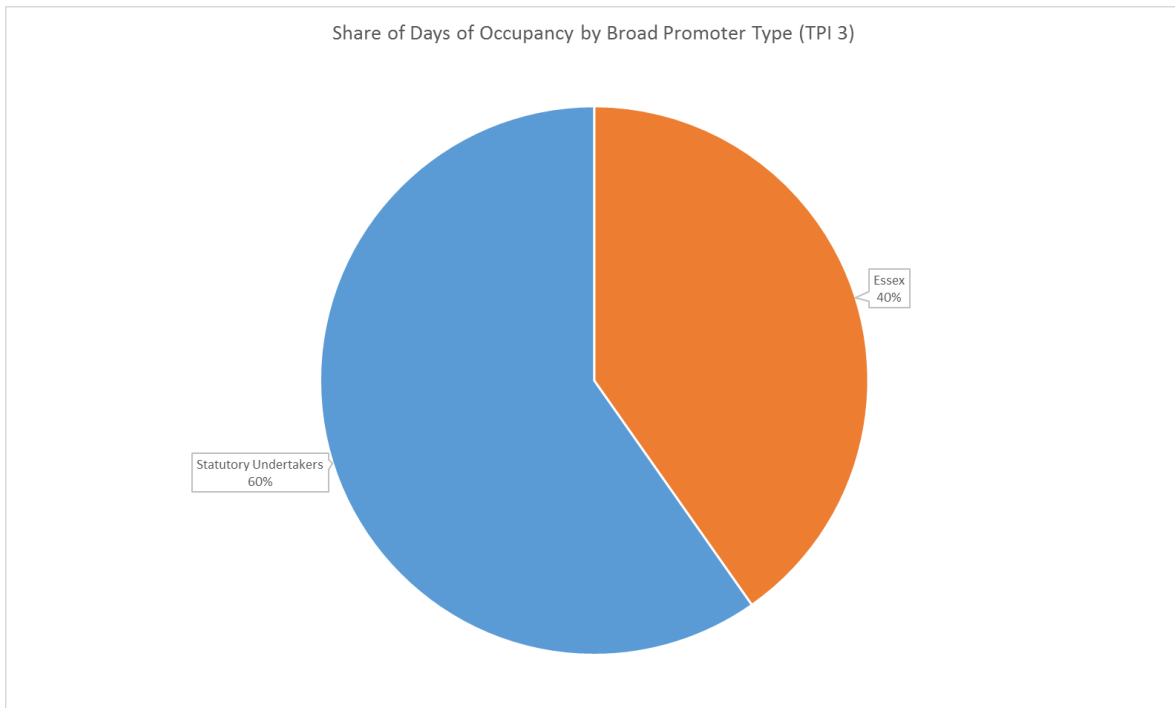
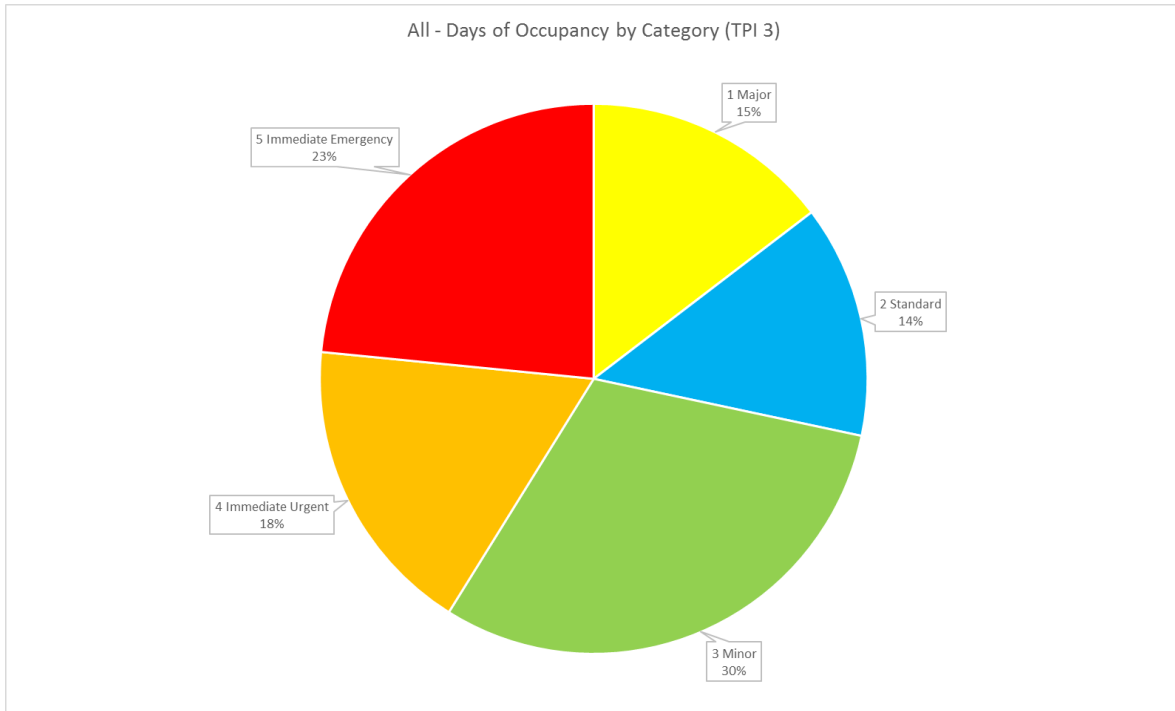
7.1 TPI 1 Works Phases Started



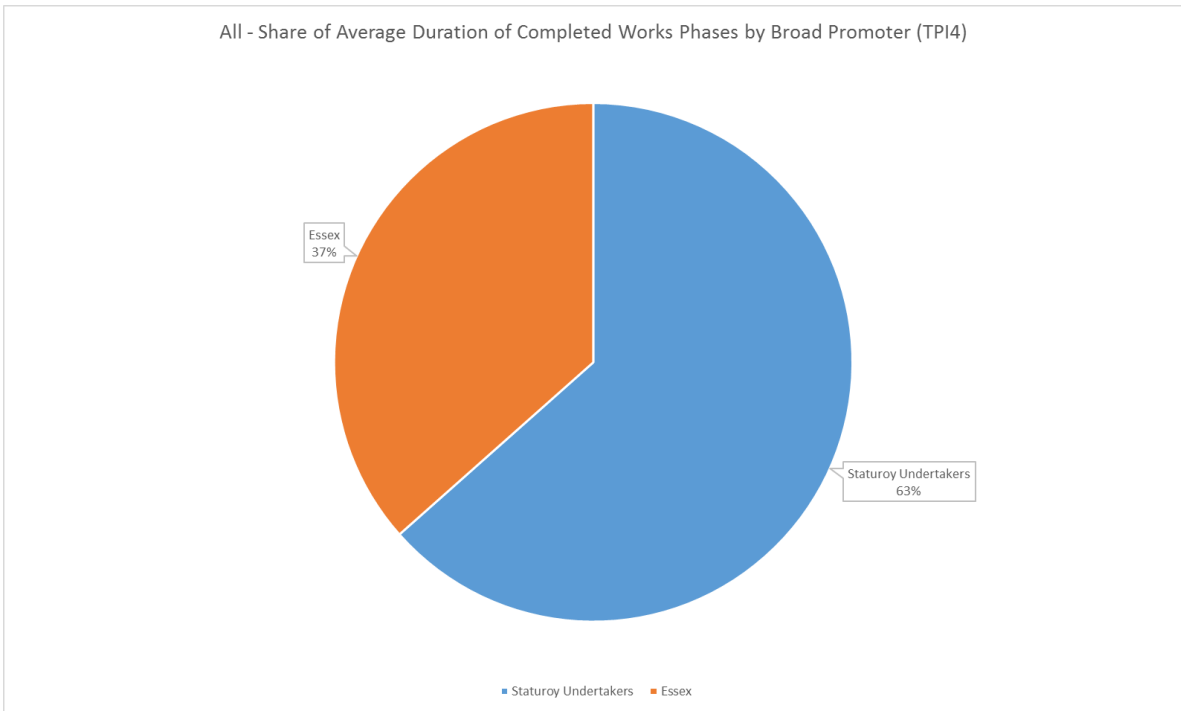
7.2 TPI 2 Works Phases Completed



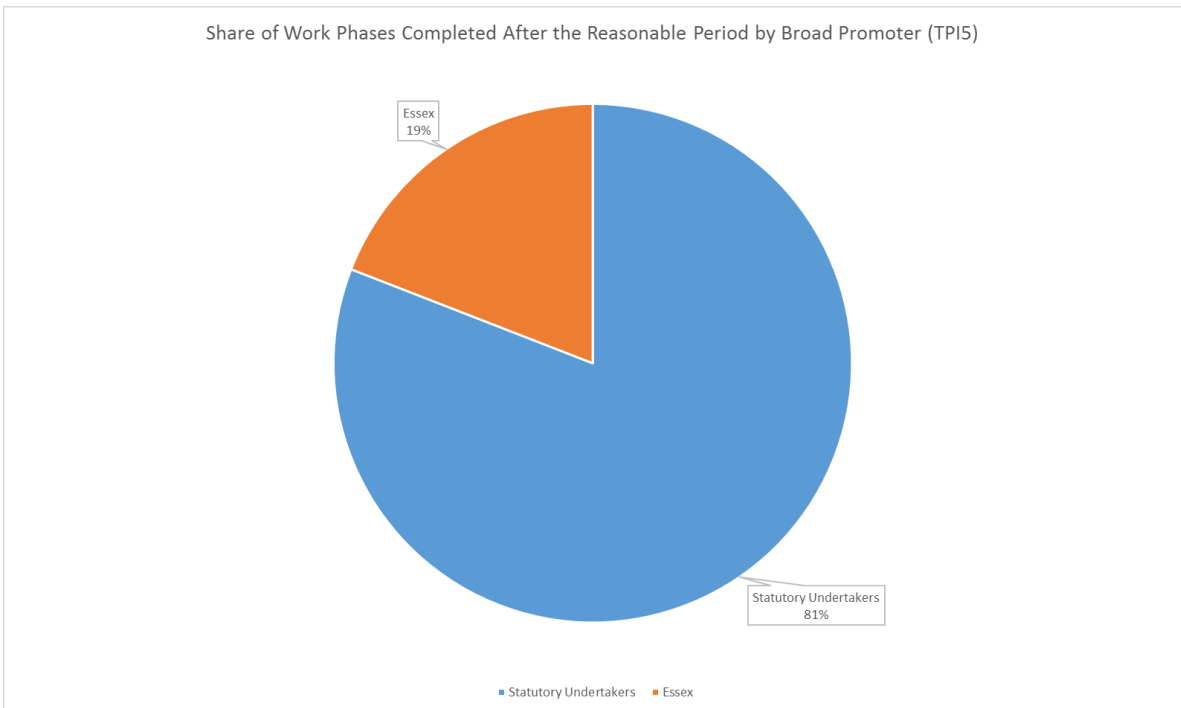
7.3 TPI 3 Days of Occupancy



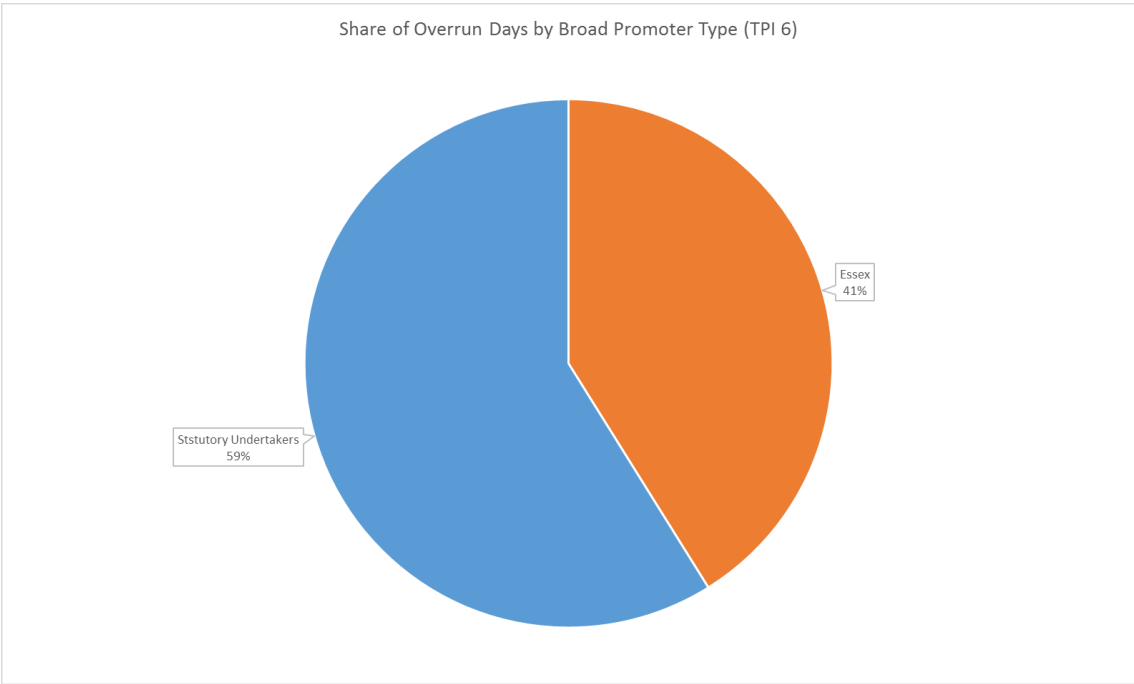
7.4 TPI 4 Average Duration of Works



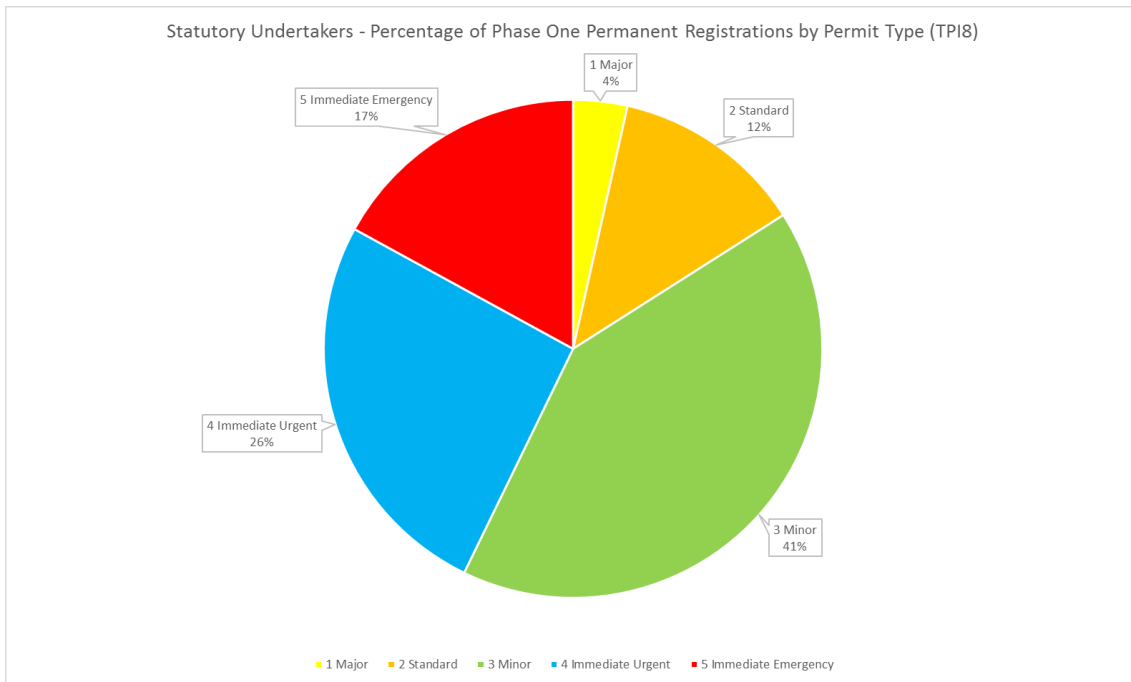
7.5 TPI 5 Phases Completed on Time



7.6 TPI 6 Number of Overrun Days



7.7 TPI 8 Number of Phase One Permanent Registrations



8 Authority Measures

In addition to the above measures, as part of the ECC Permit scheme, a number of other measures are recorded and reported. .

8.1 AM 1 - Average duration of works by permit type

The below table shows the results from TPI 4 compared with the maximum duration allowed for Permit Type to provide Authority Measure 1 (AM 1). The information in the table below provides an insight into the planning of projects and the durations which appeared to trend a miss calculation in the ability to deliver works within the respective Permit Type across all works promoters working within the County. The average duration for a Standard Permit was +156% more than the prescribed duration which should be up to 10 working days and a Minor Permit was 141% more than the prescribed duration which should be up to 3 working days.

Works Promoter	Category	TPI 4	Allowed Duration	AM 1 - Percentage of Allowed Duration
		Average Duration of Completed Works Phases in working Days	Maximum Duration prescribed for Permit Type in working days	Percentage +/- of the allowable duration
All	1 Major	36	-	-
	2 Standard	16	10	+156%
	3 Minor	4	3	+141%
	4 Immediate Urgent	6	-	-
	5 Immediate Emergency	8	-	-

8.2 AM 2 – Inspections

This measure provides two separate performance indicators:

- Number of failed “Sample A” inspections shown as a percentage of the total undertaken within a period.
- Number of failed permit conditions checks (where one or more permit conditions have been breached) shown as a percentage of the total undertaken within a period.

8.2.1 Results

Year of Operation	Condition Inspections Total	Non-Compliant	Percentage of Non-Compliance	Cat A Inspections Total	Failed Cat A Inspections	Percentage of Failures
Year 1	6608	1213	18.36%	No Data	No Data	No Data
Year 2	7325	1326	18.10%	672	88	13%

further detailed in [Appendix 1](#).

8.2.2 Analysis

The data set above shows that despite the increase in volume of works the percentage of non-compliance has remained the almost the same, this highlights a lack of improvement in performance from work promoters.

The data set above shows that despite the increase in volume of works the percentage of non-compliance has remained the almost the same, which is no marked improvement in compliance which is disappointing and measures will need to be explored to improve.

8.3 AM 3 - Days of Disruption Saved/ Number of collaborative works

This measure is the number of days of disruption saved through the various co-ordination methods available e.g. collaborative works or challenging initial duration and/or proposed methodology of working (whether formally through the S74 mechanism or through informal discussion at the planning stage).

8.3.1 Results

This data was collated outside the EToN Streetworks System and a summary of the output is shown below. (This is now recorded outside the Streetwork system is to allow for a more accurate capture of days worked collaboratively by using the days overlapped rather than the whole duration of works, which may not be the same)

The chart below shows the number of collaborative and the number of days saved in 2016/17..

Year of Operation	Instances of Collaboration	Number of Days Saved	Average Number of Days Saved per Instance
Year 1	191	No Data	No Data
Year 2	197	425	2

8.3.2 Analysis

a new mechanism in recording the amount of days saved has been used which makes it difficult to compare to Yr1, therefore the Yr2 figure has been converted to enable a comparison. The converted figure is 1149 days saved for Yr2 of operation which equates to +131% increase on Yr1 which was 879 days saved.

8.4 AM 4 Response Code – broken down by promoter

This measure is the number of refusals broken down by response code where this has been used by the authority.

8.4.1 Results

Due to our current system reporting mechanism we are unable to provide this data

9 Conclusion

The Essex County Council Permit Scheme has been in operation for 2 years. Through the permit scheme, new ways of working continue to be developed and ECC aspires to be a leading authority and exemplar of good practice to both undertake our network management duty as well as facilitating works with parity.

The high level benefits and achievements explored through the report for year 2 were an outstanding success of the scheme and the staff involved in its operation on both the Authority and work promoters. ECC is continuing to build and exceed on the achievements made in year 1. Through the operation of years 1 and 2, trends are being identified in both good and poor practice which will be targeted in year 3 and onwards, working with all work promoters to ensure that the aims of the ECC Permit scheme continue to be delivered helping to achieve the ECC corporate objectives around encouraging growth and promoting journey time improvements

Essex County Council will look to support the introduction of the proposed HAUC (England) Operation of Permit Scheme guidance document which may affect the reporting for future years as it may suggest improved ways of working for all parties. ECC see this proposed document as positive way forward as it will industry owned document.

10 Glossary

Yr1 – The first fully charged operational year of the Essex Permit Scheme which is from the 1st April 2015 to 31st March 2016 (Excludes the soft launch period from the 16th March 2015 to 31st March 2015).

Yr2 – The second fully charged operational year of the Essex Permit Scheme which is from the 1st April 2016 to 31st March 2017.

EToN system – The Electronic Transfer of Notices, the nationally agreed format for the transmission of notice information.

EToN developers – representatives of the main software developers involved in street works

EToN Strategy Group – responsible for the development of the EToN system

NMD – Network Management Duty, a legal obligation created by the Traffic Management Act 2004 for highway authorities to secure the expeditious movement of traffic

AM – Authority Measure

PAN – Permit Advice Note

TMA – Traffic Management Act 2004

Sample A – An inspection undertaken during the progress of the works as defined in Section 2.3.1 of The Code of Practice for Inspections 2002

Appendix A(i) – Grants, Refusals & Deems

RESPONSE BY APPLICATION TYPE (TABLE 1):

STATUTORY UNDERTAKERS	Granted			Refused			Deemed			TOTALS		
	PAA	Permit Application	Variation	PAA	Permit Application	Variation	PAA	Permit Application	Variation	PAA	Permit Application	Variation
Immediate - Urgent	-	7219	2010	-	169	203	0	0	0	-	7388	2213
Immediate - Emergency	-	4335	1784	-	96	206	0	0	0	-	4431	1990
Minor	-	18684	8287	-	8356	3000	0	0	0	-	27040	11287
Standard	-	2769	3674	-	2364	1661	0	0	0	-	5133	5335
Major	1728	1133	1224	1425	533	474	0	0	0	3153	1666	1698
TOTALS BY PERMIT TYPE	1728	34140	16979	1425	11518	5544	0	0	0	3153	45658	22523
TOTALS BY RESPONSE TYPE	52847			18487			0			71334		

ESSEX	Granted			Refused			Deemed			TOTALS		
	PAA	Permit Application	Variation	PAA	Permit Application	Variation	PAA	Permit Application	Variation	PAA	Permit Application	Variation
Immediate - Urgent	-	265	47	-	3	2	0	0	0	-	268	49
Immediate - Emergency	-	214	52	-	5	5	0	0	0	-	219	57
Minor	-	5688	2595	-	1860	536	0	0	0	-	7548	3131
Standard	-	508	736	-	322	198	0	0	0	-	830	934
Major	2123	1349	1003	647	196	183	0	0	0	2770	1545	1186
TOTALS BY PERMIT TYPE	2123	8024	4433	647	2386	924	0	0	0	2770	10410	5357
TOTALS BY RESPONSE TYPE	14580			3957			0			18537		

Appendix A(ii) – Grants, Refusals & Deems

RESPONSE BY APPLICATION MONTH (TABLE 2):

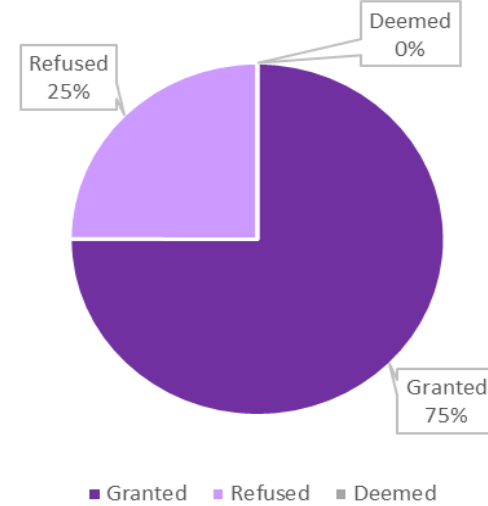
STATUTORY UNDERTAKERS	Granted			Refused			Deemed		
	PAA	Permit Application	Variation	PAA	Permit Application	Variation	PAA	Permit Application	Variation
Apr-16	147	2863	1200	133	881	363	0	0	0
May-16	130	2638	1241	134	965	390	0	0	0
Jun-16	133	2898	1487	145	1058	496	0	0	0
Jul-16	155	2817	1379	135	933	439	0	0	0
Aug-16	178	2891	1409	112	968	525	0	0	0
Sep-16	140	2967	1383	127	862	434	0	0	0
Oct-16	104	2726	1312	99	964	399	0	0	0
Nov-16	214	2971	1681	115	1108	544	0	0	0
Dec-16	96	2280	1136	130	733	337	0	0	0
Jan-17	151	3051	1483	115	947	447	0	0	0
Feb-17	120	2808	1485	78	930	543	0	0	0
Mar-17	160	3230	1783	102	1169	627	0	0	0
TOTALS BY PERMIT TYPE	1728	34140	16979	1425	11518	5544	0	0	0
ESSEX	Granted			Refused			Deemed		
	PAA	Permit Application	Variation	PAA	Permit Application	Variation	PAA	Permit Application	Variation
Apr-16	336	593	376	131	221	102	0	0	0
May-16	219	426	287	93	165	69	0	0	0
Jun-16	190	810	482	71	223	87	0	0	0
Jul-16	151	905	456	48	164	71	0	0	0
Aug-16	138	708	379	52	200	69	0	0	0
Sep-16	147	738	335	49	209	90	0	0	0
Oct-16	143	590	276	38	140	42	0	0	0
Nov-16	80	537	351	29	152	65	0	0	0
Dec-16	98	438	204	25	103	39	0	0	0
Jan-17	103	587	333	38	241	73	0	0	0
Feb-17	203	780	443	29	242	111	0	0	0
Mar-17	315	912	511	44	326	106	0	0	0
TOTALS BY PERMIT TYPE	2123	8024	4433	647	2386	924	0	0	0
COMBINED TOTAL BY PERMIT TYPE	3851	42164	21412	2072	13904	6468	0	0	0
GRAND TOTALS BY RESPONSE TYPE	67427			22444			0		

Appendix A(iii) – Grants, Refusals & Deems

PERMIT OUTCOMES BY PROMOTER (GRAPHS A-C):

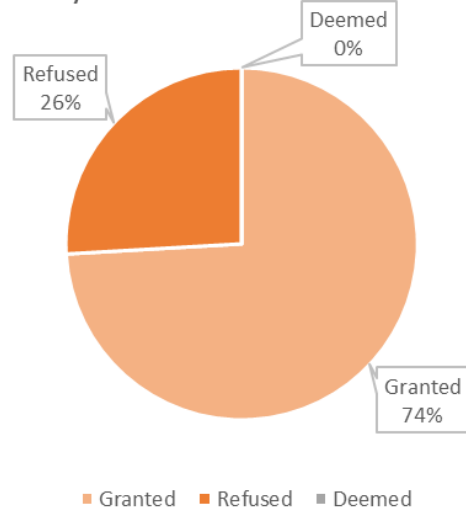
A

All Permit Outcomes



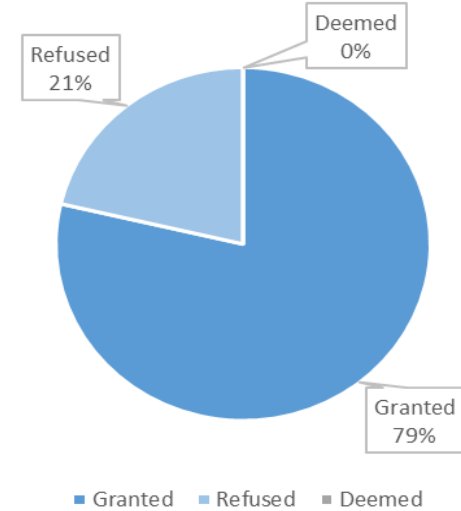
B

Statutory Undertakers Permit Outcomes



C

Essex Permit Outcomes



Appendix B(i) – Permit Conditions

PERMIT CONDITIONS APPLIED BY TYPE PER MONTH (TABLE 1):

STATUTORY UNDERTAKERS

PERMIT CONDITIONS	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL
1. Date Constraints	238	208	262	247	295	179	159	229	141	237	183	231	2609
2. Time Constraints	825	746	955	874	833	815	785	1045	666	832	841	964	10181
3. Out of Hours Work	167	161	188	165	132	131	148	187	193	223	218	157	2070
4. Material and Plant Storage	222	271	318	307	245	306	259	449	290	290	264	324	3545
5. Road Occupation Dimensions	182	175	264	196	189	207	225	252	176	280	328	389	2863
6. Traffic Space Dimensions	1304	1111	1128	1161	1187	1103	1032	1336	1023	1437	1306	1621	14749
7. Road Closure	117	113	122	177	156	133	131	162	87	160	162	197	1717
8. Light Signals and Shuttle Working	463	431	460	550	582	550	577	760	491	593	623	729	6809
9. Traffic Management Changes	493	421	537	561	544	505	537	761	555	735	777	858	7284
10. Works Methodology	323	361	394	335	336	341	324	485	263	389	340	435	4326
11. Consultation and Publicity	514	490	504	541	561	563	488	733	445	618	537	695	6689
12. Environmental	14	23	22	22	17	26	8	29	30	20	20	37	268
13. Local	19	27	26	16	18	22	12	14	9	22	8	4	197
TOTAL	4881	4538	5180	5152	5095	4881	4685	6442	4369	5836	5607	6641	63307

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Appendix B(ii) – Permit Conditions

PERMIT CONDITIONS APPLIED BY TYPE PER MONTH (TABLE 2):

ESSEX

PERMIT CONDITIONS	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL
1. Date Constraints	108	38	34	24	37	28	38	23	37	66	102	48	583
2. Time Constraints	747	558	763	708	501	549	496	474	345	568	767	968	7444
3. Out of Hours Work	354	200	251	283	191	121	122	151	75	111	179	219	2257
4. Material and Plant Storage	40	94	55	61	34	35	37	30	5	8	3	7	409
5. Road Occupation Dimensions	2	9	9	3	7	10	7	7	7	5	13	10	89
6. Traffic Space Dimensions	35	18	56	34	36	27	34	26	16	38	23	26	369
7. Road Closure	417	317	333	338	242	224	211	188	143	204	307	512	3436
8. Light Signals and Shuttle Working	217	138	236	213	158	179	152	170	156	252	316	379	2566
9. Traffic Management Changes	278	202	360	351	302	313	311	303	241	335	422	446	3864
10. Works Methodology	52	28	35	61	111	106	99	112	55	55	93	92	899
11. Consultation and Publicity	535	352	372	365	301	267	265	231	174	290	400	571	4123
12. Environmental	28	15	56	73	59	49	78	86	31	45	74	198	792
13. Local	0	1	1	4	0	2	3	0	1	0	0	1	13
TOTAL	2813	1970	2561	2518	1979	1910	1853	1801	1286	1977	2699	3477	26844

Appendix B(iii) – Permit Conditions

PERMIT CONDITIONS APPLIED BY TYPE PER MONTH (TABLE 3):

ALL

PERMIT CONDITIONS	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL	% of issued
1. Date Constraints	346	246	296	271	332	207	197	252	178	303	285	279	3192	4.73%
2. Time Constraints	1572	1304	1718	1582	1334	1364	1281	1519	1011	1400	1608	1932	17625	26.14%
3. Out of Hours Work	521	361	439	448	323	252	270	338	268	334	397	376	4327	6.42%
4. Material and Plant Storage	262	365	373	368	279	341	296	479	295	298	267	331	3954	5.86%
5. Road Occupation Dimensions	184	184	273	199	196	217	232	259	183	285	341	399	2952	4.38%
6. Traffic Space Dimensions	1339	1129	1184	1195	1223	1130	1066	1362	1039	1475	1329	1647	15118	22.42%
7. Road Closure	534	430	455	515	398	357	342	350	230	364	469	709	5153	7.64%
8. Light Signals and Shuttle Working	680	569	696	763	740	729	729	930	647	845	939	1108	9375	13.90%
9. Traffic Management Changes	771	623	897	912	846	818	848	1064	796	1070	1199	1304	11148	16.53%
10. Works Methodology	375	389	429	396	447	447	423	597	318	444	433	527	5225	7.75%
11. Consultation and Publicity	1049	842	876	906	862	830	753	964	619	908	937	1266	10812	16.04%
12. Environmental	42	38	78	95	76	75	86	115	61	65	94	235	1060	1.57%
13. Local	19	28	27	20	18	24	15	14	10	22	8	5	210	0.31%
TOTAL	7694	6508	7741	7670	7074	6791	6538	8243	5655	7813	8306	10118	90151	

Appendix C(i) – Extensions

NUMBER OF EXTENSIONS APPROVED PER MONTH (TABLES 1-3):

ESSEX	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL
Permits Granted	1172	845	1453	1498	1210	1212	987	966	730	1006	1406	1715	14200
Permit Duration Requests	54	28	51	39	45	57	27	45	9	41	51	71	518
Permit Durations Approved	46	25	40	33	40	44	24	45	8	34	42	53	434
Requests Vs Approved %	85%	89%	78%	85%	89%	77%	89%	100%	89%	83%	82%	75%	84%

NON STATUTORY	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL
Permits Granted	3849	3711	3969	3762	3915	3959	3654	4181	3103	4062	3799	5322	47286
Permit Duration Requests	185	158	233	194	218	233	238	279	165	190	186	249	2528
Permit Durations Approved	153	137	204	162	171	200	209	231	141	165	151	218	2142
Requests Vs Approved %	83%	87%	88%	84%	78%	86%	88%	83%	85%	87%	81%	88%	85%

COMBINED	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL
Permits Granted	5021	4556	5422	5260	5125	5171	4641	5147	3833	5068	5205	7037	61486
Permit Duration Requests	239	186	284	233	263	290	265	324	174	231	237	320	3046
Permit Durations Approved	199	162	244	195	211	244	233	276	149	199	193	271	2576
Requests Vs Approved %	83%	87%	86%	84%	80%	84%	88%	85%	86%	86%	81%	85%	85%
Permits Vs Requests %	5%	4%	5%	4%	5%	6%	6%	6%	5%	5%	5%	5%	5%
Permits Vs Approved %	4%	4%	5%	4%	4%	5%	5%	5%	4%	4%	4%	4%	4%

Appendix D(i) – Reduced Application Periods

NUMBER OF REDUCED APPLICATIONS AGREED PER MONTH (TABLE 1):

STATUTORY UNDERTAKERS	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL
Number of Applications	5587	5498	6217	5858	6083	5913	5604	6633	4712	6194	5964	7071	71334
Number of Reduced Periods	366	391	388	366	336	347	727	823	451	699	703	916	6513
Number of Early Start Agreements	326	332	319	303	295	315	343	341	240	312	367	445	3938
Percentage of Early Start Approvals	89%	85%	82%	83%	88%	91%	47%	41%	53%	45%	52%	49%	60%

ESSEX	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL
Number of Applications	1759	1259	1863	1795	1546	1568	1229	1214	907	1375	1808	2214	18537
Number of Reduced Periods	700	509	550	489	477	463	468	472	315	504	854	1072	6873
Number of Early Start Agreements	597	450	486	408	388	404	349	325	258	330	597	769	5361
Percentage of Early Start Approvals	85%	88%	88%	83%	81%	87%	75%	69%	82%	65%	70%	72%	78%

ALL	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	GRAND TOTAL
Number of Applications	7346	6757	8080	7653	7629	7481	6833	7847	5619	7569	7772	9285	89871
Number of Reduced Periods	1066	900	938	855	813	810	1195	1295	766	1203	1557	1988	13386
Number of Early Start Agreements	923	782	805	711	683	719	692	666	498	642	964	1214	9299
Percentage of Early Start Approvals	87%	87%	86%	83%	84%	89%	58%	51%	65%	53%	62%	61%	69%

Appendix D(ii) – Reduced Application Periods

NUMBER OF REDUCED APPLICATIONS AGREED PER MONTH FOR YEAR 1 (TABLE 2):

Period	Year 1		
	Early Starts Agreements		
	ESSEX	STATUTORY UNDERTAKERS	TOTAL
Apr-15	251	86	337
May-15	229	87	316
Jun-15	201	117	318
Jul-15	155	108	263
Aug-15	264	124	388
Sep-15	155	92	247
Oct-15	352	179	531
Nov-15	496	175	671
Dec-15	443	208	651
Jan-16	612	244	856
Feb-16	626	224	850
Mar-16	163	54	217
GRAND TOTAL	3,947	1,698	5,645

Appendix E(i) – TPI Measures 1 – 8 (Excluding 7)

TPI MEASURES FOR ALL WORKS PROMOTERS (TABLE 1): TPI REPORT IS IN CALENDAR DAYS(?)

DURATION OF WORKS HAS BEEN CORRECTED

Broad Promoter Type	Category	TPI 1	TPI 2	TPI 3	TPI 4	TPI 5	TPI 6	TPI 8
		Works Phases Started	Works Phases Completed	Days of Occupancy	Average Duration of Completed Works Phases in Days	Works Phases Completed After the Reasonable Period	Overrun Days	Number of Phase 1 Permanent Registrations
All	1 Major	2451	2379	81725	36	97	1171	779
	2 Standard	4468	4363	76381	16	161	525	2766
	3 Minor	24005	23830	170460	4	153	772	9147
	4 Immediate Urgent	7589	7607	98720	6	159	492	5720
	5 Immediate Emergency	4854	4835	130841	8	53	180	3777
	Total	43367	43014	558127	70	623	3140	22189

Appendix E(ii) – TPI Measures 1 – 8 (Excluding 7)

TPI MEASURES FOR STATUTORY UNDERTAKERS PROMOTERS ONLY (TABLE 2):

Broad Promoter Type	Category	TPI 1	TPI 2	TPI 3	TPI 4	TPI 5	TPI 6	TPI 8
		Works Phases Started	Works Phases Completed	Days of Occupancy	Average Duration of Completed Works Phases in Days	Works Phases Completed After the Reasonable Period	Overrun Days	Number of Phase 1 Permanent Registrations
Statutory Undertakers	1 Major	1176	1181	31851	24	51	251	779
	2 Standard	3709	3686	38200	9	123	377	2643
	3 Minor	18728	18652	89293	3	123	576	9142
	4 Immediate Urgent	7343	7406	38889	5	156	488	5720
	5 Immediate Emergency	4619	4665	26400	5	51	157	3777
	Total	35575	35590	224633	44	504	1849	22061

Appendix E(iii) – TPI Measures 1 – 8 (Excluding 7)

TPI MEASURES FOR ESSEX HIGHWAY AUTHORITY ONLY (TABLE 3):

Broad Promoter Type	Category	TPI 1	TPI 2	TPI 3	TPI 4	TPI 5	TPI 6	TPI 8
		Works Phases Started	Works Phases Completed	Days of Occupancy	Average Duration of Completed Works Phases in Days	Works Phases Completed After the Reasonable Period	Overrun Days	Number of Phase 1 Permanent Registrations
Essex	1 Major	1275	1198	49874	12	46	920	0
	2 Standard	759	677	38181	7	38	148	123
	3 Minor	5277	5178	81167	2	30	196	5
	4 Immediate Urgent	246	201	59831	2	3	4	0
	5 Immediate Emergency	235	170	104441	3	2	23	0
	Total	7792	7424	333494	26	119	1291	128

Appendix F(i) – Permit Inspections

PERMIT CONDITIONS INSPECTIONS BY MONTH (TABLE 1):

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