KCC
Highways and Transportation

# Measuring the Success of the Kent Permit Scheme

## Annual Report - April 2014

| | |
|---|---|
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## 1.0 INTRODUCTION

### 1.1 Background information

1.1.1 Road works carried out by statutory undertakers, local authorities or other bodies can often lead to disruption and delay, with resulting impacts on all road users, to include the general public, local businesses, public transport operators and passengers.

1.1.2 The Kent Permit Scheme (KPS) was launched in July 2009 for Kent County Council's (KCC) own works promoters and on 25 January 2010 for statutory undertakers. Kent County Council became the first Local Highway Authority to gain approval and introduce a roadworks permit scheme. The staggered start enabled the Roadworks Team within KCC to ensure that, as the 'enforcer' of the scheme, it could be confident that it was working with the best possible information; to achieve the best possible outcome.

1.1.3 The Kent Permit Scheme covers the whole of the county, some 3,736 square kilometres with over 8,000 km of highway.

### 1.2 Changes to works on the highway under the Kent Permit Scheme

1.2.1 Traditionally utility companies sent a notice of intended works to the relevant Highway Authority. Unless an obvious problem was brought to the Local Highway Authority's attention, the Highway Authority was not obliged to respond and the utility company could progress their proposed activities.

1.2.2 Under the provisions of the permit scheme, the utility company has to receive permission before they can commence with proposed works. In addition, special conditions can also be required covering working hours, traffic management measures or co-ordination with other works. Although the permit may attract a fee, discounts can be achieved if an applicant can demonstrate joined up working, works outside of core hours or an excellent safety record.

### 1.3 The role of the Highway Authority

1.3.1 Although KCC is the Permit Authority that administers the KPS, KCC is also a promoter of its own maintenance and other highway and traffic activities in its role as highway authority.

1.3.2 As the Highway and Permit Authority, KCC can choose to require conditions to be attached to a permit, grant a permit, apply conditions to a granted permit or decline permission for work.

## 1.4 Objectives of the Kent Permit Scheme

1.4.1 The introduction of the Permit Scheme has enabled KCC to adopt a proactive stance in the co-ordination of roadworks activities and those of other promoters. In accordance with the provisions of the permit scheme, any organisation wishing to carry out works on the highway is legally required to apply for permission in advance of the works taking place, with the exception of Emergency works.

1.4.2 KCC introduced the Kent Permit Scheme to enable the:

- Carrying out of roadworks more effectively and limiting disruption
- Improved consideration of people who live near, or travel through roadworks
- Provision of safer roadworks

## 1.5 The Permit Scheme Report

1.5.1 This document represents a significant milestone to review, analyse and reflect and comment on the relative successes of the Kent Permit Scheme in its first four years of operation.

1.5.2 The intended audience include the Department for Transport, utility companies, other promoters, other stakeholders and other local authorities that might be looking to establish a permit scheme.

1.5.3 A description of the report structure, to include commentary on the component information, is bulleted below:

- Section 2: describes the framework approach that has been applied to measure the performance of the Permit Scheme.
- Section 3: provides a summary of the performance of the Kent Permit Scheme based on interrogation of the defined Key Performance Indicators. A number of case studies are also provided to showcase the successes of the Kent Permit Scheme.
- Section 4: draws together the analysis from other areas of the report and examines a number of previous recommendations concerning how the permit scheme performance could be improved.

## 2.0 METHODOLOGY

### 2.1 Introduction

2.1.1 This section describes the framework approach that has been developed to measure the performance of the permit scheme.

2.1.2 As part of the process of implementing a permit scheme, KCC has committed to introducing ways to measure the benefits of the KPS. These measurements assess the overall effect that the permit scheme will have on the roads in Kent, specifically:

- journey times and reliability
- safety on the roads
- reduction in roadworks occupation

2.1.3 A set of Key Performance Indicators (KPIs) have been defined in order to measure the performance of the Permit Scheme. A definition of the KPIs is provided in section 2.2 below.

### 2.2 Defining the Key Performance Indicators for the Kent Permit Scheme

2.2.1 The KPIs for the Kent Permit Scheme are based on information presented within the report *"Kent Permit Scheme, Version 2.0 – Approved for Submittal"* (dated July 2009), which states that:

> *"KCC will use the four KPIs … to demonstrate parity of treatment of promoters across the scheme. The first two indicators are those identified in the Statutory Guidance for Permits; the other two are selected from the list in the Code of Practice for Permits of March 2008."*

2.2.2 The four headline KPIs are bulleted below:

- The number of permit and permit variation applications received, the number granted and the number refused
- The number of conditions applied by condition type
- The number of approved extensions
- Number of inspections carried out to monitor conditions

2.2.3 Regarding the publication of results, the 2009 Kent Permit Scheme, Version 2.0 – Approved for Submittal report continues:

*"The results of these KPIs will be published on an annual basis but will be transparent and available to any promoter at other times. The KPIs will be provided and discussed at the quarterly co-ordination meetings and other regular meetings held with promoters. KCC will make the KPI data available to Government and other regulatory bodies"*

2.2.4 The four headline KPIs defined above have been broken down into 27 component KPIs, as presented in Table 2.1 below. A summary description of each KPI is also provided. Not all KPIs are individually reported on, as a number of data streams have been amalgamated due to commonalities in the output data. In addition, it has not been possible to generate a number of datasets for certain KPIs, as the software tools that were used to generate the analytical output was not able to break down the data by type.

**Table 2.1.** The Kent Permit Scheme KPIs

| No | Key Performance Indicator | Description |
|---|---|---|
| 1 | Total Permit Applications received / Permit Applications Accepted | The total number of Permit Applications Accepted or Permit Applications accepted (the total number of applications processed is this figure plus the total number of variations applied for) |
| 2 | Permit applications granted with no variations | The total number of permits that were granted on first review and no subsequent variations were applied for on that phase. |
| 3 | Permit applications granted with variations | The total number of phases that have been granted at second or subsequent applications following refusal, as well as variations after a permit has been granted |
| 4 | Permit applications refused | The total number of permit applications that were refused including any subsequent variation refusals |
| 5 | Applications for permit extension | Base data of extension requests (Change to the permits timing) to current started works applied for, broken down by type. |
| 6 | Applications for permit extension granted | The percentage of extensions granted compared to the number of requests, broken down by type. |
| 7 | Applications for permit variations | Base data of the number of permit variations (No change to the permits timing) applied for, broken down by type. |

| | | |
|---|---|---|
| 8 | Applications for a permit variations granted | Base data of the number of permit variations granted compared to the number of requests broken down by type. |
| 9 | Comments sent back on immediate applications | The percentage of comments and challenges sent back on immediate applications |
| 10 | Early starts without an agreement | Early starts without agreement compared to applications, broken down by type. It is not possible for the software to identify the reason for each variation. Consequently, the data does not differentiate between extensions, early starts and other types of variation. |
| 11 | Volume of inspections completed | The percentage of inspections completed compared to the target number of inspections. |
| 12 | Frequency of inspection sample | Measure of how often sample inspections are generated. |
| 13 | Percentage of work sites with submitted reinstatement data | The percentage of work sites with submitted reinstatement data. This data is required to be sent within 10 days of finishing on site and details that the road has been reinstated. |
| 14 | Volume of first time reinstatements | The percentage of first time permanent reinstatements compared to the total number of works requiring reinstatements. |
| 15 | Number of Permit Applications processed within response time | The percentage of permit applications processed within the stated response time, broken down by type. |
| 16 | Average duration between receipt of Permit Applications and response | The measurement of duration between the receipt of application and the response to it. |
| 17 | Average lead time for Permit Applications | Measurement of time between the minimum application time and the actual application date, broken down by type. |

| | | |
|---|---|---|
| 18 | Works completed to original program | Percentage of works completed by the estimated end date compared to all active works. |
| 19 | Percentage of work permits granted and cancelled | The percentage of permits granted and then cancelled prior to the start date of works. |
| 20 | Percentage of booked space utilised for works | The percentage of applications granted, where no start or end date is specified, therefore suggesting booked space is not utilised. |
| 21 | Permit Application with correct lead time | The percentage of applications processed within the correct lead time in comparison to the total number of works. |
| 22 | Permit Applications with an early start agreement | The percentage of applications with a written early start agreement, in comparison to the total number of applications. |
| 23 | Works started outside of booked space | The percentage of works started outside of the allowed time window *(varying by type)* in comparison to the total number of applications |
| 24 | Works stopped supplied | The percentage of works that provide an actual stop date for the works, in comparison to the total number of applications. |
| 25 | Permits Applications with Conditions | The percentage of permit applications that have conditions applied. |
| 26 | Number of potential FPN offences | The percentage of potential FPN offences compared to the items eligible for an FPN. |
| 27 | Days saved as a result of collaborative working. | Shows the number of days saved as a result of collaborative working. |

## 2.3 Annual Roadworks Impacts (or costs) in Kent

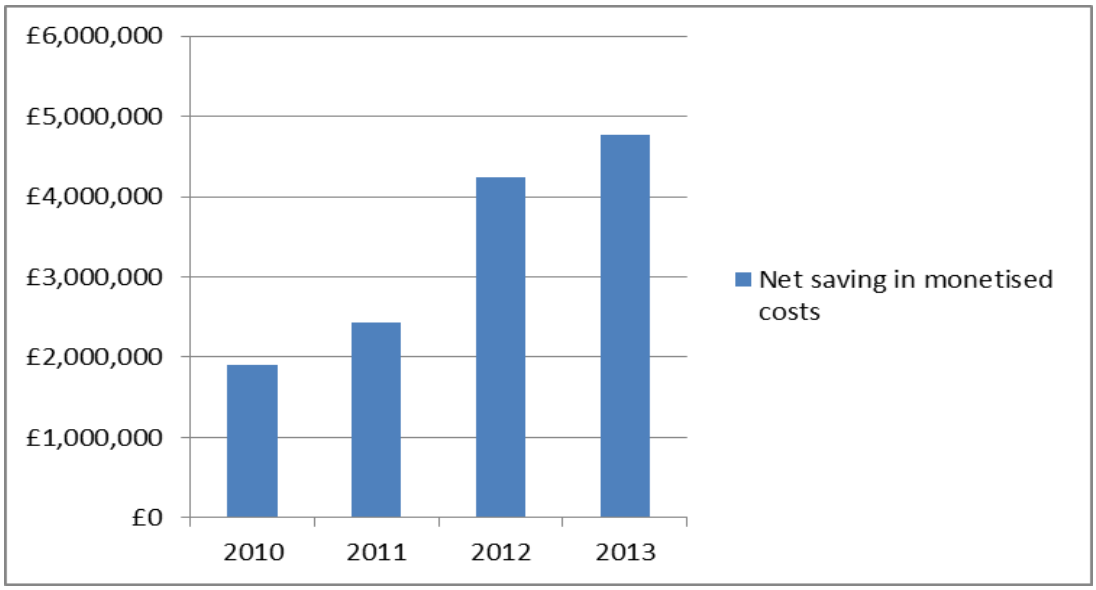
2.3.1 As drawn from the report *"Application to operate the Kent Permit Scheme: Cost Benefit Analysis"*, taking into account costs for crashes, fuel, carbon emissions and Government fuel tax revenue, the monetised cost per site, per day is now calculated to be £783 (see Table 2.2 below).

**Table 2.2.** Annual Roadworks Impacts (or costs) in Kent - 2013

| | Per site | Per day | Per year |
|---|---|---|---|
| | | | |
| Number of Works | | 168 | 61,191 |
| Net Consumer Impact | £223 | £37,514 | £13,663,674 |
| Net Business Impact | £260 | £43,697 | £15,915,773 |
| Accident Costs | £299 | £50,233 | £18,296,293 |
| Fuel Carbon Emission Costs | £2 | £252 | £91,933 |
| Government Funding | -£5 | -£888 | -£323,414 |
| Sum consumer and business users | £483 | £81,210 | £29,579,447 |
| **Monetised cost of delay (£)** | **£783** | **£131,493** | **£47,894,070** |

Costs (£) in average 2013 prices

**Table 2.3.** Net savings in monetised costs for Kent



| | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| | | | | |
| Total cost for Kent | £40,861,302 | £52,506,238 | £55,081,296 | £47,894,070 |
| % reduction in the impact of roadworks | 4.66 | 4.64 | 7.69 | 9.95 |
| **Net saving in monetised costs** | **£1,904,137** | **£2,436,289** | **£4,235,752** | **£4,765,460** |

## 3.0 THE PERFORMANCE OF THE KENT PERMIT SCHEME

### 3.1 Introduction

3.1.1 This section provides a summary of the performance of the Kent permit Scheme based on interrogation of the defined Key Performance Indicators. A number of case studies are also provided to showcase the successes of the Kent Permit Scheme.

### 3.2 Monitoring data and discussion: an introduction

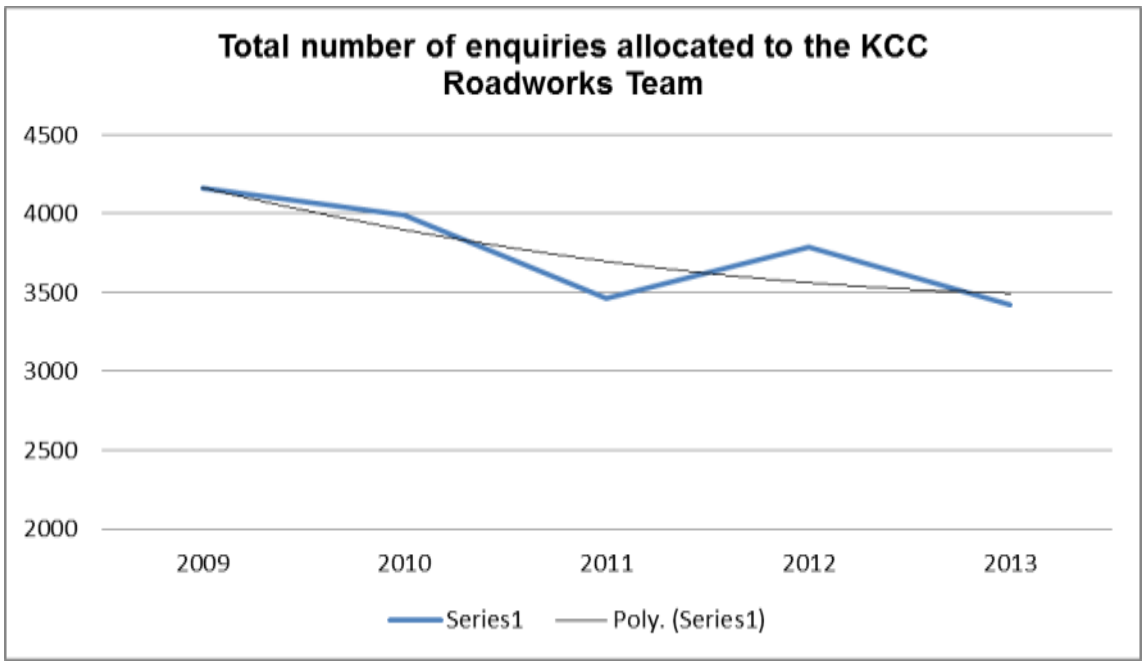
3.2.1 Data has been collected, collated and presented in either graphical or tabulated format for each of the defined KPIs and is presented herewith. Commentary is also provided to draw out and expand upon noteworthy trends in the data.

### 3.3 Roadworks enquiries by year

3.3.1 Data for the number of roadworks enquiries reflects the number of enquiries that are made to KCC and logged on the WAMS database, which generates a unique identifier code.

3.3.2 The graphical plot, presented in Figure 3.1, shows the number of roadworks enquiries received between 1st January 2009 and 31st December 2013.

**Figure 3.1.** Roadworks enquiries by year 2009 to 2013



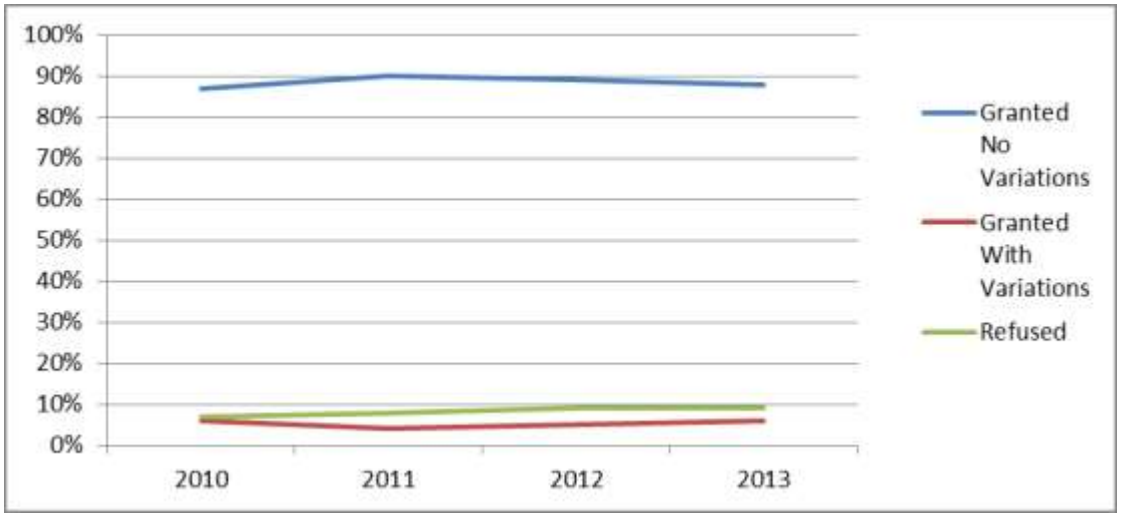

3.3.3 Importantly, the trend analysis shows an 18% decline, over the period, from a figure of 4158 enquiries in 2009 to a figure of 3422 in 2013, which shows that the introduction of the Kent Permit Scheme has resulted in fewer enquiries being fielded to KCC.

### 3.4 Total Permit Applications submitted

3.4.1 This section provides the measure of performance for KPIs 1, 2, 3 and 4. Data presented in Table 3.1 provides information on the total number of Permit Applications that have been processed from 25 January 2010 (the start of the KPS) to 31st December 2013, which is the sum of the number of Permit Applications received in addition to the number of variations that have been applied for. The data relates to all work phases in Kent.

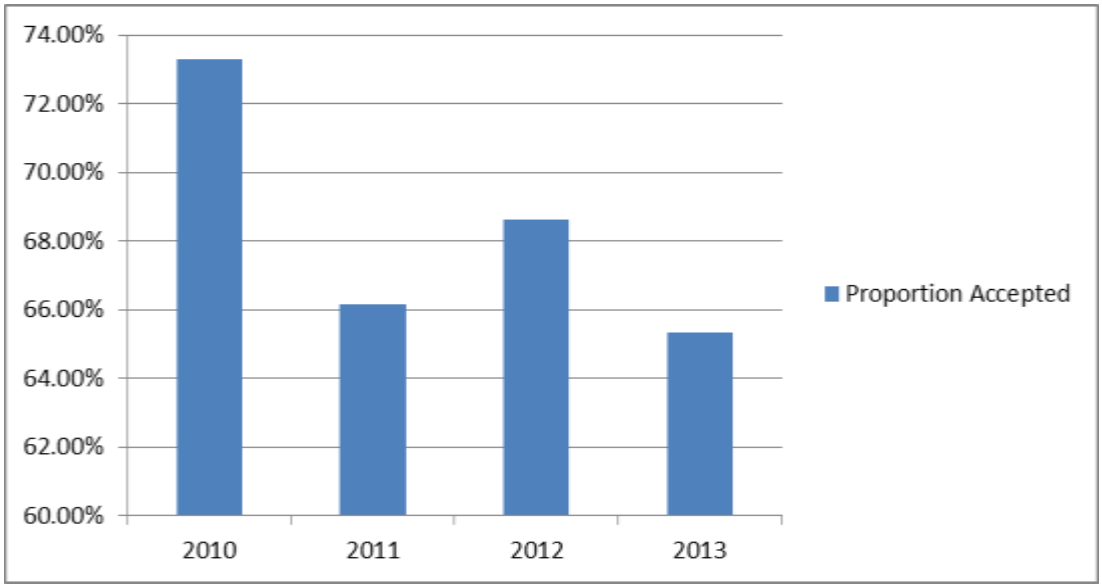
3.4.2 The data in Table 3.1 indicates that the majority of permit applications are granted with no variations which suggests that the coordinators are working proactively with the works promoters and that the majority of promoters now understand the application process so that they are successful at the first attempt. This figure has remained constant throughout the 4 years of the KPS.

**Table 3.1.** Permit applications to be granted, refused or revised




3.4.3 It was not possible for the software to identify the reason for each variation and consequently to differentiate between extensions, early starts and other types of variation. For this reason, therefore, data relating to KPIs 5 and 6 has been grouped together and reported on in accordance with KPIs 7 and 8, as discussed in paragraph 3.4.4 below.

**Table 3.2.** Applications for permit variations




3.4.4 Regarding KPIs 7 (applications for permit variations) and 8 (applications for permit variations granted), the applications to have been granted permission with variations represents a current approval rate of 65% as a proportion of the total number of variations that were applied for.

## 3.5 Completed inspections

3.5.1 Data presented in Table 3.3 records the number of random sample inspections carried out between April 2010 and December 2013 compared to the agreed sample size for each year. The Kent Highway Authority and Utility Committee (HAUC) quarterly report presents this information in accordance with the financial year.

3.5.2 The agreed sample uses a rolling 3 year average of inspections units generated by each works promoter. The agreed sample is 10% of the rolling average for each works stage. The three stages are: A works in progress, B works just completed and C three months before the end of the guarantee period for the works. In 2010 KCC decided to increase the sample for B and C to 15%. The additional cost of the extra inspections being covered by KCC. In 2012 KCC then increased the sample for A to 12.5%, giving greater focus to the quality of works in progress.

3.5.3 The benefit of the additional inspections is the generation of a better understanding of compliance with work completed to time and raising the standard of reinstatements. Any defects discovered are repaired by the works promoter at their expense, rather than being left for to the Highway Authority to correct.

**Table 3.3.** Random inspections for the 2010/11 financial year (KPI 11)

| | 2010 | | | 2011 | | | 2012 | | | 2013 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | A | B | C | A | B | C | A | B | C |
| Total Available | 33,547 | 36,931 | 38,185 | 37,286 | 35,848 | 39,420 | 29,900 | 35,393 | 32,824 | 13291 | 31102 | 34869 |
| Sample | 4,253 | 5,924 | 6,064 | 5,596 | 6,346 | 6,568 | 7,557 | 5,243 | 5,121 | 5912 | 5508 | 5453 |
| Passed | 2,844 | 5,372 | 5,586 | 5,003 | 5,861 | 6,158 | 5,926 | 4,821 | 4,875 | 5676 | 4997 | 5131 |
| Failed (High Risk) | 10 | 3 | 0 | 123 | 3 | 1 | 105 | 13 | 0 | 72 | 19 | 1 |
| Failed (Low Risk) | 35 | 225 | 151 | 107 | 297 | 150 | 119 | 298 | 124 | 67 | 275 | 155 |
| Abortive | 1,343 | 292 | 306 | 322 | 138 | 90 | 1,407 | 102 | 100 | 97 | 181 | 145 |
| Not Updated | 21 | 32 | 21 | 41 | 47 | 169 | 0 | 9 | 22 | 0 | 36 | 21 |
| **Agreed amount** | **3,927** | **3,927** | **3,927** | **3,822** | **3,822** | **3,822** | **3,708** | **3,780** | **3,780** | **3803** | **3827** | **3827** |
| **% Achieved** | **108%** | **151%** | **154%** | **137%** | **161%** | **165%** | **166%** | **136%** | **132%** | **153%** | **138%** | **138%** |
| Selected | 13% | 16% | 16% | 15% | 18% | 17% | 25% | 15% | 16% | 44% | 18% | 16% |
| Passed | 67% | 91% | 92% | 89% | 92% | 94% | 78% | 92% | 95% | 96% | 91% | 94% |
| Failed | 1% | 4% | 2% | 4% | 5% | 2% | 3% | 6% | 2% | 2% | 5% | 3% |
| Abortive | 32% | 5% | 5% | 6% | 2% | 1% | 19% | 2% | 2% | 2% | 3% | 3% |

## 3.6 First time reinstatement of works

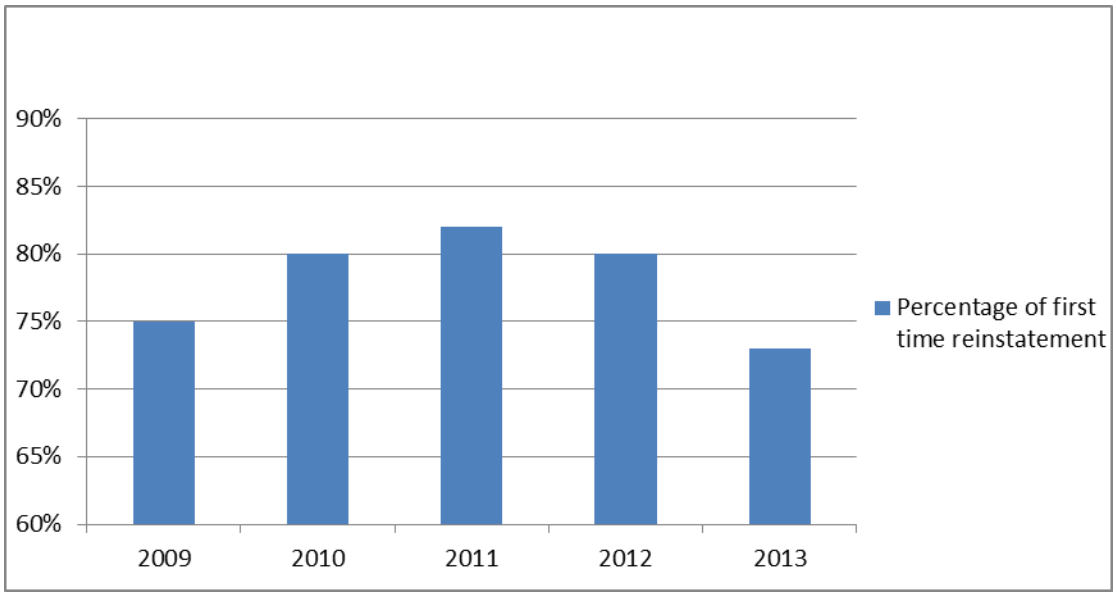
3.6.1 Data presented in Table 3.4 shows the percentage of works that had a first time permanent reinstatement for the 12 months prior to the permit scheme coming into existence and the first 4 years of the scheme's operation, for all roads in Kent, in accordance with KPI 14.

3.6.2 The data reveals that the percentage of first-time reinstatements, as a proportion of total works, had risen from 75% (pre-Permit Scheme) to 82% under the Permit Scheme. There was also an increase in the number of total works over this period.

3.6.3 In 2013 this annual figure dropped to 73%. This drop was due to the result for the first quarter, being only 54%, primarily due to the very cold spring weather. The average for the remaining three quarters was 81%. It is worth noting that the national average for first-time reinstatements is only 70%.

3.6.4 Where an interim reinstatement is used a second works phase is required to go back to site to make it a permanent restatement. The number of second works phases required is the difference between total works and first time reinstatements.

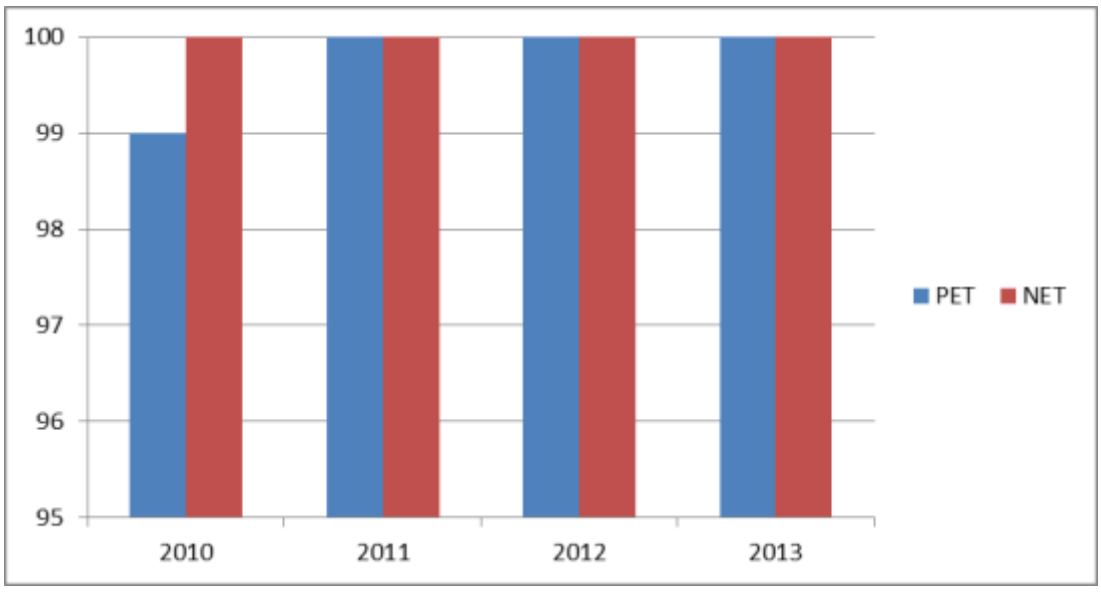
**Table 3.4.** Works with a permanent reinstatement




## 3.7 Permit processing time

3.7.1 Table 3.5 contains data collected in accordance with KPI 15, providing a measure of the percentage of permits processed on time broken down by works type and street type. The agreed target was for 98% of permits to be processed on time.

**Table 3.5.** The number of permit applications processed within the agreed response time




3.7.2 The headline figure is that the processing of permit applications target was achieved for both application types, with figures of 99% and 100% respectively in 2010. This has further improved with a continual 100 % achieved in the past 3 years.

## 3.8 Time duration between receipt of permit applications and generated response

3.8.1 In accordance with KPI 16, the monitoring data presented in Table 3.6 provides a measure of the number of working days between applications being received and when a response (grant or refuse) is generated for all roads in Kent. The average processing time is provided for the 5 types of application, namely:

- Major
- Standard
- Minor
- Immediate
- Variations

3.8.2 The average processing time, for each work type, has continually reduced during the 4 years of the KPS, with the average processing time for all application types decreasing from 0.43 to 0.38 working days.

**Table 3.6.** Time duration between the receipt of permit applications and the generated response (by application type)

| | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| | Av. Processing time | Av. Processing time | Av. Processing time | Av. Processing time |
| Major - PAA | 2.48 | 2.04 | 2.27 | 2.24 |
| Standard\MP | 0.77 | 0.72 | 0.68 | 0.66 |
| Minor | 0.36 | 0.32 | 0.33 | 0.3 |
| Immediate | 0.29 | 0.25 | 0.25 | 0.25 |
| Variations | 0.41 | 0.37 | 0.35 | 0.37 |
| **Total** | **0.43** | **0.39** | **0.39** | **0.38** |

## 3.9 Average lead time for Permit Applications

3.9.1 KPI 17 (average lead time for permit applications) provides a measure of the difference in working days between the received date and latest compliant application date. This is for all roads in Kent.

3.9.2 The data reveals that the average additional lead time, for Standard works has reduced significantly, whilst Minor works remain constant.

**Table 3.7**. Average lead time for permit applications

| | 2010 | | 2011 | | 2012 | | 2013 | |
|---|---|---|---|---|---|---|---|---|
| | Standard | Minor | Standard | Minor | Standard | Minor | Standard | Minor |
| Total day lead time | 21,107 | 108,649 | 15,580 | 105,084 | 15,935 | 118,961 | 15,057 | 121,349 |
| Total works phases | 3,787 | 53,511 | 4,597 | 60,432 | 4,651 | 61,900 | 4,126 | 54,622 |
| **Average Lead time** | **5.57** | **2.03** | **3.39** | **1.74** | **3.43** | **1.92** | **3.65** | **2.22** |

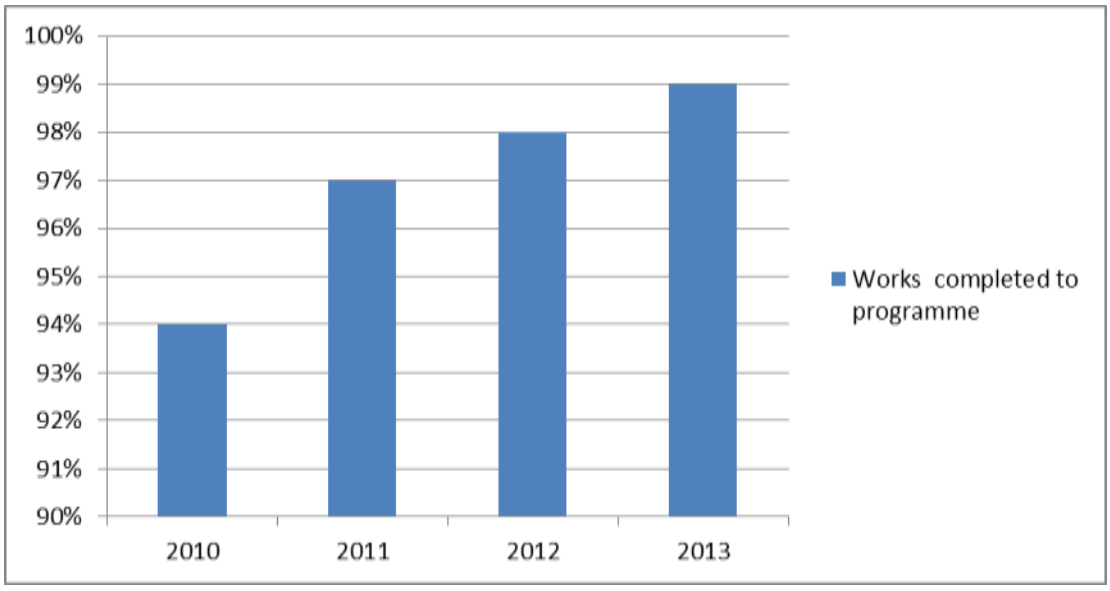
## 3.10 Work phases completed by the agreed end date

3.10.1 KPI 18 provides a measure of the number of work phases completed by the agreed end date. Data presented in Table 3.8 only relates to full Permit Equivalent Treatment (PET) streets. There is no flexibility on the end date for works on these streets.

3.10.2 In the case of a Notice equivalent treatment (NET) street, if the contractor commences work later than the agreed start date there is flexibility to do so, thereby delaying the end date, providing the total duration of works remains as per the original agreement. NET streets are afforded a greater degree of flexibility as the activities that are undertaken are characteristically less disruptive than works on PET streets.

3.10.3 Works that extend beyond the agreed end date may incur Section 74 charges.

**Table 3.8.** Work phases completed by the agreed end date



3.10.4 The headline figure is that the percentage of works completed by the agreed end date has increased from 94% in 2010 to 99% in 2013.

### 3.11 Work phase permits to be granted and subsequently cancelled

3.11.1 In accordance with KPI 19, data presented in Table 3.9 indicates the percentage of works phase permits which were granted and subsequently cancelled. The tabulated data only relates to full Permit Equivalent Treatment streets. If the work is subsequently reapplied for a permit fee is charged.

3.11.2 The data confirms that work phase cancellations have occurred for all work types with an observed trend that, proportionately, fewer Major work phases are cancelled when compared to Standard and Minor phases. The increase in cancellations, since 2010, is reflected in the reduction of Missing / late cancellation FPN offences from 11,291 offences in 2010 to 194 offences in 2013.

**Table 3.9.** Works phase permits granted and subsequently cancelled

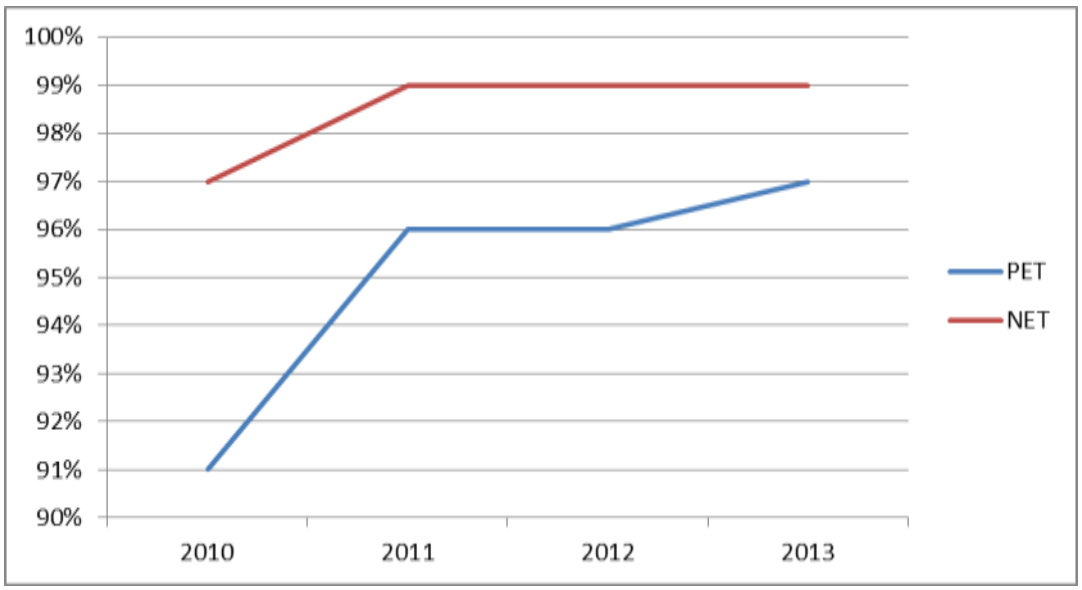
| | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| | % Cancelled | % Cancelled | % Cancelled | % Cancelled |
| Major | 20% | 23% | 28% | 24% |
| Standard | 28% | 38% | 36% | 32% |
| Minor | 31% | 34% | 35% | 34% |
| **Total** | **29%** | **33%** | **34%** | **32%** |

### 3.12 Booked space utilised for works

3.12.1 KPI 20 is a measure of the percentage of works phases permits that are actually utilised where, for example, the permit was not cancelled and KCC received a start and stop notice. Permits that are processed but not used are chargeable.

3.12.2 Data presented in Table 3.10 represents booked space that was utilised in accordance with details submitted as part of the permit application process. The headline figure is that the percentage of booked space being utilised has increased, from 91% in 2010 to 97% in 2013 for PET works, and from 97% in 2010 to 99% in 2013 for NET works.

**Table 3.10.** Booked space utilised for works




| | 2010 | | 2011 | | 2012 | | 2013 | |
|---|---|---|---|---|---|---|---|---|
| | PET | NET | PET | NET | PET | NET | PET | NET |
| No Unutilised spaces | 1,584 | 1,712 | 886 | 482 | 895 | 365 | 672 | 272 |
| Total works phases | 18,626 | 68,133 | 20,321 | 72,966 | 23,194 | 69,485 | 20,804 | 45,453 |
| **% Utilised Booked Space** | **91%** | **97%** | **96%** | **99%** | **96%** | **99%** | **97%** | **99%** |

3.12.3 The inverse of KPI 21 (Permit applications with correct lead time) is a Fixed Penalty Notice (FPN) offence, 'Insufficient notice given for works'. Information relating to KPI 22 (permit applications with an early start agreement) is covered within KPIs 2 and 3. KPI 23 (works started outside of booked space) is not specifically reported on within this report as this is also an FPN offence.

### 3.13 Proportion of works stopped supplied

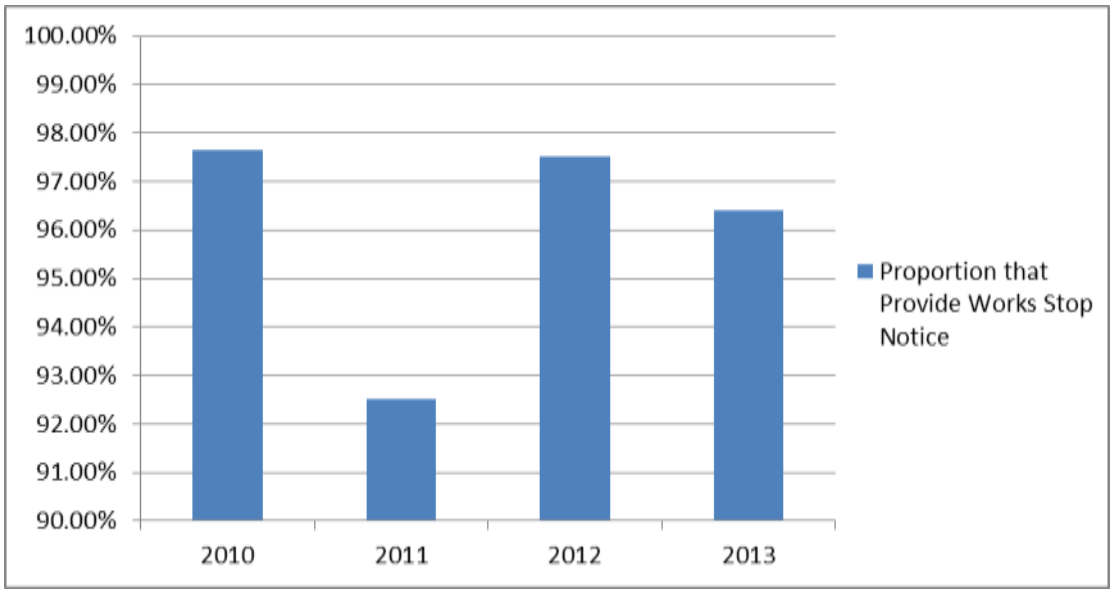
3.13.1 KPI 24 refers to the percentage of works that, in accordance with the defined procedure, provide an actual stop notice for works as a proportion of the total number of applications submitted. Works can only be stopped once the highway is returned to full usage.

3.13.2 Data presented in Table 3.11 shows that 96.4% of works are stopped in accordance with the defined procedure[1].

3.13.3 The late submission of a stop notice may result in the generation of a FPN, meaning there is an incentive for a promoter to submit a stop notice and avoid a penalty fine. Stopping late is an offence and overrun charges apply.

3.13.4 This data only records whether a stop notice was supplied, and cannot be used to determine whether the stop notice was supplied on time.

**Table 3.11.** The proportion of works to be stopped with the issue of a stop notice




## 3.14 Permit applications granted with conditions

3.14.1 KPI 25 (permit applications granted with conditions) provides a measure of the proportion of permit applications that are approved subject to conditions. A total of 13 standard condition types are defined, which is consistent with the EToN specification[2]. The output data is a log of the conditions selected by the promoter at application stage and, therefore, reflects how coordinators are working proactively with the works promoters. This trend has risen, during the 4 years of the KPS, reflecting a greater level of accuracy at the application stage.

[1] The formal stopping procedure is where KCC is formally advised that works have been stopped

[2] Electronic Transfer of Notices, the system defined in the Technical Specification for EToN for passing notices, permit applications, permits and other information between promoters and the Permit Authority.

**Table 3.12.** Conditions attached to Permit Applications Approved

| | 2010 | | 2011 | | 2012 | | 2013 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| Permit Applications | 126223 | | 125610 | | 124243 | | 114110 | |
| Any | 57180 | 45.30% | 53830 | 42.90% | 61563 | 49.60% | 58092 | 50.90% |
| Date Constraints | 4722 | 3.74% | 6037 | 4.80% | 9227 | 7.40% | 10560 | 9.30% |
| Time Constraints | 15686 | 12.43% | 19344 | 15.40% | 27090 | 21.80% | 29888 | 26.20% |
| Out of Hours Work | 3930 | 3.11% | 5016 | 4.00% | 4297 | 3.50% | 3872 | 3.40% |
| Material and Plant Storage | 2506 | 1.99% | 4385 | 3.50% | 9266 | 7.50% | 11154 | 9.80% |
| Road Occupation Dimensions | 1083 | 0.86% | 2539 | 2.00% | 2751 | 2.20% | 4425 | 3.90% |
| Traffic Space Dimensions | 1910 | 1.51% | 2053 | 1.60% | 4418 | 3.60% | 6411 | 5.60% |
| Road Closure | 1411 | 1.12% | 1535 | 1.20% | 2321 | 1.90% | 2577 | 2.30% |
| Light Signals and Shuttle Working | 2614 | 2.07% | 2281 | 1.80% | 2408 | 1.90% | 2292 | 2.00% |
| Traffic Management Changes | 699 | 0.55% | 610 | 0.50% | 854 | 0.70% | 1362 | 1.20% |
| Work Methodology | 5723 | 4.53% | 7127 | 5.70% | 13070 | 10.50% | 25712 | 22.50% |
| Consultation and Publicity | 1426 | 1.13% | 1893 | 1.50% | 2921 | 2.40% | 3161 | 2.80% |
| Environmental | 212 | 0.17% | 188 | 0.10% | 242 | 0.20% | 585 | 0.50% |
| Local | 7101 | 5.63% | 7549 | 6.00% | 7693 | 6.20% | 7373 | 6.50% |

## 3.15 Potential FPN offences

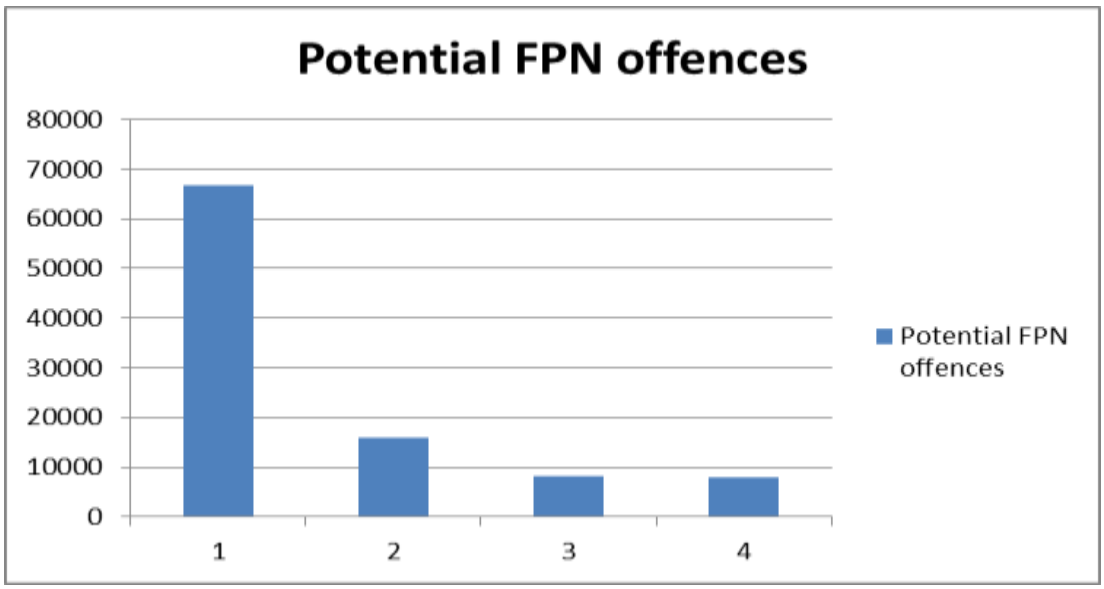
3.15.1 KPI 26 provides a measure of the percentage of potential FPN offences compared to the items eligible for an FPN. Data presented in Table 3.13 shows the percentage of potential FPNs compared to the total number of actions that could incur a FPN. It should be noted that this is the potential FPNs that the system has highlighted for further investigation as an offence that may have occurred, as opposed to representing an exhaustive list of all the actual FPNs that have been issued by KCC. This is for all works on all roads.

3.15.2 In the KPS first year report (completed in January 2011) the data presented showed that the seven highest ranking potential FPN offences were:

- missing/late registration of works
- late notification of works stop notice
- missing/late cancellation
- site interim construction method supplied when not needed
- late notification of works start
- working without a permit
- incorrect dimensions

During the 4 years of the KPS offences relating to the above categories have significantly reduced.

**Table 3.13.** Percentage of potential FPNs compared to the total number of actions that could incur an FPN



| Offence Type | 2010 | | 2011 | | 2012 | | 2013 | |
|---|---|---|---|---|---|---|---|---|
| | Offence Totals | % of eligible items | Offence Totals | % of eligible items | Offence Totals | % of eligible items | Offence Totals | % of eligible items |
| Missing/late registration of works | 30,528 | 24.19% | 6700 | 7.10% | 1152 | 1.38% | 760 | 0.98% |
| Late notification of works stop notice | 10,055 | 16.20% | 2260 | 2.27% | 1376 | 1.41% | 1407 | 1.54% |
| Missing/late cancellation | 11,291 | 8.95% | 626 | 2.21% | 348 | 1.20% | 194 | 0.87% |
| Site interim construction method supplied when not needed | 5,377 | 8.67% | 335 | 0.36% | 327 | 0.39% | 322 | 0.42% |
| Late notification of works start | 4,274 | 6.77% | 829 | 1.17% | 1338 | 1.83% | 915 | 1.40% |
| Working without a permit | 2,719 | 4.31% | 2189 | 3.10% | 3033 | 4.16% | 1557 | 2.38% |
| Incorrect dimensions | 2,597 | 4.19% | 2978 | 3.16% | 549 | 0.66% | 2716 | 3.50% |

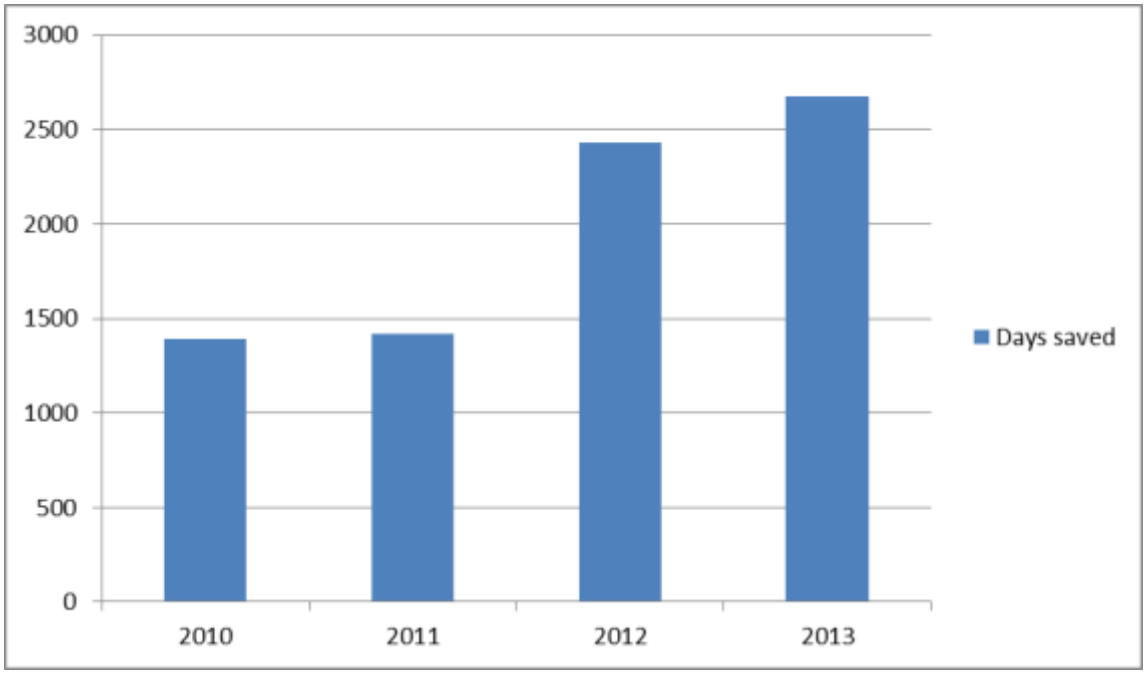
The table below helps explain each offence.

| **Offence** | **Definitions** |
|---|---|
| Missing/late registration of works | The reinstatement details for the works have either not been received or were received more than 10 working days after the works stopped. |
| Late notification of works stop notice | The works stop notice must be received before the end of the next working day. |
| Missing/late cancellation | No cancellation notice was received and no start notice has been received. |
| Site Interim construction method supplied when not needed | Interim construction method is only required on an interim reinstatement. |
| Late notification of works start | Works start notifications should be received by the end of the next working day. |
| Working without a permit | Works have taken place without a granted permit or works took place on dates outside the ones agreed on the permit. |
| Incorrect dimensions | The site reinstatement dimensions are incorrect. |

### 3.16 Days saved as a result of collaborative working and extended hours

3.16.1 KPI 27 provides a measure of the total number of days saved on full permit equivalent treatment streets as a result of collaborative working under the provisions of the Kent Permit Scheme. Accordingly, this is an important headline figure that provides a tangible measure of benefits of endorsing the Kent Permit Scheme.

**Table 3.14.** Days saved as a percentage of potential days occupations for full permit equivalent treatment works




| | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| | | | | |
| Days occupation | 29782 | 30626 | 31622 | 26861 |
| Days saved | 1389 | 1422 | 2433 | 2674 |
| Days saved as a % of potential days | 4.46 | 4.64 | 7.69 | 9.95 |

3.16.2 The data shows that the total number of working days saved in 2013, due to the Kent Permit Scheme, amounts to 2,674 equivalent to 10 years and 8 months.

## 3.17 Case studies

### 3.17.1 Bearsted Road, Boxley

Bearsted road was closed for 2 weeks, during the 2013 Easter school holidays, to allow for the diversion of existing plant in the carriageway and the construction of a new roundabout.

KCC required collaborative working, between the 8 utilities involved, including trench sharing, for which the building contractor completed the reinstatement works. In addition to this further conditions were applied, such as extended hours and weekend working.

As a result of these measures KCC were able to reduce the proposed 18 week road closure down to 2 weeks, with traffic light control for a further 10 weeks.

### 3.17.2 High Street, Hythe

The High Street was closed for 11 weeks to allow for Gas Main replacement (SGN).

KCC and SGN carried out an extensive consultation process with Hythe Town Council and the local shopkeepers.

KCC subsequently placed various working conditions on SGN, including extended hours and weekend working, resulting in the original planned duration of the road closure being reduced by 7 weeks.

### 3.17.3 Maidstone Town Centre

This was an extensive SGN gas replacement project which commenced on 10th April 2012 and concluded on 9th June 2013.

It was a five phase project, which made good use of the closure of Knightrider Street, significantly reducing the overall duration by enabling the first two phases to be combined.

KCC and SGN carried out a detailed consultation process with the Borough Council and Town Centre management.

The works duration was further reduced by KCC requiring the utilisation of extended hours and weekend working.

Another condition KCC imposed was an embargo on certain areas of work in order to reduce town centre congestion during the 6 weeks of Christmas.

3.17.4 **Hawley Street Margate**

This project involved a gas mains replacement by SGN with a road closure from 27th June to 30th August 2011.

There was extensive consultation involving representatives of SGN, KCC, TDC, Margate Town Partnership and local traders.

Working conditions, required by KCC, included extended working hours Monday to Sunday 7am – 7pm.

3.17.5 **Aylesford and Ditton**

This project involved extensive Water Mains Reinforcement work (SEW) along the A20 London Road, Aylesford to Ditton, and additional work in Station Road / New Road, Ditton.

The original SEW proposal was to use two and four way signals, along the A20, for a duration of 11 weeks. This would have caused serious disruption to the A20 and potentially had a 'knock on' effect on the A228 and M20.

KCC and SEW carried out a detailed consultation process with Parish Councils, businesses and residents.

The subsequently agreed closure of New Road and Station road (for a period of only 3 weeks) and the temporary removal of traffic islands on the A20 allowed for two-way traffic flows to be maintained, along the A20, throughout these works. This agreement also included extended working hours and 7 day working throughout the project.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

### 4.1 Introduction

4.1.1 This section draws together the analysis from other areas of the report and examines a number of previous recommendations concerning how the permit scheme performance could be improved.

### 4.2 Discussion

4.2.1 Using powers not available under previous regulations, the Kent Permit Scheme has improved the management of all works on the road network and because of that reduced unnecessary disruption to road users, and ensures Kent's highways are made available to the travelling public and businesses for more of the time, improving both journey times and their reliability.

4.2.2 Specifically, the Kent Permit Scheme has enabled KCC to better co-ordinate the timing of roadworks by gas, water, telecoms, electricity companies and its own works on the same part of the road at the same time, thereby reducing the number and duration of roadworks and minimising their impact on motorists and other road users.

4.2.3 The successes of the Kent Permit Scheme in its first four years of operation are aptly demonstrated by the total time saving of roadworks occupation that was achieved through coordinated operations and the monetised benefit achieved through reduced congestion.

4.2.4 A crucial element to the success of the Kent Permit Scheme is the proactive pre-planning of works. Elgin helps by providing easy access to all approved activity on the highway.

### 4.3 Recommendations from previous KPS reports

4.3.1 In January 2011 the first year report was produced, entitled "Measuring the Success of the Kent Permit Scheme". This report contained four recommendations, as detailed below:

1. *That we work to consolidate and improve the number of joint occupations of the highway and use of extended working hours, to maximise the amount of time the highway is available for use*

   As per item 3.16 above the total number of working days saved in 2013, due to the Kent Permit Scheme, amounts to 2,674 equivalent to 10 years and 8 months**.**

2. *To continue to work with all work promoters to improve the quality and timeliness of information and to explore innovative ways of working. This will improve information to highway users to improve the reliability of journey*

*choices, reduce the risk of penalties to works promoters, and deliver more effective working practices*

Members of the KCC roadworks team continue to take an active role, at national, regional and county level, in groups such as the National Joint Authorities Group and the Highway Authorities and Utilities Committee.

3. *To continue to promote examples of excellent work in the press to improve the public perception of roadworks*

KCC have continued to promote examples of excellent work in the press. An example of which is the below article, published in the Folkestone Herald in April 2012

*Traffic allowed back in Hythe High Street ahead of schedule*

*HYTHE High Street is fully open to traffic again – weeks before the gas mains project was due to end.*

*Workers from Southern Gas Networks and contractors Morrisons have moved into Bank Street, allowing traffic to use the main road freely again for the first time since January.*

*Bosses now expect the essential mains replacement work to be finished by May 7, six weeks ahead of schedule.*

*Kevin Howell, who runs One One Two Wines and is vice-chairman of the Hythe Chamber of Commerce and Tourism said: "It's excellent news for the High Street.*

*"It's been really hard, especially for evening traders, because you lose the passing trade but it seems to be picking up again since the road reopened.*

*"Morrisons has been really good at working with the businesses to cause as little disruption as possible and they've got it done quickly. They've helped us and been happy to, which we really appreciate.*

*"The High Street is fully open for business again."*

*The Herald reported last year that the work had been due to last until July, causing concern among traders.*

*Jastal Thind, manager of chip shop Torbay of Hythe, said his evening trade had suffered a dramatic drop while the road was closed.*

*He said: "Lunch trade was a bit less but we were almost 25 per cent down in the evenings, it was very, very bad.*

*"But this Saturday and Friday, business was almost double what it was the previous week, opening the road really made a difference.*

*"I'm very happy it's open again, and so early, hopefully people will start coming back and we'll be busy again."*

*Laura Varney, spokeswoman for Southern Gas Networks, said: "We worked hard to get this done to the best of our ability and we are pleased to say that the project has now finished on Hythe High Street.*

*"Planning was key to this project and SGN worked with Kent Highways and Hythe Town Council to keep disruption to a minimum.*

*"Throughout the project we received good feedback from both traders and local residents.*

*"The area now has a safe and reliable gas supply which will be beneficial for many years to come."*

4. *To review permit fees at the next annual review with the intention, if current trends continue, to reduce some permit fees*

Such a review was carried out and a permit fee reduction was made in respect of standard, minor and immediate works, to reflect the cost of processing those permits. Variations weren't changed as they are avoidable in most cases. The reductions are detailed in Table 4.1 below.

**Table 4.1.** Permit fee reductions

| | Before | |
|---|---|---|
| | PET | NET |
| PAA | £87.00 | £73.00 |
| Major | £225.00 | £146.00 |
| Standard | £130.00 | £ - |
| Minor | £65.00 | £ - |
| Urgent | £57.00 | £ - |
| Emergency | £57.00 | £ - |
| Variation | £45.00 | £ - |

| | After | |
|---|---|---|
| | PET | NET |
| PAA | £87.00 | £73.00 |
| Major | £225.00 | £146.00 |
| Standard | £117.00 | £ - |
| Minor | £58.50 | £ - |
| Urgent | £51.30 | £ - |
| Emergency | £51.30 | £ - |
| Variation | £45.00 | £ - |

4.3.2 In May 2012 a qualitative review of the Permit Scheme, by the KCC Environment, Highways and Waste Cabinet Committee, and subsequent report entitled "Management of Roadworks" contained four recommendations, as detailed below:

1. *To ensure better compliance with Permit Conditions, the following management action could be considered to increase the number and frequency of roadwork inspections:*

i. *Appoint an additional county-wide inspector*

An additional Compliance Inspector has been appointed.

ii. *Make better use of existing "eyes" out on the network, particularly through existing KCC resource (e.g. highways stewards and safety inspectors) but also the general public*

Through closer partnership, such as KCC Operations direct involvement in Kent HAUC, a greater level of information exchange is taking place on a regular basis.

iii. *Carry out additional inspections on weekends*

The additional Compliance Inspector and the four Lane Rental Route Managers are on contracts that include weekend working leading to an increase in weekend inspections taking place.

2. *Expand our interface with works promoters and their contractors to drive a culture change. This could be achieved by:*

i. *More regular targeted performance meetings with selected works promoters*

KCC conduct regular progress meetings, with works promoters, especially to review major projects such as the replacement water metering and the high-speed broadband roll out. Evidence of improvements in site safety can be seen in Table 4.2 below.

**Table 4.2.** Considerate Contractors Scheme scores

| | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| | CCS Score | | | |
| EDF / UKPN | 88% | 90% | 90% | 94% |
| KCC | 78% | 72% | 86% | 83% |
| SEW | 92% | 93% | 95% | 94% |
| SGN | 89% | 91% | 93% | 93% |
| S Water | 95% | 95% | 94% | 92% |
| BT | 82% | 68% | 77% | 82% |
| **All** | **87%** | **85%** | **89%** | **90%** |

ii. *Leading by example – demonstrating to other works promoters how we are managing to improve quality and minimise disruption of our own works*

KCC circulate quarterly inspection results to all works promoters, through HAUC. Meanwhile, we continue to take positive strides in this regard with increased coring of our own works and procedural changes to improve works programming by our contractors.

*iii.* *Continuing to take an active role in national and regional committees, rewarding and sharing best practice and where necessary naming and shaming poor performers*

Members of the KCC roadworks team continue to take an active role, at national, regional and county level, in groups such as the National Joint Authorities Group and the Highway Authorities and Utilities Committee.

*iv.* *Considering the development of a Kent Code of Conduct for all works promoters to sign up to when working in Kent, similar to the initiative implemented by the London Mayor*

This issue has been further examined by KCC. Kent works in partnership with work promoters to gain improvement and work to, and in excess of, the Code of Conduct.

3. *To help improve perceptions, more could be done to publicise successes and promote projects that have exceeded or met challenging targets and delivered customer satisfaction*

   KCC have continued to promote examples of excellent work in the press. An example of which is the aforementioned article, published in the Folkestone Herald in April 2012 (see 4.3.1 item 3)

4. *Continue to develop a Lane Rental scheme for Kent as set out in the Highways and Transportation business plan*

   The Kent Lane Rental Scheme went live on 28th May 2013. The six month review is available on the Kent County Council website.

## 4.4 Recommendations for the future

4.4.1 That we continue to consolidate and build upon the number of joint occupations of the highway and use of extended working hours, to maximise the amount of time the highway is available for use.

4.4.2 To continue to work with all work promoters in improving the quality and timeliness of information and further exploring innovative ways of working. This will improve information to highway users to improve the reliability of journey choices, reduce the risk of penalties to works promoters, and continue to deliver more effective working practices.

4.4.3 To continue to work with all promoters in improving quality of reinstatements through inspection and coring programmes, performance measures and improvement plans.

4.4.4 To refresh the Considerate Contractors scheme with an emphasis on the new Code of Practise for Safety at street works