#### **Performance + Consultation Unit**

# Acquisitive Crime & Part-Night Street Lighting

GURAFI

Sam Taylor Version 1.3 : 04/12/2017

#### Introduction

This briefing document seeks to provide a further response to concerns raised in relation to Surrey County Council's decision to move to Part-Night street lighting across the county. This follows an initial response provided in November 2017<sup>1</sup>. The roll out of this project started in December 2016 with all boroughs completed by March 2017. This report will seek to assess changes in levels of reported crime since the implementation.

An analysis completed by the College of Policing<sup>2</sup> suggested that, in the UK, street lighting has a positive effect on acquisitive crime (Theft, Burglary, and Vehicle Crime) with evidence of reductions across the day, not necessarily just limited to offending in hours of darkness. The effect on other crime types in the UK was negligible within the research.

The mechanisms by which this is achieve are argued to be twofold:

- By introducing improved street lighting within a community, this increases surveillance, 'guarding' locations and deterring potential offenders. It acts as a situational crime prevention measure that focuses on reducing opportunity and increasing perceived risk through modification of the physical environment<sup>3</sup>
- Improved lighting signals investment in the community. This act as a method of strengthening informal social control and community cohesion through more effective street

This paper does not seek to challenge the research around the general merits of crime reduction associated with improved street lighting. This has long been established as part of the 'What Works?' agenda. Instead, it will seek to assess if changes in crime levels are likely to be the result of the implementation of Part-Night Street Lighting based upon the two mechanisms which have been outlined above. To establish that Part-Night Street Lighting is the likely cause of increases in crime we would expect to see evidence of either mechanism operating across the county.

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<sup>&</sup>lt;sup>1</sup> <a href="http://www.surrey-pcc.gov.uk/wp-content/uploads/2017/11/StreetLightingReport.pdf">http://www.surrey-pcc.gov.uk/wp-content/uploads/2017/11/StreetLightingReport.pdf</a>

<sup>&</sup>lt;sup>2</sup> http://library.college.police.uk/docs/what-works/What-works-briefing-improved-street-lighting-2013.pdf

<sup>&</sup>lt;sup>3</sup> Clarke RV. Situational crime prevention. In: Tonry M, Farrington DP, editor(s). Building a Safer Society: Strategic Approaches to Crime Prevention. Crime and Justice: A Review of Research, Vol. 19. Chicago, Illinois: University of Chicago Press, 1995:91-150.

<sup>&</sup>lt;sup>4</sup> Angel S. Discouraging Crime Through City Planning. Working Paper No. 5. Berkeley, CA: University of California, 1968.

### Methodology

For the purposes of this paper crime trends between the 1<sup>st</sup> April 2015 and 30<sup>th</sup> November 2017 will be considered. Comparisons are drawn specifically between 1<sup>st</sup> April 2016 and 30<sup>th</sup> November 2016 and 1<sup>st</sup> April 2017 and 30<sup>th</sup> November 2017 to reflect two distinct periods in which the street lights were on/off respectively. This is intended to avoid the gradual roll out period (Jan-Mar 2017) which may potentially confound results.

In line with existing research in this area, only acquisitive crimes will be included (A complete list of the HO Codes included within this analysis is shown in Appendix A). The research discussed above suggests that impacts on other crime categories in the UK is negligible meaning that a transition to Part-Night Street Lighting would not be expected to impact of these crime types; these have been excluded from the analysis as a result. Further excluded from this analysis are other offences categorised under acquisitive crime which are unlikely to be impacted by changes to street lighting (35 – Blackmail, 41- Theft by an employee, 42 – Theft of mail, 43 – Dishonest Use of Electricity, 46 – Shoplifting and 49A – Making off without payment). Acquisitive crimes also represent the categories of offences which residents of Surrey have expressed most concern around since the implementation of the Part-Night Street Lighting program.

A dataset has been obtained which details levels of lighting by street and ward and includes the lights which are exceptions to the Part-Night Street Lighting program. These locations have been grouped at Ward, rather than street, level to match police recorded data.

For the purposes of this analysis, a dataset has been obtain from the Surrey I website which details the population of wards as well as their area size in hectares<sup>5</sup>. This has been used to create a standardised measure of street lighting coverage (Street Lights per Hectare) in order to recognise the variations in size between wards and also to account for the associated variation in population. Additionally a dataset from the same website has been obtained which details the level of deprivation in each ward.

Crime data has been extracted from the Force's Data Warehouse. This data is extracted from a live Crime Recording System and is liable to change over time. It may differ from police recorded crime datasets published elsewhere as a result.

On occasion, accurate location information is not available. 13.4% of acquisitive crime recorded between 1<sup>st</sup> April 2017 and 30<sup>th</sup> November 2017 could not be reconciled with a ward. For 1<sup>st</sup> April 2016 and 30<sup>th</sup> November 2016, this figure was 13.3%. In relation to acquisitive offences committed between 00.00 and 05.00, 11.5% of the 2017 offences and 11.6% of the 2016 could not be reconciled with a ward. This data is excluded from ward level analysis as a result.

Where the year on year percentage increase cannot be calculated (i.e the 2016 value was 0), the volume change multiplied by one hundred has been used to ensure that these values and associated increases are captured.

Analysis was completed using the statistical package R and visualised through Tableau.

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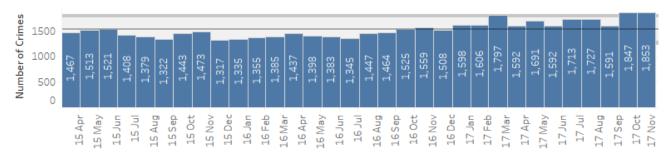
<sup>&</sup>lt;sup>5</sup>https://www.surreyi.gov.uk/Viewdata.aspx?P=Data&referer=%2fViewPage.aspx%3fc%3ddbdatasetinformation%26did%3d456%26v%3d 2301

#### Overview of Acquisitive Crime Levels

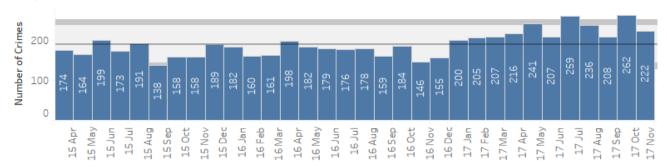
Between 1st April 2017 and 30<sup>th</sup> November 2017, the Force has recorded 13,607 acquisitive crimes, an increase of 17.7% (+2049 offences) compared to 1<sup>st</sup> April 2016 and 30<sup>th</sup> November 2016 (11,558). For offences committed between 00.00 and 05.00 the Force record 1851 offences, an uplift of 32% compared to April 2016 and 30<sup>th</sup> November 2016 (+449, 1402 offences). The proportion of acquisitive offences committed during these hours has therefore increased from 12.1% in Apr – Nov 2016 to 13.6% in Apr – Nov 2017 (+1.5%).<sup>6</sup>

The graphs below present the monthly number of acquisitive offences recorded since April 2015 alongside the number which were committed between the hours of 00.00 and 05.00 and the proportion of acquisitive offences which these crimes account for. The grey area on the charts below represent variance from the average. Although above average over the previous 12 months, monthly volumes rarely fall outsides of the expected deviation within the dataset. Overall levels of acquisitive offending shows an increase from July 2016 whereas offending between 00.00 and 05.00 begins to increase from January 2017.

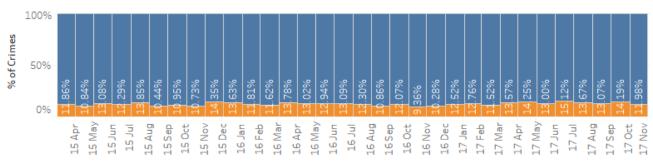
#### Acquisitive Offences Committed



#### Acquisitive Offences Committed between 00:00 and 05:00



### Proportion of Acquisitive Offences Committed between 00:00 and 05:00



<sup>&</sup>lt;sup>6</sup> Includes offences which could not be reconciled to a ward

Having outlined that acquisitive crime has indeed increased across the county, this paper will seek to assess if these increases are the result of changes to street lighting across the county.

#### Hypothesis One – Situational Crime Prevention

The first mechanism by which improved street lighting is suggested to lead to a reduction in offending is through situational crime prevention. For a crime to be committed a suitable target must be available, there must be a lack of a suitable guardian and finally there must be a motivated offender present. The premise of this argument in relation to street lighting is based on Routine Activity Theory<sup>7</sup> which suggests that offenders are creatures of habit and disrupting their routines results in crime being reduced. Street lighting is therefore felt to be a 'suitable/capable' guardian in this model which has a deterrent effect on offenders as it increases the risk of offenders being detected

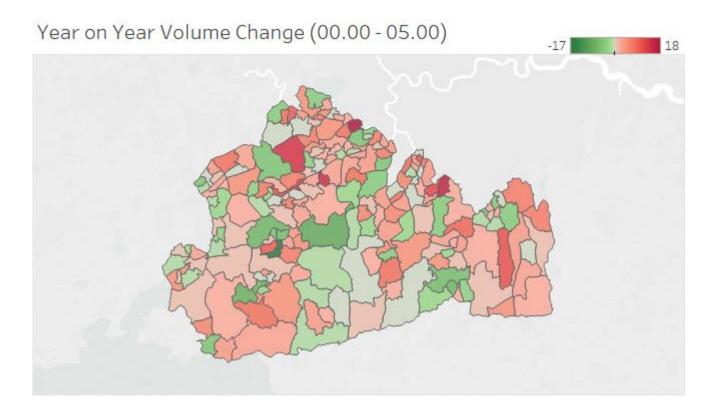
Based on the above, Part-Night Street Lighting would arguable lead to likely and motivated offenders being present during the hours in which the street lights were turned off (i.e. 00:00 and 05:00) at which point the risk of detection would be minimised as a 'suitable/capable' guardian in the form of street lighting would no longer be present. Given the above, it could be expected that there would be an increase in the proportion of offences committed during the hours in which the street lights had been switched off as offenders targeted this situation in which the risk of detection is reduced. This finding would be most notable in relation to those areas which had the least coverage of lighting as a result of the Part-Night Street Lighting program.

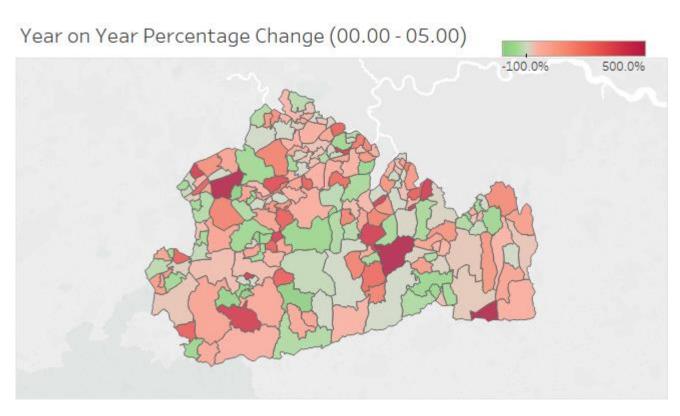
From the graphs above, there certainly appears to be a correlation between increases in acquisitive crime committed between 00.00 and 05.00 and the proportion of acquisitive offences for which these offences account for since the start of the fiscal year lending support to the first mechanism outlined in the research of Situational Crime Prevention. These increases have not been noted equally across the county however. The maps below present a ward level breakdown of firstly the year on year volume increases in acquisitive crime committed between 00.00 and 05.00 and secondly, the year on year percentage increases in acquisitive crime committed between 00.00 and 05.00.

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<sup>&</sup>lt;sup>7</sup> Cohen, L.E. and Felson, M., 1979, 'Social Change and Crime Rate Trends: A Routine Activity Approach'. American Sociological Review. 44: 588-605.

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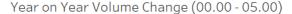


A possible explanation for this variance is the number of street lights exempted for the Part-Night Street Lighting program in each ward. This number varies from ward to ward with the median number of lights left on between 00.00 and 05.00 being 16. Based on the mechanism outlined above and research<sup>8</sup> from the College of Policing, which suggests a diffusion of benefits associated street

 $<sup>^{8}\ \</sup>underline{\text{http://library.college.police.uk/docs/what-works/What-works-briefing-improved-street-lighting-2013.pdf}$ 

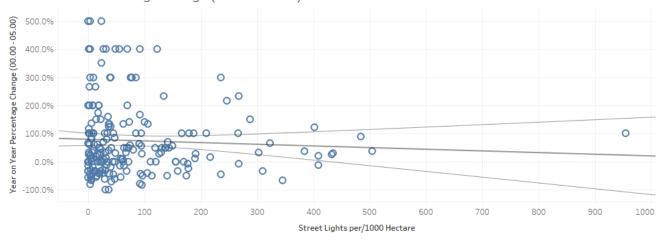
lighting across a locality, we would expect to see those wards which have the greatest number of lights, and larger coverage of street lighting, having smaller year on year increases than those areas with less lights exempt and less coverage. The former would be considered to be more risky to the offender under a model of Situational Crime Prevention whereas the latter would enhance the likelihood of going undetected. In both cases, those wards in close proximity to main arterial routes (M25, M23, M3, A3, A31 and A24) appears to be recording above average increases in acquisitive crime which may be indicative that transient rather than local offenders are committing these offences.

The scatter plots below shows the relationship between both year on year change in the volume of acquisitive crimes recorded which were committed between 00.00 and 05.00 and also the year on year percentage change against street lights per/1000 hectares, with each data point representing a ward.









In relation to the first scatterplot, this shows a positive relationship between street lights per/1000 hectares and year on year volume changes in crime; those areas with greater street light coverage per/1000 hectares saw greater increases in the volume of acquisitive crimes recorded compared with those areas which had less street light coverage. The second scatterplot shows a negative relationship between street lighting per/1000 and the year on year percentage change in acquisitive crimes committed between 00.00 and 05.00; those areas with less street light coverage as a result of the Part-Night Street Lighting program saw greater year on year percentage increases compared

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with those areas which had higher street light coverage. In both cases these values could not be considered statistically significant<sup>9</sup> (Full models are provided in Appendix B and Appendix C).

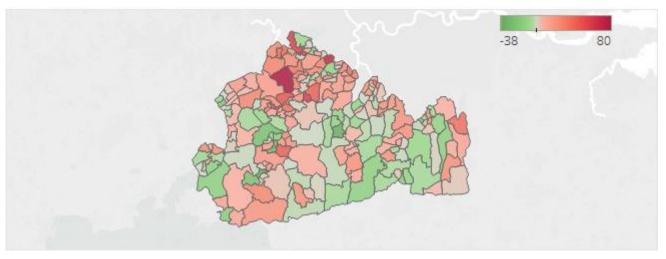
In relation to a Situational Crime Prevention hypothesis, there does appear to be a relationship in which street lighting could be seen as a protective factor against increased year on year percentage increases in crime committed between 00.00 and 05.00 although this finding could not be considered statistically significant.

### Hypothesis Two – Informal Social Control

The second mechanism by which improved street lighting is said to reduce levels of offending is through improving informal social control within a location. This hypothesis has its basis in Wilson and Kelling's 'Broken Windows Theory<sup>10</sup>' in which street lighting makes a location more welcoming and is a display of civic pride; street lighting is a display of investment within a community. The argument therefore suggests improved street lighting exerts a degree of informal social control over an area, deterring would be offenders as a result. Importantly however, in relation to this second mechanism, the impacts are likely to cover offending both during the day as well as the night. To this end, acquisitive offences committed outside of the hours of 00.00 and 05.00, when the Part-Night Street Lighting program is not in effect, will need to be considered. Additionally, the level of deprivation in each ward will also be considered as part of the modelling process to account for the relative levels of deprivation across the county which may skew the calculation.

In the current fiscal year (Apr – Nov 17), the Force has seen an increase of 17.7% in acquisitive crime compared to the same period in the previous year (Apr – Nov 16), an additional 2049 offences. Unlike acquisitive offences committed between 00.00 and 05.00 however these offences have been increasing since July 2016 although the most notable spikes have come in the months of March, October and November of 2017. The maps below present a ward level breakdown of firstly the year on year volume increases in acquisitive crime and secondly, the year on year percentage increases in acquisitive crime.

# Year on Year Volume Change



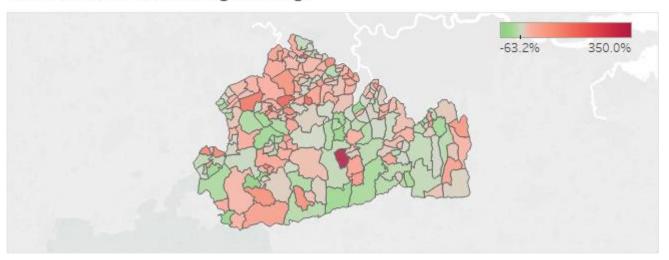
<sup>&</sup>lt;sup>9</sup> p-values of 0.0687303 and 0.434011 respectively

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<sup>&</sup>lt;sup>10</sup> Wilson, J. Q. and Kelling, G., 1982, 'Broken windows', The Atlantic Monthly: 29:38

### Year on Year Percentage Change



Those wards in the North West of the county appear to have recorded the most significant volume and percentage increases year on year however increases in acquisitive crime have not been record across the piece.

As previously discussed, this variance may be explained through the number of street lights exempted for the Part-Night Street Lighting program in each ward. Based on the second hypothesis offered in relation to how street lighting reduces crime, those areas which had less street light coverage would arguably see greater reductions in Informal Social Control present and larger increases in acquisitive crime as a result.

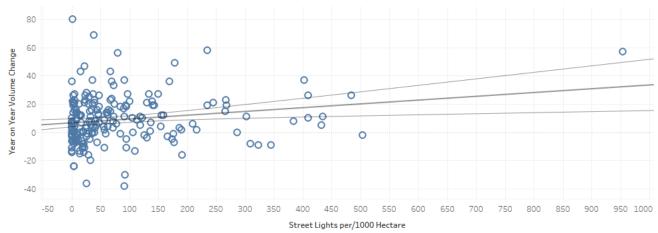
The scatter plot below shows the relationship between both year on year increases in the volume of acquisitive crimes recorded and also the year on year percentage increase against street lights per/1000 hectares with each data point representing a ward.

The first scatter plot displays a positive relationship between Street Lights per/1000 Hectares, with the year on year volume change in acquisitive crime levels increasing as street light coverage in a ward increases. Those locations with fewer lights in place as part of the Part-Night Street Lighting program saw smaller increases in acquisitive crime than those with more street lights exempt from the pilot. The second plot displays a similar trend for year on year percentage change; those locations with greater coverage of street lighting saw greater year on year increases in acquisitive crime compared to those locations with fewer lights.

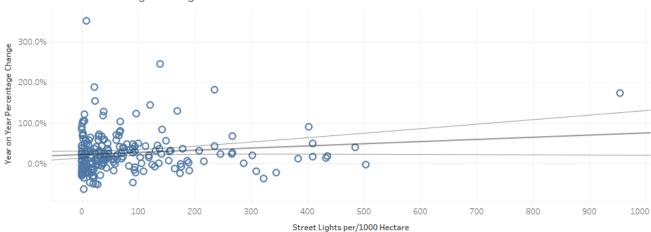
In relation to the first plot, the finding that higher levels of Street Lights per/1000 hectares was associated with an increase in the year on year volume change in acquisitive crime (having adjusted for level of deprivation by adding this as a potential confounder within the regression analysis) could be considered statistically significant. In relation to year on year percentage change, this was not significantly associated with number of Street Lights per/1000 hectares.<sup>11</sup> (Full models are provided in Appendix D and Appendix E).

<sup>&</sup>lt;sup>11</sup> p-values of 0.00694 and 0.0684 respectively









Given an Informal Social Control hypothesis centres around general increases in crime it is important to consider the national picture and crime trends in neighbouring Force areas to determine if Surrey is an outlier in this regard. The latest national dataset available from the ONS provides comparative figure for April – June 2016 and 2017. With regards to the national picture, levels of Theft Offences<sup>12</sup> have increased with all Force areas currently experiencing increases. The average increase experienced across England and Wales is 14.3% which rises to 15.2% when the MPS is excluded. Surrey's increase during this period was 17.1%. By comparison the South East region (Hampshire, Kent, Sussex and Thames Valley) has seen increases of 18.1% whilst Surrey's Most Similar Force Group (Dorset, Thames Valley and Cambridgeshire) have experienced an average increase of 21.3%.

The graph below provides an overview of overall Theft Offences<sup>13</sup> per/1000 population since April 2015 for both Surrey and England & Wales till the end of June 2017. This data is useful in that it highlights that a similar trend in recorded acquisitive crime has been experienced across England and Wales (with the exception of March 2017 in which Surrey recorded an increase in excess of increase recorded nationally).

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<sup>&</sup>lt;sup>13</sup> Includes offences recorded 35 – Blackmail, 41- Theft by an employee, 42 – Theft of mail, 43 – Dishonest Use of Electricity, 46 – Shoplifting and 49A – Making off without payment





Year on year increases therefore are not unique to Surrey, an extract from the latest Office of National Statistics bulletin is shown below to this effect:

"Since the mid-1990s, both the Crime Survey for England and Wales (CSEW) and police recorded crime have shown long-term reductions in most categories of theft. However, police recorded theft increased by 11% in the year ending June 2017 compared with the previous year and continues the recent upward rise seen in the last two years....It is thought that some sub-categories of theft such as burglary and vehicle theft are well-recorded by police. Therefore in these categories the increases are likely to reflect a genuine rise in these types of crime" – ONS, June 2017<sup>14</sup>

In relation to an Informal Social Control hypothesis, there appears less evidence for a causal association between levels of street lighting an increases in crime. This category of offences started to increase prior to the implementation of the Part-Night Street Lighting Program and increases have been replicated at a national level with the majority of Force areas experiencing a similar change in crime levels with no associated changes to street lighting within the Force area.

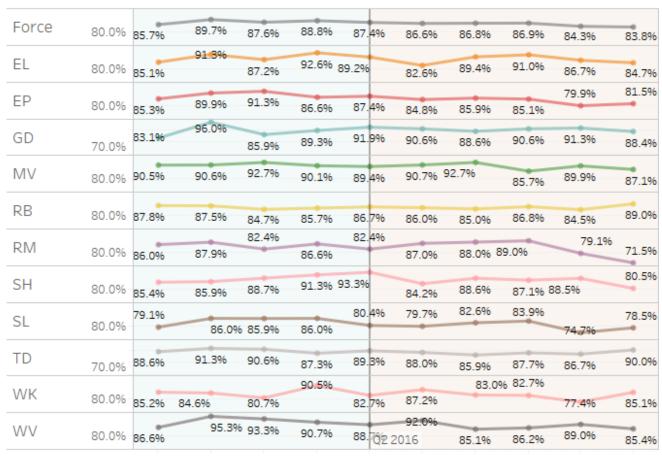
#### Other Considerations

The chart below provides an overview of responses to the Joint Neighbourhood Survey question regarding respondents feeling of safety after dark. The percentages reflect the number of respondents who felt safe during hours of darkness. Although not directly related to street lighting the dataset below could be considered indicative of public sentiment.

<sup>&</sup>lt;sup>14</sup>https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimeinenglandandwales/june2017

### Joint Neighbourhood Survey:

Q6: How safe do you feel walking alone in your neighbourhood after DARK



Q2 2015 Q3 2015 Q4 2015 Q1 2016 Q2 2016 Q3 2016 Q4 2016 Q1 2017 Q2 2017 Q3 2017

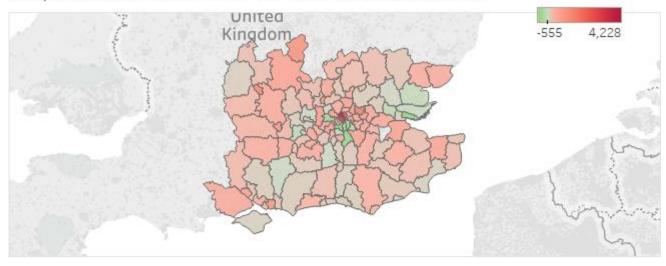
At Force level, perceptions of safety after dark have been in reduction since quarter one of 2016 however the reduction has been more marked over the previous six months, reducing from 86.9% in the first quarter of 2017 (Jan – Mar) to 83.8% in quarter three (Jul – Sept). This trend has not been experience equally across the Force however. The reduction has been particularly acute in Runnymede with perceptions of safety after dark falling from 89% to 71.5% over the previous 9 months. Of note, this borough has recorded amongst the largest year on year increases in crime during this period. By contrast areas such as Tandridge have actually seen improvements with perceptions of safety increasing from 87.7% of respondents to 90% over the same period. Although at present this reduction is not statistically significant, this reduction is cause for concern.

Another consideration in relation to increases in acquisitive crime within Surrey throughout 2017 is displacement of offences from the Metropolitan Police Service as a result of their 'MetTrace' campaign. This 3 year program has seen reductions of up to 85% in volume of burglaries in targeted areas<sup>15</sup>. London Boroughs in the South West such as Croydon and Merton have seen reductions in

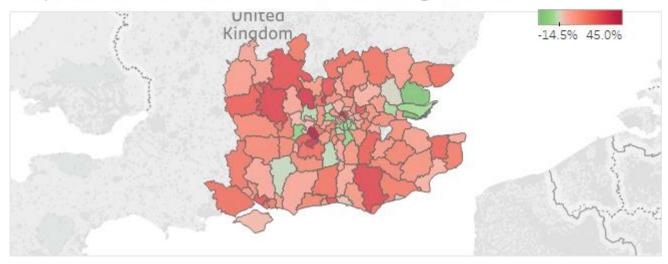
<sup>15 &</sup>lt;u>https://www.met.police.uk/about-the-met/campaigns/MetTrace/what-is-mettrace/</u>

offences of -6.2% and -2.5% although much of the MPS Force area has seen increases in acquisitive crime in the latest ONS reporting period.

### Acquisitive Offences Year on Year Volume Increase



# Acquisitive Offences Year on Year Percentage Increase



## Summary

Residents of Surrey are without doubt experiencing genuine and sustained increases in levels of acquisitive crime. In the current fiscal year levels of acquisitive crime across Surrey have increased (+17.7%) compared to the same period in the previous year. Acquisitive offences committed between 00.00 and 05.00 have increased by 32% year on year. This report has sought to explore if these increases are likely to be the result of a transition to a Part-Night Street Lighting. Increases in acquisitive crime have not been experienced equally across the county however there is some evidence that wards with less lighting coverage as a result of this program has experienced greater year on year percentage increases in acquisitive crime committed between 00.00 and 05.00 compared to those locations which have greater lighting; although not to a statistically significant degree.

In relation to overall acquisitive crime levels there appeared to be no statistically significant association between years on year increases in either the volume of acquisitive crime or percentage

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change and street lighting coverage which would be expected under an Informal Social Control hypothesis. Similar patterns have been experienced nationally which suggests that the implementation of a Part-Night Street Lighting program may not necessarily be the sole cause of the increases in acquisitive crime recorded over the previous 12 months. Please note that the increases recorded in Surrey were above the national average. This variance could be explained by a transition to Part-Night Street Lighting arrangements which may have accentuated increases recorded compared to elsewhere in the country. Other considerations include the potential displacement of offences from MPS Force area, particularly in boroughs which neighbour Surrey. Given the potential displacement of offences from MPS, the Force may wish to consider the use of 'Smartwater' which has been employed with the MPS to great effect with reductions of 85% in Burglary offences in target areas. The product was initially trialled within Surrey on a small scale in late 2016 and saw some promising results but has not been rolled out more widely at this point.

Of concern is a marked reduction in resident's perception of safety during hours of darkness within the county over the previous 6 months which, although not statistically significant at this stage, is trending in this direction. This is not to suggest that a causal relationship has been established however Surrey Police/Surrey County Council may wish to further explore and consult residents to understand the main causes of a reduction in this metric.

Given the increases in acquisitive crime across the county over the previous 12 months it is recommended that the Force explore an appropriate response in terms of crime reduction strategies. There is some evidence that wards with less street light coverage as a result of the Part-Night Street Lighting program have experienced larger year on year percentage increases in acquisitive crime committed between 00.00 and 05.00 although this is not to a statistically significant degree within this dataset.

Forces across England and Wales have experienced similar trends in acquisitive crime trends which makes it difficult to isolate street lighting at the causal factor. Given the above average increases across the county compared to the national average however, Part-Night Street Lighting may explain this variance although the potential displacement of offenders from MPS boroughs into Surrey should also considered within any crime prevention strategy. A matrix has been prepared to highlight those wards considered to be most at risk given trends in crime over the previous 12 months to allow them to be prioritised (Provided in the attached dataset).

Although not directly related to levels of acquisitive crime, it is also recommended that Surrey Police and Surrey County Council seek to understand the primary drivers of reductions in perceptions of safety amongst residents surveyed as part of the Joint Neighbourhood Survey.

# Appendix A – Offence List

126	Interfering with a motor vehicle
28A	Burglary in a Dwelling (exc Att/Dis)
28B	Attempted burglary in a dwelling
28C	Distraction burglary in a dwelling
28D	Attempted distraction burglary in a dwelling
28E	Burglary - Residential
28F	Attempted burglary - Residential
28G	Distraction burglary - Residential
28H	Attempted distraction burglary - Residential
29	Aggravated burglary in a dwelling
29A	Aggravated burglary - Residential
30A	Burglary in a Building other than a Dwelling (exc Att)
30B	Attempted burglary in a building other than a dwelling
30C	Burglary - Business and community
30D	Attempted burglary - Business and community
31	Aggravated burglary in a building other than a dwelling
31A	Aggravated burglary - Business and community
37.2	Aggravated vehicle taking
39	Theft from the person
40	Theft in a dwelling other than from an automatic machine or meter
44	Theft or unauthorised taking of a pedal cycle
45	Theft from a motor vehicle
47	Theft from automatic machine or meter
48	Theft or unauthorised taking of motor vehicle
49	Other theft

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#### Appendix B – Regression Model for Volume Change (00.00 – 05.00)

```
Residuals:
                    1Q
                           Median
       Min
-19.0351 -2.6115 -0.3962
                                        2.2950 16.2353
Coefficients:
                       Estimate Std. Error t value Pr(>|t|) 1.574856 0.396351 3.973 9.9e-05
                                                   3.973 9.9e-05 ***
(Intercept)
Lights_Per_1000H 0.004963
                                      0.002712
                                                     1.830
                                                                0.0687 .
Signif. codes:
0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Residual standard error: 4.608 on 199 degrees of freedom
(5 observations deleted due to missingness)
Multiple R-squared: 0.01655, Adjusted R-squared: 0.01161
F-statistic: 3.349 on 1 and 199 DF, p-value: 0.06873
```

### Appendix C – Regression Model for Percentage Change (00.00 – 05.00)

#### Appendix D – Regression Model for Volume Change

```
Residuals:
                 1Q
                      Median
     Min
                                       3Q
                                                Max
-46.183 -10.684
                      -1.015
                                   9.846 73.608
Coefficients:
                        Estimate Std. Error t value Pr(>|t|)
8.774814 2.699707 3.250 0.00135
                                                     3.250 0.00135 **
(Intercept)
                                                              0.00694 **
Lights_Per_1000H 0.027200
                                       0.009969
                                                     2.728
Deprivation
                       -0.233587
                                       0.252729
                                                   -0.924
                                                              0.35648
Signif. codes:
0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Residual standard error: 16.92 on 198 degrees of freedom
(5 observations deleted due to missingness)
Multiple R-squared: 0.03927, Adjusted R-squared: 0.02957
F-statistic: 4.047 on 2 and 198 DF, p-value: 0.01894
```

#### Appendix E – Regression Model for Percentage Change

```
Residuals:
    Min
               10 Median
                                         Max
-0.8750 -0.2992 -0.0755
                            0.199\hat{5}
                                      3.2370
Coefficients:
                      Estimate Std. Error t value Pr(>|t|)
                    0.3230089 0.0813169
(Intercept)
                                               3.972 9.96e-05 ***
Lights_Per_1000H 0.0005502 0.0003003
                                               1.832
                                                        0.0684 .
                   -0.0115351 0.0076124
                                             -1.515
                                                        0.1313
Deprivation
Signif. codes:
0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Residual standard error: 0.5097 on 198 degrees of freedom
  (5 observations deleted due to missingness)
Multiple R-squared: 0.02665, Adjusted R-squared: 0.01682 F-statistic: 2.711 on 2 and 198 DF, p-value: 0.06897
```

# Appendix F – Top Risk Areas

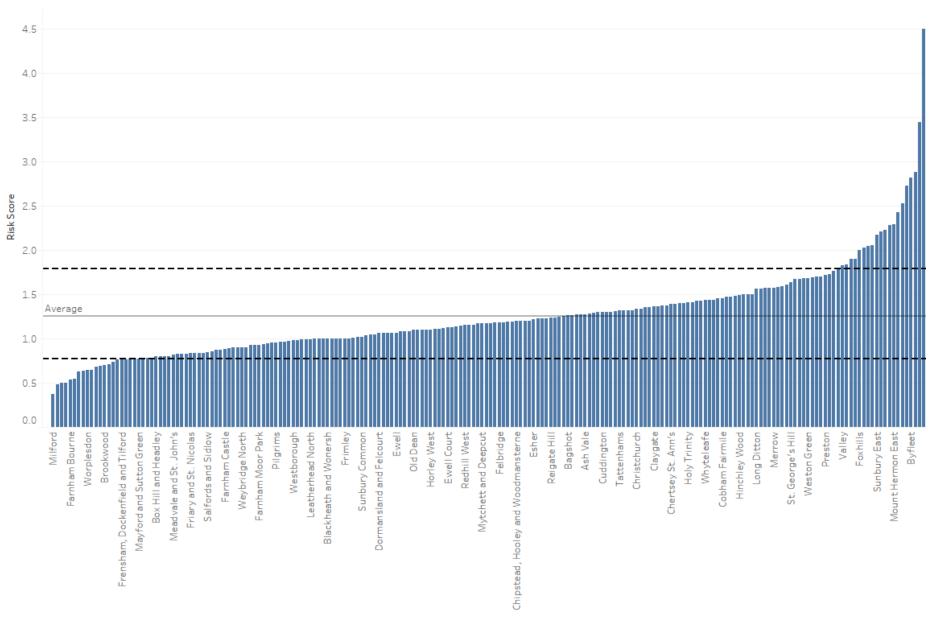
Acquisitive Crime Risk Areas (00.00 - 05.00)	Borough	Division
West End	Surrey Heath	W
Brockham, Betchworth and Buckland	Mole Valley	E
Godalming Binscombe	Waverley	W
Ashtead Village	Mole Valley	E
Banstead Village	Reigate & Banstead	E
Old Dean	Surrey Heath	W
Preston	Reigate & Banstead	E
Walton Ambleside	Elmbridge	N
Witley and Hambledon	Waverley	W
Horsell East and Woodham	Woking	W
Byfleet	Woking	W
Christchurch	Guildford	W
Hindhead	Waverley	W
Nork	Reigate & Banstead	E
Parkside	Surrey Heath	W
Sunbury East	Spelthorne	N
Cobham Fairmile	Elmbridge	N
Holmwoods	Mole Valley	E
Stoneleigh	Epsom & Ewell	E
Molesey East	Elmbridge	N
Maybury and Sheerwater	Woking	W

Acquisitive Crime Risk Areas	Borough	Division
Goldsworth West	Woking	W
Horsell East and Woodham	Woking	W
Byfleet	Woking	W
Staines South	Spelthorne	N
West End	Surrey Heath	W
Godalming Binscombe	Waverley	W
Mount Hermon East	Woking	W
Farnham Weybourne and Badshot Lea	Waverley	W
Hermitage and Knaphill South	Woking	W
Farnham Upper Hale	Waverley	W
Sunbury East	Spelthorne	N
Cranleigh West	Waverley	W
Witley and Hambledon	Waverley	W
Thames Ditton	Elmbridge	N
Foxhills	Runnymede	N
Auriol	Epsom & Ewell	E
Tatsfield and Titsey	Tandridge	E
Beare Green	Mole Valley	E
Valley	Tandridge	E
Burpham	Guildford	W

Reviewed By: Tony Fenton-Jones

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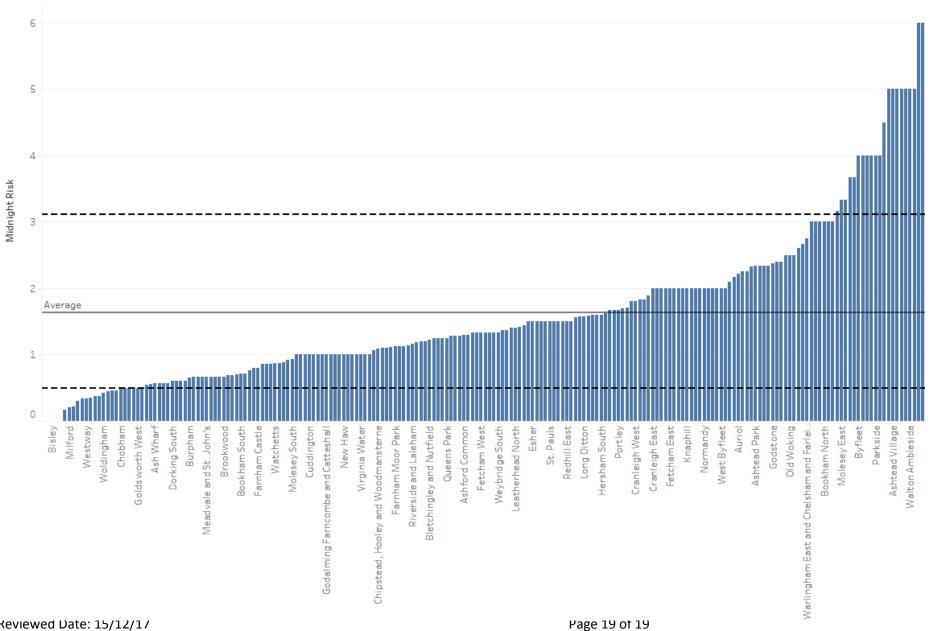


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### Acquisitive Crime Committed between 00.00 and 05.00 Risk Matrix



Reviewed Date: 15/12/1/ Pa