

## WEST SUSSEX MENTAL HEALTH SERVICE REDESIGN



## FINAL INDEPENDENT TRANSPORT ANALYSIS REPORT VERSION 8

## 1.0 Summary

1.1 Sussex Partnership NHS Foundation Trust [SPFT] is proposing to redesign its mental health services in West Sussex. The current proposal is to:

- close the inpatient service currently provided at the Harold Kidd Unit in Chichester and Iris Ward at Horsham Hospital
- relocate the current inpatient bed provision on both sites to Meadowfield Hospital and Salvington Lodge at Swandean Hospital in Worthing and Langley Green Hospital in Crawley
- establish single gender wards at Meadowfield Hospital and Salvington Lodge, Swandean Hospital in Worthing and Langley Green Hospital in Crawley.

1.2 The specific service changes involved in the proposal are as follows:

<b>Patient group:</b>	<b>Current service:</b>	<b>To be provided in future at:</b>
Older people with mental health problems	12-bed mixed ward at the Harold Kidd Unit in Chichester (Orchard Ward)	Single gender wards at Meadowfield Hospital in Worthing and Langley Green Hospital in Crawley
Male patients with dementia	10-bed single gender ward at the Harold Kidd Unit in Chichester (Grove Ward)	Refurbished ward at Salvington Lodge (The Burrowes Unit), Swandean Hospital in Worthing
Female patients with dementia	12-bed single gender ward at Horsham Hospital (Iris Ward)	New ward at Salvington Lodge (The Burrowes), Swandean Hospital in Worthing (subject to agreement with Sussex Community NHS Foundation Trust)

1.3 The proposal will mean that patients and their carers and relatives, as well as staff, will have to travel to different locations in West Sussex and this may involve additional travel time and cost. In view of this, SPFT commissioned West Sussex County Council's Insight and Intelligence Service, working in partnership with the Trust, to provide a transport analysis to quantify the travel impact for patients and their carers and relatives.

1.4 A separate transport analysis will be undertaken for staff since any travel impact will be considered as part of their employment terms and conditions, covered by national and local policies and procedures.

- 1.5 The Insight and Intelligence Service used anonymised patient data provided by the Trust to undertake their analysis. Based on this it is possible to quantify the travel impact in relation to: i) mode of transport, ii) travel distances and iii) cost of travel. Due to the number of postcodes and the numerous possible travel journeys, four key scenarios were generated and their current and future mileage and costs for car, bus and train calculated. An additional scenario was included following the Transport Review Group meeting held on the 30 November. For further information refer to section 4.3.
- 1.6 The groups affected by the proposed service redesign, transport analysis methodology and key findings are detailed in sections 2-4.
- 1.7 SPFT jointly with the local CCGs convened a Transport Review Group to review this report, its findings and make suggestions on possible transport solutions for those affected by the proposed change. The Group met on the 30<sup>th</sup> November and its membership included service user and carer representatives, SPFT Governors and Healthwatch, Trust, CCG and West Sussex County Council representatives. It was chaired by SPFT's Chief Operating Officer. The Transport Group's response to this report and their suggestions on transport solutions are detailed in the *Transport Review Group's Response To The Draft Independent Transport Analysis Report Version 7*.
- 1.8 The Transport Analysis report and the Transport Review Group's response will be submitted to the Independent Review Panel for their consideration.

## **2.0 Groups affected by the proposed service redesign**

- 2.1 The primary group affected will be those patients and their carers and relatives who are currently admitted to and visit Grove and Orchard wards at the Harold Kidd Unit in Chichester and Iris ward at Horsham Hospital.
- 2.2 174 patients will potentially be affected as well as their relatives and carers. The estimate of likely patients affected is based on the numbers that would have been admitted to the three wards in 2017/18, i.e. 35 to Grove ward (average length of stay of 35 days), 57 to Iris ward (average length of stay of 57 days) and 82 to Orchard ward (average length of stay of 51 days). The larger number for Orchard reflects the shorter average length of stay for older people with mental illness (functional) compared to those with dementia.
- 2.3 It is also worth noting that annually only 6-8 per cent of those cared for by the adult and older people's community teams are admitted. The vast majority of patients receive their care either at or close to their homes in a variety of community settings.
- 2.4 In addition, SPFT is proposing to eliminate mixed sex accommodation as part of the proposed service redesign. Currently Oaklands ward is a mixed unit, admitting both men and women but will become a male only ward. Therefore female patients and their carers and relatives who are admitted to or visit the Oaklands ward for adults of working age at the Chichester Centre will therefore

be affected. The ward is on the same site as the Harold Kidd Unit and therefore the travel impact for adults of working age will be the same as for older people.

- 2.5 Wherever possible, SPFT will admit adults of working age, older people and patients with dementia to the closest inpatient unit. Due to bed availability this is not always possible and therefore patients and their carers and relatives may have to travel to other units in West Sussex.
- 2.6 Grove ward at the Harold Kidd Unit in Chichester is currently male only. Female patients with dementia and their carers and relatives from the Chichester and surrounding areas are therefore already travelling to The Burrowes Unit, Swandean Hospital. As Iris Ward is female only, male patients with dementia and their carers and relatives from Horsham and the surrounding area are also currently travelling to The Burrowes Unit.

### **3.0 Transport Analysis: Methodology**

- 3.1 SPFT provided the Insight & Intelligence Service with anonymised inpatient data for three wards, i.e. Grove and Orchard at the Harold Kidd Unit in Chichester and Iris in Horsham. This included the anonymised postcodes, i.e. Postal Code District of those patients who had been admitted to these wards since they opened.
- 3.2 The Insight & Intelligence Service used the data to map where current patients reside and the impact of travelling to:
  - The Burrowes Unit, Salvington Lodge on the Swandean Hospital site, Worthing
  - Meadowfield Hospital on the Swandean Hospital site, Worthing, and
  - Langley Green Hospital, Crawley
- 3.3 Carto software was used to map the data and identify the different travel impact in relation to:
  - mode of transport, i.e. car, bus and train
  - travel distances from defined localities to the three inpatient sites outlined in 3.2
  - average weekly cost of travel for car, bus and train.
- 3.4 An interactive web-based software package accessed via a web link, Carto provides maps to show the differences in moving locations allowing some inter-activity. The software is designed to allow additional postcodes to be entered easily which can then be geographically mapped to quantify the travel impact. For further information about the software and how it is used see Appendix 1.

- 3.5 The following web links provide access to data for the three wards affected by the proposed service changes:

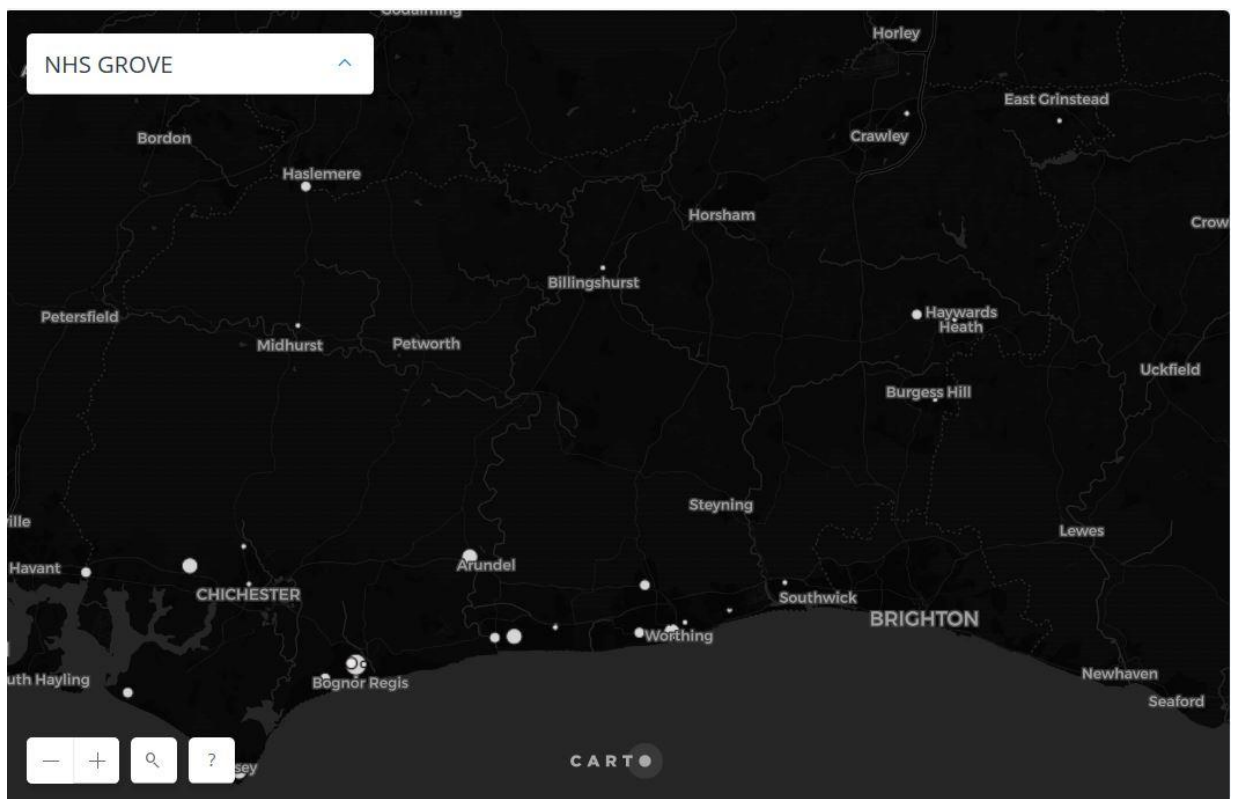
Grove ward, Harold Kidd Unit, Chichester: <https://west-sussex-county-council.carto.com/u/wsc-cto-3/builder/c6774005-7754-4ecd-9b33-f8c78694c296/embed>

Orchard ward, Harold Kidd Unit, Chichester: <https://west-sussex-county-council.carto.com/u/wsc-cto-3/builder/d4000fa8-e62e-49fc-ab27-8908ffd1cf10/embed>

Iris ward, Horsham Hospital: <https://west-sussex-county-council.carto.com/u/wsc-cto-3/builder/4fd5c595-81d3-4e94-9008-9aa7729a5ddf/embed>

- 3.6 Carto provides different mapping views. As an illustration, Map A below identifies those using SPFT services by white circles with the larger circles indicating where larger numbers of people live.

Map A: Where people are currently living across West Sussex



- 3.7 The average weekly costs of car, bus and train are used, in line with industry guidelines, i.e.: Car: £0.45p per mile; Bus: £0.05p per mile and Train: £0.31p per mile. See Appendix 1 for further information on how to use the software.

## 4.0 Transport Analysis: Key Findings

- 4.1 By using the total number of admissions to these wards, 1,990 anonymised patient postcodes were entered into the Carto software resulting in numerous potential different travel impacts across West Sussex. Four scenarios were originally created to demonstrate the impact for the key groups affected by the proposed service changes, e.g. people living in the Chichester or Horsham areas and the north east and north west of West Sussex who have difficult travel journeys. In view of the known difficulties of travelling to and from Midhurst, the Transport Review Group, suggested that this area was included as well. The five scenarios are detailed below:

**Scenario A based on Orchard Ward:** *individuals from the Chichester area travelling to The Burrowes Unit or Meadowfield Hospital on the Swandean Hospital site, Worthing and Langley Green Hospital, Crawley*

**Scenario B based on Iris Ward:** *individuals from the Pulborough area travelling to The Burrowes Unit or Salvington Lodge on the Swandean Hospital site, Worthing*

**Scenario C based on Iris Ward:** *individuals from the Horsham area travelling to Salvington Lodge on the Swandean Hospital site, Worthing*

**Scenario D based on Grove ward:** *individuals from the Pulborough area travelling to Salvington Lodge on the Swandean Hospital site, Worthing.*

**Scenario E based on Orchard/Grove Wards:** *individuals from the Midhurst area travelling to Harold Kidd Unit, Chichester, The Burrowes Unit, Meadowfield Hospital, Salvington Lodge on the Swandean Hospital site, Worthing and Langley Green Hospitals, Crawley.*

- 4.2 As outlined in 3.4 above, other scenarios can be easily generated from either postcodes already on the Carto software or by entering new ones.
- 4.3 The travel impact of the five scenarios including the current and future mileage and costs by the three modes of travel on a daily basis are detailed in the table overleaf.

## Travel Impact of the Five Scenarios:

	Current Travel		Swandean Hospital, Worthing			Langley Green Hospital, Crawley		
Scenario A:	Daily	Duration	Daily	Duration	Difference	Daily	Duration	Difference
Mileage*	0.68		16.05		<b>+15.37</b>	32.59		<b>+31.91</b>
Car	£0.30	4 mins	£14.44	27 mins	<b>+23 mins +£14.14</b>	£29.33	1 hr 07 mins	<b>+1 hr 03 mins +£29.03</b>
Bus	£0.34	15 mins	£9.00	2 hrs 07 mins	<b>+1 hr 52 mins +£8.66</b>	£13.00	1 hr 46 mins	<b>+1 hr 31 mins +£12.66</b>
Train	n/a	n/a	£8.70	29 mins	<b>+29 mins +£8.70</b>	£16.10	50 mins	<b>50 mins +£16.10</b>
<b>Scenario B:</b>						n/a	n/a	<b>n/a</b>
Mileage*	18.06		7.01		<b>-11.05</b>			
Car	£16.25	20 mins	£6.30	10 mins	<b>-10 mins -£9.95</b>			
Bus	£4.37	42 mins	£8.00	44 mins	<b>+2 mins +£3.63</b>			
Train	£11.30	28 mins	£4.80	49 mins	<b>+21 mins -£6.50</b>			
<b>Scenario C:</b>						n/a	n/a	<b>n/a</b>
Mileage*	0.53		8.75		<b>+8.22</b>			
Car	£0.46	4 mins	£7.87	30 mins	<b>+26 mins +£7.45</b>			
Bus	£0.26	4 mins	£6.00	44 mins	<b>+40 mins +£5.34</b>			
Train	n/a	n/a	£9.10	49 mins	<b>+49 mins +£9.10</b>			
<b>Scenario D:</b>						n/a	n/a	<b>n/a</b>
Mileage*	9.4		8.75		<b>-0.65</b>			
Car	£8.46	34 mins	£7.87	24 mins	<b>-10 mins -£0.59</b>			
Bus	£7.00	1 hr 23 mins	£8.00	44 mins	<b>-39 mins +£1.00</b>			
Train	£10.30	35 mins	£9.10	59 mins	<b>+24 mins -£1.20</b>			
<b>Scenario E:</b>								
Mileage*	11.2		24.6		<b>+13.4</b>	31		<b>+19.8</b>
Car	£10.08	20 mins	£22.14	37 mins	<b>+17 mins +£12.06</b>	£27.90	54 mins	<b>+34 mins +£17.82</b>
Bus	£8.00	48 mins	£8.20	1 hr 30 mins (with 20 min walk) or 2 hr 08 mins	<b>+42 mins/ +1hr 20 mins +£0.20</b>	£11.00	2 hrs	<b>+1hr 12 mins +£3.00</b>
Train	£15.16	2 hrs 4 mins (train and bus)	£20.03	2 hr 57 mins	<b>+53 mins +£4.87</b>	£22.45	3 hrs (train and bus)	<b>+56 mins +£7.29</b>

\* An average mileage cost is used for current travel, i.e: Car: £0.45p per mile; Bus: £0.05p per mile and Train: £0.31p per mile and actual costs for future bus and train (off peak) travel.

Note 1: The costs for car, bus and train are return fares.

Note 2: In view of the client group affected, the above analysis limits the amount of walking required, unless otherwise specified.

## **5.0 Next Steps**

- 5.1 The Transport Review Group's response to this report will be presented to the West Sussex Service Redesign Programme Board, submitted to the Independent Review Panel for consideration and included within further public engagement/consultation to seek wider public feedback.

**December 2018**



# Appendix 1: Further information about the Carto Software and how to use the software

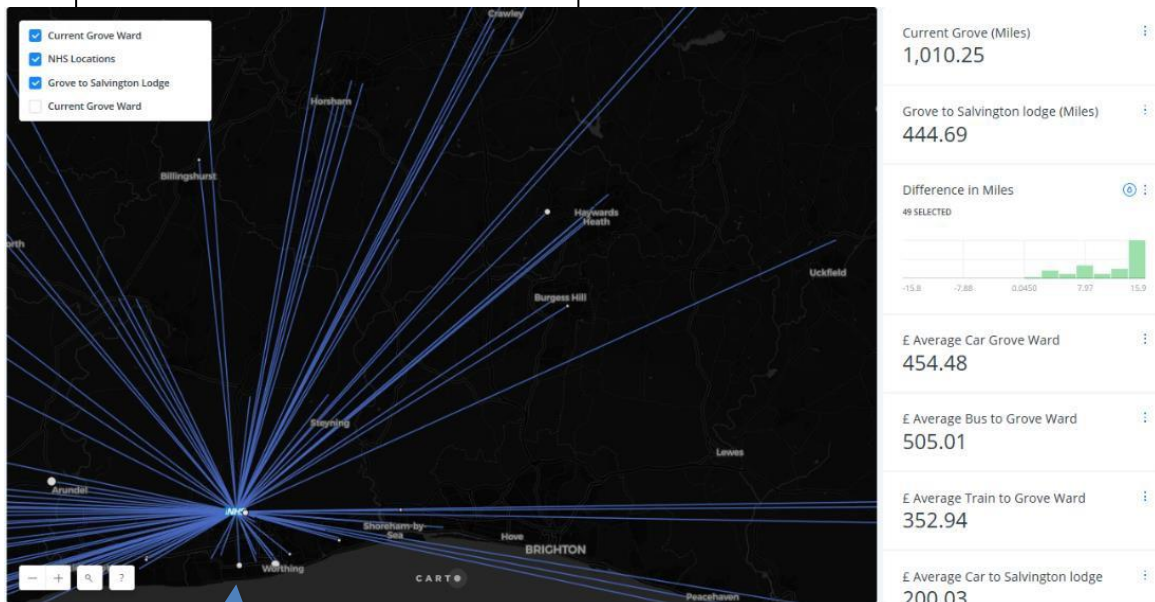
## West Sussex Transport Analysis

The Transport analysis is for three different hospital wards, they are Grove Ward, Orchard Ward and Iris Ward. Included in the analysis are details about mode, cost and distance.

The Carto software used for the presentations we can use visualizations to show the differences in moving locations as well as giving information to make logical decisions.

## How to use Software

The map is accessed via a web link and will open the map as shown below.

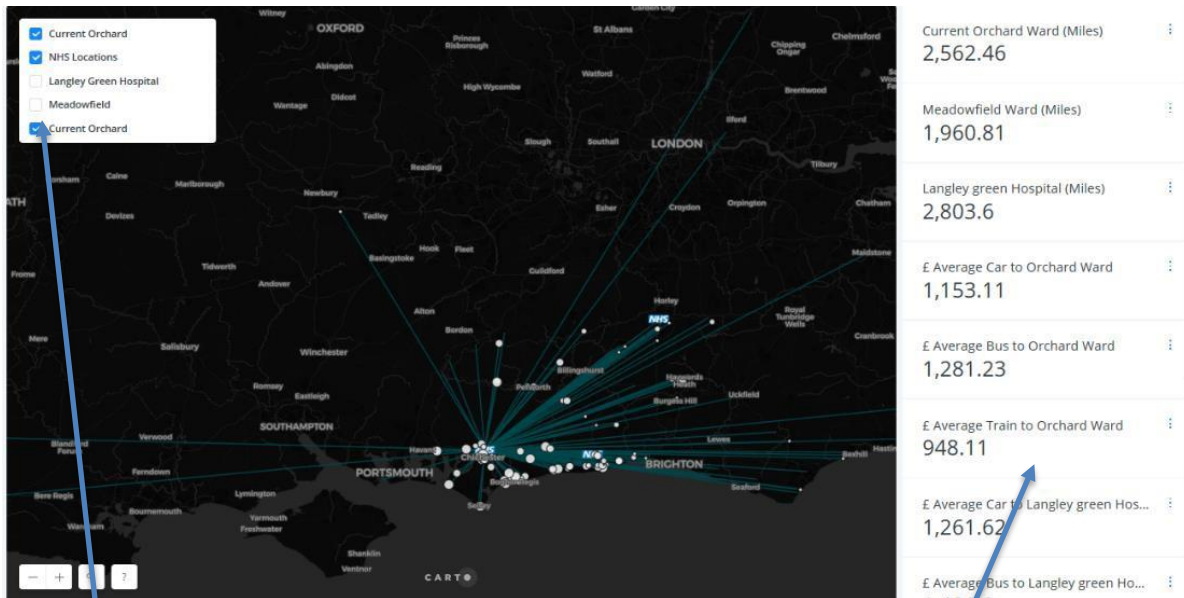


The Map has two aspects to it, the locations on the left, the lines gives representation of distance, the white dots are clickable which pop up contextual information about the location.

On the right-hand side are widgets that recalculate depending on what is show and selected on the map allowing a degree of interactive analysis.

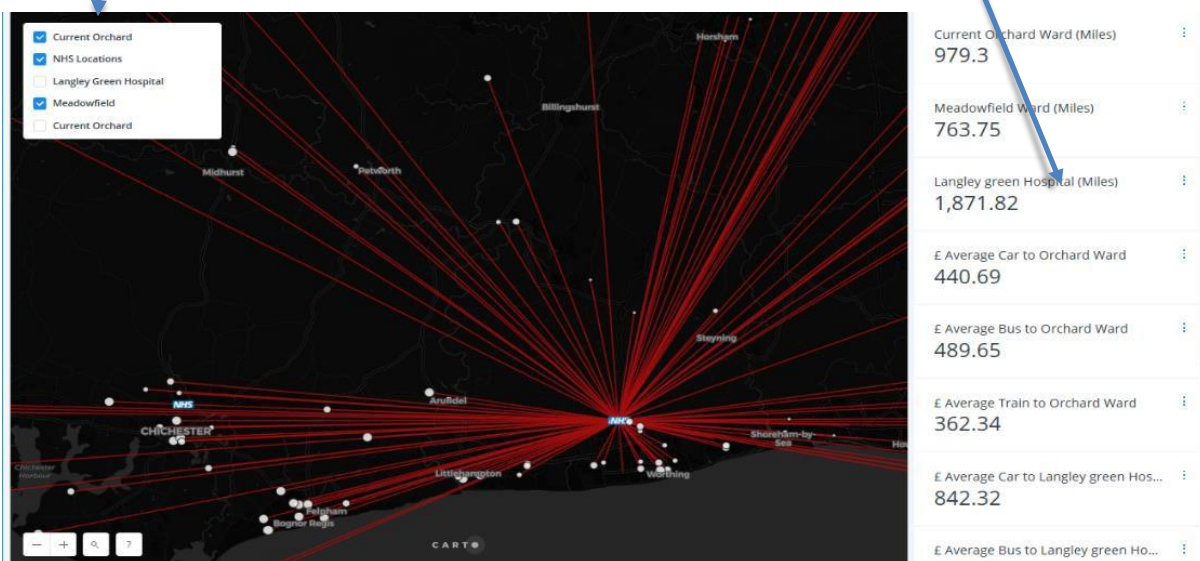
## Orchard Ward

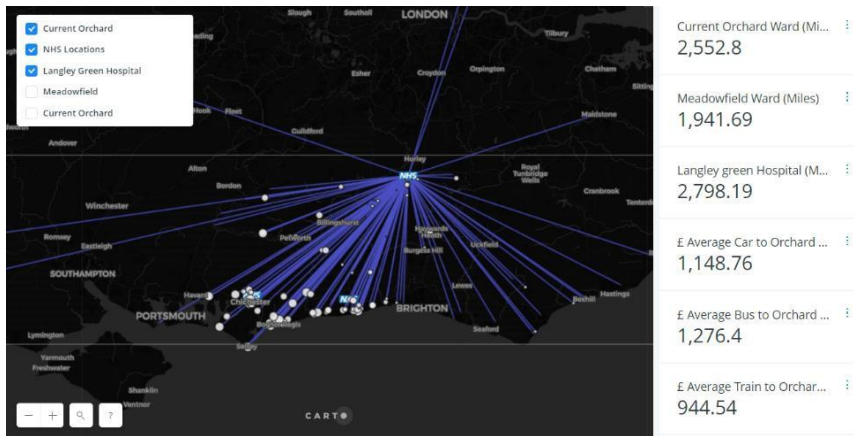
As we can see from the example below, depending on the selection made (top left) and the map area selected, the widgets in the right-hand side will update. This information is dynamic so as the map is moved or zoomed in or out and the selections are changed, the widgets will recalculate.



Updating the box that is ticked, we can see the map has updated.

The two maps show different figures on the right-hand side, this is because the map has moved.





The Analysis that has gone in to the product will help to understand the different process into travelling to the various hospitals, when looking at the Map, the Widgets will update, and it shows a variety of information to help to inform decisions. The top Widgets will show how far away they are to the certain ward in miles. As the widgets are scrolled down it will move onto average cost.

As you move in and the map will constantly be updated and change mileage and costing. The average cost will be shown for three different types of transportation; they are car, train and bus.

### References:

#### Cost:

[http://www.theaa.com/motoring\\_advice/running\\_costs/advice\\_rcosts\\_guide.htm](http://www.theaa.com/motoring_advice/running_costs/advice_rcosts_guide.htm) |

AA – overall cost of running a car (Tax, Insurance, Fuel)

#### Train Cost:

<http://www.whatprice.co.uk/travel/train-prices.html#axzz5VbZZ3G9g>

\*Commuter travel

#### Bus:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/666759/annual-bus-statistics-year-ending-march-2017.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/666759/annual-bus-statistics-year-ending-march-2017.pdf)

\*average cost per week

### Alex Harries

Insight Analyst – Location Intelligence | Performance & Intelligence | West Sussex County Council.