

# WEST CUMBRIANS' VOICE FOR HEALTHCARE

Travel Time and Distance Analysis for Postcodes in West, North and East Cumbria to West Cumberland Hospital at Whitehaven and the Cumberland Infirmary at Carlisle

**Table 1: typical daytime journey times, without any unusual delays**

miles		Postode	name of postode	popn	time			Cumulative Population by Time	Traffic adjustment:	122.5%	Avg Speed (mph)
to WCH	to CIC				to WCH (Whitehaven)	to CIC (Carlisle)	Time increase for further hospital				
11.7	46.9	CA20	SEASCALE	3,355	00:22	01:24	01:02	3,355			33.3
16.1	54.5	CA18	RAVENGLASS	328	00:30	01:30	01:00	3,683			36.1
7.7	46.1	CA21	BECKERMET	1,017	00:17	01:17	01:00	4,700			35.8
4.4	42.8	CA22	EGREMONT	8,887	00:11	01:11	01:00	13,587			36.1
2.8	40.5	CA25	CLEATOR MOOR	6,183	00:07	01:07	01:00	19,770			36.1
2.2	40.6	CA24	MOOR ROW	1,266	00:06	01:06	01:00	21,036			36.8
22.8	61.5	LA19	MILLOM	972	00:41	01:40	00:58	22,008			36.7
13.3	51.5	CA19	HOLMROOK	1,069	00:24	01:23	00:58	23,077			37.1
3.7	42.3	CA27	ST. BEES	1,644	00:11	01:09	00:58	24,721			36.3
3.7	39.8	CA23	CLEATOR	1,424	00:09	01:06	00:56	26,145			36.1
1.8	37.7	CA28	WHITEHAVEN	9,888	00:06	00:58	00:52	36,033			38.5
3.9	36.5	CA26	FRIZINGTON	3,868	00:11	00:57	00:46	39,901			38.0
8.8	30.6	CA14	WORKINGTON	35,799	00:18	00:46	00:28	75,700			39.4
19.1	29.9	CA13	COCKERMOUTH	8,597	00:35	00:49	00:13	84,297			36.6
20.8	25.0	CA15	MARYPORT	16,218	00:42	00:42	00:00				
32.9	35.4	CA12	KESWICK	8,026	00:53	00:52	00:01	193,588			40.3
26.6	14.2	CA7	WIGTON; CARLISLE	22,533	00:42	00:24	00:15	185,562			34.8
39.7	27.1	CA11	PENRITH	22,359	01:00	00:39	00:17	163,029			41.5
61.1	37.6	CA16	APPLEBY-IN-WESTMORLAND	6,175	01:29	00:53	00:29	140,670			41.9
57.3	37.9	CA10	PENRITH	13,623	01:29	00:53	00:29	134,495			42.2
69.8	50.0	CA17	KIRKBY STEPHEN	4,873	01:40	01:03	00:30	120,872			47.1
35.8	4.5	CA5	CARLISLE	7,114	00:56	00:11	00:37	115,999			24.5
67.8	32.2	CA9	ALSTON	2,088	01:49	00:58	00:41	108,885			32.9
38.3	2.2	CA2	CARLISLE	39,435	01:02	00:09	00:43	106,797			13.5
53.3	14.1	CA6	CARLISLE	9,094	01:30	00:34	00:46	67,362			24.7
46.4	8.8	CA4	CARLISLE	9,679	01:17	00:19	00:47	58,268			26.9
41.0	2.3	CA3	CARLISLE	14,015	01:11	00:09	00:50	48,589			14.1
41.8	3.1	CA1	CARLISLE	24,260	01:13	00:12	00:50	34,574			15.2
52.7	14.0	CA8	BRAMPTON; CARLISLE	10,314	01:33	00:31	00:50	10,314			26.4



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Travel Time and Distance Analysis for Postcodes in West, North and East Cumbria to West Cumberland Hospital at Whitehaven and the Cumberland Infirmary at Carlisle

Table 2: fastest possible journey times

miles		Postode	name of postode	popn	time		Time increase for further hospital	Cumulative Population by Time
to WCH	to CIC				to WCH (Whitehaven)	to CIC (Carlisle)		
11.7	46.9	CA20	SEASCALE	3,355	00:18	01:09	00:51	3,355
16.1	54.5	CA18	RAVENGLASS	328	00:25	01:14	00:49	3,683
7.7	46.1	CA21	BECKERMET	1,017	00:14	01:03	00:49	4,700
4.4	42.8	CA22	EGREMONT	8,887	00:09	00:58	00:49	13,587
2.8	40.5	CA25	CLEATOR MOOR	6,183	00:06	00:55	00:49	19,770
2.2	40.6	CA24	MOOR ROW	1,266	00:05	00:54	00:49	21,036
22.8	61.5	LA19	MILLOM	972	00:34	01:22	00:48	22,008
13.3	51.5	CA19	HOLMROOK	1,069	00:20	01:08	00:48	23,077
3.7	42.3	CA27	ST. BEES	1,644	00:09	00:57	00:48	24,721
3.7	39.8	CA23	CLEATOR	1,424	00:08	00:54	00:46	26,145
1.8	37.7	CA28	WHITEHAVEN	9,888	00:05	00:48	00:43	36,033
3.9	36.5	CA26	FRIZINGTON	3,868	00:09	00:47	00:38	39,901
8.8	30.6	CA14	WORKINGTON	35,799	00:15	00:38	00:23	75,700
19.1	29.9	CA13	COCKERMOUTH	8,597	00:29	00:40	00:11	84,297
20.8	25.0	CA15	MARYPORT	16,218	00:35	00:35	00:00	
32.9	35.4	CA12	KESWICK	8,026	00:44	00:43	00:01	193,588
26.6	14.2	CA7	WIGTON; CARLISLE	22,533	00:35	00:20	00:15	185,562
39.7	27.1	CA11	PENRITH	22,359	00:49	00:32	00:17	163,029
61.1	37.6	CA16	APPLEBY-IN-WESTMORLAND	6,175	01:13	00:44	00:29	140,670
57.3	37.9	CA10	PENRITH	13,623	01:13	00:44	00:29	134,495
69.8	50.0	CA17	KIRKBY STEPHEN	4,873	01:22	00:52	00:30	120,872
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38.3	2.2	CA2	CARLISLE	39,435	00:51	00:08	00:43	106,797
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41.8	3.1	CA1	CARLISLE	24,260	01:00	00:10	00:50	34,574
52.7	14.0	CA8	BRAMPTON; CARLISLE	10,314	01:16	00:26	00:50	10,314



# WEST CUMBRIANS' VOICE FOR HEALTHCARE

Accompanying notes for the VOICE travel time and distance analysis for postcodes in west, north and east Cumbria to West Cumberland Hospital in Whitehaven and the Cumberland Infirmary in Carlisle

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## Purpose

This document has been prepared to demonstrate the sort of analysis that had been expected as evidence to support the current NHS *Healthcare for the Future* consultation.

The consultation Travel Impact Analysis (appendix L in the consultation documents) is inadequate in other aspects, for instance isochrones maps centred on both West Cumberland Hospital and the Cumberland Infirmary would have been helpful.

## Method

The intent was to produce a table which showed distance and typical journey times from each postcode in west, north and east Cumbria to the acute hospitals at Whitehaven and Carlisle. The increase in journey time is then calculated for each postcode for travel to the hospital that is further away, compared to the one that is closer. The data is sorted by increase in journey time.

Cumulative totals of population are shown to make it possible to see how many people have an increase in journey time. Population information was taken from 2011 census information in the National Archives (<http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/previous-foi-requests/population/population-statistics-at-postcode-sector-level-from-the-2011-census/foi-1911-extract-from-ks101ew.xls>)

Journey time information comes from the Google maps directions function. The starting point in each postcode is the centre of the postcode as determined by Google, unless this will give an unrepresentative point to measure from. In that case, a visual estimate was made of the centre of population for the postcode. An example of this is CA20, Seascale. The bulk of the population of this postcode live in Seascale and Gosforth, but the postcode extends to include Great Gable, Bowfell, Scafell Pike and the other mountains at the head of Wasdale. Therefore a starting point was selected that appeared a typical distance for most of the residents from the A595.

The journey times extracted from Google maps is the quickest achievable, that is, without any traffic or other delays. A sample journey in normal daytime traffic was chosen for West Cumberland Hospital to the Cumberland Infirmary and the routefinder was set to give journey times in those traffic conditions. This was a 22.5% longer journey time. This adjustment was made to all journey times to show the traffic adjusted data.

Anecdotal evidence suggests that the traffic adjusted figures are reasonably accurate, although readers familiar with these roads can make their own judgements.

### **Limitations**

Though real data is used, the intent is to illustrate to those undertaking the consultation the underpinning work that was expected from them.

The traffic adjusted data could have journey times individually entered for working daytime journeys for each individual postcode. This would give more accurate results.

The study should also include travel times to acute hospitals outside west, north and east Cumbria. For some postcodes, these other hospitals will be closer than the further of the two acute hospitals in this part of Cumbria.

Some rounding errors produce small differences in the result. These are not felt to be significant.

As some postcodes cover a large geographic area there will be a number of residents for whom the journey times will be significantly greater than those stated.

No account is taken of the workforce of Sellafield but the reader should be aware that several thousand people would be at work in the CA20 postcode during a normal working day.

No account is taken of the tourist population which can easily add several thousand people staying overnight in the CA19 and CA20 postcodes at any time from Easter to summer, with a likely peak number of tourists in all of West Cumbria of 40,000 visitors.

### **West Cumbrians' VOICE for Health Care**

<http://www.cumbriansvoiceforhealth.com/>

JDW  
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