

## **Briefing - Accessibility Statistics**

#### **Cumbria & Districts**

#### 2013

### Aim

This briefing presents information regarding the accessibility of key services within Cumbria by three modes of transport (public transport/walking, cycling and car).

### **Key Points**

For all three modes of transport:

- Key services in Cumbria are generally less accessible than in other areas of England;
- There is much variation between Cumbria's districts in the accessibility of key services;
- In Eden key services were amongst the least accessible in England;
- At national and county level primary schools had the shortest average journey times, while hospitals had the longest average journey times;
- At national and county level employment centres were accessible to the greatest proportion of residents within a 'reasonable' time, while hospitals were accessible to the smallest proportion of residents within a 'reasonable' time;
- When compared to the national average, Cumbria had a lower proportion of residents able to access each individual key service in a 'reasonable' time, except employment centres and primary schools by car;
- The proportions of residents in Cumbria within a 'reasonable' time of employment centres and primary schools by car matched the national average.

## Background

In September 2014 the Department for Transport (DfT) published accessibility statistics considering where people lived in relation to key local services in 2013. These statistics reported on travel times to eight key services (employment centres, primary schools, secondary schools, further education institutions, GPs, hospitals, food stores and town centres) by three modes of transport (public transport/walking, cycling and car).

### **Average Minimum Travel Times**

Figure 1 plots the average minimum travel time to reach the range of key local services listed in the previous section, by each mode of transport, for England, Cumbria and the county's six districts.

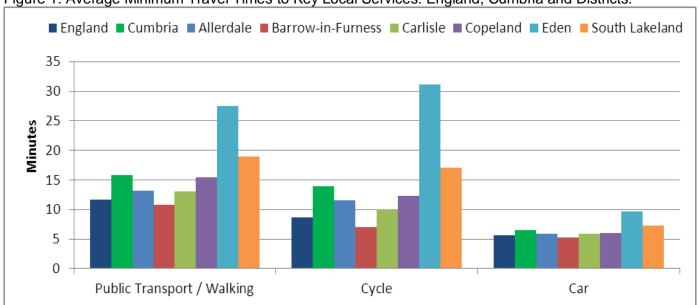


Figure 1: Average Minimum Travel Times to Key Local Services: England, Cumbria and Districts:

Source: Department for Transport (DfT), Accessibility Statistics, 2013.

At a national level, the average minimum travel time to reach key local services was 12 minutes by public transport / walking, 9 minutes by cycle and 6 minutes by car. In comparison, the average minimum travel time to reach key local services across Cumbria was 16 minutes by public transport / walking, 14 minutes by cycle and 7 minutes by car. Overall, this would suggest that key services in Cumbria were less accessible than in other areas of England.

There was much variation between Cumbria's districts in the accessibility of key services. Of the county's districts, Eden had the longest average minimum travel time to reach key local services; 28 minutes by public transport / walking, 31 minutes by cycle and 10 minutes by car (the 2<sup>nd</sup> longest times for all three modes out of all local authorities in England, Isles of Scilly was longest). In contrast, Barrow-in-Furness had the shortest average minimum travel times in Cumbria to reach key local services (11 minutes by public transport / walking, 7 minutes by cycle and 5 minutes by car; more accessible than the national averages).

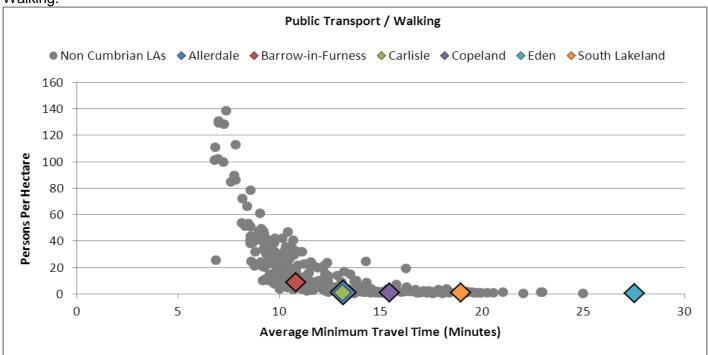
## **Average Minimum Travel Times by Population Density**

The DfT reported that "Much of the variation in access times is related to the density of population of an area, which will generally have a strong relationship with the number and density of service locations, and the density and service frequency of transport networks and services. Therefore there tends to be a strong relationship between access times and the urban or rural character of an area".

As 54% of Cumbria's residents live in rural areas compared to just 18% of the population nationally, it is therefore reasonable to expect that the county's access times will be longer than the England average. All of Cumbria's districts have greater proportions of residents living in rural areas than the national average, with Allerdale, Eden, Copeland and South Lakeland having particularly large proportions (72%, 71%, 65% and 61% respectively).

Figures 2, 3 and 4 consider the relationship between travel times to reach the range of key local services and population density across district and unitary local authorities (LAs) in England by each mode of transport respectively.

Figure 2: Average Minimum Travel Times to Key Local Services vs. Population Density: Public Transport / Walking:



Source: Department for Transport (DfT) Accessibility Statistics 2013, 2011 Census Population Density. Please note that due to the extremely long travel times experienced in the Isles of Scilly, this LA has been excluded from charts.

Cycle ■ Non Cumbrian LAs ◆ Allerdale ◆ Barrow-in-Furness ◆ Carlisle ◆ Copeland ◆ Eden ◆ South Lakeland 160 140 Persons Per Hectare 120 100 80 60 40 20 0 0 5 15 25 30 35 Average Minimum Travel Time (Minutes)

Figure 3: Average Minimum Travel Times to Key Local Services vs. Population Density: Cycle:

Source: Department for Transport (DfT) Accessibility Statistics 2013, 2011 Census Population Density. Please note that due to the extremely long travel times experienced in the Isles of Scilly, this LA has been excluded from charts.

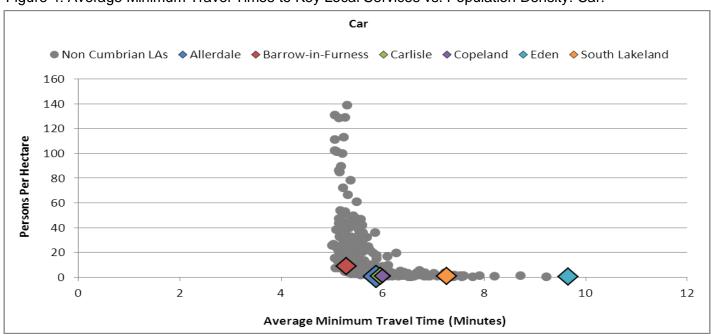


Figure 4: Average Minimum Travel Times to Key Local Services vs. Population Density: Car:

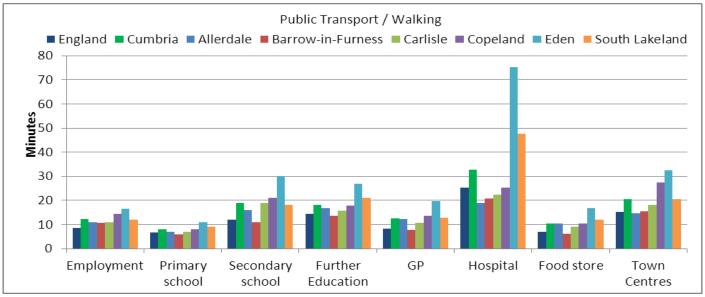
Source: Department for Transport (DfT) Accessibility Statistics 2013, 2011 Census Population Density. Please note that due to the extremely long travel times experienced in the Isles of Scilly, this LA has been excluded from charts.

Across each mode of transport, when compared to LAs with similar population densities, average travel times in Allerdale, Barrow-in-Furness, Carlisle and Copeland appear to be relatively short, while South Lakeland's average travel times seem comparable to times for LAs with equivalent population densities. However, Eden's average travel times stand out as being longer than similarly sparsely populated LAs.

## **Average Minimum Travel Times by Service**

Figures 5, 6 and 7 plot the average minimum travel time to reach each individual key local service by each mode of transport respectively across England, Cumbria and districts.

Figure 5: Average Minimum Travel Time: Key Local Services: Public Transport / Walking:

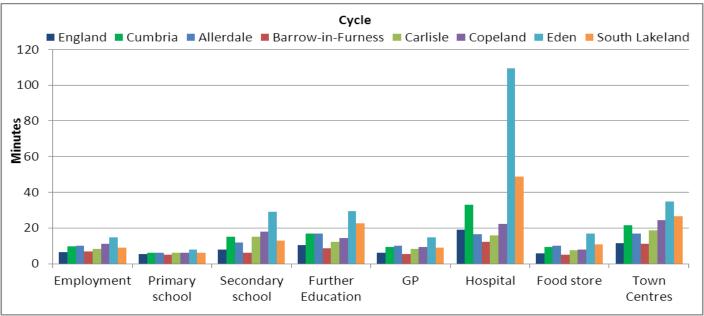


Source: Department for Transport (DfT), Accessibility Statistics, 2013.

## By public transport / walking:

- Across all geographies, primary schools had the shortest average journey times (8 minutes in Cumbria),
   while hospitals had the longest average journey times (33 minutes in Cumbria).
- Average journey times to each key local service were longer in Cumbria than they were nationally.
- Of the county's districts, Eden had the longest average travel times to all key services, while Barrow-in-Furness had the shortest average travel times to all but two of the key services; the exceptions being hospitals and town centres, for which Allerdale had the shortest average travel times.
- Eden's average travel times to employment centres, primary schools, secondary schools, GPs, hospitals, food stores and town centres were within the ten longest times out of all local authorities in England, as were Copeland's average travel times to employment centres, secondary schools, GPs and town centres and South Lakeland's average travel times to primary schools and food stores.

Figure 6: Average Minimum Travel Times: Key Local Services: Cycle:

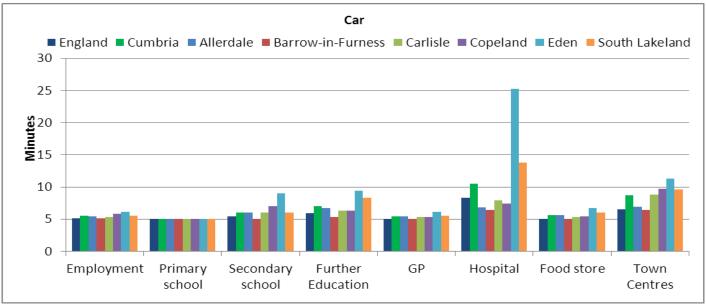


Source: Department for Transport (DfT), Accessibility Statistics, 2013.

## By bicycle:

- Across all geographies, primary schools had the shortest average journey times (6 minutes in Cumbria),
  while hospitals had the longest average journey times (33 minutes in Cumbria), with the exception of
  Allerdale, Carlisle and Copeland; where town centres accounted for the longest average journey times
  (21 minutes in Cumbria).
- Average journey times to each key local service were longer in Cumbria than they were nationally.
- Of the county's districts, Eden had the longest average travel times to reach all key services, while Barrow-in-Furness had the shortest average travel times for all key services.
- Eden's average travel times to employment centres, primary schools, secondary schools, GPs, hospitals, food stores and town centres were all within the ten longest times nationally, as was Copeland's average travel time to secondary schools.

Figure 7: Average Minimum Travel Times: Key Local Services: Car:



Source: Department for Transport (DfT), Accessibility Statistics, 2013.

## By car:

- Across all geographies, primary schools had the shortest average journey times (5 minutes in Cumbria).
   Inversely, hospitals had the longest average journey times (10 minutes in Cumbria), except in Allerdale,
   Barrow-in-Furness, Carlisle and Copeland; where town centres accounted for the longest average journey times (9 minutes in Cumbria).
- When compared to the national average, Cumbria had longer journey times to all key services except primary schools. The county's journey time to primary schools matched the national average.
- Of the county's districts, Eden had the longest average travel times to all key services with the exception
  of primary schools, while Barrow-in-Furness had the shortest average travel times to all key services
  with the exception of primary schools. There was no variation between districts in relation to average
  journey times to primary schools.
- Eden's average travel times to employment centres, secondary schools, GPs, hospitals, food stores and town centres were all within the ten longest times nationally, as was Copeland's average travel time to secondary schools and South Lakeland's average travel time to food stores.

#### Service Users with 'Reasonable' Access

The DfT also produced figures for users with access to each service within a 'reasonable' time; by using a formula that took into account the tendency for real journeys to be made less frequently as time taken increases, with different time thresholds applied for each type of service and mode of transport. Figures 8, 9 and 10 plot the proportion of residents able to access each key service within a 'reasonable' time by public transport / walking, cycle and car respectively, across England, Cumbria and districts.

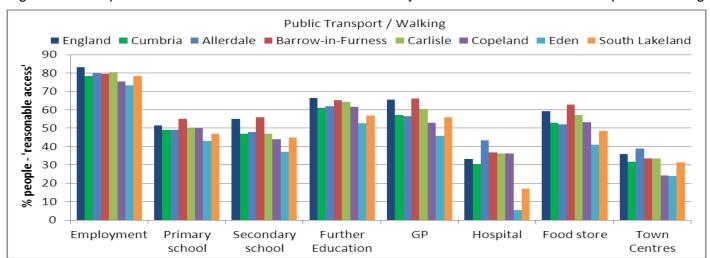


Figure 8: % Population within 'Reasonable' Travel Time: Key Local Services: Public Transport / Walking:

Source: Department for Transport (DfT), Accessibility Statistics, 2013.

# By public transport / walking:

- Across all geographies, of the key services, employment centres were accessible to the greatest proportion of residents in a 'reasonable' time (78% of Cumbria's population could reach an employment centre in a 'reasonable' time). Across England, Cumbria, Eden and South Lakeland, hospitals were accessible to the smallest proportion of residents in a 'reasonable' time (Cumbria 30%), while town centres were accessible to the smallest proportion of residents in a 'reasonable' time in Allerdale, Barrow-in-Furness, Carlisle and Copeland (Cumbria 32%). When compared to the national average, Cumbria had a lower proportion of residents with access to each key service in a 'reasonable' time.
- Of Cumbria's districts, Eden had the smallest proportion of residents in a 'reasonable' time of each key service, while Barrow-in-Furness had the greatest proportion of residents in a 'reasonable' time of primary schools, secondary schools, further education institutes, GPs and food stores, Allerdale had the greatest proportion of residents in a 'reasonable' time of hospitals and town centres, and Carlisle had the greatest proportion of residents in a 'reasonable' time of employment centres.
- The proportion of residents in Eden within 'reasonable' times of employment centres, primary schools, secondary schools, GPs, hospitals and food stores were within the ten smallest proportions (least accessible) nationally, as was Copeland's proportion of residents in a 'reasonable' time of GPs and South Lakeland's proportion of residents in a 'reasonable' time of food stores.

Cycle ■ England ■ Cumbria ■ Allerdale ■ Barrow-in-Furness ■ Carlisle ■ Copeland ■ Eden ■ South Lakeland 70 % people - 'reasonable access' 60 50 40 30 20 10 0 Food store Employment Primary Secondary GΡ Hospital Further Town

Education

Centres

Figure 9: % Population within 'Reasonable' Travel Time: Key Local Services: Cycle:

Source: Department for Transport (DfT), Accessibility Statistics, 2013.

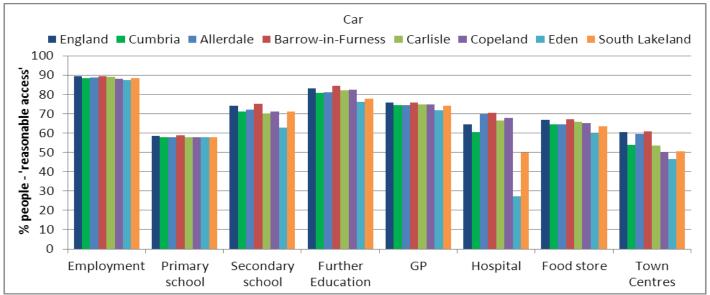
school

school

## By bicycle:

- At county and district level, with the exception of Barrow-in-Furness, of the key services, primary schools were accessible to the greatest proportion of residents in a 'reasonable' time (57% of Cumbria's population could reach a primary school within a 'reasonable' time). Across England and in Barrow-in-Furness food stores were accessible to the greatest proportion of residents within a 'reasonable' time. In contrast, across all geographies except Copeland, hospitals were accessible to the smallest proportion of residents within a 'reasonable' time. In Copeland town centres were accessible to the smallest proportion of residents within a 'reasonable' time, while 35% of Cumbria's population could reach a hospital within a 'reasonable' time, while 35% of Cumbria's population could reach a town centre within a 'reasonable' time.
- When compared to the national average, Cumbria had a lower proportion of residents able to access all key services in a 'reasonable' time. Of the county's districts, Eden had the smallest proportion of residents within a 'reasonable' time of each key service. In contrast, Barrow-in-Furness had the greatest proportion of residents within a 'reasonable' time of each key service, except hospitals. Allerdale had the greatest proportion of residents within a 'reasonable' time of hospitals.
- Eden's proportions of residents within a 'reasonable' time of employment centres, primary schools, secondary schools, GPs, hospitals and food stores were all within the ten smallest proportions (least accessible) nationally.

Figure 10: % Population within 'Reasonable' Travel Time: Key Local Services: Car:



Source: Department for Transport (DfT), Accessibility Statistics, 2013.

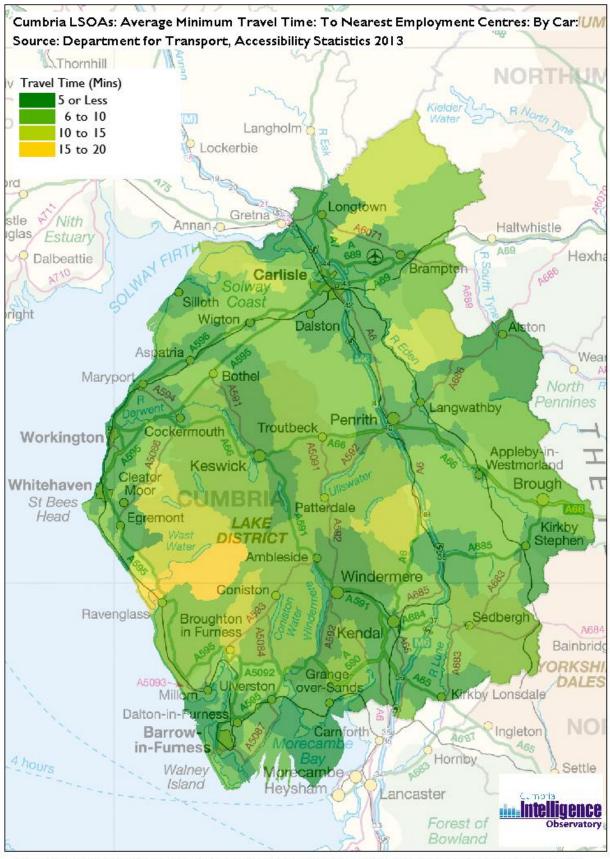
## By car:

- Across all geographies, of the key services, employment centres were accessible to the greatest proportion of residents in a 'reasonable' time (89% of Cumbria's population could reach an employment centre in a 'reasonable' time). Across England, Allerdale and Barrow-in-Furness, primary schools were accessible to the smallest proportion of residents in a 'reasonable' time, while in Cumbria, Carlisle and Copeland town centres were accessible to the smallest proportion of residents within a 'reasonable' time, and in Eden and South Lakeland hospitals were accessible to the smallest proportion of residents within a 'reasonable' time. 58% of Cumbria's population could reach a primary school within a 'reasonable' time, while 54% of Cumbria's population could reach a town centre within a 'reasonable' time and 60% could reach a hospital within a 'reasonable' time.
- When compared to the national average, Cumbria had a lower proportion of residents within a 'reasonable' time of all key services, except employment centres and primary schools. The county's proportions of residents in a 'reasonable' time from employment centres and primary schools matched the national average. Of the county's districts, with the exception of primary schools, Eden had the smallest proportion of residents within a 'reasonable' time of all key services, while Barrow-in-Furness had the greatest proportion of residents within a 'reasonable' time of all key services. There was no variation between districts in relation to proportions of residents within a 'reasonable' time from primary schools.
- Eden's proportions of residents within a 'reasonable' time of employment centres, secondary schools, GPs, hospitals, food stores and town centres were all within the ten smallest proportions (least accessible) nationally. Furthermore, South Lakeland's proportion of residents within a 'reasonable' time of food stores was within the ten smallest proportions nationally.

### **Small Area Data**

As well as producing accessibility statistics at national and local authority level, the DfT also produced data for small areas within local authorities; these small areas are known as 'Lower Super Output Areas' or 'LSOAs'.

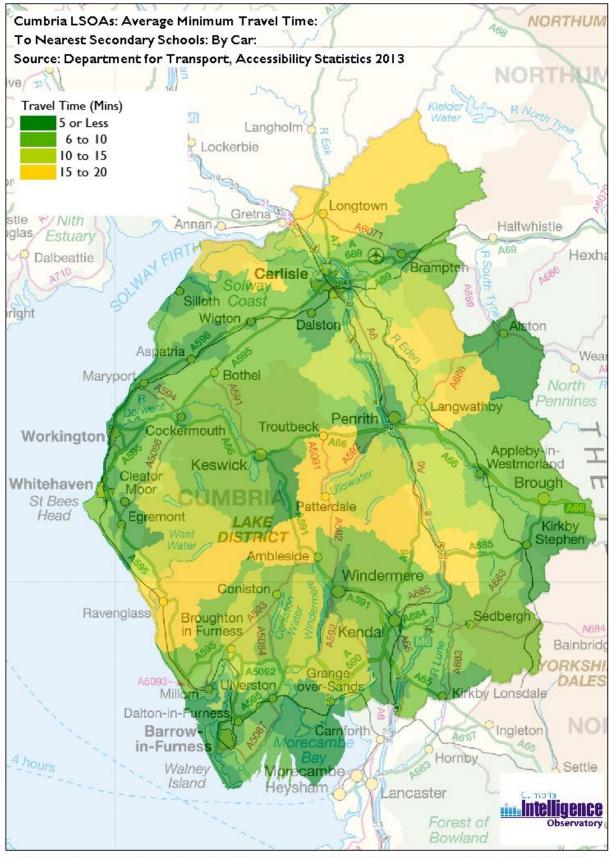
The 2011 Census reported that the vast majority of households in Cumbria have access to at least one car or van (79%); higher than the England & Wales average of 74%. Furthermore, the greatest proportion of residents in Cumbria travel to work by private vehicle (45%); again higher than the England & Wales average of 41%. As these figures suggest there is a dependence on car travel in Cumbria, figures 11 to 18 plot the average minimum travel time to reach each individual key local service by car across Cumbria's LSOAs.



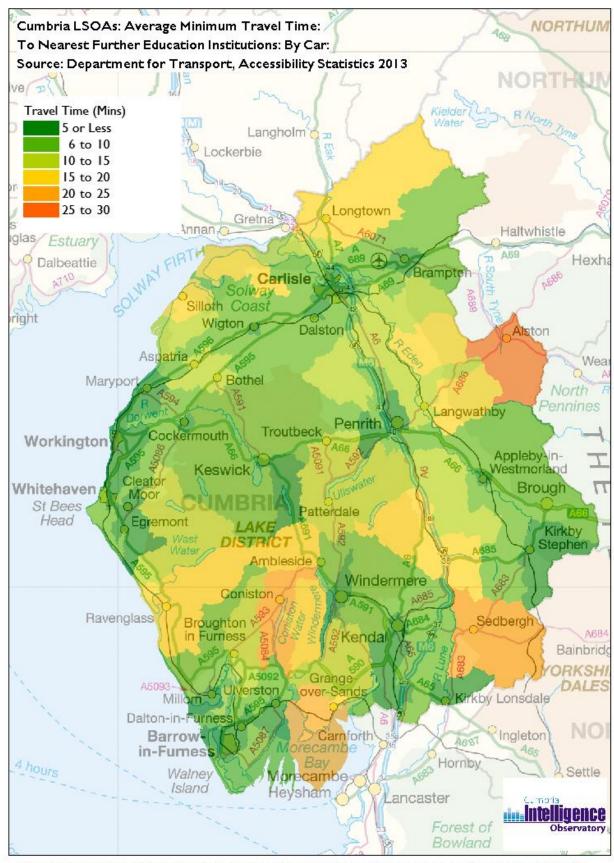
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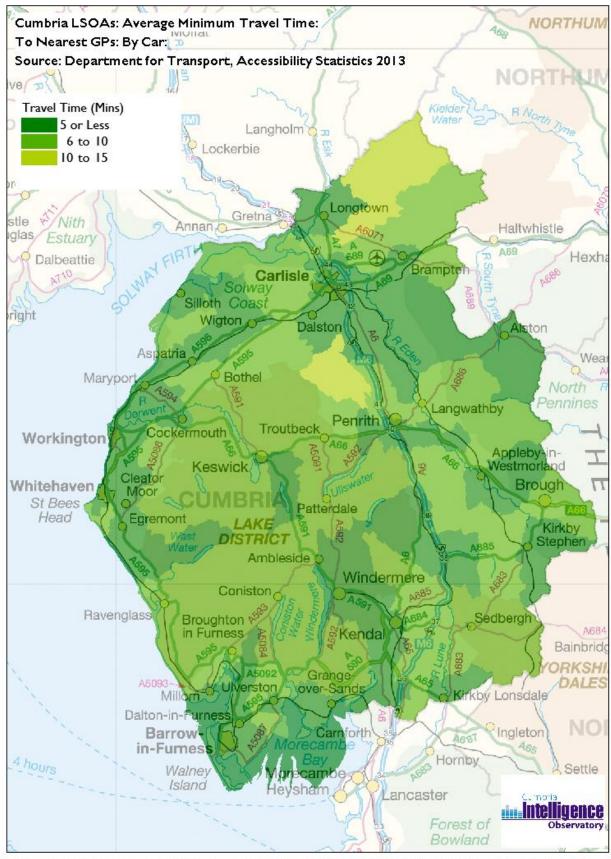
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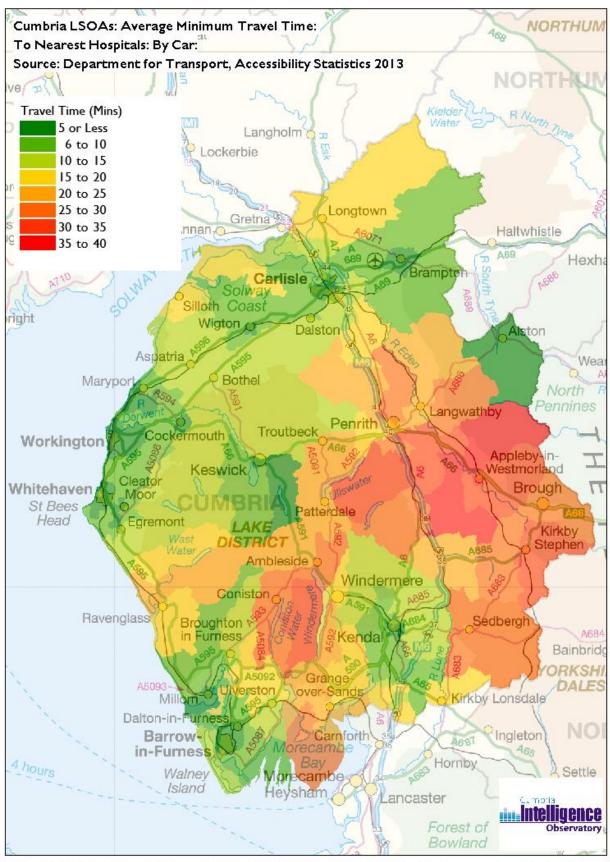
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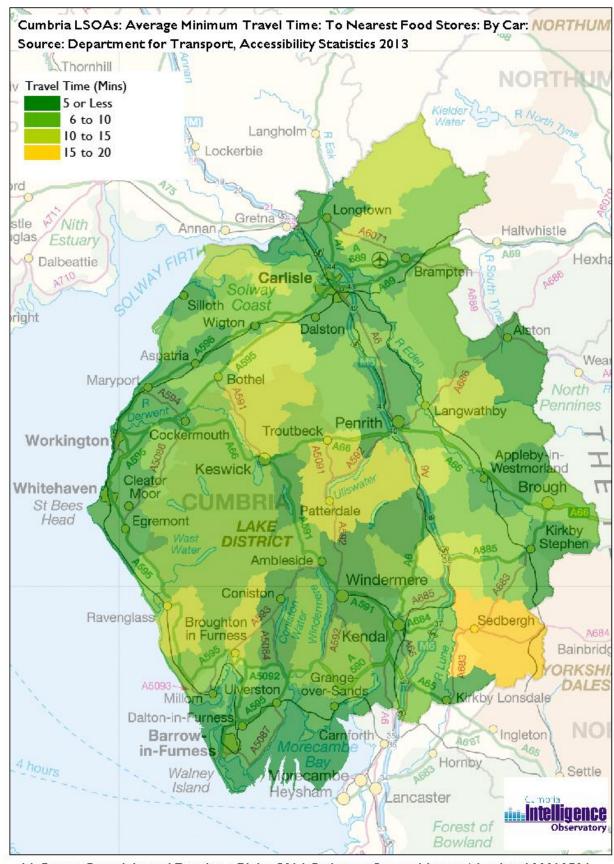
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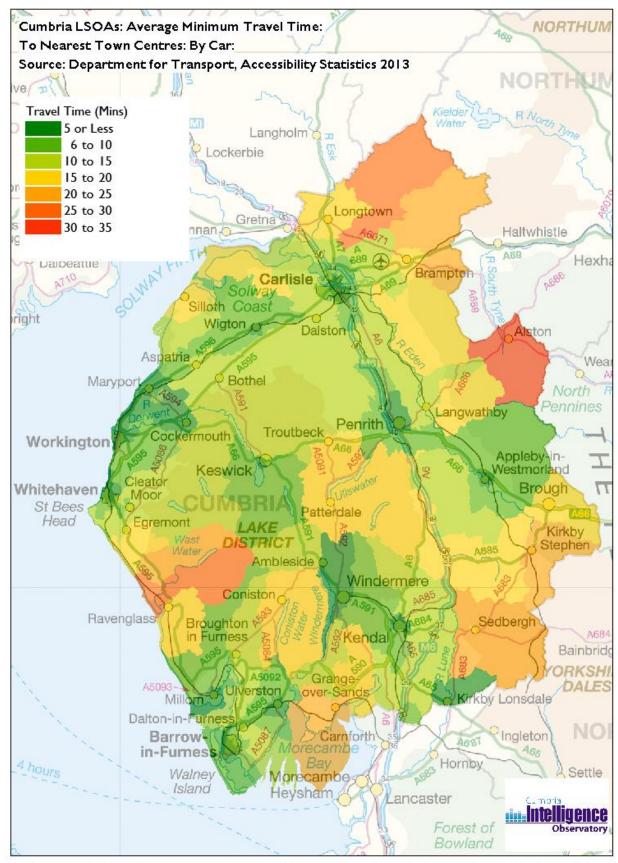
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#### **Further Information**

The average minimum journey time to each key service by each mode of transport and the proportion of residents within 'reasonable' travel times of each key service by each mode of transport can be explored for each of Cumbria's LSOAs, along with national, county and district level comparisons, using the Cumbria Atlas; an interactive geographical tool which enables users to view datasets in a user-friendly format combining maps, tables and charts. To access the Cumbria Atlas, please visit the following webpage:

## http://www.cumbriaobservatory.org.uk/Atlas/CumbriaAtlas.asp

As well as providing information about average minimum journey times and the proportion of residents within 'reasonable' travel times, the DfT have also produced statistics regarding the number of key services within a 'reasonable' travel time from local authorities and LSOAs. For further information regarding this dataset or for any information about the content of this report, please contact the Information & Intelligence Team at Cumbria County Council:

Email: info@cumbriaobservatory.org.uk or Phone: 01228 226309.

More information about Accessibility Statistics is available on the Department for Transport website:

http://www.dft.gov.uk/statistics/series/accessibility/