



Northumberland Knowledge 2011 Census Travel Isochrones Fact Sheet

Background Information

Journey time areas (drive time areas/Isochrones) around key towns in Northumberland have been calculated using average journey times on roads in and around the county of Northumberland. The journey time and road network data used to calculate these areas was provided by the Department for Transport via a contract with Trafficmaster and was for the time period between September 2011 and August 2012.

Journey times were averaged for roads where they were available and for those without journey times an average speed for roads of that type was used. To calculate the average journey time areas, all journeys between 7am and 10am on weekdays outside of school holidays were used. Esri ArcMap and the Network Analyst add on were then used to create the journey time areas.

The information provided in the fact sheets is based on results from the 2011 Census Key Statistics tables available on the Neighbourhood Statistics website. 2011 Census Output Areas (OAs) were cross referenced using the population weighted centroid file provided by ONS and where the centroid of an OA fell into the isochrones (drive time areas) it was summed with other OAs falling into the same area to provide the statistics.

The 2011 Census results provide an indication of the make-up of the resident population at a point in time (27 March 2011). Some of the indicators provided (for example levels of unemployment) vary over time so this should be taken into account when using the fact sheets.

The drive time areas provide an estimate of the journey times towards each town centre. Journey time information is not available for all roads in the area and it relates to a journey made during a specific time period, therefore it should be noted that this is an estimate. Census OAs were selected on a best-fit basis meaning that the figures provided do not relate to the exact journey time boundary. This is the method of calculating 2011 Census statistics recommended in the ONS Geography Policy and it is the method used by ONS to provide statistics for all geographies with boundaries that do not align with Census Output Areas.

For more information please contact the Northumberland Policy and Research Team by e-mailing knowledge@northumberland.gov.uk.