Digital vulnerability indicators
(June 2022)

Digital skills are increasingly important for accessing information and services. The digital divide is leading to inequalities in access to opportunities, services and goods.

CACI has developed a range of six digital vulnerability indicators to help organisations better identify groups of vulnerable customers in order to target them with appropriate assistance. The indicators are:

- Online purchasing
- Online finance
- Internet users
- Mobile phone users
- Fixed internet speed
- Confused by computers.

The CACI data is at postcode level, with scores for each indicator presented as decile rankings ranging from one to ten with one indicating the highest estimated vulnerability and ten representing the lowest vulnerability. Data sources CACI has used to compile the indicators include CACI Ocean (consumer database), Ipsos Financial Research Survey and data from the regulator for the communications services (OFCOM).

The Insight and Intelligence Team has combined the CACI data with 2011 Census data on the number of households in each postcode to produce estimates of households that rank in the top 20% nationally (decile one or two) in terms of digital vulnerability.

There are limitations with this data; the CACI data is modelled data and it has been combined with 2011 Census that is now ten years old. However, the analysis may contribute to a range of evidence which helps to inform decisions about where to focus efforts to tackle digital exclusion.
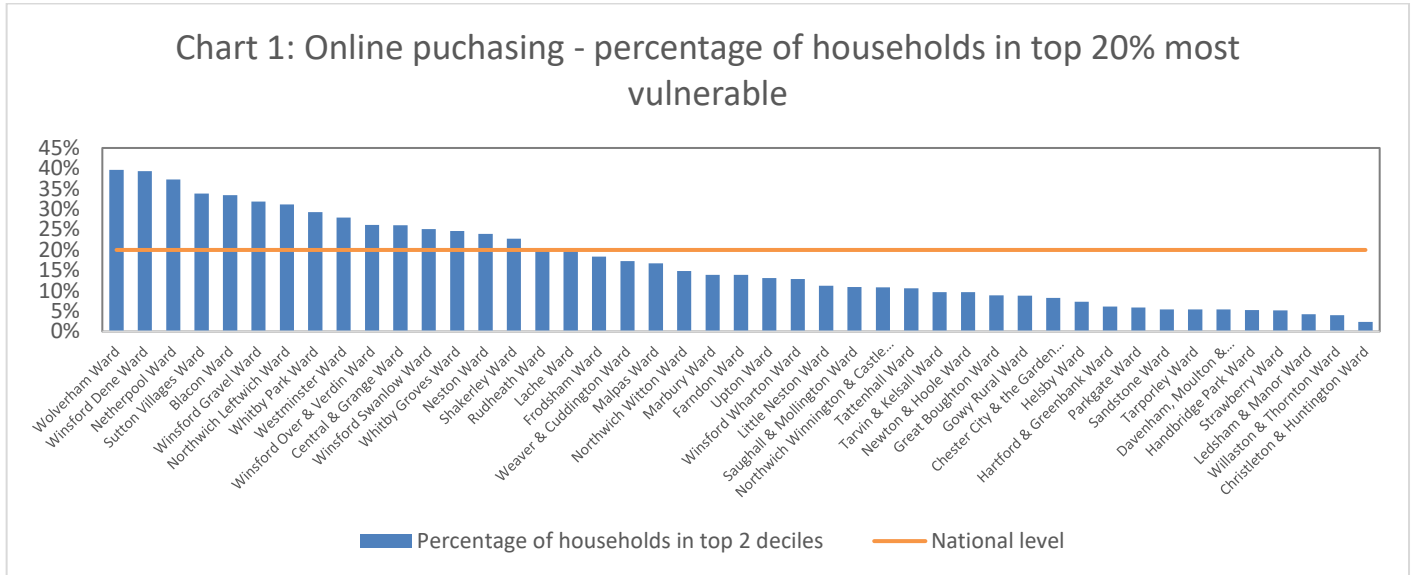
This paper highlights the geographical areas in Cheshire West and Chester which are estimated to have the highest level of digital vulnerability.

Key findings:

- There are digitally vulnerable households in every ward in the borough.
- Three wards; Wolverham, Winsford Dene and Netherpool have the highest proportion of households with 'digital vulnerability - confused by computers'.
- These three wards also have higher proportion of vulnerable households for all the other indicators (except fixed internet speed). There are other wards who also repeatedly have higher estimates of vulnerability.
- Netherpool ward has by far the highest proportion of households in postcodes which rank in the top 20% least likely nationally to have a mobile phone.
- Generally speaking, the highest estimated percentages of households who are confused by computers tend to be in more deprived areas.
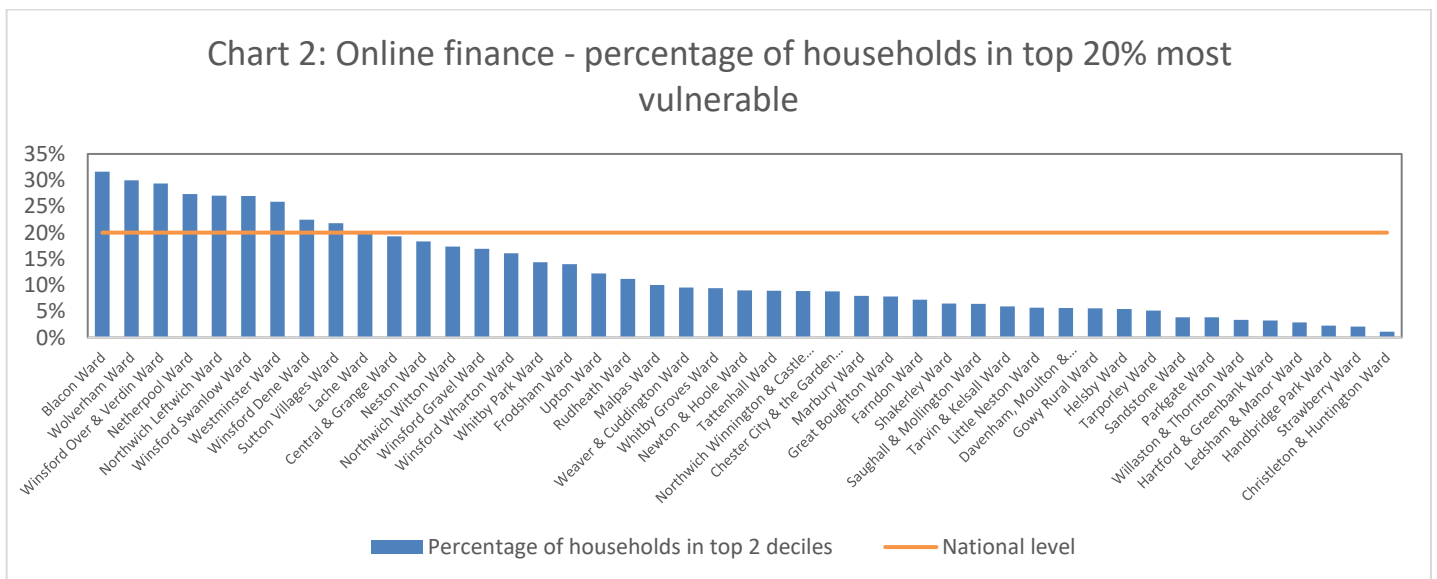
Online purchasing

Chart 1 shows every ward in the borough has some households in postcodes ranked nationally in the top 20% most digitally vulnerable in terms of online purchasing. These are households who are least likely to shop online. There are fifteen wards who have a higher proportion of households who are less likely to shop online (and in the top 20% most vulnerable in terms of online shopping) than nationally. In three wards, Wolverham, Winsford Dene and Netherpool, more than a third of households are in postcodes ranked in the top 20%.

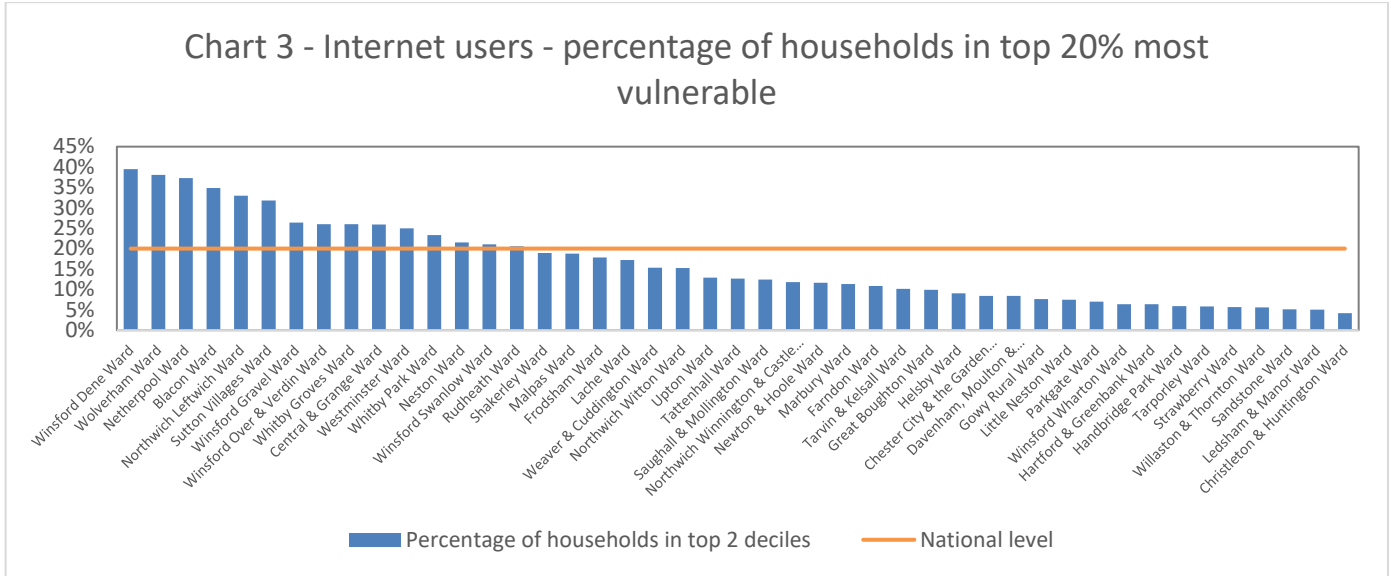Chart 1: Online puchasing - percentage of households in top 20% most vulnerable

Online finance

Chart 2 shows every ward in the borough has some households in postcodes ranked nationally in the top 20% most digitally vulnerable in terms of online finance. These are households who are least likely to manage their current account online. Nine wards are estimated to have a higher proportion of households less likely to have an online current account (and in the top 20% most vulnerable in terms of online finance) than nationally.

Chart 2: Online finance - percentage of households in top 20% most vulnerable
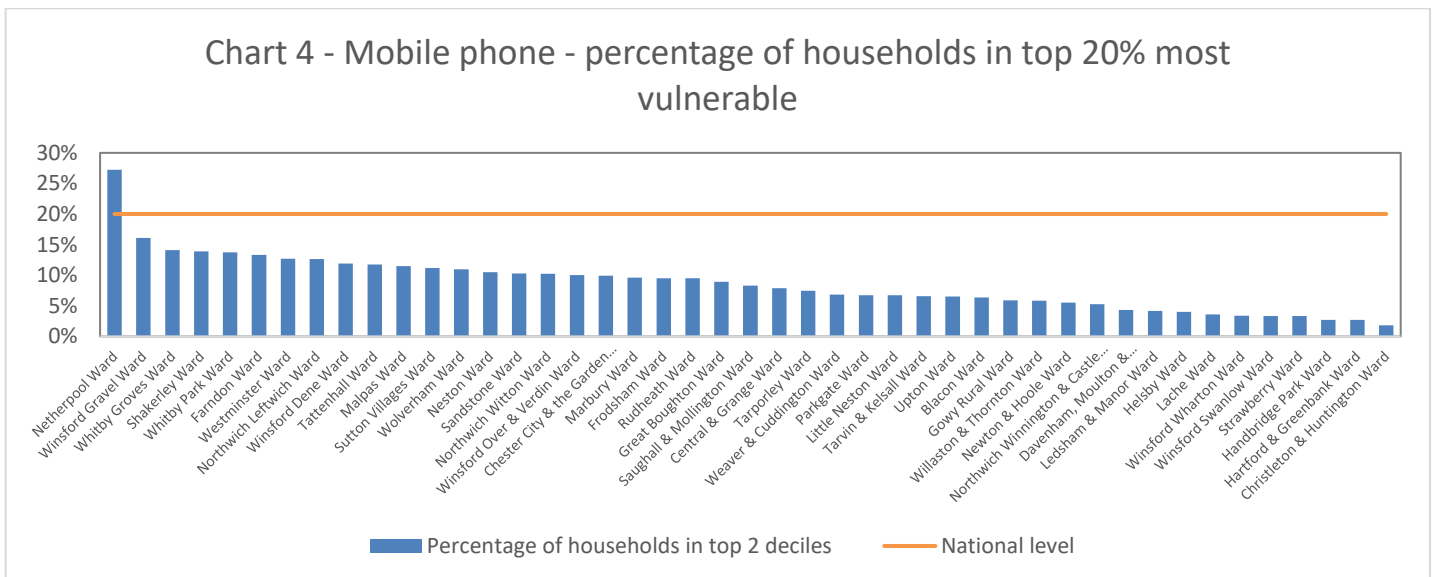
Internet users

Chart 3 shows every ward in the borough has some households in postcodes ranked nationally in the top 20% most digitally vulnerable in terms of internet users. These are households who are least likely to use the internet. The wards with the highest proportion of households in postcodes ranking in top 20% include Winsford Dene, Wolverham, Netherpool and Blacon.

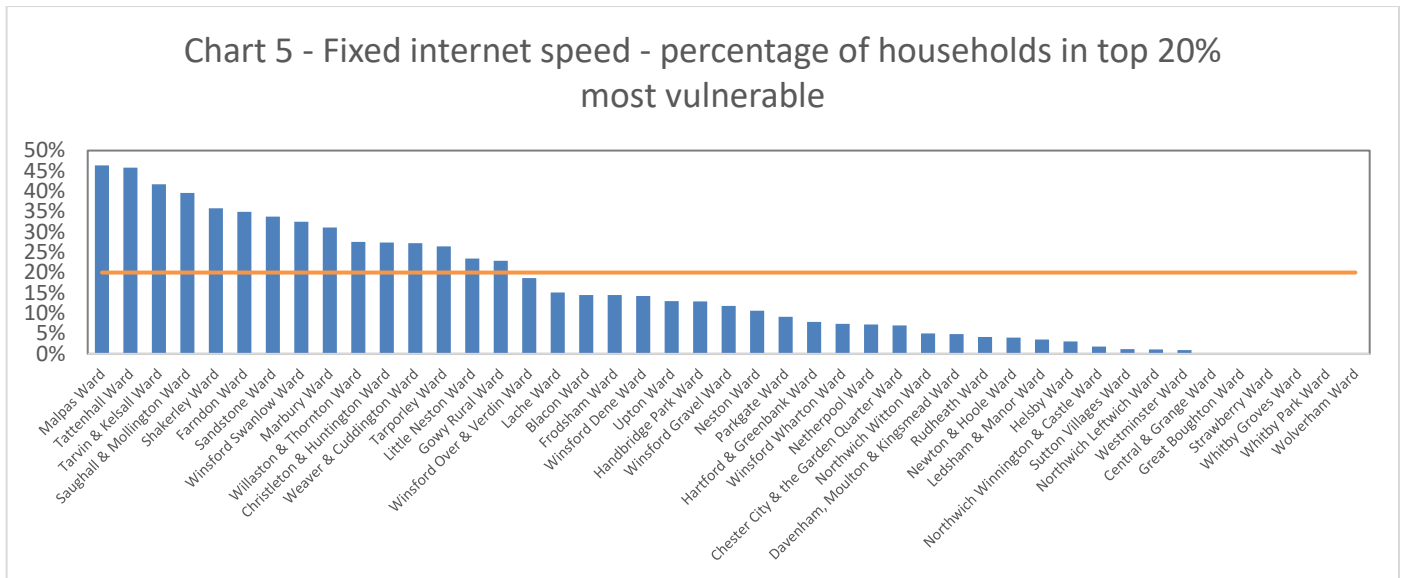Chart 3 - Internet users - percentage of households in top 20% most vulnerable

Mobile phone

Chart 4 shows every ward in the borough has some households in postcodes ranked nationally in the top 20% most digitally vulnerable in terms of mobile phone use. These are households who are least likely to have a mobile phone. In Netherpool ward more than a quarter of households are in postcodes ranked in the top 20% least likely nationally to have a mobile phone. This is the only ward which is above the national level.

Chart 4 - Mobile phone - percentage of households in top 20% most vulnerable
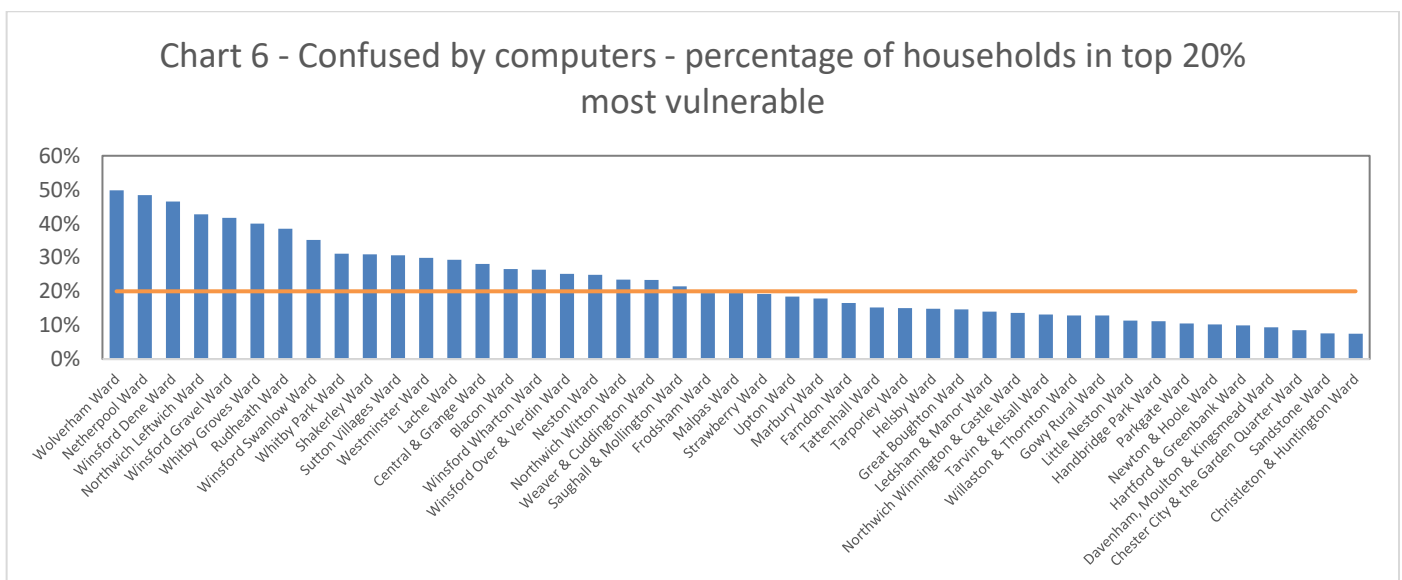
Fixed internet speed

Chart 5 shows the wards which have households in postcodes ranked nationally in the top 20% most digitally vulnerable in terms of fixed internet speed. Many of the wards with a higher percentage of vulnerable households are unsurprisingly in rural areas.

Chart 5 - Fixed internet speed - percentage of households in top 20% most vulnerable

Confused by computers

Chart 6 shows every ward in the borough has some households in postcodes ranked nationally in the top 20% most digitally vulnerable in terms of people who are likely to agree with the statement 'Computers confuse me, I will never get used to them'. In three wards, Wolverham, Netherpool and Winsford Dene it is estimated that almost half of households are amongst the top 20% nationally to agree with this statement.

Chart 6 - Confused by computers - percentage of households in top 20% most vulnerable
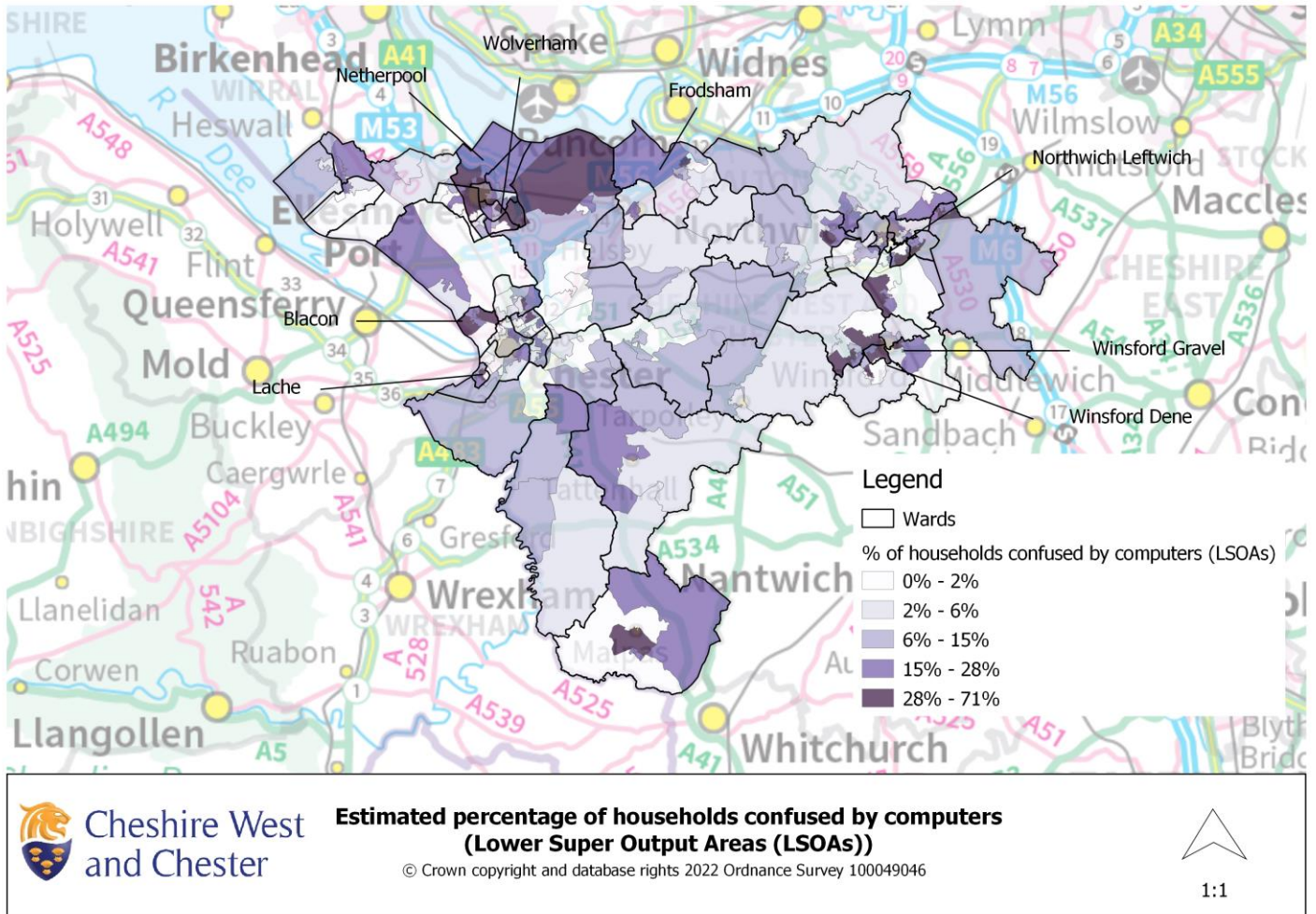
Data for smaller geographical areas

Lower super output areas (LSOAs) are small areas designed to be of a similar population size with an average of approximately 1,500 residents. They were produced by the Office for National

Statistics for the reporting of small area statistics. There are 212 LSOAs in Cheshire West and Chester.

The following map shows the estimated percentage of households who are more likely to be confused by computers across all LSOAs in Cheshire West and Chester.

Estimated percentage of households confused by computers (Lower Super Output Areas (LSOAs))
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1:1

The LSOAs with the highest estimated percentages of households who are confused by computers tend to be in more deprived areas. Nine of the thirteen LSOAs in Cheshire West and Chester where more than half of households are estimated to be confused by computers are in the top 20% deprived areas in England (IMD 2019).

Sources:

This paper is produced using data supplied by CACI who use statistical models to estimate scores, deciles and percentiles for a range of vulnerability indicators. © 1996 – 2021 CACI Limited. This report shall be used solely for academic, personal and/or non-commercial purposes. The applicable copyright notices can be found at http://www.caci.co.uk/copyrightnotices.pdf.

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