Bury Libraries – Option Development

Impact Assessment

October 2016

Mott MacDonald

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Issue and revision record

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Contents

1 Executive summary

Scope of the study

Mott MacDonald was commissioned by Bury Council to provide an analysis and evaluation of the potential options for the future delivery of library services across Bury. Socio-demographic, equality, and public transport accessibility analyses have been undertaken in order to help understand the outcomes of all seven possible options for development.

The seven proposed options for future delivery are:

- Option 1: Ramsbottom, Bury, Prestwich, Radcliffe, Tottington, Whitefield, Unsworth
- Option 2: Ramsbottom, Bury, Prestwich, Radcliffe, Tottington, Whitefield
- Option 3: Ramsbottom, Bury, Prestwich, Radcliffe, Tottington, Unsworth
- Option 4: Ramsbottom, Bury, Prestwich, Radcliffe, Whitefield
- Option 5: Ramsbottom, Bury, Prestwich, Radcliffe, Unsworth
- Option 6: Ramsbottom, Bury, Prestwich
- Option 7: Ramsbottom, Bury, Radcliffe, Prestwich

Socio-demographic profile

Population data[1] was collected for the following groups to understand those are likely to be affected by the potential reconfiguration of library services.

- Total population
- Older people (Over 65, Census 2011)
- Children (Under 16, Census 2011)
- Deprived people (Index of Multiple Deprivation [IMD], Department for Communities and
- Local Government [DCLG] 2015)
- Disabled people (Limiting Long Term Illness, Census 2011)
- People from black, Asian or minority ethnic (BAME) background (not White British, Census 2011)
- People without access to a car (households without a car, Census 2011)

The demographic profile indicates that the majority of population groups considered for this analysis are in line with both the regional (north west region) and national (England) averages. However, those from BAME groups and those with no access to a car are both below the national average. With regards to deprivation, the population of the assessment area is broadly in line with both the national and regional averages for all quintiles, except for the most deprived quintile, which is lower than the average for the north west.

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[1] Population data was extracted from the 2014 Subnational Population Projections and the 2011 Census.

Key usage trends

To supplement and support the socio-demographic work above Bury Libraries' membership database[2] was interrogated and a qualitative evidence review was carried out in order to explore the underpinning reasons behind service use and access patterns. This indicates that:

- Bury usage data shows that the highest concentrations of users are located around the town of Bury itself, and to the urban south of the district around Prestwich.
- Bury and Prestwich libraries have a combined share of 54% of users, with Bury itself home to 34%.
- Bury has a high proportion of adult borrowers, with a comparatively low proportion of young person's when compared to other library locations. Conversely, Tottington and Unsworth libraries both have low proportions of adult borrowers, and high proportions of young persons.
- National evidence suggests that there has been a decline in library usage in recent years, due to numerous factors including library users having less free time and people buying or getting books from elsewhere, such as e-books.[3]
- Much of the literature highlights that libraries play a variety social and civics and contribute to social well-being. They are considered to be safe environments for literacy and learning and a starting point for the empowerment of citizens who may lack opportunities and resources at home. [4] [5] These functions are particularly important to older people and those from deprived backgrounds.
- Libraries enable access to computers and the internet, which can be a key driver in use by those from deprived communities and also younger people, [6]
- There is national evidence to suggest that a higher proportion of adults from BAME groups use libraries for academic purposes compared to adults from white ethnic backgrounds. [7] .

[2] 54,632 records were mapped to postcodes in Bury, so were used for the analysis. The analysis has also disaggregated the user database by 'users of each library location' and 'borrower type' to further explore the impacts on these sub groups.
[3] Deprtament of Culture, Media and Sport (DCMS) (2016) Taking part focus on libraries. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519675/Libraries_short_story_-_FINAL.pdf
[4] DCMS (2014) Independent library report for England. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388989/Independent_Library_Report-_18_December.pdf
[5] Older People's Commissioner for Wales (2014) The importance and impact of community services within Wales.See:http://www.olderpeoplewales.com/Libraries/Uploads/The_Importance_and_Impact_of_Community_Services_within_Wales.sflb.ashx
[6] Citizens Advice Scotland (2015) Internet access in Glasgow's deprived areas. See: http://www.cas.org.uk/system/files/publications/internet_access_in_glasgow_2015_final_-_aug_15.pdf
[7] DCMS (2016) Taking part focus on libraries. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519675/Libraries_short_story_-_FINAL.pdf

Public transport accessibility

Analysis by population

Results of public transport accessibility analysis[8] for the population of Bury show that:

- Option 1 affects the least amount of residents as it includes the highest number of libraries (seven). All of the population are within a 30 minute travel time of a library
- Options 2 and 3 (six sites) also affect a relatively small number of residents. Although options 2 and 3 both lose one library in the south of the district, both options already have three libraries in the south so, overall, the area remains well served. Under both options all of the population are within a 30 minute travel time of library. Higher proportions of the population can access the site within 10 minutes under option 3 (which retains Unsworth) as compared to option 2.
- Options 4 and 5 (five sites) both lose Tottington library. This impacts in the north west of the district experiencing increased travel times. However, the north east and the south of the district remain well served. Under these options 730 people live have journey times of over 30 minutes. Higher proportions of the population can access the site within 10 minutes under option 5 (which retains Unsworth) as compared to option 4.
- Option 6 affects the highest number of residents as a result of proposing the fewest libraries in the future (three sites). With this option, over 4,500 of the district's population live over 30 minutes from a library.
- Option 7 in the only option that contains four libraries. Of the overall population, 26% are located within 10 minutes' travel time. The proportion of overall population located within 15 minutes travel time is 67%.
- There are no significant differences between weekday and Saturday travel times with any of the options. This is a result of Saturday services operating at a similar frequency and operating along the same routes as weekday services.

Analysis by user group

Public transport travel times for each of the proposed option sets were also mapped against the types of borrower (Adult borrower, disabled user, institution, senior citizen, young person) in order to see if any borrower types would be disproportionately affected by potential changes. Figures were calculated as a proportion of the total borrower population:

- With option 1, each borrower type group has proportions in each travel time band that are broadly in line with the total proportion of borrowers.
- Options 2, 3 and 4 have similar proportions of borrower type compared to the total borrower proportion column in each travel time band with the exception of the institution borrower type category.
- Similarly with option 5 the institution borrower type category has proportions that are not in line with the total proportion. However, with this option senior citizens may also be disproportionately impacted by longer travel times as 28% of this borrower type will have travel times of over 15 minutes, compared to 22% of the total proportion of library users.
- With options 6 and 7, the borrower type proportions are broadly in line with the overall totals, with the exception of the institution borrower type.

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[8] Public transport travel time isochrones have been generated using TRACC software which includes timetable information for bus, rail, coach and tram from quarter one 2016, More detail can be found in section 2.

2   Introduction

2.1   Scope

Mott MacDonald was commissioned by Bury Council to undertake socio-demographic, equality and public transport accessibility analysis to help shape potential options for the future delivery of library services across Bury.

2.2   Demographics

A socio-demographic baseline of Bury district was created to provide the social and demographic context for the review. The baseline presents a snapshot of the relevant surrounding communities that are likely to experience any effects from potential service reconfigurations. Population data has been extracted from 2014 Subnational Population Projections and the 2011 Census, and includes the following categories:

– Total population
– Children (under 16)
– Older people (65 and above)
– Disabled people or those with an LLTI
– BAME
– Pakistani women
– Households with no access to a car
– IMD deprivation quintiles

2.3   Qualitative review

To supplement and support the socio-demographic baseline qualitative evidence has been reviewed. The review explores drivers behind usage patterns, barriers to access, and trends in need and demand for particular services, determining why certain patterns of use or non-use have emerged.

2.4   Accessibility

In considering a council's duty to provide a comprehensive library service to its residents, the High Court ruled in 2014 that, 'Comprehensive has...been taken to mean delivering a service that is accessible to all residents using reasonable means...' 'The modelling undertaken in this report was commissioned in order to inform understanding of what would represent the minimum level of service provision consistent with this ruling. This was done by estimating the degree of accessibility to the nearest township library for all residents living within the borough under different levels of service provision. The focus was on the township libraries as these have longer opening hours. As such they are, by definition, more accessible and tend to offer a more comprehensive range of services. It should be emphasised however that the decision to model only accessibility to the township libraries dos not provide any indication about the Council's intentions at this time with respect to Bury's community libraries.

'Accessible' is measured by the amount of time (in five minute intervals up to 30 minutes) taken for each resident to reach their nearest library by public transport.

Public transport was chosen over accessibility by car because not all residents have access to a car, and the borough's more vulnerable residents will be disproportionately represented amongst public transport users. In addition, older residents, who are an important user group for the service, can travel for free on public transport.

Accessibility was modelled first using the current service level provided by Bury's seven township libraries (option 1). Subsequent modelling provided an indication of how the level of accessibility changed in response to different levels of service provision (options 2 to 7). These are set out below.

- Option 1: Ramsbottom, Bury, Prestwich, Radcliffe, Tottington, Whitefield, Unsworth
- Option 2: Ramsbottom, Bury, Prestwich, Radcliffe, Tottington, Whitefield
- Option 3: Ramsbottom, Bury, Prestwich, Radcliffe, Tottington, Unsworth
- Option 4: Ramsbottom, Bury, Prestwich, Radcliffe, Whitefield
- Option 5: Ramsbottom, Bury, Prestwich, Radcliffe, Unsworth
- Option 6: Ramsbottom, Bury, Prestwich
- Option 7: Ramsbottom, Bury, Radcliffe, Prestwich

2.5   Library user analysis

The Bury libraries membership database was interrogated to provide an understanding of current users of each of the libraries above. This data was linked to the outputs of the accessibility analysis to provide a more in depth appraisal of travel impacts for persons who will be specifically impacted by potential service changes. The analysis also disaggregated the user database by 'users of each library location' and 'borrower type' to further explore the impacts on these sub groups.

3 Socio-demographic mapping

3.1 Introduction

This chapter sets out the socio-demographic baseline data that has been collated to inform the assessment. It is not intended to be a full socio-demographic profile of the impact area - the data focuses on baseline data that is relevant to the future delivery of library services across Bury. The baseline provides the social and demographic context for the review and presents a snapshot of the relevant surrounding communities that are likely to experience any effects.

Comparisons are made between the Bury local authority, the north west region and England. Figures for England are given to show whether the profile of the assessment area is in line with national averages.

3.2 Population

3.2.1 Total population and population density

Table 3.1 shows the population for the three areas as of 2014. The usual resident population in Bury is 187,500 according to 2014 Subnational Population Projections.

Table 3.1:   Usual resident population

	Total population
Bury local authority	187,500
North west	7,133,000
England	54,316,600

Source: Subnational Population Projections, 2014

Figure 3.1 illustrates the population density across Bury. Population density is higher in the more urbanised areas, south of the district.

Figure 3.1:   Population density – all usual residents
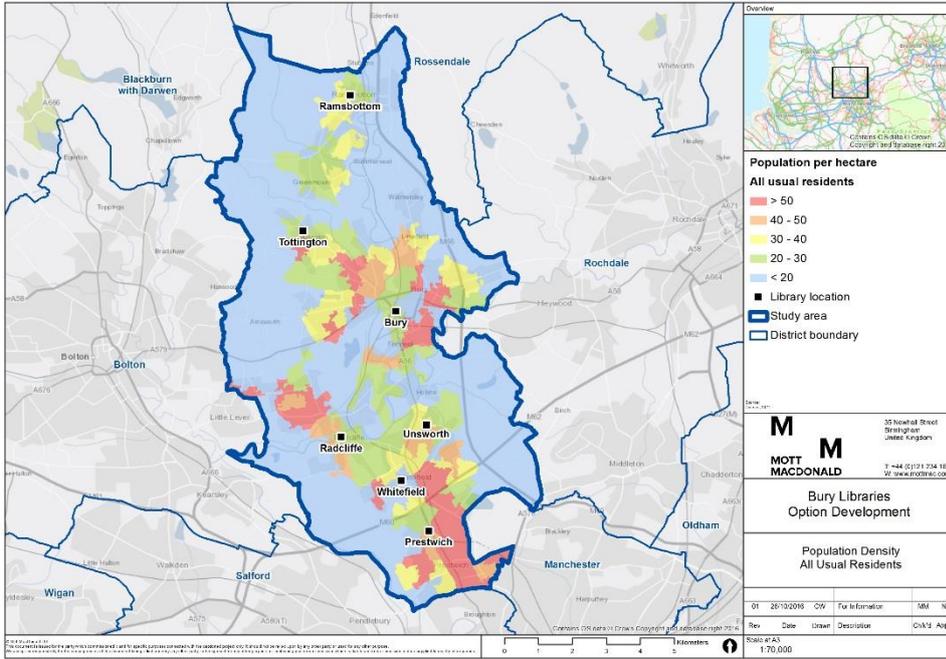
Source: Subnational Population Projections, 2014

3.2.2   Children (under 16)

Bury has 37,900 residents aged under 16 which is 20% of the total population. This is shown in Table 3.2 below. The proportion of the population who are aged under 16 in Bury is broadly in line with the comparator areas of the north west region and England.

Table 3.2:   Population aged under 16

	Population aged under 16	Proportion aged under 16
Bury local authority	37,900	20%
North west	1,342,500	19%
England	10,303,600	19%

Source: Subnational Population Projections, 2014

Figures 3.2 and 3.3 respectively show the proportion and density of children aged under 16 in Bury. The more rural areas of Bury have low densities of the under 16 population. However, there are higher concentrations in the built-up areas, particularly in the south east of the district to the east of Whitefield and Prestwich.

Figure 3.2:   Proportion of residents aged under 16

Source: Subnational Population Projections, 2014

Figure 3.3:   Population density – residents aged under 16
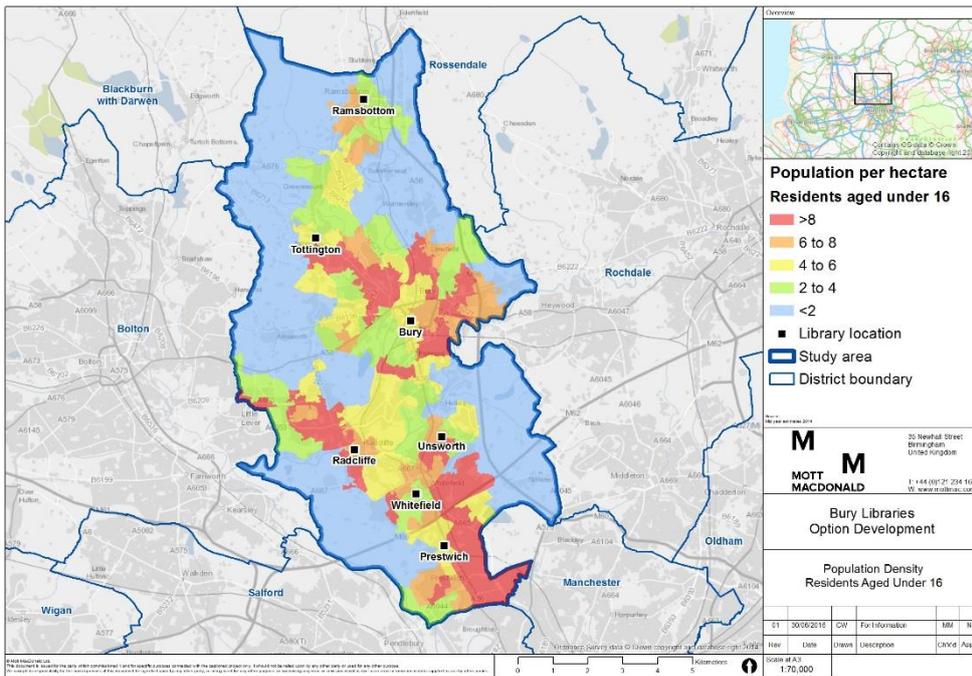
Source: Subnational Population Projections, 2014

3.2.3 Older people (65 and over)

Table 3.3 shows Bury has 32,800 residents aged 65 and over which is 17% of the total population. The proportion of the population who are aged over 65 in Bury is in line with the comparator area of the North west region and England.

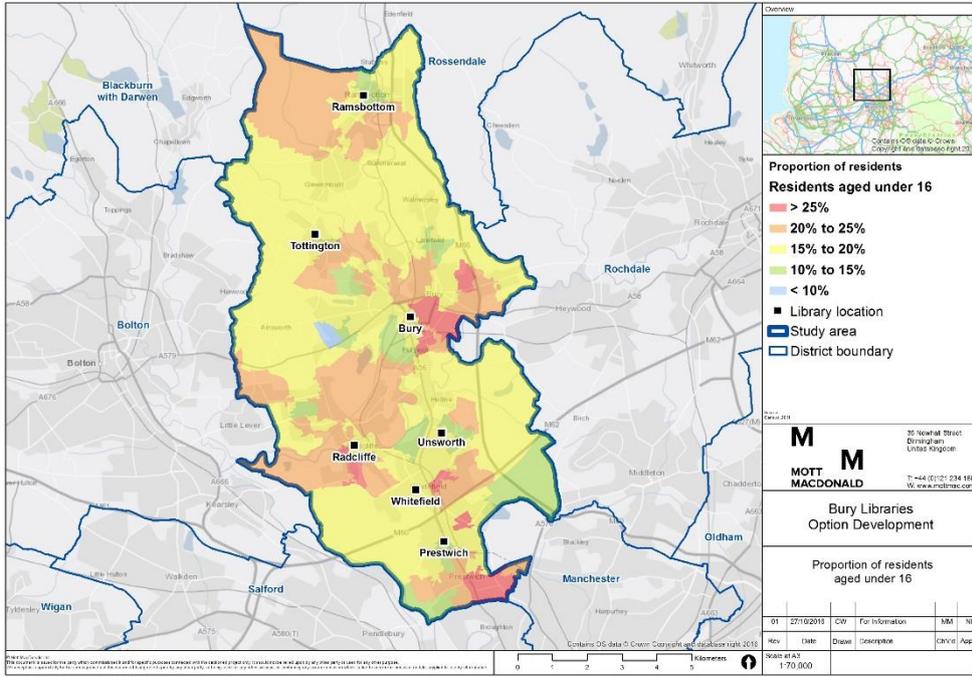Table 3.3: Population aged 65 and over

	Population aged 65 and over	Proportion aged 65 and over
Bury local authority	32,800	17%
North west	1,280,800	18%
England	9,537,700	18%

Source: Subnational Population Projections, 2014

Figure 3.4 shows the proportion of the population aged over 65 in Bury. Bury has relatively low levels of residents aged 65 and over, with higher proportions to the north west of Bury town and the eastern side of Prestwich. Figure 3.5 shows the density of residents aged 65 and over within Bury.

Figure 3.4: Proportion of residents aged 65 and over
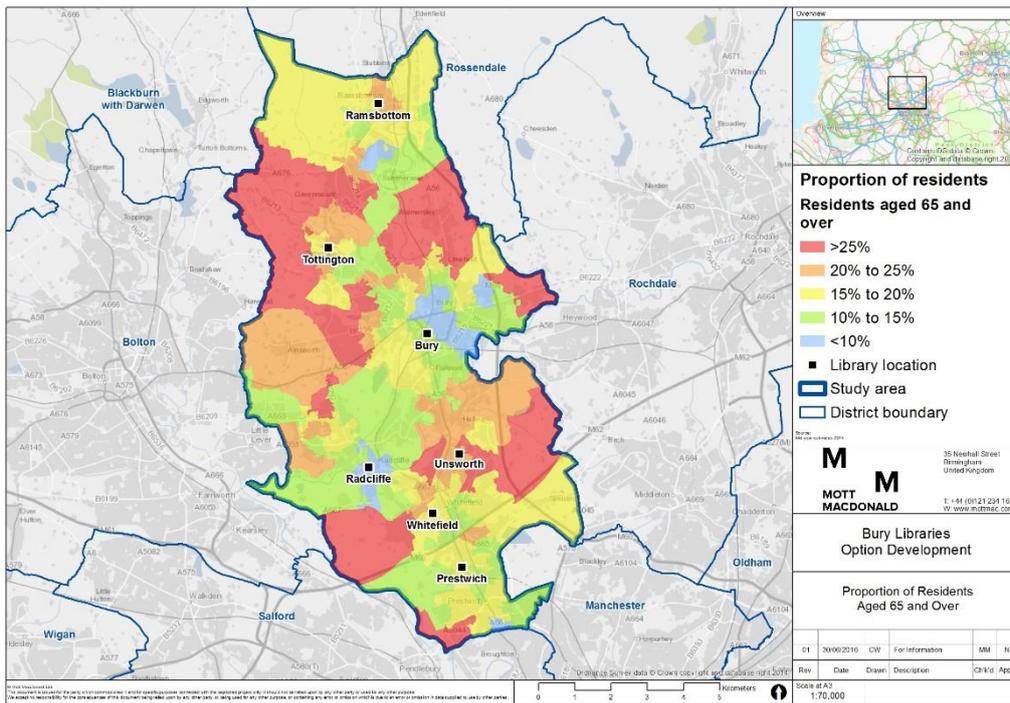
Source: Subnational Population Projections, 2014

Figure 3.5:   Population density – residents aged 65 and over
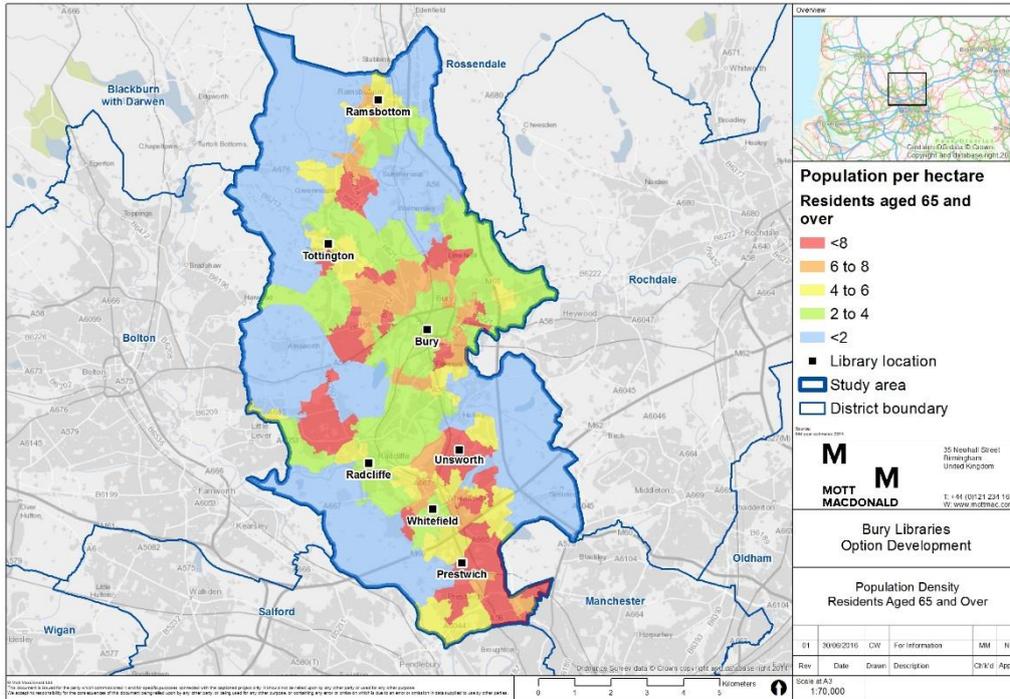
Source: Subnational Population Projections, 2014

3.2.4 Disability

33,200 people in Bury have an LLTI – 18% of the population. This is in line with the national average, but slightly lower than the average for the North west region.

Table 3.4:   People with an LLTI

	People with as LLTI	Proportion of people with an LLTI
Bury local authority	33,200	18%
North west	1,369,600	20%
England	8,937,000	17%

Source: Census 2011

Figure 3.6 shows the proportion of the population with an LLTI in Bury. Figure 3.7 shows the density of residents with an LLTI within Bury. Bury has relatively low proportions of people with a LLTI, however there are higher concentrations on the outskirts of Bury town and to the south east of the district.

Figure 3.6:   Proportion of residents with a LLTI
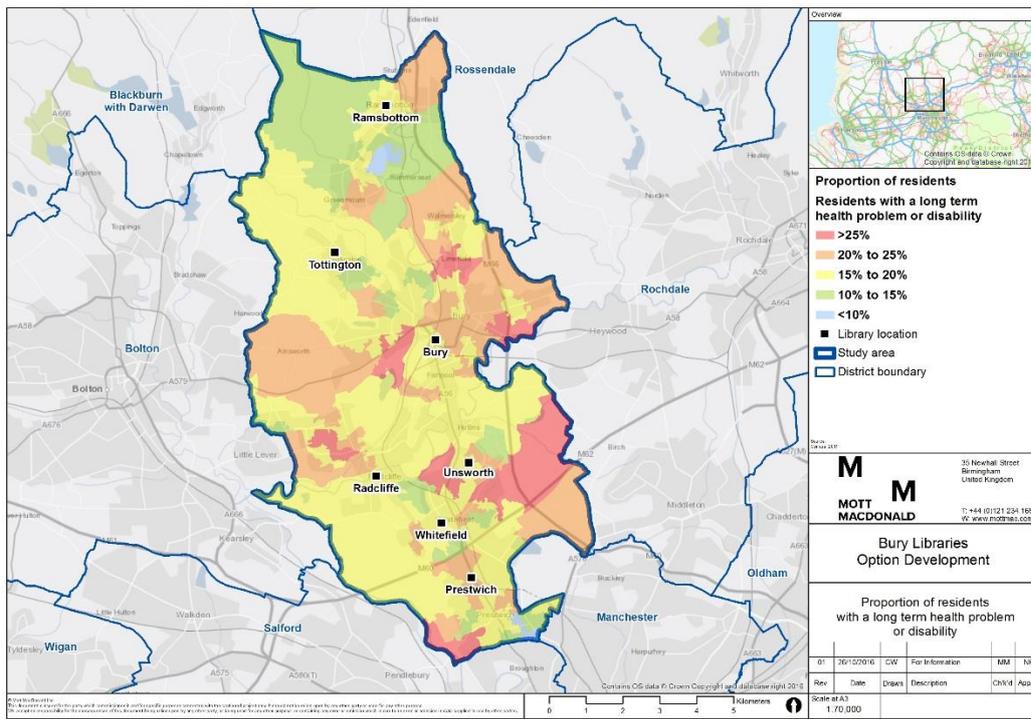
Source: Census 2011

Figure 3.7:   Population density – residents with an LLTI
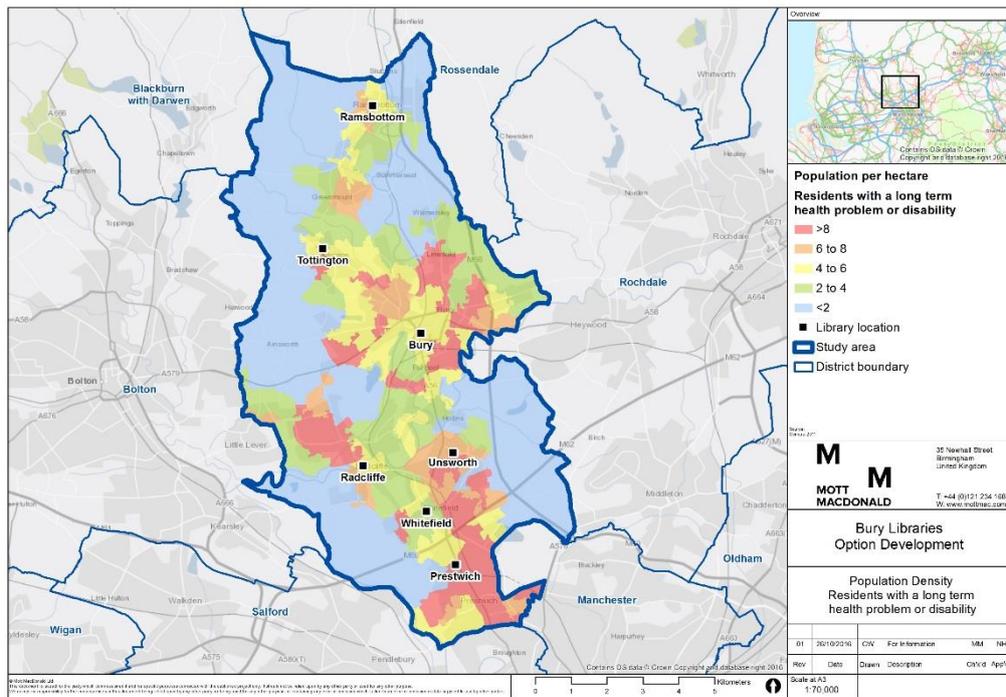
Source: Census 2011

3.2.5   BAME

Table 3.5 shows Bury has 27,200 individuals from a BAME background, which is 15% of the total population. This is higher than the comparator area of the North West Region (13%), but lower than England (20%).

Table 3.5:   BAME residents

	BAME	BAME proportion
Bury local authority	27,200	15%
North west	911,100	13%
England	10,733,200	20%

Source: Census 2011

Figure 3.8 shows the proportion of BAME residents in Bury. Figure 3.9 shows the density of BAME residents. There are low proportions of BAME individuals throughout the district of Bury, however there are high concentrations in the built up areas of Bury town and Prestwich.

Figure 3.8:   Proportion of BAME residents
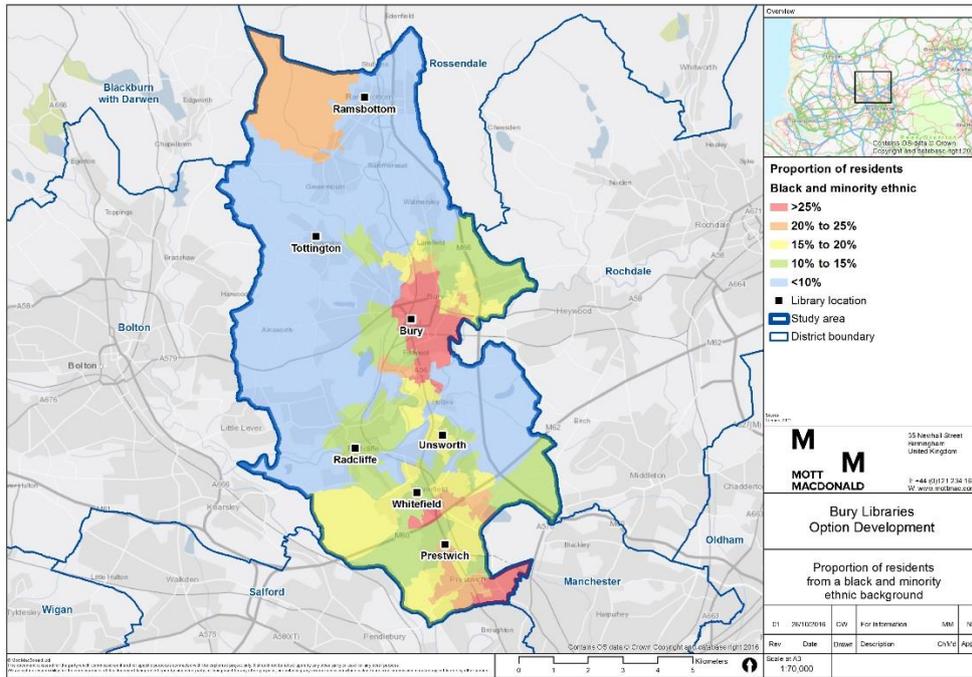
Source: Census 2011

Figure 3.9:   Population density – BAME residents
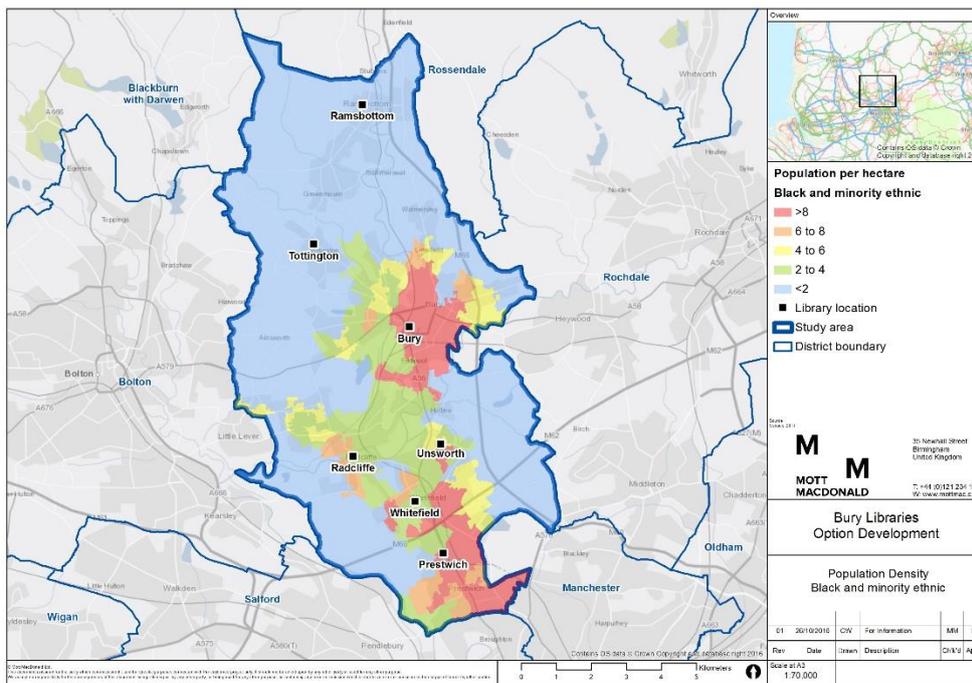
Source: Census 2011

3.2.6 Pakistani women

Table 3.6 shows Bury has 4,500 Pakistani women, which is 5% of the total population. This is higher than both the comparator area of the North west region (3%) and England (2%).

Table 3.6: Pakistani women

	Pakistani women	Proportion of Pakistani women (as proportion of total women)
Bury local authority	4,500	5%
North west	93,000	3%
England	542,500	2%

Source: Census 2011

Figures 3.10 and 3.11 show the proportion and density of Pakistani women within the Bury district, respectively. The proportion of Pakistani women is low for the majority of the district, however there are high concentrations in the built up area of Bury, particularly to the east of the town.

Figure 3.10: Proportion of Pakistani women
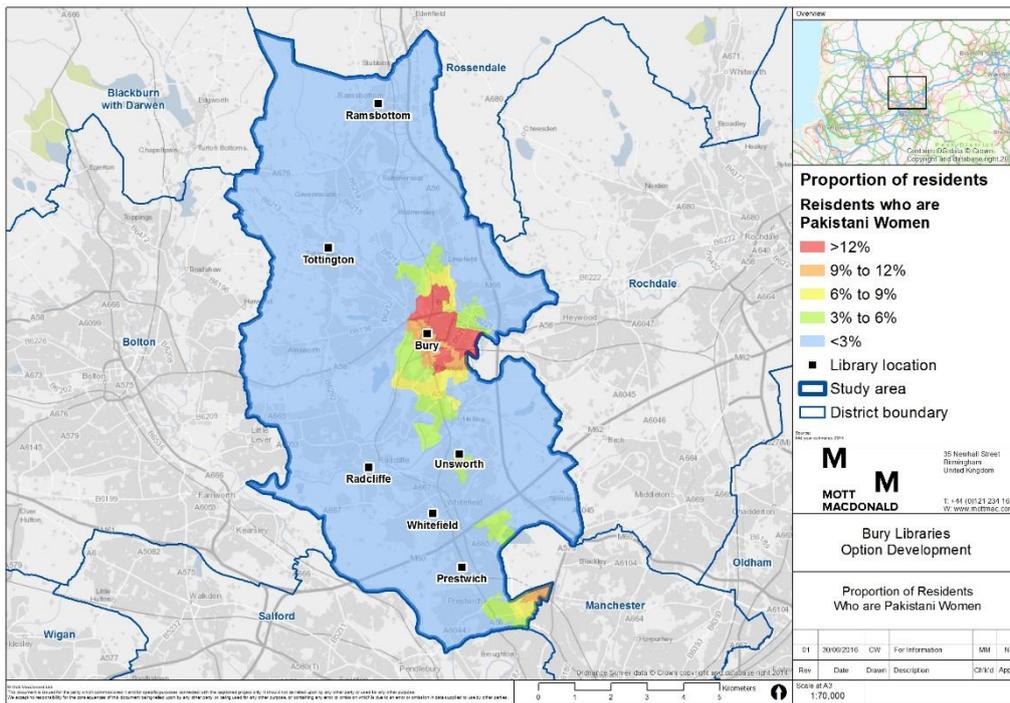
Source: Census 2011

Figure 3.11: Population density – Pakistani women
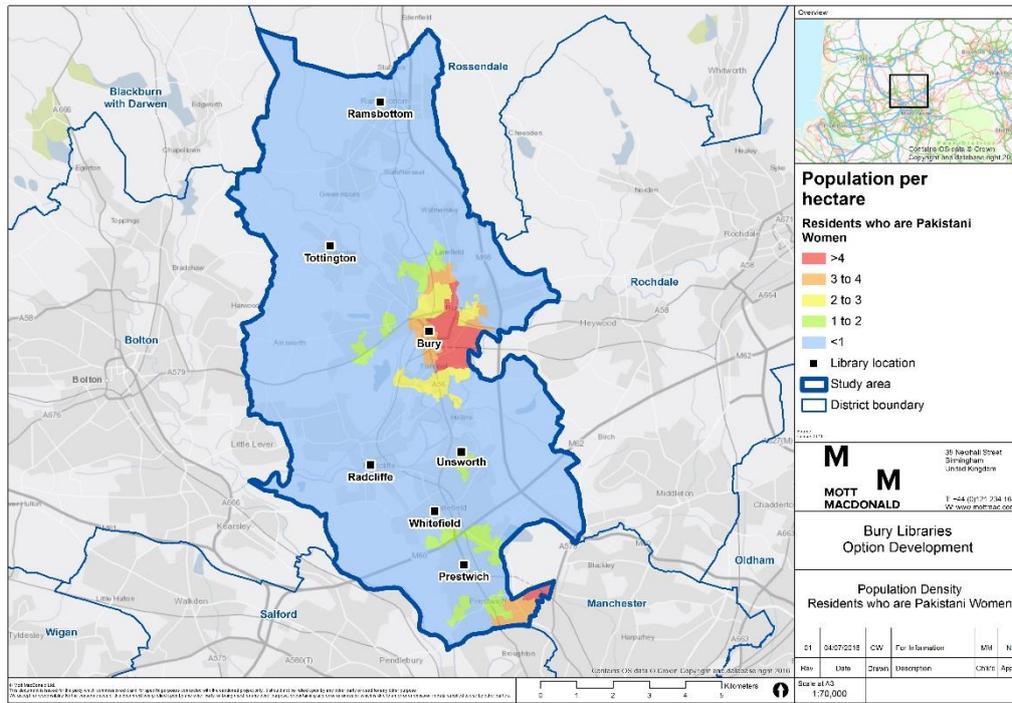
Source: Census 2011

3.2.7 People without access to a car

Table 3.7 shows Bury has 18,700 households without access to a car, which is 24% of the total population. This is slightly lower than both the comparator area of the north west region and England.

Table 3.7: Households with no access to a car

	Households with no access to a car	Proportion of households
Bury local authority	18,700	24%
North west	841,700	28%
England	5,691,300	26%

Source: Census 2011

Figure 3.12 shows the proportion of households without access to a car within Bury. Figure 3.13 shows the density of households without access to a car within Bury. Just under a quarter of households in Bury do not have access to a car. There are higher concentrations of those without access to a car around the built up areas of Radcliffe and Prestwich, as well as to the east of Bury town.

Figure 3.12: Proportion of households with no access to a car
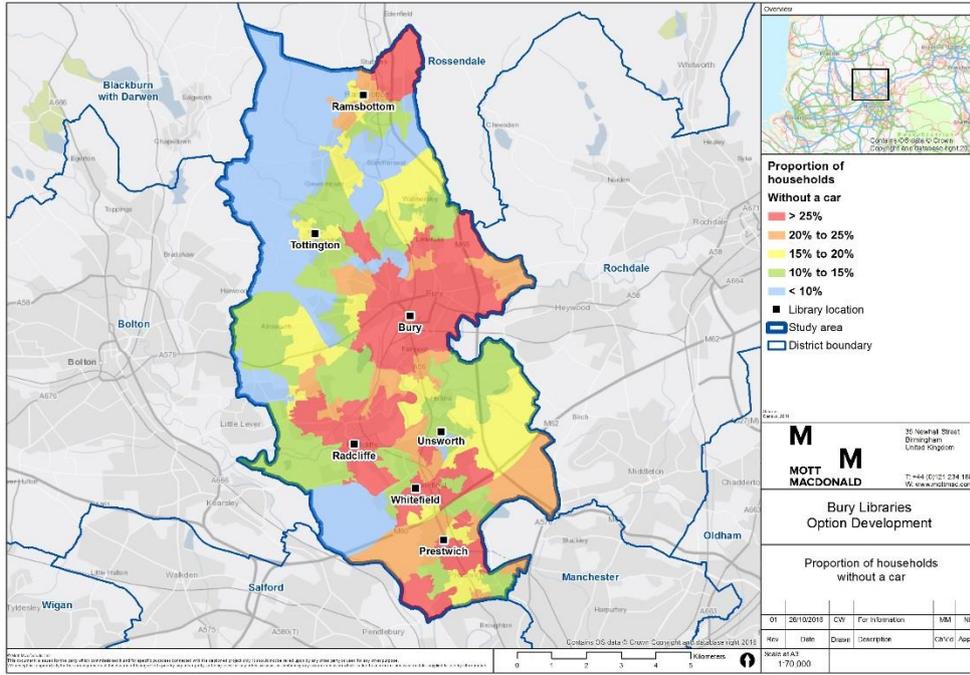
Source: Census 2011

Figure 3.13: Density of households with no access to a car
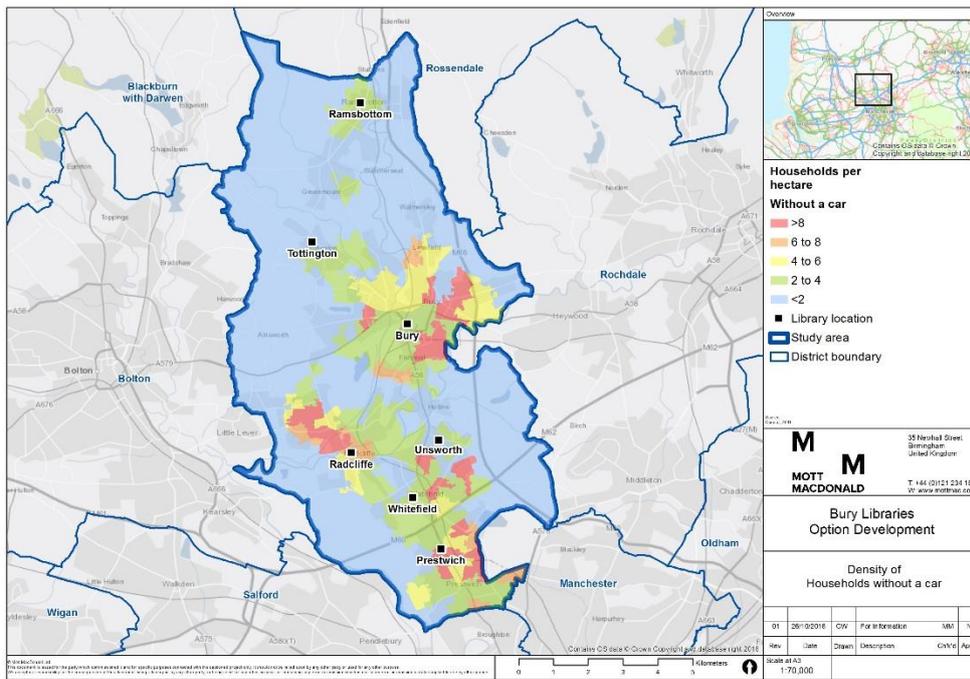
Source: Census 2011

3.2.8   Deprivation

Table 3.8 shows the proportion of the population in each deprivation quintile for the district of Bury, the North west region and England. Bury has a relatively equal proportion of population that falls into each quintile, however the third, second and most deprived quintiles have the largest proportion of population all at 21%. This is a similar reflection of the national averages. The North west region, however, has a larger proportion (32%) of its population in the most deprived quintile.

Table 3.8:   Deprivation

	Least deprived quintile	Fourth most deprived quintile	Third most deprived quintile	Second most deprived quintile	Most deprived quintile
Bury local authority	18%	20%	21%	21%	21%
North west	16%	17%	16%	19%	32%
England	20%	20%	20%	20%	20%

Source: IMD 2015

Figure 3.14 below shows the geographic spread of deprivation in the district. The map illustrates that the district is characterised as having a mix of areas in all quintiles. Areas of deprivation are concentrated mostly in urban areas, specifically around Bury town and Radcliffe. The least deprived areas are located primarily in rural areas, or to the north and west of the district.

Figure 3.14: Deprivation quintiles
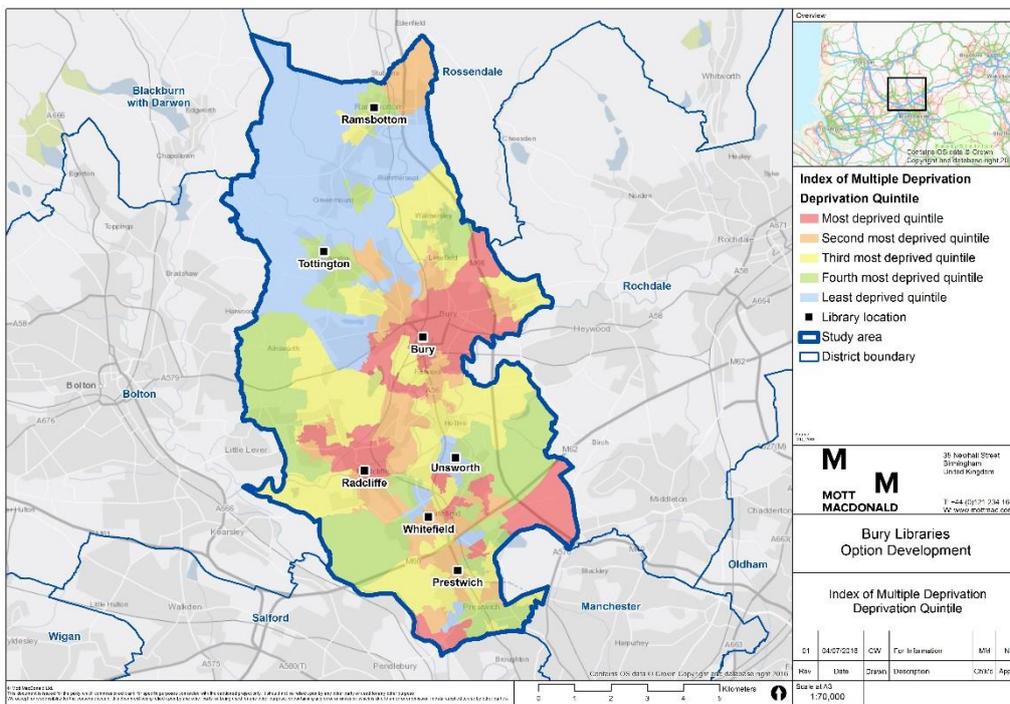
Source: Indices of Multiple Deprivation, 2015

4 Qualitative Analysis

4.1 Introduction

This literature review paper presents an overview of patterns of library use, service utilization and barriers to access, broken down by a range of social and demographic groups including:

- Older people (aged 65 and over)
- People from deprived communities and those with no access to a car
- Children and young people
- BAME groups and Pakistani women
- Disabled people

This paper presents an overall picture of library usage, before providing more detailed analysis of usage of library services in Bury and nationally.

4.2 Demographics of UK library users

Across the UK, data from the Department for Culture Media and Sport (DCMS) highlights a pattern of library usage based on social and demographic characteristics. This data shows that library usage varies considerably between different sections of the population, and a wider review of available evidence points to reasons why this might be the case. Overall, national data shows that:

- 68% of 5-10 year olds and 74% 11-15 year olds visited a library in the last year.[9]
- 14% of 5-10 year olds and 29% of 11-15 year olds visited a library in the last week.[10]
- 15% of adults engaged with the library sector digitally (4% visited a library website but not a physical library and 11% both visited a library and a library website).[11]
- 35% of adults visited a public library in the last 12 months.
- Library attendance is higher amongst women (39%) than men (30%).
- However, amongst all socio-demographic groups library usage has decreased from 2005 to 2015.[12]

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[9] DCMS (2015) Taking Part 2014/15 Annual Child Report p.6
[10] DCMS (2015) Taking Part 2014/15 Annual Child Report p.21
[11] DCMS (2015) Taking Part 2014/15 Quarter 4 p.32

[12] DCMS (2016) Taking part focus on libraries. See:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519675/Libraries_short_story_-_FINAL.pdf

Figure 4.1: Change in library user demographics by per cent between 2005/6 and 2014/15
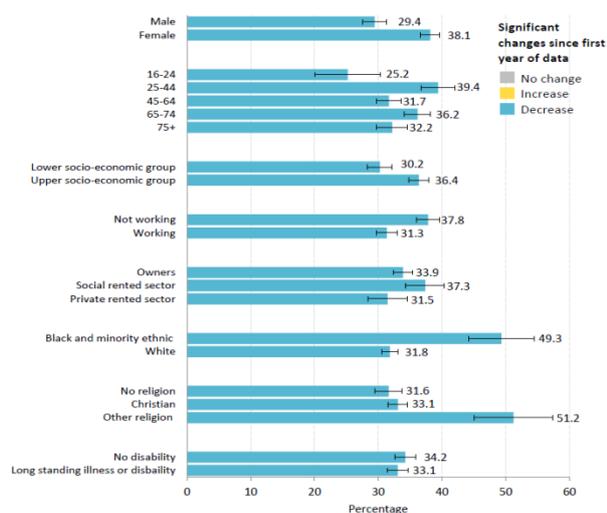
Source: DCMS (2015) Taking Part 2014/15 Quarter 4

It has been suggested by DCMS that reasoning behind the decline in library usage is associated with: [13]

- Library users claiming that they have less free time (25% of adults).
- People buying or getting books from elsewhere.
- The increase in people using e-books as opposed to hard copies.
- Adults in upper socio-economic groups[14] had a higher rate of library attendance than people in lower socio-economic groups[15] (36% compared to 31%).
- Adults between 25 and 44 years old had higher rates of library attendance (41%) than adults in all other age groups.
- Adults who were not working had higher rates of library attendance than those who were working (38% compared to 32%).
- Adults with no limiting long term condition or disability had higher rates of library attendance than those with a limiting disability (36% compared to 32%).
- Adults from BAME groups had higher rates of library attendance than adults from the white group (48% compared to 33%). [16]

The remainder of this review explores usage trends amongst the different socio-demographic groups which are subject of this study including:

- The potential benefits of using library services
- The kinds of services required
- Any barriers to accessing library services

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[13]DCMS (2016) Taking part focus on libraries. See:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519675/Libraries_short_story_-_FINAL.pdf
[14] Details of socioeconomic groupings are published by ONS at the following link:
http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html
[15] Details of socioeconomic groupings are published by ONS at the following link:
http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html
[16] Reading Agency (No Date) Library facts. See: https://readingagency.org.uk/about/impact/001-library-facts/

4.2.1 Older people (aged over 65)

4.2.1.1 Library usage and benefits

Recent research for the Older People's Commissioner for Wales highlighted that libraries play a significant role in the lives of older people as they provide a physical space for people to interact, thereby helping to address social isolation and depression which are problems faced by many as they grow older. Many libraries seek to meet the needs of those who are socially isolated by providing stimulating activities which can often bring health benefits to those who take part. Libraries can also play a pivotal role in allowing older people to remain actively engaged in their wider community. Volunteer opportunities are common amongst libraries allowing older people to become involved.[17]

In addition, many services provide opportunities to attend educational classes in libraries, such as language and IT courses, which mean older people can remain involved in learning at all stages of their life. IT training can further support the independence of older people, in an increasingly online age. Training activities can be successfully accommodated in a library environment with the provision of large print and audio formats to ensure all older audiences are catered for and there are no access barriers. [18]

4.2.1.2 Key service areas used

Department for Health funded research for the Society of Chef Librarians suggest that the main services used by older people include:

– Book and reading groups: which often provide the abovementioned opportunities for socialising.
– Discussion groups: older people often have the desire to remain up-to-date with contemporary life, and discussion groups can help to accommodate that.
– Coffee and conversation groups: including informal drop-in sessions, normally run by volunteers.
– Memoir writing: suitable materials including books, local studies, and internet access can all be provided to give support to these kinds of activities.
– Film: film screenings draws members in and has a social aspect too.
– Reading programmes: many library services offer mobile services whereby the service itself visits residential homes.
– IT related programmes: many libraries offer IT classes which help people to use the internet, access emails, and use Microsoft Word. Many libraries also participate in the 'Silver Surfer' scheme which runs to assist older people with IT and avoid the 'digital divide' which is increasingly apparent.
– Wider wellbeing services: including non-typical services such as health checks.[19]

4.2.1.3 Barriers to accessing libraries

There is some evidence to suggest that older people experience barriers to accessing library services. Many older people can be unaware of the full range of services on offer at libraries due to limited marketing to members of this group. Promotion of such services need to be more widespread and embedded in community and umbrella groups who work with older people themselves, thus increasing visibility.

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[17] Sloan, M. and Vincent, J. (2009) Library services for older people. See: http://www.seapn.org.uk/uploads/files/Library-services-good-practice-guide-1336795.pdf
[18] Sloan, M. and Vincent, J. (2009) Library services for older people. See: http://www.seapn.org.uk/uploads/files/Library-services-good-practice-guide-1336795.pdf
[19] Sloan, M. and Vincent, J. (2009) Library services for older people. See: http://www.seapn.org.uk/uploads/files/Library-services-good-practice-guide-1336795.pdf

The limitations of stock at libraries can also be a potential access barrier. Libraries may have a lack of choice in terms of large print items, for example.[20]

4.2.2 People from deprived communities and those with no access to a car

Non-car ownership is also overwhelmingly concentrated in areas of low income.[21] As a result of this the benefits that they are likely to experience as a result of using the library are expected to be similar to those of people from deprived communities.

4.2.2.1 Library usage and benefits

Public library data suggests that adults living in the most deprived areas visit the library more than those from less deprived areas. 37% of those living in the most deprived area visit their library, compared to 32% in the least deprived.[22] In 2014 it was also suggested in a report by DCMS that in England over a third of the population visits their local library; in the poorest areas of the country, this figure rises to nearly half. Libraries are not only considered to be safe environments for literacy and learning, but have also become the starting point for the empowerment of citizens who may lack opportunities and resources at home.[23]

4.2.2.2 Key service areas used

A 2012 Economic and Social Research Council research paper on poverty suggests that libraries are valuable to deprived communities because they able to provide a number of resources – such as books, magazines, newspapers and other media – for free or at low cost. It also noted that many of the activities that are offered in libraries – such as reading groups, parent and toddler groups, and children's events – are also free or, again, offered at very low cost. Moreover, it suggests that in difficult economic times, libraries can become an important replacement mechanism by which to access resources for many people. People may also choose to replace more expensive leisure activities with reading and thus feel more inclined to access free books available in a library.[24]

Internet access and use of a computer is also a common reason for people living in deprived areas to visit a library.[25] The DCMS research report stated that at least 20% of the population have no access to digital technology at home, and a much higher proportion than this figure do have such technology but fail to utilise it to its full potential. The need to create digital literacy in today's society can therefore be met by the professionalism and services offered within the library network. And, as a result of these services often being free of charge to use, are able to be made available to deprived communities and persons.[26]

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[20] Sloan, M. and Vincent, J. (2009) Library services for older people. See: http://www.seapn.org.uk/uploads/files/Library-services-good-practice-guide-1336795.pdf

[21] House of Commons Environmental Audit Committee (2013) Transport and accessibility to public services. See: http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenvaud/201/201.pdf

[22] May, J. (2015) who uses public libraries? See: http://www.cilip.org.uk/blog/who-uses-public-libraries

[23] Department for Culture, Media and Sport (2014) Independent library report for England. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388989/Independent_Library_Report-_18_December.pdf

[24] Poverty and Social Exclusion in the UK (2012) Local services under siege: attitudes to public services in a time of austerity. See: http://www.poverty.ac.uk/system/files/WP%20Analysis%20No.2%20-%20Local%20Services%20Under%20Siege%20(Besemer%20%20Bramley%20May%202012).pdf

[25] Citizens Advice Scotland (2015) Internet access in Glasgow's deprived areas. See: http://www.cas.org.uk/system/files/publications/internet_access_in_glasgow_2015_final_-_aug_15.pdf

[26] Department for Culture, Media and Sport (2014) Independent library report for England. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388989/Independent_Library_Report-_18_December.pdf

Libraries can support access to employment through job clubs, back to work programmes and facilitated sessions with partner agencies, for example, adult learning and skills, Jobcentre Plus and other local organisations. [27]

4.2.2.3 Barriers to accessing libraries

A recent UCL study on the links between transport and poverty suggested that 89% of households in the highest income group own one or more cars compared with just 52% in the lowest group. The more limited access to private transport could make accessing libraries (and other public services) more difficult. The increase in cost for public transport in recent years furthers the accessibility issues to public services those without access to a car already face.[28] Local bus fares in England increased by an average of 61% between March 2005 and March 2015, with fares in metropolitan areas increasing by 71%.[29] The UK rail network is also prone to regularly experiencing ticket fare increases, with the average rail fare increase in January 2016 at 1%

Problems with transport provision and the location of public services can reinforce social exclusion by preventing people from accessing key local services, including public libraries. The inability to access the public library undermines its purpose of being an environment that welcomes all people from within the community.

4.2.3 Children and young people

4.2.3.1 Library usage and benefits

Department for Education (DfE) research suggests that there is a link between library use and reading for pleasure - young people that use their public library are reportedly nearly twice as likely to be reading outside of school every day. Young people who do not use the library are also almost three times as likely to rate themselves as 'not very good readers' when compared to those who do use the library. [30]

4.2.3.2 Key service areas used

Young people use a range of library services. In Bury, the following services are available to support the use of the services by children and young people:

– Young people are entitled to a young person's library card where they are able to borrow up to eight books at one time
– Computers are available with free internet access, which are well used by younger users
– Story and rhyme time: Staff at the library read stories from a range of picture books and combine this with rhymes and singing
– DVD loans are available

[27] Department for Culture, Media and Sport (2016) Libraries shaping the future: good practice toolkit. See: https://www.gov.uk/government/publications/libraries-shaping-the-future-good-practice-toolkit/libraries-shaping-the-future-good-practice-toolkit
[28] House of Commons Environmental Audit Committee (2013) Transport and accessibility to public services. See: http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenvaud/201/201.pdf
[29] Department for Transport (2015) Annual bus statistics: England 2014/15. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/485296/annual-bus-statistics-year-ending-march-2015.pdf
[30] Department for Education (2012) Research evidence on reading for pleasure. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284286/reading_for_pleasure.pdf

- Clubs, events and activities including LEGO clubs, and the 'Animate' club – a club where stop-motion animation is explored using tablet technology
- The summer reading challenge, where children are encouraged to read six library books of their choice, collecting stickers as rewards along the way.[31]

Furthermore, in 2011/12, 123 class visits to libraries took place across the borough which involved 3,400 children and a total of 124 group book exchanges. [32]

4.2.3.3 Barriers to accessing libraries

Libraries research suggests that younger generations in particular increasingly expect and look for services such as WiFi to be accessible at all times, and the lack of its availability at many libraries is often an access barrier to this group of people. Where WiFi and other computer facilities of a high standard are not readily available, as if often the case in libraries, they can subsequently be perceived as being 'old fashioned', out of touch with, or of little relevance to younger people and their lifestyles.[33]

Another access barrier experienced by some young people is the level of engagement they experience from within their family unit. l. Moreover, research by the Literacy Trust suggests that the family has a major role to play in the use of libraries for younger people. If there is a lack of encouragement at home, this can act as a barrier to accessing library services.[34]

The issues of relevance and interest are key. Over 40% of young people surveyed in the Reading for Pleasure survey who did not use libraries stated it was because their friends didn't use the library, or because the library didn't contain any interesting materials for them.[35]

4.2.4 BAME groups and Pakistani women

4.2.4.1 Library usage and benefits

A report published by DCMS in April 2016 revealed that, in the year ending 2015, a considerably higher proportion of adults from BAME groups used a library than adults from White ethnic groups (49% compared to 32%). The same report also found that a significantly higher proportion of adults from BAME groups who used the library for academic purposes in the last 12 months compared to adults from the white ethnic group (20% compared with 8%).

There has been a significant decline in library use by adults in both groups since 2005/06, however the gap between ethnic groups appears to be increasing - in 2005/06 there was a difference of 10% between the two groups, whereas in 2015 there was a difference of 18%.[36]

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[31] Bury Council: (No date) Children and young people. See: http://www.bury.gov.uk/index.aspx?articleid=10862
[32] Bury Council (2012) Library service: equality analysis form. See: https://councildecisions.bury.gov.uk/Data/Overview%20and%20Scrutiny%20Committee/201212051900/Agenda/$att17053.docx.pdf
[33] Department for Culture, Media and Sport (2014) Independent library report for England. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/388989/Independent_Library_Report-_18_December.pdf
[34] National Literacy Trust (2011): Pubic libraries and literacy: Young people's reading habits and attitudes to public libraries and an exploration of the relationship between public library use and school attainment. See: http://www.literacytrust.org.uk/assets/0000/7424/Public_libraries_literacy_2011.pdf

[35] Department for Education (2012): Research evidence on reading for pleasure. See: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284286/reading_for_pleasure.pdf

[36] DCMS (2016): Taking part focus on libraries. See:

4.2.4.2 Key service areas used

It is worth mentioning that Bury library does have some targeted resources at this minority group, for example the provision of books and DVDs in Urdu. BAME individuals may also use Outreach services provided by libraries whereby members of staff from within the library visit areas with high levels of BAME. Staff often deliver literacy classes amongst other services in order to allow for BAME individuals to further their community engagement and enhance integration on a local level. [37]

4.2.4.3 Barriers to accessing libraries

Literature relating to the barriers experienced by BAME individuals is limited, however one barrier identified to accessing libraries is the low numbers of ethnic minority staff working within the UK library service. Ethnic minority library users may feel uncomfortable about using a perceived white environment.[38] Language and cultural differences amongst different ethnic groups also have the potential to create access barriers.

4.2.5 Disabled people

4.2.5.1 Library usage and benefits

The 2016 'Taking Part focus on: libraries' report published by DCMS also revealed findings relevant to library users with a disability. The report found that there was no significant difference between the proportion of adults with an illness or disability (33%) who used the library within the last 12 months, and the proportion of adults with no illness or disability (34%). [39]

4.2.5.2 Key service areas used

Bury Library itself has a Service Sensory Unit which offers a range of resources to people who have visual or hearing impairments. The unit also offers a variety of information to this group of people too.[40] NHS hearing aids can also be re tubed and exchanged for new ones in the Sensory Unit, as well as demonstrations of telephones with amplification held on a one-to-one basis. [41]

A group is also ran on the last Monday of every month at Bury Library which is exclusively for visually impaired readers. All books for the group are selected from the e-audio book service and are supplied to members of the group on a USB stick alongside a USB memory stick player. The free service is offered as part of a joint project the library have with Bury Blind Society and Adult Care Services. They offer a free confidential reading service for visually impaired library users who may need certain pieces of text to be read to them in a private and trusting environment.[42]

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519675/Libraries_short_story_-_FINAL.pdf

[37] DCMS (2016) Taking part focus on libraries. See:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519675/Libraries_short_story_-_FINAL.pdf

[38] Mansoor, S. (2006). An investigation into the provision of ethnic minority library services in predominantly white areas. See:
https://www.sheffield.ac.uk/polopoly_fs/1.128130!/file/Mansoor_Sami_MALib.pdf

[39] Miller-Bakewell, H. (2016) Changing patterns of library use. See: https://librariestaskforce.blog.gov.uk/2016/05/10/changing-patterns-of-library-use/

[40] The Bury Directory (No date) Bury Library Sensory Unit. See:
https://www.theburydirectory.co.uk/kb5/bury/directory/service.page?id=ExbUeBE8UDA

[41] Bury Council (No date) Services for people who are deaf or hard of hearing. See:
http://www.bury.gov.uk/index.aspx?articleid=10981

[42] Bury Council (No date) Services for people who are blind or partially sighted. See:
http://www.bury.gov.uk/index.aspx?articleid=10953

Bury Library also offers a range of equipment and materials to those with visual or hearing impairments including: magnifying equipment, computers with speech software, transcription to braille and tape, British Sign Language DVDs and videos, and audiobooks and eBooks. Certain equipment can be offered on a 'try before you buy' basis such as loop systems, telephone amplifiers, Bluetooth neck-loops, person to person transmitter, alarm clocks with flashing lights and vibrating pads.[43]

4.2.5.3 Barriers to accessing libraries

In 2015, an accessibility barrier for disabled users at Prestwich Library was identified. Concerns were raised by the fire service that in the event of an emergency people with mobility issues may struggle to leave the building in an evacuation. It was feared that the issue may exclude such people from courses at the venue, but a personal evacuation plan for those with mobility issues has since been created, thus resolving the accessibility issue.[44]

Certain tasks in the library can be physically demanding for people with certain medical conditions, thus creating an accessibility barrier. For example, accessing different areas of a large library building to obtain the resources needed may require individuals to negotiate a number of staircases, or reaching for books off high shelves and carrying them around. Busy and noisy library environments such as group study areas and print rooms may also be difficult for people with certain learning disabilities and mental health conditions to manage, thereby restricting areas or services offered within the library.

Restricted access to library services and facilities can also occur if there is a requirement for an alternate form of information or communication. For example, the lack of braille and audio recordings can reduce the ability of visually impaired library users to fully utilise scanning and printing facilities, and the set-up of teaching rooms and study areas lacking induction loops can be an access barrier to those with hearing impairments. Those with visual and hearing impairments may also feel unsafe or fear for their security whilst in a room in the library where they cannot fully see what is happening and there is a lack of audio cues.[45]

The use of transport to get to the library itself can be an access barrier for disabled people. There may be a lack of taxi drop off points, public transport routes or blue badge parking spaces.[46] However, Bury library has a number of blue badge parking bays located within close proximity that are free to use for an unlimited number of hours.[47]

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[43] Bury Council (No date) Services for people who are blind or partially sighted. See:
http://www.bury.gov.uk/index.aspx?articleid=10953
[44] Haslam, D. (2015) Solution found over Prestwich Library access problems. See:
http://www.burytimes.co.uk/news/14034218.Solution_found_over_Prestwich_Library_access_problems/
[45] Robertson, L. On behalf of Society of College, National and University Libraries. (No date) Access for library users with disabilities.
See: http://www.sconul.ac.uk/sites/default/files/documents/access_disabilities_0.pdf
[46] Robertson, L. On behalf of Society of College, National and University Libraries. (No date) Access for library users with disabilities.
See: http://www.sconul.ac.uk/sites/default/files/documents/access_disabilities_0.pdf
[47] Bury Council (No date) Bury Library. See: http://www.bury.gov.uk/index.aspx?articleid=10923

5   Accessibility

5.1   Introduction

This chapter analyses and presents the expected journey times that would be experienced as a result of service change to the seven different library options. The chapter identifies:

- The number and proportions of the total population impacted.
- Access impacts for the population, based on public transport journey times.
- Impacts on the selected population groups.

Public transport travel time isochrones were generated using TRACC software which includes timetable information for bus, rail, coach and tram from quarter one 2016. This data contains information from the Traveline National Dataset (TNDS) and Associate of Train Operating Companies (ATOC) and is consolidated into .cif timetable files by Basemap, the TRACC software developer.

Walking is permitted to allow connection to and from the public transport network. Walks are limited to 800m at a speed of 3.5 kmph. This walk speed was deemed appropriate for the study as the speed is more appropriate for older persons than the TRACC default value of 4.8kmph. Where an interchange is required a minimum wait time of 5 minutes is applied before making the next connection. The analysis has been conducted to model journeys within the weekday inter-peak period (11:00 to 14:00) and the Saturday AM peak period (09:00 to 12:00).

A 100 metre grid of potential origin locations was created to cover the extent of Bury district. For each of these points accessibility time values were calculated to each library. Once each library location had a travel time isochrone generated, these were then be joined together in GIS software in various configurations to create the seven option maps.

Once the isochrone travel bands were incorporated into GIS software for the various options, demographic data was overlaid allowing for population totals be calculated for the overall population and also different social groups needed for the assessment. From here data tables showing the proportions of population affected for each option were created and are presented below.

5.2   Option 1

5.2.1   Weekday public transport accessibility (11.00 – 14.00 hrs)

Figure 5.1:   Weekday public transport travel times to libraries in option 1
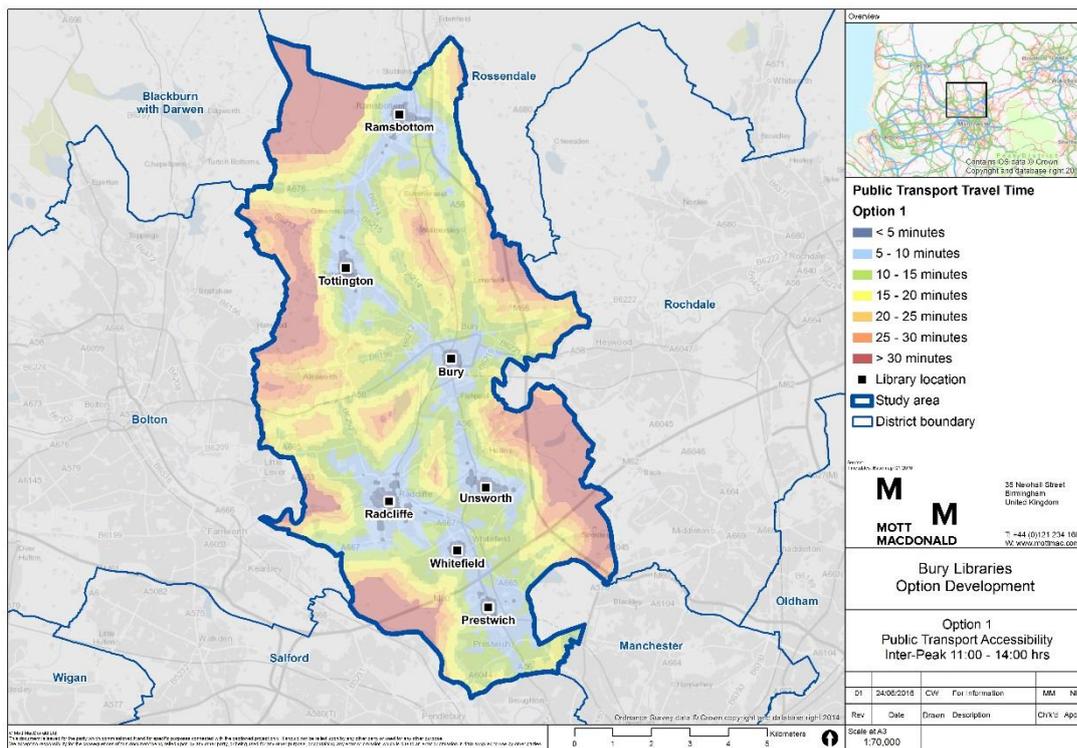
Source: Quarter 1 2016 - Data provided by Basemap

Option 1 proposes the most amount of libraries, moreover it will affect the least number of residents within the study area. The libraries that are proposed in this option (Ramsbottom, Tottington, Bury, Unsworth, Radcliffe, Whitefield and Prestwich) present the most extensive geographic coverage for the study area. The more urban, southern areas of the district are served by Prestwich, Whitefield, Radcliffe and Unsworth, whilst Ramsbottom helps to serve the north of the district.

Table 5.1:   Option 1 - Weekday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani women	Households without access to a car	Deprived population
Within 5 minutes	5%	5%	4%	5%	3%	2%	6%	4%
Within 10 minutes	37%	35%	36%	35%	33%	28%	38%	28%
Within 15 minutes	77%	75%	77%	77%	81%	84%	82%	84%
Within 20 minutes	97%	96%	97%	96%	97%	98%	97%	96%
Within 25 minutes	99%	99%	100%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,900	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.1 shows the proportions of social groups per travel time band for option 1. Under this option:

- 37% of the population are located within 10 minutes travel time to libraries.
- This figure increases to 77% when the travel time band raises to 15 minutes.
- Pakistani women (28%) and those living in the most deprived population quintile (28%) have the lowest proportion of their population within the 10 minute travel time band when compared to other social groups.
- Households without access to a car (38%) have the highest proportion of their population within the 10 minute travel time band when compared to other social groups.

5.2.2   Saturday public transport accessibility (09.00 – 12.00 hrs)

Figure 5.2:   Saturday public transport travel times to libraries in option 1

Source: Quarter 1 2016 - Data provided by Basemap

Table 5.2:   Option 1 - Saturday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani Women	Households without access to a car	Deprived Population
Within 5 minutes	5%	5%	4%	5%	4%	3%	7%	5%
Within 10 minutes	37%	35%	36%	36%	33%	28%	39%	28%
Within 15 minutes	77%	76%	77%	77%	81%	84%	82%	84%
Within 20 minutes	97%	97%	97%	97%	98%	98%	97%	96%
Within 25 minutes	100%	100%	100%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.2 shows the cumulative proportions of social groups per travel time band for option 1 on a Saturday. Under this option:

- 37% of the population are located within 10 minutes travel time to libraries in option 1.
- This figure increases to 77% when the travel time band raises to 15 minutes.
- These Saturday figures are similar to weekday travel time figures.

5.3   Option 2

5.3.1   Weekday public transport accessibility (11.00 – 14.00 hrs)

Figure 5.3:   Weekday public transport travel times to libraries in option 2
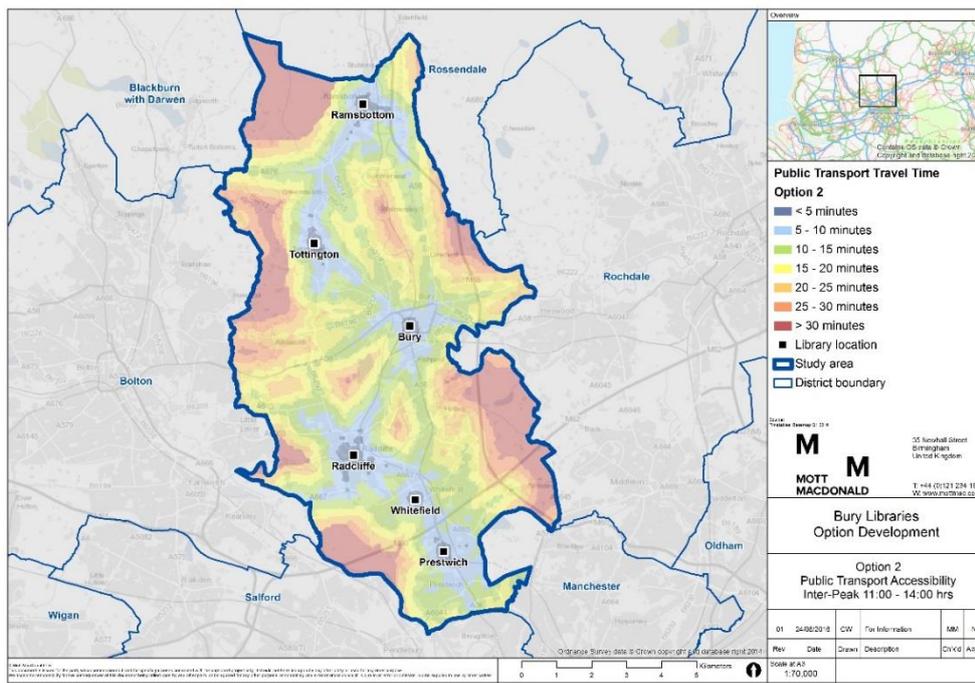
Source: Quarter 1 2016 - Data provided by Basemap

Option 2 proposes six libraries. The libraries proposed in this option are Ramsbottom, Tottington, Bury, Radcliffe, Whitefield and Prestwich which provide a good level of geographic coverage for the study area. Similarly to option 1, the south of the district is served by Radcliffe, Whitefield and Prestwich. The more rural north west of the district is also served by Tottington.

Table 5.3:   Option 2 - Weekday cumulative proportions of social group per travel time band

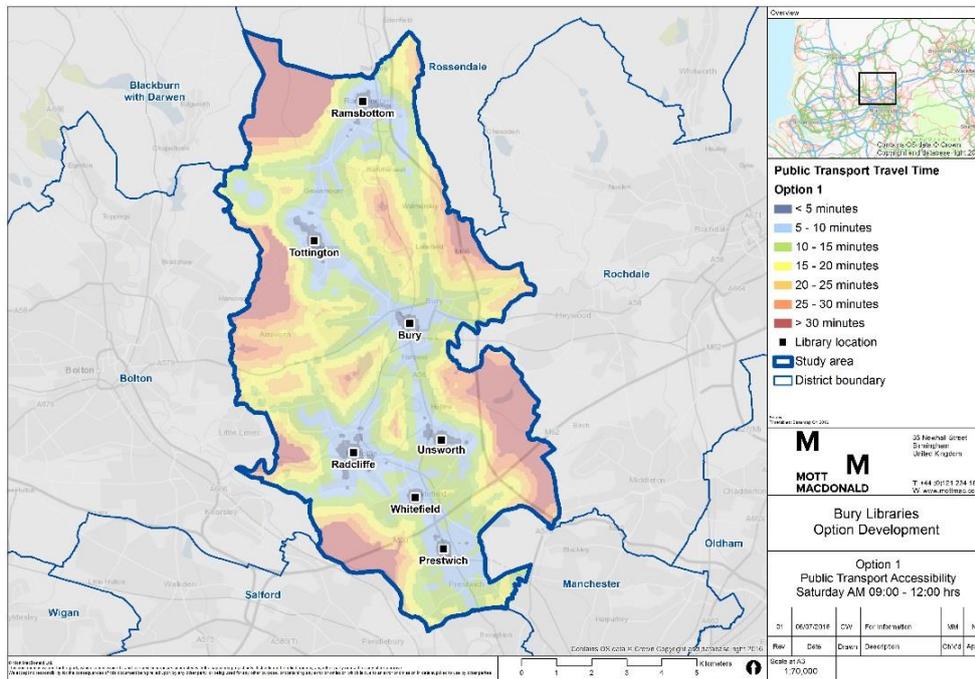| Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani Women	Households without access to a car	Deprived population
Within 5 minutes	4%	4%	4%	4%	3%	1%	6%	4%
Within 10 minutes	32%	29%	32%	31%	29%	24%	34%	25%
Within 15 minutes	74%	71%	75%	74%	78%	81%	79%	82%
Within 20 minutes	96%	96%	96%	96%	97%	97%	96%	96%
Within 25 minutes	99%	99%	100%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.3 shows the cumulative proportions of social groups per travel time band for option 2. Under this option:

- 32% of the overall population are based within 10 minutes travel time to libraries in option 2.
- When the travel time band increases to 15 minutes the proportion of population within this travel time band also increases to 74%.
- Similarly to option 1, Pakistani women (24%) and the deprived population (25%) have the lowest proportion of their population located within 10 minutes travel time in comparison to other social groupings.
- Also similar to option 1, households without access to a car (34%) have the highest proportion of their population within the 10 minute travel time band when compared to other social groups.

5.3.2 Saturday public transport accessibility (09.00 – 12.00 hrs)

Figure 5.4: Saturday public transport travel times to libraries in option 2

Source: Quarter 1 2016 - Data provided by Basemap

Table 5.4:   Option 2 - Saturday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani Women	Households without access to a car	Deprived population
Within 5 minutes	4%	4%	4%	4%	3%	2%	7%	5%
Within 10 minutes	33%	29%	33%	31%	29%	24%	35%	25%
Within 15 minutes	74%	71%	75%	74%	78%	81%	79%	82%
Within 20 minutes	96%	96%	96%	96%	97%	97%	97%	96%
Within 25 minutes	100%	100%	100%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.4 shows the cumulative proportions of social groups per travel time band for option 2 on a Saturday. The table shows that:

- There is a 1% increase in overall population living within the 10 minute travel time band when compared to a weekday (33%).
- 74% of the population live within 15 minutes of libraries in option 2 on a Saturday; the same figure as weekdays.

5.4   Option 3

5.4.1   Weekday public transport accessibility (11.00 – 14.00 hrs)

Figure 5.5:   Weekday public transport travel times to libraries in option 3

Source: Quarter 1 2016 - Data provided by Basemap

Option 3 also proposes a set of six libraries. The libraries proposed in this option (Ramsbottom, Tottington, Bury, Unsworth, Radcliffe and Prestwich) provide a good geographic coverage of the study area. The rural north west of the district is served by Tottington, whilst the more urban south of the district is still served by Unsworth, Radcliffe and Prestwich.

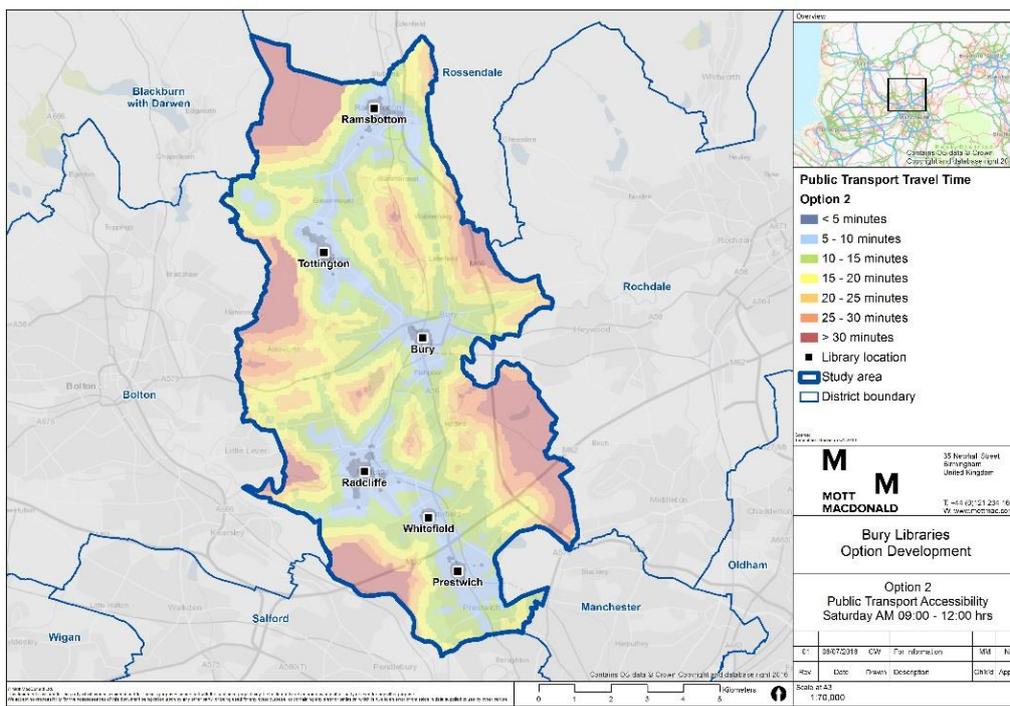Table 5.5:   Option 3 - Weekday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani Women	Households without access to a car	Deprived Population
Within 5 minutes	5%	4%	4%	4%	3%	2%	6%	4%
Within 10 minutes	36%	33%	35%	34%	31%	28%	38%	28%
Within 15 minutes	76%	74%	77%	76%	80%	83%	81%	82%
Within 20 minutes	97%	96%	97%	96%	97%	98%	97%	96%
Within 25 minutes	99%	99%	100%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.5 shows the cumulative proportions of social groups per travel time band for option 3. Under this option:

- 36% of the population are based within 10 minutes travel time to libraries.
- Deprived populations and Pakistani women both have smaller proportions of their population (28%) in this time band when compared to other groups.
- Similarly to options 1 and 2, households without access to a car (38%) have the highest proportion of their population within the 10 minute travel time band when compared to other social groups.
- When the travel time increases to 15 minute, the population rises to 76%.

5.4.2   Saturday public transport accessibility (09.00 – 12.00 hrs)

Figure 5.6:   Saturday public transport travel times to libraries in option 3

Source: Quarter 1 2016 - Data provided by Basemap

Table 5.6:   Option 3 - Saturday cumulative proportions of social group per travel time band

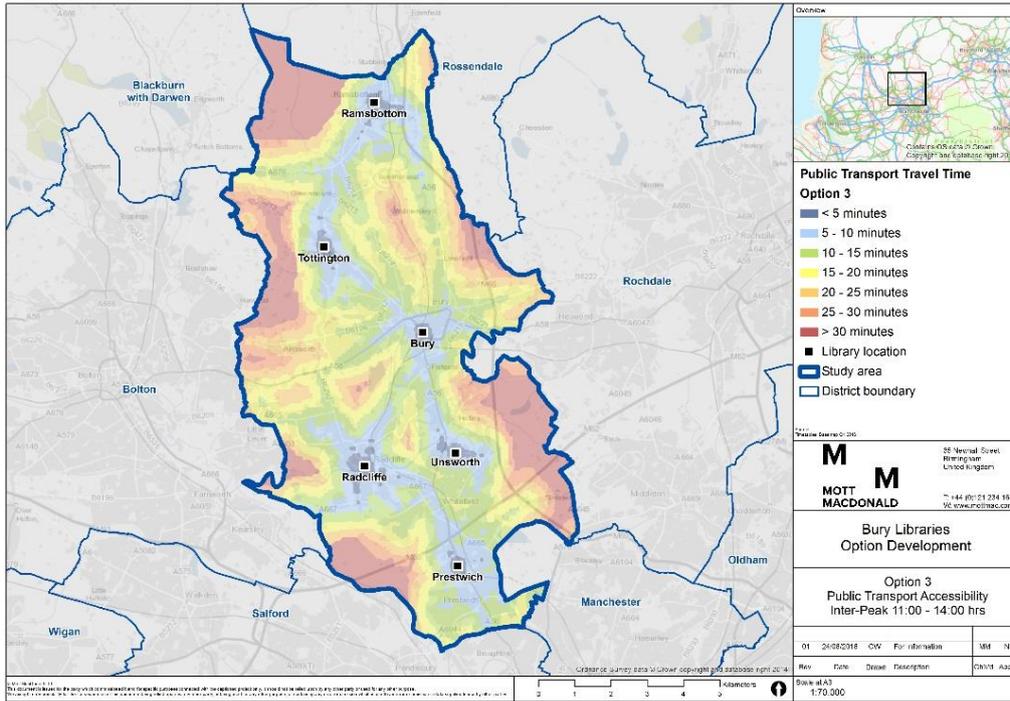| Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani Women	Households without access to a car	Deprived Population
Within 5 minutes	5%	4%	4%	5%	4%	3%	7%	5%
Within 10 minutes	36%	34%	36%	35%	32%	28%	38%	28%
Within 15 minutes	77%	75%	77%	76%	80%	83%	81%	82%
Within 20 minutes	97%	97%	97%	97%	98%	98%	97%	96%
Within 25 minutes	100%	100%	100%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.6 shows the cumulative proportions of social groups per travel time band for option 3 on a Saturday. The table reveals that:

- The overall population located within 10 minutes travel time does not change from weekday figures (36%).
- Similarly, when compared to weekday travel times, the overall population within 15 minutes travel time is also very similar (77% compared to 76%).

5.5 Option 4

5.5.1 Weekday public transport accessibility (11.00 – 14.00 hrs)

Figure 5.7: Weekday public transport travel times to libraries in option 4
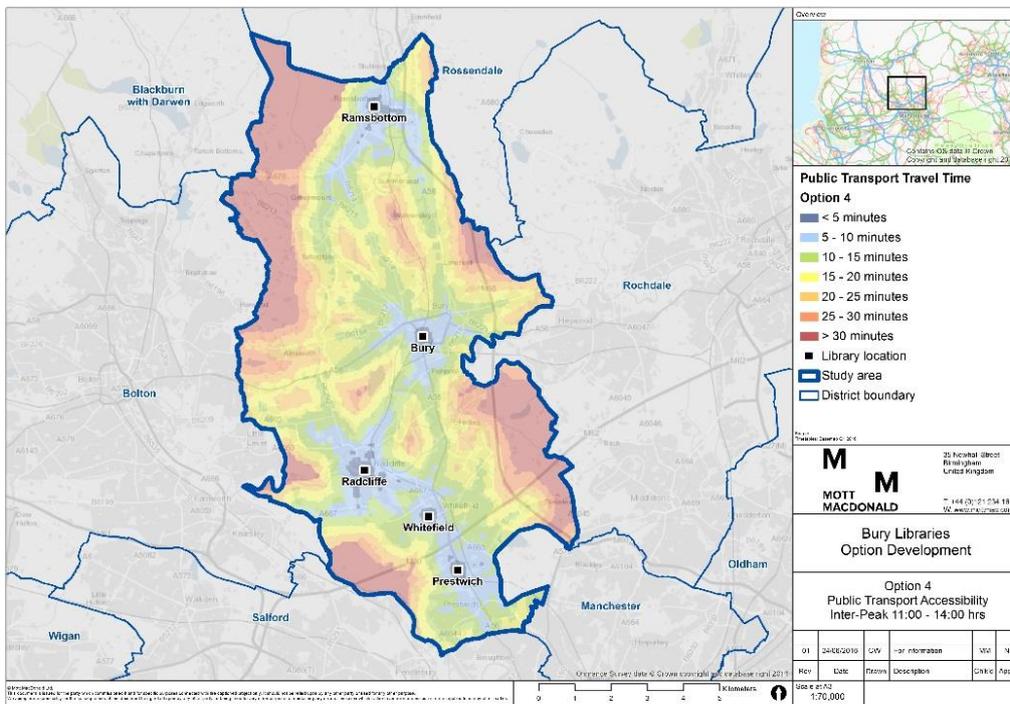
Source: Quarter 1 2016 - Data provided by Basemap

Option 4 is one of two options which consists of five libraries. The libraries in this option are: Ramsbottom, Bury, Radcliffe, Whitefield and Prestwich. As a result of Tottington library not being included in this option, residents in the north west of the district would experience increased journey times. However, the north of the study area is served by Ramsbottom, and the urban south is covered by Radcliffe, Whitefield and Prestwich.

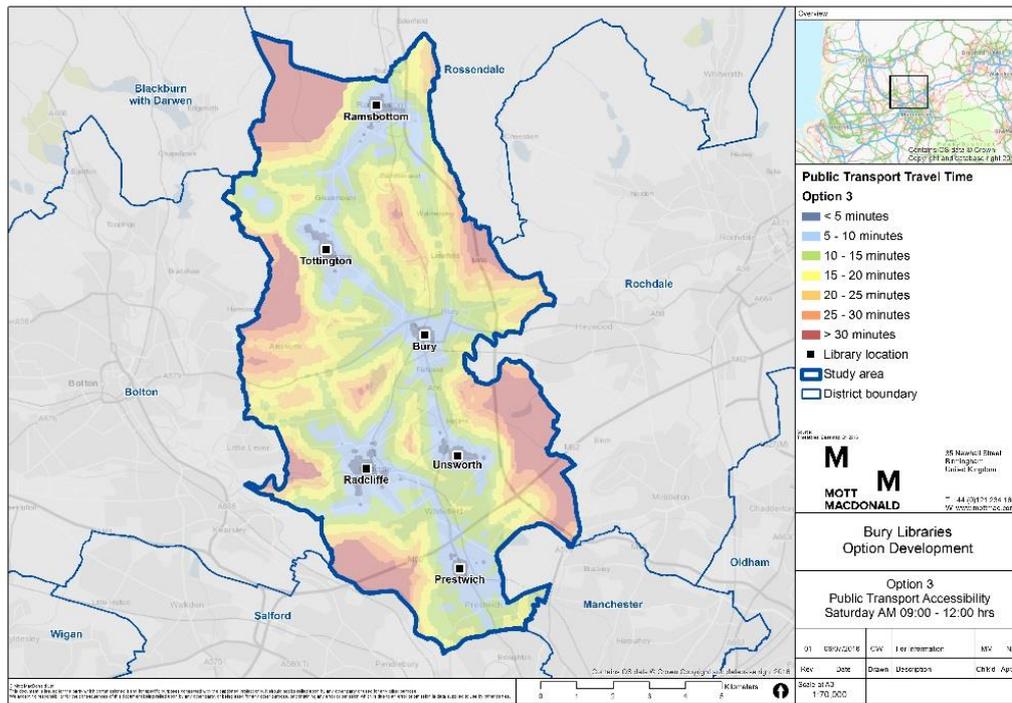Table 5.7:   Option 4 - Weekday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani Women	Households without access to a car	Deprived Population
Within 5 minutes	4%	3%	3%	4%	3%	1%	6%	4%
Within 10 minutes	27%	23%	27%	26%	27%	23%	31%	25%
Within 15 minutes	70%	67%	71%	70%	77%	80%	78%	82%
Within 20 minutes	95%	95%	95%	95%	97%	97%	96%	96%
Within 25 minutes	99%	99%	99%	99%	100%	100%	100%	99%
Within 30 minutes	100%	99%	100%	99%	100%	100%	100%	100%
>30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.7 shows the cumulative proportions of social groups per travel time band for option 4. Under this option:

- The overall population located within 10 minutes travel time of libraries in option 4 is 27%. When compared to the previous three options, this figure is lower.
- The population based within 15 minutes travel time is also lower than the previous three options at 70%.
- Pakistani women (23%) and the 65 and over population (23%) have the lowest proportion of their population within the 10 minute travel time band when compared to other social groups.
- As with all previous options, households without access to a car have the highest proportion of their population within the 10 minute travel time band when compared to other social groups.

5.5.2 Saturday public transport accessibility (09.00 – 12.00 hrs)

Figure 5.8: Saturday public transport travel times to libraries in option 4

Source: Quarter 1 2016 - Data provided by Basemap

Table 5.8: Option 4 - Saturday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani women	Households without access to a car	Deprived population
Within 5 minutes	4%	3%	3%	4%	3%	2%	6%	5%
Within 10 minutes	27%	23%	27%	26%	27%	24%	32%	25%
Within 15 minutes	71%	68%	72%	71%	77%	81%	78%	82%
Within 20 minutes	95%	95%	95%	95%	97%	97%	96%	96%
Within 25 minutes	99%	99%	99%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Over 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,900	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.8 shows the cumulative proportions of social groups per travel time band for option 4 on a Saturday. The table shows that:

- 27% of the overall population is based within 10 minutes of travel time to libraries in option 4.
- This figure increases to 71% when the travel time increases to 15 minutes.
- Both figures are very similar to weekday travel time.

5.6   Option 5

5.6.1   Weekday public transport accessibility (11.00 – 14.00 hrs)

Figure 5.9:   Weekday public transport travel times to libraries in option 5
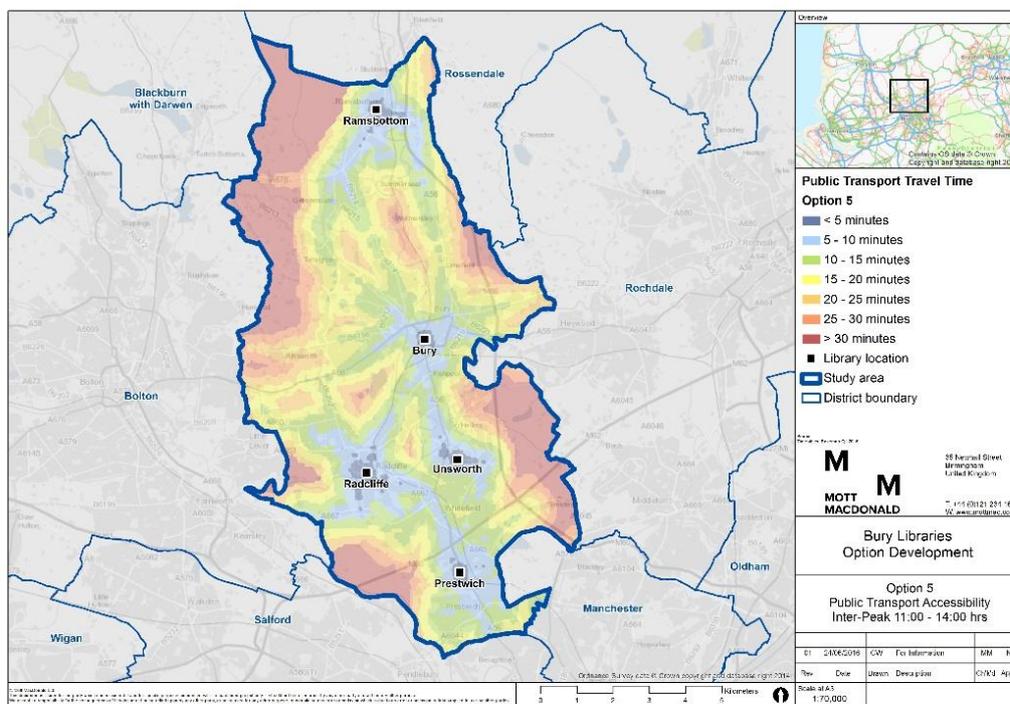
Source: Quarter 1 2016 - Data provided by Basemap

Option 5 is the second of two options that both consist of five libraries. The libraries in this option are Ramsbottom, Bury, Unsworth, Radcliffe and Prestwich. Service is provided to the urban south of the district by Prestwich, Radcliffe and Unsworth, whilst the northern region is served by Ramsbottom. Similarly to option 4, as Tottington library is not included the north western area of the district would see increased journey times.

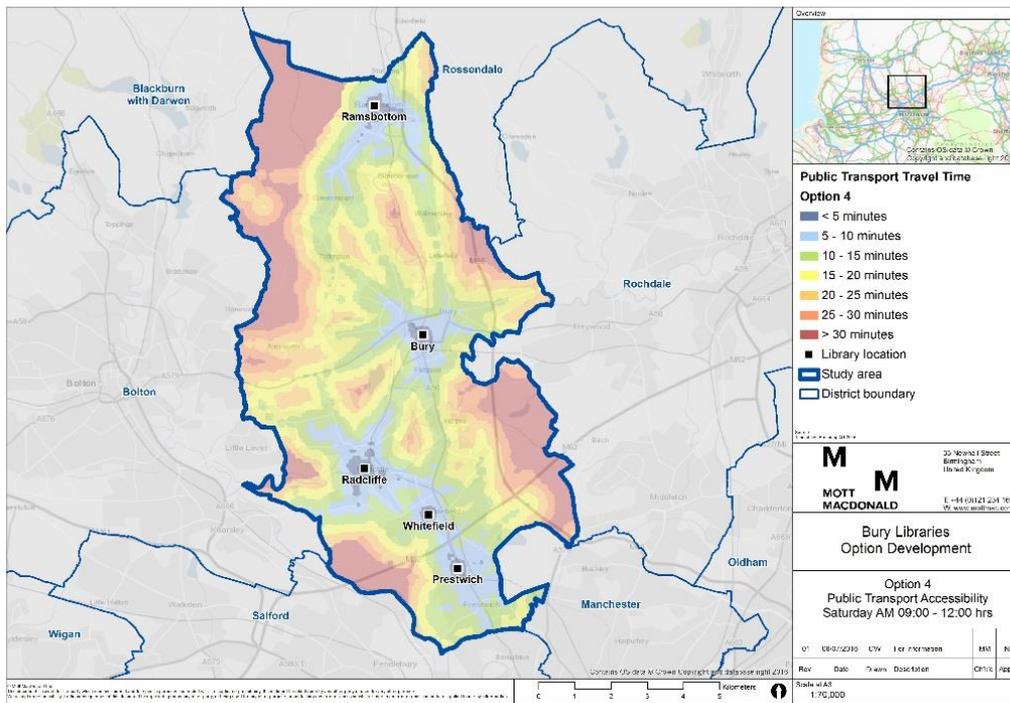Table 5.9:   Option 5 - Weekday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani Women	Households without access to a car	Deprived Population
Within 5 minutes	4%	4%	4%	4%	3%	2%	6%	4%
Within 10 minutes	30%	28%	30%	29%	30%	27%	35%	28%
Within 15 minutes	72%	71%	73%	73%	79%	82%	79%	82%
Within 20 minutes	96%	96%	96%	96%	97%	98%	97%	96%
Within 25 minutes	99%	99%	99%	99%	100%	100%	100%	99%
Within 30 minutes	100%	99%	100%	99%	100%	100%	100%	100%
>30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,900	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.9 shows the cumulative proportions of social groups per travel time band for option 5. Under this option:

- 30% of the overall population are within 10 minutes travel time to option 5 libraries.
- 72% of the overall population is within the 15 minute travel time band.
- As with all previous options, households without access to a car have the highest proportion of their population (35%) within the 10 minute travel time band when compared to other social groups.
- Pakistani women have the lowest proportion of their population (27%) within the 10 minute travel time band when compared to other social groups.

5.6.2 Saturday public transport accessibility (09.00 – 12.00 hrs)

Figure 5.10: Saturday public transport travel times for libraries in option 5

Source: Quarter 1 2016 - Data provided by Basemap

Table 5.10: Option 5 - Saturday cumulative proportion of social group per travel time band

| Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani Women	Households without access to a car	Deprived Population
Within 5 minutes	4%	4%	4%	4%	4%	3%	6%	5%
Within 10 minutes	30%	28%	30%	30%	30%	27%	35%	28%
Within 15 minutes	73%	71%	74%	73%	79%	83%	80%	82%
Within 20 minutes	96%	96%	96%	96%	97%	98%	97%	96%
Within 25 minutes	99%	99%	99%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Over 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.10 shows the cumulative proportions of social groups per travel time band for option 5 on a Saturday. The table reveals that:

- 30% of the overall population live within 10 minutes travel time and 73% live within 15 minutes.
- These Saturday figures are similar to those of a weekday.

5.7   Option 6

5.7.1   Weekday public transport accessibility (11.00 – 14.00 hrs)

Figure 5.11: Weekday public transport travel times to libraries in option 6
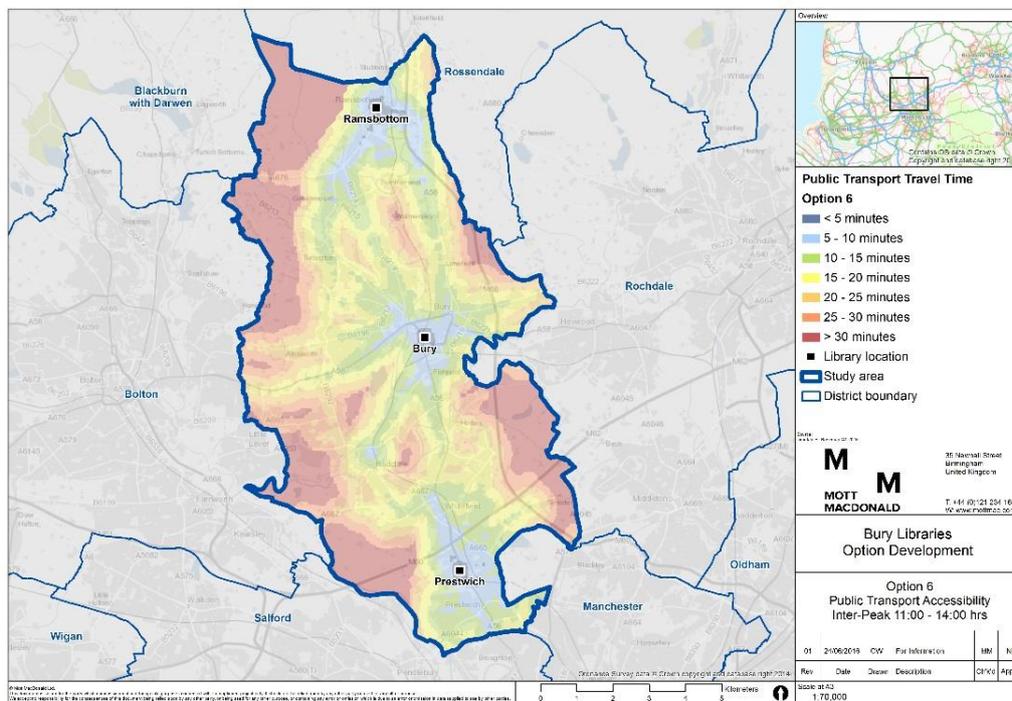
Source: Quarter 1 2016 - Data provided by Basemap

This option set provides the fewest libraries within the study, and will thus affect the largest amount of residents within the study area. The three libraries within this option (Ramsbottom, Bury and Prestwich) propose the most limited geographical coverage for the district. The western side of the study area appears to be affected the most in terms of increased travel times, as well as the south east. However, the three libraries that are included in this option are distributed well geographically with Ramsbottom in the north, Bury the centre and Prestwich in the south.

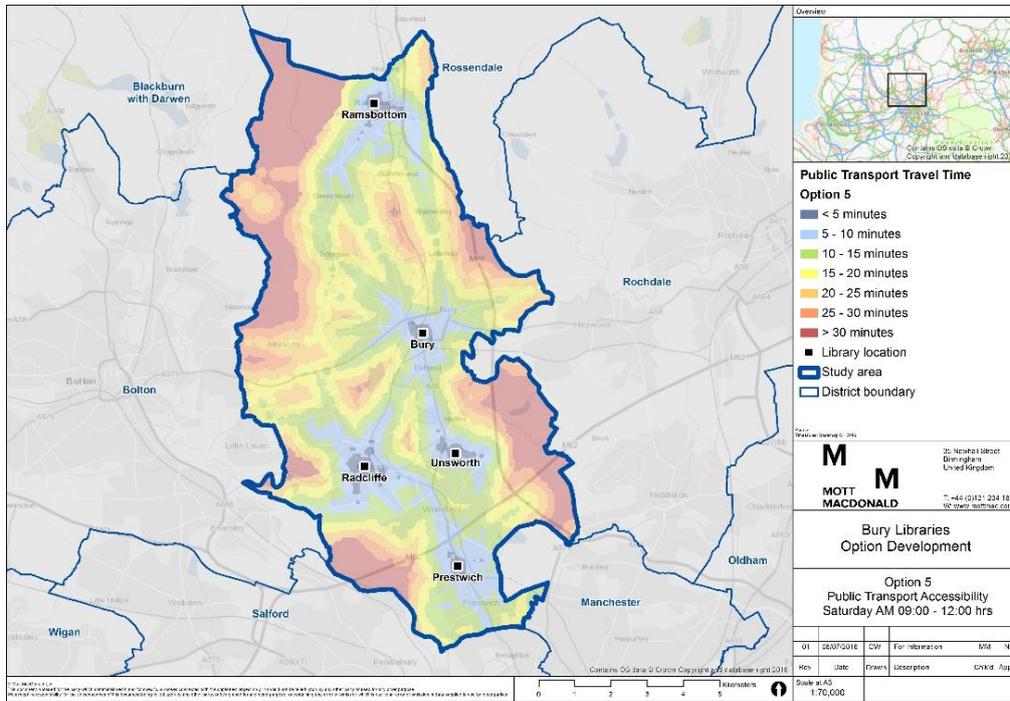Table 5.11: Option 6 - Weekday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani women	Households without access to a car	Deprived population
Within 5 minutes	2%	2%	1%	2%	1%	1%	3%	0%
Within 10 minutes	18%	16%	17%	17%	20%	20%	19%	12%
Within 15 minutes	55%	52%	56%	54%	67%	75%	59%	62%
Within 20 minutes	82%	81%	83%	81%	89%	93%	84%	86%
Within 25 minutes	91%	91%	93%	91%	96%	98%	92%	93%
Within 30 minutes	98%	97%	98%	97%	99%	100%	98%	99%
>30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.11 shows the cumulative proportions of social groups per travel time band for option 6. Under this option:

- Of the overall population, 18% are located within 10 minutes travel time. This figure is significantly lower than the previous five options.
- In this travel time band the deprived population social group has the smallest proportion of their population (12%) when compared to other social groups.
- Those from BAME population groups and Pakistani women have the highest proportion of their population (20%) within the 10 minute travel time band when compared to other social groups.
- The proportion of overall population located within 15 minutes travel time is also significantly lower than the previous options at 55%. In the 15 minute travel time band Pakistani women have a significantly larger proportion of their population (75%) when compared to other social groups.

5.7.2 Saturday public transport accessibility (09.00 – 12.00 hrs)

Figure 5.12: Saturday public transport travel times to libraries in option 6

Source: Quarter 1 2016 - Data provided by Basemap

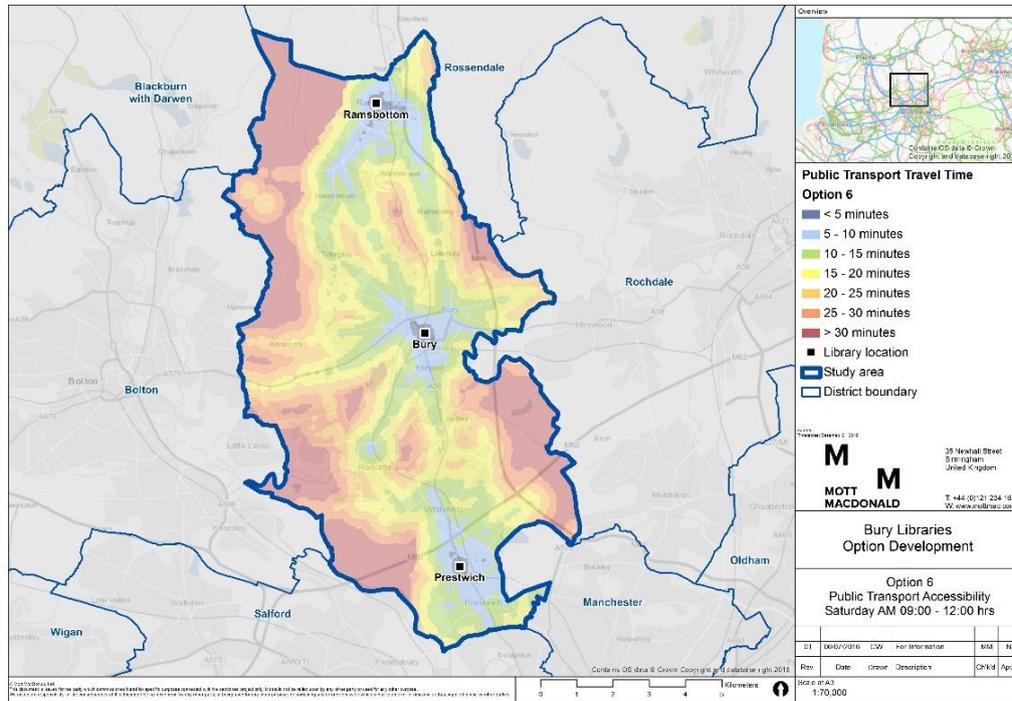Table 5.12: Option 6 - Saturday cumulative proportion of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani women	Households without access to a car	Deprived population
Within 5 minutes	2%	2%	1%	2%	2%	2%	3%	1%
Within 10 minutes	18%	16%	18%	17%	20%	20%	19%	12%
Within 15 minutes	56%	52%	57%	54%	67%	75%	59%	62%
Within 20 minutes	82%	81%	83%	81%	89%	93%	84%	86%
Within 25 minutes	91%	91%	93%	91%	96%	98%	92%	93%
Within 30 minutes	98%	97%	98%	97%	99%	100%	98%	99%
Over 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.12 shows the cumulative proportions of social groups per travel time band for option 6 on a Saturday. The table reveals that:

- 18% of the overall population live within 10 minutes travel time.
- 56% live within 15 minutes travel time.
- These Saturday figures are similar to those of a weekday.

5.8 Option 7

5.8.1 Weekday public transport accessibility (11.00 – 14.00 hrs)

Figure 5.13: Weekday public transport travel times to libraries in option 7
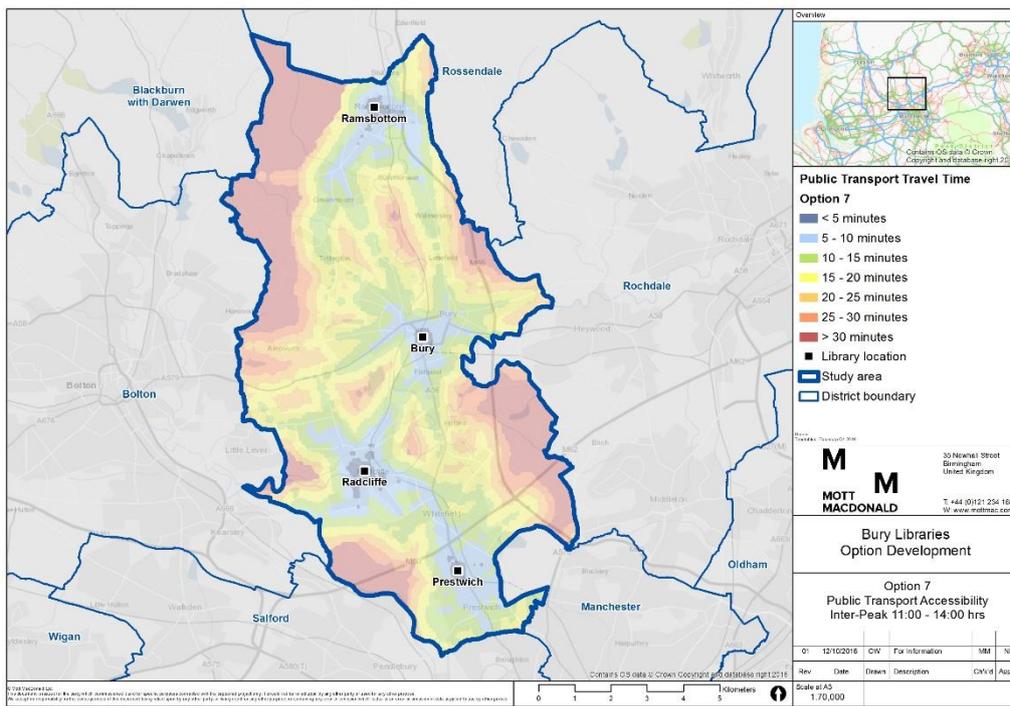
Source: Quarter 1 2016 - Data provided by Basemap

Option 7 is the only option that contains four libraries. The libraries in this option are Ramsbottom, Bury, Radcliffe and Prestwich. Service is provided to the urban south of the district by Prestwich, Radcliffe and Bury, whilst the northern region is served by Ramsbottom. As Tottington library is not included the north western area of the district would see increased journey times.

Table 5.13:   Option 7 - Weekday cumulative proportions of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani women	Households without access to a car	Deprived Population
Within 5 minutes	4%	3%	3%	3%	3%	1%	6%	4%
Within 10 minutes	26%	22%	26%	25%	26%	23%	31%	25%
Within 15 minutes	67%	63%	69%	67%	75%	79%	74%	78%
Within 20 minutes	95%	94%	95%	95%	96%	97%	96%	96%
Within 25 minutes	99%	99%	99%	99%	100%	100%	100%	99%
Within 30 minutes	100%	99%	100%	99%	100%	100%	100%	100%
>30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.13 shows the cumulative proportions of social groups per travel time band for option 7. Under this option:

- Of the overall population, 26% are located within 10 minutes' travel time.
- In this travel time band the 65 and over social group (22%) and Pakistani women (23%) have the smallest proportion of their population when compared to other social groups.
- Households without access to a car have the highest proportion of their population (31%) within the 10 minute travel time band when compared to other social groups.
- The proportion of overall population located within 15 minutes travel time is 67%.

5.8.2 Saturday public transport accessibility (09.00 – 12.00 hrs)

Figure 5.14: Saturday public transport travel times to libraries in option 7

Source: Quarter 1 2016 - Data provided by Basemap

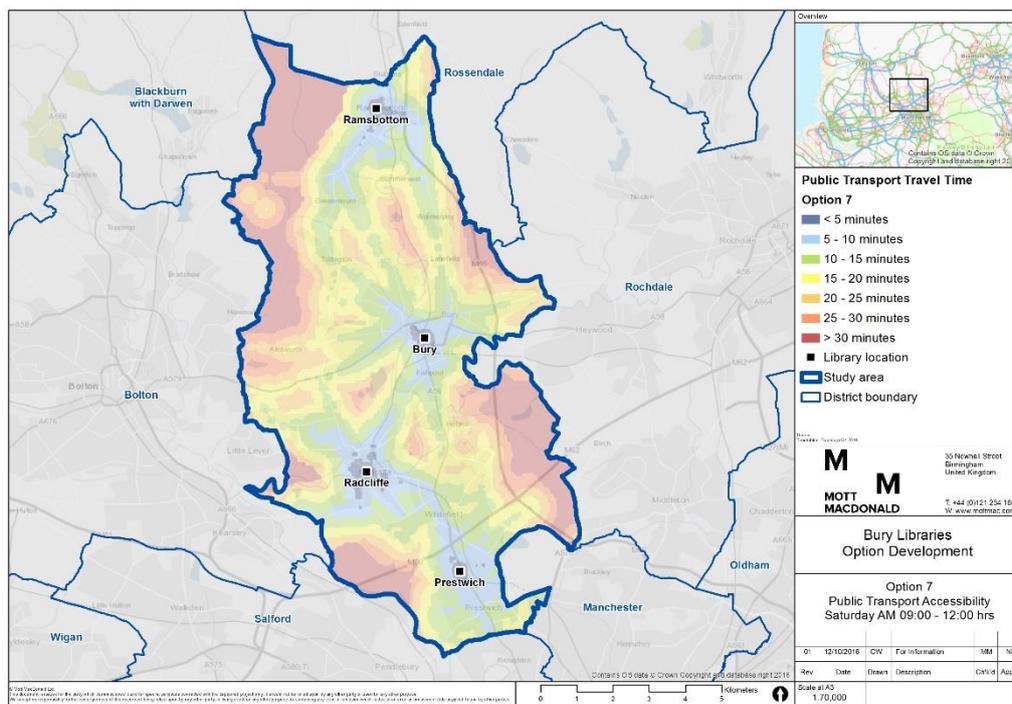Table 5.14:   Option 7 - Saturday cumulative proportion of social group per travel time band

Travel time	Population	65 and over	Under 16	LLTI	BAME	Pakistani women	Households without access to a car	Deprived population
Within 5 minutes	4%	3%	3%	4%	3%	2%	6%	5%
Within 10 minutes	26%	22%	26%	25%	26%	23%	31%	25%
Within 15 minutes	68%	64%	70%	68%	75%	79%	74%	78%
Within 20 minutes	95%	94%	95%	95%	96%	97%	96%	96%
Within 25 minutes	99%	99%	99%	99%	100%	100%	100%	99%
Within 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Over 30 minutes	100%	100%	100%	100%	100%	100%	100%	100%
Total	187,500	32,800	37,900	34,800	27,200	4,500	18,700	38,500

Table 5.14 shows the cumulative proportions of social groups per travel time band for option 7 on a Saturday. The table shows that:

- 26% of the overall population live within 10 minutes travel time.
- 68% live within 15 minutes travel time.
- These Saturday figures are similar to those of a weekday.

5.9 Summary

Option 1 affects the least amount of residents as a result of including the most amount of libraries and having the largest geographical coverage of all options. Options 2 and 3 also cover a large geographical area thus also affecting a relatively small amount of residents. Although options 2 and 3 both lose one library in the south of the district compared to option 1, both options already have three libraries in the south of the district so this area remains well served. Options 4 and 5 both lose Tottington library, resulting in the north west of the district experiencing increased travel times with both options. However, the north east and the south of the district remain well served. Option 6 affects the most amount of residents within the district as a result of proposing the least amount of libraries. As option 7 does not include Tottington library the north western area of the district would experience increased journey times. However, the north and south of the district remain well served under this option.

Overall, the western side of the study area appears to be the worst affected in terms of increased travel times. There are no significant differences between weekday and Saturday travel times with any of the options. This is a result of Saturday services operating at a similar frequency and operating along the same routes as weekday services.

Table 5.15:   Total population per option according to travel time band on a weekday

Travel time	Option 1 population	Option 2 population	Option 3 population	Option 4 population	Option 5 population	Option 6 population	Option 7 population
0 to 5 minutes	8,807	7,873	8,481	7,028	7,636	3,412	6,702
5 to 10 minutes	59,754	52,962	58,130	43,886	49,054	30,459	42,262
10 to 15 minutes	76,033	77,623	76,647	80,122	79,146	68,892	77,459
15 to 20 minutes	36,372	40,877	37,708	47,321	44,152	50,868	51,238
20 to 25 minutes	5,272	6,903	5,272	7,164	5,533	17,792	7,860
25 to 30 minutes	1,236	1,236	1,236	1,223	1,223	11,481	1,223
>30 minutes	-	-	-	730	730	4,570	730
Total	187,500	187,500	187,500	187,500	187,500	187,500	187,500

Table 5.16 shows the total population per proposed option in accordance to travel time bands on a weekday. Options 1, 2 and 3 have no population living in areas more than 30 minutes travel time from a library, reflecting the fact these options have a greater number of proposed libraries. Options 4, 5 and 7 all have 730 people living beyond 30 minutes of travel. Option 6 has a significantly larger amount of the district's population living in this travel time band at 4,570. Option 3 performs better than option 2 for journeys up to 10 minutes, and option 5 performs better than option 4 for these journeys. This may suggest that Unsworth library (retained in options 3 and 5) is more accessible than Whitefield (retained in options 2 and 4) to a greater number of residents. Table 5.17 displays the population totals per travel band as proportions of the total population.

Table 5.17:   Total % of population per option according to travel time band on a weekday

Travel time	Option 1 Population	Option 2 Population	Option 3 Population	Option 4 Population	Option 5 Population	Option 6 Population	Option 7 Population
0 to 5 minutes	4%	4%	5%	4%	4%	2%	4%
5 to 10 minutes	32%	28%	31%	23%	26%	16%	23%
10 to 15 minutes	41%	41%	41%	43%	42%	37%	41%
15 to 20 minutes	19%	22%	20%	25%	24%	27%	27%
20 to 25 minutes	3%	4%	3%	4%	3%	10%	4%
25 to 30 minutes	1%	1%	1%	1%	1%	6%	1%
>30 minutes	0%	0%	0%	0.4%	0.4%	2%	0.4%
Total	100%	100%	100%	100%	100%	100%	100%

6   Libraries' user data

6.1   Introduction

This chapter presents a more detailed review of library users in Bury by analysing Bury's library user database. Of these, 59,604 records were successfully mapped by geocoding the home postcode. The remaining 4,054 were unable to be mapped due to the respondent not providing a home postcode, or entering an incorrect value. 54,632 of the mapped postcodes fell within the district of Bury, and these records have been used for the library user analysis.

Figure 6.1 below displays the density of library users based on their home postcode location. The highest concentrations of users are located around Bury itself, and to the urban south of the district around Prestwich.

Figure 6.1:   Density of library user home postcodes
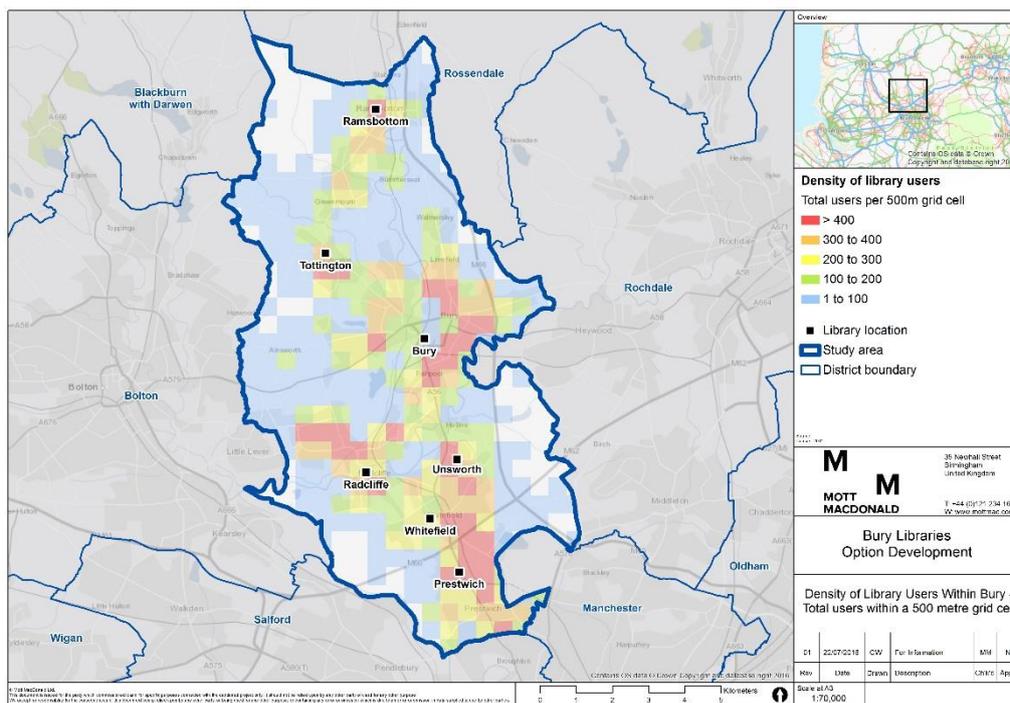
Source: Bury library user database

6.2   Home library of registered library users

Figure 6.2 displays the grid, mapped by the home library location specified in the library user database. Bury has the largest geographic footprint in terms of registered users.

Figure 6.2:   Home library of users
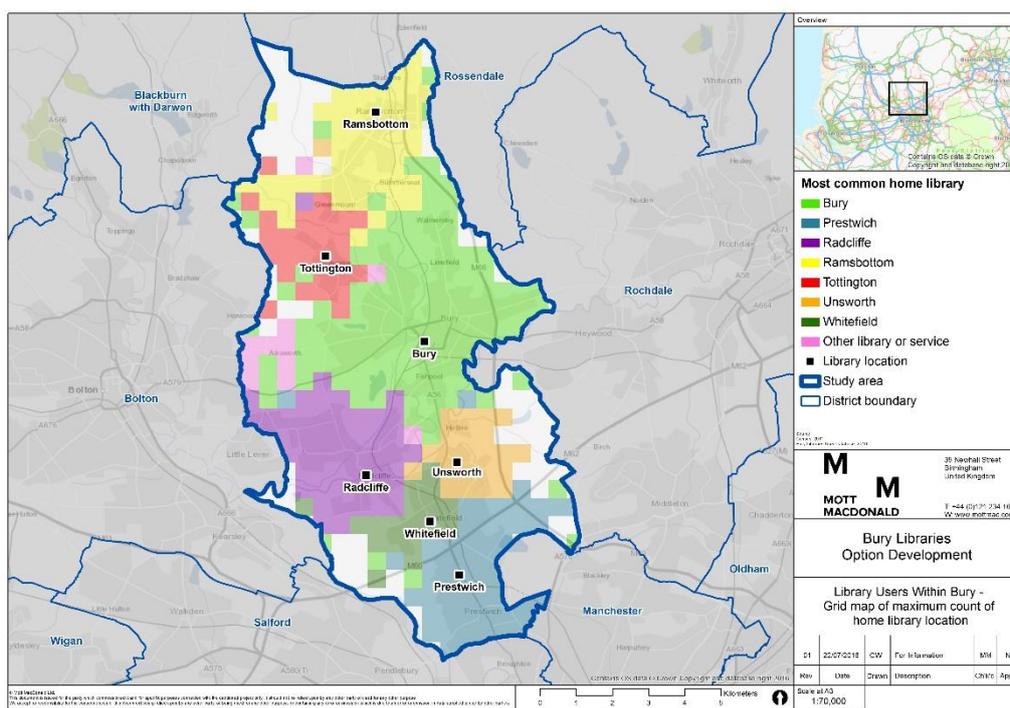
Source: Bury library user database

Table 6.1 displays the total numbers of registered library users per site. Bury and Prestwich libraries have a combined share of 54% of users, with Bury itself home to 34%. The figure of 6% for the other library or service category includes other smaller libraries not included in the assessment. It also includes discontinued services such as the school's library service and the housebound and special services facility.

Table 6.1:   Number of registered users per library

Library	Number of registered users within Bury	Proportion of registered users within Bury
Bury	18,458	34%
Prestwich	10,897	20%
Radcliffe	7,449	14%
Ramsbottom	4,695	9%
Tottington	2,720	5%
Unsworth	3,612	7%
Whitefield	3,758	7%
Other library or service	3,043	6%
Total	54,632	100%

6.3   Library users per public transport option set

Table 6.2:   Library users per weekday public transport travel time band

Travel time	Option 1 - registered users	Option 2 - registered users	Option 3 - registered users	Option 4 - registered users	Option 5 - registered users	Option 6 - registered users	Option 7 - registered users
0 to 5 minutes	3,881	3,183	3,734	2,782	3,333	1,484	2,635
5 to 10 minutes	19,372	17,445	18,896	15,375	16,826	10,518	14,899
10 to 15 minutes	21,368	21,449	21,692	21,877	22,120	19,419	21,165
15 to 20 minutes	8,542	10,545	8,781	12,160	10,396	14,657	13,079
20 to 25 minutes	1,232	1,732	1,289	2,037	1,594	5,298	2,432
25 to 30 minutes	133	174	136	211	173	2,297	232
>30 minutes	104	104	104	190	190	959	190
Total	54,632	54,632	54,632	54,632	54,632	54,632	54,632

Table 6.2 breaks down the total number of library users per weekday public transport travel time band.
Weekday figures have been used due to the similarity in travel times between the weekday and Saturday
analysis. The figures correlate to the overall residents analysis conducted in chapter 4. The most
accessible is o 1, reflecting the fact it has the greater number of proposed libraries.

Table 6.3:   Cumulative proportions of Library users per weekday public transport travel time band

Travel time	Option 1 - cumulative % of registered users	Option 2 - cumulative % of registered users	Option 3 - cumulative % of registered users	Option 4 - cumulative % of registered users	Option 5 - cumulative % of registered users	Option 6 - cumulative % of registered users	Option 7 - cumulative % of registered users
Within 5 minutes	7%	6%	7%	5%	6%	3%	5%
Within 10 minutes	43%	38%	41%	33%	37%	22%	32%
Within 15 minutes	82%	77%	81%	73%	77%	58%	71%
Within 20 minutes	97%	96%	97%	96%	96%	84%	95%
Within 25 minutes	100%	100%	100%	99%	99%	94%	99%
Within 30 minutes	100%	100%	100%	100%	100%	98%	100%
Over 30 minutes	100%	100%	100%	100%	100%	100%	100%
Total	54,632	54,632	54,632	54,632	54,632	54,632	54,632

Table 6.3 displays the library users per weekday public transport travel time band cumulatively. As with the
overall accessibility analysis, option 3 has a lesser impact than option 2, and option 5 performs better than
option 4. Again, this may suggest that Unsworth library (retained in options 3 and 5) is more accessible
than Whitefield (retained in options 2 and 4) to a greater number of library users.

6.4 Types of borrower

The library user database contained information on the type of borrower for each record. These categories were grouped into the following broad classes:

– Adult borrower
– Disabled user
– Institution
– Senior citizen
– Young person

Figure 6.3: Borrower Type
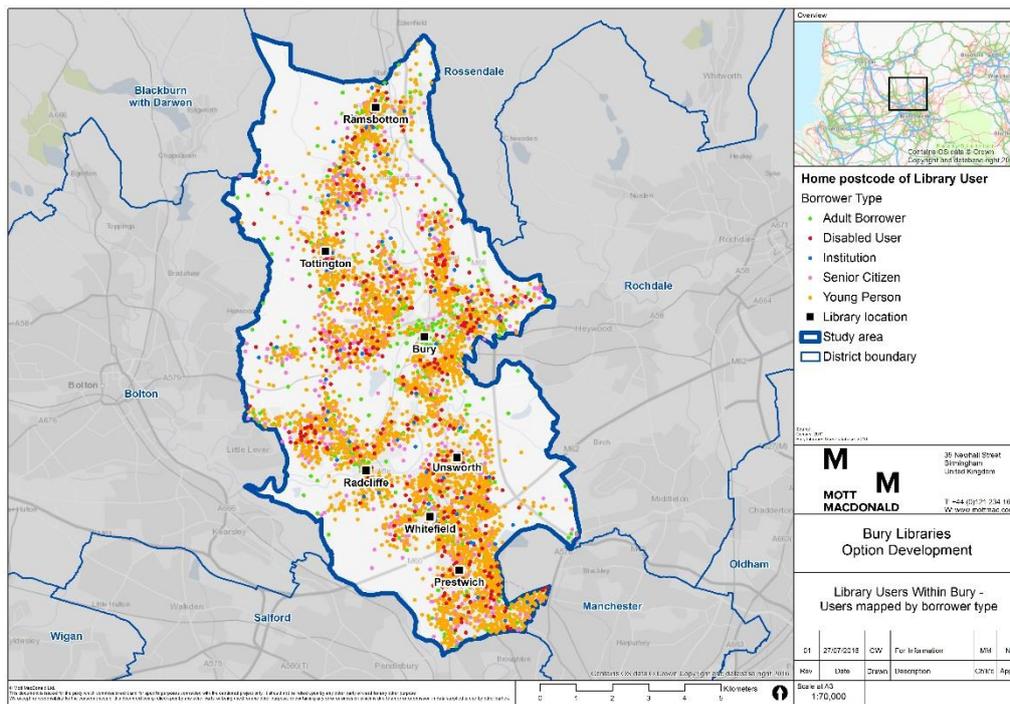
Source: Bury library user database

Figure 6.3 displays the location of library user home postcodes, mapped by borrower type. Table 5.4 below shows the number of borrowers in each borrower type, and the proportion of total borrowers.

Table 6.4:   All users by borrower type

Borrower type	Number of borrowers	Proportion of total borrowers
Adult borrower	31,066	57%
Young person	15,121	28%
Senior citizen	7565	14%
Disabled user	444	1%
Institution	436	1%
Total	54,632	100%

Table 6.5 breaks down the proportions of each borrower type registered to each library location. Bury has a high proportion of adult borrowers, with a comparatively low proportion of young person's when compared to other library locations. Conversely, Tottington and Unsworth libraries both have low proportions of adult borrowers, and high proportions of young persons. The other library or service class includes the former schools library service, hence the large proportion of respondents in the institution category compared to the other library locations.

Table 6.5:   Borrower

	Adult borrower	Disabled user	Institution	Senior citizen	Young person	Total
Bury	66%	1%	0%	12%	21%	18,458
Prestwich	56%	1%	0%	15%	28%	10,897
Radcliffe	60%	0%	0%	11%	28%	7,449
Ramsbottom	49%	1%	0%	19%	31%	4,695
Tottington	45%	1%	0%	18%	37%	2,720
Unsworth	46%	0%	0%	15%	38%	3,612
Whitefield	54%	2%	0%	15%	29%	3,758
Other library or service	36%	2%	12%	11%	39%	3,043
Total	57%	1%	1%	14%	28%	54,632

6.4.1   Types of borrower by public transport travel time

By breaking down the types of borrower at each library location and looking at the public transport travel time for each of the proposed option sets, we can see if any borrower types are disproportionately affected by potential changes in service configuration.

Table 6.6:   Option 1 weekday travel time by borrower type

Travel time	Adult borrower	Disabled user	Institution	Senior citizen	Young person	Total
0 to 5 minutes	7%	6%	12%	7%	7%	7%
5 to 10 minutes	36%	34%	32%	34%	35%	35%
10 to 15 minutes	40%	41%	31%	38%	39%	39%
15 to 20 minutes	15%	18%	19%	18%	16%	16%
20 to 25 minutes	2%	2%	6%	3%	2%	2%
25 to 30 minutes	0%	0%	0%	0%	0%	0%
>30 minutes	0%	0%	0%	0%	0%	0%
Total	31,066	444	436	7,565	15,121	54,632

Table 6.6 shows, for option 1, each borrower type group has proportions in each travel time band that are broadly in line with the total proportion column.

Table 6.7:   Option 2 weekday travel time by borrower type

Travel time	Adult borrower	Disabled user	Institution	Senior citizen	Young person	Total
0 to 5 minutes	6%	5%	11%	6%	5%	6%
5 to 10 minutes	33%	31%	30%	29%	31%	32%
10 to 15 minutes	40%	40%	23%	38%	39%	39%
15 to 20 minutes	18%	21%	29%	23%	21%	19%
20 to 25 minutes	3%	3%	6%	4%	4%	3%
25 to 30 minutes	0%	0%	0%	1%	0%	0%
>30 minutes	0%	0%	0%	0%	0%	0%
Total	31,066	444	436	7,565	15,121	54,632

Table 6.7 shows, that for option 2, each borrower type group has similar proportions to the total proportion column in each travel time band. Institution based borrowers see proportions that are significantly different to the total proportions in the 10 to 15 minute and 15 to 20 minute travel time bands.

Table 6.8:   Option 3 weekday travel time by borrower type

Travel time	Adult borrower	Disabled user	Institution	Senior citizen	Young person	Total
0 to 5 minutes	7%	5%	11%	6%	7%	7%
5 to 10 minutes	35%	32%	33%	34%	34%	35%
10 to 15 minutes	40%	41%	32%	38%	40%	40%
15 to 20 minutes	15%	19%	19%	18%	17%	16%
20 to 25 minutes	2%	2%	6%	3%	3%	2%
25 to 30 minutes	0%	0%	0%	0%	0%	0%
>30 minutes	0%	0%	0%	0%	0%	0%
Total	31,066	444	436	7,565	15,121	54,632

For option 3, Table 6.8 again shows each borrower type group has proportions in each travel time band that are broadly in line with the total proportion column with the exception of the institution borrower type category.

Table 6.9:   Option 4 weekday travel time by borrower type

Travel time	Adult borrower	Disabled user	Institution	Senior citizen	Young person	Total
0 to 5 minutes	6%	4%	10%	5%	4%	5%
5 to 10 minutes	30%	28%	23%	24%	27%	28%
10 to 15 minutes	41%	40%	24%	39%	40%	40%
15 to 20 minutes	20%	23%	35%	26%	24%	22%
20 to 25 minutes	3%	3%	6%	4%	4%	4%
25 to 30 minutes	0%	1%	0%	1%	0%	0%
>30 minutes	0%	0%	0%	1%	0%	0%
Total	31,066	444	436	7,565	15,121	54,632

Table 6.9 also shows that, under option 4, each borrower type group has proportions in each travel time band that are broadly in line with the total proportion column with the exception of the institution borrower type category. As the number of library locations reduces in the latter option sets, the proportions of borrowers in the higher travel time bands increases. Here 26% of total borrowers live more than 15 minutes from a library location, compared to 18 % in options 1 and 3, and 22% in option 2.

Table 6.10:   Option 5 weekday travel time by borrower type

Travel time	Adult borrower	Disabled user	Institution	Senior citizen	Young person	Total
0 to 5 minutes	6%	5%	10%	5%	6%	6%
5 to 10 minutes	32%	29%	26%	29%	30%	31%
10 to 15 minutes	41%	41%	33%	39%	40%	40%
15 to 20 minutes	18%	21%	25%	22%	20%	19%
20 to 25 minutes	3%	2%	6%	4%	3%	3%
25 to 30 minutes	0%	1%	0%	1%	0%	0%
>30 minutes	0%	0%	0%	1%	0%	0%
Total	31,066	444	436	7,565	15,121	54,632

Table 6.10 also shows that, under option 5, the institution borrower type category having proportions that are not in line with the total proportions. Senior citizens may be disproportionately impacted by longer travel times in this option, as 28% of this borrower type will have travel times of over 15 minutes, compared to 22% of the total proportion of library users.

Table 6.11:   Option 6 weekday travel time by borrower type

Travel time	Adult borrower	Disabled user	Institution	Senior citizen	Young person	Total
0 to 5 minutes	3%	3%	6%	3%	2%	3%
5 to 10 minutes	20%	21%	17%	18%	18%	19%
10 to 15 minutes	37%	36%	13%	33%	35%	36%
15 to 20 minutes	25%	26%	49%	29%	28%	27%
20 to 25 minutes	9%	6%	14%	9%	10%	10%
25 to 30 minutes	4%	7%	1%	5%	4%	4%
>30 minutes	2%	2%	0%	2%	2%	2%
Total	31,066	444	436	7,565	15,121	54,632

Table 6.11 shows the travel times for library borrowers in option 6. Option 6 has the least number of libraries, so the total proportions of borrowers in the higher travel bands is greatest here. 43% of library users experience travel times of greater than 15 minutes, compared to 18% in option 1. Again, borrower type proportions are broadly in line with the overall totals, with the exception of the institution borrower type.

Table 6.12:   Option 7 weekday travel time by borrower type

Travel time	Adult borrower	Disabled user	Institution	Senior citizen	Young person	Total
0 to 5 minutes	5%	4%	9%	4%	4%	5%
5 to 10 minutes	29%	27%	24%	24%	26%	27%
10 to 15 minutes	39%	39%	17%	37%	39%	39%
15 to 20 minutes	22%	25%	42%	29%	26%	24%
20 to 25 minutes	4%	4%	7%	5%	5%	4%
25 to 30 minutes	0%	1%	0%	1%	0%	0%
>30 minutes	0%	0%	0%	1%	0%	0%
Total	31,066	444	436	7,565	15,121	54,632

Table 6.12 shows the travel times for library borrowers in option 7. Option 7 contains four libraries and performs better than option 6. 28% of library users experience travel times of greater than 15 minutes, compared to 18% in option 1. Again, borrower type proportions are broadly in line with the overall totals, with the exception of the institution borrower type.

7 Conclusion

Whilst attendance has declined over the past decade[48], libraries still play a social and civic role within communities and can contribute towards the sense of social wellbeing that people have.[49] This is especially the case with older people and those from deprived communities. As well as being safe environments for literacy and learning, libraries also provide internet access and the use of computers; something which is sought after in society today. [50] However, certain social groups can experience barriers to accessing libraries as a result of culture, transport, physical accessibility to the library itself and levels of family support.

Library usage data from Bury local authority shows that the highest concentrations of users are located around the town of Bury itself, and to the urban south of the district around Prestwich. Bury and Prestwich libraries have a combined share of 54% of users, with Bury itself contributing 34% of this total. Upon further analysis it can be concluded that of these borrowers in Bury a high proportion are adults, with a comparatively low proportion of young people when compared to other library locations. Conversely, Tottington and Unsworth libraries both have low proportions of adult borrowers and high proportions of young people. By looking at these different types of borrowers with regards to the proposed option sets and public transport travel time bands, it was possible to expose any borrower types are disproportionately affected by potential changes in service configuration.

With option 1, each borrower type group has proportions in each travel time band that are broadly in line with the total proportion of borrowers. This is also the case with options 2, 3 and 4 with the exception of the institution borrower type category. Similarly, option 5 sees the institution borrower type category having proportions that are not in line with the total proportions. However, under this option senior citizens may also be disproportionately impacted by longer travel times. Option 6 has the least number of libraries of all options, so the total proportions of borrowers in the higher travel bands is greatest here. As with the majority of previous options borrower type proportions are broadly in line with the overall totals, with the exception of the institution borrower type. This is also the case with option 7. According to such data, option 1 performs the best on the basis that only 18% of borrowers experience travel times of greater than 15 minutes. Conversely, option 7 performs the worst with 43% of borrowers predicted to have a travel time exceeding 15 minutes.

When analysing accessibility purely in relation to social groups as opposed to borrowers, option 1 also negatively impacts the least amount of people. Under this option, 37% of the population are located within 10 minutes travel time to libraries. This is resultant of the option having the most amount of libraries covering the largest geographical area. Also performing well is option 3 which would mean 36% of the population are based within 10 minutes travel time to libraries. However, under option 6 this figure falls drastically to just 18% due to proposing the least amount of libraries across the smallest geographical area. This option negatively impacts the largest amount of residents by far as the next most significant figure is option 4 at 27%. No significant differences between weekday and Saturday travel times are apparent with any of the options. This is due to Saturday services operating at a similar frequency and providing the same routes as weekday services.

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[48]DCMS (2016) Taking part focus on libraries. See:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519675/Libraries_short_story_-_FINAL.pdf

[49] Older People's Commissioner for Wales (2014) The importance and impact of community services within Wales.See:http://www.olderpeoplewales.com/Libraries/Uploads/The_Importance_and_Impact_of_Community_Services_within_Wales.sflb.ashx

[50] Citizens Advice Scotland (2015) Internet access in Glasgow's deprived areas. See:
http://www.cas.org.uk/system/files/publications/internet_access_in_glasgow_2015_final_-_aug_15.pdf