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An Assessment of Mobility among Key Disadvantaged Communities in North East Dublin

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ABSTRACT

In the context of a healthy communities initiative, this study looks at mobility in a disadvantaged area in a suburban area in north east Dublin. Individuals who avail of the services of community based organisations were interviewed in-depth about their travel patterns over a period of a week and their views on the availability and quality of transport services were ascertained. The area has a high social housing quotient, though much of it is now privately owned. It has a profile of low income, welfare dependency, marginal poverty and a population base that has demonstrated some level of poorer than normal health. The area has no train or tram service, very low usage of bicycles and a higher level of bus use than the rest of the city. The Health Service Executive identified the area for the development of a community-based health strategy and worked with Northside Partnership, a Local Development Company, to develop this. The mobility study was one aspect of this programme. Preliminary analysis (this paper represents first stages in an ongoing inquiry into mobility and healthy communities within the study area) indicates that while mobility levels are high (interviewees make more trips than national and urban averages) perceptions of the quality of mobility services are very low, particularly in relation to service reliability. Furthermore, significant barriers to mobility are presented by poor environmental conditions as well as safety issues. Other issues are prevalent, such as poor perceptions of active travel as a transport mode. As the healthy communities initiative is ongoing this paper makes recommendations for further research, including exploring the potential for active travel programmes, community-transport services and a more holistic approach to mobility management and area planning.

1. INTRODUCTION AND BACKGROUND

1.1 Research Background & Justification

This paper is concerned with the relationship between social mobility and community health in a pilot area in north east Dublin (see Figure 1). The area was identified for the development of a plan addressing health inequality and promoting a Healthy Community by Northside Partnership (NSP), a local development company established in 1991 to address social exclusion, and the Dublin North East Health Promotion Department of the Health Service Executive (HSE).

Social mobility in this context refers to the ability to access, via an efficient and equitable transport system, all social amenities which are both desirable and essential, including employment, leisure, community and recreational uses.

Poor health has been identified as an issue for people in areas affected by structural disadvantage and social exclusion in the study area. A 2008 community survey (MacArtain, June 2009) and a 2003 health needs assessment (O'Driscoll and Collins, December 2003) both highlighted risk factors for high levels of chronic disease risks in the surveyed

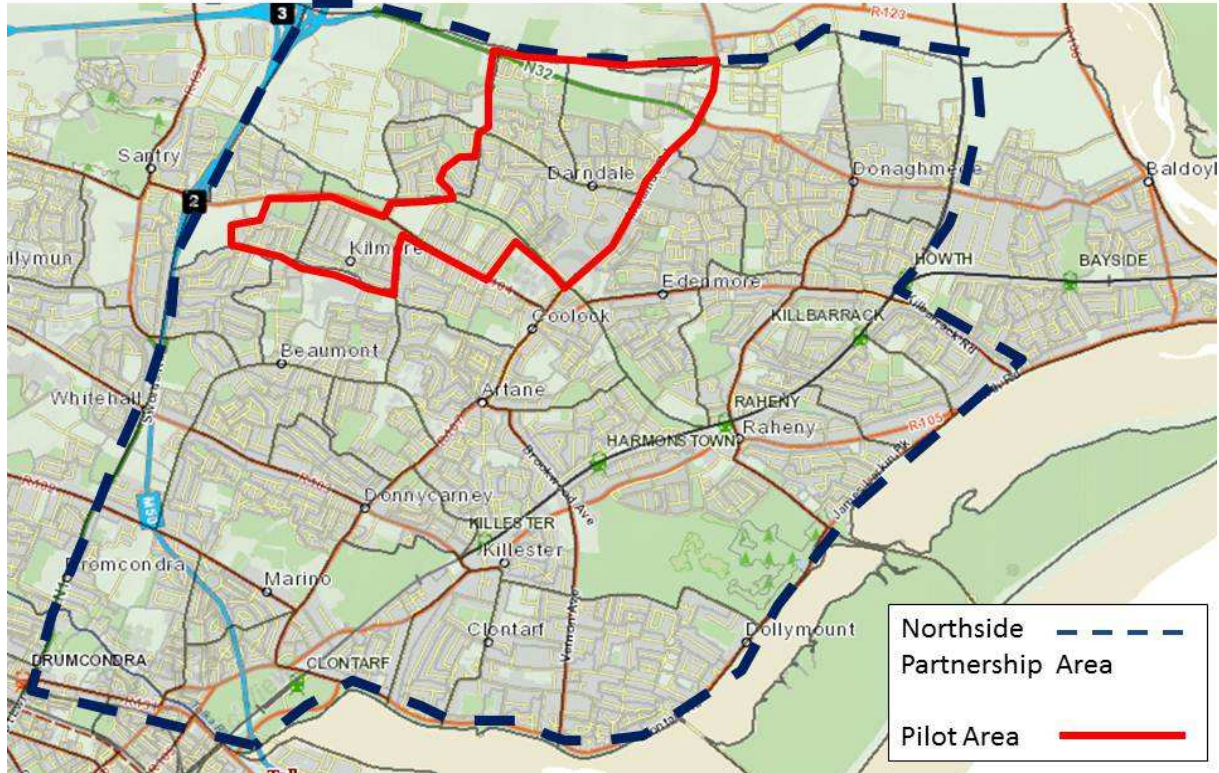
neighbourhoods and raised problems relating “to smoking, women's health, child health, psychosocial problems and social problems” (O’Driscoll and Collins, December 2003, p. 3) as well as deprivation and environmental issues, which all impact on health (MacArtain, June 2009). The self-assessed perceived health status of people in these areas is lower than citywide and national norms (Census, 2011).

Many of the elements are in place for this area to be a healthy community but there is a need to coordinate these health activities. A healthy community plan should integrate actions across public health, education and community development. Key to delivering a cohesive healthy community is both service delivery and accessibility. This in turn implies acceptable levels of mobility. The purpose of this project is to undertake an assessment of mobility among key disadvantaged communities in the north east Dublin area.

The assessment is being carried out by the School of Spatial Planning of the Dublin Institute of Technology (DIT) with Northside Partnership (NSP) as part of a DIT Community Links initiative. As part of the assessment, the following tasks were undertaken for a number of selected geographic areas affected by structural disadvantage (see figure 1 below and section 2):

- Mode share analysis
- Trip distribution analysis
- Level of service analysis
- Quality of information analysis
- Journey-to-work survey of targeted NSP clients
- Attitudinal survey of targeted NSP clients

Figure 1. Northside Partnership’s Healthy Communities Pilot Area



Source: NSP (April 2013) Consultation briefing paper.

1.2 Conceptual Framework

The assessment aims to provide an overall appraisal of social mobility based on above information. From this, an appraisal can be made of the level of overlap, or otherwise, between mobility needs and service provisions. This information, in turn, can reveal whether and to what extent current mobility levels contribute towards the delivery of a healthy community in the target area. This study might serve as an initial appraisal of a disadvantaged part of Dublin City and can, it is hoped, form part of the basis for future benchmarking against comparative locations.

1.3 Methodology

The study was carried out as part of a DIT Community Links project between the DIT School of Spatial Planning and their community partner: Northside Partnership. Desktop research and analysis was carried out by students of the *BSc Spatial Planning and Environmental Management Course*. Survey work was carried out by students of the *MSc Sustainable Development and MSc Local Development & Innovation Course*.

Community Links projects are undertaken as part of the *DIT Students Learning with Communities* initiative. The DIT initiative supports staff and students engaging in community-based learning and research and builds links with communities. The community becomes part of the teaching process and benefits from the students' work. *Students' Learning with Communities* ultimately aims to energise participants to work for social change. DIT's community partner, Northside Partnership, assisted with the scoping and design of the survey.

Desktop research and analysis carried out by the BSc students included: trip generation analysis, trip distribution analysis and mode share analysis (mobility profile of designated Electoral Districts using 2011 SAPMAPs data). The students also examined levels of service based on available public transport timetables. Quality of Information Analysis was undertaken using public transport timetables and Network Direct Information. The above information was utilised to undertake an overall appraisal of social mobility in the study area.

Field survey work was carried out by postgraduate students. Northside Partnership identified a sample of 11 individuals from within the study area who access local community-based services provided for: the elderly (3), youth (2), long-term unemployed (2), those in labour force activation measures (2) and single parents (2). A total of 11 students were undertaking the module, hence the requisite number of interviewees.

Interviewees among the five categories are typical service-users and clients of community-based organisations, each grouping having different a socio-demographic profile. A small sample size was considered suitable for the nature of the study and research context, given the duration of the research project and the relatively small time window for the organisation of the interviews (Punch, 2009, p. 42). Information gathered during a small number of face-to-face meetings that allowed the discussion of issues at a greater depth was favoured over postal surveys targeting a higher number of service users. Indeed the level of inquiry was similar in this respect to focus group research. Interviews were in-depth and semi-open, allowing students to explore specific and personalised issues with mobility services.

In pairs (one interviewer and one recorder), students were asked to undertake a survey and interview two clients to gain a thorough understanding of their individual mobility needs and assessment of available services. The survey appraised travel diary data of targeted service users and included an open attitudinal survey. The travel diary methodology was based largely on that as used in the CSO National Travel Survey (CSO, 2009).

The students were required to document and analyse the available mobility services for each interviewee. Students were also required to undertake an independent corroborative survey and analysis of Service Reliability (examining factors such as typical journey times / average speeds / RTPI (Real-time Passenger Information) reliability). Interviews were conducted in premises within the study area provided by Northside Partnership during the month of April 2013 and each interview was recorded satisfactorily.

2. STUDY AREA PROFILE

2.1 Socio-economic profile of study area

The suburban case study area (see figure 1 above) is mainly residential in character with a population of about 16,000. It consists of a number of low-density, low-rise housing estates that were built by the local authority in the 1960s and 1970s. Most of the houses, in what can be characterised as a traditional, suburban, working-class area, are now owner-occupied.

The residential areas within the case study area are bounded by major road arteries (Malahide Road, N32), two industrial estates (IDA Industrial state, Clonsaugh and the Malahide Road Industrial Estate), a derelict industrial site (the former Chivers Plant) and the Cadbury Plant in Coolock. A major hospital – Beaumont – is located at the southern periphery of the case study area in Kilmore West.

Since the mid-1990s the local manufacturing sector has experienced a rapid decline with adverse effects on local employment opportunities (Borscheid and Reid, 2012). In 1991, Northside Partnership was established in the area on a pilot basis under the 1991-93 Programme for Economic and Social Progress (PESP) as one of twelve area-based partnerships in Ireland. The main task of these structures was to tackle long-term unemployment through a bottom-up approach (Walsh, Craig and McCafferty, 1998). A large part of the study area was allocated under the RAPID programme¹, which was established in 2001 with a view to addressing social exclusion and poverty in neighbourhoods that are severely affected by structural disadvantage. A community survey carried out among 1,200 households in the Darndale-Belcamp area identifies “high levels of stress in the community about drugs, anti-social behaviour, and importantly, about the way that parents are bringing up children” (MacArtaine, 2009, p. 45).

Despite a number of small successes in addressing poverty at the local level, strong disparities persist between neighbourhoods in the study area and more affluent areas in Dublin (Northside Partnership, 2011). 2011 census data show that the study area is still affected by high levels of long-term unemployment, educational underachievement and deprivation if compared to the national average and to figures for Dublin City.

More recently, concerns about poor levels of health in the study area led to a pilot initiative between the Northside Partnership, the HSE Health Promotion Unit and the School of Spatial Planning of the DIT. The promotion of health and well-being is wider than challenges concerning delivery, accessibility and affordability of services. Social determinants of health such as social mobility, lifestyles, and fatalistic views on chronic disease within the community, the physical environment and poverty are equally relevant factors (WHO, 2012).

¹ See <http://www.environ.ie/en/Community/RAPID/>

Table 1: Key variables (apart from Deprivation Index all figures in per cent)²

SAs within Electoral District	Deprivation Score	Lone Parents Ratio	Proportion third level education	Unemployed Male	Unemployed Female	HH without a car	Aged 75+
Kilmore C	-20.34	55.22	5.08	38.36	30.72	45.55	7.85
Kilmore B	-20.90	54.95	6.40	46.49	27.13	44.85	7.94
Priorswood C	-10.34	61.74	14.34	38.73	26.35	40.47	0.53
Priorswood D	-16.09	48.37	7.79	38.68	22.60	39.98	6.05
Priorswood B	-19.93	56.80	4.29	48.69	32.99	42.42	1.01
Priorswood E	-8.92	34.77	11.10	25.66	17.18	19.66	2.59
Dublin City*	+3.7	11.1	31.57	23.11	13.3	38.15	5.99

Source: Pobal maps; *Census 2011 and AIRO Census Mapping Module

An information event and workshop with over 50 stakeholders in attendance from the state, the third sector, schools and community-based groups on 18 April 2013 launched the process for tackling health-related issues. The approach is conceptually framed by the WHO Healthy Cities agenda and its three core themes, focusing on the provision of services, lifestyles and the physical environment (WHO, 2009).

The current research on social mobility is an initiative supporting the development of a consultation and planning process leading to a Healthy Community Plan, which will be the foundation for strategically integrating actions across a number of policy arenas including public health, education, employment, housing, the environment, recreation, active citizenship and transport.

2.2 Transport profile of study area

At the 2011 Census, the study area EDs contained a population of 16,779 people, with 6,070 residential dwellings of which 349 were vacant.³ While characterised as suburban residential, the study area contains over 200,000sq.m. of commercial, industrial and retail development. Much of this is comprised of the Malahide Road Industrial Estate and Cadbury's (chocolate) Factory in Coolock, between them occupying approximately 190,000sq.m. of industrial development. The Malahide Road Industrial Estate is made up of mainly small light-industrial units of 1,000-5,000sq.m. Retail offer is mainly comprised of the Northside Shopping Centre (15,800sq.m.) and Priorswood Shopping Centre (1,600sq.m.).

The 2011 Census also reported on principal travel mode to place of work or education for persons over 5 years of age (Table 2 and Figure 2). Of approximately 9,000 journeys, active modes (i.e. walking and cycling) comprised 28%. Public transport comprised 23%. Private vehicular transport comprised 41%. Of the active modes, cycling was low at only 3%. Of the public transport modes bus was the dominant provider with rail services largely absent from the area.

Benchmarked against the area defined in Census 2011 as "Dublin City and Suburbs", the study area bus share is considerably higher than the city average of 15% (see Figure 3). The study area cycle share is lower than the city average, though the latter has been noted to have recently increased, particularly in predominantly affluent suburbs to the south of the city centre. The study area rail share is understandably lower given the absence of rail services in the area. Use of the private car as a mode is lower in the study area than across the city and suburbs.

² There are extreme variations within the EDs. For example the value for third level education in Priorswood C ranges from 1.3 to 46.9 per cent; and the male unemployment rate in Kilmore was between 35.6 and 70.8 per cent.

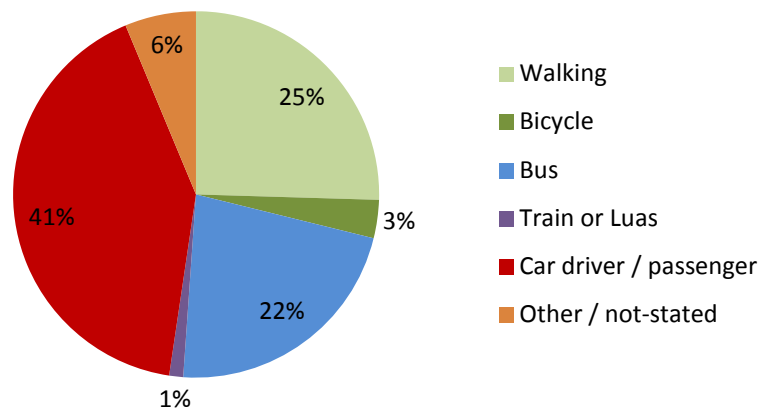
³ The study area EDs do not precisely overlap the study area, however a satisfactorily close fit is achieved.

Table 2. Travel to Work / Education by Travel Mode within Study Area EDs

On foot	2328	25%
Bicycle	308	3%
Bus	2035	22%
Train or Luas	112	1%
Motorbike	47	1%
Car driver	2374	26%
Car passenger	1220	13%
Van	182	2%
Other	70	1%
Not Stated	458	5%
Total	9134	

Source: CSO Census 2011

Figure 2. Percentage Travel Mode Share within Study Area EDs



Source: CSO Census 2011

The benchmarking suggests that the area is not necessarily untypical of the overall city in terms of its travel mode share. It is also marginally more sustainable in terms of its lower use of *non-carbon based* and private vehicular modes; however, a certain amount of this is likely to be attributable to the higher levels of disadvantage noted earlier. Notably the area is more reliant than the rest of the city on bus as a mobility provider. Cycling, though growing across the city, remains low within the study area.

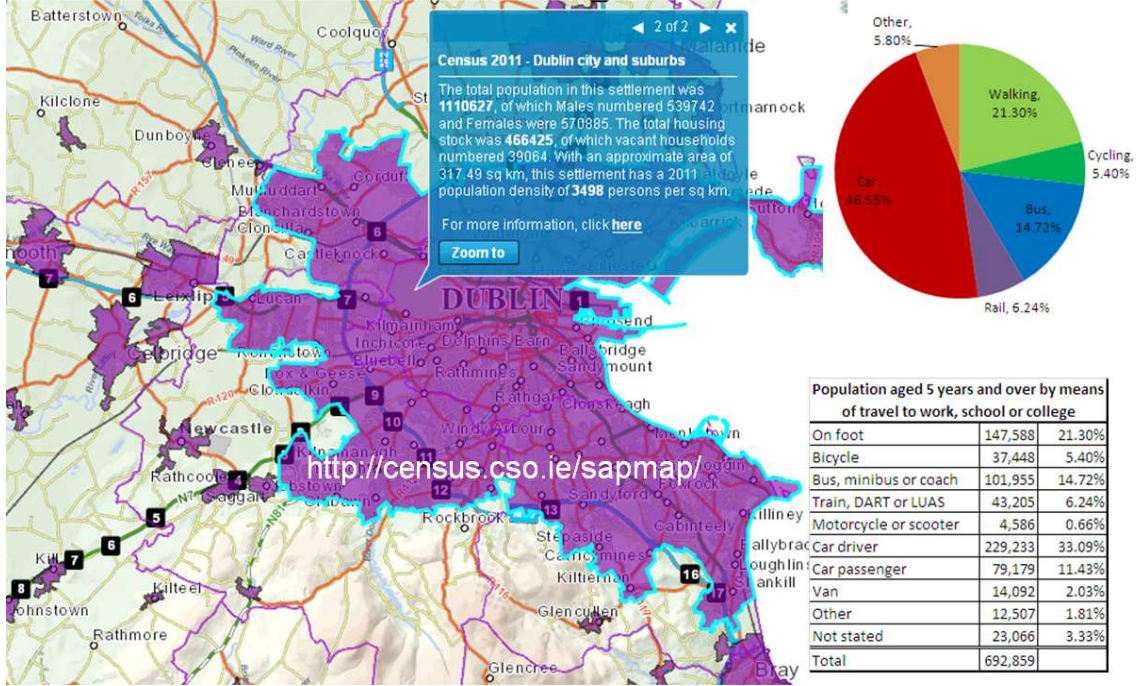
Gross residential densities in the area cover a wide range: as high as 100 units per hectare in Darndale and as low as 20 units per hectare elsewhere. On aggregate, net residential densities of 40-50 units per hectare are generally typical (see Figure 4).

Analysis of the Small Areas Populations Statistics (SAPS) data (CSO, 2011) shows that these settlement and travel patterns are evenly distributed throughout the study area; though some high car-usage is evident in those parts of the study area that are less well served by public transport (see Figure 4).

Figure 5 shows the main trip destinations for the study area. While there is employment and services locally (e.g. Northside Shopping Centre, Beaumont Hospital, the Malahide Road Industrial Estate), key trip attractors on the north side of the city include the city centre (7km), Dublin airport (6.3km) and Blanchardstown (14km). Citywide amenities include the Phoenix Park (10km), Bull Island (5.5km) and Howth / Portmarnock (9km).

The nature of the area as a medium to low density inner-suburban neighbourhood with distributed travel demands implies a high reliance on an effective and connected city-wide public transport network.

Figure 3. Percentage Travel Mode Share within Dublin City and Suburbs



Source: CSO Census 2011

Figure 4. Density and Travel Mode Share Distribution within Study Area

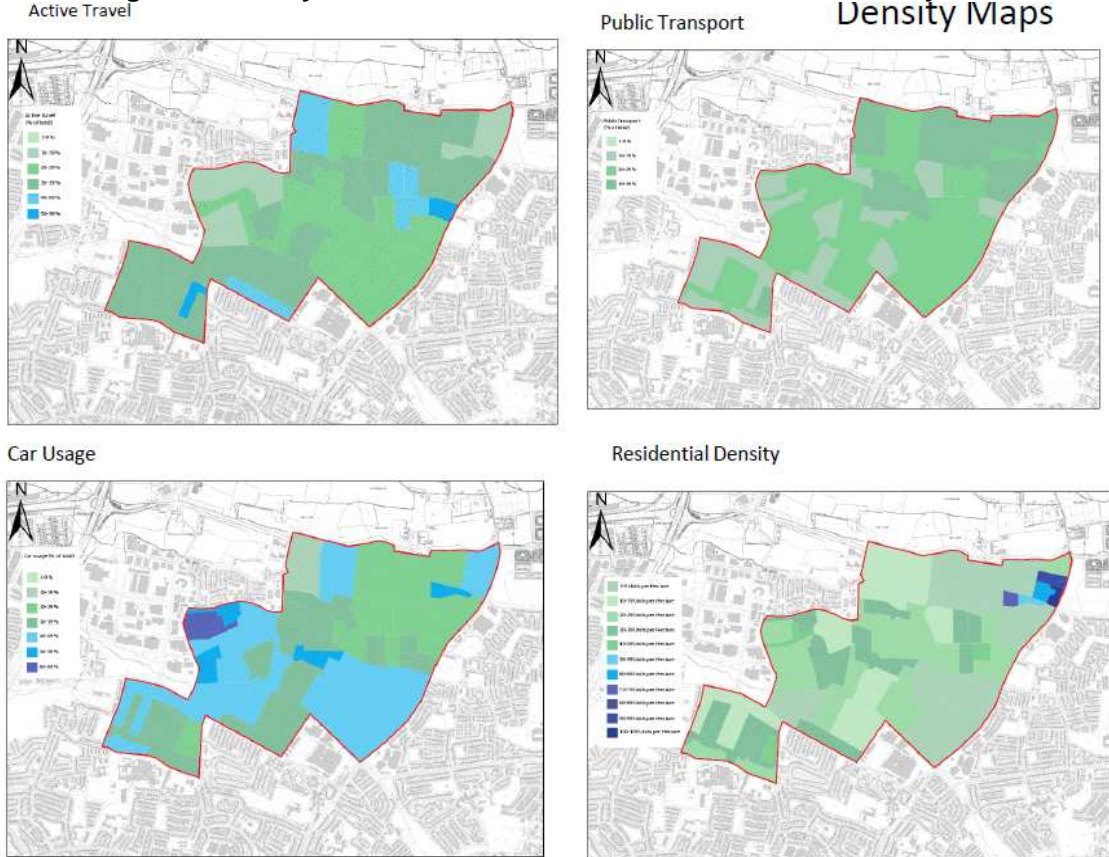


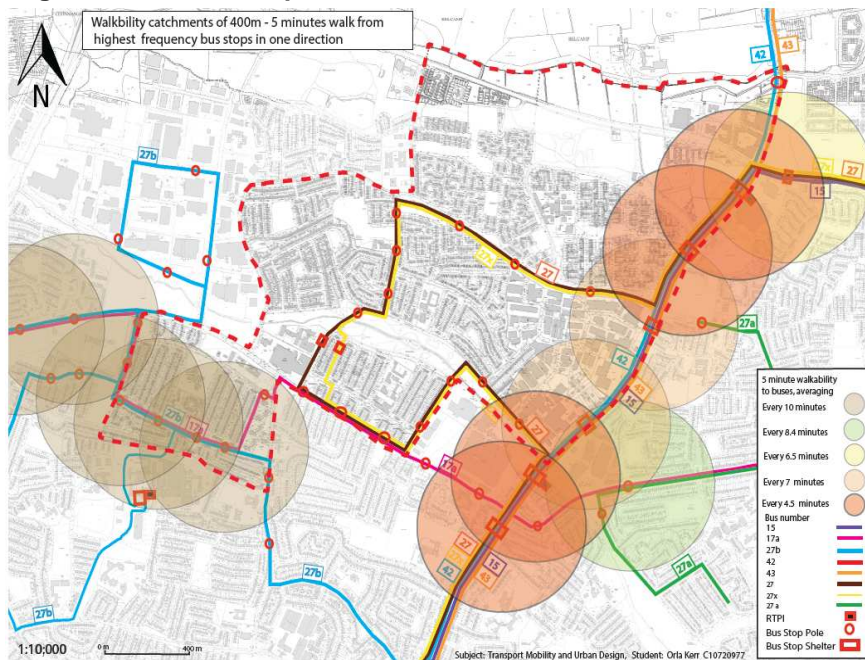
Figure 5. Key Trip Destinations in Dublin North



2.3 Scheduled Public Passenger Transport Services within Study Area

The study area is served by eight bus services, all operated by Dublin Bus. These are services 15, 17a, 27, 27a, 27b, 27x, 42 and 43 (shown in Figure 6).

Figure 6. Public transport services and 5-minute catchment buffers



Four of the services 15, 27, 42 and 43 provide high frequency service on the Malahide Quality Bus Corridor (QBC), which connects Malahide and the city centre. Services 27, 27a and 27b provide branch services into the study area and environs.

Service 17a is a cross city or orbital service connecting Blanchardstown and Kilbarrack. The latter service has recently been reconfigured as part of a network review, referred to as “Network Direct”. The area is not served by rail or tram.

Figure 6 shows the 5-minute catchment buffers (by “Euclidian”, or *as-the-crow-flies* distance) of bus stops with a 10 minute or higher frequency of service. The catchment area is relatively limited with less than 20% of the study area being served by this level of service.

Figure 7 illustrates that, if a lower level of service is analysed, in this case 10 minute buffers, a greater part of the study area is covered incorporating both residential and industrial areas.

Figure 7. Public transport services and 10-minute catchment buffers



3. RESEARCH AND ANALYSIS

3.1 Overall Mobility Patterns

The survey and interview stage of research revealed overall mobility patterns among the group that might be regarded as healthy in relative terms. On aggregate, the survey group showed relatively high mobility both within and without the study area when benchmarked against urban and national figures. Interviewees were also specifically asked if there were any trips they were unable to make as a result of poor mobility services and none were recorded. Figures 8a and 8b show examples of individual trip patterns, one for a user dependent on public transport and another who had access to a car.

The quality and perception of mobility services may be more questionable and that will be examined later in this analysis.

3.2 Travel Diaries and Overall Trip Patterns

As part of the survey, a travel diary was conducted of each users weekday and weekend-day typical journeys. The average number of daily trips across the user group was 4.4. This is higher than the national average both for urban areas (2.6) and as a whole (2.4) (CSO, 2009). More trips were made on average during weekdays (4.5) than at weekends (2.6).

Of 79 recorded trips, 34% were primarily walking trips, 25% were primarily bus trips and 38% were primarily car trips. Most users adopted a mixed-modal form of travel behaviour, with only one individual reliant on a single mode (in which case: car) and several individuals utilising up to three modes on a routine basis.

Figure 8a. Sample Trip Pattern for predominantly public transport user

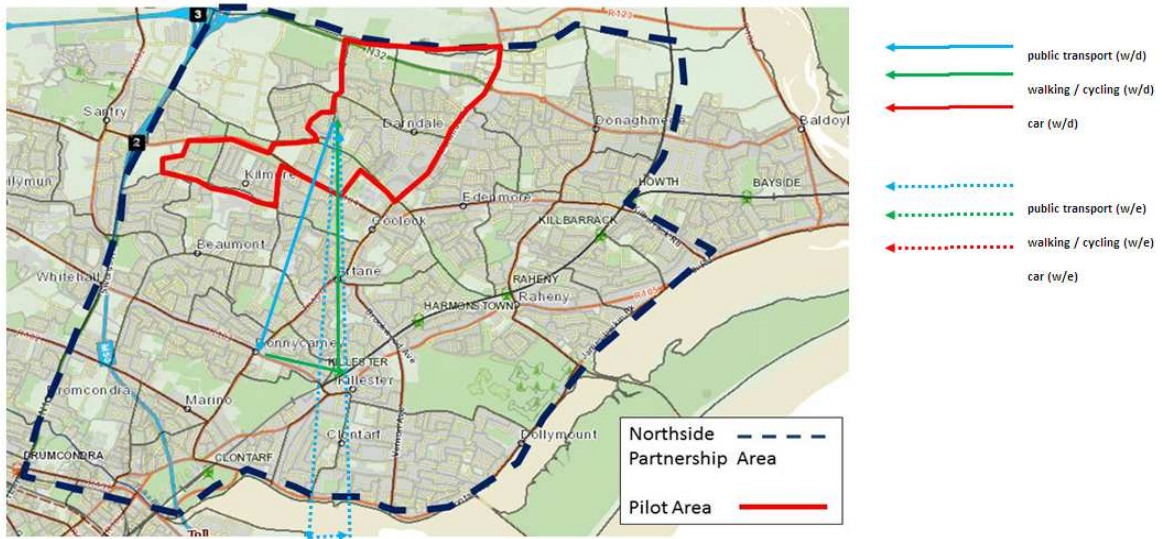
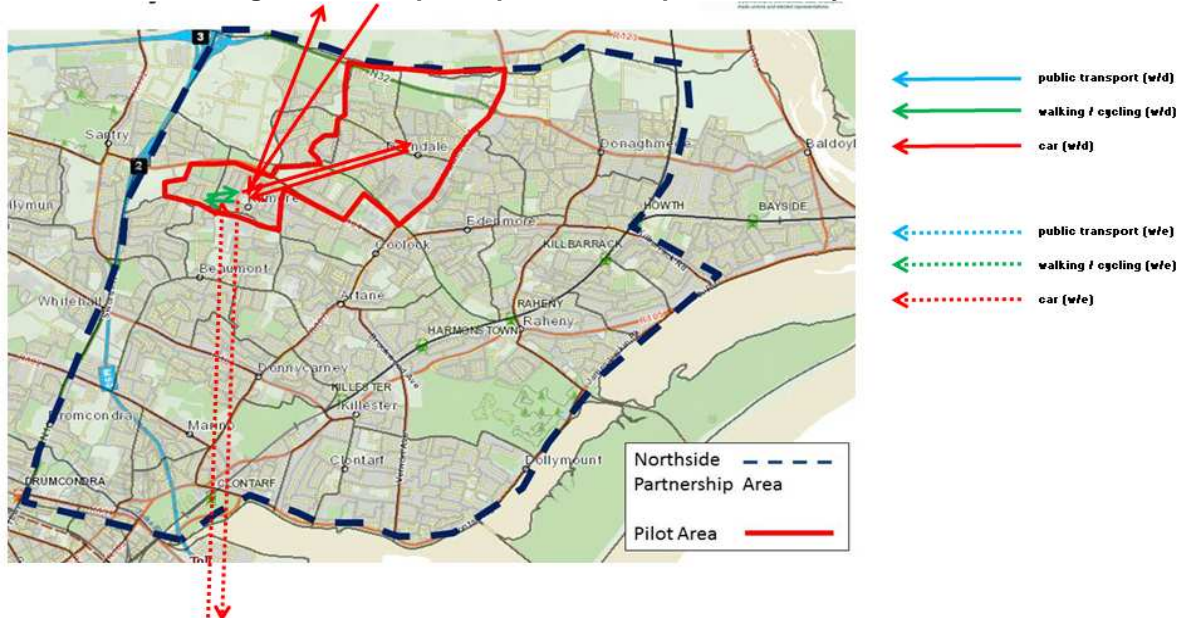


Figure 8b. Sample Trip Pattern for predominantly car user



Levels of mobility varied from user to user, as could be expected, and this was largely a function of trip requirements and available mode choice. For example, much depended on whether the individual had car access or was dependent on bus transport.

3.3 Attitudes towards Transport and Mobility Services within the Community

The sample of interviewees was small and was selected purposefully to identify informed opinions from socially marginalised groups or groups with diverse or specialised mobility needs (see 1.3. Methodology). Consequently, the more valuable analysis relates to the experiential testimonies of individuals in response to their daily personal travel needs. Some quantitative and closed questioning was nevertheless undertaken and the attitudes of the surveyed group, particularly in relation to public transport, are worth noting, as follows: -

Public transport usage was high among the group with 8 out of 11 respondents using it at least once per week. Perceptions of reliability were low with 8 out of 11 respondents saying

buses arrive on time only *sometimes* or *hardly ever*. Only 1 respondent thinks buses are always timely.

The extent of **perceived delay** compounds this concern with delays of 5-10 minutes or longer regarded as *typical*.

Quality of information appears to be a negative issue for most respondents. 8 out of 10 respondents felt that the level of timetable information was average or poor. This was balanced by a mixed view of digitally available information although few respondents (2 out of 11) said that digital information was available at their local bus stop.

Technology awareness of travel information was low among the group. Only one respondent uses the internet to plan trips. Only 3 respondents use smartphone apps to plan trips.

By comparison, **ticket awareness** was very strong among the surveyed group. Of 10 ticket types presented, at least two thirds of users were aware of 9 of these. The exception, perhaps surprisingly, was the Dublin *Bus Prepaid Smartcard*, one of the most popularly used ticket types, especially among commuters.

3.4 Barriers to Public Transport Use

While public transport usage was high among the group, users were specifically asked to state any inhibitors to their usage of public transport. Figure 9 illustrates the number of factors cited as being a barrier to public transport use.

■■■ **Service reliability** is the most frequently occurring issue, cited in some form by all users.

7 users cited lack of reliability.

6 users cited buses being full or not arriving.

5 users cited delays (in journey time).

■■■ **Safety** is a frequent concern for a majority of users.

6 users cited anti-social behaviour in the bus.

4 users cited anti-social behaviour in the area.

2 users cited anti-social behaviour at the stop.

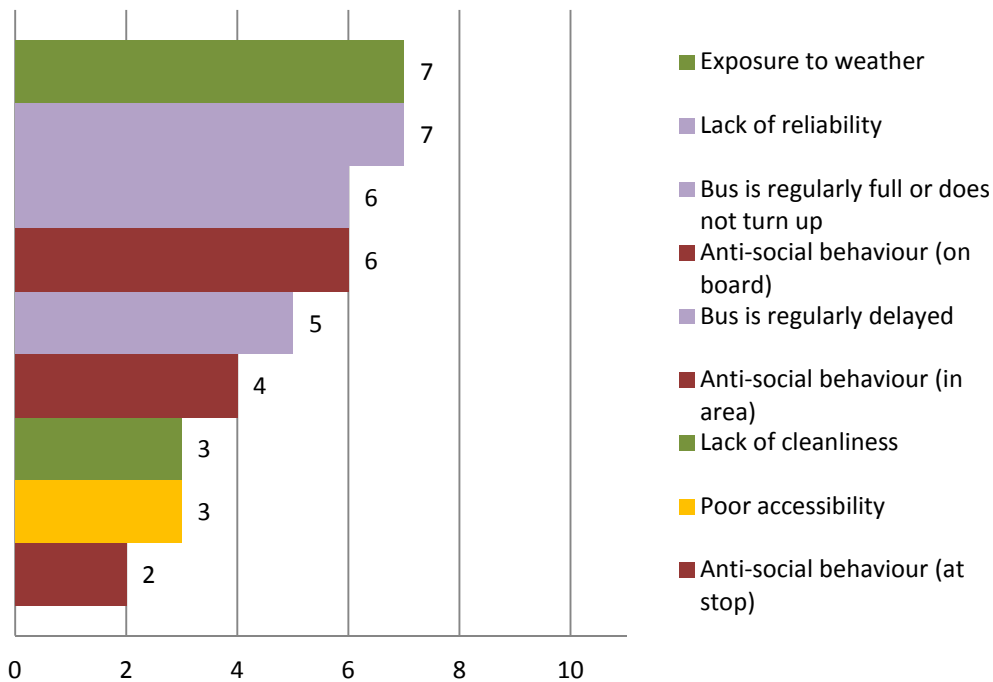
■■■ **Quality of environment** is a cited concern among several users.

7 users cited exposure to the weather.

3 users cited lack of cleanliness.

■■■ **Other concerns** included poor accessibility, lack of wheelchair facilities and lack of digital information.

Figure 9. Barriers to Public Transport Use among Survey Group



3.5 Testimonials and Key Concerns

The key survey evidence is primarily derived from the interviews and the stated views of the various respondents. Broadly these can be grouped according to the main barriers to public transport use expressed earlier. The user profile and individual's circumstances are also relevant, explaining at least some of the attitudes and opinions. The following testimonials were recorded during the survey and interview stage: -

■■■ Service reliability

Marie has restricted mobility given health problems however benefits from the fact that her social commitments are a 5-10 minute walk from her house. A close-by bus stop (5 minutes walk) connects her to a nearby Tesco where she can buy groceries. From interviewing Marie, it seems her personal activities are a response to public services available. ... Dublin Bus is not suitable if Marie was to bring a 'large' shop home with her due to awkwardness of the shopping bulk and her own limited mobility.

Marie, Active Age Group

It takes Dolores approximately 10 minutes to walk to the bus stop. At this stop there is no shelter just a single pole, with no timetable or RTPI (real time passenger information). There is also the number 42 bus which Dolores would sometimes take, but Dublin Bus has changed the route, and it would now take her approximately 30 minutes to walk to the stop. Dolores said she could wait up to an hour for the number 42. Overall, she dislikes the buses, finding them "dirty and unreliable".

Dolores, Age Action Group

Sarah uses Dublin Bus and she is "spoiled for choice" in a 15 min radius of her place. Although there are a large number of buses routes (six in total) heading to Dublin City Centre, the frequency and reliability of the service is said to leave much to be desired. The quality of the service also varies greatly from bus to bus, from where she leaves to where

she is heading to. When the destination is not Dublin City Centre Sarah is left with no other choice than walking or relying on a family member to drive her.

Sarah, Doras Bui (single parent scheme)

■■■ Safety

There is a lot of anti- social behaviour in the area and one does not feel safe standing at the bus stop for too long. Sometimes the bus drivers won't even stop even though passengers had signalled for it to stop. There's a "lack of consideration" from the bus drivers but she can understand why sometimes the bus drivers won't make an effort, because they too get a lot of abuse.

Bridget, Active Age Group

Anti-social behaviour also seems prevalent in the area e.g. reining of ponies with no permission, household waste disposed on the estate, litter and mugging.

Marie, Active Age Group

■■■ Quality of environment

Rachel walks everywhere. She was matter of fact and didn't talk negatively about the amount of walking she does during her daily commutes but it was clear she would prefer if it was more convenient for her to get around. Due to a lack of any vehicle on her journeys, the weather plays a big influence on her commuting. She will not make unnecessary trips if it is too wet. On school days her daughter has to bring a spare change of clothes with her when it is raining as they get soaked.

Rachel, Local Employment Service

Shannon's reliance on her car seems to be a firm choice that she has made and she would not easily be encouraged to use other types of travel. Her resistance to using buses is primarily because of 'the people on them' and anti-social behaviour both at bus stops and on board is an aspect of this. Also, the unreliability of buses, markedly the No. 27 and 17A, does not appeal.

When recently forced to use the bus while her car was being fixed after a crash, she thoroughly disliked the experience. Main car journeys made during the week are: the journey to and from college, to collect social welfare and to visit family and friends. The only time she mentions walking is the five minute trip when she collects her little nephew from school. Thus, she does not make lengthy journeys the majority of the time, but the car is her main option when she does make these trips.

Shannon, Young Community Leaders Programme

Unreliable public transport, unsafe cycling facilities and poor access to amenities (residential area therefore no accessible shopping centre/ area) encourage car ownership (most houses had a car in their driveway).

Marie, Active Age Group

The area of Stephens home is characterized by single houses with gardens. The street design reduces permeability which leads to longer distances to reach destinations when walking or cycling. Counting longer distances, the area provides several bus services with frequencies between 10 and 20 minutes. Due to the low permeability official walking distances to the stations increase to more than double the linear distance. This decreases the catchment area of bus stations and lowers the service levels of public transport.

Stephen, Donnycarney Youth Project

■■■ Other concerns

When questioned on whether it would be feasible to use alternatives methods of transport, he said that it would be impractical to walk to school in the morning with his little girl as the walk which would be 25 minutes, too long for a small child, especially when they are carrying a schoolbag and the child would be too tired by the time she reached school.

David, Tùs (labourforce activation) Scheme

David stated that the bus would be the last resort for both him and his wife (maybe using it once or twice a month if really stuck) as his wife will often bring the children with her in a double seated buggy or pram and when the one designated space on the bus is occupied by a wheelchair user or another mother with a buggy, she cannot get onto the bus as there is not enough room. ... In this regard, evidently, it is simply easier to take the car.

David, Tùs (labourforce activation) Scheme

On the weekend all destinations are leisure based and further away from Stephens home. Therefore he is dependent on public transportation, especially bus and dart to get to the City Centre and Dun Laoghaire. This means as well longer journeys and higher overall costs. It's noticeable that a return ticket with the dart from the City Centre to Dun Laoghaire is cheaper than the bus travel from Stephens's home to the City Centre and back. As the trips purpose is leisure the reliability of the public transportation services are less important.

Stephen, Donnycarney Youth Project

Within the above selection and throughout the interviews, even within categories a mix of issues is recorded in interviewees' responses. Many issues related to perceived quality. Such issues were often-times corroborated, though not necessarily always, by the interview team. Irrespective of this, a perception of quality, or its lack thereof, is critical in undermining user confidence in any good, social or otherwise, and transport is hardly an exception. Issues of reliability, safety and quality of environment are constructive towards an overall brand quality. In the case of area mobility services, it is clear that responsibility for brand quality may be distributed among multiple organisations, for example policing, area planning, area maintenance and transport agencies.

4. DISCUSSION OF RESULTS

4.1 Levels of Mobility in a Disadvantaged North East Dublin Community

The study forms part of a wider exploration into what the normal attributes of a healthy community might be and how to achieve these, particularly within one disadvantaged area of north east Dublin. This paper represents preliminary analysis of that study and, indeed, of the wider healthy communities exploration being carried out by NSP, HSE and DIT in the study area.

An assumption persists that mobility is an essential component of health within a community (IPHI, 2005; WHO, 2012). Given that mobility is a requirement for a healthy community, the responses of the study participants highlight a number of factors which suggest that the quality of mobility services is low within the area. Three key factors are highlighted as being barriers to social mobility within the community: service reliability; safety; and quality of environment.

This is balanced by an apparent contradiction that mobility levels in the community, i.e. the number of individual daily and weekly trips undertaken by individuals, is higher than both the national average and the national aggregated average for urban areas (CSO, 2009).

4.2 Investing in Reliable Services

The most notable issue occurring within the interview responses was the poor level of service reliability, or at least the perception thereof. As this study examined user's attitudes, perceptive responses are regarded as objective. In most cases, though, the interviewing students carried out check surveys and found corroborating evidence as regards such expressed opinions.

Irrespective of whether poor service reliability is a matter of fact or of perception, it is clear that a transport network will not be effective unless there is a strong level of user confidence in the quality and reliability of services. Evidence suggests that effective urban transport services are increasingly only delivered within a systems approach which integrates a variety of essential components into an overall transport brand, which users can interpret and rely upon (Mees, 2010; EU COST Action on BHLS, 2012).

The high level of actual mobility as against the poor levels of service available to meet these needs represents a potentially dangerous shortcoming in the social determinants of health within a community. A community that may be regarded as disadvantaged, and has requirements for people potentially lifting themselves out of disadvantaged situations, is going to be poorly served if essential transport services required to allow them make these important social shifts are not available (Wyckham, 2006). This is particularly concerning as, elsewhere, urban transportation is more and more being regarded as a network of mobility within which citizens are enabled to carry on lifestyles of individuality and accomplishment. Without such quality of service, the potential for social marginalisation, lack of self-esteem and all the ostensible indicators of disadvantage are commonly seen to occur (Larsen, 2006; Grieco et al, 2011).

It is possible that the higher-than-average levels of actual mobility within the study area may even be an indicator of attempted personal improvement. It could also be a factor of the interviewee selection, all of whom are attendees or users of local social services, which needs to be taken into account. Alternately, it could be an argument for the potentiality of higher returns on investment in the provision of improved services if such improvements were tantamount to higher levels of social and economic well-being, indeed health, within a community.

4.3 Investing in Place

A number of environmental issues emerged, particularly regarding safety and quality of place. Questions of having to leave the area for leisure, retail, education and work emerge, yet difficulty in doing so without personal (private car) assistance from family and friends. The collapse of the local manufacturing sector and consequent impacts on mobility requirements have also been noted (Borscheid and Reid, 2012). These issues are magnified if people are limited by a poor quality of service, and further so if there are deficiencies in the quality of environment. Several interviewees express exposure as an issue, for example. Indeed, the entire psychosocial experience of waiting for transport services, already perceived to be of poor quality, and in an exposed place may need to be questioned. Whether negative or otherwise, these effects can only be compounded by any issues of safety, be they en route to, waiting for or within various transport services. Finally, the experience must be balanced between those who have choice as regards travel modes and those who have none.

The study found many such testimonies to the negative impact of poor quality of environment, compounded with lack of reliable services. In any healthy community it is assumed, that these impacts need to be comprehensively counteracted (WHO, 2012).

Deeper issues of community cohesion and accountability are suggested and this has been documented, particularly by Wyckam (2006) who stated: “Car dependency enhances social exclusion. Conversely, therefore, an urban public transport system forms the sinews of urban citizenship. ... If Dublin is to have citizens rather than inhabitants, [it will require] a move towards a more sustainable and more public form of mobility within the entire city” (pp. 226-7).

4.4 Serving Dispersed Mobility Demands

Again, it is reminded that this is a preliminary assessment of results from an extensive survey of individual behaviour and attitudes to mobility in a selected area. A number of additional issues are noted which may warrant further examination as the study is ongoing. While much of the discussion was on the performance of the main city bus network and recent changes to it (for example the redirecting of the orbital service 17a as part of the branded “Network Direct” programme of Dublin Bus network revisions), there were also many local and non-arterial trips which could not be or were not served by the main trunk network. Indeed, there seemed to be an absence of any feeder network of services. The absence of such services and the benefits they may bring to an overall mobility network are suggested by a number of studies (Cervero, 1999; Finn, 2012).

Globally, many cities not only tolerate, but encourage and facilitate informal, mid-level transport sectors. These types of service, referred to by transport planners as “paratransit”, are usually demand-responsive and highly localised, in many cases operated by or within communities (Finn, 2012). In some examples (Manila, Accra), entire urban mobility networks are built on them and their success suggests lessons both for European cities, such as Dublin, and areas with dispersed mobility demands, such as the study area. Poor digital awareness and technology uptake may be a barrier here as many such emerging services (for example, the Rural Transport Programme – an example of such demand-responsive transport) benefit from use of such technologies, for example in making service bookings or communicating schedule updates (Rural Transport Network, 2011).

4.5 Health and Active Travel

The study, being an examination into the component aspects of a healthy community, also suggests a clear potential link with public health. The link between transport and public health is well recognised internationally (Speck, 2012; Tumlin, 2012) and has been advocated within Ireland also (IPHI, 2006). While the policy response has been more pronounced in other jurisdictions (Tumlin, 2012), there has been a noted shift of transport policy towards the promotion of active modes of travel recently within Ireland (Department of Transport, 2008; Department of Transport, Tourism & Sport, 2008, 2010, 2013).

Attitudes to active travel are revealed to be complex within the study group with contrasting attitudes to walking and cycling. Once again, this is a preliminary assessment of these results and further analysis is recommended as part of the local healthy communities initiative. However, it is clear that there is a prejudicial response to the potential benefits of walking and cycling, particularly when framed within individuals own mobility requirements. In several cases, individuals focussed more on the inconvenience of having to walk, mainly in time-cost terms, but also in terms of exposure, lack of safety, poor amenity and - less overtly stated but evident - personal esteem. The health benefits of active travel were often noted in general but not specifically in regard to personal travel behaviour. Questions arise, on foot of such responses, around the potential for activation of such smarter travel and mobility management policy measures as emphasised in the recent national and local policy framework (Dublin City Council, 2011).

5. CONCLUSIONS

5.1 Continuation of the Nothside Partnership / HSE Health Promotion Unit / DIT Healthy Communities Initiative

This study was carried out as an analysis of mobility and perceptions towards mobility services in a disadvantaged part of Dublin. The study is being conducted as part of an ongoing Community Health project, being undertaken by Northside Partnership and the HSE Health Promotion Unit. The paper represents a preliminary appraisal of that investigation and suggests potential directions for further research.

The study reveals that, among the surveyed group, higher than normal levels of mobility exist. That is to say, those surveyed make more daily and weekly trips than the national or national-urban average. This is a significant finding within an area of disadvantage where large parts of the population are struggling to undo individual social marginalisation.

This apparently positive feature is counteracted by very low perceptions of service quality. Many individuals are dependent upon public transport, but find that it is unreliable, untidy, not suitable for their trip destinations and difficult to access.

The study has identified that the area itself has quality of environment and permeability issues due to its design. Those surveyed have identified concerns about anti social behaviour in the area, fear whilst waiting for and travelling on buses. Quality of information on transport services is a significant negative issue for individuals surveyed. Awareness of technology on travel information is very low. Accessibility for those with mobility issues and the lack of shelter was also identified as problematic. There is also a low perception of active travel and its potential role as a basis for mobility and in providing health benefits.

The lack of confidence in the services provided, the fear of living and moving in the area, the lack of information available and the low permeability of the area and its poor connectivity to areas of employment, study, community use and entertainment have been identified as being problematic. Improvements in the mobility in the area will require a multifaceted approach that will include better information, adjustments to services, reliability, policing and design of the estates in terms of permeability and environment. It is hoped that the extent and reasons for these phenomena can be better understood as the Healthy Communities initiative is progressed.

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