

PART 2: Activity



Liverpool city centre looking east towards Kensington and Edge Lane with the Civic Group and Lime Street Station in the foreground

2:1 Activity Generators



► Bordeaux city centre

In which we describe the generators of pedestrian activity in the area based upon points of arrival and destination.

Part one of this report looked at the urban form of the Knowledge Quarter. This is important but it is nothing without people. The most attractive urban areas bustle with life and their buildings spill their activity out onto the streets and squares of the area. In Part Two we therefore look at activity and movement in the area.

The public realm of the Knowledge Quarter is the setting for this movement and interaction between people using and passing through the area. The number of people-movements varies from place to place within the Knowledge Quarter. Most interactions take place where the public realm is busiest. People-movements are most frequent close to and between places where people walk to and from. We call these places 'Activity Generators'. Typically, such places fall into two categories:

- **Points of arrival and departure:** Places where people arrive in and leave the city, and where they change modes of transport to walking. Examples include railway stations, bus interchanges, large halls of residence and car parks.
- **Destination points:** Places where large numbers of people come and go as part of

their daily life in the city. In the Knowledge Quarter these can include lecture theatres, large departmental buildings, libraries and resource centres, shops, refectories and so on.

In the Knowledge Quarter, pedestrian movement patterns are generated by people walking between points of arrival e.g. stations, car park and bus stops, and their intended destinations.

Several important arrival points are associated with the city centre (e.g. Lime Street and Central stations, bus interchange), which are some 10 minutes walking time away from the main campus destinations.

Local arrival points, such as car parks, are located along the eastern fringe of the Knowledge Quarter core.

The plan shows the distribution of arrival points and destinations within and around the Knowledge Quarter. It shows the following:

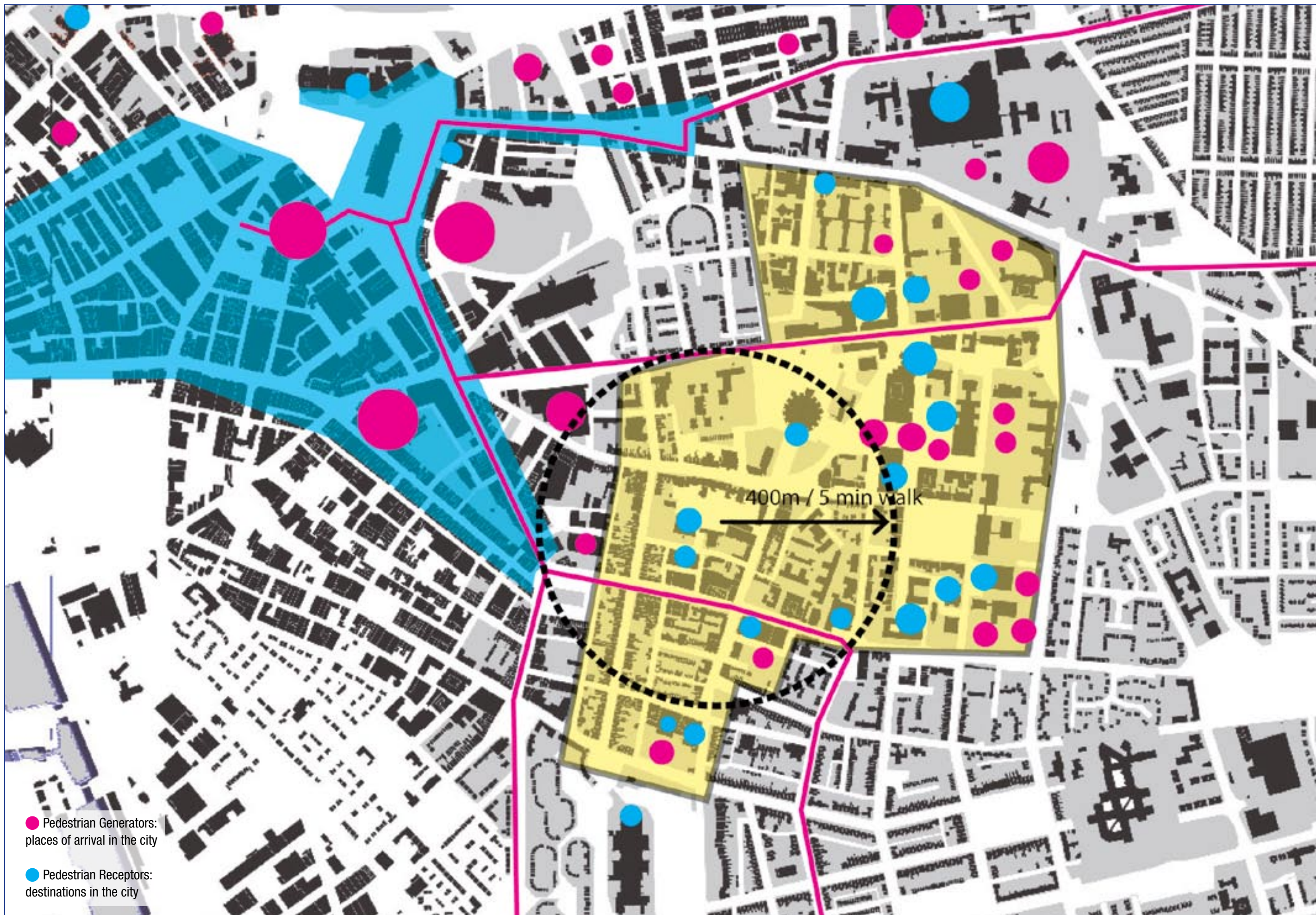
- The major arrival points are mostly located to the west of the Knowledge Quarter.
- Many of the minor arrival points such as car

parks, are located to the eastern edge of the Knowledge Quarter.

- There are relatively few arrival points in the central area of the Knowledge Quarter.
- While most destinations are dispersed centrally within the Knowledge Quarter there are several significant outlying locations.

This pattern of distribution contributes to the following:

- Most walking journeys are associated with east-west movements from the major arrival points close to the city centre.
- East west movements from the city centre involve negotiating sloping streets
- Walking journeys are relatively lengthy (frequently over 5 minutes for 400m as shown on the plan opposite), which represents a considerable investment in time and energy.
- Several locations within the Knowledge Quarter experience pedestrian congestion at peak times (morning arrival in work and lunchtimes)



2:2 Animation and Uses

In which we look at the mix of uses and the extent of active frontage in the area and therefore the extent to which the buildings of the area animate the public realm.

In addition to pedestrian movement, activity is based on the extent to which buildings animate the streets around them. This depends first of all on the uses of the buildings and particularly the mix of uses. It also depends on the way in which these buildings spill their activity onto the street through active frontages such as shop fronts, glazed facades and entrances that illuminate and animate the pavements around the building.

The plan on the facing page explores the first aspect of animation, the use of the buildings. Mixed-use districts are more lively because different uses generate activity at different times of day. In most urban areas the upper floor uses are either offices that create day time activity or residential that generates activity in the evening and at weekends. However, this activity is only visible on the streets where there are active ground floor uses, that tend to be shops, services or leisure uses.

The plan shows clearly the distribution of uses in the city centre. The core of the city centre is a mono-culture of retailing with a predominantly office area to the north. This contrasts with the mixed-use nature of the Ropewalks area and within the Knowledge Quarter Hope Street. Elsewhere in the Knowledge Quarter the uses are more segregated, with large areas given over to academic and institutional uses and the southern area being predominantly residential. Only in Islington and in the fringes of the city centre is there a mix of uses. It is therefore not surprising that much of the area, beyond Hope Street feels

deserted for much of the day particularly outside term times.

The plan in this page looks at the extent of active frontage in the area. Active frontages are most common along well-used walking routes, and in public squares, gardens and courtyards where there is a high level of footfall to provide customers and window shoppers for shops and leisure uses. However, it also works the other way as walking routes, which pass shop-fronts, cafes, galleries and other frontages to buildings where there are visible “signs of life”, are more attractive and therefore busier than those which pass blank or neutral frontages. This is because:

- They are busy, and people like to be where people are.
- Such frontages are interesting to walk down, there is plenty to look at and they feel lively and animated.
- They provide an overlooked, well-lit frontage which makes pedestrians feel safer.
- They are places which are usually found on routes which are well-connected to other places.

In several locations in the Knowledge Quarter, these active frontages open onto public squares and places; e.g. Metropolitan Cathedral steps, University Square, Monument Place. As a result, these places are perceived as lively,



active squares. Such places are attractive to people because they provide a setting for social interaction e.g. sitting and chatting and people-watching in the company of others.

The plan shows the distribution of active frontages and lively spaces in and near the Knowledge Quarter. It shows the following:

- There are few streets with continuous active frontages;
- Individual buildings with active frontages are dispersed throughout the Knowledge Quarter; and
- While there is a well distributed network of public places through the Knowledge Quarter, there are relatively few “lively spaces”.

This pattern of distribution contributes to the following:

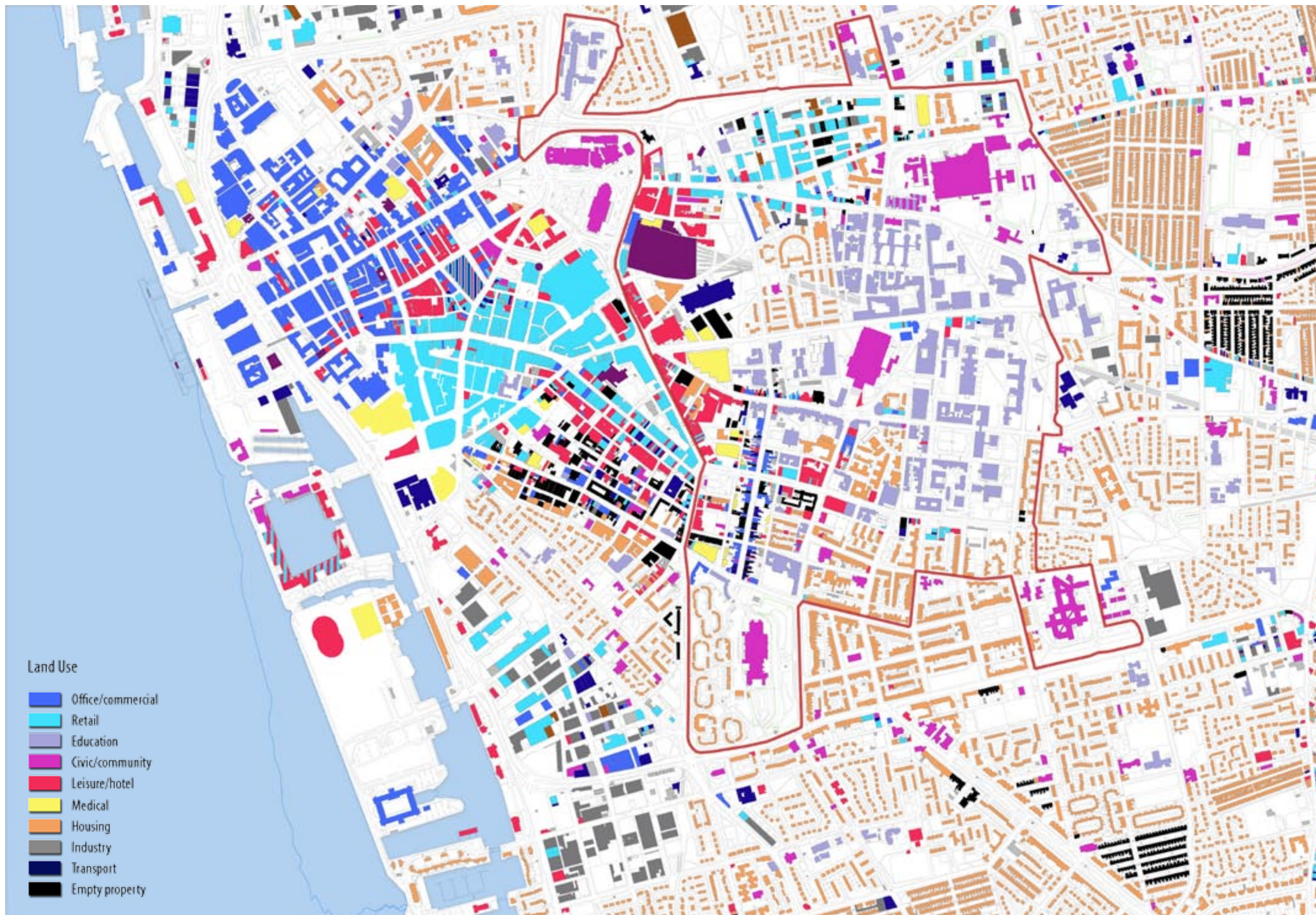
- The fragmented, discontinuous active frontages in the central part of the Knowledge Quarter contribute to the perception of discontinuous public realm;
- Many streets feel not overlooked, and therefore less safe for pedestrians; and
- The need for more lively places, connected to active street frontages, in the public realm of the Knowledge Quarter.



Far left: Abercromby Square; middle: the Cavern Quarter; below: Renshaw Street



► Active frontages





► Core shopping areas



► Cultural and tourist areas & routes



► Evening economy



► Combined activity

2:3 Movement

In which we describe the activity generated by different land uses in the Knowledge Quarter and City Centre and the extent to which they are influenced by Shatter Zones of poor quality urban form.

A combination of the points of arrival and destination and the activity generated by buildings creates the street activity, or footfall of the city. These patterns of movement in and around the Knowledge Quarter tend to link points of arrival such as the major stations at Lime Street and Central. There are also clusters of activity around destinations associated with the hospital, university libraries, lecture rooms, and departmental offices. Movement is also related to different uses so that the intensity, orientation and length of activity varies during the course of a typical day and through the week into the weekend. Snapshot observations carried out in the winter (2007) show the following:

Working

Working day pedestrian movements into and within the Knowledge Quarter involve students, staff and office workers; there are peak morning and lunchtime movements throughout the Knowledge Quarter, with particularly active locations in the central area of the Knowledge Quarter (for example University Square, Rodney Street crossings). Pedestrian movements are

most frequent in the morning, reaching a peak associated with the “rush hour” and walking to work. Peak rush hour activity around 9.00 am diminishes through the morning before increasing at lunchtime with a lesser peak between 12.30 - 2.00. Lunchtime walking movements are typically more local, and are associated with short journeys to local shopping parades, convenience and sandwich stores. There is less evidence of an evening rush-hour peak, possibly because students and staff at the teaching institutions do not finish work simultaneously. As a result, some afternoon walking routes are considerably less busy than morning ones. Some pedestrians may choose to walk on busier routes where they feel safer, but which involve longer journeys.

Shopping

Shopping as a street-based activity takes place mostly in locations on the fringes of the Knowledge Quarter such as London Road, Bold Street and Renshaw Street. These locations are well-frequented, because they offer a range of shops in a relatively compact area. It is possible to discern walking routes related

to daily shopping patterns; for example some shoppers choose to alight from buses at the ‘top of the street’ – the eastern end of Hardman Street or London Road, and walk downhill into the city centre, whence they take a return bus home. Lunchtime walking routes from the central locations within the Knowledge Quarter to the peripheral shopping areas outlined above are busy with students and others making “top-up” purchases, or buying lunch. Shopping activity in the central area of the Knowledge Quarter tends to focus on short trips to individual shops or shopping parades.

Visiting

Cultural tourism and sightseeing routes: The cultural offer for tourists visiting Liverpool City Centre overlaps significantly with the Knowledge Quarter. Several major attractions, including the Anglican Cathedral (the second-most visited attraction in Liverpool after the Albert Dock and the 3rd most favourite heritage site to visit in the UK in a poll conducted as part of UK TV History channel’s ‘Britain’s Best’), the Metropolitan Cathedral, The Philharmonic Hall, the theatres

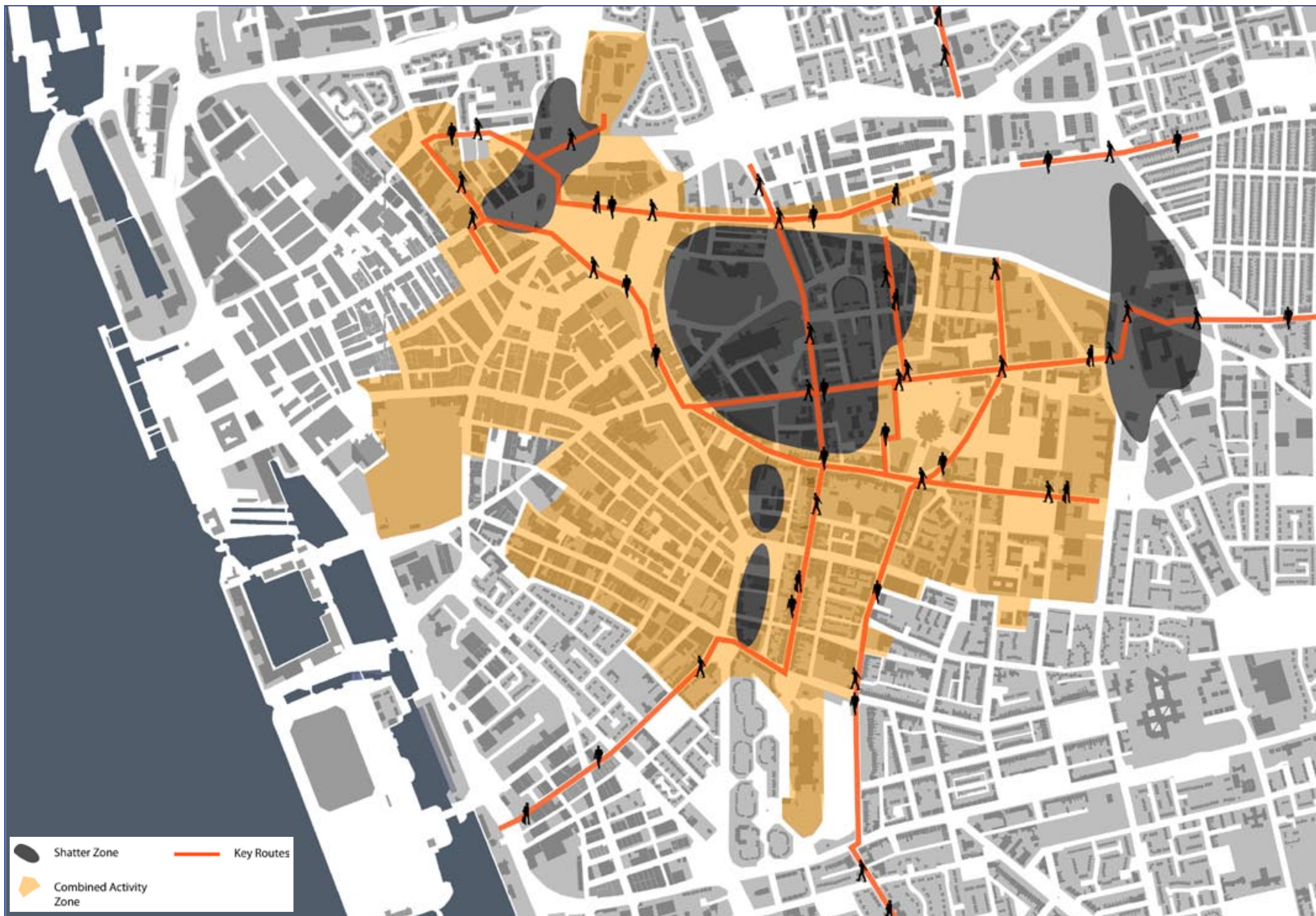
and the University Gallery, are located in the Knowledge Quarter, and are must-see components of many tourists’ visit to the city. Walking routes connecting the points of arrival in the city centre (particularly Lime Street Station) to these attractions become busy during holidays and weekends. It is possible to discern future walking routes which will connect the Knowledge Quarter with Chinatown, and the emerging Independent District in the Baltic Triangle, to the established tourist destinations of the Waterfront, Matthew Street and the Civic Forum to make an especially rewarding tourist circuit.

Playing

Evening pedestrian activity persists in areas where pubs, bars, cafes and restaurants, cinemas and clubs are clustered. In the majority of the Knowledge Quarter, pedestrian activity is much diminished. This reinforces a perception that parts of the Knowledge Quarter public realm are generally devoid of activity at night, and for some people the area is threatening and unfriendly. Hardman Street, the Berry St. - Lime St. - Renshaw St. axis and London Road are the only ones that remain lively at night.

Shatter Zones

Shatter Zones: poor pedestrian environment. As has been outlined in earlier sections, major infrastructure elements such as railways and the planning blight associated with the planning of the inner ring roads and the subsequent urban clearance has resulted in areas which lack the distinctive pattern of enclosed continuous street frontages overlooked by adjacent buildings typically found in the core areas of the Knowledge Quarter. Instead, these areas of open, ill-defined streetscape lack shelter and activity. The areas, which are called “Shatter Zones” because the urban grain is so fragmented, are unattractive to pedestrians, particularly after dark, when these wind-swept and ill-lit localities feel threatening. Many of the most important walking routes connecting the city centre (particularly Lime Street Station) with the Knowledge Quarter, traverse these Shatter Zones. As a result, it is probable that many potential pedestrians are dissuaded from choosing to walk, and instead travel short distance by bus, taxi or even private car. This shows the importance of making better connections to the main walking routes into the quarter from surrounding districts, and improving the quality of these routes.



2:4 Walking Routes

In which we describe the way that the activity in the area is channelled into a relatively limited number of pedestrian routes which nevertheless still have to negotiate barriers and poor quality environments.

The activity described so far in this section feeds into a series of pedestrian and cycle routes through the area. The Knowledge Quarter is made up of sub-districts, comprising clusters of educational facilities organised around smaller 'campuses'. While many of the outlying 'campuses' are relatively self-contained e.g. Liverpool Hope University, the snapshot survey in winter 2007 shows that students and staff walk between campuses, in places generating significant levels of foot traffic at busy times of day (particularly morning arrival and lunch peak times).

These walking routes do not, however, always follow the shortest route from A to B. This is partly because in some of the Shatter Zone areas on the previous page the environment feels unsafe so that the routes are avoided. In other cases as shown on the plan above right, there are a series of obstacles to pedestrian movement. This can mean that some walking routes are lengthy (over 800m), and traverse a variety of city districts. As a result, pedestrians are confronted with a wide range of city characteristics, physical obstructions and multiple route choices. These routes are often poorly signed, and wayfinding is difficult.

The public realm within the Knowledge Quarter should be improved to establish clear, unobstructed walking routes, with appropriate signage indicating distant as well as local destinations.

Weekday Student movement

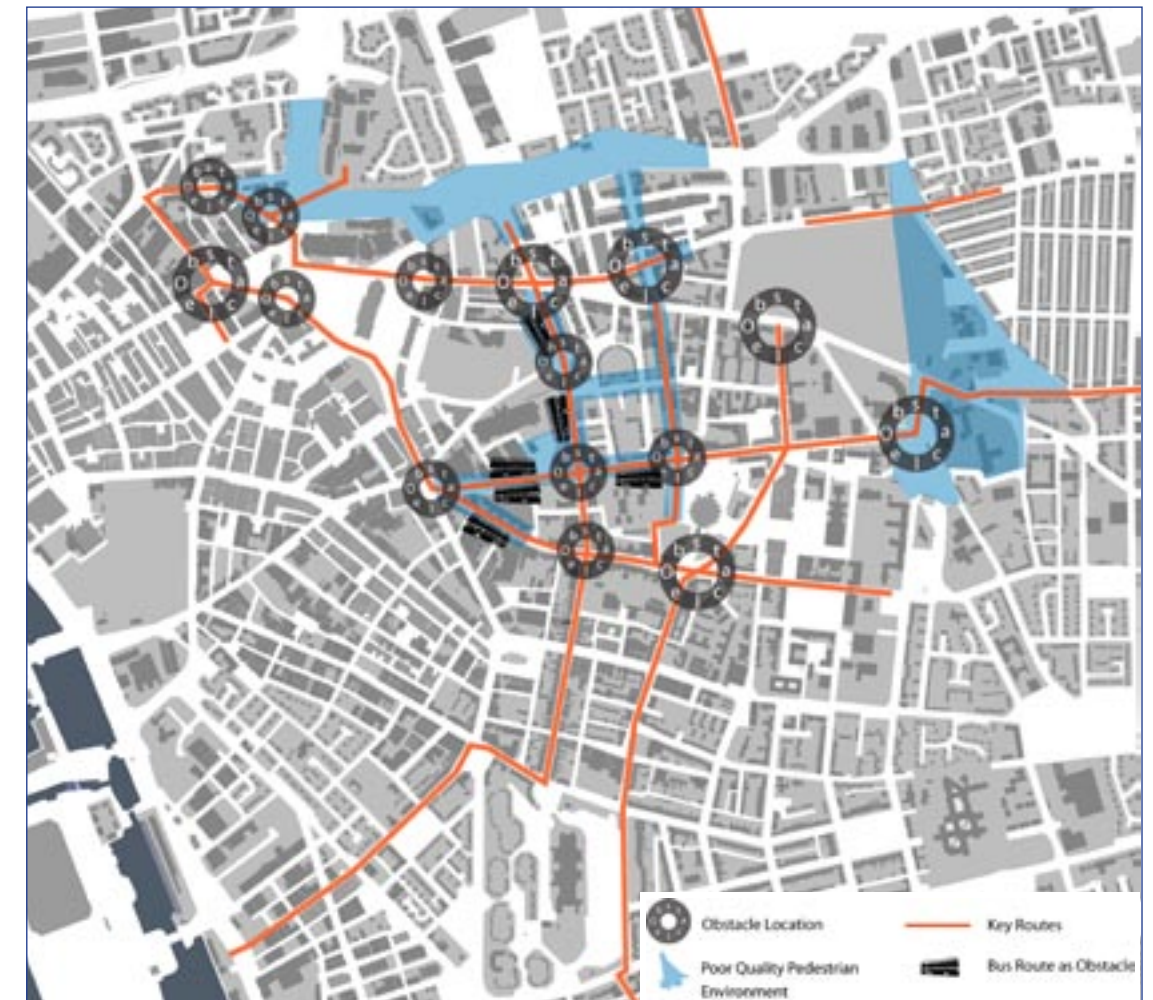
Pedestrian movement within the Knowledge Quarter appears to correspond closely to the main clusters of academic and residential facilities, and arrival points such as transport hubs and larger car parks. Frequent walking trips take place within the clusters, and less frequently between clusters.

Weekday student cycle movement

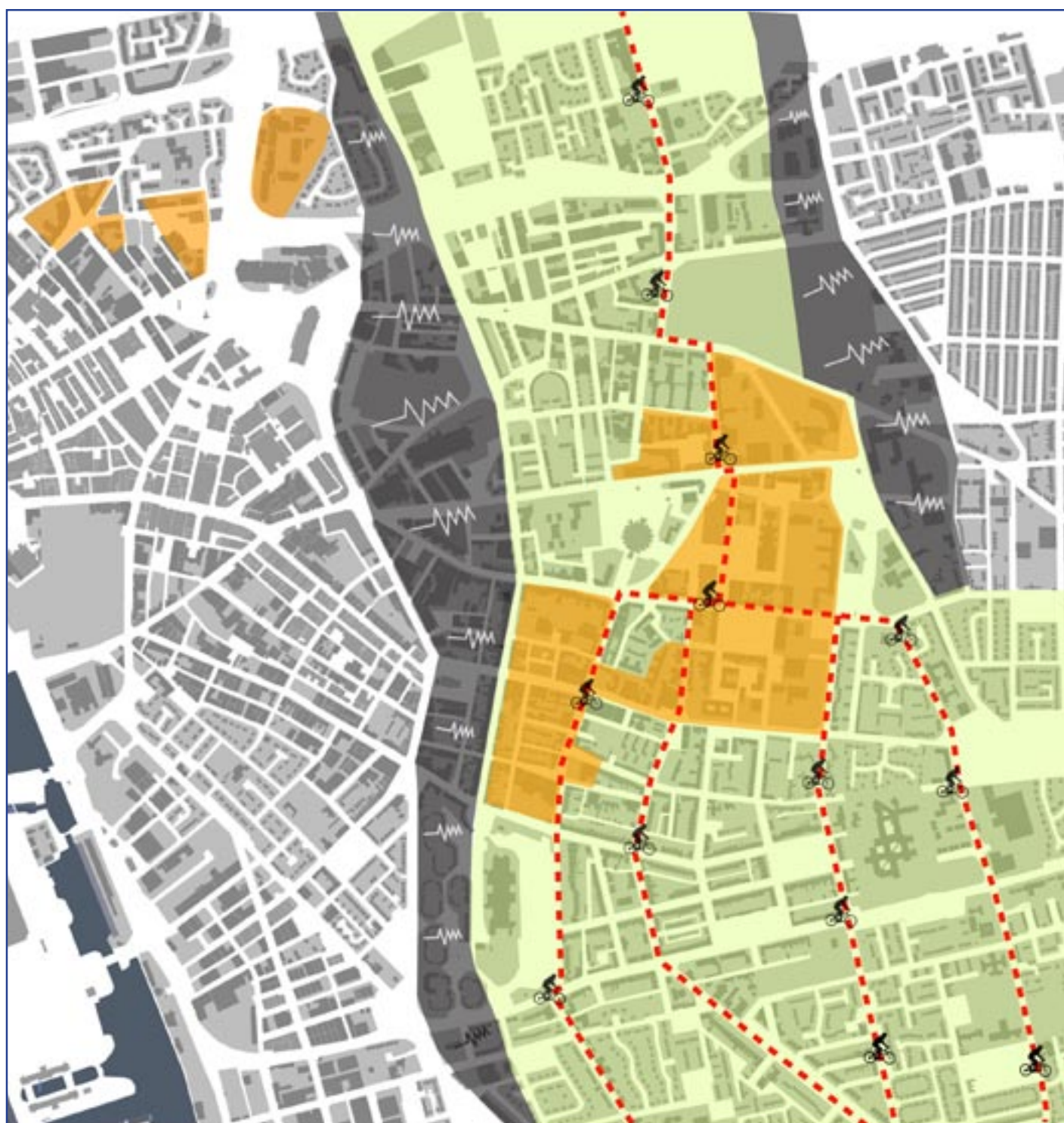
Cycle movement through the Knowledge Quarter area appears to be mostly confined to the central campuses. This may be explained by the following:

- The steep topography to the west and east, which makes cycling a strenuous activity;
- The poor quality cycling environment of the east-west routes, which are a disincentive to movement in this mode; and
- The relative ease of access north and south from the primary student residential areas to the central campus along occasionally well-signed and safe cycle routes.

► Main pedestrian routes, obstacles and poor quality environments



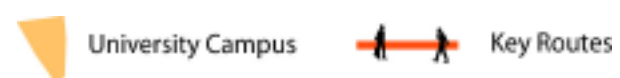
► Main pedestrian routes related to the points of arrival and destination



► Level changes and cycle movement



► Key pedestrian routes in-between campus areas



2:5 Parking & Public Transport

In which we describe parking provision and the public transport routes that serve the area.



► Seymour Street

We have undertaken a study of parking provision in and around the Knowledge Quarter. There are approximately 7,400 spaces provided off-street, mostly on a multitude of surface car parks. There are also several multi-storey car parks, the largest at Mount Pleasant, with three further substantial facilities at Lime Street, Epworth Street and Oldham Street.

Much of the off-street surface parking is associated with major institutions like the Hospital and Universities although much of this is also available for public use. The Lime Street, Epworth Street and Oldham Street multi-storey car parks are usually available 24 hours, with Mount Pleasant closing during the evenings.

There are further substantial multi-storey car parks in the city centre to the west of the Knowledge Quarter, at St. John's Centre, Tithebarn Street, Vernon Street and Queen's



► Car park on Kempston Street

Square, although these are too far from the central core of the study area to serve anything deeper than its western edge and the LJMU City Campus. On-street parking offers approximately 2,000 additional spaces mostly for short-stay parking.

High demand for parking associated with visits to the medical and academic institutions leads to a scarcity of places throughout the week. Conflicts with resident parking around the Canning and Hope Street areas led in recent years to introduction of a residents' permit system in these areas. The University has now introduced a barrier and permit system across its estate, and will review the impact on demand in due course.

Other points of high demand are during the evenings around Hope Street and Lime Street, when the Philharmonic Hall, Empire Theatre, the Everyman and the Unity have major shows attracting thousands of people. On-street



► Brownlow Hill

provision is very limited and capacity has been reached as the evening economy has expanded in recent years. At weekends there tends to be more parking capacity around the Knowledge Quarter during the day-time.

Visual impacts of the off-street surface parking facilities are damaging, as the gap sites tend to disrupt street form and building lines. Some of the multi-storey provision is also visually intrusive, the purpose built facilities of the 1960s and 70s having a deadening impact on important streets like Brownlow Hill and Mount Pleasant.



► Norton Street bus station

Public Transport

As part of the city centre, the Knowledge Quarter benefits from its proximity to the focal point of the city-region's numerous public transport routes. Services to all parts of Merseyside, the north-west and indeed the UK are available from within the area or its immediate 'door-step'.

Lime Street Station offers three sub-50 minute express rail services per hour to the heart of Manchester, whose Oxford Road higher education and 'science city' quarter has obvious synergies with Liverpool's Knowledge Quarter. There are also direct rail services to London Euston as rapid as 2 hours 7 minutes, accessing continental rail links with just one change now the St. Pancras Eurostar terminal is open.

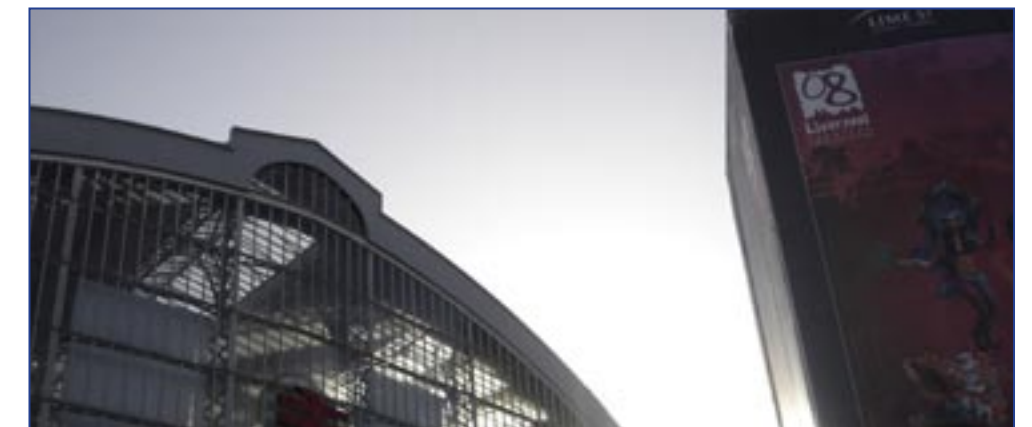
Lime Street and Central Stations access the underground Merseyrail Loop Line system, which has fast and regular shuttle services under the river to Birkenhead, Chester, North Wales and the Wirral, and also lines north along the coast as far as Southport and to South Liverpool and the Airport. Long range coach services across the UK are provided from the Norton Street National Express station alongside Islington. The area

also benefits from the regular shuttle bus service between Liverpool John Lennon Airport and Lime Street Station.

The map to the left (facing page) shows local bus routes around the area. The core area around Hope Street is fairly well served by some routes to the south of the city, running from Princes Avenue along Catherine Street, but requires a fairly long walk north to London Road in order to pick up services to Anfield or Kensington. This is significant as these high-density inner city communities traditionally house students and also staff working in support roles in the large institutions.

Similarly the north of the area around the Hospital is poorly served by bus services from the south of the city. North-south connecting routes tend to traverse the Knowledge Quarter along its western Renshaw Street edge, rather than cross through it.

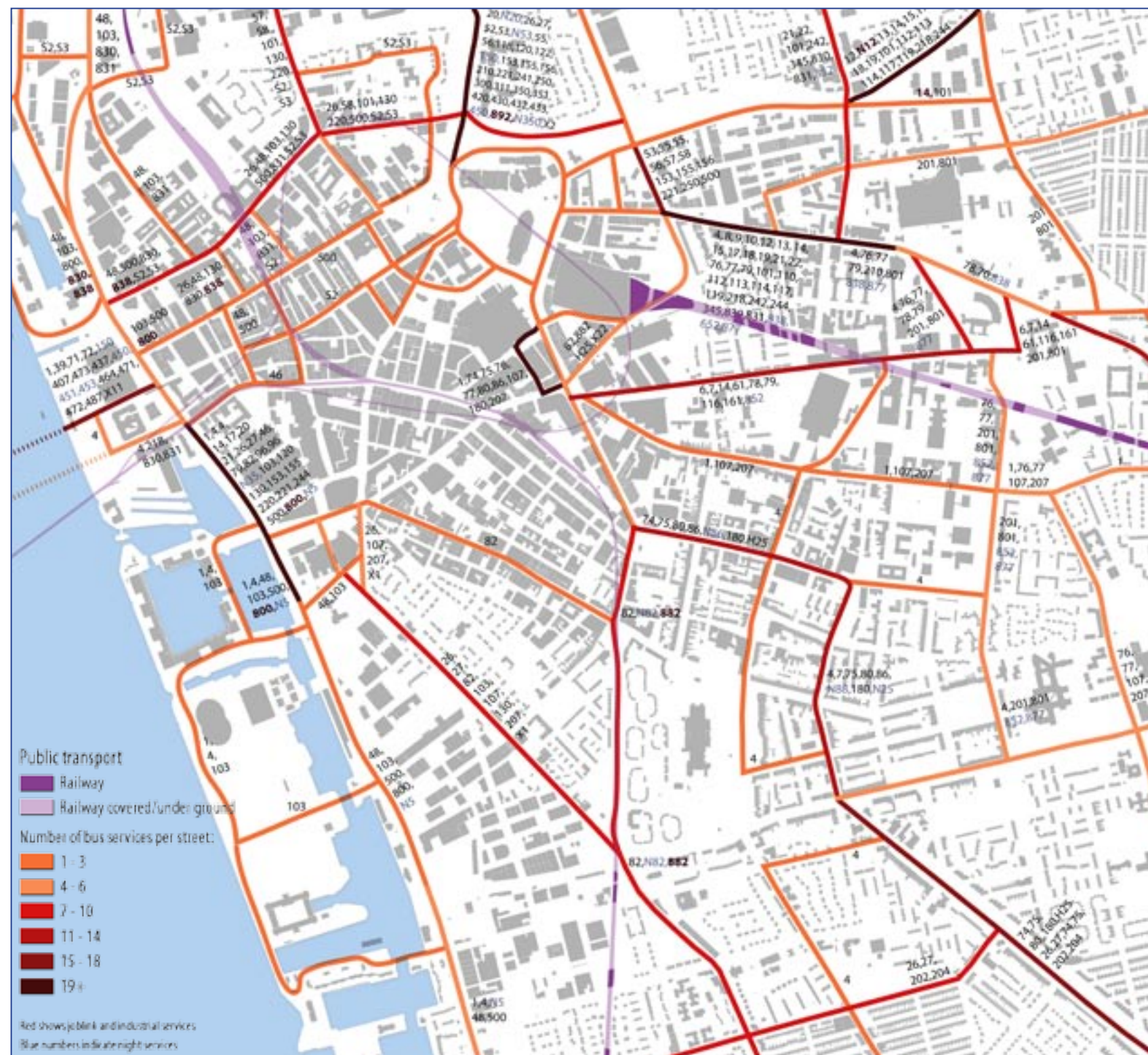
A real weakness in public transport provision exists in terms of affordable linkages between the Knowledge Quarter and the city centre. With the current flat fare regime, a two stop lunchtime hop is prohibitively expensive. Such invisible barriers do not encourage daily interaction around the city centre.



► Lime Street Station



► Existing parking - on-/off-street and multi-storey parking - (in yellow) within the Knowledge Quarter



► Public transport