Wirral Case Study Report

(The Eastham to Birkenhead Corridor)

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1 *The Eastham to Birkenhead Corridor*

1.1 *Introduction*

1.1.1 This section sets out the case study of the Eastham to Birkenhead public transport corridor. The corridor was selected as an example of an urban area where the public transport provision had recently been improved and where significant development opportunities exist. Section 4.2 reviews the corridor as it is today, while Section 4.3 reviews the vision for the future of the corridor. Section 4.4 sets out the process by which the corridor has and is being developed. Key findings are set out in Section 4.5.

1.2 *The corridor today*

Strategic overview of the corridor

1.2.1 The Birkenhead – Eastham corridor covers the eastern part of the Wirral peninsular. The corridor is defined by the River Mersey to the north east and the Green Belt to the south west. Industry located near to the docking facilities along the Mersey and associated communities of workers located adjacent to them. The most famous example of this type of community is Port Sunlight village associated with the Unilever soap factory.

1.2.2 The changing spatial and locational needs of the shipbuilding industry meant that the much of the corridor's dockside infrastructure and plant became increasingly obsolete. This structural economic change means that the area is now the focus of considerable regeneration efforts and has a number of opportunities with significant development potential.

1.2.3 The Merseyrail line provides a high frequency service for the area. It links directly to Chester, Helsby and Shotton stations which, in turn, link into the West Coast Main line. The line also creates a major commuting corridor by linking to Liverpool Lime Street Station under the Mersey. The service provides gives ready access to Liverpool city centre for the corridor residents, via the tunnel and loop line opened in the 1970s which provided a speedier replacement for the Mersey ferry.

1.2.4 As the railway link from the Wirral to Liverpool town centre was developed, areas of commuter housing grew forming a continuous belt of development along the peninsular of land. The A41 (T), New

Chester Road, forms a spine road linking Eastham to Birkenhead and on to Wallasey. The first phase of the SMART bus scheme runs along this road and branches off to serve the main communities and employment areas between Birkenhead and Eastham. High levels of freight traffic use the A41 (T) road and are perceived to cause traffic congestion and environmental distruption. Figure 4.1 shows the structure of the corridor.

Figure 1.1: Overview of the Eastham-Birkenhead corridor

[Figure showing the rail line and stations, the A41(T), Birkenhead town centre and SMART bus routes]

Land uses and development

The nature of the corridor

1.2.5 Employment uses were traditionally located down the eastern side of the corridor adjacent to the Mersey. As the traditional heavy industries declined and closed or moved away, new industries located on the same sites, although substantial opportunities remain at the Cammell Larid site and Wirral International Business Park.

1.2.6 Figure 4.2 shows the land uses and development opportunities in the corridor.

Figure 1.2: Land uses and development opportunities

[Figure showing the different land uses and Cammel Laird and the business park]

1.2.7 Significant changes have been made to Birkenhead town centre in recent years, including its public transport infrastructure and associated development. Anew bus station was provided to bring together and update the existing facilities. It was developed with an extension to the town centre and was partly funded by City Challenge money. The extension to the town centre included a multi-storey car park. The bus station has been acknowledged as an architectural success but there hare doubts about its capacity to handle future increases in traffic. It adjoins a square, created from a car park, which is intended to have a civic presence, although the car parking which covers half the square detracts from this. On the other sides of the square are a new frontage to the town market and the redevelopment of an ASDA store for four retail units (which are not of high quality architecturally).

1.2.8 On the other side of Conway Street, away from the traditional centre, there was a large clearance area which offered an opportunity for a

town centre extension. It has been developed around a boulevard with a new railway station located in the middle. Adjoining development includes offices, education institutions and a mutiplex cinema, with one development site left for development.

1.2.9 The door step proximity of the rail and bus stations have been quoted to developers as reasons for requiring reduced car parking provision. The level of parking for buildings along the Boulevard is low. However, it must be borne in mind that the multi-storey car park is close by, and there was a suggestion that had it not been for this fact, the multiplex developer would have required higher levels of on-site parking. Planning officers suggest that lower car parking provision may prove to be an issue for the developer of a hotel on the boulevard. The bus and rail stations, although new, are not adjacent, and interchange involves a significant walk.

[Photos of bus and rail stations]

Land values and development activity

1.2.10 Table 4.1 shows typical land values in the corridor. As Table 4.1 shows, land values are generally low. Many of the key development opportunities have high abnormal costs due to their previous uses. The area has a poor image and in an economy where firms are increasingly footloose it is proving difficult to attract investors to the area. Yet there are comparatively few problems of access or congestion. The situation is one of low demand and low congestion.

1.2.11 Analysis of planning applications over the last five years suggest that much of the development interest is focused in the Bromborough area where applications have been made for a range of "big box" types of uses including employment, leisure and retail as well as residential.

Table 1.1: Typical land values in the corridor

Housing	Generally graded with cheapest at the north, becoming more expensive towards Chester. From £100,000/acre in Birkenhead (too near Liverpool) to £400,000 in "nice" areas of Eastham. Housing estate areas generally command £100,000.
Industry	Fairly consistent throughout, huge abnormal costs usually. Approximately £90.000-£120,000/acre throughout the corridor. At higher end around motorway junctions.

Leisure	Very few opportunities, hotel need identified near Birkenhead, approximately £100,000/acre for hotel use
Retail	Would command £200,000 for non-food retail but no land is allocated.

Land values from Wirral MBC Estates Department. Values do not include abnormal costs and all sites abnormal in corridor.

Public transport provision

1.2.12 The bus links and train links within the corridor provide two different functions. The development of the Merseyrail heavy rail system enabled the corridor to become a commuter zone to Liverpool and Birkenhead town centre and stimulated the existing suburban development that has developed between the traditional centres of population.

1.2.13 The SMART bus routes run parallel to the rail line but provide for shorter journeys to district centres. Its improvement is relevant to the reduction of short car journeys to decrease environmental damage.

1.2.14 The partnership is still working to develop multi-modal integrated tickets. The main bus/rail interchanges are Hamilton Square, Bebbington, Bromborough and Rock Ferry.

Rail services

1.2.15 Rail services in the corridor, on the route between Birkenhead and Chester are provided by Merseyrail Electrics, a subsidiary of MTL Holdings LTD. The route is electrified by use of the third rail system, and is part of a network which extends across Merseyside which at its extremity, reaches as far north as Southport and as far south as Chester. the third rail system is unique outside the South East.

1.2.16 Passenger services have been exclusively operated since the late 1970's, which have a capacity of 230 standard class seats per three-car unit, and a maximum speed of 75 miles per hour. Services are provided under a franchise agreement paid for by Merseyside Passenger Transport Executive.

1.2.17 Stations in the corridor are Hamilton Square (junction with the other Wirral Line) Birkenhead Central, Green Lane, Rock Ferry, Bebington, Port Sunlight, Spital, Bromborough Rake, Bromborough, and Eastham. The line is shown in Figure 4.3.

Figure 1.3: Rail line and stations on the Eastham to Birkenhead corridor

[Figure showing rail line and stations]

1.2.18 Table 4.2 shows the frequency of rail services.

Table 1.2: Rail services within the corridor

From	To	Frequency (train every number of minutes shown)				
		AM Peak	Off Peak	PM Peak	Saturday	Sunday
		07:00 - 09:00	09:01 - 16:00	16:01 - 18:00	06:00- 24:00	06:00- 24:00
Birkenhead	Chester	15	30	17	30	34
Chester	Birkenhead	15	30	17	30	34
Birkenhead	Ellesmere Port	30	30	20	29	29
Ellesmere Port	Birkenhead	30	30	20	29	29

Notes: Frequency only applies to those hours when service runs

Bus services

1.2.19 First Crosville or PMT (Red Rider) generally provide bus services in the corridor. There are two high profile 'SMART' services which serve the corridor, as shown in Figure 4.1.

1.2.20 Service provision in and around the Birkenhead to Eastham corridor is made up of a number of services over the day, in total there are around 35 services serving the corridor at various points in the area. [Richard, what do you mean by this?] Table 4.2 shows an example of frequencies between Bromborough and Birkenhead and the services are shown in Figure 4.3.

Table 1.3: Bus service frequency

From	To	Frequency (bus every number of minutes shown)				
		AM Peak	Off Peak	PM Peak	Saturday	Sunday
		07:00 – 09:00	09:01 - 16:00	16:01 - 18:00	06:00- 24:00	07:00- 24:00
Bromborough	Birkenhead	3	3	3	4	7
Birkenhead	Bromborough	3	3	3	4	7

Notes:

Frequency only calculated for those hours when service runs, not 24 hrs.

Services included are, 1,2,10A, 10B, 11,11C, 12,12A, 18, 40, 41, 41A, 41B, 41D, 51, 72, 72A, 72D, 118, 119, 140, 141, 143, 151, 169, 170, 172, 241, 218, 410, 411.

Analysis point in Corridor is Bromborough Cross. Also Port Sunlight (51/151) and Bebington (10A, 10B, 111)

Figure 1.4: Services in the corridor

[Map showing bus services.]

1.2.21 There are also several other services, which run through the corridor, to different areas on the Wirral.

SMART Services

1.2.22 The SMART bus service was launched in June 1998, and followed the implementation of several SMART services in Liverpool over the previous years.

1.2.23 SMART is the brand name of upgraded, high quality bus services, they consist of the following upgrades to bus services:

- modern vehicles with low step entrances and wide doors;
- the ability to "kneel", with ramps, to allow buggies, shopping trolleys and wheelchairs on and off;
- new bus stops, highly visible, with lighting, route and timetable information, which is easy to read and understand; and
- "real time" information, due to be fitted to bus stops in the near future.

[Photo showing bus infrastructure]

1.2.24 The Smart service concept has been created through a quality partnership between Merseytravel, the local authority and the operators. As well as improvements to vehicles and stops, bus priority measures have been implemented along the A41 corridor. Prominent amongst these is a "bus-only" section of road through Bromborough District Centre.

[Photo of bus-only section of road]

1.2.25 Comparison of service provision before and after the SMART bus initiative shows little change in the frequency of service or in journey times. The timetabling and operation of the SMART bus routes have not undergone any extensive changes. Headway and periods of operation have remained similar in 1999 to that operating in 1995. Indeed, journey time has increased in some cases.

1.2.26 The advantage in changing to SMART operation has been in the increased reliability of services and the ease of accessing the bus service for those with mobility impairments or encumbrance. This has been coupled with easy-to-read timetable leaflets, e.g. in separating out Monday to Friday and Saturday service tables which has led to a reduced number of potentially confusing footnotes.

Perception of bus services

1.2.27 Data from the 1998 bus tracking survey provides attitude information on buses in Merseyside and the Wirral which provides an indication of the perception of the new SMART services. Data for the whole of Merseyside shows improvements in passenger satisfaction in areas such as the quality vehicles and ease of boarding. All areas where SMART has been introduced have shown improved customer satisfaction. Table 4.4 shows customer views of bus stops.

Table 1.4: Comparison of bus stop performance

	1995	1996	1997	1998
Pavement Condition	6.2	6.8	7.6	8
Being Well Lit	5.6	6	6.5	7
Protection from Weather	5.5	6.2	6.3	6.8
Providing Timetable information	5	5.4	6	7.4

Note:1 = Performs badly, 10 = performs very well

1.2.28 As can be seen in Table 4.4, passengers opinions of bus stop performance have improved, as the number of SMART stops has increased across Merseyside. The data also suggests that passengers are increasingly confident that services will not change in the nearby future, reflecting the improved stability of the services.

1.2.29 Passengers have recorded that bus lanes have had a benefit in terms of increasing the speed of their journey (64% of people thought bus lanes made a difference in journey times in 1998 compared with 31% in 1997). This perception does not tally with the reality of bus service speeds. Journey times have not decreased. It appears that the provision of bus lanes improves the perception journey times without actually reducing them.

1.2.30 The major changes experienced by the introduction of the SMART bus therefore appear to be:

- improvements to the quality of the vehicles operating the services;
- improvements to the quality of information provided to passengers; and
- increased priority given to vehicles through bus priority measures, rather than to any large-scale increase in service frequency.

Travel within the corridor

1.2.31 Mode split data for the period since the operation of the SMART service in the corridor has proved difficult to obtain. Data from 1992 provides a base line of the mode split in the corridor and is shown in Table 4.5.

Table 1.5: Mode split in Merseyside and the Eastham to Birkenhead corridor, 1992

	Merseyside		Corridor	
	Number of trips	% of trips	Number of trips	% of trips
Car / Van Driver	1329361	37%	49785	42%
Car / Van Passenger	591635	16%	15986	13%
Walk	896782	25%	27428	23%
Pedal Cycle	50371	1%	2401	2%
Scheduled Bus	588319	16%	16368	14%
Train	72891	2%	5864	5%
Other	100596	3%	1516	1%
Total	3629955	100%	119348	100%

Source: Merseyside Information Service, 1992

1.2.32 The mode split for the corridor was similar to Merseyside as a whole, though rail had a larger role.

1.2.33 Table 2.6 shows the changes in ridership on the SMART bus services for one year before and one year after the implementation of the service.

Table 1.6: Changes in bus use since the introduction of the SMART bus

	Pre Smart	Post Smart	% change
Early AM	11763	26701	127%
Peak	1269380	1171800	-8%
Inter Peak	1470369	1381622	-6%
Evenings	111710	158206	42%
Saturday	443451	484653	9%
Total	3306673	3222982	-3%

1.2.34 The changes have been mixed but, with a 3% decrease in passengers overall. However this is against a decrease in bus patronage in Liverpool of 4.7% between 1994 and 1997. What is noticeable is the increasing trips made in outside the main "workday" hours, which are periods that generally are prone to the biggest decline in passenger use.

1.2.35 The total figure masks some significant changes, such as a large increase in early morning (56%) and evening passengers (29%). The SMART service appears to have gone some way to help stem the loss of passengers. There may also have been an element of, 'bedding down', of the service before full user perceptions of the benefits of the SMART service feed through.

1.2.36 [The availability of road traffic count data since the commencement of SMART services has been investigated. However due to the recent implementation of the SMART service in the A41 corridor, the most recent existing traffic counts in the area are not comparable with pre SMART data as of yet, and do not give a full picture of the situation at present.]

1.2.37 Rail data for an average winter weekday in 1993, 1996 and 1998 is set out in Table 4.7. The percentage change between 1996 and 1998 has also been calculated. Eastham Rake was opened in (?) and hence comparative information is not provided.

Table 1.7: Change in rail use between 1993 and 1998

	1993	**1996**	**1998**	**change 1996/1998 1996=100**
Birkenhead Central	3145	2899	3030	105
Green Lane	698	852	1095	129

Rock Ferry	1309	1522	1952	128
Bebington	2042	1881	2039	108
Port Sunlight	888	1058	1463	138
Spital	826	750	1143	152
Bromborough Rake	853	845	1107	131
Bromborough	1816	1449	1790	124
Eastham Rake	-	-	1099	-

Source: [source?]

1.2.38 The rail service provision has remained static between 1996 and 1998, with four trains per hour, two continuing to Ellesmere Port, two to Chester. However as with the rail network nationally, there have been some large increases in passenger usage, and this is particularly noticeable at Spital and Port Sunlight, with a 52% and 38% increase respectively between 1996 and 1998.

1.2.39 This increase is less marked, however, if figures for 1993 are taken into account, and an explanation of this may be due to passengers returning to the rail network after reliability problems due to flooding in the Mersey tunnel network in the mid 1990's which affected the reliability of services to Liverpool.

Population characteristics within the corridor compared to non-corridor locations

1.3 *Vision for the corridor*

Overall vision

1.3.1 The vision for the Eastham to Birkenhead corridor is currently made up of two rather separate strands. On the one hand, there is the public transport view of the corridor which has, to a significant extent, been implemented through the new SMART bus services. On the other hand, there is the development potential offered by the Merseyside industrial sites at Cammell Laird, the Croft Business Park and the Wirral International Business Park. The development of these sites, as well as the improvements to existing communities, form the basis for the development vision for the area. There is currently little integration between these two strands, and there is limited perception of the area as a "corridor".

1.3.2 For example, Green Lane station is one of the stations which serves the Cammell Laird area, but is seen in terms of having potential to provide a Park and Ride interchange facility rather than as having potential for public-transport orientated development.

Cammell Laird

1.3.3 Large areas of the former ship building yards are now surplus to current requirements. The Council's vision for the future of the area can be summed up as seeking to build on traditional strengths while also encouraging new, modern industries. Thus the vision for the site includes attracting 21st Century uses such as laser engineering (a "state of the art" laser engineering centre has been developed in partnership with a local university) and ship building related technologies such as a simulation facility (again, developed in partnership with a university). Uses such as B1/B2 and B8 are considered to be suitable for the area.

1.3.4 The call-centre industry is experiencing growth and employs large numbers of people, many of whom are unskilled. This type of employment fits the demography of the Eastham – Birkenhead corridor. The workforce often has low car ownership levels and call-centre employers now realise that they need to locate near to good public transport links. Many now ask for a public transport assessment when investigating possible new sites. They cannot locate in town centres as they require large amounts of low rent space. They are therefore are ideally suited to the industrial areas of the corridor and are currently showing an interest in Bromborough.

1.3.5 The Local Authority perceives public transport to be important to investors in the "Lairdside" regeneration area. The rail system is felt to be fairly effective, although connections on foot to the stations are not particularly convenient. The bus could also be made more convenient, perhaps through re-routing to better serve the site (via Cambleton Road rather than the A41). However, it appears that current proposals for development are car-based.

1.3.6 The Council's regeneration agency is keen to see a new road link to Birkenhead centre from the A41 which would, they say, open up a significant development opportunity. This appears to be higher on the agenda than considerations relating to increasing the use of bus or rail services.

Freight issues

1.3.7 Freight traffic is a key issue in the corridor. The increasing trend for 'just in time' freight delivery means that it is difficult to transport freight by rail. Rail operators reportedly need at least six weeks notice if service times change. Also in the UK infrastructure costs, track use charges and charges for incremental trains are much higher than in. The corridor has potential track capacity to run freight trains, though reinstatement of the Wirral Line to four tracks might be required, involving remodelling of stations.

Croft Business Park and the Wirral International Business Park

1.3.8 The Croft Business Park and the Wirral International Business Park have been developed as two separate developments. They are not linked by road due to the fear of mixing industrial and retail traffic and the creation of rat run traffic routes.

1.3.9 The developments were planned without the involvement of the public transport operators and consequently the destinations cannot be linked to local bus routes. The poor road layout and lack of connections between the two developments mean that currently this is not possible. The area contains further development opportunities. These provide an opportunity for improving the public transport provision to the business parks. It appears to be essential that public transport operators are involved from the start of the negotiations over any further development. It may be possible to establish ways of connecting the two existing sites without creating traffic difficulties, for example by the provision of a bus gate.

Improving existing communities

1.3.10 SRB funding in the area provides inputs for a wide range of projects (£15m over 7 years 1997 – 2003) including community-based projects in the nearby Tranmere community. The council is intending to develop Tranmere as an urban village with improved retail and additional housing.

Demand management

1.3.11 There appears to be little awareness of the need for demand management perhaps because congestion is not perceived as a significant problem. While some efforts have been made to reduce parking provision associated with development next to the bus and rail stations in Birkenhead town centre, this is only seen as being possible because of the presence of a multi-storey car park. Elsewhere in the corridor the emphasis is on attracting investment and providing jobs, rather than on the form which the development could take.

1.4 *The process of corridor development*

The story of the corridor

1.4.1 The corridor is self defined as it has the River Mersey on one side and the Greenbelt on the other. The heavy rail line has been

developed by the PTE over 30 years. Originally passenger trains ran only between Birkenhead and Rock Ferry but now run between Liverpool city centre and Chester and Ellesmere Port. Upgrading of this and the other Wirral lines has been expensive with the electrification of the tracks and the provision of new stations, and the tunnel and loop line under the Mersey in the 1970s.

1.4.2 The rail investment was instrumental in establishing the corridor as a commuter location for Liverpool. This attracted higher socio-economic groups to the area.

1.4.3 Traditionally industry along the eastern side of the corridor used rail and water to receive and distribute their goods. The Lever Bros. factory established a private rail line [to Bromborough Docks – ?] however, it was closed when it became economically unviable. The track bed has been retained as a walkway/cycleway to Eastern Park. The walkway will be extended in the year 2000 to give Port Sunlight Village pedestrian access to the park.

1.4.4 Bromborough Docks went into decline when it became cheaper to transport goods by rail than by water. The Docks then closed as it was costing too much to maintain them. As heavy industry declined in the area, rail transport too became unviable and the industries closed or moved away.

1.4.5 One solution to mitigate the impact of road freight traffic would be to reopen Bromborough Docks and the private rail line linking the industry directly to the main line. However, this, and a range of other initiatives, have proved to be commercially unviable.

1.4.6 Development of the Merseyside "SMARTBUS" system occurred before the term 'quality partnership' had been established, but had the same aim of bringing improvements to the existing bus services. The Metropolitan Borough of Wirral (WMBc) have played their part in the partnership by providing priority measures including signal and junction priority and bus lanes, and the provision of a new bus station and highly visible shelters. There have been problems as it is always politically sensitive to take road space away from the car and some people are not keen on having the new shelters outside their homes.

1.4.7 The public transport operators have shown their commitment to the partnership through using "state of the art" buses and the provision of "real time" information at key stops all in branded package. The services operated are mostly commercially viable with subsidies only being provided to maintain services during the evenings and on Sundays.

1.4.8 The SMART bus fleet was introduced in June 1998. Before that, bus priority measures were undertaken on the A41 and were completed in 1999. Further improvements are programmed 1999/2000, linking the SMART bus to an SRB4 Initiative (Improved Transport Linkages) by extending the scheme to Moreton and Twelve Quays, terminating at Woodside.

1.4.9 The quality partnership has proved to be a good mechanism for improving and establishing bus services in existing areas. However, the co-ordination between the partners has not been so effective in establishing public transport services in new developments. The transport operators have not been involved until the later stages of projects, this has resulted in site Masterplans that do not allow effective connections to existing services.

1.5 *Conclusions*

1.5.1 The key findings of the case study are set out below.

1 There is currently poor integration between public transport and land use planning. The Eastham to Birkenhead corridor displays this on every level. Strategically there is no combined vision for the corridor overall. At the neighbourhood level, development has been planned and built without thorough consultation with public transport providers, resulting in developments which they are not prepared to run bus services to. At the street level, there is poor integration between the rail stations and the key employment areas.

2 There is a need to involve public transport operators in the early stages of planning of new development. This could have avoided the errors with the Business Parks. There is an opportunity to provide further bus routes and infrastructure in conjunction with development of employment and other facilities at the Business Parks.

3 The Quality Partnership between WMBC and the public transport operators is an effective mechanism for securing public transport improvements in existing areas. The Partnership has worked well and a good relationship has developed between the organisations. Unfortunately, as mentioned above, this success has not been extended to providing good services to new development.

4 The corridor has potential for a major rail freight operation, although it appears that this would require significant

public investment and an improvement in the balance between road and rail freight costs. The benefits arising from reduced congestion to the bus services would be reportedly significant.

5 Development of the SMART bus service has produced disappointing results with only a marginally slower decline in bus use than is true of the whole of Merseyside. This suggest that providing a better bus service is not, in itself, sufficient to ensure mode switch.

6 Industrial sectors which have large numbers of low paid workers are currently interested in investing in the corridor (call centres amongst others). The employees of these types of firms could be encouraged to use public transport from day one, if sufficient commitment were made to ensuring developments can be well served by a high quality and aggressively marketed service. This type of investor offers potential for improving the strength of the public transport corridor.

7 There is currently very little demand management within the corridor, and car use remains an attractive option for all those who have a car.

8 The Wirral SMART bus has produce positive change, at the very least a better quality image and service. The bus shelters increase the "presence" of public transport in the street scene which is important in attracting and retaining public transport users. The bus-only area of Bromborough district centre has created an attractive and safe shopping environment.