

SUSTAINABLE DISTRIBUTION OF FREIGHT

BACKGROUND

1. Moving goods sustainably is a key element of the national integrated transport policy set out in 'A New Deal for Transport: Better for Everyone'. In March 1999 the DETR published the daughter document for freight, 'Sustainable Distribution: A Strategy'. This document sets out the Government's objectives and detailed measures that will be pursued including changes to national and European policies and legislation and financial and taxation regimes. It also provides considerable statistical information.
2. Being able to transport goods efficiently is essential to support economic vitality. Freight matters are addressed in the Regional Innovation Strategy and are being progressed through a Freight Industries Innovation Board and a Food Industries Board. Yorkshire Forward, the regional development agency, is supporting this work.
3. Within West Yorkshire economic considerations have several different emphases. The former coalfield areas once relied heavily on rail, and to a lesser extent waterways, for transporting coal between the pits and power stations and as such highway infrastructure is deficient in these areas. This is recognised in the June 1998 report by the Coalfields Task Force. Regeneration initiatives for these areas are now seeking to attract inward investment and diversification but success will be dependent on ensuring high levels of accessibility for the transportation of goods by a range of modes. Similarly other areas have suffered decline through the loss of traditional industries and are seeking to promote regeneration. At the other end of the spectrum some areas are experiencing high levels of economic growth which is creating different transport problems that need to be addressed if this growth is to continue.
4. West Yorkshire is strategically located in relation to the motorway network (M1, M62 and A1), the East Coast Main Line and Trans Pennine rail line, and commercial waterways. There is therefore potential for promoting a multi-modal approach to transporting freight.

Road Freight Problems And Opportunities

5. Road freight has for many years now been widely considered to be the most flexible means of distributing goods, particularly with the trend towards "just in time" deliveries. The drive for competitiveness within an increasingly global economy has meant that producers have sought to expand their markets. As a result road freight has been growing significantly but this is primarily due to increases in the distances that goods are being carried rather than in the total amount of goods, which has remained fairly constant. To change this trend would require policy action at national, European and international levels. Without this local actions to manage demand could simply disadvantage local companies or cause them to relocate.
6. The continued growth in overall vehicular traffic has resulted in increasing problems of congestion and pollution. The transportation of goods by road is both suffering from and contributing to these problems. Whilst there is potential for using rail and waterway as alternative transport modes, the patterns of land use and distribution networks that have developed are such that the lorry is likely to remain the principal means of distributing freight. Within West Yorkshire there are large volumes of lorry traffic using the inter-urban and urban local highways and the trunk roads and

motorways. This traffic comprises both that generated from within this sub-region and large volumes of through traffic.

7. It has to be recognised that the majority of destinations for goods are shops and other premises that lie within built up areas for which road-based delivery is the only option. In newer developments the facilities for achieving access for deliveries are generally incorporated but perhaps the majority of deliveries rely on access direct from the street. On the one hand hauliers and businesses experience delays and unreliability from congestion and difficulties in being able to park for loading and unloading. On the other hand residents, workers, shoppers and other visitors suffer the noise and visual intrusion and even obstruction and intimidation caused by the presence of heavy lorries.

8. Such problems have been studied and potential solutions examined in a report that has been published jointly by the Freight Transport Association and the Local Government Association entitled *Delivering The Goods*. Following the piloting of several partnership initiatives a list is included of a range of possible measures that can be adopted to promote best practice in urban distribution. From this list a number of suggestions are considered to be appropriate (some in combination), together with various other proposals, and these are included below in the strategy measures that are to be progressed.

Rail Freight Problems and Opportunities

9. The rail freight market has suffered decline until recently, seeing a fall in the total national tonne-kilometres per year from around 17 billion throughout the 1980s to around 13 billion in 1995. Measured by freight lifted the decline was even worse, from around 150 to 100 million tonnes over the same periods. This has been principally due to the decline in rail freight's core market of transporting coal for power generation and so is of particular significance in this region. This decline has resulted in the loss of many all-purpose sidings thus reducing the opportunity for rail freight.

10. The 1993 Railways Act provided the framework for privatising freight services but to date there are just two private licensed freight operating companies. English Welsh and Scottish Railways (EWS) is the main national operator, and Freightliner transports containerised goods. Direct Rail Services is a publicly owned company (British Nuclear Fuels Limited). EWS have achieved a 40 percent increase in tonne-kilometres between 1995 and 1999 and aim to achieve further significant increases. Because of the decline in traditional markets it will be necessary to broaden the customer base. Freightliner aim to increase the volume of containers carried nationally by fifty percent over five years.

11. The region has two major rail freight terminals, Wakefield Europort in Normanton and Freightliner in Stourton, Leeds. There are a number of sidings that are operated by private companies, some of which handle significant volumes. There are also sites where connections and signals remain but are not in use, and there are seven strategic freight sites defined by the Railways Act.

12. Wakefield Europort opened in 1996 and is located adjacent to junction 31 of the M62. It is owned by the City of Wakefield Metropolitan District Council and operated by EWS. This is one of the locations chosen nationally to ensure that the regions would benefit from the Channel Tunnel and it provides a daily timetabled service to Europe. The main products being carried are bulk steel, some foods and electrical goods. Rail freight traffic using the Channel Tunnel has not reached its anticipated throughput levels.

Growth in European rail freight traffic will also be dependent on the extent to which European rail operators expand their services into England. Wakefield Europort has been developed in conjunction with some 350 acres of new industrial land, in addition to the longer standing industrial estates located around junction 31 of the M62. The Aire and Calder Navigation is in close proximity and so there is also potential for freight transfer between road, rail and waterway at this location.

13. The Freightliner terminal at Stourton is located close to junction 7 of the M621 (formerly the M1) and junction 44 of the M1 (on the new M1-A1 Link). It has been in existence for many years and provides a transfer facility for containerised goods to and from the deep-sea ports. It currently handles some 85,000 containers per year, which represents a significant proportion of the area's intercontinental imports and exports. There is still potential for further growth at Stourton through investment in new equipment and by updating operating techniques, but it is also important that land for development and redevelopment in the vicinity remains available for terminal related uses. The Aire and Calder Navigation is in close proximity and so there is possibly potential for freight transfer between road, rail and waterway at this location.

14. EWS, Freightliner and Direct Rail Services, have all embarked on programmes to acquire new and refurbished rolling stock in order to seek new business. The Government has also significantly increased the funds available for Freight Facilities and Track Access Grants. The projected growth in rail freight will add to the competition for use of the network. Overall capacity, the speed differentials between freight and passenger services, and the loading gauge are particular problems on the East Coast Main Line.

15. The cost of using rail is still in many instances too high to encourage a transfer from road, and track access charges are increasing. Other problems are that there is a need to make additional paths available on the network and the reliability of rail freight services needs to be improved. The recent decision by the Government to allow 44 tonne lorries to operate within the United Kingdom is widely regarded by the rail freight industry as potentially damaging not only to the prospects for growth but indeed to existing rail freight markets.

Waterway Freight Problems and Opportunities

16. Waterway transport is one of the most environmentally friendly transport modes, having low emissions, low noise, low visual intrusion and energy efficiency. Vessels on Inland Waterways may travel slower than road but they are not subject to congestion and have the benefits of economies of scale and reliability. Thus they can, for many products, form part of an efficient logistics supply chain.

17. In the recent past transporting coal for power generation was one of the main markets served by the waterways of the Region but this market has been in decline. Other markets include oils and aggregates. Only recently an oil terminal at Woodlesford in Leeds was upgraded with the aid of a Freight Facility Grant from DETR, which allowed the transportation of petroleum spirit, by water to return to the site after a number years.

18. There are within West Yorkshire important lengths of commercial and cruising waterways that form part of a network linking the Region to the East Coast and beyond. The Aire and Calder Navigation provides access from the East Coast Ports via

Ferrybridge, Knottingley and Castleford to Leeds and is capable of accommodating barges up to 600 tonnes carrying capacity. The Navigation branches at Castleford allowing vessels up to 250 tonnes carrying capacity to navigate to Wakefield. The Calder and Hebble Navigation runs from Wakefield to Dewsbury and Halifax where it joins the Rochdale Canal. The Leeds and Liverpool Canal runs westward from Leeds into Lancashire.

19. In recent years there has been a growth in leisure boating with investment in new marinas and facilities at moorings, along with a move towards multi-use of the waterways. However it is not considered that there should be any major conflict of interest between commercial and leisure interests as freight may be carried on cruising waterways where appropriate, having regard for safety, heritage, feasibility, the environment and impact upon other waterway users.

20. Approximately 1.5 million tonnes of freight was moved in 1999/2000 by private sector carriers on the waterways under British Waterways control in the Region. British Waterways are continuing their marketing efforts to encourage increased use of their waterway network, where appropriate, for freight and leisure purposes.

THE SUSTAINABLE FREIGHT DISTRIBUTION STRATEGY

21. The sustainable freight distribution strategy is being developed and progressed through a Freight Working Group that has been established for West Yorkshire, involving representatives of the infrastructure providers and users. The strategy is based on three main themes:

- making better use of existing national and local roads, rail and waterway infrastructure and for ensuring that deficiencies and problems are identified and resolved with new provision being made where appropriate;
- transferring more goods from road to rail and waterway;
- improving the operation of deliveries within town and city centres and communities, both for business efficiency and for improving safety and the environment.

22. The strategy will have to address a number of significant barriers to progress:

- there is a lack of knowledge and awareness of freight issues such as grant regimes, both within the industry and transport authorities;
- the current dominance of road as the means of transport adopted by industry and business presents a major barrier of attitude and expectation;
- as most goods transport will always require the use of lorry or van at one or both ends of the journey, the need to transfer goods between modes when using rail or waterway imposes a further cost;
- the capacity of the rail network is severely limited and this results in a conflict of interest between passenger and freight services, particularly since the aim is to increase passenger train frequencies and speeds, especially on the East Coast Main Line and Trans Pennine route;
- there is spare rail capacity during the night but this can cause environmental problems where lines are close to residential areas;
- the high capital cost of providing new interchange infrastructure;

- the availability of suitable land in strategic locations for inter-modal facilities.

23. The measures that comprise the sustainable distribution strategy are detailed as follows:

Making Better Use of Existing Infrastructure and Providing New Infrastructure

- Heavy through traffic is a problem for certain centres and communities. Traffic management measures to restrict movements and encourage use of alternative routes will be investigated through a systematic approach for the whole network.
- In the absence of suitable alternative routes, the promotion of new road construction schemes such as relief roads or bypasses may be the appropriate way of removing through movements of heavy goods vehicles from communities, or improving goods vehicle access by reducing other general traffic. There are several proposals for major highway schemes in West Yorkshire and in assessing the justification for each of them and their relative priority their role in resolving any problems associated with road freight or improving accessibility for goods will be a major factor.
- the strengthening and maintenance programme for highway structures, including the imposition of weight restrictions, will take account of the need to manage the routing of lorries;
- The Highways Agency is developing a Route Management Strategy for the M62. The Government Office for Yorkshire and the Humber is leading in the multi-modal studies for West and South Yorkshire (Motorway Box). Some of the measures being examined include the introduction of priority measures for goods vehicles on some sections of the trunk road network;
- identify and sign a 24-hour lorry network complemented by signing to key destinations, working with such as major distributors and power generators;
- produce maps and an Internet site with information about lorry access restrictions, physical restrictions and the 24-hour network;
- adopt measures for improving goods access to Leeds and Bradford Airport emerging from the Surface Access Study.

Freight Transfer From Road to Rail and Waterway

24. The Road Haulage Association (RHA) includes in its membership the vast majority of larger companies. Work by the RHA has established that the key issues that need to be considered by industry in making modal choices are availability, reliability, flexibility, security, speed and cost. To achieve a transfer from road to rail and waterway the following measures are proposed:

- assessment of rail freight facilities and opportunities based on the sites scheduled in Railtrack's guide to freight connections to determine the scope for expanding the use of operating sites and the re-opening of non-operating sites;
- identify rail lines, sidings and associated infrastructure and the land owned by BRB that it proposes to sell off that should be safeguarded for future rail freight initiatives;
- identify waterways facilities that are no longer in use and consider which are

appropriate to safeguard for future use;

- identify the commercial waterways routes and related infrastructure that could form the basis for developing interchange and Inland Ports by providing or improving access;
- consider with industry the role of urban distribution centres;
- integrating the road network with major freight transport interchanges, considering both road access to existing facilities and the potential for new interchange facilities through public-private partnerships;
- work with EWS and Freightliner to determine growth targets for rail freight in West Yorkshire and ways in which local authorities can help to achieve them;
- work with British Waterways to determine growth targets for waterborne freight in West Yorkshire and ways in which local authorities can help to achieve them;
- streamline and clarify the process for obtaining information and guidance on how companies can transfer from road to rail or waterway to influence the location and modal choice of companies through the Centre of Excellence proposal to produce a handbook to promote suitable sites;
- promote the formulation and adoption of Travel Plans by business and industry (to include deliveries and goods transport);
- promote the use of existing freight transfer facilities both by companies within West Yorkshire and to intercept through traffic.

Improving Deliveries in Urban Centres through Freight Quality Partnerships

25. This is a process that will be increasingly used as a means of identifying the problems and issues that are specific to a particular location such as a town centre, and then to devise appropriate solutions by facilitating active participation by all the appropriate parties. The principal difficulty experienced so far is that there is potentially such a large number of different parties (Local Authorities, Police, hauliers, businesses and industries, residents, civic and environmental organisations, etc.) and there is a lack of established liaison arrangements.

26. In Leeds a pilot initiative has been started as a possible means of overcoming these difficulties. The approach adopted is for the Local Authority, the Freight Transport Association, the Road Haulage Association and the Chamber of Commerce to act as representative bodies to identify the issues within a defined area and the individual parties with an interest that need to be involved. Action plans can then be developed that propose schemes and measures, define the responsibilities for implementing them, and identify sources of funding. The Local Authority will be responsible for co-ordination.

27. The types of measures that might be included in an action plan are typically similar to those set out in Delivering The Goods and are as follows:

- address public perceptions about lorries in urban areas, especially for such as night time and early morning deliveries through the deployment of quieter vehicles and driver education;

- review the controls such as Traffic Regulation Orders that are currently in place in West Yorkshire that affect the delivery of goods and relax them where possible (for this to be acceptable it may require certain good practice measures to be adopted by the industry, with trial schemes if necessary);
- where loading and unloading has to take place from the kerbside ensure adequate protection is given through the provision of bays and enforcement to protect against illegal parking;
- consider how lorries can be given greater priority access to town centres through such as the shared use of priority lanes or other forms of reallocating road space, and incorporating selective detection in Urban Traffic Management and Control systems;
- ensure there are adequate, properly located lorry parking and servicing facilities;
- work with companies and operators to include freight as an issue to be addressed in developing Travel Plans, including an encouragement to use alternative fuels.

RELATIONSHIP WITH DEVELOPMENT PLANS AND ECONOMIC DEVELOPMENT

28. Whilst the Local Transport Plan sets out the strategies for meeting transport objectives, the Unitary Development Plans of the five West Yorkshire District authorities contain the statutory policy framework. There is also a statutory duty placed on each authority to have an Economic Development strategy.

- review UDP policies to strengthen the emphasis on sustainable distribution;
- incorporate existing and proposed interchanges (including sidings) on proposals maps;
- carry out a proposed research project by Huddersfield University in conjunction with Wakefield TEC / FTA / EWS into an economic assessment of the transport and associated activities sector including a mapping of the movement of goods from Wakefield to Europe.

TARGETS, INDICATORS AND MONITORING

29. The following targets and indicators have been identified:

- contributions to Road Traffic Reduction Act (targets for HGVs);
- contributions to action on climate change and local air quality management;
- Freightliner aim to increase the volume of containers carried nationally by fifty percent over five years;
- EWS aim to significantly increase the amount of freight carried by rail;
- waterway freight growth targets to be developed.

REFERENCES

Sustainable Distribution: A Strategy (www.detr.uk/itwp/susdist/index.htm)

Handbook on Sustainable Freight Distribution (West Yorkshire Centre of Excellence)

Delivering The Goods (FTA / LGA)

A New Deal For Transport: Better For Everyone

APPENDIX

PILOT INITIATIVE FOR URBAN DISTRIBUTION IN LEEDS

Background

A1. In response to the New Deal for Transport and the daughter document, *Sustainable Distribution: A Strategy*, and the research into promoting Freight Quality Partnerships, Leeds City Council is piloting a partnership arrangement to improve urban distribution within Leeds City Centre. The aim is to take on board views from all parties to agree on courses of action that will resolve identified problems and work towards achieving more sustainable freight distribution via quality partnerships.

Progress

A2. The problems related to servicing in the City Centre have firstly been investigated by City Council officers, involving Traffic Management, UTC, Divisional Offices and City Centre Management.

A3. To date it has been noted that regular problems occur in association with the activities of two companies and they are being approached to discuss the problems directly and gain their perspective.

A4. Where problems relate to delivery companies they are being approached via the FTA or RHA. In the pedestrian precinct areas the problems can be summarised as:

- staying too long and causing an obstruction;
- infringement of one-way streets to avoid such obstruction;
- opening the Briggate gates to gain access during the restricted period;
- gates being left open leading to further abuse;
- the size of vehicles used to service the City Centre.

Pilot Measures

A5. Implementation of a City Centre strategy is well advanced. This comprises the provision of an inner Public Transport Box and a City Centre Loop. Any vehicles needing to access the City should do so from the City Centre Loop and any with no destination in the City Centre should use the Inner Ring Road. This creates the possibility for better management of traffic within and around the City Centre.

A6. Measures that are being considered include:

- carry out surveys of existing lorry and van movements in the City Centre to determine the actual need for access and the potential for redirecting traffic;
- designate and sign servicing areas off the Loop identified by name, number or possibly colour;
- produce and distribute publicity advising of the servicing areas;
- designate and sign advisory HGV routes around the City Centre;
- negotiate with map companies to have information included;

- introduce electronic routing systems including servicing information;
- progress an application for Special Parking Area Status for decriminalised parking enforcement to assist deliveries by targeting problem areas where cars park illegally blocking servicing areas or kerb space used for loading.

A7. Outside the City Centre, the East Leeds Link is a major scheme proposal to connect the Inner Ring Road Stage 6 and the M1/A1 Link. The current proposal for a dual carriageway is being reviewed. One of the options being tested is for one of the lanes in each direction to be designated as a PSV/HGV lane.

OIL PRODUCTS TO WOODLESFORD BY WATERWAY

A8. In July 1999 Bayford Thrust opened its refurbished oil storage terminal at Woodlesford, near Leeds, adjacent to the Aire and Calder Navigation.

A8. The terminal was refurbished with the aid of a Freight Facility Grant from the Department of Environment, Transport and the Regions, together with investment by Bayfords. The project included:

- refurbishment of the barge discharge facility
- installation of a computer controlled bottom loading system for road vehicles
- installation of a remote tank monitoring system
- upgrading of the security system at the terminal.

A10. The new terminal is supplied with petroleum products by barge via the navigation and is expected to receive up to 200,000 tonnes of oil products by waterway over a five year period. Each barge can carry the equivalent of twenty lorry loads and the operation will save up to 16,000 tanker journeys by road over the five year period.

A11. The initiative was supported by British Waterways who manage the navigation. The facility was opened by the Transport Minister, with the event receiving much media interest.