

Kingsway Business Park Rochdale

Sustainable Travel Plan

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1 INTRODUCTION

Kingsway Business Park is a large strategic mixed use development in Rochdale and its development will have long term impacts on the region and sub-region. The Kingsway Partnership wants to ensure that the development is as sustainable as possible, within the constraints upon development, and that it will act as an exemplar of good practice long into the future. The Business Park development will have significant transport implications and the extent to which travel needs can be met in a sustainable way will be one of the main factors in the overall sustainability of the development.

The location of the site and its direct access to the M62 motorway at J21 are of great importance to the success of Kingsway and, as a consequence, it will attract significant levels of car-borne traffic. The A6193 Sir Isaac Newton Way passes through the site and is an important route into central Rochdale. Although the use of Sir Isaac Newton Way to other locations is outside the control of the Developer and Site Owners / Managers, any emissions from transport will still impact upon Kingsway and its occupants.

The Travel Plan is a package of measures tailored to meet the needs of the Business Park, whilst minimising the negative impacts of travel on the local environment, community and economy. This Travel Plan aims to reduce the reliance on the car, provide sustainable travel choices for employees and promote greener cleaner travel.

Statement of intent: *To implement measures within and around Kingsway so that the majority of employees and visitors have the option to get to the Business Park by sustainable modes of transport, thereby encouraging a better quality of life for employers, employees and surrounding residents, improving the environment and enhancing the local economy. This will mean providing and improving alternatives to the car and discouraging unnecessary use of the car.*

The aim of this document is to set out the framework to enable the successful implementation of sustainable transport measures. It sets clear targets for the Kingsway site and the indicators that will be used to measure progress. It describes the measures to be implemented to meet the targets and sets out the management framework required for effective implementation. As the Business Park is a long term development, the Travel Plan will need to adapt to reflect changing circumstances, although the underlying principles and objectives will remain constant.

The remainder of the document is structured as follows

- Section 1.1 describes the way in which the Travel Plan was developed.
- Section 1.2 describes characteristics of the Kingsway site and their transport implications.
- Section 1.3 sets out the business case for travel plans.
- Section 2 sets out the objectives and targets for the Travel Plan and indicators that will be used to measure progress, and provides information on current occupant travel behaviour.
- Section 3 discusses the measures that can be put in place to achieve the objectives and makes recommendations on the appropriate way forward for Kingsway.
- Section 4 sets out how the travel plan should be managed and marketed to ensure effective implementation.

1.1 THE TRAVEL PLAN PROCESS

The Rochdale Kingsway Sustainable Transport Plan, originally developed by Sustainability Northwest (SNW) in 2004, was part financed from the European Regional Development Fund, Measure 3.3 *Connecting with Communities in Need*. Matched funding was provided by the North West Regional Development Agency (NWDA) and Wilson Bowden Developments Ltd.

SNW is a member of the Kingsway EDZ Transport Task Group, which acted as a Steering Group for the production of this Travel Plan. Other members of the Transport Task Group included representatives from:

- North West Regional Development Agency (NWDA)
- Rochdale Development Agency
- Rochdale Metropolitan Borough Council
- Wilson Bowden Developments Ltd
- Greater Manchester Passenger Transport Executive (GMPTE)
- Groundwork Trust Oldham and Rochdale
- Heywood and Rochdale Community Transport
- Oldham Metropolitan Borough Council
- Highways Agency

Research was carried out on best practice in developing and implementing transport plans and transport trends. Travel co-ordinators from large multi-occupancy sites were interviewed to gain their perspectives on the reality of putting transport plans into practice and insights into what worked well and what should be avoided. Site visits were made by SNW and members of the Kingsway EDZ Transport Task Group to three organisations or business parks, which were considered to have elements of good or best practice relevant to the Kingsway site¹. This first-hand experience was complemented with attendance at three transport conferences² in order to understand current best practice. SNW staff visited the Kingsway site and discussed the proposed plans for vehicular, cycle and pedestrian access with other members of the Task Group.

The information gained through the initial research process culminated in a sustainable transport workshop on 10th August 2004. Speakers included international transport experts, Northwest-based transport plan implementers and the Kingsway site owners. They presented their perspectives on what was possible and practical to an audience which included site developers, council representatives, businesses and support agencies (see Appendix 5 for a list of speakers and attendees).

In order to understand the travel needs and attitudes of local residents, potential employees and businesses, consultations and interviews were carried out during August and September 2004 (see Appendix 5 for a list of events attended and businesses interviewed). Over 130 individuals and 15 local businesses were consulted on a number of proposed measures. The results of this consultation have been incorporated into the measures to achieve the objectives in this Travel Plan.

¹ Manchester Airport 19th July 2004, Birchwood Business Park 20th July 2004, Chester Business Park 5th August 2004

² Conferences attended: 1: Mersey TravelWise 'Transport and Business Forum' 8th June 2004, MerseyTravel Liverpool; 2: DfT event 'Campaign Solutions for Transport' 1st July 2004, MerseyTravel Liverpool; 3: ACT Master Class 'Showcasing the award winning Coventry Powergen Travel Plan' 6th July 2004, Coventry

The Travel Plan has been updated as part of the review and monitoring process and follows the renewal of Outline Planning permission for the business park. The update of the Travel Plan document draws upon experience of working with occupants at the business park since first occupation in September 2008, and provides an update on infrastructure and service provision at the site.

1.2 SITE OPPORTUNITIES AND BARRIERS

During October 2010, six units had been constructed at Kingsway, and a significant new unit was under construction. Three units were occupied. In addition Broadshaw Farm had undergone extensive refurbishment and is now occupied by British Millerrain, a manufacturer and distributor of performance fabrics. The spine road Sir Isaac Newton Way was officially opened on 1st December 2007 and was adopted by Rochdale Borough Council in March 2009. Construction of the southern loop road, John Milne Avenue, was also completed in March 2009. The majority of the planned cycleways / footpaths shown in Figure 1 are also open to the public.

It is proposed that a Metrolink stop will be provided on the eastern boundary of the site, as part of the conversion of the former Oldham Loop line to light rail. Metrolink services will begin running on the former rail line between Manchester, Oldham and Rochdale in 2012. The stop would be accessed from the northern loop road and would be a significant asset for the business park, helping to contribute to the challenging modal split targets contained within this Travel Plan.

In the original Travel Plan issued in September 2007, the estimated take up/occupancy rate of plots and buildings was estimated at 6.0ha (15.5 acres) per annum. Due to the impacts of the recession the actual take-up/occupancy of new units to date has been far less, with 6.38 ha occupied by October 2010. Similarly the estimated job numbers for the first three years of development at Kingsway provided in the original Travel Plan were far higher than the actual number of jobs realised. Table 1.0 compares the estimates of job numbers at the business park from 2008-2011 included in the original Travel Plan with current estimated/actual job numbers at the business park for 2008-2012.

Table 1.0 Comparison of Estimated Job Numbers

Year End	Original Estimates		Current Estimates	
	Job numbers in year	Cumulative Jobs	Job numbers in year	Cumulative jobs
2008	509	509	30	30
2009	259	768	60	90
2010	614	1382	60	150
2011	318	1700	300	450
2012	-	-	500	950

It was originally assumed that the site would be fully developed within 10 to 15 years (2015-2020), with an estimated total of 7,250 people employed at the Park. Due to the impacts of the recession it is anticipated that it will now take longer than 15 years to fully develop the business park.

The Kingsway development is a Business Park including the following uses: general and light industrial use, Classes B1 & B2, Offices in use Class B1, Distribution and storage in use Class B8, Research and Development facilities in use Class B1,

Hotels in use Class C3, ancillary retail and leisure in use Classes A12, A2, A3 & D2, housing in use Class C1.

The first major phase of the construction programme included the major changes at junction 21 of the M62 and the new spine road (Sir Isaac Newton Way) through the site to Kingsway, and the drainage and plateau formation for the first development plots. An application for the first phase of buildings on Plot E was approved by Rochdale Borough Council in December 2006, with first occupation at the site by the end of September 2008.

As well as considering the operation of Kingsway, consideration has been given to the construction works during the development of the site. All construction access (for contractors and employees) to and from the site is via Sir Isaac Newton Way (A664). No vehicular access to the site is possible through the existing residential areas (save with the express consent of RMBC as the Planning Authority, when special circumstances require it).

Off-site HGV movements are being minimised by re-using materials on site and a policy to minimise off site disposal of surplus material has been implemented where possible. On-site and off-site movements can be minimised with careful programming and may provide cost savings. Where possible, construction vehicles are selected for low emissions and noise impacts, and mud is removed by wheel washing before vehicles exit the site.

The current road infrastructure has been improved since construction began on the site in 2005. Improvements have been completed by RMBC (partly funded by Wilson Bowden Developments) at the Kingsway / Milnrow Road junction, the Elizabethan Way / Bridge St Junction in Milnrow, and at the junction of the A664 Kingsway / Queensway with Oldham Road.

There are specific planning restrictions preventing vehicular access from the east and west of the site. However, access via cycling routes and footpaths has been provided to increase opportunities for residents of the priority wards to access Kingsway.

Figure 1 shows the main circulatory routes around the site on completion. During on-going construction phases, some of the greenway or pedestrian routes will remain closed for health and safety reasons. However a significant proportion of routes are now open to the public.

Commercially operated bus service provision along Sir Issac Newton Way is unlikely to become financially viable until site occupancy increases significantly. However, a developer-funded Demand Responsive Transport (DRT) bus service operates within Rochdale for staff employed at Kingsway.

In summary, an effective network of sustainable modes of transport is being developed in order to minimise negative health and environmental impacts of transport and maximise the employment opportunities and economic benefits from the development.

1.3 WHY PLAN TRAVEL – THE BUSINESS CASE

The Kingsway Partnership has indicated that it wants the site to be as sustainable as possible. Transport has economic, environmental and social impacts, affecting health, the environment, quality of life and the regional economy and image.

Reducing unsustainable transport will be one of the most effective ways of improving the overall sustainability of the Kingsway Business Park.

Economic impacts

Traffic congestion and a poor transport system are major factors in poor productivity and failure to attract new investment. Car journeys are taking up more and more time, with estimates of traffic congestion and unreliable transport costing British businesses £20 billion a year. Road transport accounts for the largest proportion of oil consumption in the UK, with the increases in oil prices adding to the economic burden. Current estimates show that 80% of car journeys are one-person occupancy and journeys to and from work account for almost 25% of all miles driven by car or van. Sustainable Travel Plans tackle rush hour congestion at source by reducing the number of vehicles that take to the road each day.

Social impacts

Besides the thousands of deaths and injuries on the roads each year, emissions from transport are responsible for a number of health problems. The Committee on the Medical Effects of Air Pollution estimates that between 12,000 and 24,000 people die prematurely from respiratory diseases and heart disorders each year because of air pollution from compounds such as nitrogen oxides (NO_x), Carbon Dioxide (CO₂) and Particulates (PM₁₀), all of which can be attributed to vehicle emissions. It is estimated that PM₁₀ particles are responsible for 8,100 deaths and 10,500 hospital admissions.

Rochdale's air quality is relatively poor, due mainly to its proximity to the motorway network and major roads. It is within the Greater Manchester Air Quality Management Area, where efforts are being taken to reduce the amount of air pollution. The sustainable Travel Plan will contribute to efforts to reduce air pollution.

Current research indicates that the population of the UK is becoming fatter, lazier and less healthy. In 1975, the average individual in the UK walked 255 miles a year, compared to 192 miles in 2004. The sedentary lifestyle has come from the increased use of the car and 'labour-saving devices'. 37% of coronary heart disease deaths are related to inactivity, compared to 19% related to smoking. Obesity costs the NHS £8 billion a year.

The use of alternatives to the car can help provide a healthier lifestyle. The British Heart Foundation (BHF) says 10,000 steps a day (about five miles) can give you a healthy heart and reduce body fat. Thirty minutes a day of moderate exercise, such as cycling or brisk walking, protects against many forms of ill health. The use of public transport, walking and cycling helps staff to arrive on time and with less stress involved in their journey. In addition it reduces the stress involved in driving and provides opportunities for socialising.

There are a considerable number of un-employed / under employed people living in priority wards close to the Kingsway site. Providing an effective network of sustainable modes of transport should make it easier and cheaper for local people to access jobs at the Kingsway site without requiring access to a car.

Environmental impacts

As well as the air pollution impacts cited above, emissions from road transport are the fastest growing contributor to global warming, contributing over 25% of all UK CO₂ emissions.

A Travel Plan, through a set of objectives, targets and measures, offers a solution to the negative impacts of transport, promoting benefits to the employer, employees, environment, local community and economy. A Travel Plan helps to cut congestion, reduce commuter stress, enhance staff recruitment and retention, improve choice for staff, provide a better organisational image and enhance regional image. It also helps to promote a healthy workforce, improve productivity, improve road safety, provide a solution to parking and accessibility problems, reduce pollution and saves money.

Travel plans are estimated to cost approximately £47 per person (exact figures depend on a number of factors, such as measures implemented and the number of staff), remarkably less than a typical car parking space per employee of £300-500 (figures depend on a number of factors, such as number of spaces and location)³.

There are a number of advantages for employees travelling by public transport to work. The journey provides time to relax, read and work; there is no need for a car parking space; the journey can be quicker compared to the car (especially in areas which are regularly congested, more so if there is a designated bus lane); and, a chance to socialise. The disadvantages include a lack of services (including timing of services) on desired routes, costs, lack of information and unreliable services.

Impacts from transport will be a major factor affecting the sustainability of the site. Unsustainable transport patterns must be addressed before employees' travel behaviour has become embedded. Kingsway has an advantage over many examples of best practice in travel planning, in that there are currently few employees on the site. Therefore, measures defined in the Travel Plan will be easier to implement, rather than having to retrofit with large numbers of existing employees.

³ Department of Transport (2002) *Making travel plans work: Lessons from UK case studies*

2 OBJECTIVES, TARGETS AND INDICATORS

Statement of intent: *To implement measures within and around Kingsway so that the majority of employees have the opportunity to get to work by sustainable modes of transport, thereby encouraging a better quality of life for employers, employees and surrounding residents, improving the environment and enhancing the local economy. This will mean improving alternatives to the car and discouraging unnecessary use of the car.*

The Rochdale Kingsway Sustainable Travel Plan has four objectives: -

1. To reduce the need to use the car;
2. To maximise public transport use;
3. To encourage walking and cycling; and
4. To reduce the need to travel to and for work.

Targets are essential to ensure that everyone involved knows what needs to be done and to enable progress to be assessed. Indicators provide the means for tracking progress against the targets. As the developments on the site will adapt from the outline proposals, and site occupation is going to be phased over several years, it is recommended that the targets and indicators are reviewed annually to ensure appropriateness to the scheme and to ensure that best practice is met or exceeded. The Kingsway Partnership and/or the Travel Plan Coordinator will monitor progress against these targets and indicators and report on them annually.

The four objectives are detailed below with targets and indicators.

Overall Targets

Target 1: To achieve a modal split by 2012 for the main modes of travel to the site of:

- | | |
|-----------------------------|-----|
| • Single occupancy vehicles | 45% |
| • Car share | 20% |
| • Public transport | 20% |
| • Walking & cycling | 15% |

This will be reviewed so as to achieve best practice by 2012, including a reduction of single occupancy vehicles.

Target 2: To minimise carbon dioxide emissions from business travel and fleet mileage associated with the operation of businesses on Kingsway. The Travel Plan annual review process will estimate actual carbon dioxide emissions associated with business travel and fleet mileage and compare this against the norm for the relevant land uses. A methodology for monitoring carbon dioxide emissions is included in Appendix 4.

Objective 1: Reducing the need to use the car

Target 1: For 20% of all car journeys to be multi-occupancy trips by 2012.
Indicators: Number of companies actively promoting the car share scheme.
Number of employees actively participating in the car share scheme.
Percentage of employees travelling to work alone by car.

- Target 2: Encourage employers to employ local labour.
Indicator: Percentage of people working in Kingsway living in local priority wards.
- Target 3: The average commuter trip length to Kingsway to be 10% below national average by 2012.
Indicator: Average number of miles travelled to work by car (compared against the national average).
- Target 4: The average business trip length to and from Kingsway to be 10% below national average by 2012.
Indicators: Number of people travelling for business purposes.
Average number of miles travelled for business purposes (compared against the national average).
- Target 5: To provide on-site facilities to reduce the need to travel off-site.
Indicators: Number of facilities operating on the site.
Uptake of service, e.g. number of employees who are gym members who have membership of on-site gym, number of transactions at bank/ATM.
Percentage of employees within 10 minutes walking distance of key facilities (food outlet, bank, shop etc) in Kingsway.
- Target 6: To provide the number of parking spaces as specified in the outline planning consent, unless otherwise agreed by the Local Planning Authority.
Indicators: Ratio of car parking spaces per m² of floorspace.
- Target 7: For 40% of total car parking provision to be restricted for priority users (disabled drivers, visitors, car sharers, essential car users and shift workers) only.
Indicators: Number of car parking spaces for priority drivers.
Percentage of priority car parking spaces as part of overall parking provision.

Objective 2: Maximising public transport use

- Target 1: To provide integrated, clean, quality bus services used regularly by 10% of employees / visitors.
Indicators: Number of bus services stopping in the business park.
Percentage of employees travelling to work by bus.
Data from the supported bus service provision.
- Target 2: For 20% of employees to use public transport (bus, rail, Metrolink) for all journeys to and from Kingsway when all of these services are provided in the future.
Indicators: Number of trips made using public transport.
Percentage of employees using the shuttle bus to Rochdale town centre, local train and/or Metrolink at lunchtimes and peak hours.
- Target 3: For 30% of employees to use public transport (bus, rail, Metrolink) at least once per week when all of these services are provided in the future.
Indicators: Number of trips made using public transport.

Percentage of employees using the shuttle bus to Rochdale town centre, local train and/or Metrolink at lunchtimes and peak hours.

Target 4: To provide incentives to use public transport.
Indicators: Number of discounted (by at least 40%) travel passes issued.
Number of interest-free loans issued for season travel tickets by companies and/or Travel Co-ordinator.

Target 5: To promote the use of public transport to all employees.
Indicators: The number of employees that are made aware of the Travel Plan as part of their induction/annual appraisal.
Percentage of employees aware of the Travel Plan in regular travel surveys.
Percentage of employees who have easy access to public transport information.
Percentage of businesses providing public transport information to visitors.

Objective 3: Encourage walking and cycling

Target 1: Improve road safety and personal security.
Indicators: All of road network with safe cycle lanes.
Number of safe crossing points on main roads within site.
Percentage of the main access route cycleways and footpaths that are well lit from when they become operational.
85th percentile traffic speeds across the site.
Number of incidences of attacks on pedestrians and cyclists within the boundary of Kingsway.

Target 2: For all employees to have access to high quality cycle facilities.
Indicators: Number of on-site sheltered cycle parking spaces on Kingsway and off-site cycle lockers at key interchanges.
Number of Kingsway employees using the off-site secure cycle parking at public transport interchanges.
Number of showers for use by cyclists on Kingsway.
Number of cyclists regularly using the facilities.

Target 3: To have an active Bicycle User Group and Walking Group.
Indicator: Number of active members and frequency of meetings

Objective 4: Reducing the need to travel to work

Target 1: To provide the opportunity for 10% of staff the option of working from home or flexitime by 2012.
Indicators: Number of people working from home.
Number of working days from home.
Percentage of employees able to work flexitime.

2.1 CURRENT OCCUPANT TRAVEL BEHAVIOUR

Kingsway occupants Vindon, Takeuchi and CR Laurence have been assisted by the Travel Plan Coordinator in developing their own Travel Plans. British Millerain relocated to Kingsway in June 2009. Whilst they are under no obligation to prepare a

Travel Plan, the Travel Plan Coordinator will inform them of Travel Plan measures being implemented for the business park. As part of the development of occupant Travel Plans a staff travel survey was undertaken with Takeuchi and Vindon approximately 12 months after first occupation in Summer 2010. A staff travel survey was also undertaken with CR Laurence as part of the preparation of their Travel Plan in March 2010, with respondents asked how they expected to travel on relocation to Kingsway.

Table 2.1 shows the results of these travel surveys and demonstrates that all three occupants are currently falling short of the mode split targets for the business park as a whole.

Mode	Takeuchi	Vindon	CR Laurence	Current KBP	Targetted KBP
Single occupancy vehicles	73%	85%	88%	80%	45%
Car share	0%	15%	4%	10%	20%
Public transport	27%	0%	2%	10%	20%
Walking and cycling	0%	0%	6%	0%	15%

Before relocating to Kingsway, Vindon were based in Diggle and the majority of their staff still live within the Saddleworth area, severely limiting opportunities for these staff to travel to Kingsway by non-car modes. Before occupation, the extension of an existing Local Link Demand Responsive Transport Service operating in the Saddleworth area was discussed with Vindon staff but it was considered that the service would not be used by relocating staff. The benefits of car sharing have been highlighted to Vindon staff and potential incentives for staff to car share investigated, and a small increase in car sharing has been delivered to date.

Takeuchi employ 17 staff but a number of these staff live within the Rochdale area and have significant potential to travel by non-car modes. Four members of Takeuchi staff regularly use the Kingsway Link service, although it would appear from the staff travel survey that more staff have the potential to use the Kingsway Link service and individuals will be targeted to make greater use of the service.

Both companies have adopted a Guaranteed Ride Home scheme to encourage car sharing, but incompatibility of working hours and the geographical spread of where staff live would appear to be more significant factors influencing low levels of car sharing. Whilst incentives to car sharing have been discussed, there is a reluctance on the part of both companies to sign up to any incentive that would cost the business. Instead efforts to encourage car sharing will focus on persuading individuals to try car sharing for a limited period. After sharing for a week or so, it is hoped that individuals will be more likely to continue car sharing.

Both companies have been presented with a bike for use by their staff. In addition, the details of the Government Cycle2Work scheme have been passed onto both companies. However, despite strong interest in the scheme neither company has pursued it. It is considered that this is likely to be due to a combination of reasons, including the relative small size of each company, and caution over the time and costs associated with setting up the scheme.

3 MEASURES AND RECOMMENDATIONS

Sections 3.1 – 3.8 describe the measures which can be implemented to achieve the objectives detailed in Section 2.0. The paragraphs in italics set out the recommendations for the Kingsway Partnership and Site Management Company. Appendix 1 details all the actions that should be carried out to put the recommendations into practice.

3.1 TRAVEL PLAN CO-ORDINATOR

Wilson Bowden Developments appointed a Travel Plan Co-ordinator (TPC) to implement the Travel Plan for Kingsway Business Park. The TPC role is being undertaken by Consultants in the first instance. Wilson Bowden are committed to the Travel Plan for Kingsway and as such will fund the post until the role is taken on by the Kingsway Management Company.

3.2 MINIMISING CAR USE

A number of initiatives are available which minimise car use.

Car park management

This is one of the easiest and most effective mechanisms for encouraging use of more sustainable modes of transport. Car parking management can take a variety of forms:

- Restrict the number of car park spaces: Car parking restraint is one of the most effective ways of reducing car use and encouraging a higher level of alternative modes of transport and/or car sharing. (This measure must be complemented by a range of actions to ensure alternative modes are available, especially at peak times).
- Prioritise parking spaces: Allocate the majority of parking spaces to those who cannot use alternative modes or who are taking measures to reduce their impacts e.g. car sharers. Spaces should be prioritised for disabled employees/visitors, employees' car sharing, short-term visitor parking, shift workers, essential car users and those who have green fuel systems, LPG etc.
- Introduce parking charges: High parking charges reduce the attractiveness of driving and can provide a means of funding Travel Plan objectives through the money collected. This could be combined with a parking voucher scheme, where employees receive vouchers to park for 120 days per year and must either car share, pay a parking charge or find an alternative way to work for the other 120 days of the working year.
- All roads on Kingsway will be marked with double yellow lines to ensure no on-street parking. This will be enforced by the Highway Authority / Management Company dependant upon the adoption status of roads and plot accesses.

At least 40% of car parking will be for priority car users. The Travel Co-ordinator will develop criteria for the use of priority parking. Any revenue from car parking will be ring-fenced to fund the Travel Co-ordinator role and its budgetary requirements. Individual plot holders will work with the local Council Highways officers to implement Residents Parking Schemes where appropriate.

Travel Plans submitted to the Council as part of a Planning application (or to discharge a condition following Planning approval) should include targets for modal shift, and an Action Plan for achieving these targets. The Action Plan will incorporate

remedial measures (such as the restriction of parking or introduction of charges) if modal share targets are not achieved.

Car sharing

Car sharing involves two or more people sharing a car for their journey. Promoting and facilitating car sharing is very effective in reducing peak congestion times and eases car-parking shortages. The benefits of car sharing include cost savings, opportunity to socialise, free parking and a reserved parking space near to employee entrance (the latter two benefits are dependent on introduced measures). It has been estimated that annual sharing on fuel for a car sharer are from £200 - £1,000, dependent on the number of miles travelled and the number of people in the car.

A match finding database is usually required to run a successful car-share system. This database can be a simple database, which can be developed in-house, or a specialist software package, which is offered by a number of companies. For a fee, these companies will manage and market car-sharing.

Currently the Travel Plan Coordinator is looking to identify car sharing opportunities with staff. In light of the low staff numbers currently working at Kingsway, no efforts have been made to purchase a match-finding database, although the Travel Plan Coordinator is monitoring developments at the Greater Manchester level, where the Greater Manchester authorities are considering options for their own car sharing database. *This database is expected to be launched during 2010, and will be made available to Kingsway.*

One of the reasons why employees are reluctant to join a car-sharing scheme is the fear of being penalised if the lift to work does not materialise, or being stranded at work if their lift falls through or if there is an emergency at home. Successful car-share schemes support rather than penalise employees and offer a guaranteed ride home for example by guaranteeing free taxis if lifts fall through. In practice taxis home tend to be rarely required but knowing that they can be utilised increases uptake of such schemes. Vindon, Takeuchi and CR Laurence all offer a Guaranteed Ride Home service to staff.

There will be a central database for a Kingsway-wide car-sharing scheme, facilitated by the Travel Co-ordinator. There will be a central scheme operating to guarantee rides home. All staff will be listed on the carshare database unless they opt out, and encouraged to join the car-share scheme. Information regarding sustainable modes of travelling to work including registration for the car-share scheme will be given to all new occupiers and new members of staff.

Pooled company cars and vans

Providing company cars/vans as a perk encourages employees to use their car/van to work. Instead of providing a company car, one option open to employers is to provide on-site cars which are available for use by employees, with LPG / electric power or similar green fuel systems as and when necessary. Occupants have access to a vehicle when they need one and only pay for the time it is in use and the miles that are driven. Vehicles are parked in reserved parking spaces, close to units and can be booked for as little as one hour or up to a few days. If there is no option but to provide cars, they should all be models that use 'clean fuels', such as LPG or biodiesel.

The Travel Plan Co-ordinator will encourage occupants to only operate fleet vehicles using 'clean fuels'. The Kingsway Partnership will investigate possible funding mechanisms to set up a new car hire company or work in partnership with an existing

car rental/leasing firm to set up a car pool for occupants. It is anticipated that business opportunities for car rental/pooling will increase as larger occupants move to the business park. The Kingsway Partnership will look to introduce car rental services by 2012.

3.3 MAXIMISING PUBLIC TRANSPORT USE

The presence of a good quality regional/local integrated public transport system is fundamental to the success of the Kingsway Sustainable Travel Plan. Unless employees have good access to clean, reliable and safe public transport, they will have no alternative but to use their own cars. It is important to encourage employees to use public transport for all, or part of, their journey as an alternative to single occupancy car journeys to work.

During community consultations, it was found that people do not like to travel by public transport because of unreliable and expensive services, indirect (or non-existent) routes to and from work, and lack of information. There were also issues around safety, cleanliness and poor waiting facilities. In order to encourage employees to use public transport, these issues need to be dealt with.

Providing new sources of public transport to the site and improving existing services

The number and frequency of bus services to the site are currently limited, mainly due to a lack of demand. It will be necessary to negotiate further with public transport providers to discuss the current service routes, options for additional/future services, service reliability and matching services to work patterns. Initial discussions with First bus have generated little commercial interest in rerouting services through Kingsway, given the current low numbers of staff. However, as more employees use Kingsway, there will be more prospective public transport users.

The Travel Plan Coordinator will maintain discussions with bus service operators regarding the potential introduction / rerouting of services and aim to secure commercial services through the business park by 2012.

It is proposed that a dedicated Metrolink stop could be provided on the eastern boundary of the site. The Joint Venture partners are pursuing provision of this stop, and would intend to form a transport hub around the Metrolink stop, to link the bus and Metrolink services. This would have a positive impact on increasing employment opportunities for residents and would help to reduce local congestion. A character area with local facilities including bus, taxi, cycle provision, possibly park and ride, and local services would be provided adjacent to any Metrolink stop.

In addition to public transport provision, improvements in the waiting environment, such as better bus shelters, seating, lighting, CCTV and real time transport information facilities, will encourage more employees to use public transport.

The Kingsway Partnership will hold discussions with public transport providers to ensure the maximum uptake of public transport services on the site and links with other transport modes (rail and Metrolink). Clean and safe waiting environments will be provided throughout the site.

Providing works buses / shuttle buses / Demand Responsive Services

A Demand Responsive Transport bus service – the 'Kingsway Link' – has been provided for journeys between home and Kingsway in the morning and evening, and for journeys into Rochdale town centre or to local shops and facilities in the lunch

period. The service operates within priority ward areas of Rochdale, according to demand, with passengers phoning to book the service at a particular time. There is a nominal £1 charge for using the service. The service is currently operated by Rochdale Community Transport under contract through the Greater Manchester Passenger Transport Executive (GMPT). The service is periodically reviewed to ensure best fit with the shift patterns of firms relocating to the business park. In the future the service operating area will be reviewed to assess whether the service can be extended to improve access to the site from outlying areas of Rochdale Borough.

A shuttle bus service will also be provided between the site and Rochdale bus and rail stations once there is a critical mass of people working at the site. Evidence suggests that successful Travel Plans, which perform best on bus and rail, provide a dedicated shuttle bus.

The Kingsway Partnership is committed to funding appropriate public transport services.

All businesses will be encouraged by the Travel Co-ordinator to work towards maximising use of the shuttle bus, Kingsway Link and other services.

The Kingsway Partnership will also work with existing and future DRT providers to maximise services to Kingsway using DRT

The Kingsway Partnership will work with existing commercial operators to maximise the options for commercial services to go onto Kingsway at the earliest opportunity..

Negotiating ticket discounts

Representatives of the Kingsway Management Company and site occupants will negotiate with local bus operators for discounted travel passes/subsidised employee travel passes. Ticket discounts are very effective as high fares deter public transport use. Additionally, travel passes are valid over the weekend and offer an additional benefit to employees, whilst encouraging greater use of public transport. Alternatively, companies can provide interest-free loans to purchase season travel tickets. The Travel Plan Coordinator has entered into initial discussions with the bus operator First regarding the potential for discounted ticketing arrangements, but this is dependent on there being a higher number of staff employed at the business park.

The Travel Plan Coordinator will maintain negotiations with bus service operators regarding discounted travel tickets, and aim to secure such initiatives along with the introduction of commercial bus services through the business park by 2012.

Providing information and personalised journey planning

It is important to display as much information as possible to make the journey by public transport user friendly, for example simplified diagrammatic displays detailing bus routes. On-site bus shelters will be installed as part of the works. The possibility of providing real time information is also being considered. A central travel centre is a very effective means of providing information, especially if sited near to on-site facilities such as catering units and shops. Having an on-site travel centre, where the Travel Co-ordinator is based with access to timetables and advice will also promote personalised journey planning. Personal journey planners help employees to understand the choices available to them and provide opportunities to link in with other employees who are travelling the same routes/directions. It is also necessary to publicise the sustainable transport plan when recruiting staff and to provide an induction sustainable transport pack.

The Kingsway Partnership will ensure that there are regularly updated and easily accessible sources of information on public transport provision and timetables, including a website ([http://www.kingsway-business-park.com/parklife-getting-](http://www.kingsway-business-park.com/parklife-getting)

here.html) and notice boards. The Travel Plan will be included as an item in inductions/appraisals, and Personalised Journey Planning will be offered to all relocating staff.

3.4 ENCOURAGING AND FACILITATING CYCLING

Cycling has health benefits and proves a viable alternative to the car (if the appropriate facilities are in place). Cycling 20 miles per week halves the risk of heart attack and can extend life expectancy. The following initiatives and measures will facilitate cycling and encourage people to take up cycling to and from work: -

Developing a network of safe cycle routes on and off site and providing route maps and signs

A range of cycle routes have been implemented across the site to link into external cycle routes linking the site with main areas of population. Cycle networks will be well maintained, well sign-posted, direct and accessible to the Business Park. These routes will be lit where possible. Additionally routes will be attractive, convenient to use, safe from conflict with traffic, avoid major junctions, free from barriers such as gates and steps, well surfaced, clear of debris (an important factor during construction) and connected to local cycle routes.

Wilson Bowden Developments Ltd, in conjunction with Rochdale Council will ensure the delivery and maintenance of a network of safe, signed and lit (where appropriate) cycle routes, through the implementation of planning consents. Cycle route maps will be provided by the Kingsway Partnership.

Providing secure cycle parking

Secure parking enhances the likelihood of employees cycling to work. Providing cycle parking is considerably cheaper than providing car parking. One car park space can provide space for over 10 bicycles. Parking facilities can be free-standing Sheffield cycle stands, purpose built shelters, lockers or cycle centres. The cheapest option is free-standing Sheffield cycle stands, although these are usually less secure, and cycles are open to the weather, which is not acceptable for all day parking. Cost options vary from £500 (covered secured stands) to over £2,000 (cycle cage with secure locks). The best option for Kingsway is a combination of purpose-built high-quality shelters and cycle lockers with CCTV monitoring. Each unit will have its own shelter and/or cycle lockers as a requirement of planning consent. The location of cycle parking facilities is fundamental to encouraging employees to cycle. The facilities should be located close to the journey end i.e. as near or nearer than car parking, be near changing facilities, secure and in adequate lighting.

All new build units at Kingsway have been provided with cycle lockers and short stay Sheffield racks overlooked by the main building. In addition cycle lockers will be provided at Rochdale rail station.

The Local Authority will ensure the provision and maintenance of secure, long stay covered cycle parking, through planning consents. Any developer constructing buildings on the site will be required to provide these facilities.

Providing shower/change/locker facilities

It is important to provide facilities to store equipment and clothing and to provide shower and changing facilities for those cycling greater distances or over difficult terrain where strenuous cycling is required. Drying facilities are also helpful during the wet months. The more facilities that are provided to help employees, the more employees will be encouraged, and not deterred, to cycle to and from work.

Kingsway will ensure the provision of these facilities in each building on the site, via planning approvals, in combination with central facilities where more appropriate. This will be addressed when detailed planning consent is sought.

Establish a Bicycle User Group (BUG)

BUGs are groups of people who want to improve facilities for cyclists and encourage others to cycle and provide a means of socialising. BUGs can encourage, and organise routes for people who live in the same direction to cycle to and from work together. A BUG can be supported by the provision of cycle repair kits/training through a partnership with a local cycle hire/sales business or an on-site mechanic.

The Kingsway Partnership will encourage and support a Bicycle User Group, facilitated by the Travel Co-ordinator. The creation of a BUG is targeted for 2012, once a critical mass of people working at Kingsway is reached.

3.5 ENCOURAGING AND FACILITATING WALKING

Walking is a no-cost healthy way to get to work and is accessible to many. It is important to encourage walking to work. The walk to work can either be the whole way, in the case of local employees, or part of the journey to work integrated with other modes of transport. The health benefits of walking are immense; walking briskly for half an hour a day halves the risk of heart disease.

It is important to provide the right walking environment and facilities to encourage staff to walk to work. It will therefore be necessary to: -

Develop a good network of safe walking routes on and off site

Routes will be well-maintained, well lit, direct, convenient and well sign posted. Access points are located near to local transport routes. Route maps of Kingsway and links to public transport for walkers and cyclists will be made available.

Routes avoid congested areas and busy main roads of the Business Park. Traffic speeds will be controlled around Kingsway (all roads will be public highways), with walkers having priority at crossing points. Routes should not be in secluded areas that would intimidate people walking alone. Using crunchy gravel creates 'audible footpaths' so that walkers can hear others approaching. Kingsway should have on-site security and CCTV security cameras, and will provide publicity for any personal security measures, such as personal alarms and self-defence classes.

The Kingsway Partnership will ensure that a signed network of suitable footpaths is established and maintained throughout the site and to access the site to facilitate walking. Security measures and printed route information must be in place.

Promote available route network and identify walk times

Pedestrians are more likely to walk to a destination if they know how long it will take them to reach that destination. Often an individual will decide not to make a journey on foot due to uncertainty over how long it will take them. Promotional material is being developed to suggest appropriate walking routes for lunch-time or early evening walks, identify walking times and the health benefits of using these routes.

The Kingsway Partnership is developing promotional material including a map of walking routes within the Business Park identifying approximate walking times between key points. The material will be developed in partnership with the Primary Care Trust and will be provided to all staff working at the business park and will also

be made available to local residents who may wish to use recreational routes on Kingsway. The map will also be uploaded to the Kingsway website.

Provide shower/change/locker facilities

Shower/change/locker facilities are invaluable during extreme weather conditions and to those walking strenuously to work. These facilities may also encourage exercise to be taken before work or during lunch hours.

The Kingsway Partnership will ensure the provision of these facilities in each building on the site, via planning approvals. This will be addressed when detailed planning consent is sought.

Provide umbrellas/rainproof clothing

Having umbrellas and rainproof clothing will encourage staff to walk around Kingsway during the day without the risk of being drenched by the rain.

The Travel Co-ordinator will encourage the provision of these facilities (potentially as promotional items) for those employees that regularly have to access other parts of Kingsway during the working day.

Establish and support a Walking Group

Establishing a Walking Group has proved a very effective means of encouraging walking in other organisations. Groups provide a focal point for encouraging people to walk together, organise pleasant routes and provide a means of socialising. Often walking groups organise lunchtime walks, sometimes with a theme, or a nice lunch at the end to encourage people to get involved. They also work to ensure appropriate facilities are provided.

The Kingsway Partnership will encourage and support a Walking Group, facilitated by the Travel Co-ordinator. The creation of a Walking Group is targeted for 2012, once a critical mass of people working at Kingsway is reached.

The Kingsway Partnership will ensure that all entrances onto plots will facilitate walking desire lines.

3.6 REDUCING THE NEED TO TRAVEL

Allowing a change in work practices and utilising improvements in IT reduces the frequency and/or need to travel to and from work. A number of the jobs that will be created at Kingsway will be in manufacturing or be logistics-based, which will necessitate employees' physical presence on the site and so some of the following measures will not be appropriate for such roles.

Working from home

As technology and working practices have evolved, many jobs are no longer totally dependent on an office within the workplace. Many job categories and functions can be carried out from the home. In the majority of cases facilities, such as a computer, dedicated phone line and internet/broadband, have to be provided and set up to allow staff to work from home.

There are many benefits attributed to working from home such as reduced mileage claims and expenses, increased productivity and profitability and an increased pool of potential employees. Working from home one-day a week will reduce commuting trips by 20%, thus reducing both congestion and pollution.

However, working from home is not applicable to all types of jobs and may require an initial economic expenditure for the purchase of equipment and systems. It will be necessary to ensure that health and safety measures apply in the home and health and safety workplace risk assessments must be carried out.

Some employees can feel isolated when working from home and miss the office environment and interactions with colleagues. It is, therefore, more practical to offer employees the opportunity to work from home and the office, possibly with a set number of hours or days that the employee has to be in the office.

The Kingsway Partnership will work with occupant companies to provide advice and support to implement effective home working, where appropriate.

Flexitime

Flexitime is a system whereby employees work a set amount of hours but have the flexibility for the times they start and finish work. There are a number of ways flexitime can be implemented in the work place, for example: -

- Employees work a set number of core days (e.g. Monday – Friday) and hours (e.g. 10am – 4pm) but have the flexibility for the times they start and finish.
- Employees work a set number of hours per week and have complete flexibility when these hours are worked.
- Employees condense the number of hours worked into a four-day week or nine-day fortnight.

There are a number of benefits associated with flexitime. Flexitime enables employees to schedule their travel to work alongside public transport and/or avoid congestion times and accommodate their lifestyles, such as taking children to school. Studies have shown that the percentage of sick days is reduced in companies that allow a condensed working week. Additionally, a four-day week or nine-day fortnight can reduce the costs of childcare for working parents. However, if the company does not operate a clocking-in system, flexitime requires a large degree of trust. Flexitime can potentially disrupt work patterns and project management and needs to be managed so that a specified number of employees are in the workplace during core working hours.

The Kingsway Partnership will work with occupant companies to provide advice and support to implement flexible working, where appropriate.

Employing local labour

Employing local labour is a key requirement of the European Union funding for the Kingsway development. Kingsway is aiming to provide employment opportunities for residents from the local deprived wards.

Employing local labour cuts travel time and mileage, as well as contributing to the local economy. There should be an employment drive in wards that directly surround the Park and throughout the borough of Rochdale. However, if the locality lacks a good public transport and road network, employing local labour can contribute to local congestion. Therefore, it is important to have local travel networks and infrastructure in place early in the development.

The Kingsway Partnership will carry out an employment drive in the local wards and throughout the borough of Rochdale in order to maximise employment opportunities in the deprived wards and the borough. This will include the Travel Co-ordinator assisting local employees in accessing sustainable modes of transport.

Tele-conferencing/ video-conferencing

Tele and video-conferencing enables employees to communicate with other people using audio and/or video-conferencing facilities. Tele-conferencing allows business meetings to be conducted by telephone. Conference calls can be set up simply by organising participant dial-in numbers through companies such as BT, or relatively cheap equipment such as speakerphones can be bought so that people in the same office can sit together and participate in the call. Video-conferencing enables participants and documents to be viewed on screen. However, both sides of the meeting need to have the technology to hold a video-conference.

Tele and video-conferencing reduce the amount of travel journeys (including air travel), saves money (e.g. hotel and travel bills) and increases employee productivity. Business travel often accounts for a large proportion of journeys taken and eats into the working day; thus tele/video-conferencing should be encouraged.

There is an initial outlay to purchase the video-conferencing equipment. This typically has a payback of eight months or less. Payback periods are dependent on the type of system installed and the amount of travel that has been saved. Tele-conferencing systems are very low cost and could be provided to all occupants. Video-conferencing costs vary from £100,000 for the high-end systems to £800 for a PC system. If this extra cost is unfeasible, and/or tele/video-conferencing is a rare event, the equipment can also be hired. Alternatively, these facilities could be provided as a central resource by the Site Management Company, larger companies or ICT companies operating on the site.

The Kingsway Partnership will encourage the provision of central meeting facilities complete with video-conferencing rooms that can be hired out by occupants on the site. These could be delivered through the Management Company or as part of the on-site hotel facilities.

On-site facilities

On-site facilities (such as a newsagent, sandwich bar, dry cleaners, cash dispenser, gym, crèche, hairdresser, post office and medical centre), reduce the need for people to travel during their working day. It may also reduce the need to travel to work by car. On-site facilities have many benefits such as reducing travel, reducing congestion during lunch times and reducing the risk of staff returning late from their breaks due to trouble with congestion and parking. However, on-site facilities require an initial economic expenditure, construction and infrastructure. Good uptake of services should outweigh the initial expense and inconvenience.

During the initial stages of development caterers have been invited to provide approved catering facilities to deliver directly to occupiers. Additionally, the Kingsway Link DRT service has been introduced to provide journeys to and from the local shops during lunchtime hours.

The Kingsway Partnership will ensure that food, shopping and leisure facilities are provided on site to minimise transport off-site during the working day. Furthermore, the Kingsway Partnership will continue to provide transport services during peak periods, subject to suitable funding streams being available.

3.7 FINANCIAL INCENTIVES

Financial incentives need to tip the costs in favour of public transport, walking and cycling. A range of incentives can be provided, such as: -

- Discount vouchers for footwear, waterproof clothing, bicycles, reflective clothing, bicycle locks (typical costs are footwear = up to £30; waterproof jackets = up to £70; waterproof trousers= up to £40; reflective straps = up to £20)
- Interest free loans to allow employees to purchase equipment and/or annual bus/train tickets and bicycles/bicycle equipment (average cost of a non-specialised bike is around £250, high quality bike locks cost up to £40)
- Access to information about Government tax breaks for bicycles. Cycle mileage rates are tax free. Employers can lend or hire cycles and cycle safety equipment to employees, without the employee incurring any tax or National Insurance Contributions (NICs). Employers make savings through tax relief and employers' NICs. The Cycle 2 Work scheme allows employers to offer salary sacrifice hire purchase of cycles at large discounts.
- Payments to employees who give up their car park space (a payment of up to £2/day before tax for each car-free day)
- Payments to employees who do not travel alone by car (a payment of up to £1/day before tax for each employee).
- Reduced transport fares in negotiation with GMPTE and local public transport operators.
- Introduced cycle mileage rates for business purposes, excluding the commute to work (non-taxable rate 20 pence per mile: incentive rates above this level can be offered but are taxable)
- Parking vouchers for part-year usage only
- High street shopping vouchers

The Management Company will engage with occupants to facilitate the uptake of financial incentives appropriate to employees. Discount negotiation and the set-up of schemes will be managed centrally by The Kingsway Partnership / Management Company.

3.8 DELIVERIES

It is assumed that there will be a number of daily deliveries to Kingsway. To reduce the amount of deliveries and/or the distance travelled, a procurement policy will be developed by the Management Company which promotes the use of local suppliers. This policy will be made available to occupants, who will be encouraged to use it to facilitate investment in the local economy. It will be necessary to provide information and promotional material to site occupants and their suppliers and organise a working group to discuss these issues and consider grouping delivery dates together. Additionally, occupants should seek to maximise deliveries and collections during off-peak traffic times and opt for the shared use of haulage vehicles. This will require a great deal of co-operation and co-ordination.

The Kingsway Partnership will develop a local procurement policy for the Management Company that is compliant with EU procurement guidelines. The policy will be made available to occupants, who will be encouraged to work within the policy guidelines. Occupants will be supported by the Travel Co-ordinator to develop measures to help reduce numbers of deliveries where possible through co-operation.

4 MANAGING THE TRAVEL PLAN

4.1 TRANSPORT PLAN RESPONSIBILITIES

For the sustainable Travel Plan to be effective, the Kingsway Partnership must assign responsibility for each action to the Kingsway Delivery Team, or progress towards specified targets will not be achieved. The Travel Plan is a working document, which will have to adapt to reflect developments on Kingsway. As such, responsibilities that have been assigned to particular actions may have to change as the development progresses and the delivery team will need to recommend reviews / amendments on an annual basis.

4.1.1 Joint Venture

Wilson Bowden Developments Ltd and the Northwest Regional Development Agency (NWDA) are the Joint Venture partners responsible for the delivery of Kingsway, with Wilson Bowden taking the lead in the procurement of physical infrastructure and development of individual plots. The NWDA will lead in respect of support services in collaboration with Rochdale MBC (RMBC) and the Rochdale Development Agency (RDA).

The Joint Venture partners have responsibility for ensuring that suitable infrastructure is in place, such as road networks, bus lay-bys, cycle lanes, footpaths, lighting and, where appropriate, signage and CCTV, as part of the site-wide infrastructure. Wilson Bowden will have responsibility on specific plots for meeting the Kingsway design guide and individual planning consent requirements for the provision of secure parking (cars, motorbikes and bicycles), shower and changing facilities etc.

Whilst the NWDA will hold the title to the land, a Management Company will be established by the Joint Venture partners, to manage the land and infrastructure, as until individual plots are developed and public realm infrastructure is adopted. The Management Company / occupiers forum will / may include representation from the public sector and investors and occupiers at Kingsway.

Individual properties will be held freehold or on long leases, and initial legal agreements will include assignable requirements for occupiers to support the Kingsway Travel Plan, to introduce their own linked Travel Plans, to monitor travel impacts and, via participation in the Management Company, to work towards achieving and exceeding the established targets.

4.1.2 Kingsway Partnership

The Kingsway Partnership, comprising the Joint Venture partners, RDA and RMBC will have responsibility for supporting the Travel Plan, its delivery and implementation and ensuring that all project partners are fully committed to achieving the aims of this Travel Plan, within the constraints of finance and planning consents.

The Kingsway Partnership has established the Kingsway Partnership Delivery Team, a site-based delivery team that will assume the day-to-day responsibility for marketing, business support and some estate management services at Kingsway in collaboration with the management company vehicle. This will include responsibility for the promotion, implementation and operation of the Travel Plan. This should extend *inter alia* to liaison with individual occupiers, and control of community transport initiatives.

The Kingsway Agency / Management Company will be expected to fulfil its own obligations towards achieving the targets set out in this Travel Plan and subsequent revisions. It will also undertake / facilitate the quarterly monitoring and annual reporting of transport impacts of its own operations and occupants.

4.1.3 Occupants

There are four occupants currently on the site, and other companies have expressed an interest in re-locating to Kingsway. Each new business locating to Kingsway will be required to make a commitment to take actions towards achieving the targets of the Travel Plan, whether that is by implementing the Kingsway Travel Plan or developing and implementing its own compatible Travel Plan. It is expected that smaller companies will use the Kingsway Travel Plan and larger companies may develop their own Travel Plans to help to achieve the targets of the main Travel Plan. Each company will be supported by the Travel Co-ordinator.

Each occupant will be expected to have a named point of contact for transport issues.

4.1.4 Travel Co-ordinator

In order to ensure that the Travel Plan is an active document, a dedicated Travel Co-ordinator role has been created for the implementation of the Travel Plan at the site. The position has initially been financed through a mixture of public and private funding as it is central to the success of the Travel Plan. The Co-ordinator has been seconded to the Project Delivery Team, and has responsibility for the day-to-day management and delivery of the Travel Plan and acts as a central resource for occupant companies on transport issues. Ultimately the Travel Plan Manager will be employed via the Kingsway Management Company and funded by the service charge.

The contact details for the Travel Co-ordinator are as follows:

Andy Beel
Kingsway Partnership
01706 751158
andy.beel@atkingglobal.com

The provisional organisation chart for the Project Delivery Team is attached in Figure 2.

4.2 DELIVERY AND FUNDING

It was essential that a Travel Plan was adopted by the Kingsway Partnership and Wilson Bowden Developments Ltd to comply with planning permission conditions and should thereafter be fully implemented. Therefore the Travel Co-ordinator position must be funded. In addition, it is clear from examples of best practice that the Travel Co-ordinator must have financial resources to allow him/her to keep the momentum going with occupants towards realising the specified targets.

Funding was identified within the Collaboration Agreement of 12th June 2002, payable to Rochdale MBC, for the provision of transport initiatives, to discharge a planning permission condition requirement in respect of the Travel Co-ordinator's role. However, there must be long-term funding measures for the Travel Co-

ordinator role and the budget for promoting and implementing the Travel Plan. Options have been identified for levying a service charge, part of which should be ring-fenced for sustainable transport initiatives:

- Service charge per parking space – if suitable measures are in place, car parking requirements should be reduced and so financial benefits can accrue from promoting alternatives to single-occupancy cars.
- Payment for additional support and advice from the Travel Co-ordinator, above an agreed minimum level.

Exact funding levels will be confirmed by the Management Company and relevant partners and reviewed annually.

In addition to the service charge and developer funding, potential funding mechanisms include:

- Additional public sector grant funding alongside private sector funding through the Management Company service charge.
- In-kind support from the larger companies on the site, providing a 'mentoring' scheme to the smaller organisations.
- After EDZ funding, Kingsway could be designated as a Business Improvement District, with higher rates paid to Rochdale MBC to be returned to the Travel Co-ordinator service provider. This would need to be investigated further to ensure that Kingsway remains competitive against other comparable business parks.
- Car parking charges which should be ring-fenced for sustainable transport initiatives. This could include centralised parking, controlled by the Management Company. Charges should be operated on a sliding scale, with the highest charges for single-occupancy vehicles and reducing for car sharers.

4.2.1 Links to Other Travel Plans

It must be ensured that any occupant company that has its own Travel Plan complements and links into the Kingsway Travel Plan. Any targets in individual company Travel Plans must contribute towards the associated targets defined in this Travel Plan or any of its subsequent revisions.

The Travel Co-ordinator will ensure that all new occupiers on Kingsway receive information on public transport, cycle and walking routes and incentives to use alternatives to the car before they move on to the site. The Kingsway Travel Co-ordinator will foster strong links with a representative from each occupying company to ensure the success of individual Travel Plans and of the overarching Kingsway sustainable Travel Plan.

The Travel Co-ordinator will work with each occupier to ensure the suitability of each occupiers own Travel Plan and ensure that it fits within the Kingsway framework for reducing transport impacts. The planning consent for the site includes the provision of many facilities that will help individual occupiers and visitors to Kingsway to minimise the dependency upon the car and maximise the use of more sustainable alternatives, such as the planned bus services, Metrolink, safe cycleways, cycle parking and well lit footpaths.

4.3 MONITORING AND REVIEW

Kingsway must be able to demonstrate progress towards the targets set out in Section 2. In order to do this, a monitoring system must be set up by the Travel Co-ordinator, in partnership with occupant companies. Monitoring will be undertaken on a quarterly basis and reported annually.

Occupant companies will be expected to assist the Travel Co-ordinator in carrying out employee travel surveys. Internal data collection will be provided as in-kind support by each occupant company. This data will be interpreted to indicate the progress made towards achieving the targets set out in this transport plan.

A protocol will be developed by the Travel Co-ordinator to clarify what data is required and to advise on how best to measure and monitor the data required. An induction process will be developed for new occupants on the site to ensure that each company knows what is required of them for monitoring purposes and how they can collect the relevant data.

The Travel Co-ordinator will collate the data (including transport surveys) from the occupant companies and interpret it before producing an annual report of the findings, as a key part of their role. This will include benchmarking organisations against others operating in the same sector, against best practice and existing commitments and policies. The report will be made publicly available. All data provided by occupant companies to the Travel Co-ordinator will be treated as confidential and will be reported as the amalgamated impact of the Kingsway site. Any particular successes may be reported, as case studies subject to agreement for release from the relevant Occupant Company.

Automatic Traffic Counters (ATC) have been installed on John Milne Avenue (the southern loop road) and additional counters will be installed on the northern loop road and direct access points from Tom Benson Way following the completion of construction works. ATC data will be monitored on a six monthly basis and the findings reported to the Highways Agency. In addition cycle counters are being installed on selected routes across the business park, and data will also be monitored on a six monthly basis.

Data from the ATCs will also be used to estimate carbon dioxide emissions from business travel and fleet mileage, in line with the methodology set out in Appendix 4. This process will be repeated on an annual basis to compare estimated carbon dioxide emissions against the level of emissions calculated for a typical business park of the same development mix as Kingsway.

In addition to monitoring the transport impacts associated with the site, the Travel Plan itself, and its objectives and targets must be regularly reviewed, particularly in light of the major developments that are planned for Kingsway. As such, it is essential that the Travel Plan is reviewed on an annual basis and amended if necessary to reflect any changes. The update of this document in 2010 constitutes the first review of the Travel Plan. An Action Plan will be prepared as part of the review process, this will include details of the measures to be implemented, who has responsibility for implementing them and the timescale for implementation. An updated Action Plan is attached in Appendix 3.

In April 2009 the Department for Transport issued the Good Practice Guidelines "Delivering Travel Plans through the Planning Process". The guidelines encourage active engagement between local authorities, developers and occupants in the

monitoring and review of Travel Plans. A positive partnership has been established at Kingsway between Rochdale Council, Wilson Bowden Developments, Rochdale Development Agency, local Councillors, the Highways Agency, and Greater Manchester Passenger Transport Executive. Each party is represented on a Transport Steering Group that is responsible for the future direction and review of the Kingsway Travel Plan.

A Travel Plan Coordinator is in place and is responsible for implementing Travel Plan measures and monitoring the effectiveness of individual business Travel Plans and the overall Kingsway site-wide Travel Plan. The Travel Plan Coordinator reports to the Steering Group of partners on a regular basis, and feedback from the Steering Group informs the direction of the Travel Plan Coordinator's ongoing work.

The partnership has taken active steps to secure the delivery of a Metrolink stop for the business park, tailor bus service provision to the needs of current occupants, and promote the Travel Plan through discussions with potential new occupants. In addition, through active negotiations between Steering Group partners, parking provision for current development at the business park has been limited to levels below those originally identified in the Outline planning permission.

The ongoing installation of permanent traffic counters at Kingsway will enable the site developer to continuously monitor traffic levels generated by the development. The Highways Agency and developer have agreed a ceiling level for the amount of traffic that can be generated by the business park as part of the Outline planning permission. Consequently, the developer has a clear interest to maximise sustainable travel and minimise car use through effective Travel Planning.

Policy and practice in respect of travel planning is constantly evolving, and Rochdale Borough Council is currently in the process of producing its own Supplementary Planning Document (SPD) on this matter. Rochdale Council strongly supports the objectives of the Kingsway Travel Plan and is committed to working with the Kingsway Partnership and the Travel Plan steering group to maximise the effectiveness of the Travel Plan. An adopted SPD will be applied to all new development at Kingsway. However, until the emerging SPD is adopted policy, the reader is encouraged to visit the Council's website for up-to-date information in respect of Travel Plan policy, and directed towards the DfT Good Practice Guidelines (<http://www.dft.gov.uk/pgr/sustainable/travelplans/tpp/>).

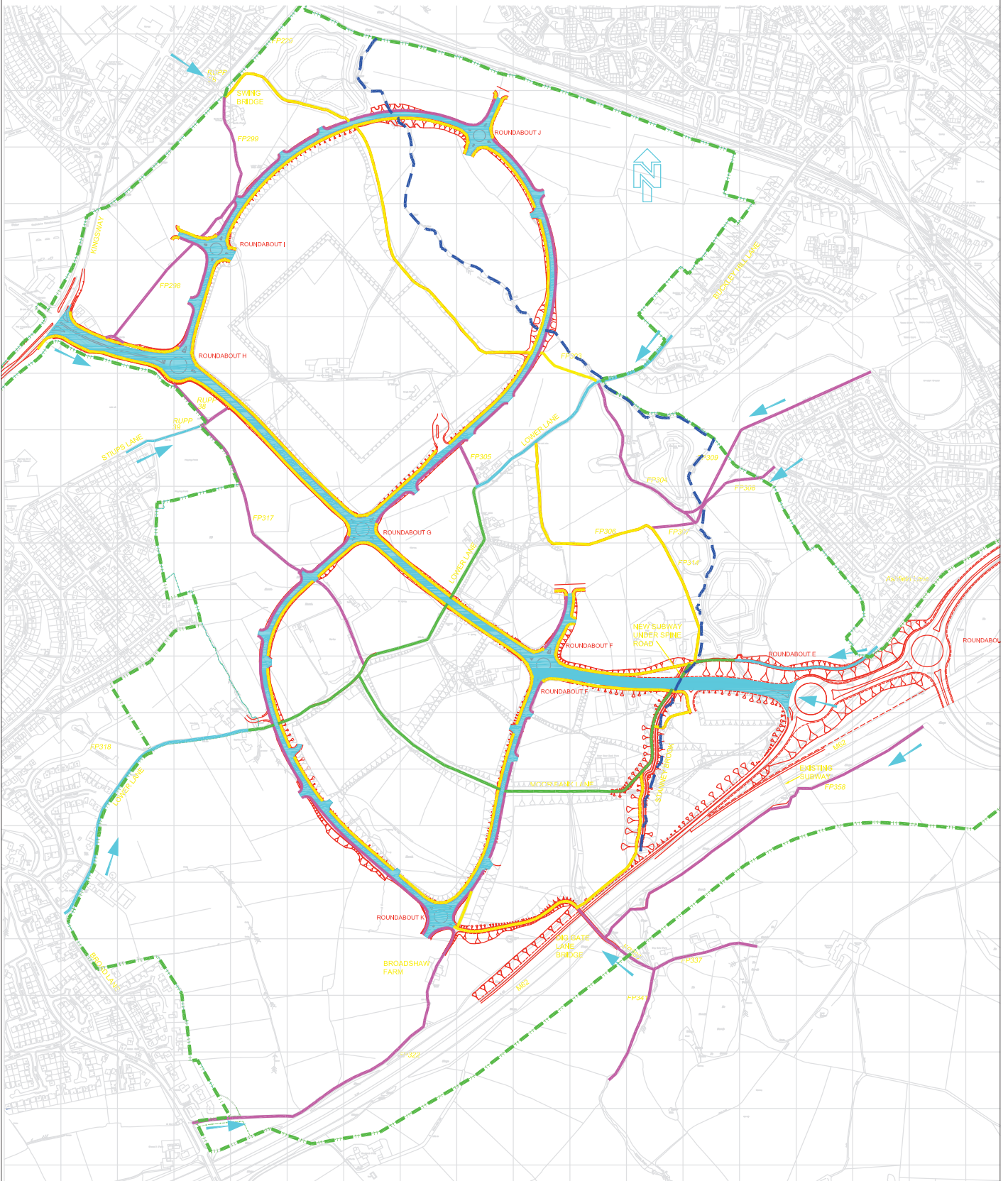
4.4 MARKETING

The success of the Travel Plan depends on how the plan is marketed. It is imperative that all occupants of Kingsway know the benefits of Travel Plans and are aware of the options that are available to them. This will be achieved through: -

- Internal communication with senior management to obtain their support and endorsement.
- Formulating a clear marketing campaign which promotes benefits and cost savings, publicises any successes and targets different groups.
- Focus groups, which inform employees of the Travel Plan, exchanges information, ideas and complaints, and informs employees of the progress, targets and changes.
- Producing publicity material, in various forms such as written media (leaflets, staff induction packs, newsletter, posters), internet and Travel Plan website, bulletin boards, spoken media (groups, meetings, employee inductions) and special events (car-free days, bicycle doctor).

- Branding the Travel Plan with a design and slogan that takes the plan forward.
- Providing and advertising incentives and hosting competitions. Incentives can be linked in with branding, using promotional items, such as umbrellas, t-shirts, pedometers etc.

Figure 1 – Main Circulatory Routes on Completion of the Business Park



KEY:

- FOOTPATH
- ALL PURPOSE ROAD
- BRIDLEWAY
- FOOTWAY/CYCLEWAY

↑ CONNECTION TO EXTERNAL ROW NETWORK

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P2	CONNECTION TO EXTERNAL ROW NETWORK ARROWS ADDED	PEM		28.04.03
Rev	Description	By	Chk	App

Arndale Court
 Headingley
 Leeds
 LS6 2UJ

Tel: 0113 278 7111
 Fax: 0113 278 3487
 e-mail: enquiries@wyg.co.uk



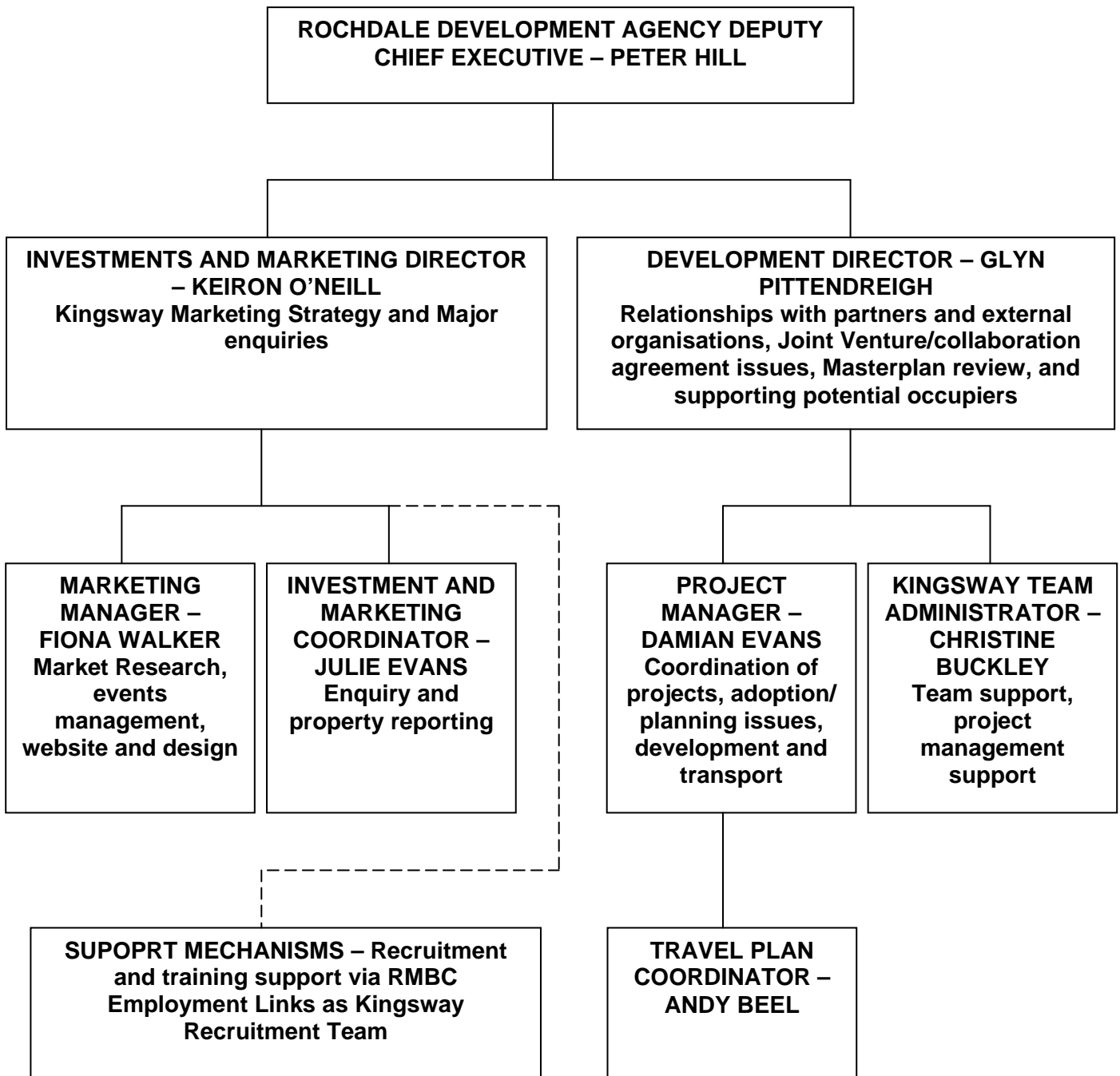
**KINGSWAY BUSINESS PARK
 ROCHDALE**

Consulting Engineers

Civil Structural Mechanical Electrical Process Rail Traffic Environmental Project Management

Drawing Title: POST DEVELOPMENT RIGHTS OF WAY					
Scale at A3 NTS	Drawn By PEM	Date 18.10.02	Checked By AW	Date 25.11.02	Approved By CD
Project No. A007664	Office 21	Type C&S	Drawing No. SK04	Revision P2	
APPROVAL <input type="checkbox"/>	INFORMATION <input checked="" type="checkbox"/>	TENDER <input type="checkbox"/>	CONTRACT <input type="checkbox"/>	CONSTRUCTION <input type="checkbox"/>	

Figure 2 – Kingsway Partnership Delivery Team Organisational Chart



Appendix 1 – Suggested actions to be carried out

REDUCING THE USE OF THE CAR

- a) Find out how employees travel, or intend to travel, to the Business Park
- b) Record the number of car park spaces, collect data on who travels by car, why and from where
- c) Implement a car park management plan, prioritising spaces for employees participating in car-sharing, disabled drivers, those employees who have no alternative but to travel by car, employees who work hours outside the normal working day and short stay spaces
- d) Organise a car-sharing database and match people up who travel from the same area, e.g. by postcode coffee mornings
- e) Distribute car-sharing registration forms (for example with wage slips, in newsletters, during staff meetings, on notice boards)
- f) Organise promotional events to encourage people to use their car less, use alternative modes of transport to work and participate in car sharing
- g) Develop a travel induction pack for all new employees on Kingsway
- h) Organise induction meetings for new staff where the travel plan can be discussed, and personal journey planning can be introduced, encouraged and organised
- i) Promote car-pooling, mopeds, bicycle pooling and electrical bikes
- j) Promote initiatives whereby employees leave their car at home once a week/month
- k) Investigate the costs and feasibility of video-conferencing equipment
- l) Promote the use of tele-conferencing and video-conferencing throughout Kingsway
- m) Discuss reducing the mileage rate for business car journeys
- n) Investigate the feasibility of operating a Kingsway Car Club.

MAXIMISING PUBLIC TRANSPORT USE

- a) Meet with local transport providers and lobby for more services and direct routes
- b) Display targeted timetable information
- c) Promote public transport
- d) Include public transport information in all employees induction packs and in directions sent to people visiting Kingsway
- e) Meet with local community transport providers to investigate potential for community transport
- f) Advertise community transport providers throughout the Business Park
- g) Investigate funding for provision of shuttle buses.
- h) Negotiate for travel discount and/or employee passes with local bus companies and rail operators

ENCOURAGING WALKING AND CYCLING

- a) Develop safe, well-lit, signed and direct pedestrian walking routes within and around Kingsway
- b) Develop safe, signed and direct cycling routes within and around the Business Park
- c) Ensure pedestrian and cycling routes are maintained
- d) Promote walking and cycling for leisure
- e) Promote the health benefits of walking and cycling
- f) Encourage walking to on-site meetings and facilities
- g) Provide access to self-defence classes and personal security alarms in addition to CCTV provision across the site
- h) Organise a walking club for employees walking to work and/or walking at lunchtimes
- i) Establish Bicycle User Groups (BUG) and walking groups
- j) Campaign for cycle-friendly trains and buses
- k) Provide promotional material and promote the Cycle to Work scheme amongst employers.
- l) Arrange and hold events to promote cycling to work e.g. cycle training and one-day bike clinic to promote cycling to work, safety measures and cycling equipment
- m) Introduce a bicycle leasing scheme
- n) Provide cycle and walking mileage expenses

REDUCING THE NEED TO TRAVEL

- a) Promote flexitime and working from home
- b) Collect contact details of occupants operating flexitime and home working
- c) Encourage senior management to promote and endorse flexitime within the workplace
- d) Encourage senior management to promote and endorse working from home for a percentage of employees
- e) Disseminate the benefits of a four-day week/nine-day fortnight
- f) Support occupants who actively want to pursue and encourage working from home
- g) Organise an equipment loaning service whereby occupants can loan equipment to allow employees to work from home

ADDITIONAL ACTIONS

- a) Arrange meetings with senior management to obtain their support for, and endorsement of, the travel plan
- b) Market the travel plan
- c) Run a poster campaign
- d) Set up and maintain a dedicated area on the Kingsway website for the travel plan
- e) Develop branding for the travel plan
- f) Organise quarterly breakfast meeting to encourage uptake of the travel plan
- g) Maintain momentum for the travel plan (actions a-f should help maintain momentum)
- h) Carry out regular travel surveys with employees

Appendix 2 – Support and sources of further information

- **ACT:** Association for Commuter Travel support organisation www.act-uk.com
- **Boost LPG:** Provides information and promotes the benefits of LPG-fuelled vehicles www.boostlpg.co.uk
- **Car-free cities:** Website that offers solutions to problems caused by urban cars and lorries www.carfree.com
- **Commission for Integrated Transport:** UK Government's thinktank on sustainable transport www.cfit.gov.uk
- **Cyclists 1st:** A directory/search engine for all cycling needs www.cycle1st.co.uk
- **Cyclists Touring Club (CTC):** The UK's national cycling organisation www.ctc.org.uk
- **Demand Responsive Transport (DRT):** Site set up to improve public transport. Site is dedicated to raising awareness and exchanging information from demand responsive transport schemes across the world <http://drtbus.co.uk>
- **Department for Transport:** UK Government department www.dft.gov.uk
Provide useful information including good practice guidance on delivering travel plans through the planning system
www.dft.gov.uk/pgr/sustainable/travelplans/tpp/
- **Energy Saving Trust:** Provides advice and grant for cleaner vehicle technology www.est.org.uk
- **Environmental Law Foundation:** Charity set up to give legal assistance to communities with environmental problems www.elflaw.org
- **Greater Manchester Travel Plans:** www.travelplans.org.uk
- **Leeds Cycling Action Group:** Campaigns for cyclists in Leeds, West Yorkshire. Includes useful, accessible information on tax breaks
www.leedscyclists.org.uk/Tax%20breaks.htm#Travelling%20expenses
- **Liftshare:** Car-sharing data base service www.liftshare.com
- **Living Streets:** Campaign to 'win back the streets'. The group represents the interest of walkers' www.livingstreets.org.uk
- **Making Travel Plans Work:** Lessons from UK Case Studies Department for Transport 2002 T:020 7944 3000
- **MyLifts.com:** Car-sharing database www.mylifts.com
- **National Safety Cameras:** Details about road speed cameras www.nationalsafetycameras.co.uk
- **New Life for Main Roads:** Campaign to reduce the impact of traffic and make high streets better for people www.newlifeformainroads.org.uk
- **Pedestrians Association:** www.pedestrians.org.uk

- **Powershift:** www.transportenergy.org.uk Funding for conversion of vehicles to alternative fuels and information on them
- **Smart moves:** Offers transport solutions and support to set up a car club www.smartmoves.co.uk
- **Sustrans:** National Cycle Network www.sustrans.org
- **Transport 2000:** National body concerns with sustainable transport www.transport2000.org.uk
- **Transport Energy:** Government's Best Practice Programme www.transportenergy.org.uk
- **Travel Plan Resources Pack for Employers:** T: 0845 602 1425 www.transportenergy.org.uk/bestpractice
- **TravelWise:** Information on travel initiatives www.travelwise.org.uk
- **Vehicle Certification Agency:** Helps to inform buyers of new cars how they can reduce the impact of their vehicle on the environment and identifies the vehicle excise duty on individual vehicles based on their environmental impact (CO₂ emissions). www.vca.gov.uk
- **World Transport Policy and Practice:** Sustainable transport journal www.eco-logica.co.uk/WTPPhome.html

Appendix 3 – Travel Plan Action Plan

	ACTION POINT	LEAD PERSON / ORGANISATION	DATE
1.	TRAVEL PLAN CO-ORDINATOR		
1.1	Continue to fund and secure Travel Plan Coordinator role in the short term and identify funding opportunities / delivery mechanism for role in medium to long term.	WBD / Kingsway Partnership	Ongoing
2.	OCCUPIER TRAVEL PLANS		
2.1	Engage with new businesses to highlight the required commitment to the Travel Plan process and identify opportunities for sustainable travel and, if required, changes to existing transport services.	TPC	Prior to occupation
2.2	Foster strong links with a representative from each company.	TPC	Prior to occupation
2.3	Work with each occupier to develop their individual Travel Plan.	TPC	Prior to occupation
2.4	Offer and provide personalised travel information to all relocating staff.	TPC	Prior to occupation
3.	PUBLIC TRANSPORT		
3.1	Monitor the need for changes to the scope of the existing Kingsway Link service presented by future business relocations.	TPC	Ongoing and prior to business relocations
3.2	Monitor the need and potential usage of the proposed shuttle bus	TPC	Ongoing and prior to business

	service between the business park and town centre, with a view to introducing such a service in 2012.		relocations
3.3	Liaise with commercial bus service operators regarding provision of new or rerouted bus services through Kingsway, with a view to securing a service along Sir Isaac Newton Way in 2012.	TPC	Ongoing and prior to business relocations
3.4	Identify funding sources to finance the development of a Metrolink stop at Kingsway, to ensure that a stop is provided in advance of the reopening of the Oldham Loop line for Metrolink services in 2012.	WBD / Kingsway Partnership	Ongoing
3.5	Liaise with public transport operators to develop discounted or subsidised ticketing arrangements for Kingsway employees.	TPC / Kingsway Partnership	Ongoing
4.	WALKING AND CYCLING		
4.1	The TPC to continue to promote walking and cycling to relocating businesses, and continue to identify opportunities to enhance facilities and promote these modes of travel.	TPC	Ongoing and prior to business relocations
4.2	TPC to establish Walking Group within Kingsway, developing appropriate marketing, events, and support initiatives.	TPC	Targeted for implementation in 2012
4.3	TPC to establish Bicycle User Group at Kingsway, developing appropriate marketing, events, and support initiatives.	TPC	Targeted for implementation in 2012
4.4	Coordinate installation of remaining cycle counters on new cycle routes as they are completed and opened to the public.	TPC	Ongoing

5.	REDUCING CAR USE		
5.1	Develop car sharing arrangements with each occupier in the short-term, whilst promoting the CarShareGM Greater Manchester car sharing database. In the medium term introduce dedicated Kingsway car sharing database to identify and match potential sharers working at Kingsway.	TPC / Kingsway Partnership	Ongoing, with introduction of dedicated Kingsway scheme by 2012.
5.2	Introduce car club / car hire arrangements at Kingsway.	TPC / Kingsway Partnership	Targeted for implementation in 2012
5.3	Develop priority parking arrangements, flexible working policies, and incentives to encourage car sharing with individual occupants.	TPC	Ongoing
5.4	Provide on-site food, shopping and leisure facilities along with facilities for transport information and tele-conferencing.	WBD / Kingsway Partnership	Potential provision in advance of 2015
6.	MONITORING AND REVIEW		
6.1	Establish a quarterly monitoring system with occupant companies and report results to Council on an annual basis. Monitoring data may include take up of cycle parking spaces, attendance at Travel Plan events, take up of discounted tickets, take up of pedestrian / cycle maps.	TPC / occupiers	Ongoing, reporting on an annual basis
6.2	Carry out annual employee travel surveys to monitor progress against Travel Plan targets and report to RMBC. Occupiers will be expected	TPC / occupiers	Annually

	to collect the internal data as in-kind support.		
6.3	Provide an induction process to all new occupiers to discuss monitoring and data collection requirements.	TPC	Prior to 1 st occupation
6.4	Collate travel survey and monitoring data, and interpret it to include in an annual travel patterns report to be submitted to RMBC	TPC	Annually
6.5	Monitor traffic levels generated by the business park on a six monthly basis using Automatic Traffic Counters installed on loop roads, and report to RMBC and the Highways Agency. Carry out annual traffic counts on the loop road to supplement ATC data and report to RMBC.	TPC	Ongoing
6.6	Monitor usage of cycle routes on a six monthly basis using data from cycle counters installed across the business park.	TPC	Ongoing
6.7	Review the Kingsway Travel Plan and Action Plan on a yearly basis.	TPC	Annually
7.	MARKETING		
7.1	Promote and publicise the benefits and savings of Travel Plans, Travel Plan initiatives and successes, and future activities.	TPC / Marketing Group	Ongoing
7.2	Develop focus groups to inform employees of the Travel Plan, exchange information, ideas and complaints and inform employees of the progress, targets and changes	TPC	Targeted for implementation in 2012
7.3	Provide and advertise incentives for sustainable travel; including competitions to award staff travelling by sustainable modes.	TPC / Occupiers	Ongoing

Appendix 4 – Carbon dioxide emissions baseline methodology calculations

Technical Note

Project: Kingsway Business Park Travel Plan	To: Kingsway Partnership
Subject: Carbon Dioxide Monitoring Targets	From: Andy Beel, Travel Plan Coordinator
Date: 25 November 2010	cc:

1. Introduction

This Technical Note has been prepared to outline the methodology to calculate carbon dioxide emissions from business travel and fleet mileage associated with the operation of the business park. This methodology will be used to help monitor progress against the following target of the Kingsway Business Park Sustainable Travel Plan:

“To minimise carbon dioxide emissions from business travel and fleet mileage associated with the operation of businesses on Kingsway”.

The purpose of this note is to set a baseline for predicted and current carbon dioxide (CO₂) emissions. Following the agreement of the methodology used to calculate this baseline, it is intended that targets for reducing CO₂ emissions will be set as part of the Travel Plan review process.

The Technical Note has been prepared at a time when the business park has four occupants – Takeuchi, Vindon, British Millerrain, and CR Laurence. Takeuchi and Vindon relocated to new units on Plot E of the business park in Summer 2009. British Millerrain occupy a small converted farmhouse and generate few vehicle trips each day. CR Laurence moved to the business park in Summer 2010 but have not yet fully commenced operations from the Kingsway site. As such, the analysis contained within this Technical Note has been undertaken for the operation of the Plot E units occupied by Takeuchi and Vindon.

2. Scope of Monitoring

It is not possible to ascertain exactly where all vehicle journeys to/from Kingsway start or end. Monitoring of this target will only be feasible for journeys between known points. Whilst the majority of staff journey origins are known, it is not known from where deliveries and visitors travel to/from, or how many journeys are made. Therefore monitoring of this target will initially be undertaken for journeys within the business park only. Therefore this Technical Note considers the CO₂ emissions of vehicles travelling from the occupied Plot E units to either Junction 21 of the M62 or the junction of Sir Isaac Newton Way with the A664 Kingsway. Following analysis of home postcodes for Vindon and Takeuchi staff, the current distribution of commuting journeys on Sir Isaac Newton Way is estimated to be 34% to/from the A664 Kingsway junction, and 66% to/from the Motorway junction.

This estimated distribution is used only for the purpose of a comparison between theoretical and estimated carbon dioxide emissions. It should in no way be used to assess actual vehicle flows, and would require further investigation as part of future discussions with the Highways Agency regarding monitoring development traffic flows.

The journey distance from the junction of Sir Isaac Newton Way / John Milne Avenue to Junction 21 and the Kingsway junction is 0.5 and 2 kilometres respectively.

3. Setting the Baseline

A baseline of predicted carbon dioxide emissions from business travel and fleet mileage will be calculated for the business park and the current level of occupancy. Once this baseline has been

established, the relative impact of development at Kingsway in terms of carbon dioxide emissions will be compared against the baseline.

3.1 Predicted Vehicle Generation

The TRICS database has been used to predict traffic volumes generated by operation of a fully developed business park. The TRICS database is an industry standards source of information on the likely traffic generation of a range of development types, based on traffic survey data from a large number of development sites across the UK.

Trip rates and traffic generation have been calculated for the land use types and development areas presented in Table 1. These land use areas are in line with Outline planning consent for the business park. Any future revisions of this methodology should take into account any changes in the proposed land use quantum.

Although further facilities (such as shops and restaurants) will be developed at Kingsway, these are considered to be ancillary to the main employment uses presented in Table 1, and will primarily attract passing traffic en route to/from Rochdale or journeys made on foot during the lunch period. If in the future it can be demonstrated that non-employment related journeys divert into the business park to use these facilities, then the number of vehicle trips and associated carbon dioxide emissions generated by these facilities will need to be reviewed.

Table 1 – Development Land Uses

Area	GFA / dwellings
B1 Office	27,497
B1 and B1/B2	123,295
B8	162,182
Hotel	9,754
Residential	300

Predicted trip generation will be compared against actual traffic volumes using Automatic Traffic Counter (ATC) data. The ATC data differentiates between vehicle types, allowing an assessment of the level of emissions from different vehicle types.

Daily trip rates have been extracted from the TRICS database for the land use types listed in Table 1 both for all vehicle types and Other Goods Vehicles (OGVs). TRICS categorises OGVs as all commercial vehicles with two axles and twin rear wheels, all vehicles with three axles, and all goods vehicles with four or more axles.

85th percentile trip rates have been used due to uncertainty over the appropriateness of the selected survey sites. 85th percentile trip rates represent the level at which 85% of survey sites have lower trip rates. Survey sites in Greater London, Scotland, Wales and Ireland have all been excluded from the trip rate sample. TRICS trip rate analysis output for each land-use type is included in Appendix A, and the resultant trip rates are presented in Table 2.

Table 2 – Daily 85th Percentile Trip Rates for Proposed Land Uses

Land-Use	Calculation Factor	Light Vehicles		OGVs		All Vehicles	
		Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
B1/ B1 Office	100sqm GFA	11.65	9.88	0.15	0.15	11.81	10.04
Industrial	100sqm GFA	3.16	3.90	0.42	0.35	3.58	4.25
Warehouse	100sqm	1.77	2.11	1.09	0.84	2.85	2.95

Land-Use	Calculation Factor	Light Vehicles		OGVs		All Vehicles	
		Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
	GFA						
Hotel	100sqm GFA	4.92	4.44	0.11	0.11	5.04	4.55
Residential	1 dwelling	3.19	3.21	0.06	0.06	3.25	3.27

Table 3 presents the predicted trip generation for plots within the business park, based on the proposed land use areas detailed in Table 1, and the trip rates presented in Table 2.

Table 3 - Forecast Daily Traffic Generation for all Land-Uses

Land-Use	GFA/ dwellings	Light Vehicles		OGVs		All Vehicles	
		Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
B1/ B1 Office	27497	3204	2717	42	42	3246	2759
Industrial	123295	3899	4804	516	436	4415	5240
Warehouse	162182	2863	3416	1766	1366	4629	4782
Hotel	9754	480	433	11	11	976	444
Residential	300	958	963	19	19	491	982
Total		11404	12332	2355	1875	13758	14207

Using the same methodology it has been possible to predict the amount of traffic generated by the currently occupied units on Plot E. Takeuchi and Vindon currently occupy units with a combined GFA of 7,931 sqm. Using the trip rates presented in Table 2, Table 4 presents the predicted volume of traffic generated by the currently occupied Plot E units.

Table 4 – Assumed Daily Vehicle Generation of Plot E Occupied Units

Light Vehicles		OGVs		All Vehicles	
Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
251	309	33	28	284	337

3.2 Baseline Carbon Dioxide Emissions

Factors for CO₂ emissions from average vehicle types have been sourced from the 2010 Guidelines to DEFRA's Greenhouse Gas Conversion Factors. CO₂ emissions factors for an average petrol car and a rigid Heavy Goods Vehicle (HGV) are presented in Table 5. These vehicle types have been taken as a proxy for the Light Vehicles and OGV classifications used in TRICS.

Table 5 – CO₂ Emissions Factors for Selected Vehicle Types

DEFRA Vehicle Type	Kg CO ₂ per vehicle km
Average petrol car	0.211
Rigid HGV (7.5 – 17 tonne), 41% weight laden (UK average load)	0.750

To calculate the baseline of carbon dioxide emissions for the business park as a whole, and for the currently occupied Plot E units, the predicted number of vehicles trips has been factored to

account for the assumed 66%/34% distribution to/from J21 and the A664 Kingsway junction. The distance to each junction, and the CO₂ emissions factors have then been applied to the resultant number of vehicle trips.

Table 6 presents the resultant kilogrammes (kg) of carbon dioxide that would be emitted on a daily basis should the predicted levels of traffic arriving and departing the business park materialise.

Table 6 – Predicted Daily Carbon Dioxide Emissions (kg)

	To/From Junction 21			To/From A664 Kingsway		
	Arrivals	Departures	Total	Arrivals	Departures	Totals
All Land-Uses	1,376	1,321	2,697	2,835	2,723	5,558
Plot E Occupied Units	26	28	54	53	59	111

4. Calculating Current Carbon Dioxide Emissions

It is anticipated that carbon dioxide emissions from business travel and fleet mileage associated with the business park will be monitored annually as part of the review of the Kingsway Travel Plan. As previously described, this monitoring currently focuses on journeys within the business park only, i.e. between the occupied units, Junction 21 and the Sir Isaac Newton Way / Kingsway junction. A worked example for calculating current daily carbon dioxide emissions is provided in the following sections using data from the Automatic Traffic Counters currently installed at the site.

4.1 Actual Vehicle Generation

Currently, an Automatic Traffic Counter records daily traffic volumes on John Milne Avenue. Although the traffic counters record a larger number of vehicle types than the TRICS survey data, the traffic counter data has been grouped according to the Light Vehicles / OGV TRICS data vehicle split. Data from this counter for August to September 2010 has been reviewed to provide weekday average daily flows on John Milne Avenue, as presented in Table 7.

Table 7 – Average Weekday Daily Traffic Flows on John Milne Avenue August – September 2010

Light Vehicles		OGVs		All Vehicles	
Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
177	180	21	24	198	204

4.2 Calculated Carbon Dioxide Emissions

The same process to calculate carbon dioxide emissions previously undertaken for the baseline has been repeated using the actual traffic generation reported in Table 7. The resultant actual weekday carbon dioxide emissions for vehicles travelling between the occupied Plot E units and either Junction 21 or the A664 Kingsway junction is presented in Table 8.

Table 8 – Calculated Carbon Dioxide Emissions for Current Development (kg)

To/From Junction 21			To/From A664 Kingsway		
Arrivals	Departures	Total	Arrivals	Departures	Totals
18	18	36	36	38	74

4.3 Comparison of Baseline and Actual Carbon Dioxide Emissions

Table 9 presents a direct comparison of predicted and actual carbon dioxide emissions for the currently occupied Plot E units.

Table 9 – Comparison of Baseline and Calculated Carbon Dioxide Emissions (kg)

Traffic Volume	Arrivals	Departures	Total
Predicted	79	87	166
Actual	54	56	110

Table 9 shows that operation of the two occupied units on Plot E currently results in a lower level of carbon dioxide emissions than would be expected on the basis of the TRICS trip rate information for similar land uses.

This process will be repeated on an annual basis as part of the Travel Plan review and update, and the results of the assessment reported in the updated Travel Plan document.

Appendix 5 – List of consultations

WORKSHOP SPEAKERS

- Prof. John Whitelegg, Stockholm Environment Institute, University of York
- Ade Collins, Greater Manchester Travel Co-ordinator
- Clair Visco, Project Manager, Sustainability Northwest
- Dr Emma Gardner, Project Co-ordinator, Sustainability Northwest
- Abi Turner, Green Commuting Co-ordinator, AstraZeneca
- John Smith, Transport Planner, Merseyside Travelwise
- Dr Stephen Finnigan, CATCH Information Officer
- John Porter, Managing Director, Interactions Ltd

WORKSHOP ATTENDEES

- Paul Hayes, AstraZeneca
- Bryan Marshall, Business Link North Manchester
- Bernard Richards, Business Link
- Councillor Brian Davies, Rochdale MBC
- Sarah Farmer, Faber Maunsell
- Richard Clowes, GMPTE
- Nicola Lace, Groundwork Oldham & Rochdale
- Rob Green, NWDA
- Richard Hobbs, NWDA
- Paula Rowson, Oldham MBC
- John Goss, Rochdale Development Agency
- Dan Griffiths, Rochdale MBC
- Howard Gott, Rochdale MBC
- Abdul Hamied, Rochdale MBC
- Sarah Roberts, Sustainability Northwest
- Alan Wanless, White Young & Green
- Ken Bramham, White Young & Green
- David Ward, Wilson Bowden Development Ltd
- Nikki Haywood, Wilson Bowden Development Ltd

EVENTS

- Rochdale Job Fair, Rochdale Town Hall, 9th September 2004
- Rochdale Business Leadership Team Meeting, Rochdale Town Hall, 9th September 2004
- Heywood Job Fair, Heywood Civic Centre, 14th September 2004
- Rochdale Community Borough Conference, Heywood Community High School, 18th September 2004
- Getting About in Rochdale, Rochdale Town Hall, 20th September 2004
- Health & Safety Essentials, Rochdale Town Hall, 23rd September 2004

BUSINESSES CONSULTED

- British Vita Group Ltd, Lower Lane, Milnrow, Rochdale, OL16 4NP
- Zen Internet Ltd, Moss Bridge Road, Rochdale, OL16 5EA
- Nightingale Associates, Unit 2, Blueberry Business Park, Kingsway, Rochdale, OL16 5DB
- Plus 12 companies from the following attendees at Groundwork Oldham & Rochdale's Health & Safety Essentials, Rochdale Town Hall, 23rd September 2004:
 - Ace Centre North
 - Archmoor Care Homes

- Armacell
- Ashiana Housing Association
- Burnside Community Centre
- Celltek
- Chelburn Precision Ltd
- Christopher Dunphy Ecclesiastical Ltd
- Cleland McIver
- Cost Reduction Consultancy
- Custom Composites Ltd
- Denehurst Park Ltd
- Dennis Hughes Metals
- Design 1 to 1
- Eaton Electric
- Environmental Evaluation
- Eurofans UK Ltd
- Federal Mogul Sealant Systems
- FKI Logitex
- Fothergill Engineering Fabrics
- Gemlar Decoration
- Hanson Springs
- HPP Ltd
- Industrial and Professional Supplies
- J Cooney Ltd
- Jackson Rich
- John Hall School Wear Ltd
- Kabel Electro Ltd
- Kingston UPVC
- Lees Newsome Ltd
- Manns Furnishers Ltd
- Moorside Metal Products
- Morris Dean Ltd
- Nortones Ltd
- Northern stage Services
- Oldham Community Leisure
- Peopleprint
- Shaw Trust
- Springfield Park
- Talukdar & Co.
- TBA Textiles
- Toontastic Publishers
- Wheeldon Bros. Waste