



---

**DISCUSSION PAPER ON**

**BEST PRACTICE IN FACILITATING AND PROMOTING ACTIVE TRAVEL**

---

## TABLE OF CONTENTS

---

	<b>Page/s</b>
<b>1. Introduction</b>	<b>3</b>
<b>2. Summary</b>	<b>3</b>
<b>3. Best Practice Examples</b>	
• <b>Groningen (The Netherlands)</b>	<b>4</b>
• <b>Freiburg and Vauban (Germany)</b>	<b>5-7</b>
• <b>Copenhagen</b>	<b>8-10</b>
• <b>Portland, US</b>	<b>11-13</b>
• <b>Bogota, Columbia</b>	<b>14-18</b>
• <b>Paris</b>	<b>19-21</b>
• <b>Dublin</b>	<b>22-23</b>
• <b>London</b>	<b>24-26</b>
• <b>England's Sustainable Travel Towns</b>	<b>27-28</b>
• <b>Northern Ireland – Rural Safe Routes to Schools</b>	<b>29-31</b>
• <b>Interventions to encourage walking</b>	<b>31</b>
<b>4. Conclusion</b>	<b>32</b>
<b>Figure 1: Kilometres walked per person per year</b>	<b>10</b>
<b>Figure 2: Map of London Cycle Hire Schemes</b>	<b>25</b>
<b>Figure 3: Changes in the number of trips by Residents between 2004 and 2008</b>	<b>28</b>

## **1. Introduction**

The objective of this discussion paper is to present a synopsis of current Best Practice in promoting and facilitating Active Travel.

## **2. Summary**

“Policies and strategies at all levels advocate walking and cycling but motor transport still takes priority in the big decisions and in the allocation of investment. As a consequence the UK lags badly behind many European countries in levels of active travel. To return walking and cycling to levels that can contribute to a healthy society, changes are needed in policy and practice.”<sup>1</sup>

A number of papers exist summarising the success of The Netherlands, Denmark and Germany in promoting active travel, especially cycling. Pucher et al Making Cycling Irresistible: Lessons from The Netherlands, Denmark and Germany, 2008;<sup>2</sup> Buehler et al Sustainable Transport that Works: Lessons from Germany, 2009;<sup>3</sup> Atkins, European Best Practice Report, 2006;<sup>4</sup> Jacobs Consultancy, European Best Practice Report, Final Report December 2006.<sup>5</sup> Some of these successes are discussed in more detail in the next section.

### **3. Best Practice examples**

#### **3.1.0 Groningen (The Netherlands) - for cycling <sup>6</sup>**

3.1.1 In the Netherlands bicycle policy is the responsibility of the municipalities with funding supplied by national government and external sources. The city of Groningen is a compact city with limited space and is the top-ranking amongst Dutch cities in terms of cycling use with an estimated 40% of trips.

3.1.2 Spatial planning here has focussed on creating a compact city allowing many activities to be easily accessed by bicycle. This has created a city where 78% of the inhabitants live and 90% of all jobs are located within a radius of 3 Km from the city centre. Almost all major buildings are within a 5 Km radius of the city centre. Through the planning system the municipal authorities have, over time, created a low-scale inner city as a central point for a mixture of residential, retail and employment activities.

3.1.3 In addition, the municipality has integrated its cycling policy as part of a broader approach to traffic and transport policy which has designated a user hierarchy in favour of pedestrians, cyclists and public transport. Since 1977 a traffic circulation plan has divided the inner city into four sectors. It is not possible to travel between these sectors by car but it is possible by bicycle and bus. Passing car traffic is kept outside the inner city and motorists whose destinations are in the inner city are led via the shortest route to parking areas close to the centre. <sup>6</sup>

### **3.2.0 Freiburg and Vauban (Germany) - for cycling and public transport**

3.2.1 Freiburg is in southwestern Germany, is often referred to as the environmental capital of Germany and is widely considered its most sustainable city. In the late 1960's and early 1970's transport and land use policies here began a dramatic shift away from the car. Freiburg's first intermodal transport plan, 1972, emphasised the importance of walking, cycling and public transport for the overall transport system. The 1979 update explicitly called for favouring those "green modes" over the car. The 1989 transport plan went one step further by endorsing the overall reduction of car use by restricting car use in the city centre and all residential neighbourhoods. As such, land use policies shifted accordingly. Its 2008 land use plan reiterates its earlier goals of reducing car use, but is more explicit about prohibiting car dependent developments and even supports car-free neighbourhoods. The plan focuses on high-density development along light rail routes, strengthening local neighbourhood commercial and service centres and mixing housing with stores, restaurants, offices, schools and non-residential land use uses. Central development is explicitly favoured over peripheral development on the suburban fringe. All future development is based on the principle of shortening trip distances to make them more walkable and bikeable, thus ensuring local accessibility to all necessities of life. Freiburg has a population between 200,000 – 260,000 people. 65% of its residents and 70% of all jobs are within 300m of a light rail line (Stadtbahn), which is an easy walking distance. With further expansions planned the city's goal is to raise those percentages to 83% of residents and 89% of jobs being within 300m of a light rail line.

3.2.2 There are two recent examples of the complete coordination of transport with land use in Freiburg – Rieselfeld and Vauban. These are residential developments built from 1993 to 2009 around newly extended light rail lines. All residential streets are traffic calmed at 30 km/hr or less. Many streets are designated as home zones (177 streets in 2008), with speed limits set at 7km/hr and traffic priority for pedestrians, cyclists and playing

children. Both communities feature high density and the mixing of residential, commercial, educational, religious and recreational land uses. They provide a wide range of housing types for low-income as well as affluent households and specifically favour inclusion of women, families, the elderly and persons with disabilities. In Vauban cars are banned from residential streets altogether and parking facilities are restricted to the periphery of the community.

3.2.3 The complete turnaround of Freiburg's transport policies resulted in dramatic improvements for public transport, cycling and walking whilst making the car use more expensive, slower and less convenient. Although Freiburg seeks to promote both cycling and walking, most of its efforts have focused on cycling.

3.2.4 Some successes:

- Total number of bike trips rose from 69,500 in 1976 to 211,000 in 2007
- From 1982 to 2007 the bike share of trips increased from 11% to 28%
- Network of separate bike paths and lanes expanded from 29km in 1972 to 160km in 2007
- In addition, the cycling network includes 120km of bike paths through forests and agricultural areas, 400km of traffic calmed roads and 2km of cycling streets where cyclists have absolute traffic priority. Therefore, in total there were 682km of bike routes in 2007.
- About half of the 120 one-way streets in Freiburg are "falsche Einbahnstrassen" where cyclists can ride in either direction whilst motorists are restricted to one.
- Between 1987 and 2009 the number of bike parking spaces almost tripled from 2200 to 6040
- There are 1,678 bike parking spots at public transport bike and ride facilities, including 821 sheltered bike racks and 23 secure bike lockers.<sup>6</sup>

3.2.5 Freiburg associates these sustainable city success factors to the following:<sup>7</sup>

1. Vision of integral sustainable development
2. Consensus on sustainability across all political parties
3. Network of different stakeholders
4. Participation of citizens
5. Citizens' commitment

### 3.3 Copenhagen – cycling and walking

Copenhagen: then and now

From car invasion...



...to people places



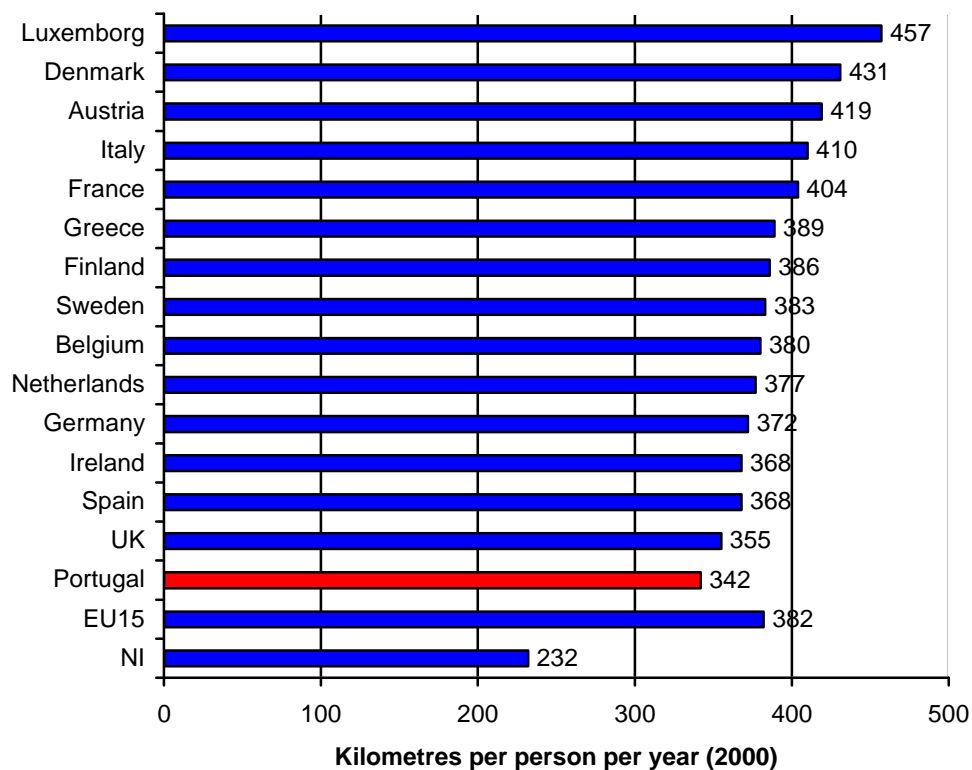
Source: Active travel inquiry Joint evidence paper to TICC Committee inquiry



- 3.3.1 In Denmark's capital city, Copenhagen, 36 percent of people going to work or school on an average day are on a bicycle, and by 2015 they aim to increase this to 50%, according to government statistics. The Danish metropolis has more than 180 miles of bike paths and lanes, traffic signals specifically for cyclists, and bicycle parking when you roll into downtown.
- 3.3.2 "Despite a dramatic growth in the use of bicycles during the last 10 years, the number of accidents has substantially decreased. Copenhagen provides a safe, secure and efficient cycling environment for its citizens".<sup>9</sup>
- 3.3.3 The main cycle network is made up of segregated cycle paths separated from the carriageway by a physical barrier or grade-separation. These have been used in preference to cycle lanes because it is thought to create a feeling of greater safety for cycle users. Plans are to build a further 51km of cycle tracks by 2015.
- Current cycling policy in Copenhagen advocates maintenance and cleaning of infrastructure to improve the comfort of cycle journeys. Copenhagen has increased investment in infrastructure and facilities: over the last two budget periods DKK 110m (£13m) has been committed to improve the network and parking facilities.
- 3.3.4 Data on cycling has been collected since 1995 and has been used to create the Bicycle Account report. This report contains metrics on the state of the network, the use of the network and attitudinal data about reasons for and barriers to cycling. Feedback from this report has identified the need for improved cycle parking at railway stations.
- 3.3.5 **Walking:** - Copenhagen introduced its first pedestrianisation scheme in 1962 and since then has pioneered city space improvements. To do this they have employed a range of measures to develop an urban realm that is supportive of walking. These include:-
- The introduction of car free zones and the development of public spaces, such as public squares and urban strollways.

- The redesign of older areas to facilitate increased use, including a programme of courtyard renewal.
- The reallocation of parking areas to cycle lanes, wider pavements and pedestrian space. The total number of parking spaces in the inner city decreased by 12% from 1995 to 2005 despite a significant increase in car ownership. (11% from 1999 to 2004)

Figure 1 below shows that Denmark has the second highest levels of walking of all EU 15 countries whilst the UK has the second lowest and NI has the lowest.



Kilometres walked per person per year (2000)

Source: EU Energy & Transport in Figures, 2003 (data for 2000), Eurostat

### 3.4 Portland, US – Cycling<sup>6</sup>

3.4.1 Portland has made significant progress in increasing the modal share for cycling by investing in radial and neighbourhood networks, commuter facilities and promotion.

3.4.2 The initial focus in Portland was on the provision of well connected infrastructure. In 1982, the city identified 22 bicycle corridors based on census data and travel use patterns and began an implementation process for improvements along these corridors in an attempt to target commuting journeys to the city centre. The process proved time consuming and difficult, so in 1988 the Bicycle Program moved towards a more flexible process to make improvements on a district by district basis. This approach produced additional neighbourhood networks to complement the existing corridor routes.

3.4.3 In 1991, the Bicycle Program added 900 sidewalk bicycle racks to bring the city total to 1400 racks. The Program also manages 156 bicycle lockers and is developing, in conjunction with health clubs, combined parking, locker and shower facilities for 475 central city commuters.

3.4.4 By 1996 the cycling modal share for commuting was 4.4% compared to a US average of 0.5%. A new Bicycle Master Plan was created in 1996 which sets the vision, ambition and objectives for cycling over five, ten and twenty year periods. Portland has set a target so that by 2010 cycling will represent a 10% modal share at a city wide level and a 15% modal share at the inner city scale. This is to be delivered by a combination of capital and revenue based activities including the provision of the following:-

- 630 mile integrated cycle network (radial and neighbourhood)
- 8,600 short-term and 23,134 long-term spaces
- Showering facilities for any cycling commuters needing them
- Several annual city-wide events
- Commitment to provide cycle training to 90%of school children

Craig Bower states that “Portland is the first large American city to plan for a committed bike-focused infrastructure. The city of 500,000 has

begun a “Green Box” pilot program within nine intersections, creating a road map that directs cars away from bike lanes and traditional areas of bike congestion”.<sup>10</sup>

According to Stephan Shier, owner of Seattle’s [Dutch Bike Company](#) “Portland is at least ten years ahead of all other large American cities,” The City of Roses has also become the hub of American bike manufacturing, generating \$68 million in revenue last year.

“Portland was a streetcar city,” says Tom Miller, chief of staff for Portland City. Councilman (and mayoral candidate) Sam Adams said “We still have the footprint of the dense, walkable and thus bikeable city.” Adams leads the city’s advocacy for cycling and, not coincidentally, is leading the polls for mayor. “You can’t win an election here without the support of the bicycle community,” adds Miller.

“Portlanders maintain a definite focus on bicycle advocacy, whether for locals or visitors” Miller continues. “Many hotels offer free bikes for guests, the city is changing one-car parking spaces to bike corrals that accommodate twelve bikes, and there are plenty of great tours like the 18- to 40-mile Sauvy Island tour or the Waterfront Tour, one of the great urban greenways ... You can even ride along trails all the way from the airport to downtown, 12 miles away.”

In 2002 Portland launched “SmartTrips” at an initial investment of \$550,000 per target area, which is approximately 20,000 households. SmartTrips is an awareness campaign and communication effort to inform Portland’s citizens of the various modes of transportation available. The program is based on the assumption that people will change their travel behaviour if provided with information about the full range of transportation options. SmartTrips identifies individuals who are interested in changing the way they travel by sending each household a SmartTrips order form, allowing residents to order different transportation options. Those who do so receive customized packets delivered by bicycle that include free transportation options information and incentives.

It is a comprehensive approach to reduce drive-alone trips and increase biking, walking and public transit in targeted geographic areas of the city. It incorporates the innovative and highly effective “individualized marketing” methodology, which hand delivers packets of information to residents who wish to learn more about public transportation. Key components feature biking and walking maps and organized activities which get people out in their neighbourhoods or places of employment to shop, work, and discover how many trips they can easily, conveniently, and safely make without using a car. Success is tracked by evaluating qualitative and quantitative results from surveys and other performance measures. <sup>11</sup>

### **3.5 Bogota, Columbia – bus network <sup>12</sup> and cycling <sup>13</sup>**

3.5.1 Bogota is the capital city of Columbia, with an estimated population of 7,304,384 inhabitants as of 2009. In terms of land area it is the largest city in Columbia, one of the biggest Latin America, figures in the 30<sup>th</sup> largest cities in the world and its altitude of 2,640 metres makes it the third highest capital city in the world. It has 20 districts which form an extensive network of neighbourhoods.

3.5.2 Bogota's growth has placed a strain on its roads and highways, but within the past decade significant efforts to upgrade the infrastructure have been undertaken.

3.5.3 The District Mayor and District Council, both elected by popular vote, are responsible for city administration. Between 1998 and 2000 the Mayor was Enrique Penalosa Londono and he had 4 goals in mind to deal with traffic issues:

- Improve the public transport system
- Restrict private automobile use
- Expand and improve bicycle paths
- Enhance public space

To do this he created a team, separate and external to his own administration, to oversee the implementation of a new transport system called the Transmilenio.

3.5.4 The Municipality created the company Transmilenio S.A. to plan, organize, and construct the transportation infrastructure, as well as to supervise the bus service. The Transmilenio is a rapid bus transit system that operates throughout the city of Bogotá, and consists of 850 buses and has a demand of 1,400,000 passengers per day. It was financed by a combination of national and local resources. The national government of Colombia allocated 70% of funds while the municipal

government of Bogotá allocated the remaining 30%. The city of Bogotá paid for their 30% in three different ways:

1. Resources taken from privatizing Energia de Bogotá (Bogotá Energy)
2. A World Bank loan
3. Obtained resources through the United Nations Development Program (UNDP)

3.5.5 The Transmilenio has attained a very high productivity level averaging 1,600 passengers per day per bus, reducing travelling time by 32%, eliminating 2,109 public-service vehicles, reducing gas emissions by 40%, and making zones around the trunk roads safer thus decreasing accident rates by 90% throughout the system.

3.5.6 The Bus Network Infrastructure is as follows:

- The System operates 18 hours every day.
- Dedicated lanes, large capacity buses and elevated bus stations that allow pre-board ticketing and fast boarding.
- Smaller units offering feeder services to main stations are integrated into the system.
- A centralized coordinated fleet control providing monitoring and communications to schedule services and real-time response to contingencies.

3.5.7 Currently, Transmilenio has completed both Phase I and Phase II and has a total of 84.4 kilometres. Phase III will be implemented gradually. By 2012 it is expected that Transmilenio will consist of:

- 3 new trunk routes: 130 km of new dedicated lanes including new bus-stations.
- Around 1200 new articulated buses with a capacity of 160 passengers, operating on trunk routes and 500 new large buses operating on feeder lines.
- Daily 1.8 million passengers transported.

## **Bogotá – Cycling** <sup>13</sup>

3.5.8 Bogotá's CicloRuta is one of the most extensive bicycle path networks in the world. It covers over 211 miles (340 km) and connects citizens to major BRT routes, parks, and community centres. The system is a best practice, not only because it has reduced car dependence and associated emissions, but it has also fundamentally changed behaviour in the city – in 2007 4% of the population use their bikes, an increase from 0.2% in 2000. The system is both unique and successful because its design took into consideration the topography of the city – the manmade and natural features, such as essential facilities, hills, waterways, and parklands – to create the best possible flow and function.

3.5.9 After a few examples of built lines between 1996 and 1997 (a few km during the Antanas Mockus administration), a formal plan was structured and extensively implemented all around the city by Mayor Enrique Peñalosa who has a personal commitment to a healthy, car-free city. He proposed that urban planners "make sidewalks as wide as you value your citizens".

3.5.10 The CircloRuta facilitates 213,000 trips (2005) a day although at present it might be helping to produce 320,000 trips (4% of the more than 8 million trips made in Bogota), and accounts for 83,000 people (1.2% of the whole population). When the project began about 0.2% of the trips were made by bike.

3.5.11 The system is divided into three sections:

1. The Main Network: connects the key city centres – its main educational and work areas - with the most populated residential areas. It also connects with the secondary network.



2. Secondary Network: connects housing areas, parks and facilities and attractions with the main network. These paths are mostly designed to serve as feeders to TransMilenio. All main head and stations of TransMilenio have guarded bike parking facilities.
3. Complementary Network: this links recreational networks, and external routes to the system. These paths are located along the river banks which in turn are part of the system of Linear Parks of the City; some are surrounding wetlands too.

#### 3.5.12 Since the beginning of the construction of the CicloRuta in 2000:

1. Bicycle use has increased from 0.2% in 2000 to 4% in 2007 of the total trips in the City.
2. This means up to 320,000 trips made daily within Bogotá
3. The use of bikes in CicloRutas has increased from 22,700 to 83,500 bikers, meaning a 268% increase in 7 years or 38% per year.
4. CicloRutas play an important role for the poor people of the City. As in the following graphic can be seen, more than 23% of the trips made by the lowest income group in the city are pedestrian and by bikes. As the income level rises, there are less people walking or biking.
5. Air quality improvement is helped with the use of CicloRutas when people leave the car at home. It was calculated for Bogota a reduction in GHG of 36.6 thousand tones of CO<sub>2</sub>e.
6. Safety in transportation is one of the issues the bikers mention in the surveys. Now they can move with reduced accident risk since the paths are away from cars, but for the intersections where most attention ought to be put. In Bogotá there has been a 335 decrease in deaths relating to bikes (from 115 in year 2001 to 77 in year 2004); this has occurred despite the large increase in CicloRutas trips. In addition, injuries reduced 8.8% (2,754 in 2001 to 2,512 in 2004) despite a 38% increase in bike use.
7. Speed is often an interesting benefit: bikes mean speed is 17 km/h, while public non massive transport runs at 13 km/h.

8. CicloRutas also helped to recover public space, along riverbanks, and wetlands - the city's 13 wetlands were occupied for years by illegal constructors, after construction of the CicloRutas development stopped in this precious natural environment.
9. The annual savings for each person is \$480.
10. 340km of the CicloRuta network was built by the City Administration with its public investment budget. The city has spent US\$250,000 in studies and initial designs and US\$50 million in construction.
11. The direct investment cost per km built is nearly US\$ 147,000.

3.5.13 Bogotá has stated that there are several requirements for the CicloRutas to be considered as a successful transportation option:

- political will
- independent paths from car lanes
- origin-destination linked (people, especially low income groups, should find the CicloRutas useful to go to school, universities, to work;
- connection with other transportation modes;
- bike parking facilities in private and public premises especially in transportation mode exchange places (if parking facilities are not available using the bike becomes a major problem getting in to any office or building, or changing transportation mode);
- rules for cyclists, pedestrians and car owners;
- good intersections and signals;
- bridges to keep continuity and to cross wide avenues; and
- Many businesses will grow along with CicloRutes: bike parking services, bikes and spare parts shops and production, clothing, etc

### 3.6 Paris, France - cycling

3.6.1 On 15 July 2007, Paris launched Vélib, a 24/7 cycle hire scheme that is changing the face of transport in Paris. Currently the system manages some 20,000 cycles and 1451 stations around the city. In the first three months of operation there were 100,000 users daily, travelling 300,000 km, this translates to a 32,330 tCO<sub>2</sub> reduction of emissions annually. Importantly, Vélib is a viable economic story; the City of Paris will generate €34 million over the first 10 years of the project without investing a single cent. In exchange, the company which invested €80 million upfront will pay operating costs plus €3.4 million annually to Paris for rights to advertising space. Paris will also collect all user fares, expected to total around €30 million per year. SOMUPI expect to generate around €60 million per year in advertising revenues from Vélib.

14

3.6.2 Vélib is a public private partnership between the city of Paris and SOMUPI, a company lead by the advertising group JC Decaux. The company provides a cycle hire service that is integrated into the city's public transport plans and offers low-cost cycle hire at hundreds of locations across the city, encouraging uptake of cycling. In return for managing the construction and operation of the scheme, SOMUPI generates revenues through advertising on the bicycles, or at the different stations around the city

3.6.3 At the scheme's inception, 10,648 cycles were positioned in 750 stations around the city, with each station no more than 300 metres apart, with increased density of stations around major public transport nodes. This enables citizens to easily switch between the different forms of public transport in the city. It is anticipated that each bike will be used 10-15 times per day.

- 3.6.4 An extra municipal commission made up of key stakeholders, such as user groups, informs the municipality about the needs of cyclists. This group has been influential in the establishment of Vélib and other initiatives.
- 3.6.5 Careful planning has quite literally paved the way for the adoption of Vélib. As recently as 1997, there were 110 km of cycle paths in Paris. Over the next decade, Paris systematically expanded the cycle network, creating an infrastructure for mass pedal-powered transit. In 2006, 43.6 km of new cycle paths were constructed, meaning Paris offered a total of 371 km of cycle paths by day 1 of Vélib. They claim to have 400km now and hope to have 600km by 2013. <sup>15</sup>
- 3.6.6 Speed restriction zones, protected bus lanes and contra flow systems, together with the expanded cycle infrastructure, have contributed towards a steady rise in cycling in recent years. Innovative schemes made cycling a more prominent feature of city life - from 1998-2006, 150,000 bicycle hires were made in Paris through the “Roué Libre” convention, a guided bike scheme organized by the City and local transport authority.
- 3.6.7 Between 2001 and 2007, bicycle use in Paris rose by 48%. Vélib aims to accelerate this rise by providing low-cost affordable bike hires to the 2.15 million residents of Paris and the 27 million tourists that visit the city each year. From March 2007, construction began on Vélib stations, with around 125 completed each week up to the scheme’s launch in July.
- 3.6.8 Paris has however had some problems with the Velib - In the first year of operation at least 3,000 bicycles were stolen, many more than had been initially estimated. Some have been stolen and taken to Eastern Europe and Africa. As of August 2009, of 20,600 bikes initially, about 16,000 bikes have been replaced due to vandalism, including 8,000 stolen and 100 pulled from the Seine River. Officials of JCDecaux have admitted that they initially underestimated the degree of vandalism and theft.

3.6.9 In addition to the development of infrastructure for Vélib, Paris has also undertaken a high-profile awareness-raising campaign to promote Vélib and cycling. Demonstration points have been stationed near the town halls of each arrondissement and road safety campaigns have been carried out.

### 3.7 Dublin – cycling <sup>16</sup>

3.7.1 The bike scheme was announced by Dublin City Council in 2006 when JC Decaux received 72 free advertising spaces around Dublin in a 15-year deal in return for the advertising company's funding of the project. Critics argued that the deal was an expensive one when compared to Copenhagen where companies pay to have their logos attached to the bicycle.

3.7.2 Dublin City Council launched the city bike scheme in September 2009 in order to alleviate high levels of traffic congestion and to improve the general functionality and amenities of the city.

3.7.3 Although the scheme is under the control of Dublin City Council, it is managed and maintained by J C Decaux. The scheme is operating at no charge to Dublin, as the costs are met by J C Decaux in exchange for the advertising space.

3.7.4 Dublinbikes is a self-service bike rental system open to everyone from 14 years of age. With 40 stations and 450 db's (bikes), it enables you to travel through the city centre, commute between home and work and get out and about to enjoy Dublin city at your leisure.

The 40 dublinbikes stations are distributed in close proximity to each other in Dublin city centre, so you are never far away from renting or returning a db. All stations are equipped for Long Term Hire Card and 3 Day Ticket users. 14 of the 40 terminals allow you to purchase a 3 Day Ticket. Once purchased, you can use the 3 Day Ticket similar to the Long Term Hire Card to rent or return a db from any station in the network.

You can enjoy the many benefits of a Long Term Hire Card for just €10. A 3 Day Ticket costs €2. The first 30 minutes of use is free on every db.<sup>17</sup>

3.7.5 It has been very successful and in the first ten months of the scheme, it was reported that there were over 37,000 users, over 828,000 journeys, no accidents, no vandalism, and only one bike missing.

3.7.6 Dublinbikes is proving to be one of the most successful of its kind in the world and work on the first phase of expansion has already begun with 100 new bikes, 4 new stations and 400 new bike stands being added.<sup>18</sup>

### **3.8 London – cycling**

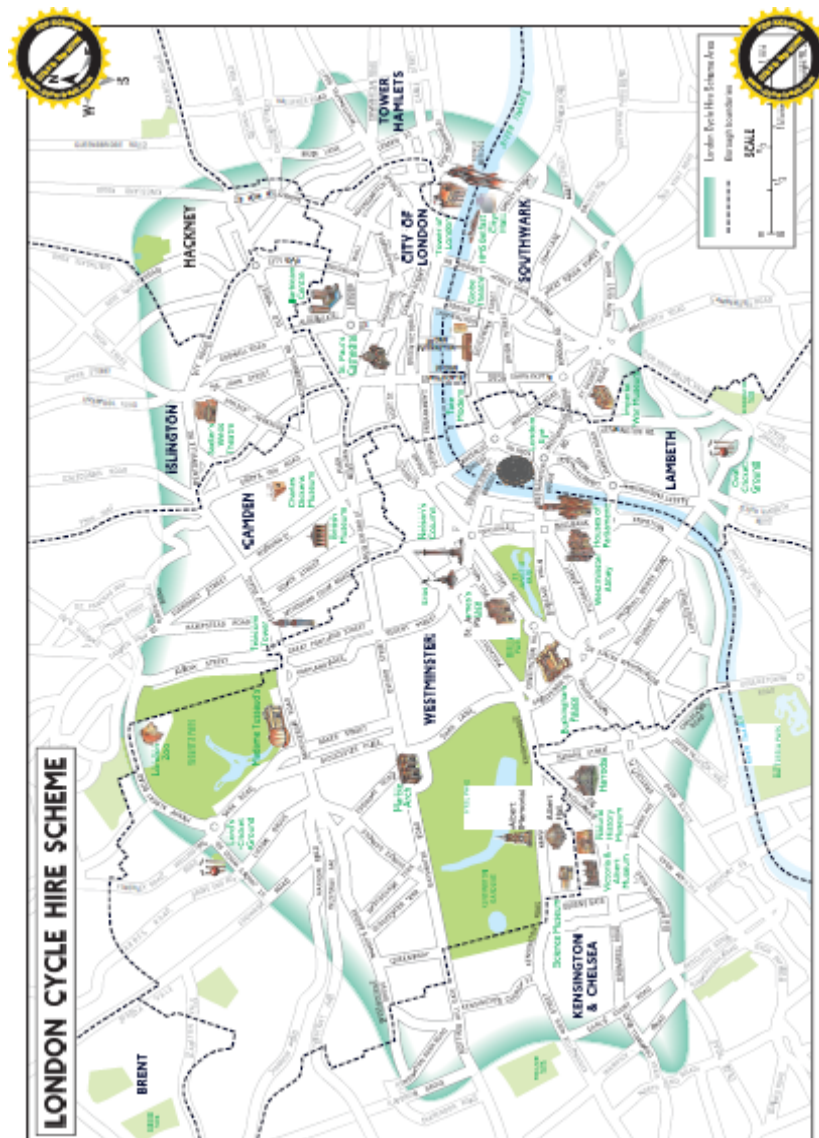
3.8.1 Cycling is at the heart of the Mayor's (Boris Johnston) Transport Strategy and the creation of an easy-to-use cycle hire system was a key pledge of his manifesto.

3.8.2 In August 2009 Serco, the service company which operates the Docklands Light Railway and Woolwich Ferry, won a £140 million contract to run the London bike hire scheme. The contract is for six years with a possible two year expansion and was for designing, building and operating the scheme. The scheme expected to generate an extra 40,000 bicycle journeys a day in Central London. <sup>19</sup>

3.8.3 The plan was for 400 docking stations and 6000 bicycles and would cover an area of about 44sq km, roughly equivalent to TfL's central fare zone. (see Figure 2) Revenues from the scheme would be paid to Transport for London (TfL) who believe that it will pay for itself in 5 years.



Figure 2: Map of London Cycle Hire Schemes



3.8.4 Barclays came on board as sponsors of the scheme in May 2010 when they paid £25 M in a five-year deal for its branding to be used on the bikes and on the Mayor's 12 "cycle super highways" being created across the capital. The name of the scheme was changed to Barclays Cycle Hire scheme. The deal recouped part of Transport for London's £140million outlay on the scheme.<sup>20</sup>

3.8.5 The scheme was launched on 30 July 2010 with 315 of the 400 docking stations, based every 300m or so throughout the centre of the Capital,

and 5000 bikes available. It operates 24 hours a day, seven days a week and stretches from Notting Hill Gate to Wapping and from Regents Park to Borough Market. Speaking at the launch event the Mayor of London, Boris Johnson, said "My crusade for the Capital to become the greatest big cycling city in the world has taken a gigantic pedal powered push forwards." The Mayor of London asked Transport for London (TfL), nine London boroughs and The Royal Parks to work together to deliver the Barclays Cycle Hire scheme.<sup>21</sup>

3.8.6 The day before the Cycle Hire scheme's launch, 11,000 people had registered to become members. On 22 August 2010, less than a month later, there had been 200,000 journeys and 54,000 had signed up as members.<sup>22</sup>

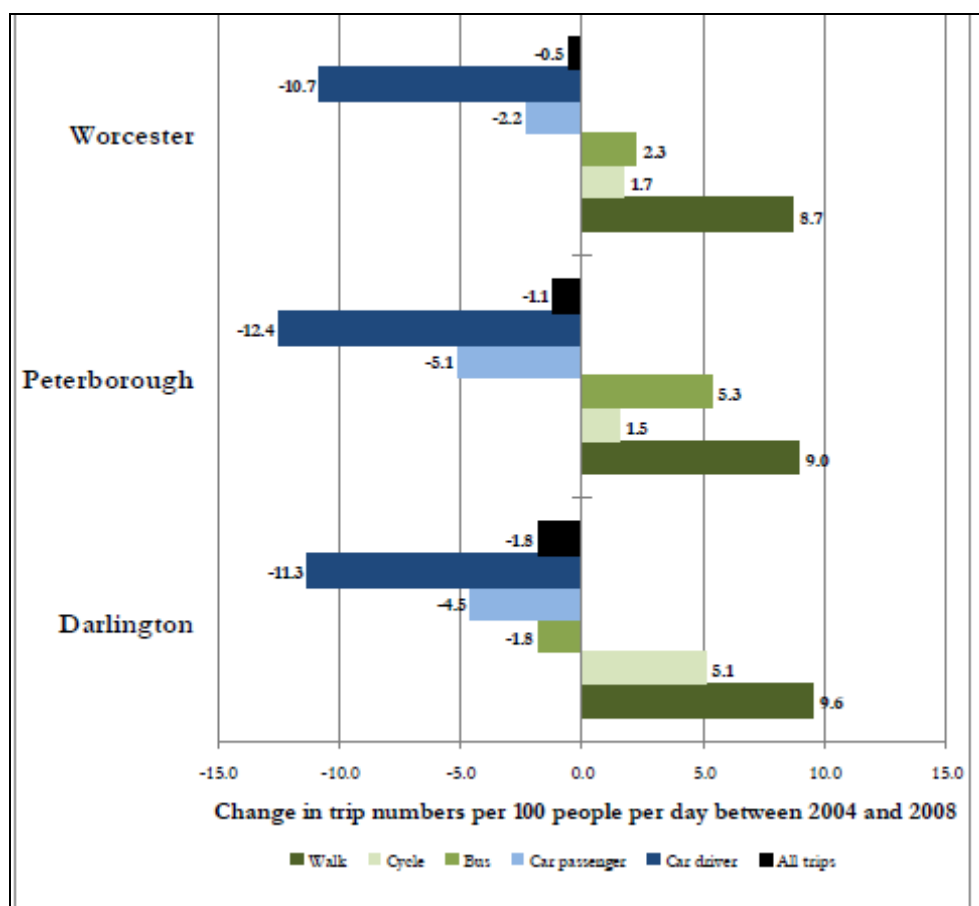
3.8.7 The separate Barclays Superhighway scheme will create designated cycle routes into London from the outer boroughs, with two routes open initially and a further 10 more planned by 2015. They will provide cyclists with safer, faster and more direct journeys into the city.

### **3.9 England Sustainable Travel Towns – walking and cycling<sup>23</sup>**

- 3.9.1 Darlington, Peterborough and Worcester were selected from more than 50 local authorities in England who expressed an interest in becoming 'showcase' demonstration towns. They are all medium sized, relatively free-standing towns located in the north and middle of England. Taken together they spent £15 million, of which £10 million was special Government funding provided by the Department for Transport. The 5 year project, which ran from 2004-2008, aimed to demonstrate the effect a sustained package of 'Smarter Choice' measures can have when coupled with infrastructure improvements
- 3.9.2 There were differences in local conditions and problems, so each town made its own choice on how to spend on each of a range of different measures. They all spent most on personal travel planning (from a third to nearly half of revenue), followed by travel awareness campaigns, promoting walking and cycling, and public transport marketing. Smaller amounts were spent on workplace and school travel plans.
- 3.9.3 At the end of the five-year project, car use had fallen by up to 9 % across the three towns, detailed travel surveys conducted by Sustrans and its partner Socialdata on behalf of the Towns have revealed. This equates to nearly 53 million miles of car travel taken off the roads across the three towns, resulting in annual savings of more than 17,000 tonnes of carbon dioxide.
- 3.9.4 As car travel has fallen, use of more active and sustainable forms of transport has increased across all three demonstration towns. Levels of walking increased by more than 10 % in each location, while bus use grew by more than a third in Peterborough and by a fifth in Worcester.
- 3.9.5 There was a 12 % increase in cycling in Peterborough and a 19 % increase in Worcester. Darlington, which received further Government cash to improve facilities for cyclists, saw levels of cycling more than double over the same period.<sup>24</sup>

3.9.6 Taking all three towns together, the total number of trips per head made by residents reduced slightly. Car trips per person reduced and trips by more sustainable modes increased. The figures showed a similar overall pattern, but marked differences in detail from town to town. These are summarised in Figure. 3

**Fig 3: Changes in the number of trips by residents between 2004 and 2008**



### **3.10 Northern Ireland – Rural safer routes to schools – walking and cycling<sup>25</sup>**

3.10.1 The first of its kind in Northern Ireland, the project sought to bring together a wide variety of agencies and resources that were already working on encouraging active school travel, and focus efforts on achieving two key objectives:

- reducing car use on the school run by 10%
- increasing levels of cycling and walking

3.10.2 Schools in rural areas were invited to apply to Sustrans to take part in the project which was funded to the tune of £1.3 million, and would look at all aspects of school travel, from the production of school travel plans, to improving the environment around schools for those travelling by foot and bike, to cycle training and other behaviour change initiatives.

3.10.3 Whilst more than 70 schools applied, indicating the demand from schools for this kind of support, Sustrans had to whittle this down to 18 to make best use of the funding available. The final selections of schools were all primary schools, varying in size from 50 to 450 pupils, with the majority of pupils living less than two miles from school.

3.10.4 The aim of the project was to work directly with schools that were keen to increase levels of walking and cycling, and help them to create a pro-walking and cycling culture which would continue and grow in the future.

3.10.5 To achieve this they developed a ten step approach:-

- build confidence within schools to promote walking and cycling
- help the school to set up a School Travel Group, chaired by a “champion” of active travel, comprising pupils, staff, parents and governors to organise regular events and to develop a School Travel Plan

- liaise between the school and agencies to ensure the provision of cycle parking, high quality pedestrian crossings and new and improved walking and cycling paths
- advise and support the school on running special events to both inspire and reward children and parents for walking and cycling to school
- ensure the provision of training to encourage safe walking and cycling
- share information and celebrate success and good practice between schools through a regular newsletter
- co-ordinate support for schools across the wide range of government departments responsible for school travel
- support the development of a School Travel Plan and events in the classroom by ensuring their relevance to the school curriculum
- rigorously evaluate the impact through before and after surveys of pupils, parents and staff and their attitudes to walking and cycling to school
- oversee official completion of different aspects of the projects, inviting ministers and local elected representatives to celebrate the success of schools and pupils, and promote the benefits of active school travel to the wider public.

3.10.6 There is evidence that the project has brought about significant changes in travel behaviour. Sustrans Research and Monitoring Unit surveyed 3,500 pupils, 200 staff and 2,000 parents, before and after the project.

The results are:

- 49% of children are now driven to school compared to 64% before the project
- 7% of pupils now cycle to schools compared to 5% before the project
- 33% of pupils now walk to school compared with 20% before the project
- 83% of parents thought Sustrans had been successful in getting them to think about the way they travel

- 79% of Head Teachers believe the initiative had a very good or excellent impact on helping their pupils become more physically active.

3.10.7 Sustrans believe that this project was so successful because Schools were well supported by people skilled at working with children and communities on practical projects, and able to maximise the benefits of changes to the physical environment. In addressing safety concerns by investing in new paths and crossings the team motivated parents, children and schools alike.

### 3.11 Interventions to encourage walking

3.11.1 A number of interventions aimed at encouraging walking have been developed both in the UK and internationally. Some examples include:

3.11.2 **Living Streets** – this is a charity focusing on improving conditions for pedestrians, and works both with infrastructure and behavioural change. The organization has developed a number of tools for making neighbourhoods and towns more walkable.<sup>26</sup> .

3.11.3 In the US, the American Podiatric Medical Association, in collaboration with partners, has developed a set of 19 criteria to assess the walkability of metropolitan cities. The **Best Walking City award** has been run since 2002 and considers factors including population density per square mile, use of mass transit, crime rates, and square miles of local and state parks. The winner in 2009 was San Francisco, and in 2008 Cambridge, Massachusetts; New York features highly on the list from year to year.<sup>27</sup> ,

#### **4.0 Conclusion**

The best practice examples given are only a sample of successes from around the world. There are many more but, unfortunately, too many to put into a discussion paper. The examples demonstrate what can be achieved when the focus is placed on improving active travel and when the schemes have political backing and finance.

TRACEY ARLOW

8 September 2010



## Bibliography

1. Take action on active travel; published on behalf of the working group partners by Sustrans; 2008  
[http://www.adph.org.uk/downloads/policies/Take\\_action\\_on\\_active\\_travel.pdf](http://www.adph.org.uk/downloads/policies/Take_action_on_active_travel.pdf)
2. Pucher J and Buehler, R; Making Cycling Irresistible: Lessons from The Netherlands, Denmark and Germany; Transport Review, Volume 28, No.4, Pages 495-528, July 2008
3. Buehler, R and Pucher, J; Sustainable Transport that Works: Lessons from Germany; World Transport Policy and Practice, Volume 15, No.1 Pages 13-46, April 2009
4. Atkins European Best Practice 2006 Report  
<http://cfit.independent.gov.uk/pubs/2007/ebp/01.htm>
5. Jacobs Consultancy, European Best Practice, Final report December 2006  
<http://cfit.independent.gov.uk/pubs/2007/ebp/02.htm>
6. An analysis of urban transport – November 2009, Cabinet Office  
<http://www.cabinetoffice.gov.uk/media/308292/urbantransportanalysis.pdf>
7. Michael O'Hare; Freiburg Green City – success Factors; June 2009  
<http://www.citiesforpeople.net/freiburg-green-city-%E2%80%93-success-factors>
8. Active travel inquiry Joint evidence paper to TICC Committee inquiry – Supplementary evidence paper. Sustrans Scotland & Transform Scotland, Wednesday 9<sup>th</sup> December 2009  
[www.transformscotland.org.uk/GetFile.aspx?ItemId=235](http://www.transformscotland.org.uk/GetFile.aspx?ItemId=235)
9. C40 Cities, Copenhagen, Denmark  
[http://www.c40cities.org/bestpractices/transport/copenhagen\\_bicycles.jsp](http://www.c40cities.org/bestpractices/transport/copenhagen_bicycles.jsp)
10. North America's most bike-friendly cities; City biking is here to stay; great locales for ten-speed touring by Craig Bowers; June 2008  
<http://www.msnbc.msn.com/id/25267048/>
11. Portland, United States of America; SmartTrips informs and incentivises Portland residents about alternative forms of transportation  
[http://www.c40cities.org/bestpractices/transport/portland\\_alternative.jsp](http://www.c40cities.org/bestpractices/transport/portland_alternative.jsp)

12. Bogota, Columbia BRT System  
[http://www.c40cities.org/bestpractices/transport/bogota\\_bus.jsp](http://www.c40cities.org/bestpractices/transport/bogota_bus.jsp)
13. Bogota, Columbia, Cycling System  
[http://www.c40cities.org/bestpractices/transport/bogota\\_cycling.jsp](http://www.c40cities.org/bestpractices/transport/bogota_cycling.jsp)
14. Paris, France; Velib – a new Paris love affair; C40 Cities  
[http://www.c40cities.org/bestpractices/transport/paris\\_cycling.jsp](http://www.c40cities.org/bestpractices/transport/paris_cycling.jsp)
15. Velib and generally using a bicycle in Paris. 16<sup>th</sup> April 2010-09-08  
<http://www.1984produkts.com/donkeyhottie/2010/04/16/velib-and-generally-using-a-bicycle-in-paris/>
16. <http://www.dublinbikes.ie/>
17. <http://www.dublinbikes.ie/How-does-it-work/Stations/The-Service>
18. <http://www.dublinbikes.ie/Magazine/News/One-million-journeys>
19. Dominic Walsh, 12 August 2009, Times Online, Serco saddles up for London cycle hire scheme  
[http://business.timesonline.co.uk/tol/business/industry\\_sectors/transport/article\\_e6796106.ece](http://business.timesonline.co.uk/tol/business/industry_sectors/transport/article_e6796106.ece)
20. <http://group.barclays.com/About-us/Barclays-news/NewsArticle/1231784400896.html>
21. Mayors flagship cycling scheme – Barclays Cycle Hire – opens for business, London.gov.uk, 30 July 2010  
[http://www.london.gov.uk/media/press\\_releases\\_mayoral/mayor%E2%80%99s-flagship-cycling-scheme-barclays-cycle-hire-opens-business](http://www.london.gov.uk/media/press_releases_mayoral/mayor%E2%80%99s-flagship-cycling-scheme-barclays-cycle-hire-opens-business)
22. Barclays Cycle Hire Successful So Far 22/8/10  
<http://www.financenews.co.uk/economy/barclays-cycle-hire-successful-so-far/>
23. The Effects of Smarter Choice Programmes in the Sustainable Travel Towns: Summary Report, February 2010.
24. <http://www.rudi.net/node/21125>
25. Sustrans, Rural Safe Routes to schools Project Review, January 2009  
[http://www.sustrans.org.uk/assets/files/Safe%20Routes/publications/ni/SRS\\_Rural\\_NI\\_Review.pdf](http://www.sustrans.org.uk/assets/files/Safe%20Routes/publications/ni/SRS_Rural_NI_Review.pdf)

26. Creating Healthy Environments – Practical Tools for Increasing Walking in the Built Environment, Living Streets

<http://www.livingstreets.org.uk/take-action/our-projects/creating-healthy-environments/>

27. <http://walking.about.com/od/walkablecities/tp/walkcity2009.htm> and <http://www.apma.org/MainMenu/News/Campaigns/BestWalkingCitiesCompetition/2009-Best-Walking-Cities-Frequently-Asked-Questions-FAQ.aspx?FT=.pdf>

### **Further information**

C40 Cities- Climate Leadership Group – Best Practices – Transportation

<http://www.c40cities.org/bestpractices/transport>

Vauban, Freiburg

[http://en.wikipedia.org/wiki/Vauban,\\_Freiburg](http://en.wikipedia.org/wiki/Vauban,_Freiburg)

Walking and Cycling International Literature Review, Final Report, Victoria Department of Transport , 2009

[http://www.transport.vic.gov.au/DOI/DOIElect.nsf/\\$UNIDS+for+Web+Display/70D43560D1141DDFCA2575E8000BA1EE/\\$FILE/WalkingCyclingLiteratureReview.pdf](http://www.transport.vic.gov.au/DOI/DOIElect.nsf/$UNIDS+for+Web+Display/70D43560D1141DDFCA2575E8000BA1EE/$FILE/WalkingCyclingLiteratureReview.pdf)