

Report on the Cycle to Work Scheme Tax Incentive

Published: Tuesday 4th October 2011 at the Mansion House, Dublin.

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Irish Bicycle Business Association

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Executive Sumary



EXECUTIVE SUMMARY

1.1 INTRODUCTION

1.1.1 What is the Irish Bicycle Business Association?

The IBBA (Irish Bicycle Business Association) is a not-for-profit organisation formed in 2011 as the Irish trade body representing cycling retailers and businesses within the cycling sector in the Republic of Ireland. The association represents the key stake holders in this industry, which is worth over €100m per annum.

1.1.2 What is this report?

The purpose of this report is to highlight the benefits of cycling as a means of transport, improving health, and developing the economy; and how the Government's Cycle to Work scheme which was introduced in 2009, has helped to develop that across all sectors in Irish life.

1.1.3 What is the Cycle to Work Scheme?

The Cycle to Work scheme is a Government has been incentive announced in the November 2008 budget and in operation since 1 January 2009. Employers can buy a bike up to €1,000 for employees to cycle to work and recover the cost from the employee's pre-tax salary over up to 12 months. The benefit is not subject to benefit-in-kind taxation and employees can save up to 52% of the cost of the bike, while employers save 10.75% in employer's PRSI.

1.1.4 Structure of Report

This report looks at cycling and the Cycle to Work scheme through the themes of Active Travel, the Economy, the Environment and Cycling Participation. Some conclusions draw the themes together and lead to a short list of recommendations.

1.2 Active Travel

Active travel has a key role to play in improving health and reducing health inequalities. We have looked at how the provision of the Cycle to Work scheme is facilitating access to active travel (See Figure 1)



Health Benefits of Cycling:

It has been estimated that the benefits of cycling, in terms of life years gained, pulweigh the risks by 20 to 1 (Hillman 1992).

A large-scale study of 9,000 UK civil servants found that cycling 25 miles a week halves the risk of fatal and nonfatal heart disease (British Medical Association 1992).

In Denmark it has been found that regular adult cycle commuters show a 40% lower mortality rate than their non-cycling peers. (Andersen et al 2000).

Ireland has achieved a massive drop of 75% in the number of cyclists killed between 2001 and 2010. (Edwards 2011)

Figure 1: Health Benefits of Cycling

1.3 Economic Benefits

The report looks at the economic benefit to the exchequer and country as a whole in both the short and long-term including the impact on tax, job creation, tourism, health-care.

Expenditure and Revenue to Government, see Figure 2 overleaf.

1.3.1 Wider Benefits

The report examines the economic stimulus effect with new businesses created in the cycling industry for: workplace travel planning, cycle insurance, cycle training, cycling clothing, cycling events and tourism.

Regular cyclists take on average one less sick day per year leading to an economic saving of €13.5 m per year due to the additional cyclists created by the Cycle to Work scheme (See Section 4.3). Reductions in fuel use are helping to address Ireland's balance of payments and fuel security.

1.3.2 Ireland's Cycling Economy

A recent study on the UK Cycling Economy was recently published by London School of Economics and sponsored by SKY (London School of Economics 2011). It showed that cycling contributes GBP 2.9 bn (€3.308 bn) to the UK economy every year. In Ireland this would equate to an Irish Cycling Economy of €260m per year.





1.3.3 Cost Benefit Analysis of the Cycle to Work Scheme

The Department of Transport's National Cycle Policy Framework (Department of Transport 2009) suggests that in the Irish context a cost benefit ratio of 4:1 is reasonable for investment in cycling.

For every euro in Government expenditure spent we can expect four euros in benefits to society. The Irish Bicycle Business Association (IBBA) is in the process of quantifying these benefits in detail.

1.4 Environmental Policy

The environmental benefits of cycling are well documented. This report shows how cycling can also have a positive effect on health benefits of the wider community. It shows how people's lives will improve by more of us cycling while at the same time building stronger communities by developing activity friendly environments.

1.5 Cycling Participation

The report covers the benefits, through the increased number of people cycling, to charities across the country. It also highlights the development of clubs, events and social interaction at a local and community level.



THE IRISH CYCLING ECONOMY

€750 Average Bike Cost



90,000 Bikes through scheme

€750 × 90.000 = **€67.5Million**



Direct Sales



Return Sales due to Cycle 2 Work scheme €27 Million

Average €100 per bike (over 3 years)









Family Bike

15% of scheme users purchased 1 family bike - €300 x 13,500 = €4.05m



Servicing of Bikes €9.45m

90,000 Bikes serviced once a year at €35 a service (over 3 years)



Indirect Sales

EMPLOYMENT



- Direct Jobs = **saving** to government of **€20,000** per job
- 420 x €20,000 = **€8.4million**
- New Bike Shops = **50 New Shops** (with an average of 3.3 new staff)
- 165 New Jobs x €20,000 = **€3.3million**
- Distributors = **20 new jobs**
- 20 x €20,000 = **€400,000**
- Voucher Companies = 12 New Jobs
- 12 x €20,000 = **€240,000**



2009 = €5.17m 2010 = €10.22 2011 = €15.3

Revenue from Jobs



DIRECT JOBS - Cycling Industry

· Jobs = 617 = €12.34million

Total = €12.34million

INDIRECT JOBS - Cycling Industry

- Indirect Jobs Saved or Created = 50 = €1million
- Hardware Stores moving to retailing Bikes
- = 100 Stores = 100 jobs = €2million

Total = €3million

Total Saving Breakdown

Vat = €22.68 million + Jobs = €15.34 million = €38 Million

Revenue Generated = €53 million Revenue Sacrificed = €34.2 million

Profit Balance to State = €19.1 million

*Based on a 3 year period, 2009 - 2011



EXECUTIVE SUMMARY

1.6 Conclusions and Recommendations

1.6.1 Conclusions

- The Cycle to Work scheme is an unprecedented success. As illustrated by the Case Studies (See Appendix A); employers have integrated it into their benefits systems and used it to promote active travel to the workplace.
- It is integrated with Government policy and supports policy as illustrated by Figure 3.
- The scheme actually creates net revenue for the Government when the wider stimulus effects on VAT and employment are offset against the revenue sacrificed. Over three years the scheme has created estimated net revenue to the exchequer of €19.1m. (See Figure 2)

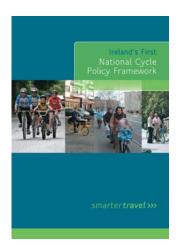
1.6.2 Recommendations

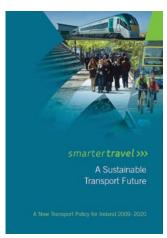
Awareness of the scheme and how to implement it has grown among employers in the three years since it was introduced. Substantial changes would not be advisable, as employers have gone to the effort of integrating it with their benefits systems. Research by Irish Bicycle Business Association (IBBA) members has highlighted some ways it could be improved:

- Allow employees to get a new bicycle under the scheme every three years rather than every five years.
- Allow employees who have had their bike stolen and report the theft to the Gardai, to get a new bike under the scheme, without having to wait five years.
- Clarify the eligibility of child seats and trailers for bicycles, as many employees combine the school run trip with their commute.
- Allow cycle insurance to be purchased under the scheme, similar to safety accessories. This would increase the promotion of insurance and address the issue of theft.
- The Irish Bicycle Business Association supports the ambitious targets in the National Cycle Policy Framework and Smarter Travel and recommends that funding for cycling is increased to the per capita levels of our European neighbours.



EXECUTIVE SUMMARY













The Cycle to Work scheme supports and is integrated into Government policy:

- Key measure in National Cycle Policy Framework (Department of Transport 2009. Action 13.1)
- The measure above supports Action 15 of the Smarter Travel Policy from Department of Transport (2008) which states that by 2020 10% of all trips will be by bike and 160,000 people will commute by bike.
- Smarter Travel in turn is a key measure to achieve the additional savings required to meet the state's ambitious 2020 emissions targets in the National Climate Change Strategy. (DEHLG 2007)
- Key measure promoted by the National Transport Authority's Smarter Travel Workplaces (smartertravelworkplaces.ie)
- Key measure promoted by the Health Services Executive's Get Ireland Active campaign and website.
 (www.getirelandactive.ie)
- Supports Dublin City Council's Cycling Action Plan 2010-2015 which has a goal to double cycling trips by 2015.
 (Dublin City Council 2010)
- Key measure to support the Cycle to Work Day during the Department of Transport's annual Bike Week. (www.bikeweek.ie)
- The Commission on Taxation (2009) report Recommendation 8.79 recommends continuing the scheme citing 'the potential social and economic benefits which may arise.'

CASE STUDIES OF EMPLOYERS

In Appendix A we have included case studies of organisations which have successfully implemented the Cycle to Work scheme.







Temple Street Children's Hospital

Padraig Ryan Transport Coordinator: "Since 2002 we have seen a 450% increase in the number of staff cycling to work, this has coincided with a 44% reduction in the number of staff driving. This could not have been achieved without the Cycle to Work scheme, it has made Children's University hospital a more accessible place for all concerned"





Google Ireland, HR Manager

"I think it's a hugely important benefit for employees and would welcome improvements to the scheme which would go the extra step to making it even more flexible. In particular, the 5 year rule would ideally be reduced as feedback from our employees suggests that they would like to re-apply before this point."





Trinity College, Dublin

"Trinity College as an employer welcomed the announcement of the Bicycle Tax Saver scheme and introduced the scheme for employees to avail of the benefits in 2009. Since then we have run the scheme on an annual basis (2009; 2010; 2011) and at least 5-6% of our staff availed of the scheme each time. As well as the financial benefits to our employees, they also benefit health wise and the College, and the City, benefit from the reduction in cars coming on to our Campus which is based in the City Centre"







Introduction



2 INTRODUCTION

The Irish Bicycle Business Association is the Irish trade body representing cycling retailers and businesses within the cycling market in the Republic Of Ireland. The association represents the key stakeholders in the bicycle industry, worth over €260m per year in the Republic of Ireland. (See Section 4)

It is a not-for-profit organisation that exists to encourage best practice amongst its members, delivering service and value to customers, as well as promoting cycling as an everyday means of transport as part of an active and healthy lifestyle.

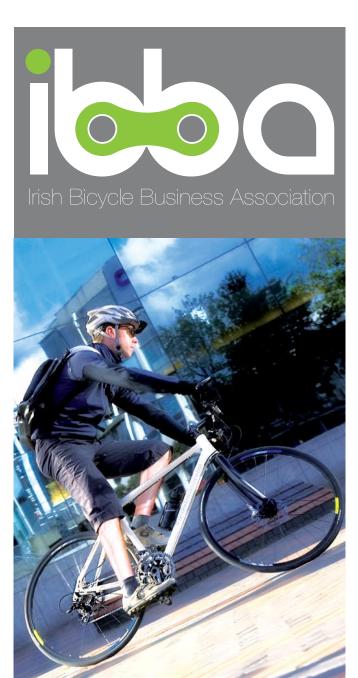
It seeks to work on behalf of members to keep them updated with developments in the industry in areas such as research, innovation, market intelligence. It also provides a forum for discussion and networking.

The association promotes best practice within the industry and seeks to work with Government agencies on industry regulation. A key role of the association is to keep members up to date with the latest trends and to promote opportunities for business development amongst members.

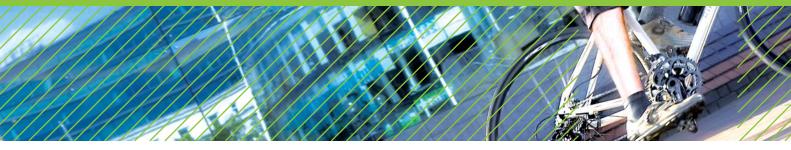
The purpose of this report is to highlight the benefits of cycling as a means of transport, improving health and developing the economy. It aims to demonstrate how the Cycle to Work Government schemewhich was introduced in 2009 has helped to develop these benefits across all sectors in Irish life.

The initiative has been a huge success, and through improvements and developments to this scheme can continue to support and drive an increasing number of health, transport, and social benefits across Ireland.

The report is split into four main sections covering the areas of Active Travel, Economic Benefits, Environmental Benefits and Cycling Participation.









Active Travel

ACTIVE TRAVEL

3.1 Introduction to Active Travel

According to a report carried out by The Institute of Public Health (2011) in Ireland entitled Active travel – Healthy Lives: active travel refers to journeys that use physical activity, such as walking and cycling, instead of motorised means to move between locations. These journeys are generally understood as travel for purposes such as going to work, shopping, visiting friends or travelling to school; as opposed to recreational walking or cycling.

Active travel has a key role to play in improving health and reducing health inequalities (Institute of Public Health 2011) and the provision of the Cycle to Work scheme is facilitating access to it. The way in which we choose to travel impacts on our health, weight and well-being. Car use has risen steadily over the past 30 years and it is important that schemes such as the Government's Cycle to Work scheme which facilitate alternative transport modes are reinforced and widely promoted.

Alongside walking and swimming, cycling is widely recognised as one of the easiest forms of physical exercise for all ages. It has been shown people who cycle regularly will have an improved quality of life. Cycling provides regular exercise that keeps the heart, lungs and muscles in good working order.

The following section highlights the associated benefits of cycling and how it can easily fulfill the recommended levels of physical activity. Cycling is arguably the safest form of transport for Irish society.

- It has been estimated that the benefits of cycling, in terms of life years gained, outweigh the risks by 20 to 1 (Hillman 1992).
- The British Medical Association (1992) has found that, all things considered, the health benefits of regular cycling significantly outweigh any increased risk of injury.
- A large-scale study of 9,000 UK civil servants found that cycling 25 miles a week (or an hour per week on the trip to work) halves the risk of fatal and nonfatal heart disease (British Medical Association 1992).
- In Denmark it has been found that regular adult cycle commuters show a 40% lower mortality rate than their non-cycling peers. (Andersen et al 2000).

3.2 Making Active Travel Part of the Solution

3.2.1 Increased Levels of Physical Activity

Physical activity guidelines suggest that adults should be at least moderately active for 30 minutes or more five days per week for optimum health benefits (Department of Health and Children 2009).

Current levels of physical activity across the island of Ireland are much lower than this with only around one fifth of adults engaging in exercise more than weekly.

3.2.2 Walking and Cycling for a Healthy Lifestyle

There is now widespread agreement that the simplest preventive measure for obesity is to incorporate physical activity such as walking or cycling into the everyday routine. In general, the more physically active people are, the better.

It is clear, however, that preventing and reversing future obesity trends cannot be achieved by just telling people to live healthier lives. Advice on physical activity and active living must go hand in hand with changes to our transport infrastructure and built environments, making it easier for people to incorporate walking or cycling into routine journeys.

The Government's Cycle to Work scheme is succeeding in incorporating cycling as part of people's everyday routines.

3.2.3 Health Impacts of Active Travel

Analysis of national travel survey data from countries in North America, Europe and Australasia found that countries with the highest levels of active transportation had the lowest obesity rates (Bassett et al. 2008).

Research on commuting, for example, suggests that those who walk or cycle to work are significantly negatively associated with overweight and obesity (Lindström 2007). The amount of time spent in cars appears to be a key factor as has been reported in a number of studies (Wen et al. 2006).

According to the World Health Organisation report Health in a Green Economy: A shift to active transport (walking and cycling) and rapid transit/public transport combined with improved landuse can yield much greater immediate health "co-benefits" compared with improving fuel and vehicle efficiency (Kahn et al 2007). The Potential health gains of a shift from private motorized transport to walking, cycling and rapid transit/public transport include reduced respiratory and cardiovascular disease from air pollution and less exposure to traffic injury risks and noise stress.

In addition, large benefits are expected from increased physical activity leading to the prevention of obesity, diabetes, heart disease and cancer, as well as greater health equity achieved by better access to goods and services among groups without private motor vehicles. (World Health Organisation 2000; Woodstock et al 2007; Woodstock et al 2009)

According to The Institute of Public Health (2011) choosing active forms of travel can bring about immediate health benefits for all individuals primarily through increasing their levels of physical activity.



ACTIVE TRAVEL

3.2.4 Active Travel Decreases Road Deaths,

The Government's Cycle to Work scheme is currently encouraging and facilitating people to switch to a form of active travel which research has shown leads to less road traffic injuries, and improved quality of life in neighbourhoods, as well as increased safety from anti-social behaviour - due to more people on bicycles in the area (Institute of Public Health 2011). This is also backed up by the increase of Gardai in local communities patrolling on bike rather than by car, as it increases their ability to communicate and liaise with local residents and address anti-social behaviour.

Less road traffic also reduces greenhouse gas emissions, improves general air quality, reduces noise - all of which have associated health benefits (Institute of Public Health 2011). Recent research carried out by the Road Safety Authority and the Garda Sióchani shows a substantial drop of 75% in the number of cyclists killed between 2001 and 2010. The decline in deaths for cyclists over the past decade has been greater than for any other group in the research (Edwards 2011). As levels of active travel increase, rates of pedestrian, cyclist and overall road traffic injuries have been observed to decline, suggesting a 'safety in numbers' effect (CTC 2010).

In countries such as Germany and the Netherlands where walking and cycling rates are high, pedestrian fatalities per billion kilometres walked are less than a tenth of those in countries with lower cycling levels (Pucher et al 2000). In London, cycling increased by 91% in eight years, with a corresponding decrease of 33% in cycle casualties. London now plans to more than quadruple cycle use by 2025. Leicester has increased cycle use by 43% in four years, with an 11% reduction in cycle casualties.

Pedestrian and Cycle Deaths in Ireland as a Percentage of all Road Traffic Deaths

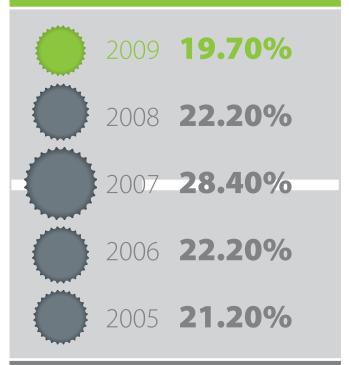


Figure 5: Pedestrian and cycle deaths in Ireland as a percentage of all road traffic deaths (Source: RSA 2010)









Economic Benefits

ECONOMIC BENEFITS

4.1 Introduction

This report shows clearly in Figure 2) that the Government's Cycle to Work scheme not only facilitates a healthier workforce, but also generates revenue for the Government - over €19.1m since 2009.

The direct Government revenue of the scheme must also be viewed in conjunction with a number of other associated economic benefits which are all being driven by more individuals being involved in active travel both by cycling to work, and in their everyday lives.

4.2 New Businesses Due to Cycle to Work Scheme

Along with the 50 new bicycle shops across Ireland the Irish Bicycle Business Association (IBBA/2011) has observed that other new businesses have developed from the increased trade and participation in cycling across Ireland, which is driven and supported by the Cycle to Work scheme.

All of these are paying tax and providing employment. A number of businesses have developed to cater for the employees who cycle to work and now provide facilities at workplaces for the storage of bikes. There has also been an increase of indigenous cycling apparel companies. For example Urban Frog, a new 100% Irish owned company, was set up in 2009 and provides a range of versatile high performance cycling tops for both men and women.

4.3 Absenteeism

Absenteeism according to a recent IBEC (2011) survey is costing businesses around €1.5bn a year, with workers missing almost six days a year on average.

A study in the UK by LSE (London School of Economics) has reported that regular cyclists take 1 less sick day per year than non-cyclists (London School of Economics 2011).

Using the results from the above reports it can be assumed that the introduction of the Cycle to Work scheme has saved the Economy €15.3million a year based on the average industrial wage of €34,000 divided by 200 (working days in a year). This is equal to €170 per day multiplied by 90,000 (new cyclists).

4.4 Local Tourism

'Staycationing' is the new buzzword for families and individuals having their vacation in Ireland rather than going abroad. It is having a positive effect on local economies all around Ireland. This is a welcome bonus and cycling is playing its part in driving and supporting staycationing through the growth in cycling tours and sportifs across the country.

Not only has the number of these sportifs increased since 2009 by over 50% (Cycling Ireland 2011), the numbers taking part in these sportifs have also significantly increased. The promotion of cycling through the Cycle to Work scheme is driving this increase and helping to stimulate local economies. For example the Ring of Kerry cycle has increased its numbers by over 66% since 2009 and now caters for more than 5,500 participants over the weekend. This would equate (based on the figures from An Post Tour De Burren which had an average spend per participant of €140) to over €770,000 being spent in the local economy due to that single cycling event.

A large number of these participants are new cyclists who have been introduced and encouraged to cycle through the Cycle to Work scheme. There are now 538 Cycling Ireland registered events in Ireland in 2011, an increase of over 50% from 2009, all of which have seen similar growth and are driving incremental economic support in local communities (Cycling Ireland 2011).

4.5 Positive Effects on Charities

The Cycle to Work scheme has also had a major effect in assisting charities, according to new research carried out by 2wheels.ie (2011). Due to the growth in the numbers taking part in cycling as a means of active transport and as a recreational hobby, cycling is now forming a major part of charities' strategic plans to raise funding. Over 70% of charities interviewed have started using cycling events as a mechanism for fundraising in the last three years. This reflects the same growth of interest in cycling and cycling events coinciding with the launch of the Government's Cycle to Work scheme.

Of the charities interviewed that used a cycling event in their calendar, a 50% increase in participant's year on year was recorded on average. The amount raised in each event was subject to size and reach for the charity, however an obvious increase in participation leads to a significant increase in funds raised. A gross figure for 2011 for the 30 charity organisations that used cycling as a fundraising method was quantified as €2,300,000. (2Wheels 2011)

4.6 Energy Costs to Ireland 4.7 Economic Analysis

Ireland is over-dependent on imported fuel. Cycling is a cheap and effective way to address these issues. The issues include:

- The €6bn per year cost to the economy of imported fuel (Ecology Foundation 2011)
- The effect on Ireland's balance of payments as almost all this fuel must be imported.
- The instability caused by fluctuating prices and the political implications of the countries which control decreasing fuel reserves.

Investments in active transport and rapid transit/public transport can assist the transport sector to achieve objectives by reducing congestion, and by reducing the need to fund costly road infrastructure. Transport systems with strong walking, cycling and public transport provision are also less vulnerable to future interruptions in supply of oil or other fuels.



4.7.1 Assessing the Cycle to Work Scheme:

When considering a particular Government measure, two separate things need to be considered:

- The direct income and expenditure to the exchequer.
- The wider costs and benefits to society.

The income and expenditure to the exchequer have been discussed in Section 4.1 and illustrated in Figure 2. The calculations show that the Cycle to Work scheme has created a net income to the exchequer of €19.1m in three years. This is an average income of €6.3m per year.

Assessing the wider costs and benefits of a scheme is difficult. However, there is an increasing amount of research available on Cost Benefit Analysis of cycling. The National Cycle Policy Framework (Department of Transport 2009) lists items that can provide fiscal benefits:

- "the value of lost lives i.e. the deaths which could have been prevented as a result of being physically active through cycling;
- savings to the Health Service Executive as a result of not having to treat illnesses which result from physical inactivity;
- gains in productivity arising from reducing absenteeism which is preventable through increased activity;
- reductions in (urban) congestion;
- reduced emissions
- costs of the Cycle to Work scheme" (Department of Transport 2009)



ECONOMIC BENEFITS

4.7.2 GDP: Ireland's Cycling Economy

This section considers the wider costs and benefits of cycling to society. A report on the UK Cycling Economy was recently published by London School of Economics (2011) and sponsored by SKY. It showed that the cycling contributes GBP 2.9 billion (€3.308 billion) to the UK economy every year.

The UK's entire economy or Gross Domestic Product (GDP) in 2010 was \$2,189 billion compared to \$172 billion for Ireland (nationmaster.com 2011). Therefore the Irish economy is 8% of the UK economy. Cycling may be a greater or lesser part of the Irish economy than the UK economy. Nevertheless, we would expect the Irish cycling economy to be of the order of 8% of the UK cycling economy or €260 m per year.



What would a cycling economy of €260 m per year look like? It would include the following:

- Bike sales
- Accessory sales
- Servicing of bikes
- Cycle training
- Cycle Insurance
- The Green Schools Travel Programme
- Workplace travel planning
- Infrastructure design, construction and maintenance
- Cycling tourism, by both Irish residents and visitors from abroad
- Sports cycling
- Childrens' cycling
- Mountain biking
- Construction, maintenance and operation of mountain biking trails
- Cycling events and charity cycles

In Figure 2 we have quantified the direct sales of bikes, accessories and servicing generated by the Cycle to Work scheme as €105 m in three years or €35 m per year. When one adds sales not related to the Cycle to Work scheme and the wider economic activities listed above, a cycling economy of €260 m per year is realistic.

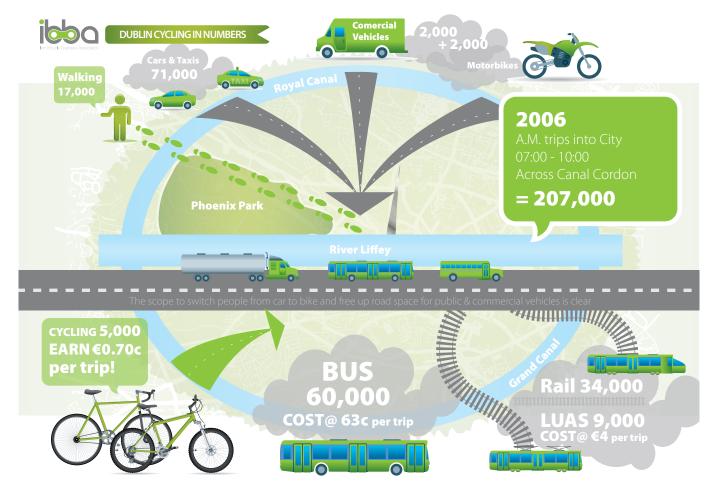


Figure 6: Dublin Cycling in Numbers. See Section 4.7.3 for details and Appendix D

4.7.3 Cost Benefit Analysis of Cycle to Work Scheme

The section before illustrates the nature and size of Ireland's cycling economy. This section outlines how the costs and benefits of the Cycle to Work scheme to society can be quantified. The Department of Transport's (2009) National Cycle Policy Framework suggests that in the Irish context a cost benefit ratio of 4:1 is reasonable for investment in cycling. i.e. for every euro in Government expenditure spent we can expect four euros in benefits to society.

The list in the section above is of items that relate specifically to Ireland's Cycling Economy. However, when doing a Cost Benefit Analysis all the wider benefits to society and GDP generated are counted. See list to right.

To illustrate this the Irish Bicycle Business Association (IBBA) has estimated revenue to the State of €0.70 for each additional trip by bicycle (See Appendix D). This compares well to a subsidy of €4 per trip for Luas (Stull and Greer 2007). Each morning approximately 200,000 people must be transported into Dublin City Centre. At present approximately 5,000 cycle, 70,000 travel by car, 9,000 travel by Luas and 34,000 by heavy rail (DTO 2006). The potential to free up street space for a modest investment by shifting people from car to bicycle is clear. This is illustrated in Figure 7 - Page 29.

The Irish Bicycle Business Association is in the process of quantifying these benefits in detail.

For the Cycle to Work scheme these include:

- VAT generated by sales
- Jobs saved and created in the cycling economy. This is especially significant at present.
- Savings in imported energy with secondary benefits for fuel security.
- Reductions in greenhouse gas emission with consequent reductions in the need to purchase carbon credits.
- A reduction in absenteeism of €15.3 m per year (See Section 4.3)
- Workplace cycles, events and charity events.
- Savings to the health sector and increased productivity due to the facilitation of active lifestyles through cycling. With growing concerns about obesity and the associated costs to society, the potential benefits are very significant.



ECONOMIC BENEFITS

Commission on Taxation

The independent Commission on Taxation (Commission on Taxation 2009) reviewed all taxes and tax expenditures (i.e. tax reliefs) in a comprehensive report for the Government in 2009. This section reviews the report's comments on the Cycle to Work Scheme. Recommendation 8.79 in the report states:

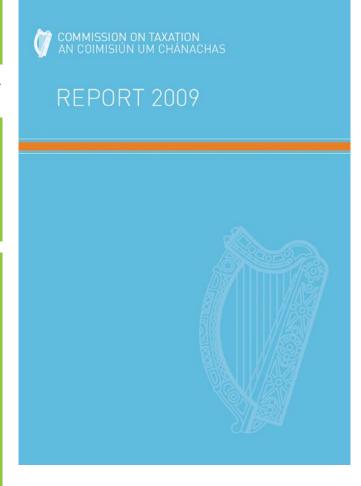
"8.79: The relief for benefit-in-kind and PRSI exemption on employer-provided bicycles and related safety equipment should continue."

Section 13.5 reviews the Cycle to Work Scheme in detail. The Conclusion states:

"The benefits of the introduction of a tax relief scheme to encourage more employees to cycle to and from work can be seen in terms of lowering carbon emissions, reducing traffic congestion and increasing the fitness levels of those who take up the scheme."

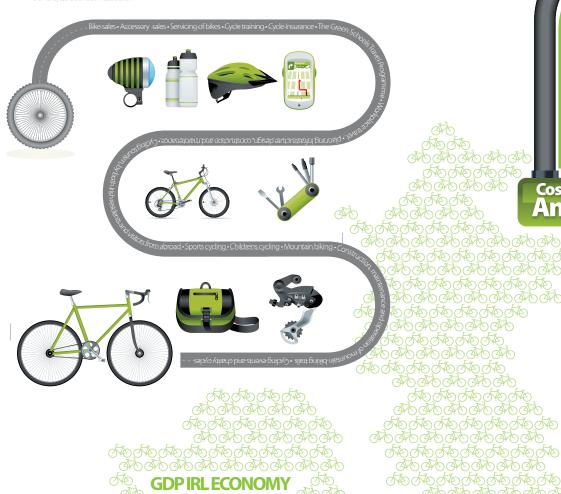
"This scheme may have incentive effects in encouraging a shift from car transport and in helping to increase awareness of the merits of such a move. At the same time, we acknowledge that it is likely to involve a deadweight element as employees that are already cycling to and from work are those most likely avail of the scheme. On balance, however, we recommend that the scheme should continue having regard to the potential social and economic benefits which may arise."

Part 9 of the report addresses Tax and the Environment. The Cycle to Work Scheme is listed in Box 9.11: Other tax measures to promote environmentally friendly travel.





THE IRISH CYCLING ECONOMY



Cost Benefit Analysis

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CYCLING ECONOM'

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Estimate €260M

8% of GDP UK

GDP UK ECONOMY

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CYCLING ECONOM

IBBA is in the process of quantifying these benefits in detail.







Environmental Policy

ENVIRONMENTAL POLICY

5.1 Introduction

This section will show how the Cycle to Work scheme integrates with Irish environmental policy and supports it.

5.2 Environmental Vision

The vision set out in Action 15 of the National Cycle Policy Framework gives an excellent summary of how cycling can support the environment:

"Our vision is to create a strong cycling culture in Ireland and ensure that all cities, towns, villages and rural areas will be cyclingfriendly. Cycling will be a normal way to get about, especially for short trips. Next to walking, cycling will be the most popular means of getting to school, both for primary and secondary school. Our universities and colleges will be bursting with bicycles. Businesspeople will see the bicycle as the best way to travel for part or all of their daily commute. Shopping by bike will be as normal as it is in many of the Northern European cycling-friendly countries. The bicycle will be the transport mode of choice for all ages and will both improve the health, and reduce obesity levels, of the general population and build social capital. We will gain economically as cycling helps in easing congestion and providing us with a fitter and more alert workforce. The cycling culture will also enhance our tourism industry by attracting many visitors to cycle in Ireland." (Department of Transport 2009)

Measures such as the Cycle to Work scheme and Dublin Bikes are working to achieve the cultural change mentioned above. Any review of changing media references to cycling will show how they have changed attitudes towards cycling. They work effectively because they nudge individuals towards smarter choices without lecturing them.

The value for money achieved can be visualised by considering how much of a marketing budget would be required to achieve a similar cultural shift through conventional advertising.

There are also wider community health benefits to cycling as recognised by the National Cycle Policy Framework:

5.3 Creating Activity-Friendly Environments

European countries and cities which have already successfully promoted active travel have done so by investing at a level commensurate with the priority they attach to clean and healthy transport.

For example, in Copenhagen in 2002, of a DKK 60 million budget for roads (approximately €8 million), one-third was allocated to improving cycling conditions (National Health Forum 2007). Amsterdam, many people's vision of a cycling city, is spending €26.95 per capita per annum on cycling between 2006 and 2010 (Ministerie van Verkeer en Waterstaat 2007). Transport planning has to take a strong lead in helping to create environments that support active living.

Promoting cycling is an essential part of any sustainable transport strategy. Cycling has multiple benefits and very few costs:

- No greenhouse gas emissions
- No local pollution
- Quiet
- Low manufacturing impact.
- Bicycles take up very little road space.

Cycling is not in conflict with motoring. Every person shifted from a car to a bike, frees up scarce road space, which reduces congestion. Cycling increases the catchment of public transport stops by a factor of nine.

"The quality of everybody's lives will improve as more of us cycle more often. We will have stronger communities as there will be regular interaction between those out walking and cycling in our neighbourhoods and town centres. Our streets will become more sociable, convivial and vibrant as more of our population use the quiet, non-polluting and non-threatening means of transport. Those countries which have the highest use of the bicycle have the lowest rates of cycle accidents." (Department of Transport 2009)



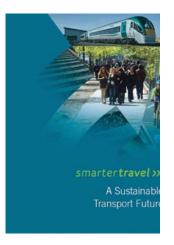
5.4 National Climate Change Strategy

The Environmental Protection Agency's (2008 p. ix, 31, 41) State of the Environment report confirms that even if all planned reduction measures are delivered Ireland will still exceed its emission targets. 'Radical changes' are required to current practices, particularly in transport where emissions have risen 170 percent between 1990 and 2006.

Current policy, the National Climate Change Strategy (DEHLG 2007 p22), recognises that for period 2012-2020 'energy for transport is the most significant immediate issue'. Failure to reduce emissions will lead to the need to buy carbon credits at a potential cost of hundreds of millions per annum to the state. Under 'Existing Emission Reduction Measures' highlighted in 'Chapter 4: Transport' are changes to Commuter Patterns:

"The Government recognises and supports the role of employers in promoting more sustainable travel patterns among employees, for example through the highly successful TaxSaver Commuter Ticket scheme. The Government will support the development of workplace travel plans, building on existing pilot projects, to encourage reduction in private car commuting, use of car sharing and flexible working in individual workplaces. These will be supported by an information campaign, funded under Transport 21, on mobility management and sustainable commuting". (DEHLG 2007 p22)

Workplace travel planning is therefore key to meeting our legally binding emissions targets. The strategy recognises that additional measures beyond the existing measures discussed above will be required to meet the lower emissions target for 2020. The planned Sustainable Transport Action Plan which was referenced was eventually published as Smarter Travel as discussed next.



5.5 Smarter Travel

The Department of Transport's sustainable transport policy is called Smarter Travel. It is supported by the more detailed National Cycle Policy Framework. Both documents support a shift to cycling through the Cycle to Work scheme. The section on Cycling and Walking (Department of Transport 2008 p42) notes that: 'Of all travel modes, cycling and walking have the lowest environmental impact.':

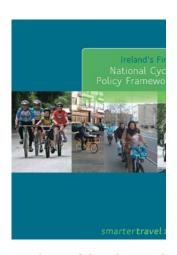
"In 2006, around 45,000 people drove less than 2km to work, with a further 160,000 people driving 2-4km to work. These people could potentially switch to walking or cycling. For various reasons not all will. Nevertheless, it should be possible to encourage a significant number to make the change."

"If the vision and ambition for future land use and planning set out in this Policy is achieved, there will be further scope for growth in these two modes. To reach a sustainable transport system, we would envisage around 450,000 people walking and cycling to work/education each day in 2020, up from 240,000 in 2006." (Department of Transport 2008)

Smarter Travel refers to the National Cycle Policy Framework (Department of Transport 2009) published the following year for detail of how the targets in Action 15 will be achieved.

A culture of cycling will be developed to the extent that, by 2020, we envisage around 160,000 people cycling for their daily commute, up from 35,000 in 2006. Cycling will be encouraged as a mode for other purposes so that by 2020 10% of all our trips will be by bike.





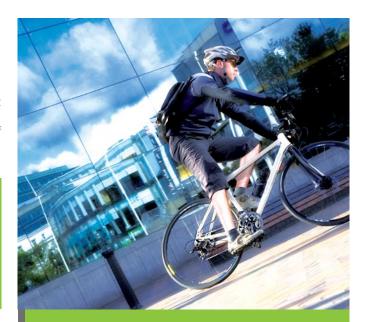
5.6 National Cycle Policy Framework

The National Cycle Policy Framework was introduced in the last section. While published by the Department of Transport (2009), it takes a multidisciplinary approach and lists a wide range of policies to promote cycling across all departments of Government. Objective 13 is to 'Provide fiscal incentives to cycle.' and notes:

"While cycling is still cheap compared to using other modes of transport, there is an absence of dedicated fiscal policies to incentivise cycling over other modes. There is an opportunity here to use policy interventions tried with great success in other countries in Ireland."

Policy 13.1 'Subsidised Bike Purchase' covers the Cycle to Work scheme:

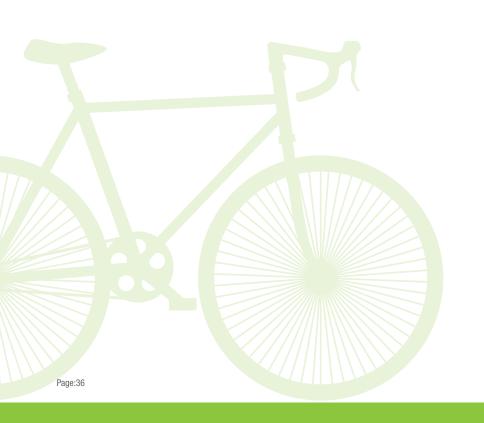
"We welcome the Budget 2009 initiative under which, from 1 January 2009, the provision of bicycles and associated safety equipment by employers to employees who agree to use the bicycles to cycle to work will be treated as a tax exempt benefitin-kind. We will encourage employers to implement the scheme through salary sacrifice arrangements as is envisaged in the Budget 2009 provision and review progress to maximise take-up. We believe the cycle to work scheme has been a great success in getting employees to use bicycles to cycle to work and should be driven and highlighted more by the Government due to the overwhelming benefits across some many different elements." (Department of Transport 2009)



"We believe the cycle to work scheme has been a great success in getting employees to use bicycles to cycle to work and should be driven and highlighted more by the Government due to the overwhelming benefits across some many different elements."

(Department of Transport 2009)









Cycling Participation

CYCLING PARTICIPATION



6.1 Local Tourism

The increase of people cycling to work facilitated by the Cycle to Work scheme has also led to a significant increase in the number of people participating in cycling as a pastime. Since the introduction of the Cycle to Work scheme, Cycling Ireland (2011) has seen a massive increase in members:

- Members have increased from 5,000 in 2008 to over 10,000 with a large number of new cycling clubs also being formed.
- 50% increase (from 350 to 528) in cycling events and charity cycles across the country due to the increase of interest and participation in cycling, which in turn is facilitated by increased accessibility to adequate cycling equipment and accessories.

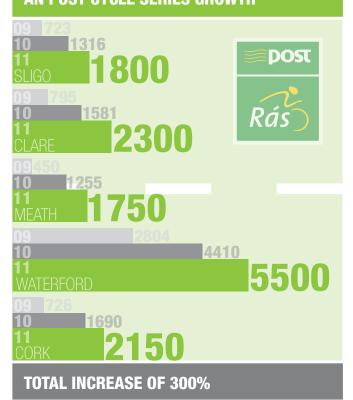
All major cycling events across Ireland have also experienced an increase in numbers or demand for places in events.

- The Ring of Kerry cycle in 2011 had over 5,500 cyclists taking part an increase of 66% from 2009.
- The An Post Cycle Series which collectively are the largest cycling events in Ireland have seen an increase of over 150% on average since 2009. See Figure 7 below.

Each of these events, and the hundreds of similar events organised around the country, generates significant incremental revenue for the Government in the form of taxes on accommodation, food, refreshments and entry fees.

They also bring a welcome boost to all the local economies and businesses where these events are held. It is estimated that the An Post Tour De Burren generated over €255,000 in the region of North Clare from participants over the course of the event in 2011. There were 1809 participants equating to a spend per person of €140 (Cycling Ireland 2011).

AN POST CYCLE SERIES GROWTH



RING OF KERRY CYCLE GROWTH



TOTAL INCREASE OF 129% SINCE 2008

6.2 Positive Effect on Charities

As cycling has significantly grown as a form of active travel and as an everyday form of exercise and leisure activity, it has also developed as a crucial financial resource for charities.

In a research project conducted by 2wheels.ie (2011) specifically for this paper, over 30 charity organisations were interviewed about the impact of the increase in interest in cycling. The study questions determined whether the charity had previously used cycling events as a fundraising source; and if there has been an increase or decrease in participation. The organisations were also asked to quantify the amount of funds raised over 5 years.

The results and figures gave the following relevant results (2Wheels 2011):

- 70% of charities interviewed had started using cycling events as a mechanism for fundraising in the last 3 years. This reflects the increase in the interest in cycling events that coincides directly with the start of the Cycle to Work scheme.
- Of the charities interviewed that used a cycling event in their calendar they saw on average a 50% increase in participants year on year. This shows that the growth has not reached saturation point and interest is continuing to build.
- The amount raised in each event was subject to size and reach for the charity. However, an obvious increase in participation led to a significant increase in funds raised. A gross figure for 2011 for the 30 charity organisations that used cycling as a fundraising method was quantified as €2,300,000.

The quantitative questions highlighted the following trend

- 63% of charities were planning on adding more cycling events to their calendar.
- 20% were planning to start charity events abroad.
- 12% Noticed an increase in foreign participants joining charity events organised in Ireland.

We can draw from the above that there will be an increase in the amount of events organised in the future.

As we can see from the results cycling is now forming a major part of charities strategic plans to raise funding and this is being aided by the provision of the Cycle to Work scheme.

It has also been noted from the research that an increasing percentage of tourism is being generated by charity and touring cycling events and that they are growing in popularity and recognition overseas. The recent Ironman 70.3 event in Galway had over 50 nationalities represented in the event, which was held over a weekend and showcased the beautiful scenery of Galway and the West of Ireland. The 'Tour de Picnic' also revealed the benefit to tourism that a cycling event can have, with over 6% of participants travelling from the UK, and 9 other nationalities represented. The Race Around Ireland which is considered to be one of the toughest cycling events in Europe has individuals and teams taking part in the week-long race along with support crews and followers. Of the solo racers, over 63% are from outside Ireland and represent seven different nationalities (Race Around Ireland 2011).

The promotion of cycling not only has incidental local tourism benefits but also supports the National Roads Authority's planned National Cycle Network, the potential of which is already shown by the recently opened Newport-Mulranny Greenway pilot project.





CYCLING PARTICIPATION

6.3 Growth in Leisure Cycling

Up until the last five years cycling activity levels in Ireland had been in a steady decline. The numbers using the bike for commuting fell from 7% in 1986, to 4.2% in 1996 and to 2% in 2006 (CSO 2007). A more rapid decline has been noted in those cycling to school. In 1986 a total of 23,635 primary level pupils cycled to school whereas in 2006, only 4,087 primary school pupils cycled to school (a decline of 83%).

The trend in adults has started to change in the last five years with increased cycling participation. The Cycle to Work scheme has been hugely successful in encouraging employees to start cycling to work. It has also had an effect on the number of individuals taking up cycling as a way to keep fit, and become more socially active, by joining cycling clubs.

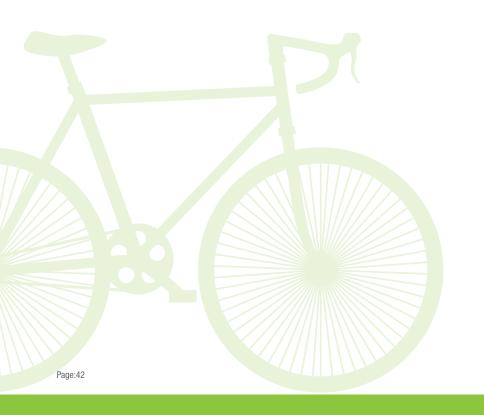
Cycling Ireland has seen a significant increase in not only their member numbers (which have increased by 50% in the last two years) but also in the number of new cycling clubs created in the last two years.

Companies such as the Gift Voucher Shop, Intel and Pfizer have all created cycling clubs following on from the success of the Cycle to Work scheme in their companies.

However more education and promotion of the benefits of regular exercise is required to ensure that these lifestyle changes continue and develop further assisting people to meet the physical activity guidelines. These suggest that adults should be at least moderately active for 30 minutes or more 5 days per week for optimum health benefits (Department of Health and Children 2009). Current levels of physical activity across the island of Ireland are much lower than this with only around one fifth of adults engaging in exercise less than weekly (Department of Health and Children 2009).











Conclusions and Recommendations

CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

7.1.1 Introduction

It can be clearly seen from this report that The Government's Cycle to Work scheme has been a massive success in achieving its main objective of encouraging individuals to get out of cars and onto bicycles using active travel for their commute.

People today in greater numbers than ever before are using the scheme to reintroduce themselves to the joy and benefits of cycling. At the same time the Irish Government and the individuals involved can reap the multiple benefits this brings.

7.1.2 Active Travel and Health

We have referenced the clear health benefits to individuals who use cycling as a mode of active travel. It has also been shown that as individuals increase in health and wellbeing there is a corresponding inverse reduction in the cost the tax-payer and Government will have to pay in the future, in terms of support from the HSE for a number of diseases or ailments associated with a lack of physical exercise.

7.1.3 Wider Benefits

The benefits of cycling, however, are not limited to health, for both individuals and the Government. This report has demonstrated that there are more far reaching implications when an increase of cycling activity takes place within a population.

As levels of active travel increase, rates of pedestrian, cyclist and overall road traffic injuries have been observed to decline, suggesting a 'safety in numbers' effect (CTC 2010).

Improvements in quality of life in local communities, as well as a reduction in anti-social behaviour, have also been documented and attributed to an increase presence of people cycling within a location. This is clearly backed up by the increase in the number of Garda patrolling on bicycles.

7.1.4 Local Economies

Another positive that has emerged from the introduction of the Government's Cycle to Work scheme has been the welcome boost to local economies from the massive increase in participants in locally run cycling tours/events and sportifs. The increase in these numbers has not only increased revenue into local communities it has also provided a lifeline to charities in a time when fundraising has become more challenging. Charities now more than ever, are relying on cycling events to raise much needed funds for support.

7.1.5 Costs and Benefits

In this challenging time, it is a fantastic achievement by the Government to have the foresight to introduce, and to drive a scheme that not only has massive health and community benefits, but also has had a net benefit to the Exchequer.

The scheme supports and stimulates Ireland's Cycling Economy which is worth approximately €260 m per annum. While due to the success of the scheme, the revenue sacrifice has been greater than expected at €34.2 million, there has been a return to the exchequer of over €53 m, leaving a surplus of €19.1 m since the introduction of the Cycle to Work scheme in 2009. This return is as a result of:

- the VAT revenue that has been generated through the increase in sale of bikes through the scheme
- the knock on effect of bikes bought for family members outside of the scheme
- the servicing of these bikes every year
- the repeat sales on accessories and apparel after the initial tax break
- the 767 jobs which have all been saved or generated through the provision of this scheme (Ref. Figure 2)

7.2 Recommendations

7.2.1 Introduction

It is widely recognised that the scheme has been a great success. Following research and surveys by the Irish Bicycle Business Association a short number of recommendations have been made to improve the scheme and ensure its continued success.

7.2.2 Crime Prevention

We have seen over history that during a recession petty crime can see an increase and the bicycle may be seen as an easy target. The Irish Bicycle Business Association (IBBA) believes that an allowance needs to be given to individuals who have been the unfortunate victim of bike theft.

Once the theft has been reported to the Gardai the employee should be able to avail of the scheme again once within the initial five year period.

7.2.3 Insurance

A further recommendation which would address theft, is to allow cycle insurance to be purchased along with the bicycle, similar to safety accessories at present.

7.2.4 Cycle to School

The Cycle to Work scheme is reversing the fall in the numbers commuting to work. In the report we have also highlighted a fall in the numbers of children cycling to school and the importance of promoting active travel from a young age.

Promotion of cycling to school would complement the benefits of the Cycle to Work scheme. We recommend that the rules on the inclusion of child seats and trailers as accessories in the Cycle to Work scheme are reviewed. Many parents combine the school run with their commute and the promotion of the current generation of accessories for bringing children should be actively promoted.

7.2.5 Every Three Years Rather than Five Years

The Cycle to Work scheme has been a massive success not only in increasing the numbers getting involved in active travel and using cycling as a form of transport to and from work but also with wider benefits for health, environment, family, community and local tourism.

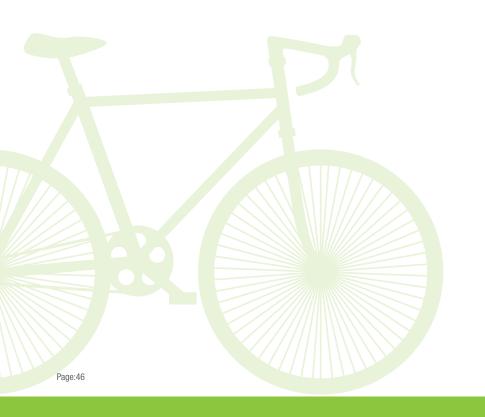
At present employees can only get a bike once every five years under the scheme. The Irish Bicycle Business Association recommends reducing this to three years. Employees who are cycling to work every day are keen to have a bike that is safe, well maintained and in good condition. Cycling must be seen as an attractive option which will compete with driving, where it is not unusual to replace a car every year or two.

7.2.6 Healthy Transport

European countries and cities that have successfully promoted active travel have done so by investing at a level commensurate with the priority they attach to clean and healthy transport. Examples from other countries have been described in this report.

The Irish Bicycle Business Association supports the ambitious targets in the National Cycle Policy Framework and Smarter Travel and recommends that funding for cycling be increased to the per capita levels of our European neighbours.









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Appendix

APPENDIX A: CASE STUDIES AND SURVEY RESULTS

The Irish Bicycle Business Association (IBBA) has sourced testimonials and case studies from major International and National companies and Institutions who have implemented the Cycle to Work scheme and are now seeing the benefits of the scheme within their staff.







A1.2 The Issue:

Childrens University Hospital's current car parking levels have been operating at capacity for some time now. Hospital management identified the growing demand for car parking spaces and took the innovative step of deciding to address the issue of demand rather than increase capacity. This decision was taken with the fact that a mobility management plan would need to be submitted as a requisite of the planning permission for the National Paediatric Hospital.

Parking demand and allocation have always been an emotive issue for staff and the increased demand threatened to create a staff retention issue for management. Site congestion and the limited parking also created problems for patient and visitor access and necessitated the development of a patient/visitor information strategy.

A1 Case Study 1: Children's University Hospital.

A1.1 The Hospital:

Children's University Hospital is a core paediatric healthcare facility located in Dublin's North inner city. The hospital caters for circa 110,000 patients per annum and sees in excess of 140,000 visitors pass through its doors every year. Children's University Hospital was originally built in 1803 with the hospital taking residence in 1879.

Since 2006 the hospital has been in a period of transition. A new National Paediatric Hospital is proposed to be built approximately 0.5km North West of Children's University Hospital on the site of the current Mater Misericordiae University Hospital.

A1.3 The Project:

Parking congestion and impending planning constraints led hospital management to take a strategic approach to reduce the number of single occupancy vehicles accessing CUH. In 2005 the hospital established an on-site Commuter Centre branded "Travelways" with responsibility for the implementation of a Mobility Management Plan.

The Commuter Centre would be tasked with reducing the number of single occupancy vehicles through soft measures of behavioural change. This is achieved through the generation and communication of innovative alternatives to single occupancy vehicles.





A1.4 The Cycle to Work Scheme:

In order to achieve a reduction in single occupancy vehicular traffic the hospital needed to promote alternatives. Children's University Hospital is a strong advocate of cycling and for many years has hosted initiatives to promote cycling amongst staff, these have included:

- Breakfast for Bikers
- Bike Maintenance Classes
- Dr. Bike Sessions
- Cycling Lectures
- Free High Visibility Safety Clothing
- Special Discounted

These initiatives achieved some modal shift at the hospital however as Padraig Ryan, Transport Coordinator states it was the introduction of the Cycle to Work scheme that really escalated cycling as a means of commuting:

"The introduction of the Cycle to Work scheme has single handily altered the daily commute for many staff at the hospital. Approximately 18% of our staff have availed of the scheme to date. Many cycle long distances to work while others use the bike as part of a multi-modal journey. Since 2002 we have seen a 450% increase in the number of staff cycling to work, this has coincided with a 44% reduction in the number of staff driving. This could not have been achieved without the Cycle to Work scheme, it has made Children's University hospital a more accessible place for all concerned"

A2 Case Study 2: Google Ireland, HR Manager

"Google are extremely happy with the Cycle to Work scheme since we rolled it out a few years ago. We saw a genuine thirst from our employees for the benefit before we launched and ever since there has been consistent engagement with the scheme. I think it's a hugely important benefit for employees and would welcome improvements to the scheme which would go the extra step to making it even more flexible. In particular, the 5 year rule would ideally be reduced as feedback from our employees suggests that they would like to re-apply before this point. Overall, this is one of our more popular benefits onsite and we are happy to engage with it."





A3 Case Study 3: Trinity College, Dublin

"Trinity College as an employer welcomed the announcement of the Bicycle Tax Saver scheme and introduced the scheme for employees to avail of the benefits in 2009. Since then we have run the scheme on an annual basis (2009; 2010; 2011) and at least 5-6% of our staff availed of the scheme each time. As well as the financial benefits to our employees, they also benefit health wise and the College, and the City, benefit from the reduction in cars coming on to our Campus which is based in the City Centre"



APPENDIX B: SURVEYS

The Irish Bicycle Business Association has also collected a number of surveys carried out recently which show the development and benefit of cycling to employers, employees and bike shops across Ireland from the implementation of the Cycle to Work scheme.

B1 Bikes4work Retailer Survey 2011

The research was conducted among 130 bike retailers nationwide, representing almost half of bike shops in the country.

91% of bike retailers reported a growth in business in 2010 as a result of the Government's Cycle to Work scheme, according to new research carried out by One4all Bikes4work ahead of National Cycle to Work Day on Wednesday 22nd June. In more than a quarter of cases, the retailers experienced a significant business growth of between 10-20%. Similarly, over 88% of respondents reported an increase in business in 2009, the first year that the scheme was introduced. This trend continues in 2011 with 60% of retailers recording a growth in business to date.

Commenting on the findings, Michael Dawson, Group CEO at the Gift Voucher Shop, which runs the One4all Bikes4work scheme said:

"The Cycle to Work scheme is a hugely innovative initiative which has helped create a renewed culture of cycling in Ireland. As our research shows, it has contributed significantly to a rejuvenated bicycle retail industry resulting in a new wave of dynamic businesses as well as job creation at a time when the country needs it most."

Since the Government scheme began, 68% of those surveyed have increased staff numbers, comprising both full and part-time employees. The majority of new hires (31%) have been recruited so far in 2011 while 28% were taken on during 2010. Furthermore, 63% of respondents have renovated or increased the size of their premises as a result.

According to over half of bike retailers (53%), the average value of each initial bike purchase through the Cycle to Work scheme, including approved equipment, is between €500- €750. 42% of those surveyed said that customers spend from €750 up to the limit of €1,000. In the majority of cases (41%), customers also spend between €50- €100 on additional equipment each year.

- For 95% of respondents, the Cycle to Work scheme has introduced cycling to a new audience while 94% say the scheme has also resulted in a positive knock-on effect of additional bikes purchased for family members.
- In over half of cases (56%), the retailers report that customers cite health benefits as their primary reason for cycling to work, followed by cutting the cost of their commute (23%).
- 91% of bike retailers reported a growth in business in 2010 as a result of the Government's Cycle to Work scheme
- In more than a quarter of cases, the retailers experienced a significant growth of between 10-20%
- Since the scheme began in January 2009, 68% of those surveyed have increased staff numbers
- 63% of respondents have renovated or increased the size of their premises
- 95% of respondents feel that the Cycle to Work scheme has introduced cycling to a new audience
- Most popular bike purchase including approved equipment is between €500 - €750

Bike to Work Employee Survey with TCD.

Bike to Work Ltd / Trinity College Dublin Survey of Employees:

The results show that 73% of those who owned a bicycle before using the scheme cycled for non-work trips at least once a week. The results show that 50% of individuals that had not owned a bicycle in 4-6 years and 54% of those that did not own a bicycle in more that seven years cycled for a non-work trips at least once a week.

Key finding were:

- The percentage of female respondents to the survey is greater than the percentage of females in Census 2006 who Cycle to Work.
 This suggests that the scheme has made cycling more attractive to females.
- Only 12% of respondents did not own a car which shows that modal shift can be achieved among car-owners.
- 52% of respondents did not own a bike before getting one through the scheme.
- Of the 52% who did not own a bike before, 75% of them did not own a bike in the previous four years, which demonstrates that the scheme has been successful in attracting individuals to cycle to work.
- 77% of respondents were very satisfied with the scheme and 22% satisfied.
- As one would expect of those individuals that had a bicycle before the scheme, 40% cycle to work every day and 68% of all of these individuals cycle to work at least once a week. Of the new bicycle owners those who had not owned a bicycle in 4-6 years 13% cycle to work every day and 57% cycle at least once a week to work.

- The results for the age profile of the individuals that purchased a bicycle show that the majority of respondents that had not owned a bicycle in at least the past four years were aged between 35-54. This finding demonstrates that one of the success of the scheme is that it has encouraged those in an age group traditionally shown not to cycle as much as other age groups to start to cycle to work.
- The results show that the most influential factor in encouraging individuals to cycle on a more regular basis was health reasons. The results show that cost was the second most influential factor followed by convenience and time-savings.

APPENDIX C: REVIEW OF EXPERIENCE FROM ABROAD

In recent years many other countries have introduced tax incentives for cyclists. On the 1st of January 2009 in the United States commuting to work by bicycle was added to the list of qualified transportation fringe benefits by the Internal Revenue Service (IRS). Under the scheme those that cycle to work may be paid up to \$20 per month for reasonable expenses associated with their commute (Department for Transport 2009). The onus is on the companies providing the rebate to monitor cycling trends. In British Columbia, Canada, an innovative scheme called 'SCRAP-IT' incentives individuals to scrap their car if it is 25 years or older and are given incentives to purchase alternative modes of transport (British Columbia, 2010). These incentives include the purchase of annual public transport tickets and financial incentives towards purchasing a bicycle.

Internationally one of the most successful schemes providing interest free loans to purchase bicycles and equipment is operated in the United Kingdom (UK). The cycle to work scheme works in a similar way to the Irish scheme and it enables employees to save from 20-40% of the cost of a bicycle (Department for Transport, 2009). Several studies in the UK have examined the benefits of providing interest-free loans to purchase bicycles. A study was carried out in the mid 1990s in Nottingham, England where eight companies provided their employees with a number of incentives to cycle to work included interest free loans (Cleary and McClintock, 2000). The results of this demonstration project showed that there was an increase cycling and a promotion of greener modes of transport. A study conducted in Waterschap Veluwe in the Netherlands of a company that offered free bicycles to employees living within a 10km of their place of work. The results of this study showed a 40% increase in the number of staff cycling to work (Travel Smart, 2010).

Wardman et al (2007) examined the potential of financial incentives to encourage individuals in the UK to cycle to work. The study considered a daily financial reward for those individuals that cycle to work on a daily basis and found such a policy would result in a considerable modal shift. Informing commuters of the cost savings of using sustainable modes of transport has been shown to modify behaviour and decrease car usage. Herzog and Grant (2002) developed an online commuter choice benefits calculator. The calculator presented in this study estimates the benefits to the employer of introducing schemes such as bicycle purchasing schemes. In countries lacking a national bicycle purchase scheme like those in the UK and Ireland, providing employers with information on the benefits of such schemes are key to persuading employers of their merit. It is also been shown that habit and education is key to ensuring a cycling culture (Koike et.al, 2002).



APPENDIX D: CALCULATIONS

Balance			Lower rate	20	7	4	31
Sheet			Higher rate	41	7	4	52
Average Tax				40%			
						Revenue	Expenditure
Tax	€750	90,000	€67,500,000	€27,000,000			€27,000,000
PRSI	10.75%			€7,256,250			€7,256,250
Vat on Bikes Sold					€14,175,000		
Accessories	€300	per bike	€27,000,000		€5,670,000		
Family Bikes	€300	13,500	€4,050,000		€850,500		
Servicing Bikes	€105	90,000	€9,450,000		€1,984,500		
Total Vat						€22,680,000	
Jobs							
New Jobs	Social Welfare Saving per Job		€20,000				
	Existing Shops	1 extra 1 saved per store	420		€8,400,000		
	New Shops		165		€3,300,000		
	Distributors		20		€400,000		
	Voucher Companies		12		€240,000		
Total New Jobs						€12,340,000	
Saved Jobs							
	Indirect Jobs Saved or Created		50	Courier Companies etc	€1,000,000		
	Hardware Stores		100		€2,000,000		
Total Saved Jobs						€3,000,000	
Total State Revenue							€38,020,000
Net Surplus							€3,763,750

APPENDIX D: CALCULATIONS

Dublin Cycling in Numbers Calculations. Item Value Unit Reference Cycle to Work Scheme sales **IBBA** 90000 2009-2011 Proportion of new cyclists 50% Caulfield and Leahy 2011 New cyclists 45000 2009-2011 Trips per new cyclist 5 See the statistics in Caulfield and Leahy 2011 per week Trips per new cyclist 240 per year Average years of use for new 2.5 Employees can only get a bike once every five years. years Cycle to Work Scheme bike Additional trips to work 27000000 2009-2011 generated by the Scheme Net revenue generated by the €19,000,000 2009-2011 See Figure 2 **Government through the Scheme** Net revenue generated per €0.70 = Revenue / Trips new trip to work. Subsity per passenger trip for €4.00 Stull and Greer 2007, p2

Deloitte 2008

Luas for comparison

Subsidy per passegner trip for

Dublin Bus for comparison

€0.63



