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# Spending Review 2021

## An Examination of the Cycle to Work Scheme

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# Spending Review of the Cycle to Work Scheme

## Contents

List of Figures and Tables .....	3
Executive Summary .....	4
1. Introduction .....	6
2. Overview of Scheme .....	7
3. Programme Context and Rationale.....	13
4. Scheme Impacts .....	28
5. International Comparisons .....	46
6. Barriers, Incentives, and Alternatives .....	50
7. Conclusions .....	59

## List of Figures and Tables

### Figures

Figure 1: Number of People Commuting to Work via Various Modes, 1981 to 2016. ....	20
Figure 2: Change in Numbers Commuting to Work via Various Modes, 1981 to 2016.....	20
Figure 3: Numbers and Modal Share of Cyclists Commuting to Work, 1981 to 2016. ....	21
Figure 4: Cycling Mode Share in Commuters by Area of Residence, 2016.....	22
Figure 5: Numbers and Modal Share of Pedestrians Commuting to Work, 1981 to 2016. ....	23
Figure 6: Programme Logic Model.....	27
Figure 7: Number of Commuters Cycling to Work and Modal Share, 1981 - 2016 .....	32
Figure 8: Change in Cycle Commuters and Cycle Mode Share by Age, 2011 – 2016. ....	33
Figure 9: Change in Number of Commuters by Age and Mode, 2011 to 2016.....	34
Figure 10: Participant Savings for a Qualifying Purchase of Value €300 .....	37
Figure 11: Participant Savings for a Qualifying Purchase of Value €500 .....	37
Figure 12: Participant Savings for a Qualifying Purchase of Value €750 .....	38
Figure 13: Breakdown of Exchequer Revenue Foregone and Participant Contribution for a Qualifying Purchase of €500 in 2021.....	40
Figure 14: Heatmap of Savings by Participant Income .....	41
Figure 15: Recorded Incidents of Bike Theft, 2008-2020.....	44
Figure 16: Journey Purpose for Persons Over 18 in 2014, 2016 and 2019.....	54

### Tables

Table 1: Estimates of Scheme Uptake and Cost .....	30
Table 2: Cost per Participant.....	30
Table 3: Number of Users and Cost per User of Belgian Cycling Mileage Allowance.....	48

## Executive Summary

The Cycle to Work Scheme is a tax incentive scheme that seeks to increase the number of people travelling to work by bicycle by allowing an exemption from taxation on a benefit that takes the form of a bicycle or associated equipment provided by an employer to their employee for the purposes of cycle-commuting.

The scheme was introduced in 2009 as part of Government response to unsustainable transport trends, and in particular sought to promote active travel and its associated health benefits, reduce urban congestion, and reduce greenhouse gas emissions associated with car travel. Since then, Government policy has reinforced the importance of these goals in addressing issues in the transport sector, and a growing body of policy evidence has reaffirmed the benefits of active travel, demonstrating the continued need for intervention.

The scheme allows participating employers to provide a bicycle and associated equipment to their employees without generating benefit-in-kind taxation. The employee may repay the cost through regular salary deductions applied for no more than one year; these deductions are exempt of income tax and related charges. Due to its legislative basis, the scheme can only be applied in the context of an employer-employee relationship, which restricts eligibility. In the interests of simplicity, the scheme operates on a self-administration basis. As a result, oversight of the scheme is limited and there are no records centrally available concerning details of scheme operation, such as the numbers of people availing of the scheme, or the revenue foregone by the Exchequer in order to provide it.

The lack of available data makes it very difficult to formally evaluate the scheme. There are no official figures indicating the scheme costs or uptake, and estimates for both vary significantly. While an examination of Census data indicates an increase in cycle-commuters since the introduction of the scheme, the increase is modest considering the reported estimates of scheme uptake. However, limitations associated with the Census data mean that some aspects of cycle-commuting may not be fully represented, and so there is also insufficient evidence to determine that the scheme has failed to deliver a significant impact.

In general, those with higher incomes will enjoy greater savings as a result of participating in the scheme, although there are some exceptions to this. Restrictions on eligibility, while unavoidable given the scheme's current model, also reduce the equity of the scheme, while restrictions on the qualifying equipment may make it less attractive to parents of other caretakers that travel with children for some part of their commuting journey.

A survey of scheme participants provides evidence of some additionality; however, it also suggests that there may be significant deadweight associated with the scheme, and that the equipment obtained through the scheme may frequently be used for leisure rather than commuting purposes.

Internationally, cycling mileage allowances introduced in France on a pilot basis, and operated in Belgium for a number of years have been shown in both jurisdictions to increase cycling mode share in commuting journeys. An evaluation of a scheme with a model similar to the Cycle to Work Scheme that has been in place in the UK since 2009 found limited evidence of impact on cycling activity generally, and cycle-commuting specifically, but did find an increase in the number of miles cycled in recent years.

The report also found only a modest increase in cycling achieved by a small proportion of participants was required to generate social benefits whose value would exceed estimated cost of the scheme. It acknowledged that there is also consistent evidence in the literature that public investment in measures to facilitate increases in cycling is generally cost effective with high benefit-to-cost ratios, and added that investments in cycling infrastructure appear to work most effectively when combined with direct efforts to increase cycling activity such as cycle to work schemes.

The scheme seeks to increase cycle-commuting by providing a financial incentive to facilitate bicycle ownership. However, survey data indicates that the cost of a bicycle does not represent a barrier to cycling for most people; rather, concerns in relation to physical safety, confidence in cycling skills and attitudinal barriers are much more commonly expressed. Revisiting the scheme rationale in light of the issues considered throughout the paper generates a number of questions concerning the type of cycling activity the scheme incentivises, the impact of eligibility restrictions, and how it addresses barriers to cycling or incentives desired behaviour. The rationale and motivation for the scheme should be fully re-examined, with due consideration given to identifying the ultimate motivation for supporting and promoting active travel.

It is likely that a combination of interventions would be most effective in delivering modal shift. Behavioural schemes such as the Cycle to Work Scheme should be combined with improvements in infrastructure and traffic management actions that would improve safety for cyclists. Educational and promotional initiatives may be as important as financial incentives in order to attract new cyclists. Any potential initiatives should be designed in a manner that ensures sufficient data can be easily collected in order to evaluate those initiatives, if implemented. Most crucially, initiatives must not be designed in isolation, but rather should form part of a systems approach to active travel where the interplay of different interventions has been explored and accounted for. Without careful planning and analysis, interventions may achieve small increases in active travel, but are unlikely to deliver the fundamental change in the nature of transport in Ireland conceived of in the Programme for Government.

# 1. Introduction

The Cycle to Work Scheme was introduced in Budget 2009 as an incentive to support cycling as a mode for commuting to work. It was introduced alongside a number of other measures aimed at easing congestion in Irish cities, supporting the use of sustainable mobility and lowering Ireland's carbon emissions. The scheme aims to increase the number of people commuting to work by bike by allowing employers to purchase bicycles and related equipment for employees without requiring the payment of income tax and related charges as would normally be required where a benefit-in-kind is provided. This can have significant implications on the cost of a bike. The scheme has received significant positive commentary in Oireachtas debates and has been proposed as a model that could be adopted in other sectors to support the transition to a zero-carbon economy in a just and equitable manner. These measures included focusing population growth in areas of employment and encouraging people to live in close proximity to places of employment, the use of pricing mechanisms or fiscal measures to encourage behavioural change, improving the public transport service, investment in cycling and walking, improving fuel efficiency by addressing fleet structure, energy efficient driving and alternative technologies.

While data on the scheme is extremely limited, it is likely that the cost, in relative terms, is reasonably low. However, given the emphasis placed on sustainable mobility in the Programme for Government, the National Planning Framework and the Climate Action Plan, a spending review of a popular and salient element of the Government's suite of measures to increase the mode share of sustainable mobility modes is timely in terms of the scheme itself and the design of other schemes utilising tax expenditures and benefit-in-kind exemptions to support the uptake of sustainable behaviour, in the transport sector and elsewhere.

Section 2 of this paper will provide an overview of the operation of the programme, and Section 3 will discuss the rationale for the scheme at the time of its introduction, the relevant policies today and the continuing rationale for investment and support in this area. Section 4 will consider the range of programme impacts including the programme's overall uptake and cost, the equity considerations of the programme, the impact of the programme on commuter behaviour and any wider transport impacts. Section 5 will review international best practice in this area and Section 6 will discuss barriers to cycling, the motivation for the scheme, and possible alternative incentive models.

## a. Methodology

The paper consists of a desk-based analysis of the Cycle to Work scheme analysing scheme rationale and governing legislation. It includes quantitative analysis of cost estimates and indicators of impact using data from a wide range of sources, including Department of Finance estimates, census data, the National Travel Survey, the Bikelife survey carried out by the National Transport Authority and

Sustrans, and participant surveys. The research employs a variety of analytical techniques, such as trend analyses and international benchmarking. Following the analytical approach taken by value for money and policy reviews and acknowledging the data constraints that arise, the approach taken is to consider the scheme in terms of its trends regarding inputs, outputs and outcomes or impacts.

## 2. Overview of Scheme

This section provides an overview of how the scheme operates in practice. Part a) sets out the legislation governing the scheme, while Parts b) and c) explain the roles of a participating employee and employer, and the conditions that apply to salary sacrifice arrangements. Part d) discusses the equipment eligible for the scheme and Part f) considers limitations on participant eligibility. Finally, Part f) explores the role of the State in administering the scheme, while Part g) discusses scheme administration in the context of governance and data availability.

### a. Background and Legislation

The legal basis for the Cycle to Work Scheme derives from Section 7 of the Finance (No.2) Act 2008, which introduced an exemption from income tax charged under section 118 of the Taxes Consolidation Act 1997 (TCA) in respect of a benefit in the form of a bicycle, pedelec or associated safety equipment provided to a director or employee by his or her employer, provided certain conditions are met.

This exemption allows an employer to incur the expense of providing an employee with a new bicycle without the employee being liable for benefit-in-kind taxation. The legislation also permits the benefit-in-kind tax exemption to apply in the context of salary sacrifice, that is, where an employee agrees to forgo or sacrifice part of his/her salary in lieu of the provision of new bicycle by the employer. This exemption applies to expenditure incurred by an employer on or after 1 January 2009.

Section 9 of the Financial Provisions (Covid-19) (No. 2) Act 2020 increased the allowable expenditure to €1,250 for bicycles and €1,500 for electric bikes and allows employees and directors to avail of the scheme every four years. These limits were previously €1,000 and every five years. The legislation that currently governs the scheme can be found at section 118 (5G) of the TCA.

The exemption allows the employee to save on the income tax, USC and PRSI that would normally be payable on the value of a qualifying purchase. The employer also makes a saving as employer PRSI is not payable on the value of a qualifying purchase.

The legislation specifies a number of conditions which must be met in order for relevant expenditure to meet the required qualifications for exemption. These are:

- the cap on expenditure and the time period which must pass before an employee may avail of the scheme a second time;
- that the bicycle and equipment should be unused and not second hand;
- that the employee uses the bicycle and equipment mainly for qualifying journeys; and
- that the scheme is made generally available to directors and employees of a company operating the scheme.

## b. Operation of the Scheme

To participate in the scheme, an employee should first contact their employer to determine whether the employer operates the scheme, discuss arrangements for salary sacrifice, and establish any conditions or restrictions imposed by the employer. Bicycles and equipment may be purchased in any cycle shop, but it is for employers to decide how they administer the scheme. Some employers may allow their employees to select the bicycle and equipment from the retailer of their choice, with the employer then organising appropriate invoicing and delivery arrangements with the retailer. However, other employers may offer more limited options to employees. An employer could, for example, allow an employee to choose only from the range available from a single retailer.

Once the employee has selected the bicycle and/or equipment that best suits their needs, the employer purchases the bike and equipment directly for the employee. The benefit-in-kind exemption does not apply where an employee or director purchases a bicycle and/or bicycle safety equipment directly and is reimbursed by their employer.

## c. Salary Sacrifice

The employer may arrange salary deductions over an agreed time frame to recoup the costs of the purchase from the employee. These deductions can be made weekly, fortnightly or monthly depending on individual salary arrangements, and the employee will not be liable to tax or PRSI or levies on the salary sacrificed. Salary sacrifice arrangements must be completed over a maximum of 12 months from the date of provision of the bicycle/safety equipment, and must satisfy the following conditions to be regarded as being effective for tax purposes:

- There must be a bona fide and enforceable alteration to the terms and conditions of employment (exercising a choice of benefit instead of salary);
- The alteration must not be retrospective and must be evidenced in writing;

- There must be no entitlement to exchange the benefit for cash;
- The choice exercised (i.e. benefit instead of cash) cannot be made more frequently than once in a 4 year period; and
- The choice exercised (i.e. benefit instead of cash) must be irrevocable for the relevant year for which it is made.

An employer may also provide a bike to employees without requiring repayment of the purchase cost or a salary sacrifice arrangement. In this case, the value of the bike and associated equipment will not be considered as benefit-in-kind income that is liable for tax.

#### d. Eligible Equipment

In addition to the bicycle, the delivery of the bicycle and safety equipment associated with the bicycle are eligible to be exempted from taxation, up to the cap of €1,250 or €1,500.

The following items appear either in the legislation or Revenue guidance as examples of qualifying bicycle safety equipment:

- bicycle bells and bulb horns;
- bicycle helmets that conform to European product safety standard CEN/EN 1078;
- bicycle lights, including dynamo packs;
- bicycle reflectors and reflective clothing;
- Mirrors and mudguards to ensure riders visibility is not impaired;
- Cycle clips and dress guards;
- Panniers, luggage carriers and straps to allow luggage to be safely carried;
- Locks and chains to ensure cycle can be safely secured; and
- Pumps, puncture repair kits, cycle tool kits and tyre sealant to allow for minor repairs.

The scheme may be used to purchase safety equipment alone if the equipment is associated with cycling to work and the other conditions are met.

As the scheme is intended to incentivise the use of cycling for commuting and other work-related journeys, safety equipment for a child such as a helmet or separate seat does not qualify as safety equipment under the scheme. Other accessories such as bike trailers are also not considered to fall within items covered by the scheme.

The act limits relevant expenditure to the initial cost of purchasing a bike and the associated safety equipment and makes no provision for the ongoing costs of commuting via bicycle such as repairs, spare parts or bicycle insurance.

## e. Scope and Eligibility

As noted above, the Cycle to Work Scheme represents an exemption from benefit-in-kind tax that normally applies where an employer provides an employee with a benefit such as a car or accommodation, provided the required conditions are met. As such, the administration of the scheme is inherently dependent on the employment relationship. As such, where this relationship does not exist, individuals cannot qualify for the scheme.

The expansion of the scheme to a wider cohort has been and continues to be a common element of public and political discussion around the scheme. A number of Parliamentary Questions have raised broadening the eligibility of the scheme to include groups such as:

- retired people and old age pensioners<sup>1</sup>;
- full time students<sup>2</sup>;
- persons for whom social welfare payments are their primary income<sup>3</sup>;
- persons engaged in home-making/child-rearing<sup>4</sup>;
- school children<sup>5</sup>;

However, as these groups primarily consist of persons who are not in employment, it is unclear how the scheme could be expanded to include them without fundamentally changing the model by which it operates. Expanding the scheme to these groups will likely require the development of an entirely new, more expansive scheme or a complementary programme targeted at these groups as the existence of an employment relationship is inherent to the nature of the current scheme as a benefit-in-kind exemption.

## f. State Involvement

The scheme is administered by the Revenue Commissioners<sup>6</sup>, however the scheme operates through self-administration and does not require the active participation of the State or State agencies. Generally, the only parties to the transaction are the employee, the employer and the bike retailer. In some cases, an employer may operate the scheme through a third-party “Cycle to Work” administrator.

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<sup>1</sup> <https://www.oireachtas.ie/en/debates/question/2020-11-03/312/>

<sup>2</sup> <https://www.oireachtas.ie/en/debates/question/2021-04-21/422/>

<sup>3</sup> <https://www.oireachtas.ie/en/debates/question/2020-05-20/135/>

<sup>4</sup> <https://www.oireachtas.ie/en/debates/question/2021-04-01/81/>

<sup>5</sup> <https://www.oireachtas.ie/en/debates/question/2020-07-30/247/>

<sup>6</sup> <https://www.oireachtas.ie/en/debates/question/2018-05-08/426/>

From time to time, Revenue undertakes random checking on particular reliefs and schemes to ensure compliance with the required conditions, and may select cases for intervention based on various risk indicators and sources of information, including intelligence and third-party information<sup>7</sup>. Where a supplier knowingly or wilfully issues or produces any incorrect invoice, receipt, instrument or other document in connection with any tax or any employee knowingly or wilfully furnishes any incorrect information in connection with any tax, they will be investigated with a view to prosecution.

#### g. Scheme Administration and Governance

The Cycle to Work Scheme operates on a self-administration basis, and relief is automatically available provided the employer is satisfied that the conditions of their particular scheme satisfy the requirements set out in the legislation. There is no notification procedure for employers to indicate that they are operating the scheme.

The purchase of bicycles and associated safety equipment by employers for directors and employees is subject to the normal Revenue audit procedure with the normal obligations on employers to maintain records (e.g. delivery dockets, invoices, payments details, etc.). The employer is also obliged to keep all salary sacrifice agreements entered into between the employer and employees/directors, together with all signed statements from employees/directors regarding use of the bicycles/safety equipment.

However, employers are not obliged to notify Revenue of the provision of bicycles/safety equipment to its employees and directors. As noted previously, the employer should obtain a signed statement from the employee or director that the bicycle/safety equipment will be for his or her own use and will be used mainly for qualifying journeys, but there is no obligation on an employer to keep a record of the usage of the bicycle/safety equipment by an employee or director.

This approach was taken with the intention of keeping the scheme simple and reducing administration on the part of employers<sup>8</sup>. With this in mind, the existence of private companies that act as third-party administrators of the scheme on behalf of certain employers may suggest that even the relative simplicity of the current scheme is undesirable for some employers. Having said that, third-party administrators tend to generate their revenue by charging commission fees to suppliers and bicycle shops rather than by charging employers. In fact, if commission fees are not absorbed by suppliers, they may increase the value of the purchase required to buy the desired equipment. As the employer makes a saving on employer PRSI that would normally be due on the

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<sup>7</sup> <https://www.oireachtas.ie/en/debates/question/2012-07-04/69/>

<sup>8</sup> [Cycle to Work Scheme – Tuesday, 16 Jun 2020 – Parliamentary Questions \(33rd Dáil\) – Houses of the Oireachtas](#)

salary sacrificed to participate in the scheme, increasing the value of purchase has the effect of increasing the savings made by an employer, so there is little to discourage employers from engaging the services of a third-party employer.

Nonetheless, while the simplicity of the current scheme may serve to limit the administrative burden, noting that any increase in administrative demands (for employers, Revenue and/or relevant Government bodies) may serve to reduce the scheme uptake or generate additional scheme administration costs, the scheme's administrative simplicity also serves to limit its level of oversight.

One implication of the limited oversight is that it may result in the scheme not being used as it was intended, for example by using the incentives to obtain a bike for leisure rather than commuting purposes. This is considered further in section 4e, which explores the wider transport impacts of the scheme.

Furthermore, the associated administrative simplicity has the effect of severely limiting the availability of basic data concerning the scheme, such as the uptake and cost associated with it. The impact of these data limitations on the evaluation of the scheme will be considered in the section that follows.

## **h. Conclusions**

The scheme derives from an exemption from taxation on a benefit in the form of a bicycle or associated equipment that is provided by an employer to their employee for the purposes of cycle-commuting. Part of the cost of purchase is off-set by the reduction in tax payable, and the employer may repay the remaining cost through a regular salary deduction applied for no more than a year. Due to its legislative basis, the scheme can only be applied in the context of an employee-employer relationship. While this restricts eligibility for the scheme, this is an unavoidable consequence of its structure.

In the interests of simplicity, the scheme operates on a self-administration basis, with little involvement from the State or State agencies. As a result, oversight of the scheme is limited, and there are no records centrally available concerning details of scheme operation, such as the numbers of people availing of the scheme, or the cost associated with providing it. The existing oversight arrangements have implications for the performance of the scheme, and for the availability of data required to evaluate how well it achieves its objectives.

### 3. Programme Context and Rationale

This section examines the motivation for operating such a scheme. Part a) sets out the rationale behind the introduction of the scheme in 2009. Part b) examines developments in the policy context that have come into play since the introduction of the scheme, while part c) examines whether there is continuing need for intervention, considering the original objectives of the scheme and how evidence in relation to these areas has developed over time. Part d) illustrates the mechanism by which the scheme could deliver these benefits using a Programme Logic Model.

#### a. Rationale

The 2009 policy Smarter Travel - A Sustainable Transport Future set out a number of concerns regarding existing trends in the Irish transport system.

Between 1996 and 2006, Ireland experienced unprecedented economic growth, manifested in a doubling of GDP, a 17% increase in population from 3.63 million to 4.24 million and a 40% increase in the number of people in employment. Furthermore, the number of private cars per 1,000 adults increased from 382 to 528 (although still below the 2003 EU average of 558 per 1,000 adults), and there was a 72% increase in the number of vehicles licensed from 1.3 million in 1996 to 2.3 million in 2006.<sup>9</sup>

The then Government was concerned that the observed transport trends were unsustainable<sup>10</sup>, particularly in light of population growth projections which indicated that the population could reach 5.1 million by 2020. Even making use of the lower growth population projection, it was feared that car ownership would increase beyond EU average levels, with car use continuing to increase while commuter walking and cycling modal share continued to decline, leading to an increased dependence on car travel and reduced physical activity, thereby contributing to obesity and other negative health impacts. In addition, localised traffic pollution could cause further damage to public health and contribute to acute and chronic diseases. There were concerns that elevated levels of car ownership may also reduce the average speed in urban areas during the morning peak travel period, leading to more time spent commuting, reducing commuters' quality of life.

EPA<sup>11</sup> estimates indicate that the transport sector went from being responsible for 7,335 kilotons of CO<sub>2</sub> equivalent in 1996 (12% of all emissions) to generating 13,826 kilotons of GHG emissions in 2006 (20% of all emissions). A continuance of the observed trends in relation to increasing car ownership

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<sup>9</sup> [Smarter Travel Policy 2009 - 2020](#)

<sup>10</sup> [Smarter Travel Policy 2009 - 2020](#)

<sup>11</sup> [Ireland's Final GHG Emissions Data 2019](#)

and usage would generate further increases in the volume of emissions arising from the transport sector.

The *Smarter Travel* policy was designed to show how unsustainable transport and travel patterns could be reversed to reduce the health and environmental impacts of existing trends and improve quality of life. One action set out in the Smarter Travel policy was the publication and implementation of a *National Cycle Policy Framework* (NCPF), with a view to creating “*a strong cycling culture in Ireland*”. The overarching target set by the NCPF was to have 10% of all trips to work made by bicycle by 2020.

It was in this context that the Cycle to Work Scheme was introduced in the 2009 Budget. It was described in the Budget speech as follows:

*“As part of the Government’s overall programme to support a sustainable environment... ...I am proposing a tax incentive to promote cycling to work. These initiatives seek to encourage greater use of public transport and ease congestion in our major cities... ... These measures... ...will make a positive contribution to reducing Ireland’s carbon emissions.”<sup>12</sup>*

The *National Cycle Policy Framework*, supporting the objective of providing fiscal incentives to cycle, states that

*“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.”<sup>13</sup>*

The NCPF makes reference to the scheme in one of the actions supporting the objective of providing fiscal incentives to cycle, and while the nature of the reference is to welcome the initiative rather than identifying it as an action to deliver that specific policy, more recently, in a reference to the scheme at Joint Committee on Climate Action Debate, it was noted by the Department of Transport that development of the scheme was motivated by the National Cycle Policy Framework, describing the scheme as follows:

*“The cycle to work scheme... ...is a tax incentive scheme that came out of the national cycle policy framework. It is specifically targeted at commuters, that is, people who commute into work. That is why the incentive is set up in that way.”<sup>14</sup>*

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<sup>12</sup> Budget Speech 2009, Oct 2008 - [Minister's Speech \(budget.gov.ie\)](http://budget.gov.ie)

<sup>13</sup> National Cycle Policy Framework 2009

<sup>14</sup> [Debate of the Joint Committee on Climate Action, 27 November 2019.](#)

This suggests that the rationale, at the time of the measure's introduction was to:

- increase the modal share of sustainable travel modes;
- ease urban congestion; and
- reduce Ireland's carbon emissions.

## b. Policy Context

### i. Project Ireland 2040 and the National Planning Framework

Project Ireland 2040 is the Government's long-term strategy for making Ireland a better country for all of its people. Project 2040 is underpinned by a set of ten shared goals known as National Strategic Outcomes (NSOs) that apply to every community across the country. Investment in active travel will support the realisation of a number of National Strategic Outcomes (NSOs) as identified in Project Ireland 2040, in particular:

- NSO 1 – Compact Growth
- NSO 3 – Strengthened Rural Economies and Communities
- NSO 4 – Sustainable Mobility
- NSO 7 – Enhanced Amenity and Heritage
- NSO 8 – Transition to a Low Carbon and Climate Resilient Society

One of the main vehicles for achieving this vision is the National Planning Framework (NPF), a national document guiding high-level strategic planning and development for the country over the next 20+ years, so that as the population grows, that growth is sustainable (in economic, social and environmental terms).

The NPF places a strong emphasis on sustainable mobility (active travel and public transport), recognising that investment in sustainable mobility supports the realisation of NPF's broader objectives through the provision of well-functioning, integrated public transport systems and enablers for active travel which can enhance competitiveness, sustain economic progress and enable citizens to choose a more sustainable mobility mode.

The NPF also highlights the importance of improving access to sustainable mobility in our towns and rural areas, with National Policy Objectives providing explicit policy support for the provision of public transport infrastructure and services to meet the needs of smaller towns, villages and rural areas and for major investments in cycling and walking infrastructure throughout the country.

The NPF calls attention to the connection between sustainable mobility and compact growth, whereby sustainable mobility acts as an enabler of compact growth while modal shift is in turn

supported by compact growth of our cities, towns and villages through the application of transport-led development principles.

## ii. Programme For Government

The Programme for Government Our Shared Future, published in June 2020, includes a number of ambitious targets in relation to reductions in overall greenhouse gas (GHG<sup>15</sup>) emissions. In particular, the Programme commits to delivering an average reduction of 7% per annum in overall GHG emissions from 2021 to 2030 (a 51% reduction over the decade) and to achieving net zero emissions by 2050. The Programme states that every sector will contribute to meeting this target by implementing the policy changes outlined therein. These policy actions are underpinned by the core philosophy of a Just Transition in order to ensure that no sector of society or community is left behind in the movement to a low-carbon future.

The Programme acknowledges that as regards the transport sector, this will require a fundamental change in the nature of transport in Ireland, and the delivery of an unprecedented modal shift in all areas by a reorientation of investment to walking, cycling and public transport. To achieve this reorientation, the Programme commits to allocating €360 million per annum to walking and cycling projects for the lifetime of the Government, with an additional 10% of the total capital budget allocated to pedestrian infrastructure. The Government's commitment to cycling and pedestrian projects will be set at 20% of the 2020 capital budget (€360 million) per year for the lifetime of the Government.

In addition to this significant investment in active travel infrastructure, the Programme includes commitments in relation to the development of cycle network plans by local authorities, the expansion of active travel expertise such as through the establishment of Regional Cycle Design Offices, achieving dramatic increases in the number of children walking and cycling to school, expanding the cycling training provided to primary school children and reviewing road traffic policy and legislation to prioritise the safety of walking and cycling. It is intended that this commitment to active travel will enable the development of an integrated national network of greenways to be used by commuters, leisure cyclists and tourists.

The Cycle to Work Scheme is specifically referenced in the Programme, which pledges to widen the eligibility of the scheme and providing an increased proportionate allowance for e-bikes and cargo

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<sup>15</sup> Greenhouse gases refer to carbon dioxide, nitrous oxide, methane, ozone and chloro-fluorocarbons occurring naturally and resulting from human (production and consumption) activities, and contributing to the greenhouse effect (global warming). Source: OECD Glossary of Statistical Terms. GHGs are a form of air pollution, which is defined as the presence of contaminant or pollutant substances in the air that do not disperse properly and that interfere with human health or welfare, or produce other harmful environmental effects. Source: OECD Glossary of Statistical Terms.

bikes. While eligibility has not yet been addressed, the other measures referenced have been progressed, with increases in the allowable expenditure limits for both mechanical bicycles and e-bikes forming part of a stimulus package announced by the Government in July 2020. In addition, the Programme commits to supporting SMEs to have adequate shower and changing facilities to assist workers who cycle and run to work, which may support a modal shift to active travel by commuters working in such places of work.

### iii. Climate Action Plan

The Climate Action Plan was published in June 2019. The Plan sets out a number of actions to ensure Ireland becomes a world leader in responding to climate breakdown. Transport accounts for approximately 20%<sup>16</sup> of Ireland's greenhouse gas emissions. Therefore, decarbonising the Transport sector will be key to reaching Ireland's emission reduction goals. Alongside efforts to decarbonise the national car fleet, the Plan emphasises the need for significant modal shift.

To support the shift to active travel modes, a Cycling Project Office was established in December 2019 in the NTA to coordinate the development of cycling infrastructure and to consider the expansion of a broad suite of mobility management initiatives.

The 2021 update of the Climate Action Plan will be published in Q4 2021. This will build on the 2019 Plan and will seek to promote sustainable mobility and significantly reduce vehicle kilometres travelled by internal combustion engine (ICE) vehicles. The Plan commits to an additional 500,000 daily sustainable journeys by 2030. This will be achieved through significant investment in public transport and active travel infrastructure, including the provision of safer, longer and better-connected walking and cycling networks across the country. This network will be delivered through collaboration between the Department of Transport, NTA, TII and Local Authorities.

### iv. Other Relevant Government Policy

Smarter Travel – A Sustainable Transport Future was published by Government in 2009 and served as the overarching policy guiding sustainable transport development in Ireland between 2009 and 2020. Its main aims were to reduce private car travel, expand access to transport alternatives and improve fuel efficiency of motorised transport.

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<sup>16</sup> This total excludes international aviation.

One action set out in the Smarter Travel policy was the publication and implementation of a National Cycle Policy Framework (NCPF), with a view to creating “a strong cycling culture in Ireland”. The overarching target set by the NCPF was to have 10% of all trips to work made by bicycle by 2020.

This also led to the development of the Smarter Travel Workplaces programme, a national voluntary behaviour change programmes, supporting employers to implement workplace travel plans encouraging staff and students to walk, cycle, take public transport and carpool on the commute and beyond, and for organisations to consider flexible working arrangements. A similar programme is in place for third level campuses.

A review of the actions in the Smarter Travel Policy and the NCPF was carried out in 2019 as part of the Department of Transport’s review of sustainable mobility policy which is looking at all aspects of active travel and public transport policy. A new 10-year Sustainable Mobility Policy Framework and 5-year action plan is scheduled to be published in the coming months which will replace the Smarter Travel Policy and the NCPF. The aim is to put in place a new policy framework that better supports sustainable mobility to provide for increased use of active travel and public transport. The new policy will be aligned with the targets in the Climate Action Plan 2021 around sustainable mobility.

### c. Continued Need for Intervention

#### i. Increase the Modal share of Active Travel Modes

Increasing the prevalence of active travel<sup>17</sup> to replace car travel can generate a range of benefits for both the individual traveller and for the wider community. For the transport sector, a modal shift from private car to active travel reduces congestion on busy roads as the physical space required to accommodate pedestrians and cyclists is significantly less than for the same number of private cars, thereby improving accessibility for all road users and reducing carbon and greenhouse gas emissions generated from private car use. The space and infrastructure required for large numbers of pedestrians and cyclists are often significantly more economical to provide when compared to the costs associated with new roads or railways, for example.

More generally, increasing the modal share of active travel in towns and cities results in improved air quality and lower noise levels due to the reduction in car volume. Improving the available active travel infrastructure may also facilitate transport equity by improving accessibility and mobility for lower income groups who may not be able to afford a private car while also delivering better accessibility for people with disabilities through the provision of transport facilities such as high-quality footpaths.

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<sup>17</sup> Active travel refers to travelling with a purpose while using your own energy. Generally, this means walking (including all users of footpaths) or cycling as part of a purposeful journey.

There is evidence that active travel, and particularly cycle-commuting may be associated with significant health benefits for cyclists. The International Transport Forum (ITF) report *Cycling, Health and Safety*<sup>18</sup> found that cycling, as a form of moderate exercise, can greatly reduce clinical health risks linked to cardiovascular disease, obesity, Type-2 diabetes, certain forms of cancer, osteoporosis and depression. The report reviewed studies looking at the full spectrum of cyclist health impacts (including crash-related injuries and air pollution) while controlling for exposure and crash under-reporting, concluding that the evidence indicated that the estimated health benefits of cycling are several orders of magnitude greater than the health dis-benefits of cycling.

A 2017 study from the University of Glasgow<sup>19</sup> of over 250,000 UK adults examined the relationship between mortality and the mode of transport used to commute to work on a typical day (walking, cycling, mixed mode or non-active (car or public transport)) and found that cycle-commuting was associated with significant reduction (42%) in overall mortality risk, and with substantial decreases in the risk of developing cardiovascular disease (46%) and cancer (45%). These reductions were dose dependent in all cases, so that commuting longer distances by bike was associated with a larger reduction in risk. Mixed mode commuting was associated with some benefits but only where cycling rather than walking was the active travel component of the commute. These associations were independent of sex, age, deprivation, ethnicity, smoking status, recreational and occupational physical activity, sedentary behaviour, dietary patterns, and other confounding factors, including body mass index and comorbidities.

Finally, it has been observed that increased numbers of cyclists tend to correlate with a reduction in accident rates for cyclists, although it is not clear that the observed effect represents a causal link<sup>20</sup>. In addition, as the numbers of active travel users increase, it is likely that the quality of the infrastructure such as footpaths and cycle paths provided by public authorities will improve, which may lead to improved safety for all road users.

As illustrated below, Ireland has had a high reliance on motor-vehicles as a mode of commuting in recent decades; this has become particularly pronounced following the economic expansion of recent decades as the overall number of people commuting to work has increased significantly.

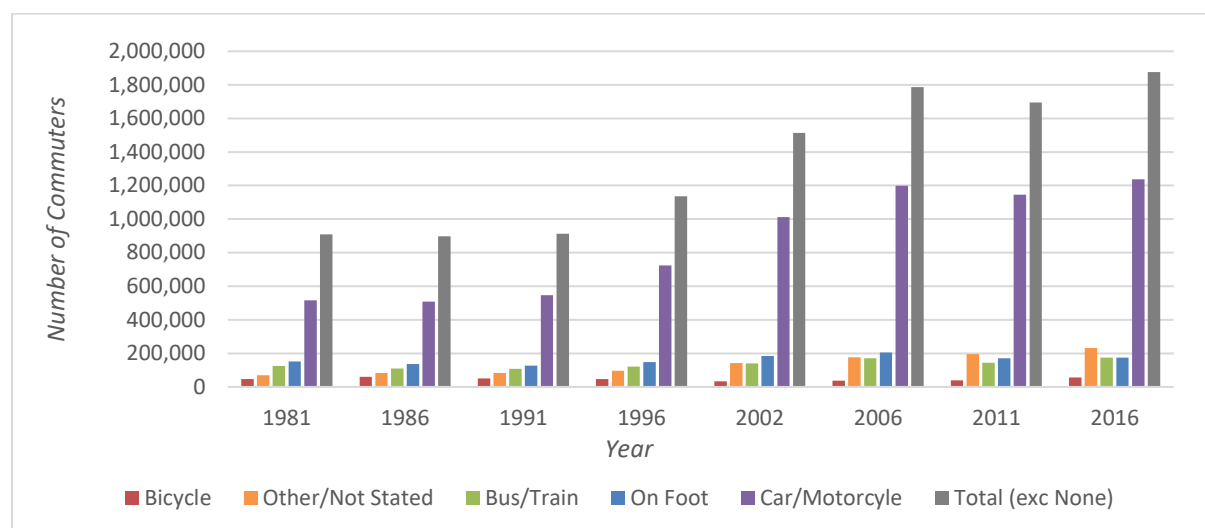
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<sup>18</sup> [\*Cycling, Health and Safety\*](#); OECD/International Transport Forum, 2013.

<sup>19</sup> [\*Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study\*](#); BMJ, 2017.

<sup>20</sup> [\*Cycling, Health and Safety\*](#); OECD/International Transport Forum, 2013.

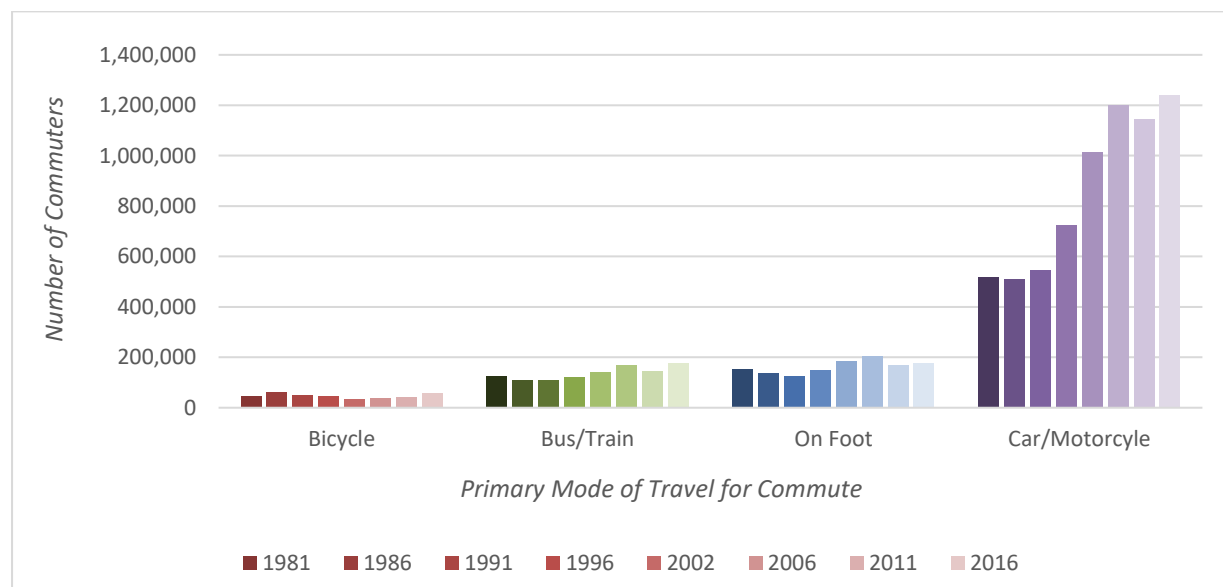
*Figure 1: Number of People Commuting to Work via Various Modes, 1981 to 2016.*



**Source:** Census Data CSO: Population aged 15 Years and Over at Work Usually Resident in State.

However, while the total number of commuters has increased significantly, the distribution of this increase has been far from even. While the gross number commuters travelling on foot and by public transport saw modest increases, the number commuting by car increased significantly, leading to decreased modal share across all other modes.

*Figure 2: Change in Numbers Commuting to Work via Various Modes, 1981 to 2016.*

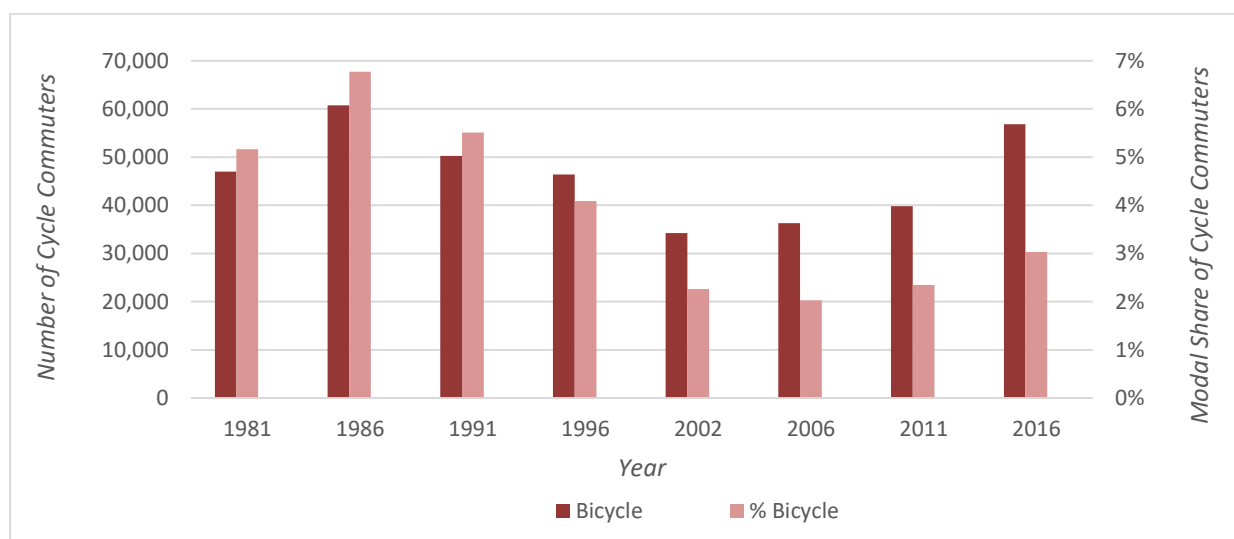


**Source:** Census Data CSO: Population aged 15 Years and Over at Work Usually Resident in State.

Cycle-commuting has historically not been a particularly popular mode of commuting in Ireland. Both modal share and the gross number of cycle-commuters was highest in 1986. Between 1991 and 2006, while the overall number of commuters was increasing significantly, the number of cycle-

commuters actually decreased to its lowest recorded level in 2002, with the lowest modal share recorded in 2006.

*Figure 3: Numbers and Modal Share of Cyclists Commuting to Work, 1981 to 2016.*



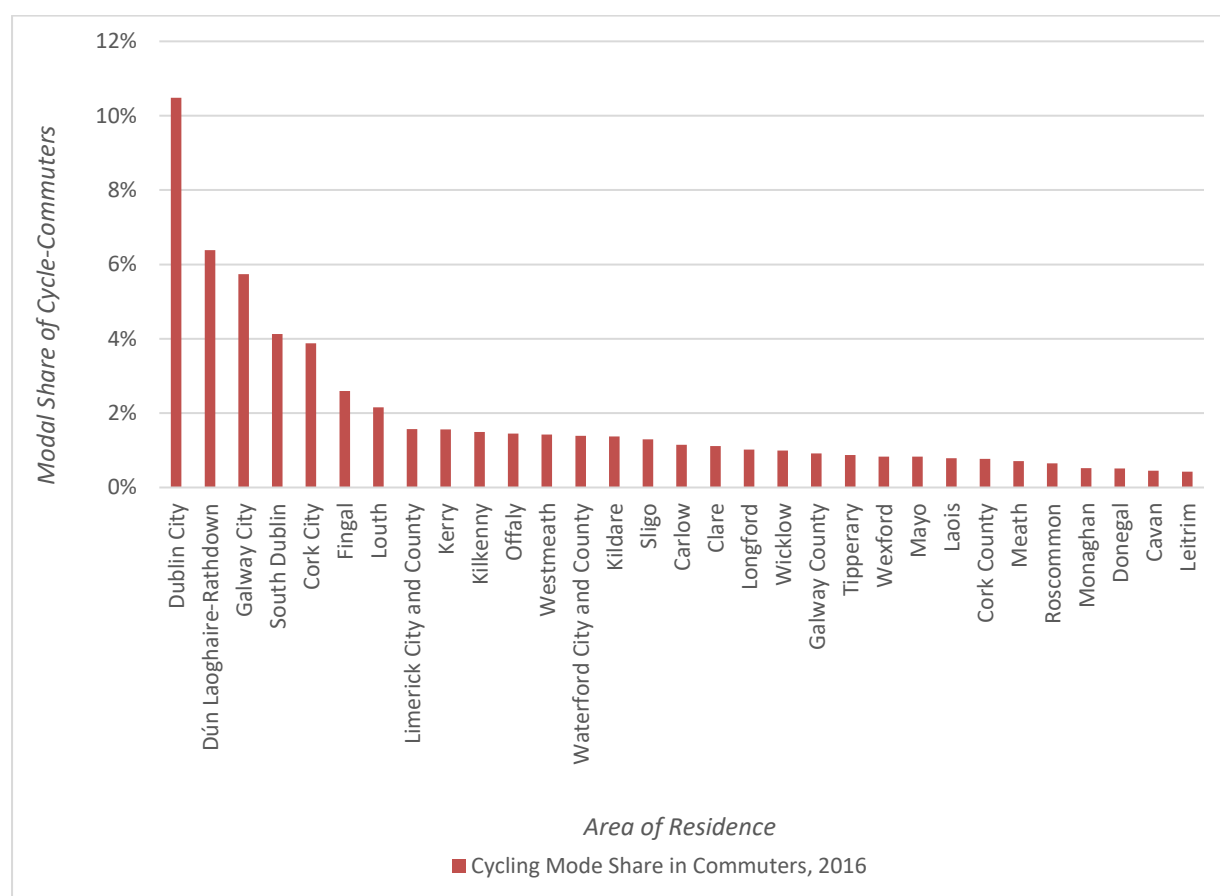
**Source:** Census Data CSO: Population aged 15 Years and Over at Work Usually Resident in State.

Using the 2006 census as a baseline, the overarching target of the National Cycling Policy Framework developed under Smarter Travel Policy was to have 10% of all trips to work made by bicycle by 2020. The 2021 census was delayed due to the covid-19 pandemic; however, the 2016 census indicates that while some progress has been achieved in recent years with the number of cycle-commuters increasing from 36,306 in 2006 to 56,837 in 2016, the increase in modal share from 2% to 3% is modest, and far below the stated target of 10%.

The increases achieved between 2011 and 2016 have largely been concentrated in major cities, with 80% of the increase occurring in the Dublin area. However even in urban areas, where the journey profile might be expected to better suit cycle-commuters, journeys made by cycling has remained relatively unpopular.

With a cycling modal share of 10.5% in 2016, Dublin City was the only area to meet the 10% target, and the modal share in Dublin overall was 6.9%, while the modal shares in Galway City and Cork City were 5.7% and 3.9% respectively.

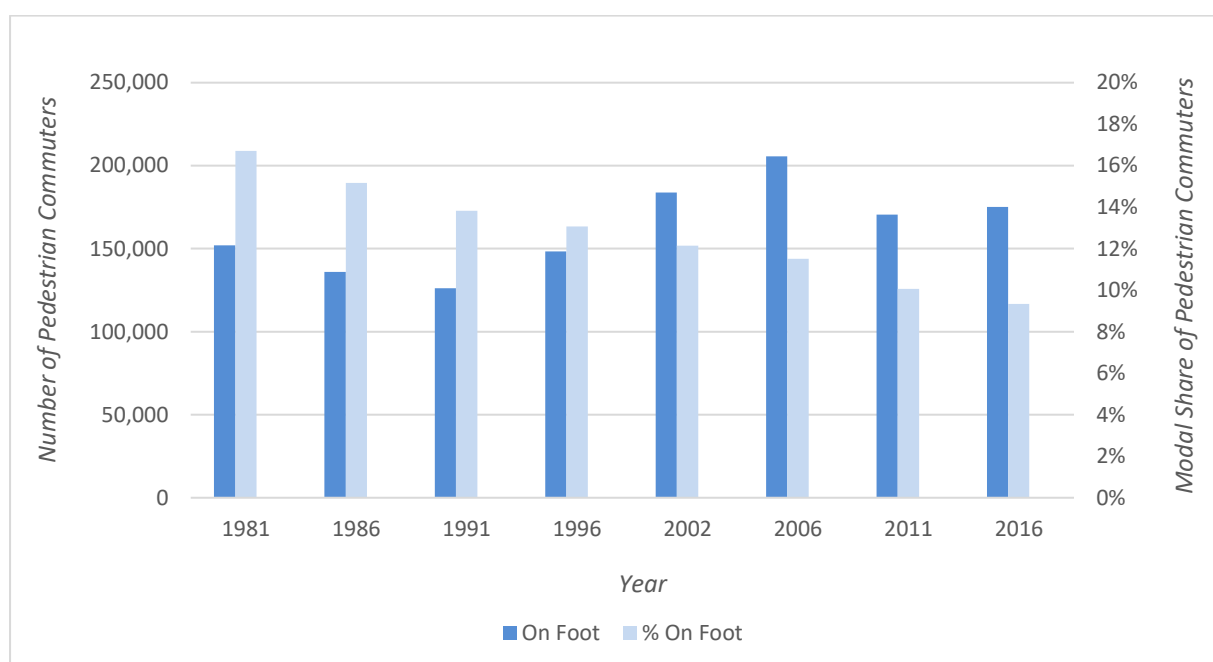
Figure 4: Cycling Mode Share in Commuters by Area of Residence, 2016.



**Source:** Census Data CSO: Population aged 15 Years and Over at Work Usually Resident in State.

Modal share for walking has also seen a steady decrease since 1981, with 2016 showing 175,080 commuters travelling on foot, a significant decrease from the 205,688 recorded in 2006.

Figure 5: Numbers and Modal Share of Pedestrians Commuting to Work, 1981 to 2016.



**Source:** Census Data CSO: Population aged 15 Years and Over at Work Usually Resident in State

As noted above, the current Programme for Government looks for a fundamental change in the nature of transport in Ireland through achieving unprecedented modal shift towards active travel and public transport. However, the OECD's 2021 review of Ireland's environmental performance<sup>21</sup> found that mobility patterns and trends are a source of rising environmental pressures, due to the dependency on road transport being as the dominant transport mode for both passenger and freight movement. Prior to the COVID-19 outbreak, projections indicated that, in the absence of strong policy action, population and sustained economic growth would further increase demand for transport, together with related emissions of GHGs and air pollutants. The report also noted that reducing reliance on private vehicles and providing credible alternatives remains a challenge as congestion and associated costs have grown and continue to grow, especially in the Greater Dublin Area. In relation to passenger movement, the report recommends that Ireland prioritise investment in public transport and active mobility, and introduce policy measures to better manage travel demand in urban areas. Specific recommendations to manage travel demand include making public transport and emerging transport services (such as bike-sharing) eligible for commuter benefits and considering allowing employers to make tax-free payments to employees who walk or bike to work.

<sup>21</sup> [OECD Environmental Performance Review: Ireland 2021](#)

## ii. Ease Urban Congestion

Historically, economic growth in Ireland has been accompanied by increased demand for transport services. The growth of the economy between 1995 and 2008, measured by GNI\* and employment, was associated with huge growth in cars licensed, passenger km travelled by car and public transport, and energy use and emissions in the transport sector. The performance of the wider economy is the primary influence on trends within the transport sector. In recent decades, economic growth has both resulted in and been driven by more commuters, and goods moving around Ireland<sup>22</sup>.

With that said, continuing growth in travel demand without increased capacity to accommodate it will eventually begin to have a detrimental effect on economic performance, and society in general. Other things being equal, high levels of congestion will reduce the attractiveness of a location to work and live in, as well as directly affecting the cost of transporting goods and services.

Excessive congestion can also make it more difficult and stressful to make even basic journeys, and causing longer days for commuters who then have less time with their families, less leisure time and less involvement in their local communities. Congestion can lead to transport users facing additional costs in the form of time wasted that could have been put to other use, increased fuel consumption and other vehicle operating costs. By increasing the amount of time vehicles are active on the network, congestion causes increases in vehicle emissions in a given transport setting<sup>23</sup>.

Research suggests that excessive levels of congestion can have significant costs to the wider economy, increasing the cost of doing business in the region (and therefore reducing Ireland's competitiveness), and also inhibiting connectivity within the economy. These impacts may limit the ability of Ireland's economy to perform to its full potential<sup>24</sup>.

The Tom Tom traffic index has recorded increases in traffic congestion in Dublin in recent years, going from 44% in 2017 to 48% in 2019. This means that on average a 30-minute trip will take 48% longer than during baseline uncongested conditions. While a reduction to 38% was observed in 2020, this appears to be a consequence of public health measures related to the Covid-19 pandemic; congestion in both January and February of 2020 before the pandemic hit was at 50%<sup>25</sup>. A similar pattern was observed in Cork, where traffic congestion increased from 31% to 33% between 2017 and 2019, with further increases to 33% and 34% respectively observed in January and February 2020, in spite of an overall decrease for the full year of 2020<sup>26</sup>.

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<sup>22</sup> [Transport Trends 2020](#)

<sup>23</sup> [Barth M, Boriboonsomsin K. Real-World Carbon Dioxide Impacts of Traffic Congestion. Transportation Research Record. 2008;2058\(1\):163-171. doi:10.3141/2058-20](#)

<sup>24</sup> [The Costs Of Congestion: An Analysis of the Greater Dublin Area, Department of Transport, July 2017](#)

<sup>25</sup> [Tom Tom Traffic Index, Dublin 2017 -2020](#)

<sup>26</sup> [Tom Tom Traffic Index, Cork 2017-2020](#)

Furthermore, the 2016 census found that the average travel time for all commuters has increased from 26.8 minutes in 2011<sup>27</sup> to 28.2 minutes in 2016<sup>28</sup>, with commuters living in counties bordering Dublin reporting the longest average commuting time – commuters in Meath and Wicklow commuted an average of 35 minutes to work, whereas the average commute for residents of Donegal, Sligo, Waterford and Kerry was under 23 minutes<sup>29</sup>. The percentage of commuters travelling whose journey was over an hour increased from 9.6% to 11.7%, while the ten large towns with the highest percentage of workers commuting over an hour to work were all in the Greater Dublin area.

In 2017, the Department of Transport<sup>30</sup> estimated the cost of ‘aggravated congestion’ (defined as congestion levels above those which would be expected on a properly functioning, busy road) across Ireland’s transport system, and how it is expected to grow if there is no intervention in the coming decades. Analysis undertaken for this report estimates the cost of time lost due to aggravated congestion at €358 million in the base year (2012). This is forecasted to rise to €2.08 billion per year in 2033 in the absence of mitigating measures. The annual cost is forecasted to grow moderately up until at least 2025, but will begin to increase sharply after that.

### iii. Reduce Carbon Emissions

As noted above, the Programme for Government Our Shared Future makes the ambitious commitment to deliver an average reduction of 7% per annum in overall greenhouse gas emissions from 2021 to 2030 (a 51% reduction over the decade) and to achieving net zero emissions by 2050. Furthermore, under the Effort Sharing Regulation (2018/842), Ireland is required to cut emissions outside the EU Emissions Trading System (ETS) by 30% by 2030 relative to 2005 levels of emissions. As transport GHG emissions account for more than a quarter of Ireland’s non-ETS emissions, the sector plays a key role in meeting the target.

In Ireland, emissions have risen since the economic recession that occurred between 2008 and 2013, and are projected to rise steeply until the end of this decade. The EPA estimates that in 2019, the transport sector was responsible for 20.4% of Ireland's greenhouse gas emissions<sup>31</sup>, with the sector recording a 137% increase in emissions between 1990 and 2019; this was the largest increase percentage observed in any sector. The increase in GHG emissions associated with road transport was even larger, increasing by 142.6% over the same period, and in 2019, cars generated over 10%

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<sup>27</sup> [2011 Census, CSO](#)

<sup>28</sup> [2016 Census, CSO](#)

<sup>29</sup> [2016 Census, CSO](#)

<sup>30</sup> [The Costs Of Congestion: An Analysis of the Greater Dublin Area, Department of Transport, July 2017.](#)

<sup>31</sup> [Transport | Environmental Protection Agency \(epa.ie\)](#)

of Ireland's total GHG emissions<sup>32 33</sup>. Decarbonising the transport sector is therefore an urgent priority in the context of our national and international climate change commitments.

The SEAI found that transport was responsible for the largest share of energy-related CO<sub>2</sub> emissions in 2018, with a share of 40%. It found that private cars were the largest constituent contributor of CO<sub>2</sub> emissions to the transport sector in 2018, estimating that private cars were responsible for 40% of CO<sub>2</sub> emissions from transport – this would suggest that private cars amount to approximately 16% of energy-related CO<sub>2</sub> emissions in 2018<sup>34</sup>. It is clear that increasing the uptake of cycling and other active travel measures could play a key role in reducing carbon emissions from the transport sector by reducing car travel and urban congestion.

Reducing GHG emissions also improves air quality and benefits human health. Where a reduction in emissions is achieved through a reduction in energy usage (such as by replacing a car journey with an active travel journey), an energy saving is also earned. A significant modal shift in favour of active travel would reduce the Irish transport sector's dependence on imported fossil fuels, improving Ireland's energy security.

While timely and full implementation of the 2019 Climate Action Plan's measures in all non-ETS sectors would decrease Ireland's non-ETS emissions by 29% in 2030 compared to the 2005 baseline, the OECD's 2021 review of Ireland's environmental performance<sup>35</sup> found that Ireland is not on a pathway consistent with the long-term decarbonisation envisaged in the Plan.

#### d. Programme Logic Model

Based on the documented rationale for the scheme, a programme logic model is set out overleaf which summarises the mechanisms through which the scheme could deliver the intended outputs, outcomes and impacts.

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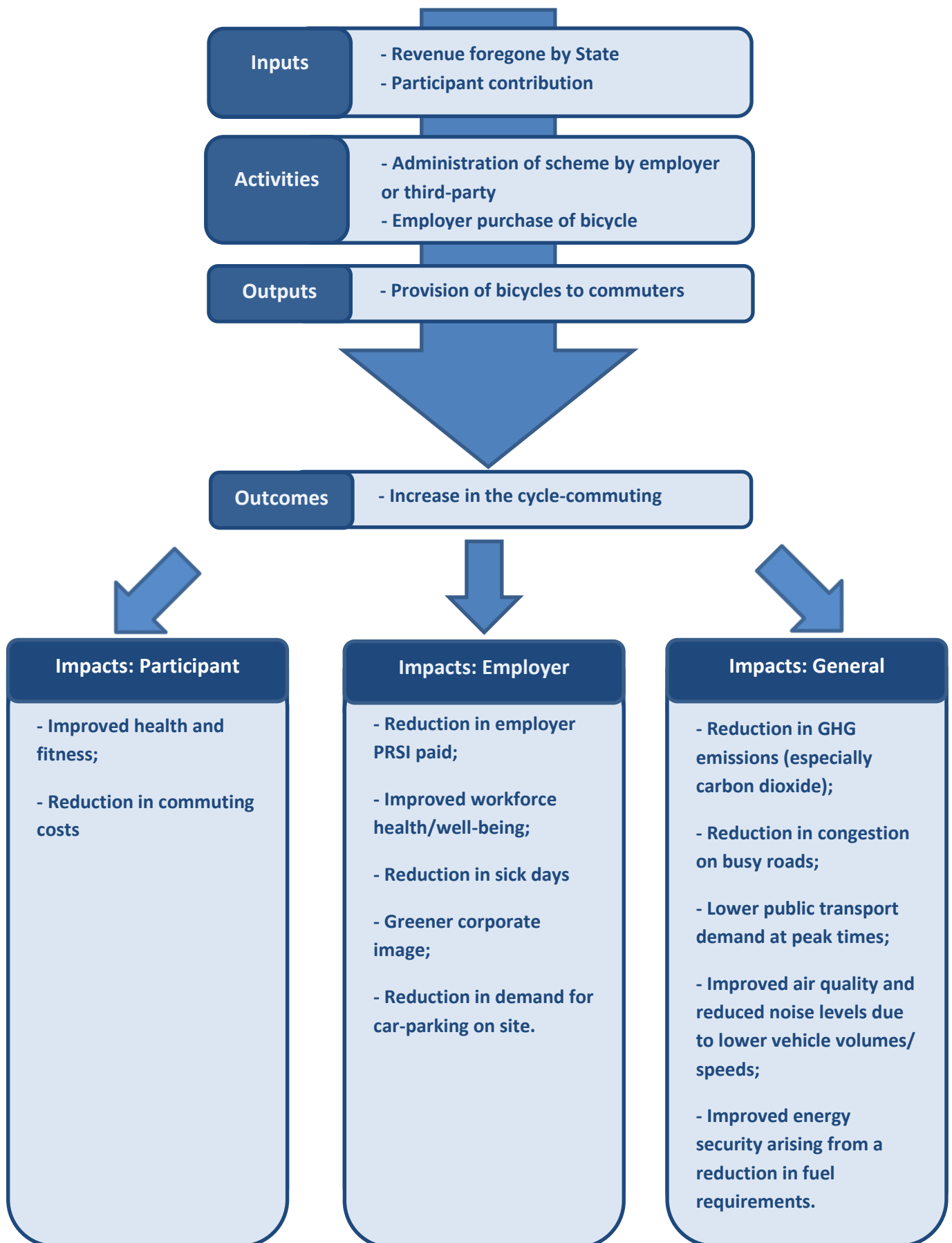
<sup>32</sup> [Ireland's National Inventory Report 2021](#); EPA, April 2021.

<sup>33</sup> Note that emissions are estimated based on fuel sales and thus may be impacted by fuel tourism whereby a proportion of the automotive fuel sold in the Republic of Ireland is used in vehicles in the UK and other countries.

<sup>34</sup> [Emissions Report 2020, SEAI](#)

<sup>35</sup> [OECD Environmental Performance Review: Ireland 2021](#)

Figure 6: Programme Logic Model



## e. Conclusions

The Cycle to Work Scheme was introduced in 2009 to serve as part of a Government response to unsustainable transport trends, in particular seeking to promote active travel and the health benefits associated for participants, reduce urban congestion, and reduce greenhouse gas emissions associated with car travel.

Since then, Government policy has reinforced the importance of these goals in addressing issues in the transport sector, and its impacts on health, the economy, climate change and wider society.

As the policy evidence indicating the benefits of achieving significant modal shift towards active travel continues to grow, there is continued need for interventions and measures to support active travel, and particularly cycling, so that these benefits can be realised.

## 4. Scheme Impacts

This section examines the available evidence that may inform an assessment of the scheme impacts. This is considered from a range of perspectives, such as scheme efficiency, the impact on consumer behaviour, equity considerations of the scheme and any wider transport impacts, acknowledging the limited evidence available and the constraints on evaluation that results.

As noted above, there is very little data available in relation to the operation of the scheme. The Department of Finance has noted that statistics concerning scheme uptake<sup>36</sup> and figures for the cost to the Exchequer<sup>37</sup> are not available. Scheme cost and uptake represent the key inputs and outputs of the scheme. In the absence of a reliable estimates of scheme costs and uptake, consideration and evaluation of the schemes efficiency and effectiveness poses a challenge.

Given these limitations, the scheme will be examined in the context of the available data, acknowledging that the conclusions that can be drawn are limited and are subject to caveats.

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<sup>36</sup> <https://www.oireachtas.ie/en/debates/question/2013-12-05/75/>

<sup>37</sup> <https://www.oireachtas.ie/en/debates/question/2016-05-24/120/>

## a. Scheme Uptake and Cost

### i. Cost Drivers

The cost of the scheme is determined by the costs associated with individual participants. No economies of scale apply, and so the level of uptake is itself one of the most significant cost drivers associated with the scheme. The other significant cost drivers are:

- the value of the qualifying purchase;
- the income distribution of participants, as participants who are subject to higher tax rates will generally make greater savings, resulting a greater Exchequer loss; and
- Rates of tax and related charges are also a cost driver as any increase in rates will increase savings made due to the tax exemption, generating a greater loss to the Exchequer.

While the rates of tax and other charges can readily be ascertained, there is little information available in relation to scheme uptake, the value of qualifying purchases made under the scheme and the income distribution of scheme participants. Uptake is the most significant driver of overall scheme cost. Estimates of uptake may be highly variable, in turn driving variability in estimates of cost. It follows that the Scheme cost cannot be robustly estimated without an accurate estimate of Scheme uptake.

### ii. Estimates of Scheme Cost and Uptake

The table below summarises the various estimates published by the Department of Finance and the Irish Bicycle Business Association (IBBA), with the implied annual cost and uptake included for ease of comparison.

*Table 1: Estimates of Scheme Uptake and Cost*

Source	Cost/Uptake Estimate	Annual Cost Estimate	Annual Uptake Estimate
D/Fin Initial Estimate 2009 <sup>38</sup>	€2m for 7,000 users over five years	€0.4 m	1,400
IBBA Report October 2011 <sup>39 40</sup>	€34m for 90,000 users over 2/3 years	€11.4 m	30,000
D/Fin Estimate May 2012 <sup>41</sup>	€5m for 30,000 users per year	€5 m	30,000
Estimates from D/Fin Tax Expenditure Reports 2014-19 <sup>42</sup>	€4m for 20,000 users per year	€4 m	20,000

Estimates for both uptake and cost vary significantly across the different estimates.

### iii. Average Cost per Participant

By calculating the average cost per participant, it is possible to eliminate the variability in cost estimates that arises due to variability in the underlying uptake estimates. This demonstrates the variability in the cost estimates that arises from cost drivers other than uptake.

The table below illustrates the results of the same:

*Table 2: Cost per Participant*

Source	Cost per Participant
D/Fin Initial Estimate 2009	€285.71
IBBA Report October 2011	€380.63
D/Fin Estimate May 2012	€166.67
D/Fin Tax Expenditure Reports for 2014-19	€200.00

<sup>38</sup> <https://www.oireachtas.ie/en/debates/question/2010-09-29/398/>

<sup>39</sup> [IBBA Report on Report on the Cycle to Work Scheme Tax Incentive](#), October 2011.

<sup>40</sup> Note that the IBBA report itself does not precisely specify a period, however press interactions with the authors indicate that it represents a two year period; the report was published in October 2011, which provides an upper limit for the period. To be conservative, per year costs and uptake are calculated on the basis of a three-year period.

<sup>41</sup> [Written Answers – Dáil Éireann \(31st Dáil\) – Tuesday, 1 May 2012 – Houses of the Oireachtas](#)

<sup>42</sup> Report on Tax Expenditures Incorporating outcomes of certain Tax Expenditure & Tax Related Reviews completed since October [2016](#), [2017](#), [2018](#), [2019](#), [2020](#)

The average cost per participant calculated on the basis of the various estimates varies considerably, suggesting that the variability in the cost estimates is not solely driven by variability in uptake estimates, but also reflects different assumptions concerning the other cost drivers. For example, the estimate calculated by the Department of Finance in May 2012 adopts the uptake figure included in the 2011 IBBA report, but uses a much smaller figure for scheme cost. As the same uptake figure is used for the two estimates, the use of this reduced cost figure suggests an assumption that at least one of the remaining cost drivers is overvalued.

While changes in the rates of tax and other levies also impact cost, the cost impacts arising from this alone would likely be comparatively minor, suggesting that the disparity in per participant cost reflects differences in the assumptions made regarding the value of the qualifying purchase made under the scheme and the income distribution of participants. Differences in the average cost per participant derived from the estimates made by the Department of Finance at various points in time appear to reflect differences in the assumptions made with respect to these underlying cost drivers, indicating that these assumptions may have changed over time.

This demonstrates that the variation in the observed cost estimates is not solely due to different estimates of scheme uptake, but also reflect differences in the assumptions made in relation to the other cost drivers, emphasising the difficulty in accurately determining the scheme cost.

#### iv. Implications

Fundamentally, the absence of data regarding the core cost drivers of the scheme means that the cost of delivering the scheme cannot be accurately determined. While there is little risk of the scheme generating an Exchequer loss that would be in any way significant in the context of overall governmental expenditure, there is nevertheless a high degree of uncertainty regarding the costs arising from this application of Exchequer revenue.

Furthermore, the challenges that occurred in evaluating the scheme's efficiency due to the limited data available will apply equally to any attempt to formally evaluate the scheme, and are unlikely to be resolved without significant change to the way in which the scheme operates.

#### b. Impact on Commuter Behaviour

As noted above, the limited data availability regarding scheme uptake precludes an evaluation of the effectiveness of the scheme. As an alternative, recent Census data concerning cycle-commuting rates will be explored to determine whether there is evidence that the scheme achieved a measurable impact on commuter behaviour.

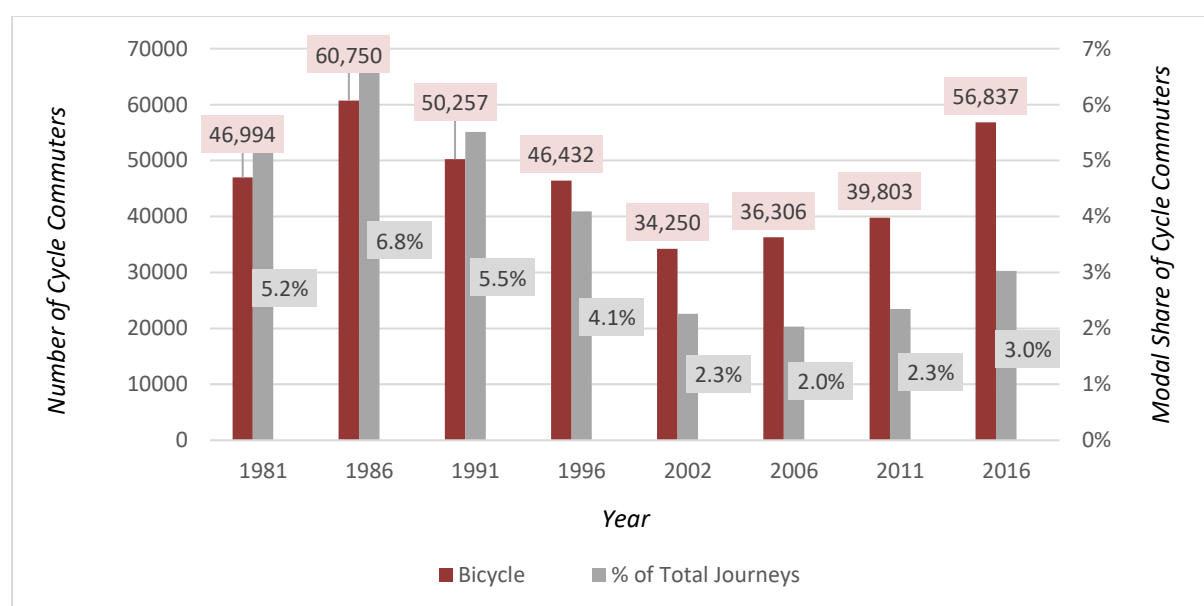
It should be noted there are some important aspects of travel behaviour that are not captured by the Census and are thus not represented here – the most significant arises from the requirement to identify a single mode of travel for commuting, as this will not capture commuters that cycle as a part of their journey (i.e. cycling to a train station) and will also exclude commuters that may cycle regularly (1-2 days a week), but use a different mode of travel more frequently. As such, the analysis that follows should be considered in the context of the significant data limitations that apply to the scheme, in addition to the omission of certain aspects of travel behaviour in the data captured by the Census.

Therefore, while this analysis suggests the programme has achieved a limited impact with respect to its desired outcome, any conclusions must be heavily caveated due to the extremely limited data on the scheme.

### i. Baseline: Census 2006

The 2006 Census as the last census completed before the introduction of the scheme in 2009, acts as a baseline for the level of cycle-commuting in place before the scheme was implemented. In 2006, 36,306 commuters identified cycling as their primary mode of commuting, a modal share of 2%.

*Figure 7: Number of Commuters Cycling to Work and Modal Share, 1981 - 2016*



**Source:** Census Data CSO: Population aged 15 Years and Over at Work Usually Resident in State

### ii. Comparing Census 2006 and Census 2011

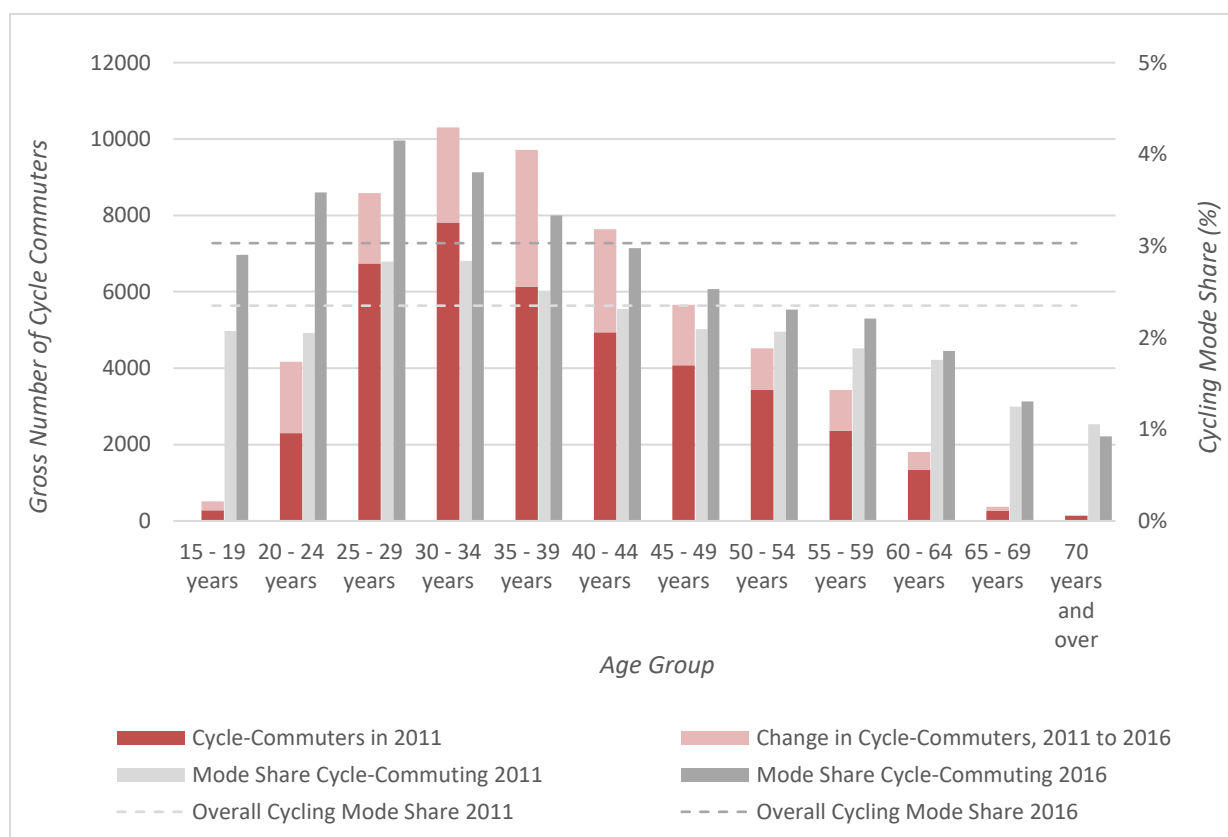
The next Census was carried out in 2011, at which point the scheme had been in operation for over two years. The 2011 census recorded 39,803 cycle-commuters, a modal share of 2.3%. This

represents an increase of 3,497 (just under 10%) in the number of cycle-commuters. This increase may seem small, particularly considering some estimates of scheme uptake suggest that 90,000 people participated in the scheme during the two-year period between the introduction of the scheme and the preparation of the 2011 Census.

However, it must be considered in the wider economic context that applied during that time period. Between 2006 and 2011, Ireland experienced significant economic upheaval, with large numbers of job losses. Between 2006 and 2011, the total number of commuters decreased from 1.8 million to 1.7 million, a reduction of 5%. This means that while the total number of commuters reduced by just under 100,000 (5%), the number of cycle-commuters increased by 10%. Had cycling mode share remained constant between 2006 and 2011, the number of cycle-commuters recorded in 2011 would have reduced to 34,437. From this perspective, the observed figure of 39,803 implies that there may be 5,366 additional cycle-commuters when the overall reduction in the number of commuters is accounted for. This assumes that commuters using all travel modes are equally impacted by job losses.

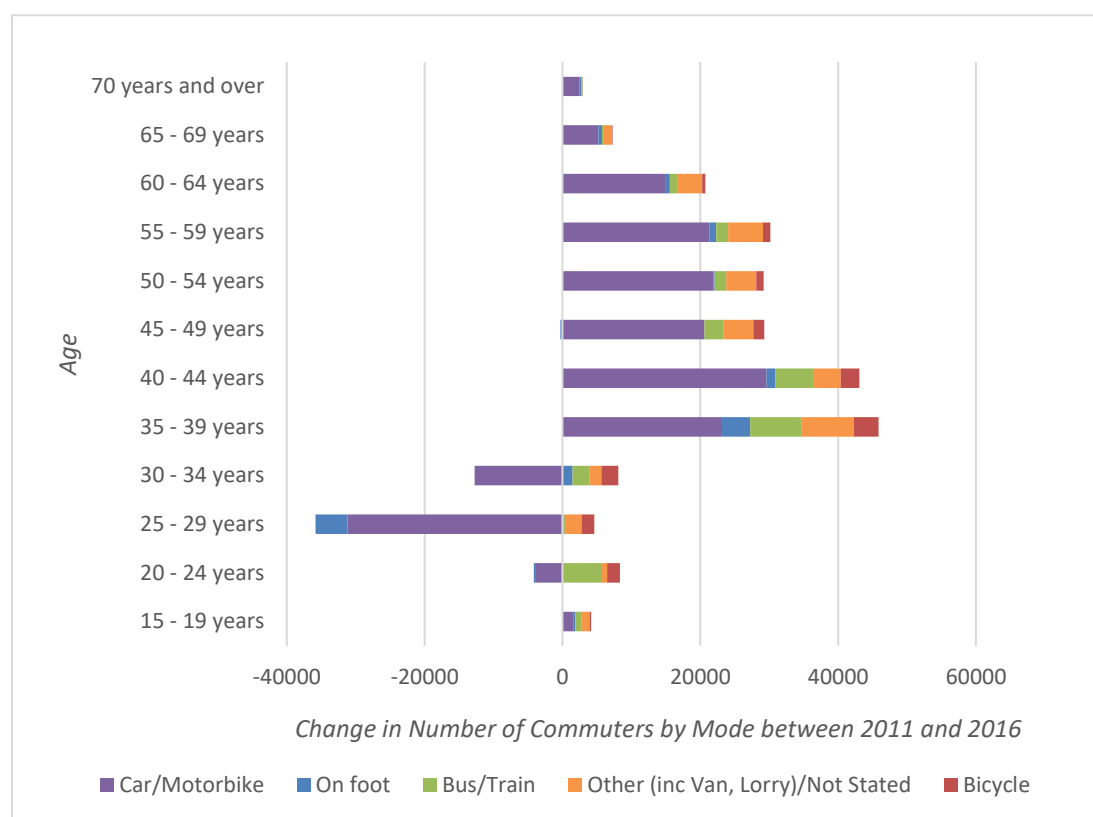
The age groups that saw the largest increase in cycle-commuting between 2011 and 2016 as indicated by Census data were the 25 and 39 years old.

*Figure 8: Change in Cycle Commuters and Cycle Mode Share by Age, 2011 – 2016.*



**Source:** Census Data CSO: Population aged 15 Years and Over at Work Usually Resident in State.

Figure 9: Change in Number of Commuters by Age and Mode, 2011 to 2016.



**Source:** Census Data CSO: Population aged 15 Years and Over at Work Usually Resident in State.

The increase in cycle commuters between the ages of 25-34 is particularly striking considering that there was actually an overall reduction in the number of commuters recorded within the 25-29 and 30-34 age groupings between 2011 and 2016. As cycle-commuters are in general younger (with over 40% under the age of 35 in both 2011 and 2016), and thus may be less likely to be well-established in their careers, they may be more vulnerable to redundancies in following economic upheaval.

### iii. Comparing Census 2011 and Census 2016

A more sizable increase in the number of cycle-commuters was observed between the 2011 and 2016 Censuses, where the number of cycle-commuters increased by 17,034 (43%) from 2011. This increase is significant, and represents the largest recorded increase in cycle-commuting that appears in the Census data as far back as 1981. Considering only those whose employment status was listed as 'employee',<sup>43</sup> the increase in cycle-commuters between 2011 and 2016 was 16,024. More

<sup>43</sup> Excludes self-employed and those listed as 'assisting a relative' as these groups would not be eligible to participate in the scheme due to the absence of an employee-employer relationship.

generally, the total number of commuters increased by almost 20,000 (3%) between 2011 and 2016, indicating a disproportionate increase in cycle-commuters.

#### iv. Comparing Scheme Uptake and Census Data

Nevertheless, the increase recorded between 2011 and 2016 represents the change over a five-year period, and given that estimates of scheme uptake range at 30,000 per annum at the high end, it is not clear that the observed increases represent a good return on the investment made through the scheme.

The 2016 Census recorded 52,613 cycle-commuters whose employment status would make them eligible to participate in the scheme. If 30,000 individuals participated in the scheme per annum between 2011 and 2016, this amounts to a total of 150,000 participants over the period<sup>44</sup>. Assuming that all those identifying as cycle-commuters in their response to the 2016 Census availed of the scheme, this would mean that 35% of scheme participants cycle to work. Assuming again that the increase in cycle-commuters recorded between 2011 and 2016 all represent new cycle-commuters who availed of the scheme, this would suggest that for every nine participants in the scheme, there is one additional cycle-commuter recorded by the Census.

This could indicate that there is a significant deadweight loss associated with the scheme, whereby a significant proportion of participants would commute to work irrespective of the scheme, or a large cohort that participate in the scheme, but use the bike obtained to cycle for leisure purposes rather than to commute to work. It should also be noted that improvements in cycling infrastructure and other actions undertaken as part of the *NCPF* may have helped to support the increase in cycle-commuters recorded in the Census; direct causality cannot be attributed to the scheme alone.

As noted above, it is also possible that some of these participants engage in a mixed mode commute or cycle-commute sometimes, but use another mode more frequently, and are therefore not captured in the Census data. However, a survey of scheme participants undertaken in December 2010 indicates that both deadweight and bicycles obtained primarily for leisure use may be a feature of the scheme; this is explored further in section 4e).

#### v. Conclusion

While the increases achieved are a welcome form of progress, they are too small to serve as convincing evidence that the scheme has delivered more than a modest impact on commuter

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<sup>44</sup> At that time, the scheme could only be availed of once every five years, which means that repeat participants should only be counted once in that 150,000

behaviour. With that said, the available data is also not sufficient to represent robust evidence that the scheme has failed to achieve a meaningful impact on commuter behaviour.

While this analysis suggests the programme has had limited effectiveness with respect to its desired outcome, this conclusion must be heavily caveated due to the range of data issues that arise in this case. As discussed above, some aspects of travel behaviour are not fully captured by the Census, and the extremely limited nature of data concerning the scheme creates difficulties. In particular, the reliance on estimates of scheme uptake that vary significantly between sources significantly limits the conclusions that can be reliably drawn and robustly evidenced.

This illustrates the challenges of robustly evaluating a programme where so little data is available.

### c. Tax and Distributive Impact

This section explores the how a participant salary's impacts the savings available to them as a result of participating in the scheme. The first part sets out how the savings that would be made by participants vary depending on the value of the qualifying purchase, the salary they receive, and the time at which they participate in the scheme. The second part illustrates the composition of the various taxes and charges forfeited by the State in operating the scheme. This shows how for a purchase of fixed value made under the scheme, the amount contributed by participants, and the revenue forfeited by the State, varies depending on participant income. Finally, the third section discusses some anomalies that may occur in the potential savings available to participants due to the existence of fixed income thresholds for the application of certain taxes and charges.

The calculations included below assume that a participant is single and claims only the standard personal and PAYE tax credits. Individual circumstances and relief entitlements may impact participant savings and revenue foregone. While the below discusses differences that occur between years, most participants availing of salary sacrifice will make repayments over a period that spans more than one calendar year (for example, beginning in June 2015 and finishing in May 2016), and may be subject to a combination of the rates and thresholds that apply to different years. Where changes to rates or thresholds were applied within a calendar year, calculations were made on a pro-rata basis with respect to the number of months each rate or threshold was in place.

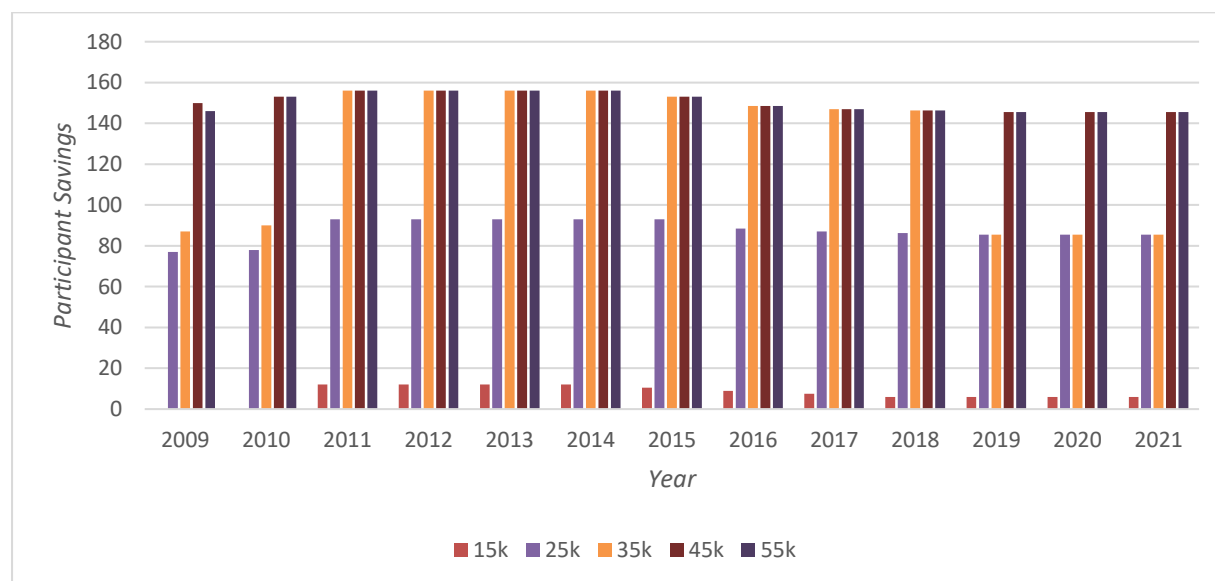
#### i. Participant Savings

As the scheme functions as a form of tax refund, it is usually the case that participants in receipt of higher incomes are eligible for larger savings as they pay a higher rate of income tax; this also

translates to a greater loss of revenue for the State. In general, those earning over €36,000 save significantly more than those earning €25,000 - €35,000, who in turn save far more than the lowest income earners. This applies across all values of the qualifying purchase.

The below graphs demonstrate the differences in savings made for qualifying purchases of various values and incomes across the life of the scheme.

*Figure 10: Participant Savings for a Qualifying Purchase of Value €300*



*Figure 11: Participant Savings for a Qualifying Purchase of Value €500*

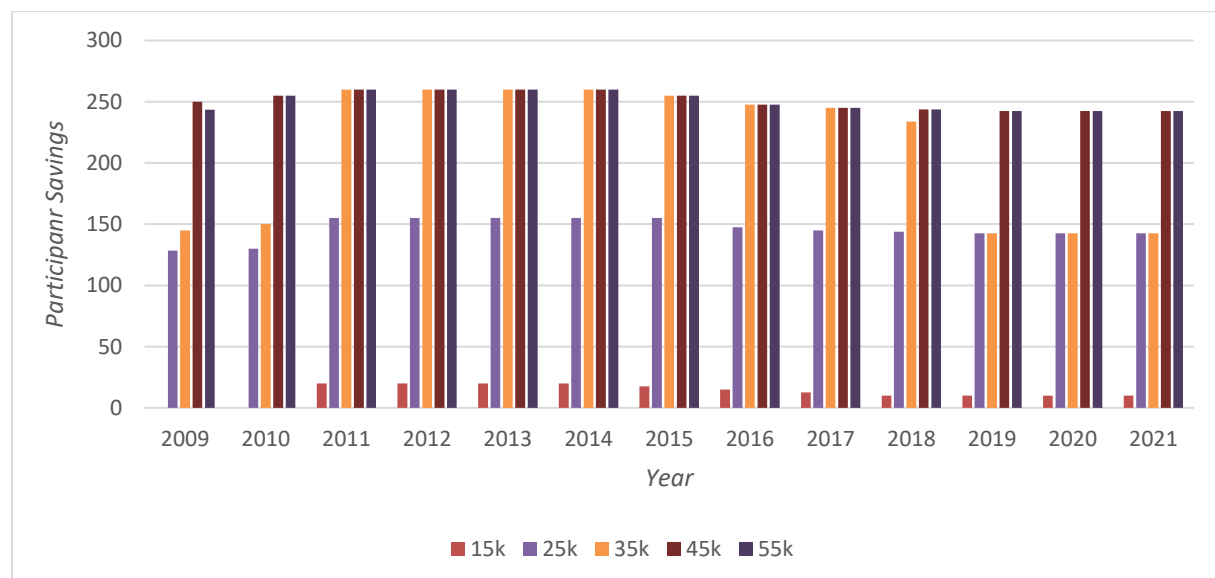
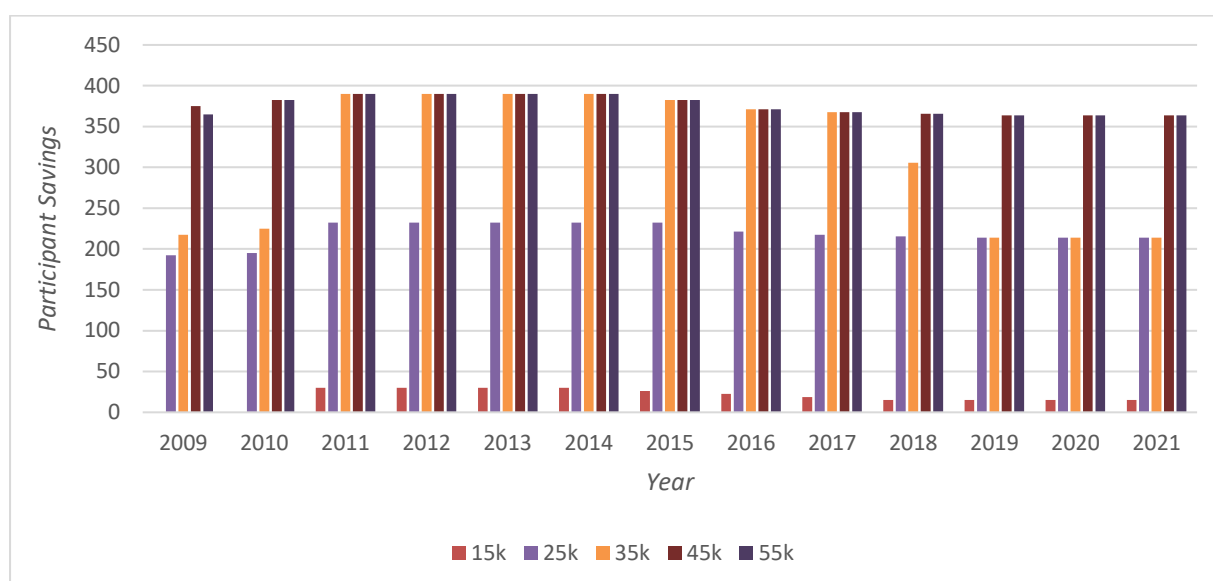


Figure 12: Participant Savings for a Qualifying Purchase of Value €750



In particular, the graphs above illustrates that the savings available to participants vary in accordance with changes to rates of tax and other charges. For example, note that the participant savings available to a participant earning a salary of €35,000 change significantly between 2018 and 2019; this reflects a change made to the threshold above which the higher rate of income tax is due. In 2018, this threshold was €34,550; this means that for a participant whose salary was €35,000, the first €450 of the value of the qualifying purchase would be subject to relief at the higher rate. In 2019, this threshold changed to €35,300, which means that a participant whose salary was €35,000 would not be paying the higher rate of income tax on any part of their income, and so the savings made would be at the lower rate of income tax. The smaller savings made reflect a reduced tax liability.

This is most clearly illustrated by figure 10, which demonstrates a staggered reduction in the participant savings available. In 2017, the threshold for paying the upper rate of income tax was €33,800. In this case, a participant with a salary of €35,000 making a qualifying purchase of €750 would have paid the higher rate of income tax on the income sacrificed in exchange for the bike, so they make a significant saving. In 2018, the threshold was reduced to €34,550, and so part of the qualifying purchase of value €750 represents income on which the higher rate of income tax would be paid, and part of the purchase value represents income on which the standard rate of income tax would be paid. In 2019, the threshold changed again to €35,300. After this, a participant with a salary of €35,000 would not be paying the higher rate of income tax on any of the income sacrificed in exchange for the bicycle, and so they make smaller savings arising from the tax exemption.

For example, figure 8 above illustrates that a participant earning a salary of €45,000 will make a saving of €145.50 on a qualifying purchase of value €300 in 2021, requiring the participant to contribute €154.50 to the cost of the equipment. In contrast, a participant earning a salary of

€35,000 will save €85.50 on a purchase of the same value, and will thus be required to contribute €214.50 to a purchase of equivalent value. In fact, in order for a participant with salary €35,000 to generate a saving of €145.50, they would have to make a significantly larger purchase of €510.53, and contribute €365.03 to the cost of that purchase. For context, Revenue PAYE data indicates that in 2020, the average gross pay was €35,688, and the median gross pay was €25,847, with 63% of employees earning incomes up to €36,000<sup>45</sup>.

Furthermore, participants with higher salaries are more likely to be in a position to purchase more expensive bicycles in general, as on average, they may have more disposable income available to them. The savings made by a participant are generally proportional to the cost of the qualifying purchase; this means that participants making more valuable purchases are eligible for larger savings, further compounding the distributive inequity of the scheme.

While the cost savings provided by the tax exemption are the most frequently cited benefit for participants in the scheme, there may be other elements which attract participants. A survey of almost 500 scheme participants undertaken in December 2010<sup>46</sup> noted that 48 respondents reported an income of less than €10,000. This is below the threshold at which significant tax and other savings would apply in 2009/2010, and so cost savings may not have been the primary motivate for participation in the scheme. However, it may be that the ability to spread the cost of the purchase across a longer period may have been a significant boon for these participants and others, particularly those on lower incomes.

## ii. Revenue Foregone by the Exchequer

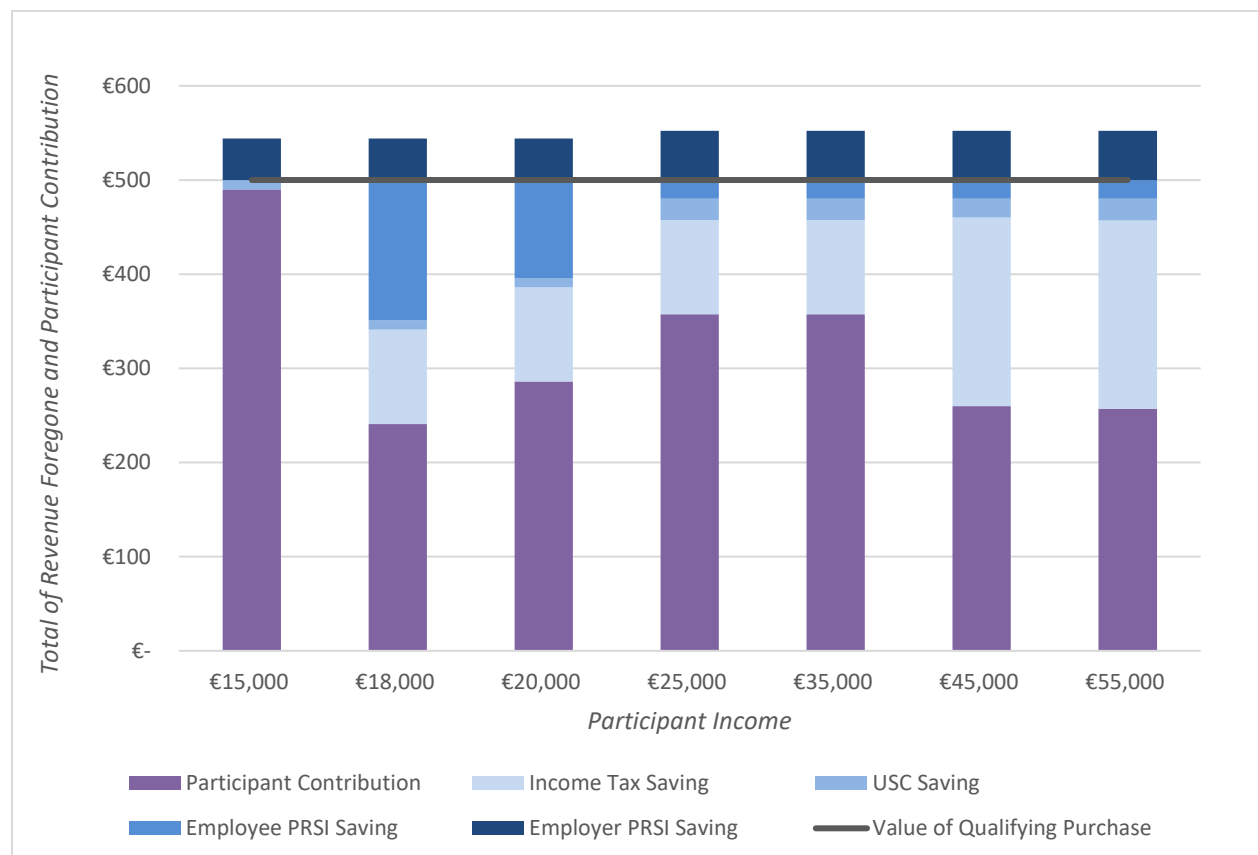
As explored above, the amount saved by scheme participants varies depending on income and other factors. Larger savings made by scheme participants imply a greater loss of revenue to the State. The chart below shows how the revenue lost is distributed across the various taxes and charges for different participant incomes making a qualifying purchase with a value of €500 in 2021.

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<sup>45</sup> *PAYE Modernisation and real-time data for statistics*, 24th June 2021 (presentation given by Revenue staff). Note that this excludes those who received TWSS, and that it excludes PRSI.

<sup>46</sup> [\*Learning to cycle again: Examining the benefits of providing tax-free loans to purchase new bicycles\*](#); Brian Caulfield and James Leahy, November 2011.

*Figure 13: Breakdown of Exchequer Revenue Foregone and Participant Contribution for a Qualifying Purchase of €500 in 2021*



It is clear that in general, those with higher incomes make smaller contributions to the price of the qualifying purchase. While the majority of revenue foregone arises from a reduction in income tax payable, there can also be a considerable impact on the amount of PRSI payable, particularly for incomes between approximately €18,000 and €22,000 as the employee PRSI payable increases relatively rapidly between these points.

Furthermore, while the cost of the qualifying purchase is shared by the Exchequer and the participant, the revenue foregone due to the reduction in employer PRSI represents an additional cost to the Exchequer.

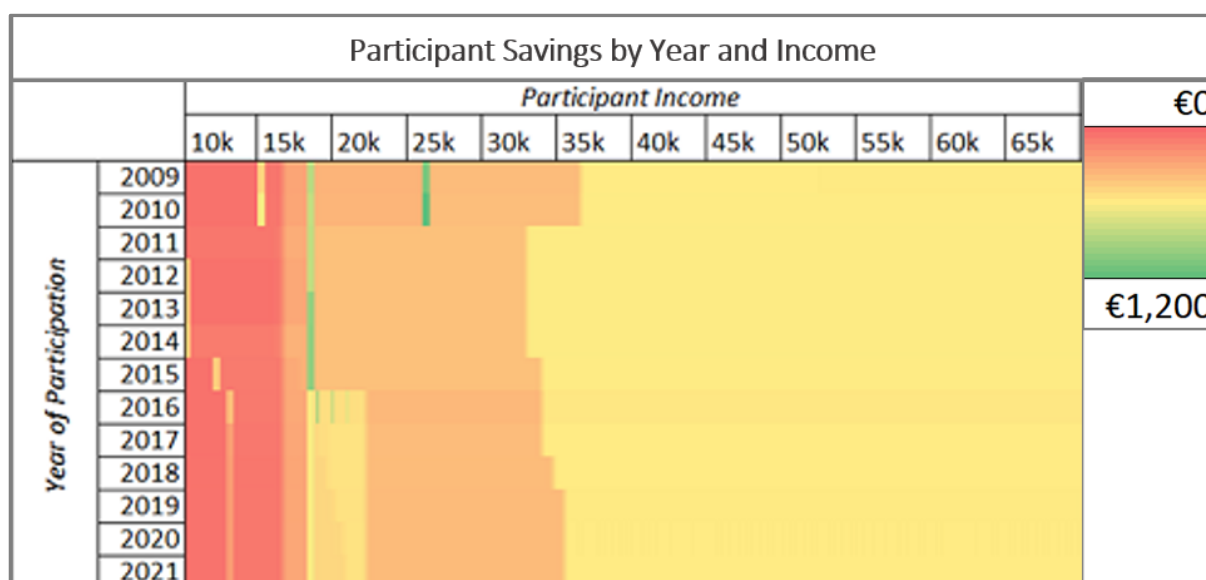
Regardless of the share of the purchase price borne by the participant, the employer will enjoy a PRSI reduction of either 8.8% or 11.05% of the value of the qualifying purchase as an incentive for taking part in the scheme. This means that where participants have lower incomes, the savings enjoyed by the employer may exceed those experienced by the participant.

### iii. Distributive Anomalies

While in general, larger savings are made by participants with higher incomes, there are some notable exceptions to this, particularly where there are fixed thresholds below which income is entirely exempt from a particular tax or charge. This may allow a participant that earns an income just above that threshold to use the scheme to reduce their qualifying income so that it falls below the threshold, achieving a significant reduction in the tax or charge due.

The below image illustrates the range in savings that a participant making a qualifying purchase of value €500 could make, depending on their income and the tax arrangements in place in a particular year. The smallest savings are represented in red and the biggest savings shown in green.

Figure 14: Heatmap of Savings by Participant Income



It is clear that savings generally correlate with participant income, with the smallest savings achieved by those on lowest incomes and larger savings achieved by middle and high-income earners, although savings remain constant above an income level of around €36,000.

However, there are some exceptions to this, in particular in earlier years before tax reforms such as the replacement of the health and income tax levy with the universal social charge created a smoother transition in the level of income tax paid at different income levels. Most notably, the existence in 2009 and 2010 of fixed thresholds for the application of the income and health levies allowed for an anomaly whereby participants could reduce their taxable income by taking part in the scheme, thus moving their income below the threshold at which the levies apply.

For example, the health levy applied a charge of 4% to all income where an employee earned more than €26,000<sup>47</sup>, but did not apply at all to those whose income was below €26,000. Participants

<sup>47</sup> With higher rates applying above €75,036

earning slightly more than €26,000 could thus save almost €1,200 on their tax bill by participating in the scheme, in addition to receiving the bicycle purchased. For example, a participant earning €26,450 could participate in the scheme with a qualifying purchase to the value of €500. This reduces their income for the purposes of taxes and charges to €25,950, which is below the health levy threshold. They then make a saving of €1,188 on their total tax bill – their income tax liability reduces by €100, PRSI due reduces by €20, the income levy due reduces by €10, and the health levy due reduces by €1058. Taking into account employer PRSI, the total revenue foregone by the State in this case would total €1241.75.

Similar, less significant, anomalies are observed at income levels close to the threshold for the application of the income levy in 2009 and 2010, and to the threshold for application of employee PRSI in the years prior to the introduction of the PRSI tapering credit in 2017.

#### d. Equity Impact

As noted previously, the Cycle to Work Scheme represents an exemption to the benefit-in-kind tax that is normally payable on any benefit of value provided to an employee by their employer. As such, the scheme can only be applied where an employee-employer relationship exists.

Although there has been some public debate in relation to expanding the scheme, and the Programme for Government includes a commitment to widen the eligibility of the scheme, it is unclear how this scheme, or indeed any scheme based on an income tax rebate, would facilitate the participation of school children, students, the unemployed, and those engaged in care-giving work, as these groups are unlikely to pay income tax.

The differences in the amount of savings delivered to scheme participants with different incomes was discussed above. However, the scheme discriminates based on the source of a person's income in addition to its quantum. Pensioners, self-employed individuals, and those in receipt of passive income (for example, generated by investments or rental property) are unable to participate irrespective of the quantity of income they receive and the amount of tax they pay where this income is not received as recompense for employment.

The scheme seeks to increase active travel, reduce congestion, and reduce greenhouse gas emissions. While any modal shift in favour of active travel will deliver some of the benefits associated with these aims, the greatest benefits can be derived from achieving modal shift in journeys taking place at peak commuting times by reducing demand on the existing transport system where congestion is at its highest. It could be argued that the employed persons are most likely to be required to travel at peak congestion periods, whereas individuals not in an employee relationship may be able to time journeys to avoid peak congestion periods; however, this does not

account for self-employed individuals that generally work the same hours as employees, or for school children and university students whose journeys to education also tend to occur at peak times.

From this perspective, if the scheme rationale remains unchanged, there may be value in exploring the merits of a similar scheme to incentivise cycle-commuting in school children and students of higher and further education, which may target those most likely to travel at peak commuting times. While some advantages associated with cycle-commuting benefit the participant directly (such as improvements in personal health), the benefits that the scheme seeks to achieve largely are enjoyed by the wider community rather than the individual participant alone. For example, the economic and environmental benefits associated with a reduction in congestion will benefit the whole community, as will the reduction in greenhouse gas emissions that arises from modal shift to active travel. It is also the case that the cost of other travel modes - such as public transport - is often heavily subsidised; arguably the non-application of a carbon charge to the pump price of fuel acts as an effective subsidy to the cost of travelling via private vehicle. In comparison, fewer financial incentives are available for active travel, in spite of the well-established benefits of active travel and the ambitions of several recent governments to increase modal share.

As the scheme aims to encourage employees to cycle to work, safety equipment for a child such as a helmet or separate seat does not qualify as safety equipment under the scheme. This is because it is not considered necessary for an employee's travel between home and work, or between two different workplaces<sup>48</sup>. However, as noted previously, for many working parents, the school run is a part of their commute to work and so the inclusion of equipment that facilitates the completion of journeys by bicycle could be considered.

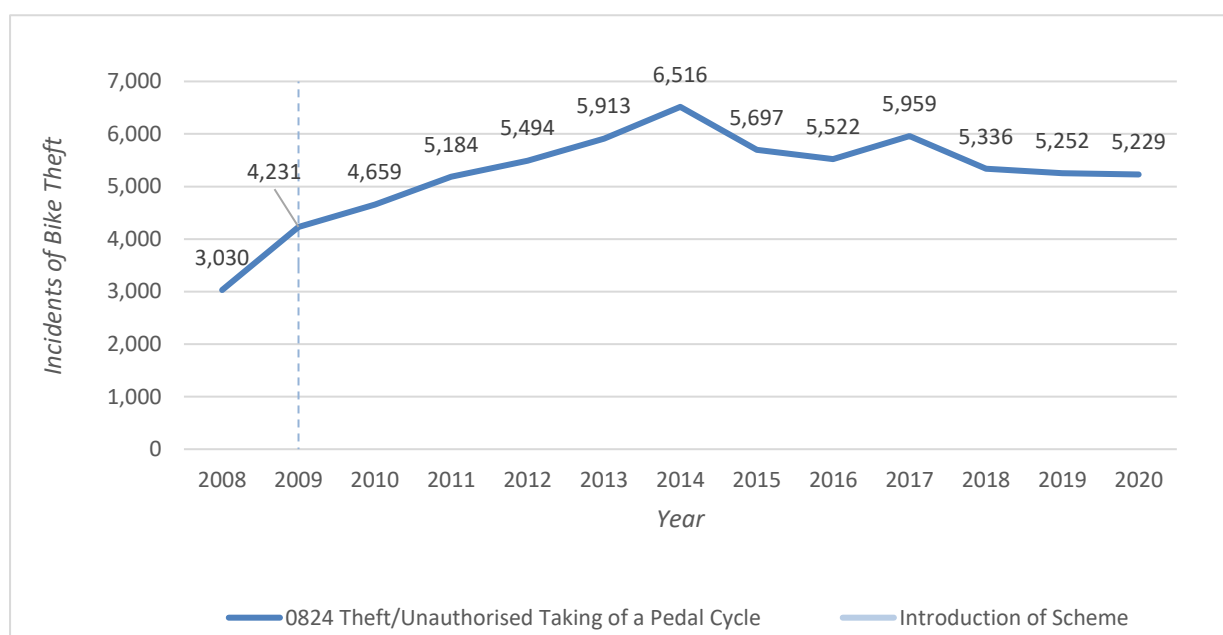
Consideration might also be given to including insurance as a qualifying item under the scheme. Crime statistics indicate that incidents of bicycle theft have increased by over 70% since the scheme was first introduced in 2009.

The CSO recorded 3,030 incidents of bike theft in 2008 before the scheme was in place; this increased to 4,231 in 2009 after it was introduced, with further increases recorded each year until 2015. The number of recorded incidents reduced somewhat following the peak in 2014, but is still significantly higher than the number of incidents recorded in 2008 before the scheme was in operation. In 2020, 5229 incidents of bike theft were recorded by the CSO.

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<sup>48</sup> [Written Answers. – Dáil Éireann \(30th Dáil\) – Tuesday, 5 Oct 2010 – Houses of the Oireachtas](#)

Figure 15: Recorded Incidents of Bike Theft, 2008-2020



Source: CSO Recorded Crime Incidents: Sub-Offence 0824 Theft/Unauthorised Taking of a Pedal Cycle.<sup>49</sup>

An Garda Síochána recorded 6,845 bicycles thefts<sup>50</sup> between January 2020 and April 2021<sup>51</sup>, and identify the scheme and the growing prevalence of high-value bikes as contributory factors. If a participant's bike is stolen, they will not be able to use it for commuting purposes, and thus will not achieve the objectives of the scheme – which means that the State investment (in the form of revenue foregone) cannot deliver the intended benefits. In response to a parliamentary question regarding the possibility of allowing repeat applications before the elapse of the specified period where bicycles obtained through the scheme are lost or stolen, the Minister for Finance noted that additional administrative procedures for either or both Revenue and employers in relation to the verification of loss, theft, insurance recovery, etc. would run counter to the administrative simplicity of the existing provisions, and that it therefore would not be appropriate to alter the existing scheme. The Minister added that anyone obtaining a bicycle under the scheme would therefore be advised to ensure it is covered by insurance<sup>52</sup>.

<sup>49</sup> Kindly provided by the CSO in response to a request. Note that all recorded crime statistics are currently being published with the status of 'under reservation' due to the quality of the underlying source. Further details can be found [here](#).

<sup>50</sup> Note that CSO data reflects recorded *incidents* of bike theft - a single incident may involve the theft of multiple bikes.

<sup>51</sup> [Lock it or Lose it – nearly 7,000 reported bike thefts in the last 16 months](#); An Garda Síochána Corporate Communications, April 2021.

<sup>52</sup> [Parliamentary Question 10942/20](#); answered by the Minister for Finance, 16 June 2020.

Allowing such insurance to be purchased under the scheme would incentivise its purchase, and may lower the risk that the public investment made does not deliver the intended outcomes as a result of bike theft or damage.

#### e. Wider Transport Impacts

There is a risk that the scheme may result in deadweight loss due to the participation of individuals that are already cycling to work. While it may be that improving the equipment available to existing cycle-commuters increases the frequency with which they cycle, or stops them from changing to another mode of travel, in order to achieve the significant modal shift required by government policy, it will be necessary to attract new cyclists.

A survey of scheme participants conducted in December 2010 found that over half (52%) of participants already owned a bicycle before participating in the scheme<sup>53</sup>. Furthermore, those who reported the highest levels of cycle-commuting were more likely to own a bike prior to participation; 75% of the participants who cycle to work daily already owned a bicycle before participating, and 58% of those who cycle at least once a week already owned a bicycle. Less than a third (31.9%) of participants who did not have a bicycle prior to participating in the scheme reported that they were cycling to work once a month or more.

There is also a risk that the resource subsidised through public investment is not used for its intended purpose. As noted previously, the scheme is designed to be simple to operate, involving limited administration. While participants must sign a written agreement stating that the bike is for their own use and will be used mainly for qualifying journeys, there is little oversight of participant behaviour once the bicycle has been received, creating a risk that participants use the bicycle for leisure rather than cycle-commuting purposes. Although 17% of participants never used the bicycle for any work trips at all, only 9% said that they would not replace the bicycle if it was lost or stolen, which suggests that a number of participants derive value from the scheme without using it for cycle-commuting.

The survey also recorded the frequency with which non-work cycling was undertaken by participants since purchasing their new bicycle. While overall, there were more trips undertaken for commuting purposes than for non-commuting purposes, non-commuting nevertheless made up a significant portion of reported cycling activity, with 38% of respondents reporting that they used the bike for non-work trips multiple times a week. Assuming a working year of 253 days and 48 weeks, participants who had a bike prior to the Scheme used the bike for work trips on 137 days per year and non-work trips on 98 days per year, while participants who did not have a bike prior to the

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<sup>53</sup> [\*Learning to cycle again: Examining the benefits of providing tax-free loans to purchase new bicycles\*](#); Brian Caulfield and James Leahy, November 2011.

scheme used the bike for work trips on 83 days per year and non-work trips on 65 days per year. Of the total cycling days recorded by scheme participants, 42.4% were for non-commuting trips and 36.8% were from participants who owned a bike prior to participating in the scheme. This means that only 20.7% of cycling days recorded by participants related to work trips undertaken by those who did not own a bike before participating in the scheme.

## f. Conclusions

The lack of available data makes it very difficult to formally evaluate the performance of the scheme. There are no official figures for the scheme cost or uptake, and available estimates for both of these elements vary significantly. While an examination of Census data does show an increase in cycle-commuting since the introduction of the scheme, the increase is modest considering the reported estimates of scheme uptake. Having said that, limitations associated with the Census data itself mean that some aspects of cycle-commuting may not be fully represented in the data, and so there is also insufficient evidence to conclude that the scheme has not delivered a significant impact on cycle-commuting.

In general, those with higher incomes will enjoy greater savings as a result of participating in the scheme, although there are some exceptions to this. Restrictions on eligibility - while unavoidable given the scheme's current model - reduce the equity of the scheme, and restrictions on the allowable equipment may make it less attractive to parents or other caregivers that are accompanied by children for some part of their commuting journey. A survey of scheme participants provides evidence of some additionality arising from the scheme, however it also suggests that there may be deadweight associated with it, and that the equipment obtained through the scheme may frequently be used for leisure rather than commuting purposes.

## 5. International Comparisons

This section considers the kinds of incentives that are employed in other jurisdictions. Part a) looks at the cycle mileage allowances that have been employed in France and Belgium, while Part b) summarise an evaluation undertaken of a UK scheme that has a model similar to the Cycle to Work Scheme.

## a. Cycle Mileage Allowance

### i. France

In 2015, France launched a cycling kilometric allowance for commuters using their own bike to cycle to work. In 2016, the limits for this allowance were set at €0.25 per kilometre cycled, up to €200 annually. This amount is exempt from both companies' social security contributions and taxes (the allowance was first trialled with private companies).

The scheme is voluntary for the private sector. Each recipient's allowance is calculated using the most direct route from their home to their workplace. As part of this, intermodality with public transport is supported: employees are reimbursed both for public transport season tickets and single journeys if their commute involves cycling to a public transport stop.

A national observatory (L'Observatoire de l'indemnité kilométrique vélo) was established to collect data, support the implementation of and follow-up activities relating to the scheme, and share good practices with companies involved. ADEME, the French Environment and Energy Management Agency, monitored a year-long pilot scheme undertaken in 2015, finding that modal share in participating companies increased from 3.8% before the introduction of the allowance to 4.8% after six months and 8.5% after a year<sup>54</sup>. In June 2018, the Observatory found that cycling modal share for employees of participating companies was at 9%, significantly higher than the French average of approximately 3%. Excluding cycling and environmental businesses, the modal share of participating companies is still almost twice the national average at 5.2%.

Businesses continue to sign up to the cycling allowance; in August 2017, 76 businesses accounting for 57,442 employees were participating with 2,000 of these receiving the allowance<sup>55</sup>; by June 2018, this increased to 121 businesses with 167,200 employees, of whom 7,450 are availing of the allowance<sup>56</sup>.

### ii. Belgium

A similar scheme which has been in place in Belgium since 1999.

The bicycle allowance is a kilometre allowance granted by an employer to members of its staff who use a bicycle to cover all or part of the distance between their home and their place of work. The granting of the bicycle allowance is not required of an employer; rather they decide whether to

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<sup>54</sup> Evaluation de la mise en oeuvre expérimentale de l'indemnité kilométrique vélo : Evaluation à un an

<sup>55</sup> [PASTA Handbook of good practice case studies for promotion of walking and cycling, November 2017](#)

<sup>56</sup> [l'indemnité kilométrique vélo enquête qualitative deux ans après sa mise en œuvre JUIN 2018](#)

grant it or not and freely fixes the amount. The allowance is used to cover the costs of the cyclist, but its main objective is to encourage more workers to use their bicycles<sup>57</sup>.

Participation in this scheme has increased significantly in recent years.

*Table 3: Number of Users and Cost per User of Belgian Cycling Mileage Allowance*

Year	Number of Users	Cost per User
2006 <sup>58</sup>	140,636	€154
2010 <sup>59</sup>	270,728	€160
2016 <sup>60</sup>	432,000	€233
2018 <sup>61</sup>	550,000	€252

The 2017 Federal Home-Workplace Travel Survey<sup>62</sup> undertaken by the Belgian Ministry of Mobility and Transport found a significant rise in the use of cycling in Belgium, which had increased by 43% since 2005. The report noted that since 2005, the bicycle allowance has undoubtedly played a role in this positive development.

To evaluate the impact of the bicycle mileage allowance, the report compared employers that operated the initiative to employers that did not offer it. For employers that offered the mileage allowance, employee cycling mode share was 12%, however for employers that did not offer it, the mode share was 7%.

To further examine the impact of the measures, the report again compared the results of employers depending on whether or not they employed a particular measure, but this time also took account of the employer's accessibility to public transport, travel distance, and the region in which the workplace was located.

This method suggested that the bicycle allowance represented a major incentive to use the bicycle, resulting in a 36% increase in the number of cyclists. The provision of covered parking spaces for bicycles was also of great importance for the use of the bicycle (+ 28% of cyclists).

<sup>57</sup> [Website of the Belgian Ministry of Finance](#) (in French)

<sup>58</sup> <https://ecf.com/files/wp-content/uploads/Tax-incentives-encouraging-employees-to-cycle-to-work.pdf>

<sup>59</sup> <https://ecf.com/files/wp-content/uploads/Tax-incentives-encouraging-employees-to-cycle-to-work.pdf>

<sup>60</sup> <https://www.brusselstimes.com/news/belgium-all-news/employment/66255/more-bike-allowances-are-given-to-belgian-employees/>

<sup>61</sup> <https://www.brusselstimes.com/news/belgium-all-news/employment/66255/more-bike-allowances-are-given-to-belgian-employees/>

<sup>62</sup> [2017 Federal Home-Workplace Travel Survey of the Belgian Ministry of Mobility and Transport](#)

## b. UK Tax Incentive Scheme

A tax incentive scheme similar to the Cycle to Work Scheme has been in place in the UK since 1999. Under the UK scheme, employers buy or lease cycling equipment up to the value of £1,000 from suppliers approved by their scheme administrator, and hire it to their employees. At the end of the loan period, the employer may choose to give the employee the option to purchase the equipment. In return, employees agree to sacrifice an equivalent proportion of their salary, for an agreed period, in exchange for the loan thereby paying less income tax and NICs on their remaining salary. Employees can save up to 40 per cent of the cost of a new bicycle. Employers also save on Secondary Class 1 NICs (usually around 13.8 per cent) as the amount they're paying in wages is also lower.

An independent evaluation<sup>63</sup> of the UK scheme undertaken in June 2016 found limited evidence of that scheme's impact on cycling generally, and cycle-commuting specifically.

The evaluation determined that there is no conclusive evidence on the impact of the scheme on the overall volume of cycling and in particular cycling to work. Although survey data indicated that participating in the scheme is associated with increased cycling to work, suggesting that some previous non-cyclists took up cycling and others cycled more as a result of their involvement, official transport data did not show an increase in the number of people cycling to work beyond what would be expected as a result of population increase. However, it did indicate that the amount of cycling (in terms of miles cycled) has risen by over two per cent per annum in recent years.

The report therefore concluded that the scheme is likely to have a positive impact on the volume of cycling to work, but it appears that this conclusion was drawn based on the mileage increase rather than evidence of increased cycle-commuting.

It also discussed the substantial range of international evidence that indicates that an increase of physical activity, such as cycling (e.g. of 30 minutes a day), is associated with a range of health benefits. Assuming that five per cent of participants, cycle for 30 minutes more a working day as a result of their involvement in the scheme, it estimated that the social benefit from reduced absence and increased physical fitness amounted to £72 million per annum, which is more than twice the estimated cost to the Treasury in lost tax and National Insurance.

The report also acknowledged that there is also consistent evidence in the literature that public investment in measures to facilitate increases in cycling is generally cost effective with high benefit-to-cost ratios, of often over five or ten to one. It concluded that while there is also evidence that some investments in cycling infrastructure can have significant payback, they appear to work most

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<sup>63</sup> [Impact of the Cycle to Work Scheme Evidence Report](#); Institute of Employment Studies, June 2016.

effectively when combined with direct efforts to increase cycling activity such as through cycle to work schemes.

### c. Conclusion

Cycling mileage allowances introduced in France on a pilot basis, and operated in Belgium for a number of years have been shown in both jurisdictions to increase cycling mode share in commuting journeys. In contrast, an evaluation of a scheme with a model similar to the Cycle to Work Scheme that has been in place in the UK since 2009 found limited evidence of impact on cycling activity generally, and cycle-commuting specifically, although it did find an increase in the number of miles cycled in recent years.

The report also found that a small proportion of participants achieving a modest increase in cycling was sufficient to generate social benefits whose value exceeded the estimated cost of the scheme. It acknowledged that there is also consistent evidence in the literature that public investment in measures to facilitate increases in cycling is generally cost effective with high benefit-to-cost ratios, and added that investments in cycling infrastructure appear to work most effectively when combined with direct efforts to increase cycling activity such as cycle to work schemes.

## 6. Barriers, Incentives, and Alternatives

The following section explores the barriers and incentives associated with cycling generally, and cycle-commuting specifically. Part a) examines the data concerning cycling barriers identified through surveys of citizens, while Part b) revisits the scheme rationale to consider the motivation for the scheme in light of issues identified in other parts of the paper. Part c) discusses a number alternative models of tax incentive for cycle-commuting, identifying the advantages and disadvantages associated with each of the various alternatives.

### a. Barriers to Cycle-Commuting

The Cycle to Work Scheme seeks to promote cycle-commuting by facilitating bicycle ownership through the provision of a subsidy. The Dublin Metropolitan Bikelife survey<sup>64</sup> conducted by Sustrans

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<sup>64</sup> [Bikelife 2019, Dublin Metropolitan Area](#)

and the National Transport Authority and undertaken in June and July of 2019 provides some insight into the barriers that may prevent people from considering cycling as a mode of transport.

#### i. Cost as a Barrier to Cycling

The survey found that although 53% of adults have access to an adult pedal cycle, only 24% cycle at least once a week, suggesting access to a bicycle may not be the primary impediment to cycling. Furthermore, only 5% of people identified the cost of a suitable cycle as a reason for not cycling or not cycling more often. Safety concerns were the most commonly identified reason for not cycling at 33%, followed by poor weather (24%) and a lack of confidence in cycling skills (18%). Those aged between 16-25 were most likely to identify cost as a factor at 11%, however safety, weather and confidence were all more commonly identified as an issue, even within this group.

This aligns with the CSO National Travel Survey 2019 which found that the availability of safer cycling routes was by far the most common factor cited by respondents that would encourage them to cycle more in the future (31.7%); less than 5% identified easier access to own or use a bike as a factor that would encourage more cycling; however, there was an age bias to these results with the highest proportion of interest in this factor expressed by the demographic groups of men aged 18-24 (10.5%), men aged 25-34 (13.9%), women aged 25-34 (9.0%). This may indicate that if a scheme to incentivise bike ownership is to be implemented, it would be most effectively targeted at certain demographics.

#### ii. Attitudinal Barriers to Cycling

The Bikelife survey found that 21% of adults do not cycle but would like to, suggesting there is further scope for change even in the Dublin area where cycling is most popular as a travel mode. This sentiment was expressed only slightly more frequently by women (23%) than by men (19%), but was more common in younger respondents than their older counterparts; the highest rate of 30% reported by those aged 26-35, with agreement rates decreasing with age after this. However, with 47% saying they do not cycle and do not want to, it may be the case that changing prevailing attitudes in relation to cycling will be necessary to achieve more widespread changes. Both those who want to cycle but do not and those who do not want to cycle and do not expressed similar levels of concern regarding safety (37% vs 39%) and weather (21% vs 20%), however confidence in skills and 'cycling not for people like me' was more commonly highlighted by those who do not want to cycle (27% vs 21%, and 17% vs 27%), while a lack of facilities at home or work was more of a concern for those who do want to cycle (14% vs 3%), as was the distance to be travelled (21% vs 11%) and the transport of children, other passengers or having too much to carry (13% vs 9%). They were also more concerned with the cost of a bicycle (9% vs 4%), although this was again a low-ranking reason.

### iii. Gender-based Barriers to Cycling

Women are more likely than men not to want to cycle, with 56% of women saying that they do not cycle and do not want to in comparison to 37% of men. This reflects the gender disparity observed in census data relating to travel modes used to commute to work. Safety concerns were more pronounced amongst women, with 25% of men identifying safety as a reason not to cycle in comparison to 39% of women. Women were also more likely to express concern regarding cycling skills, with 24% identifying a lack of confidence in cycling skills as a factor in comparison to 12% of men, and to note difficulties in relation to having children, other passengers or too much to carry at 13% vs 5% of men. Cost was slightly less likely to be a factor for women than men at 4% compared to 5%, but it doesn't appear to be a significant consideration for either.

### iv. Socioeconomic Class-Based Barriers to Cycling

It also appears that there are some cultural barriers in relation to cycling within certain socioeconomic groups (SEGs)<sup>65</sup>. Those in socioeconomic groups AB were more likely to cycle than those in socioeconomic group DE, with 32% and 17% cycling at least once a week respectively. The proportion of those who do not cycle but want to is similar in both groups, with 24% in SEG AB compared to 21% in SEG DE. However, while 38% in SEG AB say they do not cycle and do not want to, the proportion in SEG DE is much higher at 62%. 15% of people identified 'not for people like me' as a reason for not cycling or not cycling more often. This was far more common amongst residents from socioeconomic groups DE at 22%, in comparison to 8% for socioeconomic groups AB.

A lack of confidence in cycling skills appears to be an issue, with 26% of those in SEG DE identifying this as a reason for not cycling or not cycling more often, in comparison to 16% of those in SEG AB. Although the cost of a suitable cycle was more commonly identified as an impediment to cycling by SEGs DE than SEGs AB, in both cases it was by a low percentage of respondents at 6% and 2% respectively.

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<sup>65</sup> Socio-economic group is a classification based on occupation maintained by the Association of Irish Market Research Organisations (AIMRO). Groups A and B are professional and managerial. Groups D and E are semi-skilled and unskilled manual occupations and people not in employment.

Source: [Sustrans/NTA Bikeline Survey 2019, Dublin Metropolitan Area](#)

## v. Conclusions

Given that the cost of a suitable cycle is one of the least frequently identified reasons for people not cycling, both by the general population and by groups currently under-represented in cycle-commuting such as women and certain SEGs, it may be that an incentive reducing the cost of obtaining a suitable bicycle may not be the most efficient way to encourage cycle-commuting.

### b. Scheme Rationale Revisited

#### i. Categories of Cycling Activity

Cycling activity can be grouped into the following three categories:

1. Cycling to commute to or from work, or as part of a journey to or from work;
2. Cycling to complete some other journey, such as a shopping trip, journeys to and from education, or journeys for social purposes; and
3. Cycling for recreational or exercise purposes.

The current scheme focuses entirely on the first of the categories; it requires that equipment obtained through the scheme be used primarily for journeys to and from work, and does not seek to promote cycling for other purposes.

While it is clear that increasing cycling mode share for commuting journey has the potential to achieve health benefits, relieve urban congestion, and reduce greenhouse gas emissions, these aims may also be furthered by increasing the proportion of non-commuting journeys travelled by bicycle. Where a cycling journey replaces a car journey, participants will experience health benefits from the increased activity, and the greenhouse gases associated with that journey will be eliminated<sup>66</sup>. Depending on the time and place of the journey, it may also ease congestion by reducing the number of cars on the road. Furthermore, there is evidence that cycle-commuting may improve productivity by reducing sick leave. In 2010, a Dutch study<sup>67</sup> found that regular cyclists take 7.4 sick days per year, compared with 8.7 sick days for non-cyclists.

In fact, data reported through the CSO National Travel Surveys indicates that generally, commuting journeys account for only about one in four journeys made. Journeys for the purposes of shopping and social/recreation each make up about 20% of journeys, so there is a clear opportunity to achieve the desired benefits by promoting modal shift for these journeys in addition to commuting journeys.

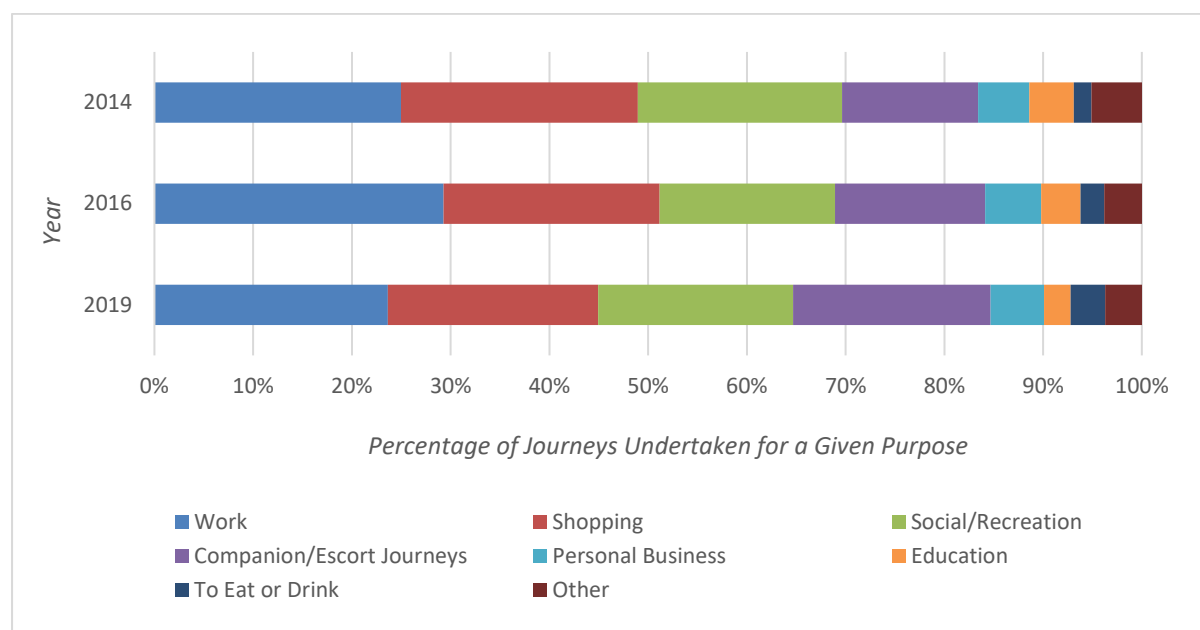
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<sup>66</sup> Assuming a mechanical bicycle; where the journey involves an electric bicycle, emissions will still be reduced but not fully eliminated.

<sup>67</sup> *The association between commuter cycling and sickness absence*; Hendriksen, I.J., Simons, M., Garre, F. G., Hildebrandtx, V. H. (2010). *Preventive Medicine*; v5; pp:132–135.

As noted previously, safety equipment for a child, like a helmet or separate seat, is not considered as being necessary for a participant's journey to work and therefore does not qualify as safety equipment under the scheme. Although an expansion of the scheme rationale to support modal shift for journeys of any purpose would mean that this justification would no longer apply, considering that the NTS indicates that companion/escort journeys – many of which likely involve escorting children – also make up a significant proportion of journeys, supporting companion/escort journeys should be explored to support modal shift in journeys of this nature.

*Figure 16: Journey Purpose for Persons Over 18 in 2014, 2016 and 2019.*



**Source:** CSO National Travel Survey 2019<sup>68</sup>.

Although cycling for recreational purposes is unlikely to relieve congestion, there is robust evidence that suggests it can achieve significant health benefits for participants, thus reducing Exchequer spending on health. Considering that the evaluation of the UK Cycle to Work Scheme, which is very similar in model to the scheme examined here found that modest increases achieved by only 5% of participants delivered benefits in terms of reduced absence and increased physical fitness that more than doubled the estimated cost of the scheme, cycling incentives should seek to increase the level of recreational cycling as well as cycle-commuting.

## ii. Eligibility Limitations

In addition, the restrictions in eligibility arising from the model that defines the scheme necessarily excludes large groups of people from participating in it. This has the effect of reducing the pool of potential participants, and thus the potential benefits that could be realised by increasing

<sup>68</sup> [CSO National Travel Survey 2019, Why We Travelled](#)

participation. In particular, the current scheme excludes schoolchildren and college students, who are highly likely to travel at peak commuting times, self-employed commuters and others.

### iii. Barriers and Incentives

While the current scheme serves as an incentive to bicycle ownership, it does not incentivise cycle-commuting specifically; those who cycle on a daily basis will not gain any additional benefit from the scheme compared to those that cycle once a month (or indeed do not cycle at all) but require the same quantum of investment. Furthermore, the survey data discussed above indicates that the cost of a bicycle does not represent a barrier to cycling for most people; rather, concerns in relation to physical safety, confidence in cycling skills and attitudinal barriers are much more commonly expressed.

This idea is further supported by surveys undertaken by Sport Ireland and consumer spending reports published by Allied Irish Bank that highlight a boom in cycling after the onset covid-19 pandemic, although no significant changes to the cost of bicycles and the incentives/supports available. However, other potentially influencing factors such temporary cycle lanes, reduced traffic on the roads and reduced public transport capacity is noted. The substantial increase in cycling activity suggests that there is no insurmountable barrier to achieving modal shift; under the right circumstances, people will choose to cycle. Taking account of all the evidence explored throughout this paper, it is clear that the current scheme is only one of a possible suite of supports that could effect the greatest possible modal shift

Revenue guidance states that ‘Home-based employees can take part in the scheme if the bicycle is used for work-related journeys’<sup>69</sup>. This might include trips to the post office, or to collect office supplies. However, while it is still possible to make use of the scheme, it is likely that participants who work remotely will make much fewer commuting trips than those who work from the office. As the cost of providing the scheme remains the same, this has the effect of reducing the efficiency of the scheme as the impact achieved is less but the cost has not reduced. The same will apply to blended working arrangements, such as is planned for introduction in the civil service. If in the future, a significant cohort of workers work remotely for all or part of their working week, one could expect the proportion of journeys completed for the purpose of commuting to work to reduce, raising further questions regarding the logic of a scheme that incentivises active travel for one particular journey purpose rather than supporting modal shift for all journeys.

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<sup>69</sup> <https://www.revenue.ie/en/employing-people/what-constitutes-pay/items-not-treated-as-pay/provision-of-bicycles-for-directors-and-employees.aspx> [published July 2021].

#### iv. Conclusions

Taking all the above into account, it is not clear that a scheme that concentrates solely on cycle-commuting and that only focuses on alleviating some of the cost barriers associated with cycling is best-positioned to deliver the full range of potential benefits associated with active travel. The additional eligibility restrictions associated with the scheme and the misalignment between the incentive offered and the barriers identified further reflect the limited scope of the scheme.

It may be that measures that improve safety for cyclists, increasing confidence in cycling skills, and addressing the perception that cycling is ‘not for people like me’ would be more effective in attracting new cyclists and delivering modal shift. As highlighted by the evaluation of the UK cycle to work scheme, investment in infrastructure is also important, and should be combined with behavioural interventions and incentive schemes. Incentives reducing the cost of obtaining a bicycle could be employed in a more limited way, and targeted to groups where cost is most likely to be a barrier. As discussed in section 4c, the current scheme provides greater savings to participants with high salaries than to those earning lower salaries; those in receipt of high salaries are unlikely to represent the group for whom cost is a significant barrier to cycle-commuting; accordingly, some alternative forms of incentive are discussed in the next section.

The rationale and motivation for the scheme should be fully re-examined, with due consideration given to identifying the ultimate motivation for this particular intervention, and indeed for any intervention that supports or promotes active travel. This will allow a careful consideration of the complete range of actions that the State may undertake to support active travel, exploring how combinations of measures may work in tandem to generate the greatest possible impact.

#### c. Alternative Models

##### i. Lowering VAT

One possible alternative form of incentive would be to lower the VAT rate on all bicycles. While this would remove all barriers to eligibility, it is likely to result in significant deadweight loss as it will apply to all individuals purchasing bicycles, regardless of whether they require an incentive to make the purchase. There may be benefits to this – such as incentivising cycling to school/college, which would achieve impacts that are similar to those sought by the scheme – but it will equally create the risk of incentivising the purchase of bicycles for leisure travel or sport, which would not progress all elements of the current scheme rationale, although a different model of intervention may involve a broader rationale.

A reduction in VAT would result in the same level of savings being available to all participants, irrespective of income. This means that in proportion to disposable income, it is likely to have a larger impact for participants in receipt of lower incomes. However, while the current scheme allows participants to spread the cost of the purchase across a period of up to a year by way of a salary sacrifice agreement, which may benefit those on lower incomes or tight budgets, this would not be possible under a VAT reduction approach in the absence of complementary measures.

## ii. Cycle Mileage Allowance

A cycle mileage allowance scheme, such as those in operation in France and Belgium discussed in the previous section, is likely to have significant deadweight implications. While the current scheme requires investment from the participant as well as the public, for an individual that already commutes to work by bicycle, applying for a cycle mileage allowance produces a saving while requiring no extra cost. It therefore seems likely that cycle-commuters that did not require an incentive to encourage them to cycle to work would apply for the scheme in any case.

Under the current scheme, the cost per user will depend on the tax laws in place, the value of the qualifying purchase, and the salary of the participant. Currently a participant earning the average total earnings for 2019 of €48,946 participating in the scheme will result in a cost to the exchequer of €297.75 for a qualifying purchase to the value of €500. The exchequer cost may be larger or smaller depending on the value of qualifying purchase and salary of participant, and cannot be estimated from available data. However, it is likely that the average cost per user is greater than the per user cost recorded in other jurisdictions, and can be limited within the scheme as was done in Belgium.

A cycling mileage allowance incentivises cycling rather than bike ownership, ensuring that public investment is directed towards the desired behaviour. Investment does not reward ownership independent of use, as is the case with the current scheme.

## iii. Administered Grant Scheme

Under its current model, the scheme is administratively simple, and it is likely that an administered grant scheme would be more complex to administer. The increase in administration will require additional effort from either the employer that applies to participate, or the body administering the scheme. In the former case, the increased administration could discourage some employers from participating and making the scheme available to their employees, which could reduce the scheme uptake by reducing the number of people that may participate. In the latter case, the completion of

additional administration will require the application of additional resources; this is likely to result in increased cost. It would allow some degree of increase in the oversight of participant activity. The degree of complexity involved would depend on the design of the scheme, but increased complexity is likely to be correlated with increased cost, oversight and targeting.

For example, a non-means tested grant would be administratively simple, which is likely to limit the additional cost associated and any impact on uptake. However, such a scheme would be regressive in nature. The current scheme similarly does not involve a means test, and as explored in section 4c, it provides larger savings for participants earning higher salaries, which also seem likely to be the group for whom cost presents the least significant barrier. In contrast, a highly regulated grant could be more effectively targeted at under-represented populations, or at those from whom cost is most likely to serve as a barrier to cycling. However, the administrative costs of such a scheme are likely to be higher.

#### d. Conclusions

The scheme seeks to increase cycle-commuting by providing a financial incentive to facilitate bicycle ownership. However, survey data indicates that the cost of a bicycle does not represent a barrier to cycling for most people; rather, concerns in relation to physical safety, confidence in cycling skills and attitudinal barriers are much more commonly expressed.

Revisiting the scheme rationale generates a number of questions concerning the type of cycling activity the scheme incentivises, the impact of eligibility restrictions, and how it addresses barriers to cycling or incentives desired behaviour. The rationale and motivation for the scheme should be fully re-examined, with due consideration given to identifying the ultimate motivation for supporting and promoting active travel.

It is likely that a combination of interventions would be most effective in delivering modal shift. Behavioural schemes such as the Cycle to Work Scheme should be combined with improvements in infrastructure and traffic management actions that would improve safety for cyclists. Educational and promotional initiatives may be as important as financial incentives in order to attract new cyclists. Most crucially, initiatives must not be designed in isolation, but rather should form part of a systems approach to active travel where the interplay of different interventions has been explored and accounted for. Without careful planning and analysis, interventions may achieve small increases in active travel, but are unlikely to deliver the fundamental change in the nature of transport in Ireland conceived of in the Programme for Government.

## 7. Conclusions

From an examination of the rationale, operation and impacts of the Cycle to Work Scheme, the most significant conclusions arising are summarised in the following points:

- The rationale that prompted the introduction of the scheme in 2009 remains compelling. Recent Government commitments and the policy evidence that has emerged in the intervening period both reaffirm the benefits of active travel, and the continued need to achieve modal shift to support health, economic and climate goals.
- The administrative simplicity of the scheme results in limited oversight and a paucity of operational data, which makes the performance of the scheme very difficult to formally evaluate. In particular, there are no figures available for scheme cost or uptake, limiting the assessment of efficiency and effectiveness.
- Scheme impacts are also difficult to assess. While the evidence in relation to scheme impacts is limited, it is neither sufficient to conclude that the scheme has a substantial impact on cycle-commuting, nor to conclude that the scheme does not achieve a substantial impact on cycle-commuting. There is a risk of deadweight associated with the scheme.
- To improve the availability of data indicating scheme uptake and impact, a question could be included in the CSO National Travel Survey to establish whether respondents had participated in the scheme. The results could be used to estimate scheme uptake, and a comparison of the travel behaviour of respondents that participated in the scheme and with respondents that did not participate may be useful evidence for exploring scheme impact.
- In general, individuals on higher incomes benefit more from the scheme than those on lower incomes. In spite of this, individuals in receipt of lower incomes still participate in the scheme, and may find benefits in doing outside of the potential tax saving.
- Survey data indicates that barriers to cycling are more likely to result from concerns regarding safety, confidence in cycling skills, and attitudinal barriers than from the cost of obtaining a suitable cycle. Consideration should be given to such barriers when examining how best to incentivise active travel.
- The rationale and motivation for the scheme should be fully re-examined, with due consideration given to identifying the ultimate motivation for this particular intervention, and indeed for any intervention that supports or promotes active travel. This will allow a careful consideration of the complete range of actions that the State may undertake to support active travel, exploring how combinations of measures may work in tandem to generate the greatest possible impact.