

Údarás Náisiúnta Iompair
National Transport Authority

2022 National Maximum Taxi Fare Review

National Transport Authority
Dún Scéine
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## Executive Summary

## Background

The Commission for Taxi Regulation introduced the National Maximum Taxi Fare structure in September 2006, applying a unified tariff structure for all taxis in Ireland. Since then, a Maximum Taxi Fare Review has been carried out approximately every two years to assess any adjustments in changes in the operating costs and market environment facing the taxi industry. The National Transport Authority (NTA) has been responsible for carrying out the Maximum Taxi Fare Reviews since 2011.

This report details the approach and findings of the 2021/2022 National Maximum Taxi Fare Review (the Fare Review). This review was undertaken between November 2021 and March 2022. During this time, while still experiencing the effects from Brexit and Covid-19, Russia invaded Ukraine, the Government of Ireland acknowledged the scale and scope of the potential geopolitical implications for the State, agreeing that a co-ordinated, whole-of-government response will be essential to minimise those impacts. ${ }^{1}$ The most significant economic issues of relevance to the National Maximum Taxi Fare Review identified are: fuel and energy supply; inflation and the cost of living; and challenges for the economy with an ongoing geopolitical crisis, creating heightened uncertainty within the uncertainty brought by Covid-19.

Objectives of the Fare Review 2022
The objectives of the 2022 Fare Review are to:

- Estimate the average activity level of taxis in a year based on survey data and Central Statistics Office (CSO) data.
- Update each element of the Taxi Cost Index (TCI), including the "fixed cost" of an average taxi, the running costs of an average taxi based on the activity levels determined and labour costs.
- Assess the appropriateness of the current fare structure.


## Recommendations from Previous Reviews

The 2010 review recommended no alteration in the maximum fare. The review in 2012 recommended a fare increase of circa 4 per cent, coupled with a simplification of the fare structure but those proposals were not implemented at the request of the taxi industry and on the recommendation of the then Advisory Council to the Commission for Taxi Regulation (colloquially the Taxi Advisory Council, now the Advisory Committee on Small Public Service Vehicles) given the recent recessionary environment. The 2014 review proposed a reduction in the initial charge (by lowering the distance and time included), a clarification of the system of premium rates and the abolition of Tariff C (Tariff C had applied an increased rate for trips above 30 km or 85 minutes), as well as an overall fare increase of 4 per cent. These changes were implemented by NTA in April 2015. The 2017 Fare Review recommended an increase in the maximum fare based on a finding that costs had increased and following this, fares were increased by approximately 3.2 per cent on average in February 2018.

The 2019 Fare Review recommended an increase in the National Maximum Taxi Fare of 4.5 per cent, which included a 4 per cent increase on foot of TCI increases and a 0.5 percent uplift for the mandatory provision of cashless payment facilities in taxis for all passengers. After a public consultation, the new Maximum Fares Order for the increase approved by the NTA Board in February 2020 to come into operation on 01 July 2020. However, due to the disruption to the hospitality, tourism, leisure and, thus, taxi industries, with the onset of the Covid-19 pandemic and travel restrictions and in recognition of passenger reaction to an increase at that time, the Advisory Committee on Small Public Service

[^0]Vehicles and taxi industry group representatives advised that the commencement of the Maximum Fares Order be postponed. NTA and the Department of Transport accepted this recommendation. Therefore, this fare review is to account for the 2019 fare review also. The current National Maximum Taxi Fare is that which was set in February 2018.

## Market Conditions 2022

The intervening years since the last National Maximum Taxi Fare update were marked initially by strong economic growth, falling unemployment levels and increased consumer spending, all of which would generally have positive implications for the taxi industry. The onset of Brexit and then the Covid19 pandemic marked the beginning of a disruptive period, which is exacerbated by current geopolitical forces in Ukraine. The Irish government is moving into a phase of managing risk in the economy, while focusing on resilience in all economic sectors. Economic activity is strong in Ireland, backed by growth in the export sector, particularly in medicine and pharmaceutical products, which are in high demand as the Covid-19 pandemic progresses. The series of unpredicted short-macroeconomic shocks that the Irish economy faced over the last two years were both costly and painful, particularly to the domestic service sectors, as the night-time and visitor economies collapsed. Although households have amassed considerable savings during the pandemic, it is uncertain as to whether households will keep consumption and spending repressed, remaining cautious in light of the uncertain European and global geopolitics. This could adversely affect the taxi industry, despite the forecast of a continuation in Irish economic growth.

The Covid-19 pandemic had a dramatic impact on taxi drivers. The taxi industry is entirely dependent on the movement of people, and the ban on non-essential travel introduced in March 2020 disrupted the industry. The series of lockdowns and travel restrictions that were imposed throughout 2020 and 2021 curtailed driver activity, with ninety per cent who stopped working at some point during the Covid-19 restrictions. This was predominantly due to a lack of sufficient demand but also due to caution about their own personal safety. With the lifting of all restrictions in February 2022, activity levels are increasing.

The results of a nationally representative household survey commissioned by NTA suggest that demand for taxi services has declined due to the impact of Covid-19. Over half of respondents reduced their use of taxi services, largely as a result of less socialising. For those that increased their taxi use over the last year, taxis were considered by users to be safer than mass public transport. Overall, the taxi market changed considerably during the Covid-19 pandemic, but the closing of the hospitality, recreation and cultural sectors had the largest impact on taxi use. Covid-19 presented difficult challenges to the taxi industry, which is slowly recovering, but still facing pressure, particularly from inflation and geopolitical impacts on the price of fuel.

The unpredictable situation that is emerging (April 2022) as a result of the Ukraine war is adding to the surge in energy prices that Ireland and Europe were already faced with, in the preceding year, 2021. With Russia being the second-biggest exporter of crude oil globally, increases in key commodity prices are evident. Although only 5.8 per cent of Ireland's petroleum comes from Russia, it is a major supplier of petroleum and impacts the global supply chain. The short term effect of the Ukraine war was evident in volatility in the commodity markets during the first month of the war. Longer term impacts will likely be seen in changes to the fuel supply chains, and there is a lot of uncertainty about the effect that this will have on fuel costs at the pump.

The consumer sentiment of the country should be considered, given there is a reduction in available disposable income and drops in real income (income minus inflation). While incentivising taxi use is key for the industry, the reaction of taxi users to price changes in fares should be considered. In the context of other available public transport options, it should be noted that this Maximum Taxi Fare

Review is occurring in the wider context of a temporary 20 per cent reduction in other public transport fares from the beginning of April 2022; an initiative announced to encourage modal shifts and to incentivise a return to pre-Covid public transport patterns while providing citizens with reliable and realistic sustainable mobility options. Taxi customer retention is key to the industry's return to profitability.

## Taxi Cost Index - Methodology

This year's review was consistent with the methodology of previous Reviews. The 2014 Review had incorporated a fundamental appraisal of the components, assumptions and methodology employed within the Taxi Cost Index, finding them to be sound.

## Taxi Cost Index - Findings

Maximum fares were revised following the 2017 Fare Review, so 2017 is the relevant year for comparisons of the Taxi Cost Index. Utilising an estimate of annual mileage or 'driver activity levels' based on CSO data of $30,352 \mathrm{~km}$ for 2019 the increase in the index is 11.5 per cent. As in previous years, the change in the TCl has also been calculated based on average activity levels reported by taxi drivers which amounted to $42,000 \mathrm{~km}$ in 2019. Costs based on the driver survey activity levels have risen by 10.7 per cent. In the 2019 recommendation, it was agreed that the TCI would also include a further 1 per cent increase to accommodate the transaction fees and hardware provision that taxi drivers incurred if mandated to accept cashless payments.

The recommendations for the 2022 increase in the Maximum Fare are between 11.7\% and 12.5\%.

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## 1. Introduction

### 1.1 Background

The Commission for Taxi Regulation introduced the National Maximum Taxi Fare structure in September 2006, applying a unified tariff structure for all taxis in Ireland. Since then, a maximum taxi fare review has been carried out approximately every two years to assess any adjustments in changes in the operating costs and market environment facing the taxi industry. Section 24 of the Taxi Regulation Act 2013 empowers NTA to make a "maximum fares order", fixing the maximum fares that may be charged by the driver of a taxi. Prior to making a maximum fares order, NTA undertakes a review to ensure that proposed maximum fare accurately reflects taxi operating costs. The National Transport Authority (NTA) has been responsible for carrying out the National Maximum Taxi Fare Reviews since 2011.

This report details the approach and finding of the 2022 National Maximum Taxi Fare Review, which was undertaken in February and March 2022.

### 1.2 Objectives of the Review

The objectives of the National Maximum Taxi Fare Review are to:

- Estimate the average activity level of taxis in a year based on survey data and other official data sources
- Update each element of the Taxi Cost Index ( TCI ), including the annual fixed and running costs of an average taxi based on the activity levels determined, together with labour costs (based on CSO data)
- Assess the appropriateness of the current fare structure in light of market conditions.


### 1.3 Structure of the Report

The structure of the report is outlined below:

- Section 2 provides background and context for the current Fare Review.
- Section 3 describes recent market developments in the industry, including an outline of wider economic conditions and the supply and demand characteristics evident in the Irish market.
- Section 4 contains a recalculation of the Taxi Cost Index (TCI). The findings of the TCI are used to determine the changes in industry operating costs since 2017 and 2019
- Section 5 presents conclusions and recommendations in relation to the maximum fare level.


## 2. Background to the 2022 National Maximum Taxi Fare Review

### 2.1 Overview of the Irish Taxi Industry

The Small Public Service Vehicle (SPSV) industry in the Republic of Ireland is made up of taxis, hackneys and limousines. NTA is responsible for the regulation of the SPSV industry in Ireland; a responsibility which includes the regulation of taxi fares. It took over this role from the Commission for Taxi Regulation in 2011. The regulatory framework for the industry comprises the consolidated Taxi Regulation Acts 2013 and 2016, together with Taxi Regulation (Small Public Service Vehicle) Regulations 2015 and 2016 and the Taxi Regulation Act 2013 (Maximum Fares) Order 2017.

The rationale for SPSV regulation is to ensure that passengers have a safe vehicle for their journey, with appropriate insurance in place, driven by a driver who has been vetted by An Garda Síochána and, in the case of taxis, with a pre-established and verified charging system. NTA is the licensing authority for SPSVs and dispatch operators (booking service providers). This includes the granting, renewal and revocation of each vehicle and dispatch operator licence, together with all associated licensing, inspection and compliance activity.

As of February 2022, there were 18,787 licenced SPSVs (taxis, hackneys and limousines) in the fleet, which is down just over 9 per cent from 2019. This number is, however, bolstered by 3,354 currently inactive vehicle licences which remain ready for reactivation for 24 months post expiry. This was a measure undertaken by NTA during Covid to allow licence holders remain attached to the industry with no associated costs during this very uncertain period. As demand recovers, these licences may be reinstated.

The Fare Review concerns only the fleet of taxis, which makes up 84 per cent of the total SPSV fleet (hackneys and limousines are excluded). The fleet of taxis includes standard taxi vehicles and wheelchair-accessible taxis (WAT), and all references to taxis in this report refer to both types of vehicle unless otherwise stated. The number of taxi licences in Ireland increased post-liberalisation, from 4,218 in 2000 to 15,686 by 2005. Taxi licences continued to increase until 2008 when there was a total of 21,177 taxis, before declining for some years following the banking crisis and recession in Ireland. While the decline was stemmed and taxi numbers had begun to rise again in 2018 and 2019, reaching 17,814 vehicles, Covid-19 led to a sudden decline throughout 2020 and 2021 with many taxi licences moving into inactive status.

As of February 2022, there were 15,838 taxis in the fleet, which is 11 per cent lower than in 2019, and matches the number active in 2005 when the economy was performing strongly. Section 3.4 will describe the supply of taxis in greater detail, but it is worth noting that taxi supply is still four times the pre-liberalisation level, reflecting the emergence of an industry that has continually responded positively to disruptive processes, while also embracing technological innovation and remaining resilient in the face of volatile recent market conditions.

### 2.2 Structural Changes in the Irish Taxi Industry

Ireland has had no significant barriers for drivers to enter to the SPSV market for two decades. In this respect it remains in a minority in international terms, and it is unsurprising that the number of SPSVs per capita in Ireland, at 3.7 SPSVs per 1,000 population, far exceeds that in most countries in Europe. Only in the UK, which has 4.4 SPSVs per 1,000 population is there a greater level of supply. The average number of SPSVs in western Europe is 1.3 SPSVs per 1,000 population.

The supply of SPSV in Dublin is also high by international standards at 7.4 SPSVs per 1,000 capita. Cities of comparable size such as Oslo, Hamburg, Vienna, Seville and Brussels have between 0.6 and 1.9 SPSVs per capita.

Although the supply of SPSVs remains high in Ireland, the difference is becoming less pronounced, as recent decades have seen a clear shift to the easing or elimination of restrictions on entry in many countries. Ireland has been to the forefront of change in the sector, but its experience is now being mirrored in countries such as Finland, France, Australia, the USA and Canada.

The composition of the SPSV fleet is changing over time also. The growth in the proportion of wheelchair accessible taxis in the fleet is evident (Figure 2.1), with wheelchair accessible vehicles comprising 20 per cent of the taxi fleet in 2022. Of note is the emergence of electric cars in the taxi fleet (eSPSV), which has seen an increase to 780 eSPSVs by the end of 2021. It is expected this growth of eSPSVs in the fleet will continue, given NTA's commitment to green or decarbonise the taxi industry.

Figure 2.1: Taxi Fleet, 2007-2022


Source: NTA Taxi Statistics

### 2.3 National Maximum Taxi Fare

The National Maximum Taxi Fare structure was established by the Commission for Taxi Regulation in September 2006. Prior to that, different fare structures applied in 34 separate taximeter areas. The National Maximum Taxi Fare structure is a pre-established and verified charging system and this provides transparency and certainty regarding the calculation of fares. This is intended to achieve protection for consumers in relation to pricing and to ensure equity between the travelling public and drivers. This transparent process also gives certainty to drivers, enabling them to make business decisions.

Other objectives when setting the National Maximum Taxi Fare include that fares should be simple and calculated on the basis of time and distance using a pre-programmed meter, with all extras included in the maximum fare calculated and visible on the meter and the receipt issued. These extras
include, for example, a $€ 2$ booking fee if the taxi is prebooked, i.e. not engaged at a rank or hailed on the street and $€ 1$ charged for each additional adult passenger.

The current National Maximum Taxi Fare includes an initial standing charge, and two tariff bands that are based on the distance travelled. These also vary based on the time of day the journey is taken: journeys between 8am and 8pm except on Sundays / public holidays are charged at a standard rate, and journeys between 8pm and 8am or journeys on Sundays / public holidays are charged at a premium rate. A special premium rate applies during the Christmas and New Year period.

Figure 2.1: Current National Maximum Taxi Fare

| Applies |  | Initial Charge | Tariff A | Tariff B |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Up to 0.5 km or 85 secs | Next 14.5 km or 41 mins | Thereafter |
| Standard Rate <br> (displayedas 1 on the taximeter) | 8am to 8pm <br> Monday to Saturday <br> (except public <br> holidays) | €3.80 | €1.14 per km or <br> € 0.40 per minute Up to total € 20.40 | $€ 1.50$ per km or €0.53 per minute |
| Premium Rate <br> (displayedas 2 on the taximeter) | 8pm to 8 am Monday to Saturday, all day Sundays, most publicholidays | €4.20 | €1.45per km or €0.51 per minute Up to total € 25.40 | € 1.80 per km or € 0.64 per minute |
| Special <br> Premium Rate <br> (displayed as 3 on the taximeter) | 8pm 24 December to 8am 26 December, 8pm 31 December to 8am 1 January | €4.20 | $\begin{aligned} & € 1.80 \\ & € 0.64 p \end{aligned}$ | er km <br> minute |

Source: National Transport Authority
The current National Maximum Taxi Fare is shown in Figure 2.1. The current National Maximum Taxi Fare is in place since February 2018, when fares were increased by 3.2 per cent on average. This increase was implemented following the completion of the 2017 Fare Review which found that costs had increased between 2014 and 2016. While an additional increase to the National Maximum Taxi Fare in the order of 4.5 per cent was proposed in the 2019 Fare Review ( $4 \%$ for the TCI increase and $0.5 \%$ for the uplift for the mandatory provision of cashless payment facilities in taxis for all passengers), this increase was not implemented due to the Covid-19 Pandemic, and the National Maximum Taxi Fare has remained at the same level since February 2018. This was despite the new Maximum Fares Order for the increase being approved by the NTA Board in February 2020. However, due to the disruption with the onset of the Covid pandemic and travel restrictions and in recognition of passenger reaction to an increase at that time, the Advisory Committee on Small Public Service Vehicles and taxi industry group representatives advised that the commencement of the Maximum Fares Order be postponed. NTA and the Department of Transport accepted this recommendation.

### 2.4 Previous National Maximum Taxi Fare Reviews

The 2010 Fare Review recommended that no change should be made to the 2008 fare levels. However, it did recommend that the removal of Tariff $C$ be considered in order to simplify the fare structure.

The 2012 Fare Review recommended the application of a fare increase of circa 4 per cent, coupled with a simplification of the fare structure. The review proposed the removal of Tariff $C$ and a reduction in the initial charge. On foot of the public and industry consultation in 2012, these proposals were not implemented.

Prior to 2014, there were three tariff bands in the maximum fare structure. Tariff A applied to the first $14 \mathrm{~km} / 40$ minutes after the initial charge. Tariff B applied to the following $15 \mathrm{~km} / 42$ minutes. Tariff $C$ applied to all travel over $30 \mathrm{~km} / 85$ Minutes. The 2014 Fare Review recommended a fare increase of approximately 4 per cent, as well as a simplification of the fare structure. The proposed changes were to remove Tariff C , to lower the initial charge, and to clarify the system of premium rates for night time work, weekend work and work during the Christmas and New Year periods. These changes were implemented by NTA in April 2015.

The 2017 Fare Review recommended an increase in the maximum fare based on a finding that costs had increased and following this, fares were increased by approximately 3.2 per cent on average in February 2018.

The 2019 Fare Review recommended an increase in the National Maximum Taxi Fare of 4.5 per cent, which included a 0.5 per cent adjustment for the extra costs (transaction fees and hardware provision) for drivers to accept cashless payments. After a public consultation review, the Maximum Fares Order for the increase was prepared, but was not implemented, as stated previously. Prior to the implementation of the proposed increase, the Covid-19 pandemic arrived in Ireland. As a result of the pandemic, and its devastating impact on the SPSV industry, the Advisory Committee on SPSVs and taxi industry representatives at that time recommended that no increase be implemented in 2020. Both NTA and the Department of Transport agreed with this recommendation. Therefore the current National Maximum Taxi Fare is that which was set in February 2018, and recommendations in this report are calculated from 2018. While the 2020 increase was not implemented, and would have been meaningless with the restrictions on travel and collapse of much of the economic activity that taxis are dependent on, NTA's focus from the onset of the pandemic was to support and assist the existing SPSV industry in any way its remit permitted. Supports provided included:

- Deferral of vehicle licence expiry dates for three months following the emergence of Covid in Ireland;
- Enactment of emergency regulations to waive late renewal fees of up to $€ 500$ for vehicle licence holders from the start of Covid to June 2022 with a reduction to end of year;
- Enactment of emergency regulations waiving standard vehicle licence renewal fees for 2021 and 2022;
- Engagement with insurance providers to provide premium reductions, including a private cover discount of up to a 60 per cent whilst not providing taxi services and up to a 90 per cent discount for transferring to Fire and Theft cover only;
- Enactment of emergency regulations extending the maximum permissible operational age of vehicles, thus ensuring that no vehicle is forced to exit the SPSV fleet in 2020, 2021 or 2022 as a result of vehicle age; and
- Enactment of a regulation to double the period (to 24 months) that taxi, hackney and limousine licences may rest in inactive status after expiry prior to losing the capacity to be replaced;
- Waiving NCT fees and funding a rebate of Motor Tax for SPSV operators for 12 months from September 2021.

While these concessions reduced the burden of costs to taxi drivers, this reduction in costs is not taken into account in the calculation of this Taxi Cost index and Maximum Fares Review.

## 3. Current market conditions

### 3.1 Introduction

This section of the report sets out the current market conditions in the taxi market, including the general economic context, and taxi demand and supply.

Section Error! Reference source not found. provides a brief overview of the economic environment in Ireland since the 2019 National Maximum Taxi Fare Review. While in previous reviews, demand for taxis was generally linked to external economic conditions like employment and consumer spending, post-Brexit disruptions to trade and the Covid-19 pandemic represent two serious disruptions to regular economic trends. During the time when this Maximum Fare Review was undertaken, an unprecedented conflict emerged in Ukraine (February 2022), and the Government of Ireland acknowledged the scale and scope of the potential implications for the State, agreeing that a coordinated, whole-of-government response will be essential to minimise those impacts. ${ }^{2}$

Brexit has impacted the economic viability of sourcing used vehicles in the UK for resale into the Irish market due to increased importation costs. A further difficulty arises in relation to sourcing vehicles which have been built to a UK Vehicle Certification Agency (VCA) European Type Approval. Where a converted vehicle has been registered in Ireland post Dec 2020, evidence that the Type Approval has been transferred to an EU 27 Approval Authority is required.

Initially due to limitations associated with battery technology and associated range, vehicle manufacturers produced electric vehicles that were in the 'small family car' segment. Due to increasing efficiencies and improvements with battery technology, larger vehicles with increased range have now become a reality. The reasons for the current shortage of vehicles are unprecedented and include: Brexit, the COVID-19 Pandemic, an on-going worldwide microprocessor shortage, and the war in Ukraine as factors which have directly and indirectly affected vehicle supply.

The most significant economic issues of relevance to the National Maximum Taxi Fare Review identified are: fuel and energy supply; inflation and the cost of living; adaptation to climate change; supplier challenges following Brexit; the impacts of Covid; and challenges for the economy with an ongoing geopolitical crisis, creating heightened uncertainty. At the time of writing this review, there is considerable uncertainty regarding the duration of time that the global situation will remain volatile, nor whether there are permanent or definite long-term changes that will result from the geopolitical crisis. In addition, the Department of the Environment, Climate and Communications (2021) published the Climate Action Plan ${ }^{3}$, which contains an action to switch to electric vehicles while disincentivising fossil-fuelled vehicles, and specifically identifies the necessary step of continuing to "support the greening of the taxi fleet, with incentives made available for Battery Electric Vehicles SPSVs". While the immediate focus is on uncertainty in fuel prices, this should be seen in the broader context of a switch away from a fossil fuel dependent taxi fleet.

In his 2021 Budget, in recognition of the important role played by small public service vehicles (SPSV) in making public transport more sustainable, Minister Ryan committed $€ 15 \mathrm{~m}$ to assisting the SPSV industry in transitioning to fully electric and zero-emission capable vehicles. Extensions to the 2021 Grant Scheme were provided until 31 March 2022 in cases where applicants experienced delays with

[^1]vehicle delivery. Due to the overwhelming success of the eSPSV21 Grant Scheme, $€ 15 m$ in funding was provided for a 2022 eSPSV Grant Scheme which opened in February 2022 and is proving to be even more popular with over 1,000 applications received within the first nine weeks of the scheme.

Against this backdrop, the following sections consider the potential impacts of economic trends on the taxi industry.

A series of five surveys of taxi customers were undertaken in October 2020, February 2021, May 2021, October 2021 and March 2022, exploring the patterns of demand for taxi services. The key findings from these surveys are presented in Section 3.3, providing valuable insights into consumer behaviour as well as emerging trends in customer demand and attitudes.

Section 3.4 examines the supply of taxi services using data from NTA and results from a national survey of taxi drivers, undertaken in February/March 2022. This survey was a replication of one which was undertaken in 2019 with appropriate Covid related questions included, and forms part of a continued dialogue between NTA and the taxi industry, whereby changes in the attitude and behaviour of drivers are observed, and incorporated into the regulatory framework of the industry.

### 3.2 Economic Environment

Resilience and recovery have been recurring themes in the Irish economy over the past two years, and this is set to continue. During this time, the crisis management skills of households, communities, businesses and government were put to the test as a series of coronavirus waves hit, causing a number of unpredicted short-macroeconomic shocks that were both costly and painful. There is a subdued optimism from many commentators on the Irish economy, given that Ireland was the only EU country to have positive GDP growth in 2020, as a result of activity in the export sector. The macroeconomic outlook for Ireland looks to continue to be beneficial for the overall economy. This however masks the disruption that occurred in certain sectors, particularly domestic service sectors, such as the taxi industry. The biggest question is the extent to which the disruption from Covid-19 has permanent or long term impacts on the taxi industry.

Historically there is a strong link between economic growth (in terms of Gross National Income - GNI) and public transport usage, as illustrated by Figure 3.1 for bus and rail services. However, there was a significant reduction in public transport passenger use in 2020 due to the Covid-19 pandemic with accompanying travel restrictions and closure of non-essential services, even though GNI* continued to grow at the same time. Taxi use recovered somewhat since 2020, although it remains below prepandemic levels. This may indicate that people prefer taxi services due to safety concerns, however the pandemic is likely to have a longer term impact on public transport use. In particular, the growth of remote working and flexible work arrangements led to a significant reduction in public transport use amongst workers in some sectors of the economy. There is a discernible switch away from inperson corporate international, national and local meetings, to on-line virtual meetings, for both low carbon (good environmental and social governance practices) and business efficiency reasons. The traditional trend of more people at work resulting in additional commuting trips may no longer be as true as in pre-pandemic times. As a result, it is unclear when public transport usership will return to 2019 levels.

Figure 3.1: Public Transport (Rail and Bus) Passengers and Modified Gross National Income, 20102020


Source: NTA Bus \& Rail Statistics, 2021; CSO Quarterly National Accounts, 2022.

The Department of Transport published their National Investment Framework for Transport in Ireland in $2021^{4}$, and the emerging trend of shared transport was noted - or "Mobility as a Service" (MaaS). Taxis are an integral component of MaaS, and it is noted that taxi shared mobility plays an important role in decarbonising the transport sector in the forthcoming years.

## Economic Growth

The three years in Ireland preceding the COVID-19 pandemic, between 2017 and 2019, were marked by strong economic growth, falling unemployment levels, and increased consumer spending; all of which had positive implications for the taxi industry. The economy contracted in 2020, with a fall in Modified Gross National Income (GNI*) of 4.9 per cent. ${ }^{5}$ The economic forecasts for growth in GNI* are shown in Figure 3.2, showing continued growth and expansion in the economy. Growth in GNI* for 2022 is estimated at 5.2 per cent, and current government forecasts predict a continuation of growth over the next three years. ${ }^{6}$

[^2]Figure 3.2: Irish Projected GNI Growth, 2017-2023


Source: Department of Finance, Economic and Fiscal Outlook 2021
*=forecast
However, real growth rates may differ significantly from Department of Finance forecasts. On one hand, GNI* growth in recent years has often exceeded expectations due to strong export and multinational sectors. For example, GNI* growth in 2019 was 9.0 per cent; far exceeding the 4.5 per cent that had been predicted prior to Budget 2019. ${ }^{7}$ However, just as much of this growth was supported by a strong multinational sector, abrupt changes in global economic conditions may cause a reversal of this trend. This occurred as a result of the Covid-19 pandemic, resulting in GNI* falling by 4.9 per cent in 2020, the first year of a decline in economic activity since 2011.

## Risks to the Irish Economy

Current risks to the Irish economy include geopolitical developments, high energy prices, high national debt, supply chain issues, housing shortages coupled with continuous increases in house prices and rents. Ireland's national debt rose to $€ 236.3$ billion in the third quarter of 2021 , up from $€ 227$ billion 12 months earlier. However, Ireland's Debt-to-GDP ratio has remained stable (an indicator of total borrowing as a proportion of the value of all economic activity in a country, as measured by GDP, or Gross Domestic Product), and is now 57 per cent of the value of GDP. ${ }^{8}$ High government debt limits the tools available to the government to respond to a downturn in the economy. However, the increases in public debt that were evidenced globally as a response to Covid-19 did not create financial instability or create panic or chaos. The EU suspended the rules in its Stability and Growth Pact (anchored in the Maastricht Treaty of 1992) relating to the cap on public debt above 60 per cent of GDP, marking a fundamental rethink about public management of the economy. Such uncertainty impacts on households, their rate of savings and their patterns of discretionary expenditure.

Trade disruption resulting from lockdowns and border closures due to the Covid-19 pandemic had a major impact on the global supply chain. Containers were left in the wrong location as trade shifted and shipping capacity was reduced. Shipping rates have soared in this environment which translated into higher costs for businesses. The Central Bank of Ireland and Economic and Social Research

[^3]Institute (ESRI) believe these problems will persist in 2022 and it is one of the contributing factors to their forecast of 6.5 and 6.7 per cent rate of inflation this year. ${ }^{9}$

## Housing Crisis

House prices and rents continue to rise rapidly, with house prices now approaching the peak reached at the height of the Celtic Tiger years. Residential property rose by 14.4 per cent nationally in 2021 and this trend looks likely to continue with new supply remaining low. ${ }^{10}$ This has the potential to erode Ireland's competitiveness, impacting the country's attractiveness for foreign direct investment and acting as a potential impediment to talent/skills relocating to Ireland.

## Supply Chain Security

The Russian invasion of Ukraine already demonstrated its negative impact on the Irish economy, with energy prices soaring as European countries seek to reduce their dependence on Russian oil and gas. Other key exports from the region including wheat, fertilizer and aluminium have also seen their prices rise significantly. Although the full impact of economic sanctions on Russia is yet to be determined, these global economic problems have the potential to exacerbate pre-existing threats to the Irish economy. For the taxi industry, these included the effects of Brexit on the supply of second-hand vehicles to Ireland.

## Employment

A growing economy provides work opportunities, and unsurprisingly, unemployment fell from 7.4 per cent in January 2017 to 4.8 in February 2020 (at the onset of Covid-19), with Ireland nearing statistical 'full employment'. ${ }^{11}$ There is some debate as to what constitutes full employment in Ireland as it differs from country to country, although it is widely believed to be between 4 and 5 per cent unemployment. Due to the Covid-19 crisis, there was a sharp increase in unemployment in 2020 and 2021, reaching 7.7 per cent in March 2021. However, government supports including the Pandemic Unemployment Payment (PUP) prevented unemployment from increasing further. The pandemic severely impacted the displacement of individuals from work in certain sectors of employment. In April 2020, there were four sectors in which the proportion of workers claiming PUP exceeded twentyfive per cent, namely Accommodation and Food Services, Construction, Administrative and Support Services, and Wholesale and Retail Trade and Repair of Vehicles. At this time, 65 per cent of workers in the Accommodation and Food Services were in receipt of the PUP. ${ }^{12}$ The surveys completed by NTA, together with DSP data, show 70 per cent of taxi drivers availed of the PUP also.

The unemployment rate in January 2022 was at 5.3 per cent (Figure 3.3), which is very close to full employment. As we emerge from the Covid-19 pandemic and the availability of labour declines, wage inflation will likely increase, and evidence of this is already available from 2021, where wage increases were 2.6 per cent. ${ }^{13}$ If the labour market continues to tighten in the short to medium term, significant wage inflation is expected throughout the economy, reflecting the difficulties faced by companies and employers in obtaining and retaining workers and skilled labour.

[^4]Figure 3.3: Monthly Unemployment Rate Ireland, 2017-2022


Source: Central Statistics Office

## Consumer Spending

The pandemic had a major impact on consumer spending, with a considerable drop recorded in annual household expenditure in 2020 and 2021, however consumer spending recovered somewhat in the latter half of 2021. Figure 3.4 displays average household expenditure since 2010 and shows that household consumption has significantly increased in this period. In turn, this increased consumption has been positive for the domestic retail sector, with Figure 3.5 showing a steady increase in the Retail Sales Index (RSI) since 2015. The pandemic also impacted retail sales with a sharp drop recorded during the first lockdown in April 2020. However, retail sales have are now higher than they were prior to the pandemic. A thriving domestic retail sector has positive implications for the taxi industry as increased consumer spending is associated with higher rates of taxi demand/usage.

Figure 3.4: Annual Household Expenditure, 2010-2021


Source: Central Statistics Office, Expenditure on Gross National Product

Figure 3.5: Retail Sales Index (RSI), 2015-2021


Source: Central Statistics Office, Retail Sales Index

Demand for taxis is linked to consumer sentiment and spending. Growth in the Retail Sales Index has been volatile since 2018, and heavily impacted by Covid-19 restrictions on the retail and hospitality industries in 2021. The Consumer Sentiment Index in Figure 3.6, which measures how confident consumers are in the economy, was in decline even prior to Covid-19. While this has mostly recovered, retail sales and consumer confidence have begun to decline again in 2022 even as domestic restrictions lifted. Domestic concerns over the cost of living, as well as geopolitical events, will likely continue to have a negative impact on consumer sentiment. KBC observed a full ten point drop in their
index, bringing it from 77 in February to 67 in March 2022, and attributes this to a sharp worsening of the general economic outlook, with weakening in consumers' outlook on their household finances. This is brought about by increased inflation fears, due to the unfolding war in Ukraine and likely consequences to the Irish economy. There is a real fear of a squeeze on purchasing power of average households, with less discretionary expenditure in the face of rising costs. Of note that the Consumer Sentiment Index is not as low the value of 42 points in April 2020 with the onset of Covid-19. At that time there was a much dimmer view of the prevailing economic condition and greater fear amongst consumers.

Figure 3.6: Consumer Sentiment Index 3-month moving average, 2016-2022 (March)


Source: KBC Bank/ESRI, Consumer Sentiment Index

## Inflation

Prior to the onset of the Covid-19 pandemic in 2020, the inflation rate in Ireland was persistently low, beneath the Central Bank of Ireland's target of close to but below 2 per cent. As shown in Figure 3.7, the pandemic had a significant impact on inflation, with the annual rate of inflation declining into negative levels. Since the beginning of 2021 however, inflation is increasing. Inflation in Ireland reached what was thought to be a high of 5.5 per cent in the 12 months to December 2021. This fell back slightly in the first two months of 2022, but rose to 6.7 per cent in the 12 months to March 2022.

Disruption to global supply chains, surging demand and the rise in energy prices remain key factors in explaining the high rate of inflation in Ireland. Transport inflation hit a rate of 18 per cent in 2021, while inflation in the energy sector stood at 28.9 per cent. The Central Bank of Ireland projects that inflation will continue to remain high over much of 2022, but to ease later in the year. Inflation of 6.5 per cent is expected in 2022, with consumer price growth moderating to 2.8 per cent in 2023 and 2.1 per cent in 2024. ${ }^{14}$

[^5]Figure 3.7: Consumer Price Index (percentage change over 12 months), Jan 2016-Mar2022


Source: Central Statistics Office - CPI

Figure 3.8: Average Weekly Earnings (Seasonally Adjusted), 2016-2021


Source: Central Statistics Office - All sectors of the economy
Average weekly earnings across all sectors of the economy were steadily rising from a value of $€ 706$ in 2016 to $€ 862$ in the last quarter of 2021. High inflation erodes purchasing power and with average hourly earnings in Ireland increasing by only 2.6 per cent in 2021, and real hourly earnings (wage growth minus inflation) fell by 2.9 per cent last year. ${ }^{15}$ This is likely to have a negative impact on taxi demand as customers with less disposable income are likely to socialise less, travel less in general,

[^6]and/or use less expensive modes of transport such as cycling, walking and public transport. Many households are facing drops in real household income (salaries/wages minus inflation), and will face expenditure constraints.

Despite the Covid-19 pandemic having a significant impact on economic activity in 2020 and 2021, the Irish economy has proved resilient, experiencing growth in economic activity which, through high levels of employment and retail spending led to greater demand for public transport, including taxis. The pandemic continues to have an impact on inflation, which is expected to remain high in 2022, before falling later in the year. Although this economic growth is forecast to continue in the medium term given the strong export focus of Irish industry, Brexit, the housing crisis, ongoing war in Ukraine and resultant uncertainty in European security, uncertainty in global commodity markets are all significant threats to these forecasts.

### 3.3 Market Demand

## Trends in Taxi Usage

To collect information on trends in taxi usage, a series of five surveys were undertaken between 2020 and 2022, to understand the impact of the pandemic on the industry. The surveys were consisted of a nationally representative sample of approximately 1,000 adults in October 2020, February 2021, May 2021, October 2021 and February 2022.

From the most recent survey in February 2022, 81 per cent of adults were taxi users, and 15 per cent use taxis fortnightly (or more frequently, see Figure 3.7). This shows that most adults are taxi users, but are not necessarily regular users (using a taxi at least once a fortnight, if not more).

Figure 3.7: Frequency of forms of transport use among adults, February 2022


Source: COVID Impact Research Wave Survey February 2022 - Taxi User Survey
Figure 3.8 shows that of those who are taxi users, 53 per cent use taxis less often than pre Covid-19 (in February 2022), indicating that taxi use unsurprisingly dropped off in the last two years. Taxi usage increased in the year to February 2022, with levels rising by 12 per cent in February 2022 above February 2021 levels. Seven per cent of taxi users reported they increased their usage, while 40 per
cent reported no change at February 2022. The data shows that the taxi use was at its lowest in February 2021. Although no structured survey data was collected during the first lockdowns from March 2020, the Taoiseach's message to "Stay at home", combined with the $5 \mathrm{~km} / 2 \mathrm{~km}$ travel restrictions were in place and a minimum of essential only taxi use was clearly evident.

Figure 3.8: Change in usage of taxi services from October 2020 to February 2022


Source: Covid-19 Impact Research Wave Surveys - Taxi Users

Among those who decreased their usage of taxis, the primary reasons reported are:

- due to going out less often (63\%);
- travelling less generally (50\%);
- minimising the risk of contracting Covid-19 (39\%);
- modal switch - that they were now using a car more often (12\%); and
- due to less disposable income: (11.5\%);

For those that increased their usage, the primary reasons reported are:

- feeling more protected from Covid-19 in a taxi than on mass public transport (33.5\%);
- limit/restrictions on usage of mass public transport, to allow for essential travel (29\%);
- unavailability of public transport (reduced capacity) (27\%); and
- that mass public transport is not suitable for new journey (18\%);

Eight per cent of those surveyed use a taxi weekly (with 1 per cent of those taking more than four trips per week), which is a steady increase from the onset of Covid-19.
These respondents are categorised as 'heavy users' of taxis, but the proportion of respondents who fall into this category fell substantially since the 2019 (pre-pandemic) survey, when it was 20 per cent, indicating a substantial recovery still required in the industry.

Figure 3.9: User frequency of taxi services, 2020-2022


Source: Covid Impact Research Wave Surveys - Taxi Users

A question was asked about taxi use in the week and fortnight leading up to when the survey was taken. Based on the responses Table 3.1 displays an estimate of taxi journeys over the past fortnight across the five surveys. The level of Covid-19 restricitons in the country had a signficant impact on taxi usage. There was a sharp decrease in journeys ( $-50 \%$ ) in the past fortnight in February 2021 when the country was under Level 5 restrictions compared to October 2020 when Level 3 restrictions were in place. Usership recovered in May 2021 (+52\%) when the easing of Level 5 restrictions came into effect with all hairdressers, barbers, beauticians, galleries, museums, libraries and other cultural attractions reopening, the resumption of non-essential retail on a phased basis, inter-county travel and in-person religious services, and the allowance of three households (or six people) from individual households to meet outdoors. Usership levels in the past fortnight further increased (+36\%) in October 2021 as service in pubs, restaurants and nightclubs resumed. The increase in journeys in February 2022, just prior to all restrictions being lifted, is estimated as 7 per cent higher than October 2021. Overall, the user surveys showed that more people are using taxis, but at a lesser frequency than pre-Covid.

Table 3.1: User base estimates of taxi services in the past fortnight

| Recency | User base estimates |  | (Number of All Taxi | Users) | ( 2020 | Feb 2021 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |

Source: Covid Impact Research Wave 5 Survey - Taxi Users

## Reasons for Using Taxis

Customers who had used a taxi in the last fortnight were asked about their reason for using a taxi on the last occasion. In February 2022, 30 per cent said that their last trip was for leisure purposes. This was followed by visiting friends/family in their homes at 15 per cent, shopping at 13 per cent and essential hospital visit or medical appointment at 10 per cent. This indicates that there has been a significant shift in the reasons for using taxis since before the pandemic, as 53 per cent said they last used a taxi for leisure purposes and 10 per cent used a taxi for visiting friends/family in their homes on their last journey pre-Covid-19. There has been an increase in taxi use for shopping purposes (up from 7 per cent) since before the pandemic.

Figure 3.10: Reason cited by taxi users for using a taxi on the last occasion, February 2022


Source: Covid Impact Research Wave Surveys - Taxi Users

When taxi users were asked whether they had other forms of transport available to them for their last taxi trip, 68 per cent confirmed they had other transport (bus, own car or friends being the most available to them). The two main reasons for selecting a taxi over alternative travel options were the ease and convenience of use and that they were quicker and more reliable than alternatives.

## Methods of Ordering Taxis

Table 3.3 shows a demographics breakdown of the methods of ordering a taxi. Overall, telephone was the most popular method for ordering a taxi, with 33 per cent of survey respondents stating they arranged their last trip by ordering via a taxi company call agent; however, this has fallen from 51 per cent from the previous fare review survey in 2019. Telephone is the most common method among those aged over 35, and for those living outside of Dublin.

However, app services are becoming increasingly popular, with 30 per cent of respondents having arranged their last taxi trip using an app service, compared to 23 per cent in 2019. App service users are the most common method among the 18-24 and 25-34 age groups and among those living in Dublin, where app is now the most popular method of ordering a taxi (46\%).

The proportion of taxi users who found their last taxi through queuing at a taxi rank has increased marginally from 15 per cent in 2019 to 18 per cent, while the number hailing a taxi on-street remained the same at 15 per cent.

Table 3.3: Method of ordering a taxi on last occasion (excluding "don't know" responses) Feb 2022

|  |  | Age |  |  |  |  | Region |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mode | Overall | 18-24 | 25-34 | 35-49 | 50-64 | 65+ | Dublin | Rest of Leinster | Munster | Conn / Ulster |
|  | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| Phone call | 33 | 17 | 24 | 32 | 46 | 47 | 12 | 41 | 4 | 50 |
| App service | 30 | 48 | 43 | 28 | 17 | 19 | 46 | 23 | 19 | 23 |
| Queued at a taxi rank | 18 | 19 | 17 | 18 | 18 | 20 | 19 | 21 | 18 | 14 |
| Hailed on the street | 15 | 13 | 15 | 17 | 17 | 10 | 20 | 15 | 12 | 10 |

Source: COVID Impact Research Wave Surveys - Taxi Users

## Demand Pattern for Taxi Services

The demand for taxi services peak on Fridays and Saturdays, with an average of 55 per cent of survey respondents taking their most recent trips on one of these two days. This reflects the most common purpose for taxi use being leisure purposes. Taxi usership on these two was slightly lower in 2019, on 54 per cent, showing a rebound in taxi use on Friday and Saturdays after a significant fall in weekend demand during the Covid-19 lockdowns. Figure 3.11 shows the distribution of passenger's most recent trip, by day of the week.

Figure 3.11: Distribution of taxi users by day of the week of most recent trip, February 2022


[^7]During the pandemic (first four Covid-19 impact consumer surveys), the distribution by day of the week flattened out, given that tourism, socialising and weekend nightlife was curtailed through lockdowns. The lack of tourism and travel exacerbated this drop in the demand for taxis.

Figure 3.12 shows the distribution of taxi users by the time in which their last trip was taken. In February 2022 (represented by orange bars), 63 per cent of taxi users reported taking their most recent taxi between 6 pm and 4 am , with 23 per cent of journeys between 6 pm and 10 pm , 19 per cent of journeys between 10 pm and midnight, and 21 per cent of journeys between midnight and 4am. The blue bars show the average times for using a taxi during Covid-19, and the increase in the nighttime demand is clearly evident. The higher proportion of users taking a taxi at night-time (after 8pm) in the February 2022 survey is indicative of the return to pre-Covid-19 patterns of socialisation, with the reopening of the night-time economy.

Figure 3.12: Taxi User Survey - Time Last Used a Taxi (Average during Oct 2020 to February 2022)


Source: COVID Impact Research Wave Surveys - Taxi Users

### 3.4 Market Supply

## Aggregate Supply of Taxi Services

The period between 2017 and 2019 saw the first increases in the national taxi fleet since 2009. As of February 2022, there were 15,838 taxis in service in Ireland. This number includes 3,113 Wheelchair Accessible Taxis (WAT), or 19.7 per cent of the fleet, and represents a significant increase in the proportion of WATs in service from five years ago in 2015, when they numbered just 5.5 per cent of the total taxi supply. This increase can be largely attributed to three policy changes: a 2010 decision to issue new taxi and hackney licences for Wheelchair Accessible Vehicles only; changes to the size specification for WATs introduced in 2014, which meant that operators could purchase smaller, appropriate WATs than heretofore; and the introduction of a grant scheme for WATs by NTA in 2014. This grant scheme provides grants to drivers of up to $€ 7,500$ for the purchase and replacement of WATs. This increase in the proportion of WATs within the taxi fleet is evident in Figure 3.13.

The uptake of the WAT grant scheme is evident from Table 3.4, with 3,341 grants allocated for the purchase of a WAT between 2014 and 2021, with an associated funding of over $€ 3$ million given over that period. Table 3.4 also presents the number of eSPSV grants administered since the scheme began in 2018. In total 780 grants were allocated, with associated funding of $€ 13.7$ million.

As stated previously, $€ 15 \mathrm{~m}$ in funding was provided for a 2022 eSPSV Grant Scheme which opened in February 2022, proving to be even more popular with over 1,000 applications received within the first nine weeks of the scheme. This is indicative of the emerging changes to the taxi fleet, evidence of technology adoption by the taxi drivers, with resultant cost efficiencies - particularly lower electricity costs to power the battery, but also lower maintenance costs to run the electric vehicle.

Figure 3.13: Trends in Taxi Supply, 2007-2022


Source: NTA Taxi Statistics, 2022

Table 3.4 NTA Grant Schemes for SPSV 2014-present

|  | NTA Grant Scheme for SPSV |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Wheelchair Accessible Vehicle Funding |  | Electric Special Purpose Service Vehicles Funding |  |
| Year | Number of WAV Grants | Total Funding Value | Number of eSPSV Grants | Total Funding Value |
|  |  |  |  |  |
| 2014 | 128 | €253,000 | - | - |
| 2015 | 153 | €116,500 | - | - |
| 2016 | 335 | €377,000 | - | - |
| 2017 | 284 | €411,000 | - | - |
| 2018 | 761 | €470,000 | 46 | €267,000 |
| 2019 | 1037 | €773,000 | 35 | €180,500 |
| 2020 | 264 | €225,000 | 20 | €159,000 |
| 2021 | 379 | €539,500 | 679 | €13,134,500 |
| Total | 3,341 | €3,165,000 | 780 | €13,741,000 |

## Vehicle Age

NTA is required by regulation to seek to promote the provision and maintenance of quality services by SPSVs and their drivers. Reflecting this objective, setting an age SPSVs is considered to be appropriate. In Ireland, most taxis and hackneys have been required to be less than 10 years old (for saloon vehicles) or 15 years old (for WAVs), with exceptions for a minority of licence holders. In 2020 and 2021, in response to the Covid-19 pandemic, NTA enacted emergency regulations relating to the maximum permissible age of SPSVs, ensuring no vehicle would be forced to exit the fleet as a result of age until 2023. The measures temporarily extended the Maximum Permissible Age (MPA) requirements of eligible vehicles by one year. As a result, a significant proportion of the SPSV fleet now exceed the MPA that existed prior to the pandemic.

As of 31 December 2021, approximately 15 per cent of the SPSV fleet exceeded the default MPA for most licence holders: half were permitted to do so as a condition of their legacy licence, and the other half did so on the basis of the temporary Covid-19 extension. More generally, the age profile of SPSVs has increased in recent years. Data from 2019, before the pandemic, shows that 51 per cent of SPSVs were five years old or less - by the end of 2021, this proportion had fallen to 35 per cent.

International comparison shows that the existing age limits applied to SPSVs in different jurisdictions varies, but that the MPA in Ireland is at the older end, when compared to many other countries. For example, in the UK, local authorities usually apply either an MPA or an emission standard. The MPA rarely exceeds 10 years for saloon vehicles. Even in those few regions where a higher age limit than Ireland exists, this often only applies to WAVs (as in Ireland), or to a taxi in a city that requires a bespoke, expensive taxi vehicle - for example, in London. In Continental Europe, many regions have an age limit below ten years, with seven being common in France and Belgium.

Figure 3.14: Age Profile of Taxi Fleet in 2021


Source: NTA Taxi Statistics, 2022

Regional Breakdown of Supply
Analysing taxi numbers at a regional level reveals the majority (60\%) of taxis are registered in Dublin. This is followed by the rest of Leinster at 17 per cent, Munster at 15 per cent and Connacht/Ulster at 8 per cent. The number of licenced vehicles by region is shown in Figure 3.15.

Figure 3.15: Proportion of Valid Taxi Licences by Region, 2022


Source: NTA Taxi Statistics, 2022

The distribution of other categories of SPSVs including hackneys and limousines follows a different pattern to that of taxis. Over three quarters of limousines (76\%) and almost all hackneys (over 98\%) are located outside Dublin. Therefore, to compare per capita service, it is useful to include all categories of SPSVs. However, the distribution of SPSVs is still skewed towards Dublin where there are 8 SPSVs per thousand population (versus 3 outside of Dublin).

## Taxi Driver Age Profile

Figure 3.16 shows the distribution of currently licensed taxi drivers by age. One fifth (20\%) of drivers are more than 65 years old, while two thirds (66\%) are over 50 years old. Eleven per cent of drivers are under 40 years old. This age profile results from the fact that drivers often take up driving a taxi only after some time working in another career and are often attracted to the flexible nature of the industry. For many SPSV drivers, the industry presents an opportunity to earn supplemental income, which is additional to income from other sources (e.g. pension). This reflects the profile in most analogous jurisdictions.

Figure 3.16: Age Profile of Taxi Drivers, 2021


Source: NTA Taxi Statistics, 2021

Patterns of Supply
According to the Driver Survey, taxi drivers have an average working week of 4.5 days. Figure 3.17 shows the days of the week normally worked by taxi drivers. Friday is the most common working day, with 85 per cent of drivers working on a Friday, Sunday is the least common day.

Figure 3.17: Days in the week worked by taxi drivers, February 2022 and July 2019


Source: 2022 National Maximum Taxi Fare Review - Driver Survey

Figure 3.18 shows the times normally worked by taxi drivers. The majority of drivers (over 50\%) reported working at all times throughout the day, with the exception of the quieter period between 04:00-07:59. Twenty-three per cent of taxi drivers reported working between 4am and 6am, while 34
per cent reported working between 6am and 8am. The orange bars on Figure 3.18 show the times normally worked in July 2019, which is considered more normal, or pre-Covid working hours. The higher proportion that worked between 9am and 6 pm in pre-Covid times reflects the loss in business trips for taxi drivers, given the shift to working from home during the Covid-19 lockdowns and the adaptation to virtual meetings, rather than meeting in person. The higher proportion of drivers catering for the night-time economy (between 8pm and 4am) in 2022 compared with 2019 may reflect this trend also-higher demand at night-time.

Overall younger drivers under 40 are more likely to work in the evenings and at night than older drivers. This trend is most evident for all time bands between 4 pm and 4 am . For example, 59 per cent of drivers under 40 reported working between 10 pm and $12 \mathrm{am}, 40$ per cent of drivers over 60 reported working during this time period. Drivers over 60 are more likely to work in the mornings compared to drivers under 40. Drivers between the ages of 40 and 60 tend to work at all times throughout the day.

A cohort of drivers (56\%) reported they do not work between midnight and 6am currently, but that they have worked nights previously, serving the pub/club/night-economy. This cohort were asked the main reasons why they have stopped working at nights and whether they would consider doing so if fares were higher. Over a third of those who do not work nights stated it was due to family life (34\%) and/or personal safety reasons (34\%), while 30 per cent cited personal health, 28 per cent customer behaviour or extra cleaning costs and 10 per cent as being not financially worth it. Thirty per cent of those drivers who do not currently work at night indicated that they would consider doing so if fares were higher, an increase from 17 per cent in 2019.

Figure 3.18: Times normally worked by taxi drivers February 2022 and pre-Covid


Source: 2022 National Maximum Taxi Fare Review - Driver Survey

## Modes of Supply

In this report, 'traditional dispatch radio operator' is intended to refer to dispatch operators/radio companies who offer a fixed cost affiliation model for drivers (referred to in previous versions of the Taxi Cost Index as a radio rental cost - typically a fixed weekly fee). Historically, it came in the form of a CB radio in the taxi, used by the taxi company base, to distribute jobs to drivers in the locality from telephone orders received from customers. Now, the CB radio is rarely found, with taxi companies
distributing jobs to drivers via mobile phone alert or an in-house only app which is not available to users.

In contrast newer app booking services typically offer a commission-based model - where the app service retains a percentage of the fare for each trip.

Figure 3.19 shows the proportion of drivers surveyed who are affiliated with traditional radio dispatch operators and/or app services from October 2020 to February 2022. Eighteen per cent of drivers do not use either a traditional radio dispatch operator or an app service, which represents a significant decrease compared to 2019, when this figure was 32 per cent. The proportion of drivers using a traditional radio dispatch operator only fell slightly from 10 per cent in 2019 to 9 per cent in 2022 (although this figure increased during Covid-19, as this became the mode of ordering a taxi, during lockdown), while the proportion using an app service has increased from 58 per cent in 2019 to 65 per cent in 2022. The proportion using a traditional radio dispatch operator and an app service fell from 11 per cent in 2019 to 8 per cent in 2022.

This data confirms an ongoing trend toward the use of apps in the taxi industry, and indeed the reliance of drivers on apps and mobile devices even in conjunction with dispatch companies, who use location technologies to allocate jobs via drivers' mobile phones. The high proportion of taxi users who made a phone call to order the taxi (on the last occasion, as shown in Table 3.3 above) attests to this.

Figure 3.19: Affiliation to traditional dispatch operator/app services among taxi drivers, October 2020-February 2022


Source: 2022 National Maximum Taxi Fare Review - Driver Survey

A stronger economy means that drivers can get more work from pedestrian hails and ranks without the use of traditional radio dispatch operators or app services. For example, amongst drivers who do not use an app service, 33 per cent said that they 'prefer street work' when asked why they don't use an app service, compared to 22 per cent in 2019. Twenty-four per cent reported specifically that they do not use an app service due to the commission/charges applied to each fare. This is between 11 and 15 per cent in the main.

Recent consumer research has shown an increase in taxi journeys originating at taxi ranks or being hailed directly by customers as more and more drivers and customers return to the streets in the
evenings. This direct hail/rank practice does not attract the commission payable by drivers to a third party app provider (10-15\% of the fare), and so has its attractions for drivers when customers on street are plentiful, such as in Dublin on a Saturday evening. Nor does a direct hail or taking from a rank incur a booking charge of $€ 2$ to the customer.

Whilst NTA has statutory responsibility for regulating (licensing and enforcement) the SPSV industry, taxi drivers are self-employed individuals and as such decide on their own business strategies within the regulatory framework. Affiliation with a booking service provider or accepting work when so affiliated is not regulated by NTA. As a result, NTA is limited in its ability to address demand issues outside of incentivising drivers to operate during peak times.

### 3.5 Market conditions at current fare structure

## Perceptions and awareness of current fare levels and structure

Taxi users were asked about their perceptions of the value for money offered by taxi services. Overall, 35 per cent of taxi user agree that taxis are good value for money, while 38 per cent disagree. This indicates a decline in perceived value for money compared to the 2019 survey results, when 50 per cent agreed that taxis are good value for money and 18 per cent disagreed.

Survey respondents were also asked about the value for money of specific journey types. The proportions of respondents agreeing that taxi journeys at day, night, shorter and longer taxi journeys represent good value for money have also decreased compared to 2019. These are shown in Figure 3.20 .

With regard to the fare structure, 26 per cent agree that the calculation of taxi fares is easy to understand; this has also decreased, from 44 per cent, in 2019. These changes are particularly understandable given the taxi usage decrease during the pandemic and the associated lapse in familiarity with the taximeter and fares structure, together with the economic uncertainty experienced now compared to the positive outlook for the economy and disposable income in 2019.

Figure 3.20: Consumer perceptions of taxis and value for money (VFM) in current fare structure


[^8]It should be noted that fares on subsidised public transport services were temporarily reduced by an average of 20 per cent in April 2022. This is among the measures included in the Government's package to reduce the cost of living. Minister Ryan said "People are coming under more and more pressure as the price of essentials continues to increase. As one element of a suite of measures being introduced by the government, this fare reduction will go some way to easing some of the financial strain that households are experiencing". The reduction in price for alternative public transport services may impact on the demand for taxi services.

## Waiting Times

The waiting times reported by taxi users with respect to their most recent taxi trip provides a useful indication of the availability of taxi services as distinct from the number of drivers and taxis licenced to provide those services.

Overall, 79 per cent of taxi users waited 15 minutes or less for a taxi on the last occasion they used one (Figure 3.21). In February 2022, 37 per cent of users found it very easy to get a taxi, waiting under five minutes. Ten per cent of taxi users had to wait 31 minutes or more on their last occasion they used one.

Figure 3.21: Length of time survey respondents had to wait for a taxi on last trip, February 2022


Source: 2022 National Maximum Taxi Fare Review - Customer Survey, February 2022

### 3.6 Summary of Trends in Market Demand and Supply

## Market Demand

- Overall, taxi use in general has declined compared to before the pandemic as 53 per cent of taxi users reported using taxis less often. Seven per cent have reported using taxi services more frequently than pre-Covid, while 40 per cent reported no change. We now see usage recovering with the lifting of restrictions and expect this to continue.
- The user survey shows that whilst more people are using taxis, those people are doing so at a lesser frequency than pre-Covid.
- The level of Covid-19 restrictions introduced had a significant impact on taxi usage. With the country under Level 5 restrictions in February 2021, the estimated number of taxi journeys taken in the past fortnight declined by 50 per cent compared to October 2020 when Level 3 restrictions were in place. Taxi usership recovered in May 2021 (+52\%) when the easing of Level 5 restrictions came into effect. Usership increased further in October 2021 (+36\%) with an estimated 1,752,000 journeys taken in the past fortnight. There is a further increase (7\%) to February 2022, with an estimated 1,890,000 journeys taken in the past fortnight.
- Thirty per cent of taxi users reported that on the last occasion they used a taxi they were making a trip for leisure purposes. The other main reasons cited included visiting friends/family (15\%), shopping (13\%), essential hospital visit or medical appointment (10\%) and work-related purposes (8\%).
- Telephone remains the most popular method of ordering a taxi nationally (33\%); however, app services continue to gain prominence with 30 per cent of respondents ordering a taxi via an app on the last occasion. There are other demographic differences in app use - app services are the most popular method of are ordering a taxi in Dublin where app services are most freely available and established for the longest period and particularly popular among those aged 18-35 (52\%).
- Demand for taxis is strongest on Fridays and Saturdays and there has been little change overall in how demand is distributed throughout different days of the week, since the 2019 survey, although during the pandemic, demand was much more evenly distributed across all days of the week.
- In terms of time, demand is more evenly distributed throughout the day compared to 2019. 46 per cent of taxi users have taken their last taxi trip between 6 pm and 4 am , a decline from 60 per cent in 2019. This decline in night-time travel coincides with restrictions on travel during the Covid-19 pandemic and the reduction in socialising across all of society.


## Waiting Times

- 79 per cent of taxi users waited 15 minutes or less for a taxi on the last occasion they used one
- 37 per cent of users found it very easy to get a taxi, waiting under five minutes.
- 10 per cent of taxi users had to wait 31 minutes or more.


## Perceptions and Attitudes towards current fare structure

- Perceptions of value for money have worsened since 2019, with 35 per cent of respondents agreeing that taxis are good value for money, a decline from 50 per cent in 2019. Thirty eight per cent of respondents disagree with the statement that taxis are good value for money, up from 18 per cent in 2019. This is in the context of real incomes (income minus inflation) declining - with wage inflation lower than the consumer price index for many workers.
- Twenty-six per cent of taxi users agreed that the fare structure was easy to understand; a decline from 44 per cent in 2019 which is thought to equate to the familiarity that comes with regular travel waning over the pandemic.


## Market Supply

- The size of the national taxi fleet decreased between 2019 and 2022 from 17,167 to 15,838 vehicles. Twenty per cent of taxis are now wheelchair accessible vehicles, and approximately 5 per cent are electric vehicles.
- Sixty per cent of taxi drivers are entitled to pick up passengers from taxi ranks and pedestrian hails in Dublin, with the remainder spread nationally.
- When considering all SPSVs, (including Hackneys and Limousines) there are 7.4 SPSVs per thousand population in Dublin, with 3.7 per thousand population for the country as a whole.
- In common with taxi age profiles internationally, eleven per cent of drivers are under 40 years old, while almost two thirds (66\%) are over 50 years old. Twenty per cent of drivers are over 65 years old.
- Friday is the most common day worked by taxi drivers, while Sunday is the least common day worked. The proportion of drivers who work late at night and early in the morning is lower that the proportion who work in the daytime.
- Among drivers who do not work nights, 30 per cent reported that they would consider doing so if fares were higher, which is an increase from the 17 per cent reported in 2019.
- Taxi ranks and pedestrian hails remain a significant source of jobs for taxi drivers, often preferred to pre-booked work given the associated radio dispatch company/app charges.
- The proportion of drivers who are affiliated with a traditional radio dispatch operator has fallen since 2019. This is true particularly in towns and cities.


## 4. Taxi Cost Index

### 4.1 Background

The Taxi Cost Index (TCI) is a quantitative tool used by NTA to assess the change in the costs associated with operating a taxi. The TCl is recalculated approximately every two years based on published price indices and industry prices and provides a standardised approach for analysing cost changes in the taxi industry and assessing the need for fare adjustments.

The Fare Reviews completed between 2006 and 2012 were generally based on an updating for inflation of major cost components of the TCl derived in 2006. The 2014 Fare Review involved a rebasing of the TCl to incorporate a wider range of costs faced by the taxi industry, and this was later updated in the 2017 and 2019 reviews.

### 4.2 Index objectives and structure

Individual taxi drivers face unique and diverse operating costs that depend on their individual operating characteristics, as well as wider market conditions. The TCI does not seek to represent the overall cost faced by any individual driver, but rather provide an estimate of the costs faced by taxi drivers on average. This approach is guided by the following principles:

- The TCI must be representative and reflect the changes in costs faced by a significant proportion of the industry.
- It should reflect a fair return for the labour provided by the taxi driver.
- It should be based on a driver that follows industry-leading practice.
- The costs included in the TCl consist of all major running and fixed costs, as well as a labour cost component, with the costs being combined to achieve an overall indicative cost of taxi operation per annum.

Much of the data used for the preparation of the 2022 TCI has been impacted heavily by the Covid-19 pandemic, particularly in terms of taxi activity levels. To ensure that the TCI remains representative of the cost of operating a taxi in a post-Covid market environment, it was decided to make the 2022 TCI 'Covid-neutral'. In practice, this means that although costs have been updated to reflect current market conditions, taxi activity levels are based on 2019 pre-COVID levels. Similarly, any once-off assistance measures or temporary waivers of certain regulatory fees introduced during the pandemic have not been incorporated into the TCI .

### 4.3 Approach to calculating the Taxi Cost Index

Prices for the individual cost components were primarily sourced through industry research. Publiclyavailable data provided precise industry prices associated with vehicle and equipment maintenance that more accurately reflect the costs incurred by a typical taxi driver. Where a range of estimates existed, averages and weighted averages are calculated from the various price points.

### 4.4 Key Assumptions

### 4.4.1 Activity Levels

Costs related to fuel, maintenance and equipment replacement will vary based on a driver's activity levels, and as such, it was necessary to have estimates of the distance covered by the average taxi driver in a year. Since 2017, the TCI uses two estimates of driver activity levels in order to calculate
running costs. This approach captures the range of estimates available for driver activity levels and is consistent with previous reviews and other jurisdictions. ${ }^{16}$

While ordinarily driver activity levels would be calculated using data from the preceding two years, 2020 and 2021 data would not provide an appropriate or reliable estimate of 'average' activity levels given the restrictions imposed on the Irish economy due to the Covid-19 Pandemic over most of this period. As such, activity levels from 2019 have been used again as the basis of the 2022 TCI.

The main source used to estimate activity levels is CSO data on vehicle mileage. After adjusting for personal mileage, the average annual distance travelled by taxi drivers in 2019 was estimated to be $\mathbf{3 0 , 3 5 2} \mathbf{k m}$. The methodology and validation for this calculation is outlined in detail in Appendix B. This estimate is slightly lower than the estimate of $\mathbf{3 2 , 6 2 4} \mathbf{k m}$ which was calculated as part of the 2017 Fare Review.

Another estimate of annual driver distance travelled is derived from a survey of taxi drivers conducted as part of each Fare Review. In the 2019 taxi driver survey, the average distance driven reported by drivers who were surveyed was $\mathbf{4 2 , 0 0 0} \mathbf{k m}^{17}$. This estimate is lower than the average distance reported in the 2017 survey of $\mathbf{4 9 , 0 0 0} \mathbf{k m}$.

### 4.4.2 Labour Costs

Labour costs are included in the TCI, as the value of drivers' time is the largest cost component of providing taxi services. The inclusion of labour costs should also help to ensure that changes to drivers' earnings are comparable to other workers in the economy. Labour costs within the TCl are treated as a constant value, unlike running costs which are calculated based on estimated activity levels. This approach is consistent with previous years.

To measure labour costs, it is necessary to consider the opportunity cost of driving a taxi, or the income a driver could have earned by working in a comparable industry. The Earnings, Hours and Employment Costs Survey (EHECS) undertaken by the CSO provides quarterly estimates of weekly earnings for different occupational categories, including "production, transport craft and other manual workers", with values for the four most recent quarters (for which data is available) shown below.

Table 4.1: Earnings, Hours and Employment Costs Survey weekly earnings estimate by quarter

| EHECS Occupational Category <br> (employee type) | 2020 Q4 | 2021 Q1 | 2021 Q2 | 2021 Q3 |
| :--- | :--- | :--- | :--- | :--- |
| Production, transport, craft <br> and other manual workers | $€ 630.87$ | $€ 596.72$ | $€ 631.2$ | $€ 648.1$ |

Source: CSO

Car, taxi and lorry drivers fall into this category, meaning that earnings data can be used to estimate taxi drivers' labour costs. The average weekly wage over this period was $€ 627$ which, based on a 48week working year, represents an annual labour cost of $€ 30,083$.

It should be noted that CSO's industry category 'Production, transport, craft and other manual workers', which is used in the TCI, includes a proportion of craft workers from the construction sector. While average weekly earnings have increased overall for the economy (see Figure 3.8 above), the

[^9]average earnings per week for the construction sector were 4.3 per cent higher than the national average for all sectors in the economy (CSO, Q4 2021). It is not possible to decompose the CSO's 'Production, transport, craft and other manual workers' industry category further, but it should be noted that the growth in the labour cost component of the TCl is driven largely by wage inflation from the construction sector. This trend will likely increase, given the new Sectoral Employment Orders providing enhanced minimum wages to sections of the construction industry in 2022 and 2023 in efforts to retain that labour for the Housing for All Strategy and the Climate Action Plan in particular.. ${ }^{18}$

In Budget 2022, the minimum wage was increased from $€ 10.20$ to $€ 10.50$, or 2.9 per cent.

### 4.4.3 Car models

The three most popular car models in the national taxi fleet in 2022 are the Toyota Prius (18\%), the Toyota Avensis (17\%) and the Skoda Superb (11\%). The Avensis and the Superb are assumed to have diesel engines, with the Avensis assumed to have a 2.0 litre engine capacity and the Superb a 1.9 litre capacity. The Prius is assumed to have a petrol-hybrid engine and 1.8 litre engine capacity.

A weighted average of the three most popular models is used in the calculation of vehicle finance, fuel, and maintenance costs. All regular maintenance is based on frequencies informed by manufacturers' recommendations and industry best-practice.

Approximately 800 taxis are electric vehicles, which is an increasing number but not significant enough to include in this review's TCI. In time, this will be included as a contributor noting that the running costs of electric vehicles are less than vehicles with internal combustion engines, particularly fuel costs estimated as approximately one third of the cost, but that purchase costs must be assessed also.

[^10]
### 4.5 2022 Taxi Cost Index

The three main cost categories for the 2022 TCl are running, fixed and labour costs. Two separate TCIs have been constructed; one for each activity level as outlined in Section Error! Reference source not found. Each of these costs refers to one year of operations for a taxi. Some fixed costs are not incurred every year. These costs have been annualised based on the actual frequency with which they are incurred or in some cases, a reasonable assumption based on industry best practice. It should also be noted that although certain regulatory charges were waived during the Covid-19 pandemic, these have been assumed at a regular pre-pandemic frequencies and no downward adjustment to costs was made.

Table 1.2: Description of annual running cost components

| Index Component | Description |
| :--- | :--- |
| Fuel | Annual cost of fuel |
| Servicing | Cost of major and minor services |
| Cleaning | Cost of major valets and minor cleans |
| Tyres | Cost of tyre replacements |
| Spares | Cost of spares required to keep car appropriately maintained |
| Miscellaneous Running Costs | This component is included to provide a contingency for any <br> additional costs incurred while operating a taxi |

Table 4.3: Description of annual fixed cost components

| Index Component | Description |
| :--- | :--- |
| Car Purchase and Finance | Annualised cost of a car loan, net of resale value |
| Insurance | Cost of insuring a taxi - driver profile dependent |
| Affiliations - traditional dispatch |  |
| operator/ app service |  |
| or app service |  | Equipment Replacement - $\quad$| Annualised cost of equipment required by taxi regulations, |
| :--- |
| including meters, printers, roof signs, branding and necessary |
| safety kit (fire extinguisher, first aid kit |$|$| regulatory requirements | Annualised cost of renewing a taxi vehicle licence |
| :--- | :--- |
| Taxi Vehicle Licence Renewal | Annual motor tax payable for the vehicle |
| Airport Charges | Charge for operating at an airport |
| National Car Test (NCT) | Cost of undertaking a periodic NCT test |
| Meter Verification | Annualised cost of meter verification |
| Meter Calibration \& Programme | Annualised cost of meter calibration and programming |
| SPSV Drivers Licence | Annualised cost of a taxi driver licence |
| National Drivers Licence | Annualised cost of vehicle driver licence |

Table 4.4: Description of annual labour cost components

| Index Component | Description |
| :--- | :--- |
| Labour Costs | Estimate of driver earnings |

The following section outlines the methodology and values used for each cost component.

### 4.5.1 Running Costs

Annual running costs refer to day-to-day costs associated with operating a taxi. These costs include fuel, servicing, cleaning and tyres. Running costs within the TCl are based on estimated driver activity levels. As described in Section Error! Reference source not found., two separate activity levels were estimated and running costs based on both activity levels are shown below.

Table 4.5: Running Costs

|  | Activity Level |  |
| :--- | :---: | :---: |
|  | 2019 CSO Estimate | 2019 Drivers' Estimate |
| Index Component | $30,352 \mathrm{~km}$ | $42,000 \mathrm{~km}$ |
| Fuel | $€ 2,390$ | $€ 3,307$ |
| Servicing | $€ 436$ | $€ 603$ |
| Cleaning | $€ 1,073$ | $€ 1,073$ |
| Tyres | $€ 389$ | $€ 539$ |
| Spares | $€ 284$ | $€ 393$ |
| Miscellaneous Running Costs | $€ 300$ | $€ 300$ |
| Total Running Costs | $€ 4,873$ | $€ 6,216$ |

- Fuel: A weighted average of fuel consumption rates per kilometre was calculated for the three most popular car models, and average diesel and petrol prices for the first three months of 2022 were sourced from the CSO and the European Commission.

It should be emphasised that fuel prices have been highly volatile in the period since the 2019 National Maximum Taxi Fare Review (particularly in the first quarter of 2022), and highly dependent on external political and economic developments. Following the outbreak of the Covid-19 pandemic in March 2020, oil prices fell significantly with the introduction of widespread travel and economic restrictions, with fuel prices also falling in 2020 to a lesser degree. As world economies gradually emerged from pandemic restrictions, oil prices rebounded at the end of 2020 and throughout 2021, while fuel also steadily rose during this period. While fuel prices were already rising by 2-3 per cent per month in 2021 and early 2022, the Russian Invasion of Ukraine and the sanctions imposed on the Russian economy by the European Union caused a significant spike beyond these regular trends. Average fuel costs in March 2022 spiked by 7-13 per cent compared to February, and have fluctuated significantly on a daily basis since.

The volatility of fuel prices due to external geopolitical and economic events makes it difficult to estimate an 'average' fuel cost compared to previous TCIs. Using data from 2020 or 2021 would be skewed heavily by the effects of the Covid-19 pandemic, which may result in unrealistically low fuel costs. For example, the minimum price for both petrol and petrol was $€ 1.283$ and $€ 1.181$ per litre, respectively, in December 2020. However, basing fuel costs solely on current pump prices would also be incorrect, as it risks locking in what is expected to be temporary price inflation. As of March 2022, the average retail price per litre, according to the AA was $€ 1.82$ per litre of petrol and $€ 1.90$ per litre of diesel ${ }^{19}$. Current fuel prices could still change significantly depending on a number of factors in the coming months, including the situation in Ukraine, any further changes to European sanctions, potential fiscal responses by national governments to reduce the cost of fuel (a temporary reduction in excise duty on fuels

[^11]was introduced in March 2022: 20c per litre of petrol and 15c per litre of diesel), as well as general economic conditions. An average of the first three months of 2022 was taken as the estimate for the 2022 TCI , which corresponds to $€ 1.75$ per litre of diesel and $€ 1.80$ per litre of petrol. Overall, this represents a 25 per cent increase in fuel costs over the 2017 TCl according to CSO activity levels, and 15 per cent according to driver activity levels.


Source: CSO Consumer Price Index, Detailed sub-indices for petrol and diesel.

- Servicing: Servicing costs are calculated using a weighted average of costs for the three most popular car models. Intervals for major and minor services are based on manufacturers' specifications, and costs are sourced from main dealers and published information.
- Cleaning: In line with previous Fare Reviews, it was assumed that taxi drivers get two "major valets" per annum and two "minor cleans" per week. The average cost of a minor clean was estimated at $€ 9$ for a standard vehicle and $€ 11$ for a WAT, which covers either the cost of a car wash or the cost of a drivers' time if they choose to undertake it themselves. The average cost of a major clean or valet was estimated at €84 for a standard vehicle and €97 for a WAT.
- Tyres: As per previous TCls, drivers were assumed to replace their tyres every 36,000 kilometres. The average cost of purchasing and fitting a full set of tyres is estimated from a sample of major suppliers and calculated for both activity levels.
- Spares: A rate of $€ 900$ per $100,000 \mathrm{~km}$ was set in the 2014 Fare Review to cover the replacement of spare parts such as batteries, windscreen wipers, shock absorbers, brake pads and discs. This rate is indexed to inflation using the CSO sub-index of 'Spare parts and accessories for personal transport equipment', which has increased by approximately 4 per cent over this period from 2014 to 2021. In the 2022 TCI this rate has been adjusted to $€ 936$ per 100,000km.
- Miscellaneous Running Costs: A number of discretionary cost items were removed from the 2014 TCl and replaced with a general cost component of $€ 300$ for these miscellaneous running costs. This rate has remained constant since then.


### 4.5.2 Fixed Costs

Annual fixed costs refer to those that are incurred independent of driver activity levels. Fixed costs listed in this section include those relating to car purchase and finance, insurance, expenditure on affiliation to traditional dispatch operators and/or app services, and equipment required under regulations. A full breakdown of fixed costs is provided in Table 4.6 below.

Some fixed costs are not incurred every year. These costs have been annualised based on the frequency with which they are incurred (either actual or assumed based on industry best practice). Some fixed costs were also waived/reduced/rebated due to the Covid-19 pandemic, as previously referenced, but this has been ignored in these calculations.

Table 4.6: Fixed Costs

| Index Component | 2021 Cost |
| :---: | :---: |
| Car Purchase and Finance | €3,899 |
| Insurance | €1,867 |
| Affiliation - traditional dispatch operator/ app service | €2,872 |
| Equipment Replacement - regulatory requirements | €230 |
| Taxi Vehicle Licence Renewal | €150 |
| Motor Tax | €95 |
| Airport Charges | €41 |
| National Car Test (NCT) | €62 |
| Meter Verification | €43 |
| Meter Calibration and Programming | €45 |
| SPSV Driver Licence | €50 |
| National Driver Licence | €6 |
| Total Fixed Costs | €9,360 |

- Car Purchase and Finance: The annual cost of vehicle financing is calculated based on a weighted average price of a 5 -year term loan for the three most popular car models among taxi drivers: Toyota Prius, Toyota Avensis, and Skoda Superb. It is assumed that vehicles are purchased at an average age of 3 years and resold at 8 years. These purchase/resale values have been sourced from Motor Trade Publishers, while the cost of finance has been calculated using average rates from a sample of major lenders. The cost of car purchase and finance shown above is net of the average resale value. According to the Taxi Driver Survey 2022, the most popular term of loan is between five and six years.
- Insurance: The insured history of a driver is critical to how insurance costs for SPSV drivers are determined. Insurance costs within the TCI are based on a typical representative driver with five years of experience driving a taxi ${ }^{20}$. Insurance brokers were consulted in relation to the likely insurance costs which would be incurred by a typical representative driver with a clean licence, 5 -year old Toyota Avensis and five years no claims bonus on a taxi policy. An average estimate of $€ 1,671$ was obtained. Estimates were also obtained for a typical 'newer' driver, with around 2-3 years of SPSV experience. An average estimate of $€ 2,700$ was obtained for this driver. Weighting these figures by the proportion of experienced and new drivers operating in

[^12]the taxi industry currently, gives an average insurance cost of $€ 1,867$. It should be noted that these estimates exclude any discounts.

This represents a 30 per cent reduction in insurance costs since the 2017 TCI, and reflects increased competition in the wider taxi and motor insurance markets in Ireland, which has resulted in better prices for customers. Similar reductions have also been witnessed in the consumer motor insurance market, with the CSO Consumer Price Index recording a 34 per cent reduction in motor insurance prices between 2016 and 2022.

- Traditional Dispatch Operator/App Service Affiliation: A significant proportion of the taxi industry incurs costs associated with affiliation to a traditional dispatch operator, an app service or both. Historically the full annual cost of a radio dispatch company has been allocated in this category of the TCI.

The proportion of drivers using traditional radio dispatch company services has fallen significantly in recent years, accompanied by a large shift towards app services. In 2014 for instance (the year in which the current structure of the TCI was developed), 36 per cent of drivers were affiliated with a radio dispatch company, while 35 per cent were affiliated with an app.

In the 2022 Driver Survey however, there is a significant change in the numbers of drivers using apps: 73 per cent of drivers used an app ( 8 per cent of which also used a traditional radio dispatch company) and 9 per cent used a dispatch company only (without using an app). Of the drivers who use apps, they estimate that on average 65 per cent of their jobs come from apps in February 2022, indicating that just under half (47\%) of all jobs are via apps.

To reflect the current use of radio dispatch and app services, the annual cost of affiliation to app and radio dispatch services was estimated from the February 2022 Driver Survey, and weighted by the proportion of drivers who used either or both services. This resulted in a total annual weighted cost of $€ 2,839$ for affiliation to either app provider or radio company. This cost has increased from $€ 2,326$ in 2019, reflecting the increase in use of apps with associated service charge on each app fare. The average app service charge (across all apps used by drivers in Ireland) is 15 per cent of each fare.

- Equipment replacement - regulatory requirements: Several pieces of equipment are required by current regulations in order to operate a taxi, including a taximeter, printer, taxi roof sign and official taxi door signage. Taxi operators are also required to have a safety kit in the vehicle, which includes a fire extinguisher, first aid kit, triangle, hi-vis vest, and torch. The annual cost of this equipment was estimated based on a review of major suppliers, and is based on a fiveyear replacement cycle.

This category also includes the cost of removing tinted windows or 'privacy glass', which often comes pre-installed in new and second-hand cars sourced from the private market. The cost of replacing tinted windows was estimated based on market research undertaken by NTA, and weighted by the most popular WAT and non-WAT vehicles. As with vehicle purchase and finance, a five-year replacement cycle was assumed.

- Taxi Vehicle Licence Renewal: The renewal of a taxi licence for 12 months normally costs $€ 150$ (assuming the renewal is completed prior to the expiry of the prior licence).
- Airport Charges: In order to operate from taxi stands at Dublin and Shannon airports, taxi drivers are required to purchase an airport permit. A maximum of 1,490 permits can be issued (accounting for approximately $9 \%$ of the fleet), and these permits cost $€ 440$ per annum. While this cost can vary depending on the payment plan the driver selects, it was assumed that drivers pay in one annual instalment.
- National Car Test (NCT): Taxis that are less than ten years old are required to undergo the NCT annually at a cost of $€ 55$. However, taxis that are over ten years old ( $12 \%$ of the fleet) require two NCTs a year, at an annual cost of $€ 110$. The cost listed has been weighted to reflect these different testing requirements, given the age of the fleet.
- Meter Calibration and Programming: It has been assumed that meter reprogramming is required every two years (although it has not been required since 2018) and a cost of €90 per occurrence is used. The current cost of LMS Verification is $€ 86.10$ The cost of the taximeter calibration varies, but the basic average cost in 2022 is $€ 91.60$, Over 2 years this equates to $€ 43.05$ for Verification (unchanged since the last fare review) and $€ 45.80$ for reprogramming and calibration.
- Other Costs: The cost of and driver licences have been sourced from publicly-available data. The cost of driver licences have been annualised as follows:
- An SPSV Drivers Licence must be renewed every five years.
- A standard Driving Licence must be renewed every ten years.


### 4.5.3 Labour Costs

As outlined in Section 4.4.2, average annual labour costs are the main cost included in the TCI. Based on CSO data for average weekly earnings of 'Production, transport, craft and other manual workers', an annual labour cost of $€ 30,083$ was calculated.

Table 4.7: Labour Costs

| Index Component | 2021 Costs |
| :--- | :---: |
| Labour Costs | € 30,083 |

Labour is the largest component of the TCI, meaning that changes in labour costs generally have the greatest impact on the direction and magnitude of the TCI from year-to-year. (See Table D. 3 in Appendix C for how this component of the TCI has increased since 2012). The labour costs increased by 26 per cent, since the previous update to the TCI .

### 4.5.4 Total Costs

The total costs of operating a taxi consist of running, fixed and labour costs. As running costs are determined by driver activity levels, the running costs and total costs shown in Table 4.8 are based on both the CSO estimate of activity levels and estimates from the Taxi Driver Survey. Labour costs are treated as a constant in the TCI , while fixed costs are also not impacted by changes in activity levels.

Table 4.8: 2022 Taxi Cost Index

|  | Activity Level |  |
| :--- | :---: | :---: |
|  | CSO Estimate | Driver Estimate |
| Index Component | $30,352 \mathrm{~km}$ | $42,000 \mathrm{~km}$ |
| Running Costs | $€ 4,873$ | $€ 6,216$ |


| Fixed Costs | $€ 9,360$ | $€ 9,360$ |
| :--- | :---: | :---: |
| Labour Costs | $€ 30,083$ | $€ 30,083$ |
| Total Costs | $€ 44,281$ | $€ 45,624$ |

### 4.6 Summary and Conclusion

The results of the 2022 National Maximum Taxi Fare Review are summarised and compared to the 2017 and 2019 Fare Reviews in Table 4.9. Taxi fares were not raised following the 2019 Fare Review, meaning that 2017 is considered the comparator year for the purposes of the 2022 Fare Review.

As noted previously, activity levels are based on 2019 activity levels given the disproportionate impact of the Covid-19 pandemic on taxi operations in 2020 and 2021. This assumes that taxi demand will recover to approximately pre-pandemic levels, for the purpose of undertaking this Fare Review.

Table 4.9: Adjusted TCI changes, 2017-2022

|  | CSO Reported Activity Levels |  |  | Driver Reported Activity Levels |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 2017 | 2019 | 2022 | 2017 | 2019 | 2022 |
| KM | 32,624 km | 29,951 km | 30,352 km | 49,000 km | 42,000 km | 42,000 km |
| Running Costs | €4,309 | €4,235 | €4,873 | €5,825 | €5,430 | €6,216 |
| Fixed Costs | €11,480 | €11,321 | €9,360 | €11,480 | €11,321 | €9,360 |
| Labour Costs | € 23,945 | €25,878 | € $¢ 0,083$ | € 23,945 | € 25,878 | €30,083 |
| Total Costs | € 39,734 | €41,435 | € 44,315 | €41,250 | €42,629 | €45,658 |
| \% Change 2017-2022 |  |  | 11.5\% |  |  | 10.7\% |
| Recommended TCl increase 2022* |  |  | 12.5\% |  |  | 11.7\% |

* Includes additional 1\% allowance for cashless payments

The largest component of the TCI is the labour costs, which amount to two thirds of the total TCI in 2022. Fixed costs make up one fifth of the TCI, while the remainder is comprised of running costs. The labour component of the TCI was lower, at 60 per cent in 2017, which shows that wage inflation is driving the increases in the TCl. Fixed costs have decreased between 2017 and 2022, due to efficiencies in technology use, particularly the uptake of the industry in the use of apps, and the continuation of drops in the cost of motor insurance. The increase in running costs is largely attributed to the increase in fuel costs.

## 5. Recommendation

Overall, the TCI increased between 10.7 and 11.5 per cent between 2017 and 2022. The 2019 Fare Review recommended a further adjustment of the TCl of 1 per cent for the extra costs (transaction fees and hardware provision) associated with cashless payment facilities.

Including this provision for cashless payments, the recommended 2022 Maximum Fare increase is between $\mathbf{1 1 . 7 \%}$ and $\mathbf{1 2 . 5 \%}$ above 2017 levels. The main drivers of the TCl are the increased labour and fuel costs, which are offset by decreases in insurance costs and decreases in affiliation to dispatch companies or apps.

## Appendix A - Covid mitigation measures undertaken by NTA to assist the restoration of services from March 2020

The following measures were taken, in chronological order:

- Extensive engagement with the industry individually and through NTA website, providing advice and assistance on all aspects of operation including temporary deferral of activities and available HSE and DEASP assistance, together with the dynamic SPSV Industry Information Note (COVID-19) providing up to date advices on all SPSV COVID related matters;
- Deferral of renewal dates of vehicle licences due to renew from 13 March to 12 June 2020 by three months at the commencement of the COVID-19 emergency (when the pandemic was expected to be short lived);
- Ensured SPSV licence holders were prioritised in NCTS;
- Increased the means by which SPSV operators could break a "Driver to Vehicle Link" following initial restrictions to include email, online, SMS and App;
- Provision of Advisory Guidelines on Temporary COVID-19 Dividing Screens;
- Engaged with insurance providers and facilitated cover reductions to private or Fire and Theft cover only for "parking up" - 60\% to 90\% discount on SPSV premium;
- Suspended SPSV licences for underinsured operators, which would ordinarily have left operators open to prosecution and placed that licence in inactive status immediately, requiring a full NCT and an SPSV suitability inspections prior to returning to operation;
- Engaged with SPSV inspection testing providers to reopen standalone SPSV centres as required and use some forecourts manned by NTA personnel to assist operators directly;
- Frequent engagement with the Advisory Committee on SPSVs and the Department of Transport, specifically including responses and actions on foot of the "Small Public Service Vehicle Industry Proposals for Industry Recovery - Advisory Committee on Small Public Service Vehicles response to Covid-19";
- Engagement with regulators in other jurisdictions to learn and advise on best practice;
- Engagement with other transport operators and with PPE suppliers and designers on face visors/masks/coverings, gloves, screens, sanitisers and other COVID-19 related safety equipment;
- Introduction of hand sanitiser points at major transport interchanges where SPSV passengers transit to or from other modes of transport;
- Facilitating the Fáilte Ireland SPSV driver Infection Prevention Control training programme;
- A confidential telephone survey of SPSV drivers nationwide. The first in a series of surveys (September 2020, February 2021, June 2021, October 2021) to establish how the cost of operation and supply/demand changed as a result of COVID-19. Online national survey of taxi users conducted in parallel.
- Undertook radio, press and social media campaigns regarding mandatory face coverings following the enactment of the Health Regulation for mandatory face coverings in SPSVs on 03 December 2020;
- Enactment of emergency Covid regulations to ensure that no taxi or hackney reaching its maximum permissible age between 13 March 2020 and 31 December 2022 would have to exit the fleet until 2023;
- Small Public Service Vehicle (Emergency Measure COVID-19) Regulations 2020 [18/05/2020] ${ }^{21}$;
- Small Public Service Vehicle (Emergency Measure COVID-19)(No.2) Regulations 2020 - [18/12/2020];
- Small Public Service Vehicle (Emergency Measure COVID-19) Regulations 2021 [12/05/2021]; and
- Small Public Service Vehicle (Emergency Measure COVID-19) (Maximum Permissible Age) - [21/09/2021] Regulations 2021.
- Enactment of regulations to waive standard vehicle licence renewal fees during the period 1 January and 31 December 2022; waive late renewal fees until 30 June 2022; and reduce late renewal fees from 01 July 2022 to 31 December 2022;
- Small Public Service Vehicle (Emergency Measure Covid-19) (Fees) Regulations 2020[18/12/2020]; and
- Small Public Service Vehicle (Emergency Measure COVID-19) (Fees) Regulations 2021 - [19/07/2021].
- Enactment of regulations to extend the period in which an SPSV vehicle licence can rest in 'Inactive' status from 12 to 24 months;
- Small Public Service Vehicle (Emergency Measure COVID-19) (Expired Licence) Regulations 2021 - [19/07/2021];
- Grant schemes
- Commencement of the ESPSV Grant Scheme 2021 with enhanced grant funding for vehicle scrappage;
- Commencement of the WAV Grant Scheme 2021;

2021 Grant assisted vehicles

|  | Total <br> $\mathbf{2 0 2 1}$ | Grants - <br> Finance | New <br> Vehicle <br> to Fleet | Replacement <br> of Vehicle |
| :--- | :--- | :--- | :--- | :--- |
| WAV Grant 2021 | $\mathbf{3 7 9}$ | $€ 1,605,500$ | 271 | 108 |
| eSPSV Grant 2021 | $\mathbf{5 8 0}$ | $€ 11,169,500$ | 0 | 580 |

- Resumed SPSV Driver Entry Testing Programme following public health advice; and
- Enactment of emergency regulations:
- Doubling the time in which an SPSV vehicle licence can rest in inactive status from 12 to 24 months;
- Commencement of Motor Tax Refund Scheme for SPSVs.
- 1,753 refunds issues in 2021
- Commencement of SPSV NCT Fee Waiver Scheme.
- 5,948 free NCT tests were completed in 2021

In June 2021, the continuation of, further horizontal supports to the SPSV industry were announced by the Minister. These included:

- SPSV vehicle licence renewal fees will be waived for 2022;

[^13]- $€ 1.5 \mathrm{~m}$ will be allocated to fund initial NCT fees for SPSV operators for a 12 month period;
- Funding of $€ 2$ million allocated to facilitate the rebate of Motor Tax to SPSV operators over a 12 month period;
- Extension of the Pandemic Unemployment Payment (PUP) to February 2022. Recipients of the PUP remain entitled to earn up to $€ 960$ over an eight-week period, net of expenses;
- Continuity of the Enterprise Support Grant (ESG), available to self-employed SPSV operators who close their PUP payments. Additionally claimants of the ESG in 2020 who subsequently found themselves back on the PUP could access the grant for a second time if they close their PUP on or after 1 June 2021.


## Appendix B - Estimating Activity Levels

Activity levels are employed in the TCl to calculate changes in those operating costs which vary according to activity levels, for example fuel, tyres, vehicle spares and servicing. Annual driver distance travelled is used as a proxy for activity levels in the TCI. Assuming all other factors remain constant, a reduction in activity levels has the impact of reducing the costs associated with operating a taxi and vice versa.

## Estimating Activity Levels based on 2019 CSO Data

The most objective source of data for annual vehicle distance travelled can be found in traffic volume data from the Central Statistics Office (CSO). The CSO estimates annual vehicle distance travelled for taxis using data from the National Car Testing Service (NCT) and the Road Safety Authority. However, an identified limitation of the CSO mileage data is that it represents both personal mileage and work mileage. Assuming that taxi drivers do not have to 'commute' per se, in order to isolate the level of operating activity, it is necessary to remove personal mileage from the CSO estimate.

Average personal mileage can be estimated at a high level by taking annual distance travelled for private cars and subsequently removing annual commuting mileage. The annual distance travelled while commuting was estimated at 7,200 kilometers as part of the 2014 Fare review, which referred to the average commuting distance found in the 2012 Household Travel Survey published by NTA and assumed a 48-week working year. This estimate has been retained as no more up to date information on average commuting distance is available. ${ }^{22}$

As outlined previously, 2019 activity levels have been carried forward to the 2022 National Maximum Taxi Fare Review, as the restrictions imposed during the COVID-19 Pandemic would affect figures for 2020 and 2021. Small PSVs travelled an average of $39,504 \mathrm{~km}$ in 2017. To estimate the average annual operating distance, personal mileage was subtracted from this figure, as shown below:
$\therefore 2019$ average annual operating $\mathrm{km}=2019$ average annual $\mathrm{km}-$ Personal km
$\therefore 9$ average annual operating $\mathrm{km}=39,504 \mathrm{~km}-9,152 \mathrm{~km}$
$\therefore 2017$ average annual operating $\mathrm{km}=30,352 \mathrm{~km}$
In previous versions of the $\mathrm{TCI}, \mathrm{CSO}$ data was subject to a two-year lag that required additional adjustments to estimate current activity levels. As the 2022 TCI is based on 2019 activity levels, this adjustment is not required in this instance.

## Estimating Activity Levels Using the 2019 Driver Survey (Sample Weighting)

In the Driver Survey, taxi drivers were also asked about their annual activity levels. There were significant differences in the results based on whether the driver drove a standard or wheelchair accessible taxi (WAT), with drivers of WATs driving 10,000km more on average per year. As the survey sample contained significantly more FAV drivers than the national average, it was decided to reweight these figures based on the actual proportion of FAV and standard taxi drivers. This gave a combined estimated activity level of 42,000km for drivers.

[^14]Table A.2: Driver Estimates of Annual Activity Levels

|  | Driver Estimate of <br> Annual Activity Levels | Proportion of Fleet |
| :--- | :--- | :--- |
| Standard Vehicle | $40,600 \mathrm{~km}$ | $87 \%$ |
| Wheelchair Accessible Taxi | $51,400 \mathrm{~km}$ | $13 \%$ |
| Weighted Average | $\mathbf{4 2 , 0 0 4} \mathbf{k m}$ |  |

Running costs in the TCI were therefore calculated based on both activity levels: the CSO average distance of $29,951 \mathrm{~km}$ and a driver distance of $42,000 \mathrm{~km}$.

## Appendix C- Comparison with Previous Taxi Cost Indices

This section contains a comparison of the 2019 TCl and previous TCIs since 2012. TCls since 2014 have been calculated using estimates of activity levels from both the CSO and the Driver Survey, while the 2012 TCI was recalculated in the 2014 National Maximum Taxi Fare Review to produce a comparable estimate of running costs.

Table D.1: Historic TCls using Estimates of Activity Levels Based on CSO Data

| Component | $\begin{aligned} & \text { Comparable } \\ & 2012 \end{aligned}$ | $\begin{array}{\|l} \hline 2014 \\ (27,804 \mathrm{~km}) \end{array}$ | $\begin{array}{r} 2017 \\ (32,624 \mathrm{~km}) \end{array}$ | $\begin{array}{r} 2019 \\ (29,951 \mathrm{~km}) \end{array}$ | $\begin{array}{r} 2022 \\ (30,352 \mathrm{~km}) \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fuel | € 2,061.39 | € 1,950 | € 1,918.00 | € 1,869.00 | € 2,389.80 |
| Servicing | € 554.65 | € 353 | € 437.00 | € 454.00 | € 435.96 |
| Cleaning | € 776.94 | € 892.00 | € 988.00 | € 966.00 | € 1,073.42 |
| Tyres | € 273.80 | € 278.00 | € 373.00 | € 376.00 | € 389.36 |
| Spares | € 241.88 | € 252.00 | € 294.00 | € 270.00 | € 284.09 |
| Miscellaneous Running Costs | € 313.17 | € 300.00 | € 300.00 | € 300.00 | € 300.00 |
| Total Running Costs | € 4,222 | € 4,026 | $€ 4,309$ | € 4,235 | € 4,873 |
| Car Purchase and Finance | € 2,677.55 | € 3,014.00 | € 3,534.00 | € 3,655.00 | € 3,898.76 |
| Insurance | € 1,951.00 | € 1,817.00 | € 2,400.00 | € 2,190.00 | € 1,867.00 |
| Affiliation - traditional radio operator/app service | € 4,600.00 | € 4,628.00 | € 4,752.00 | € 4,800.00 | € 2,872.32 |
| Equipment Replacement - regulatory requirements | € 265.41 | € 298.00 | € 298.00 | € 300.00 | € 229.89 |
| Taxi Vehicle Licence Renewal | € 125.00 | € 125.00 | € 150 | € 150 | € 150 |
| Road Tax | € 88.00 | € 95.00 | € 95.00 | € 95.00 | € 95.00 |
| Airport Charges | € 36.62 | € 35.48 | € 38.00 | € 37.00 | € 41.28 |
| NCT Testing | € 73.56 | € 66.00 | € 67.00 | € 62.00 | € 61.85 |
| Meter Verification | € 46.13 | € 43.00 | € 43.00 | € 43.00 | € 43.05 |
| Meter Calibration and Programming | € 45.00 | € 45.00 | € 45.00 | € 45.00 | € 45.00 |
| SPSV Driver's Licence | $€ 50.00$ | $€ 50.00$ | $€ 50.00$ | $€ 50.00$ | $€ 50.00$ |
| National Driver's Licence | € 2.50 | $€ 5.50$ | € 6.00 | € 6.00 | $€ 5.50$ |
| Total Fixed Costs | € 9,961 | € 10,222 | € 11,478 | € 11,433 | € 9,360 |
| Total Labour Costs | € 25,712 | € 24,246 | € 23,945 | € 25,878 | € 30,083 |
| TCI Total | € 39,895 | € 38,493 | € 39,732 | € 41,546 | € 44,315 |

Table D.2: Historic TCIs using Estimates of Activity Levels Based on Driver Survey Data

| Component | 2012 <br> (Comparable <br> with 2014 <br> Figure) | $\begin{aligned} & 2014 \\ & (62,052 \mathrm{~km}) \end{aligned}$ | $\begin{array}{r} 2017 \\ (49,000 \mathrm{~km}) \end{array}$ | $\begin{array}{r} 2019 \\ (42,000 \mathrm{~km}) \end{array}$ | 2022 $(42,000 \mathrm{~km})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fuel | € 4,600.55 | € 4,352.00 | € 2,881.00 | € 2,621.00 | € 3,306.92 |
| Servicing | € 1,237.85 | € 798.00 | € 656.00 | € 637.00 | € 603.26 |
| Cleaning | € 776.94 | € 892.00 | € 988.00 | € 966.00 | € 1,073.42 |
| Tyres | € 611.07 | € 621.00 | € 560.00 | $€ 527.00$ | € 538.78 |
| Spares | $€ 539.81$ | $€ 563.00$ | € 441.00 | € 378.00 | € 393.12 |
| Miscellaneous Running Costs | € 313.17 | € 300.00 | € 300.00 | € 300.00 | € 300.00 |
| Total Running Costs | € 8,079 | € 7,517 | $€ 5,825$ | € 5,429 | € 6,216 |
| Car Purchase and Finance | €2,677,55 | € 3,014.00 | € 3,534.00 | € 3,655.00 | € 3,898.76 |
| Insurance | € 1,951.00 | € 1,817.00 | € 2,400 | € 2,190.00 | € 1,867.00 |
| Affiliation - traditional radio operator/app service | € 4,600.00 | € 4,628.00 | € 4,752 | € 4,800.00 | € 2,872.32 |
| Equipment Replacement Regulatory requirements | € 265.41 | € 298.00 | € 298.00 | 300 | € 229.89 |
| Taxi Vehicle Licence Renewal | € 125.00 | € 125.00 | € 150 | 150 | € 150 |
| Road Tax | € 88.00 | € 95.00 | € 95.00 | 95 | $€ 95.00$ |
| Airport Charges | € 36.62 | € 35.00 | € 38.00 | 37 | € 41.28 |
| NCT Testing | € 73.56 | € 66.00 | € 67.00 | 62 | € 61.85 |
| Meter Verification | € 46.13 | $€ 43.00$ | € 43.00 | 43 | € 43.05 |
| Meter Calibration and Programming | € 45.00 | € 45.00 | € 45.00 | 45 | € 45.00 |
| SPSV Driver's Licence | $€ 50.00$ | $€ 50.00$ | $€ 50.00$ | 50 | $€ 50.00$ |
| National Driver's Licence | € 2.50 | $€ 5.50$ | € 6.00 | 6 | $€ 5.50$ |
| Total Fixed Costs | € 9,961 | € 10,222 | € 11,478 | € 11,433 | € 9,360 |
| Total Labour Costs | € 25,712 | € 24,246 | € 23,945 | € 25,878 | € 30,083 |
| TCI Total | € 43,752 | € 41,984 | € 41,248 | € 42,740 | € 45,658 |

Table D. 3 shows the three main components of the TCI from 2012 to 2022, showing how the proportions have changed. These figures are taken from D. 1 and D. 2 above. In 2022, the labour costs comprise the highest proportion of the TCl , at two thirds of the overall index for both the estimates for activity levels based on CSO data and Driver Survey data. These have increased over time for both TCIs. The fixed costs are the second biggest component of the TCI , comprising approximately one fifth of the total index. Running costs are the smaller component of the index, making up 11 per cent of the CSO Activity based TCI (which has remained consistent since 2012), and 14 per cent of the Driver Survey Activity TCI (down from 18 per cent in 2012). These proportions clearly show the dominance of labour costs in the overall TCI, and that running costs - such as fuel (even though prices may be volatile) - have a much smaller influence over the TCI.

Table D. 3 Composition of historic Taxi Cost Indexes

|  | Estimates of Activity Levels Based on CSO Data |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Component | Comparable $2012$ | $\begin{gathered} 2014 \\ (27,804 \mathrm{~km}) \end{gathered}$ | 2017 $(32,624 \mathrm{~km})$ | 2019 $(29,951 \mathrm{~km})$ | 2022 $(30,352 \mathrm{~km})$ |
| Running Costs | 11\% | 10\% | 11\% | 10\% | 11\% |
| Fixed Costs | 25\% | 27\% | 29\% | 28\% | 21\% |
| Labour Costs | 64\% | 63\% | 60\% | 62\% | 68\% |
|  | Estimates of Activity Levels Based on Driver Survey Data |  |  |  |  |
|  | 2012 <br> Comparable with 2014 Figure) | $2014$ | 2017 | 2019 | 2022 |
|  |  | (62,052km) | (49,000km) | (42,000km) | (42,000km) |
| Running Costs | 18\% | 18\% | 14\% | 13\% | 14\% |
| Fixed Costs | 23\% | 24\% | 28\% | 27\% | 20\% |
| Labour Costs | 59\% | 58\% | 58\% | 61\% | 66\% |


[^0]:    ${ }^{1}$ Department of the Taoiseach (2022). Government Statement: Ukraine national responses. Press release issued on $8^{\text {th }}$ March 2022. Accessed on 23/03/2022. https://www.gov.ie/en/press-release/60bfd-government-statement-re-ukraine-national-responses/

[^1]:    ${ }^{2}$ Department of the Taoiseach (2022). Government Statement: Ukraine national responses. Press release issued on $8^{\text {th }}$ March 2022. Accessed on 23/03/2022. https://www.gov.ie/en/press-release/60bfd-government-statement-re-ukraine-national-responses/
    ${ }^{3}$ Department of the Environment, Climate and Communications (2021) Climate Action Plan https://www/gov.ie/en/publication/6223e-climate-action-plan-2021/

[^2]:    ${ }^{4}$ Department of Transport (2021) National Investment Framework for Transport in Ireland (NIFTI) https://www.gov.ie - National Investment Framework for Transport in Ireland (NIFTI) (www.gov.ie)
    ${ }^{5}$ Modified Gross National Income (GNI*) is based on Gross National Income less depreciation of R\&D-related service imports and trade in IP, depreciation of aircraft for leasing, and net factor income of re-domiciled PLCs. ${ }^{6}$ Government of Ireland, 2021. Budget 2022, Economic \& Fiscal Outlook, October 2021, https://assets.gov.ie/201250/f0886750-a25f-4bf4-9d1d-2918347495f0.pdf

[^3]:    ${ }^{7}$ Government of Ireland, 2018. Budget 2019 Economic and Fiscal Outlook. https://assets.gov.ie/180596/be15c927-7401-4b35-8b43-b51871e1caf6.pdf
    ${ }^{8}$ Government Finance Statistics Quarter 3 2021, CSO, https://www.cso.ie/en/releasesandpublications/ep/pgfsq/governmentfinancestatisticsquarter32021/

[^4]:    ${ }^{9}$ Quarterly Bulletin 2022:2, Central Bank of Ireland, https://www.centralbank.ie/news/article/quarterly-bulletin-2022-2-economic-growth-set-to-continue-but-slower-higher-inflation-expected-6-Apr-2022. Quarterly Economic Commentary, Spring 2022, Economic and Social Research Institute (ESRI), https://www.esri.ie/system/files/publications/QEC2022SPR_0.pdf
    ${ }^{10}$ Residential Property Price Index December 2021, CSO, https://www.cso.ie/en/releasesandpublications/ep/p-rppi/residentialpropertypriceindexdecember2021/
    ${ }^{11}$ Central Statistics Office, 2022. Monthly Unemployment February 2022.
    ${ }^{12}$ Department of Social Protection. The Initial Impacts of the COVID-19 Pandemic on Ireland's Labour Market, 2020. https://assets.gov.ie/73799/2aa16fdcf3344493bbb79cec4f9071c0.pdf
    ${ }^{13}$ Central Statistics Office 2021, Earnings and Labour Costs Quarterly, Q3 2021.

[^5]:    ${ }^{14}$ Central Bank of Ireland, 2022. Quarterly Bulletin 2022:2.

[^6]:    ${ }^{15}$ Earnings and Labour Costs Q4 2021. CSO.
    https://www.cso.ie/en/statistics/earnings/earningsandlabourcosts/

[^7]:    Source: COVID Impact Research Wave Surveys - Taxi Users

[^8]:    Source: 2022 National Maximum Taxi Fare Review - Customer Survey, February 2022

[^9]:    ${ }^{16}$ The 2014 Fare Review compared estimates with those reported in other jurisdictions, such as Northern Ireland, Hamburg and Norway.
    ${ }^{17}$ Fifty per cent of drivers included in the 2019 survey sample drove a fully-accessible vehicle as a specific quota was set at this level. Therefore, the average distance travelled reported in the survey has been adjusted to better reflect the true current proportion of standard and fully-accessible vehicles in the current taxi fleet.

[^10]:    18 https://enterprise.gov.ie/en/News-And-Events/Department-News/2021/November/20211129.html

[^11]:    ${ }^{19}$ According to the methodology used to calculate the average price for both petrol and diesel used by the AA, it appears that the March 2022 average value does not include the temporary reduction in excise duty on fuels that was announced in early March 2022.

[^12]:    ${ }^{20}$ Drivers who lack experience face higher insurance premiums and it is acknowledged that the proportion of inexperienced drivers in the fleet has increased somewhat in recent years. However, continuing to base insurance cost estimates on a typical representative driver profile as in previous calculations of the TCl is appropriate as the vast majority of drivers within the current taxi fleet do have at least five years of experience. Drivers with less than five years' experience will see their insurance premiums fall within a number of years as they become more experienced.

[^13]:    ${ }^{21}$ Enactment date

[^14]:    22 The 2017 Household Travel Survey report published by NTA does not contain an estimate of average commuting distance.

