



National Maximum Taxi Fare Review 2014

November 2014

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 biennial fare review has been carried out to allow adjustments for changes in the operating costs and market environment facing the taxi industry. The National Transport Authority has been responsible for carrying out the biennial reviews since 2011.

Objectives of the Fare Review 2014

The objectives of the current review are to:

- Establish the cost of operating a taxi by calculating the Taxi Cost Index. This includes a validation of the various cost components and a full rebasing of costs, with a particular emphasis placed on gaining a truer understanding of labour costs and activity levels;
- Determine whether existing fare levels should be increased, decreased or retained; and
- Consider how the proposed fare levels could be implemented with a simplified fare structure.

Recommendations from previous reviews

The 2010 review recommended no alteration in the fare. The most recent review in 2012 recommended the application of a fare increase of around 4%, coupled with a simplification of the fare structure. The review proposed the removal of Tariff C and a reduction in the initial charge. These proposals were not implemented however, and therefore the existing National Maximum Taxi Fare remains unchanged since 2008.

Market conditions

There are strong signals from the wider economic environment that consumer demand will improve over the next two years. Improving macroeconomic factors combined with stronger consumer sentiment and increased disposable incomes could have positive consequences for the taxi industry in the coming years.

A consumer survey undertaken for this review found that the majority of respondents (67.3%) reported that their use of taxis was unchanged over the last 12 months, with 13.5% reporting an increase in usage and 19.2% reported a decrease in usage.

Approximately half of consumers surveyed for this review agreed that taxi services are good value for money, while 22.5% neither agreed nor disagreed and 28.4% disagreed.

Taxi Cost Index - Methodology

This year's review incorporated a fundamental appraisal of the components, assumptions and methodology employed in the Taxi Cost Index. This included the following:

- Validation of the various cost components, including a rebasing of Taxi Cost Index i.e. through examining the costs directly rather than adjusting biennially for inflation;

- Removal of discretionary cost items. The costs of Satellite Navigation equipment, business cards and receipt books have been removed on this basis;
- Two estimates of activity levels are used, in order to estimate the range of running costs that face drivers with varying operating characteristics;
- Labour costs retrieved according to the Central Statistics Office's Earnings, Hours and Employment Costs Survey (EHECS) data; and
- Vehicle finance and insurance costs are calculated based on the three most popular car models in the taxi industry.

Taxi Cost Index - Findings

Arising from a 3.6% increase being determined as the appropriate increase in 2012 but which was not ultimately implemented; the National Transport Authority has determined that the relevant base year for cost comparison purposes is 2010. An analysis of the Taxi Cost Index shows that since 2010, costs have increased by an estimated 0.8% - 1.7%, and suggests that a fare increase is warranted for the taxi industry. This increase is validated by observed movements in the Consumer Price Index (CPI) over this period, which show a price increase of 4.7% for all items.¹

Proposed removal of Tariff C

Tariff C applies an increased rate for trips above 30km or 85 minutes. Less than 2.8% of trips are over 20km² and many of these are booked in advance for a negotiated fare. As a result Tariff C is rarely used and adds an unnecessary level of complexity to the fare card. It is recommended that Tariff C be removed and other tariffs increased to compensate drivers for any potential loss of earnings.

Proposed reduction in the initial charge by lowering the distance and time included

The initial fare of €4.10 at the standard rate includes an allowance for 1km or 170 seconds. Reducing the initial charge element by way of reducing the mileage/time element, would have the following potential benefits:

- It would bring the structure more in line with practice elsewhere so it would be more familiar to international users;
- It would improve consumer protection by reducing the opportunity for drivers to engage the meter prematurely, for example while queuing at the airport or a railway station; and
- It would clearly show the initial charge as a separate component of the fare that is not to be confused with any significant time or distance charge.

¹ CSO Consumer Price Index, September 2010 – September 2014

² Taxi Fare Review 2014 – Household Survey

Proposed standardisation of uplift between standard and premium tariffs

The current fare structure has a premium uplift of 31% for Tariff A and 16% for Tariff B. A standardised uplift of approximately 25% on both tariffs whilst rounding to the nearest five cent would simplify the fare structure further and allow customers to calculate fares more easily.

Proposed increase in fare levels

Having regard to the changes in the Taxi Cost Index, the objective of removing Tariff C and simplifying the fare structure, it is proposed to apply an overall fare increase of 4%. As well as adjusting for the increase in taxi operating costs, this overall increase will allow the fare structure to become simpler and more customer-focussed without having an adverse impact on any one group of drivers or customers.

Proposed fare structure incorporating all the changes

The combination of all the proposed changes results in a more attractive and simpler fare card. The table below shows the existing and proposed fare structure.

	Existing		Proposed	
	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)
Initial Charge	€4.10	€4.45	€3.60	€4.00
Distance Allowance (m)	1000	1000	500	500
Time Allowance (secs)	170	170	85	85
Tariff A	€1.03 per km €0.36 per min	€1.35 per km €0.48 per min	€1.10 per km €0.39 per min	€1.40 per km €0.49 per min
Tariff B	€1.35 per km €0.48 per min	€1.57 per km €0.55 per min	€1.40 per km €0.49 per min	€1.75 per km €0.62 per min
Tariff C	€1.77 per km €0.63 per min	€1.77 per km €0.63 per min		
Extras				
Passengers	€1.00	€1.00	€1.00	€1.00
Booking Fee	€2.00	€2.00	€2.00	€2.00

Christmas rate

With the potential abolition of Tariff C, an alternative arrangement for the Christmas period needs to be devised. In doing this, there is an opportunity for the Christmas premium to be addressed in a more transparent and simple manner, while still compensating drivers adequately. With this in mind, the following adjustments are proposed:

- Apply the premium initial charge;
- Increase the Tariff A premium rate by a standard 25%; and
- Increase the Tariff B premium rate by a standard 25%.

As is currently the case, the Christmas rate would apply from 8pm on Christmas Eve to 8am on St. Stephen's Day and 8pm on New Year's Eve to 8am on New Year's Day.

Assessment of the impact of the proposed changes

The assessment of the overall proposal against a set of best practice principles is summarised as follows:

- Consumer protection – The reduction in the initial charge reduces the potential for drivers to engage the meter prematurely;
- Familiarity – The revised structure is not dissimilar to the structure that is currently in operation, in that it has two initial charges and now has two tariffs for mileage thereafter. The graduated fare structure has been maintained as have the extras which may be applicable to journeys;
- Transparency – The changes will make it easier for customers to estimate the cost of their trip as well as allowing for a simpler presentation of the fare card; and
- Equity and consistency – The proposed structure maintains the premium for taxi travel during unsocial hours and a two-tariff structure, as it is recognised that passengers are willing to pay more for certain journey types. The reduced time and distance allowance within the initial charge and the manner in which the fare increase has been applied ensure that there is no adverse impact on any one group of drivers or customers.

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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 biennial fare review has been carried out to allow adjustments for changes in the operating costs and market environment facing the taxi industry. The National Transport Authority (the Authority) has been responsible for carrying out the biennial reviews since 2011.

This report details the approach and findings of the 2014 National Maximum Taxi Fare Review (the Fare Review). This review was undertaken between July and October 2014.

1.2 Objectives of the review

The objectives of the Taxi fare Review 2014 are to:

- Establish the cost of operating a taxi by calculating the Taxi Cost Index (TCI). This includes a validation of the various cost components and a full rebasing of costs, with a particular emphasis placed on gaining a truer understanding of labour costs and activity levels;
- Determine whether existing fare levels should be increased, decreased or retained; and
- Consider how the proposed fare levels could be implemented with the simplified fare structure that was proposed in 2012.

1.3 Structure of the report

The structure of this report is described below:

- Section 2 provides a context for the current review, giving an account of previous reviews and describing the recent recommendations for the fare structure;
- Section 3 describes the market developments in the industry, from the wider economic context, to the supply and demand characteristics evident in the Irish market;
- Section 4 contains a fundamental appraisal and recalculation of the TCI. The findings from the TCI are used to determine the changes in industry operating costs since 2010;
- Section 5 outlines the rationale and options for changing the fare structure. Simplifying the fare structure has implications for the rates charged, and as such is incorporated in the fare revision decision;
- Section 6 discusses the findings of the report and presents the recommendation for the fare level and structure. It outlines an impact assessment of the fare proposals on the industry and consumers; and
- Section 7 summarises the findings and concludes the report.

2. Background to the current National Maximum Taxi Fare Review

2.1 Overview of the Irish Taxi Industry

The Small Public Service Vehicle industry (SPSV) is made up of hackneys, limousines and taxis, including wheelchair accessible vehicles. Following deregulation of the market in late 2000, the number of SPSVs in Ireland increased from 13,637 in 2000, peaking at 27,429 in 2008, and has since declined to 21,604 in 2014. This Fare Review relates to the fleet of taxis and Wheelchair Accessible Taxis (WATs) only, which represents 83% of the total SPSV fleet in Ireland.

In 2011, the Authority assumed the role of the Commission for Taxi Regulation. The principal function of the Commission was the development and maintenance of a regulatory framework for the control and operation of SPSV industry, including the area of fare regulation. The responsibility for this regulatory framework now lies with the Authority.

In 2013 and 2014, a number of new regulations were introduced, designed to improve quality standards within the industry. The introduction of taxi branding regulations, maximum age limits and fixed charge offences have contributed to the industry being more focused on quality standards.

2.2 Current 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 new National Maximum Taxi Fare structure aimed to create a unified and consistent fare structure for the Republic of Ireland. Other objectives included that it should be simple, transparent, calculated on the basis of time and distance using a meter, and have all extras added to the maximum fare using a meter.

A key challenge in the establishment of the fare structure was the need to have a fare structure which could account for, and adequately incentivise, the variety of different trips undertaken in both urban and rural areas.

The result was a fare structure including the following components:

- Standard and premium rates: premium rates are applicable during unsocial hours (20.00 -08.00), Sundays and public holidays;
- Initial Charge: a fixed fee which includes an initial distance and/or time period;
- Three tariffs (A-C): increasing across three bands of time and/or distance accrued;
- Additional passenger charges: applied on a per passenger basis;
- Booking fee: a fixed fee incurred by those who book a taxi in advance; and
- Soiling charge: a fee to compensate the driver for soiling by the passenger.

Figure 2.1: Current National Maximum Taxi Fare card

National Maximum Taxi Fare Effective from 1 November 2008				
Standard rate		Premium rate		Extras <small>Where relevant</small>
8.00h–20.00h		20.00h–8.00h & Sundays & public holidays*		Booking fee €2.00
INITIAL CHARGE Includes 1km or 170 secs	€4.10 Fixed	INITIAL CHARGE Includes 1km or 170 secs	€4.45 Fixed	Extra adults: second and additional passengers €1.00 each.
TARIFF A Next 14km or 40 mins Up to €18.70	€1.03 per km or €0.36 per min	TARIFF A Next 14km or 40 mins Up to €23.45	€1.35 per km or €0.48 per min	Extra children under 12: 1 free 2 or 3 €1.00 4 or 5 €2.00 6 or 7 €3.00
TARIFF B Next 15km or 42 mins Up to €38.90	€1.35 per km or €0.48 per min	TARIFF B Next 15km or 42 mins Up to €47.05	€1.57 per km or €0.55 per min	Road toll charges as incurred.
TARIFF C Over 30km or 85 mins Over €38.90	€1.77 per km or €0.63 per min	TARIFF C Over 30km or 85 mins Over €47.05	€1.77 per km or €0.63 per min	Soiling charge €140.00 .
Distance rate applies unless speed drops below 21 km/h when time rate applies.		*A special premium rate applies between Christmas Eve 20:00h to St. Stephen's Day 08:00h and New Year's Eve 20:00h to New Year's Day 08:00h. During these periods Tariff C is applied immediately after the premium rate initial charge.		

2.3 Previous National Maximum Taxi Fare Reviews

The National Maximum Taxi Fare has been reviewed on a biennial basis since its establishment in 2006. The objective of each review has been to determine whether a fare revision was necessary based on movements in operating costs (measured through changes in the Taxi Cost Index) and the prevailing market conditions.

In 2008, following an observed increase of 8.3% in the TCI, an increase of 8.3% was applied to fare levels, together with the introduction of special premium rates during the Christmas period and New Year's Eve.

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 most recent review in 2012 recommended the application of a fare increase of around 4%, coupled with a simplification of the fare structure. The review proposed the removal of Tariff C and a reduction in the initial charge. These proposals were not implemented however, and therefore the National Maximum Taxi Fare remains unchanged since 2008.

3. Current market conditions

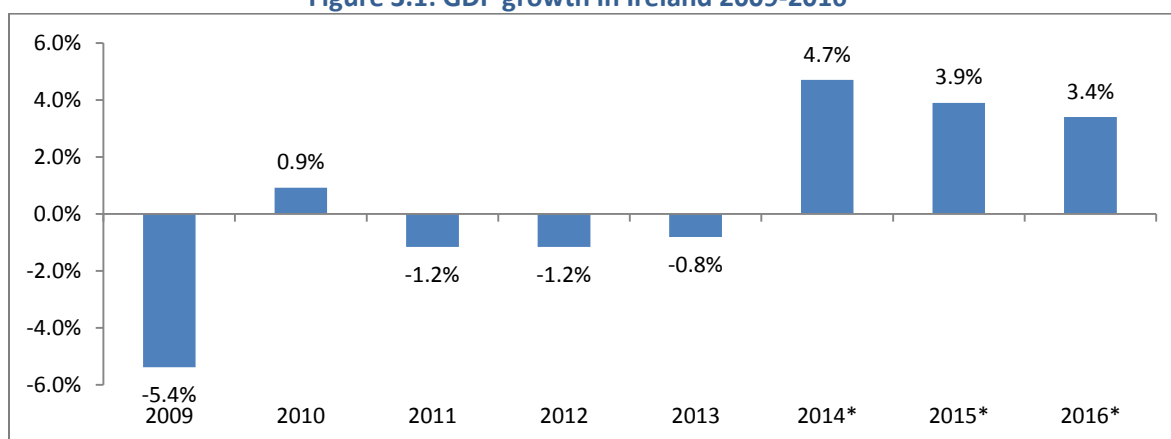
3.1 Introduction

This section of the report sets out the current demand conditions in the taxi industry. An understanding of these characteristics is essential for informed decision-making on policy issues. The section is structured as follows. A brief description of the current economic climate gives the context in which the taxi industry is operating. This is followed by a profile of the current market demand conditions which assesses the trends, characteristics and patterns of taxi demand. Subsequently, the aggregate supply of taxis is outlined with a breakdown of supply by region. Perceptions of value for money and the level of discounting are discussed.

3.2 Economic environment

Ireland's economy has entered a strong recovery phase following the combined effects of a worldwide economic downturn and an EU/IMF bailout agreement which contributed to huge adjustments in the national property and financial markets. Six years of government austerity and severe contractions in GDP followed the 2008 downturn, but the economy is now experiencing robust growth. While Ireland emerged from recession in the 2010/2011 period, as shown in Figure 3.1, meaningful and sustained growth and recovery have only taken hold this year and are expected to be maintained through to 2016.

Figure 3.1: GDP growth in Ireland 2009-2016*



Source: Central Statistics Office (CSO) and Department of Finance (Budget 2015)

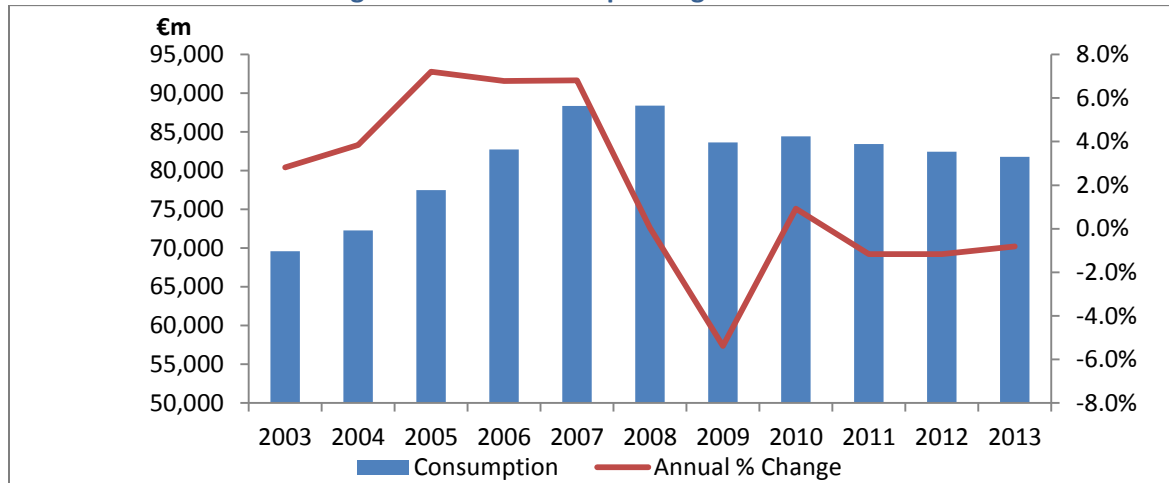
Note: forecasts indicated by *

The recession has also had lasting effects on welfare, as unemployment remains stubbornly high at 11.1%, albeit down from a peak in excess of 15% in early 2012. As depicted in Figure 3.2, this has had negative consequences for consumer spending which has declined in every year since 2008, with the minor exception of 2010.

Total disposable income remains around 16% below the Q4 2008 peak but experienced resurgence throughout 2013. It subsequently decreased by 4.8% in Q1 2014 from Q4 2013—bringing to an end a run of four consecutive quarterly increases— but has recovered significantly from the trough of late 2012 and early 2013. A large 27.4% quarterly drop in gross

savings³ was recorded in Q1 2014, along with a 0.7% decrease in consumption spending. Such disposable income levels will be crucial to expenditure rates by taxi industry customers over the coming years, particularly if growth resumes in this area. Budget 2015 has reduced taxation levels and further tax cuts are anticipated in subsequent Budgets. This will increase individuals' disposable incomes and provide a stimulus for the industry.

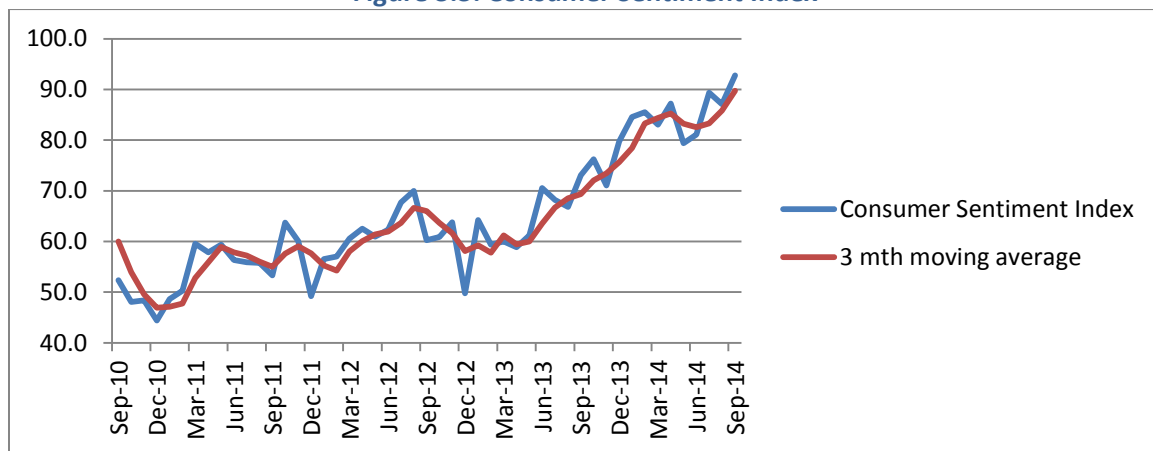
Figure 3.2: Consumer spending 2003-2013



Source: CSO

Despite such declines, Irish consumer sentiment has been on an upward trend over the past two years. The KBC/ESRI Consumer Sentiment Index increased to 92.8⁴ in September 2014, reaching its highest level since January 2007. This increase, shown in Figure 3.3, has been driven by improving expectations for the year ahead and better perceptions of the current economic environment.

Figure 3.3: Consumer Sentiment Index



Source: KBC/ESRI

³ Gross savings are the portion of individuals' disposable incomes which are not used for final consumption expenditure.

⁴ The Consumer Sentiment Index (CSI) is calculated by computing the relative scores (the percent giving favourable replies minus the percent giving unfavourable replies (the balance), plus 100) for each of five index questions which are based on how consumers view economic prospects over the next 12 months and on consumers' present situation.

In tandem, improving macroeconomic factors combined with stronger economic sentiment and increased disposable incomes could have positive consequences for the taxi industry in the coming years. As the industry is strongly influenced by social and recreational activities, increased employment, and consumer expenditure may create further demand for taxis as the economy continues to recover. However, the economic recovery in Ireland has varied by region with Dublin experiencing the strongest resurgence. Clearly this will act to further stimulate the industry in this key market, which accounts for over 60% of taxis.

3.3 Market demand

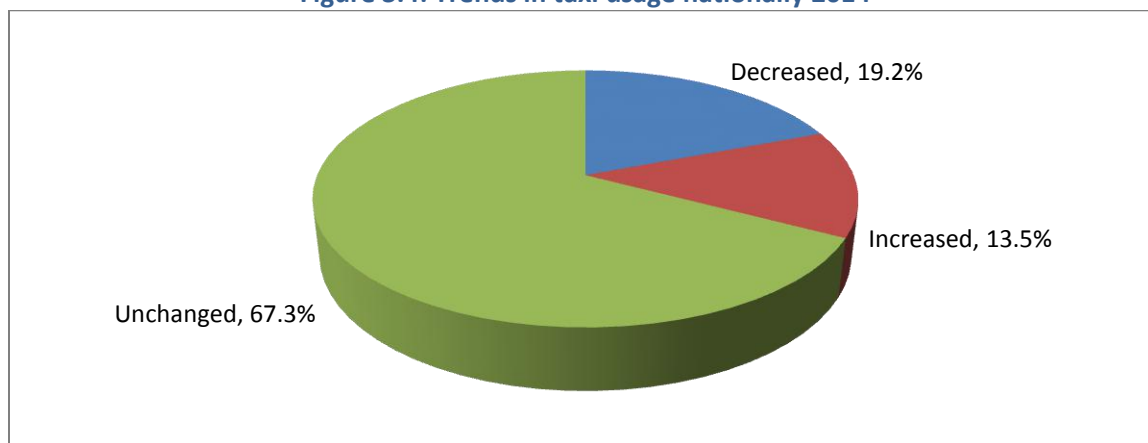
Trends in taxi usage

To inform the 2014 fare review, a national household survey was carried out across Ireland involving around 1,000 individuals. Overall, 38.9% of respondents reported having used a taxi in the last 6 months. Amongst these respondents, 30.4% use taxis once a week or more often. The majority of respondents (58.1%) use taxis between once a month and once every six months.

Trends in taxi usage over the past 12 months, as shown in Figure 3.4, indicate that almost a fifth of respondents have decreased their use of taxis while 13.5% have increased their taxi usage. The primary reasons adults surveyed gave for a reduction in taxi usage were that taxis are too expensive (26.4%) and that they were going out less often (20.6%). Some 18.4% of adults also cited less disposable income as a reason for their reduction in taxi use. Increases in taxi usage were largely driven by individuals in the 25-44 age categories, where between 25% and 27% of taxi customers reported increased usage for the main reasons of “other” (27.1%), going out more often (19.6%) and travelling/commuting more (18.3%).

By region, Dublin recorded the greatest decline in taxi usage with 22.8% of customers taking fewer taxis. Munster and the Rest of Leinster recorded the largest increases in usage, with 24.5% and 22.3% of taxi users reporting that they had taken a greater number of taxi journeys over the previous 12 months respectively.

Figure 3.4: Trends in taxi usage nationally 2014



Source: Taxi Fare Review 2014 – Household Survey

As depicted in Table 3.1, the proportion of users taking a taxi once a week or more often is 30.4%, up on 27.6% in 2012. The most intensive users of taxis are the under 35 age group, where over a third of taxi users take a trip once a week or more.

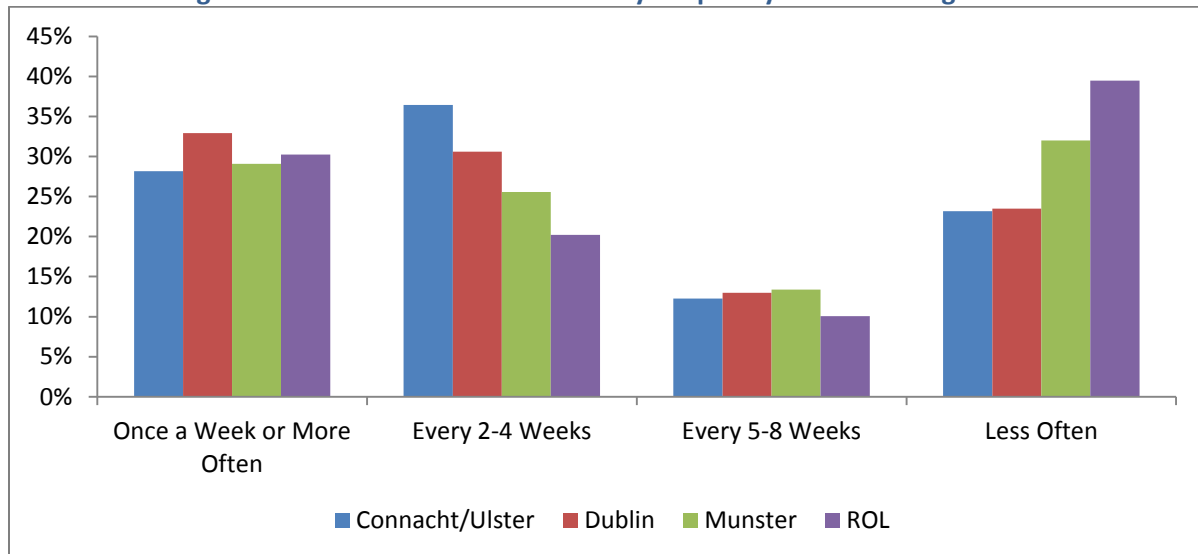
Table 3.1: Distribution of taxi users by frequency of use and age group

	Under 35 (%)	35 + (%)	All Taxi Users (%)
Once a Week or more often	36.5	25.5	30.4
Every 2/4 Weeks	26.4	27.1	26.8
Every 5/8 Weeks	13.4	11.2	12.2
Less often	23.7	36.1	30.6
Total	100.0	100.0	100.0

Source: Taxi Fare Review 2014 – Household Survey

On a regional basis, Dublin has the most frequent users of taxis where 32.9% of users take a taxi once a week or more often. This compares to 30.2% in the Rest of Leinster (ROL), 29.1% in Munster and 28.1% in the Connacht/Ulster area as shown in Figure 3.5.

Figure 3.5: Distribution of taxi users by frequency of use and region



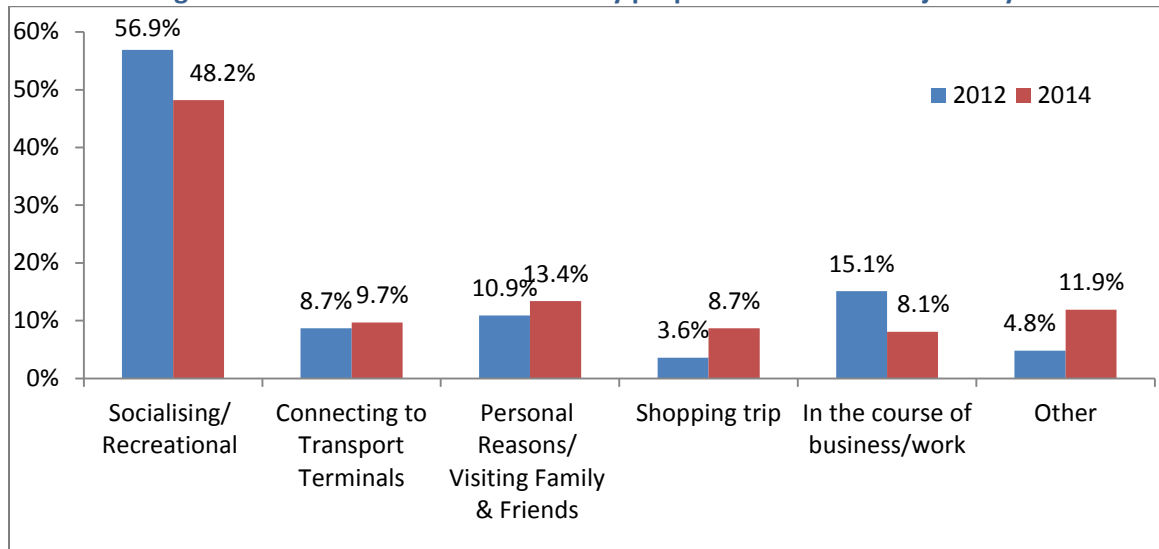
Source: Taxi Fare Review 2014 – Household Survey

Characteristics of taxi demand

Demand for taxi services is largely focused around social and recreational outings, as shown in Figure 3.6. This trend has been relatively stable over time, accounting for the majority of trips in 2008, 2010 and 2012, but it was the driving force behind a 8.7 percentage point decline in journeys in 2014 compared to 2012. There is evidence of increasing demand for taxi services relating to shopping trips, up 5 percentage points in 2014, while the proportion using taxis for

personal reasons and visiting family and friends has also increased. Finally, journeys taken for 'Other'⁵ reasons have increased substantially since 2012.

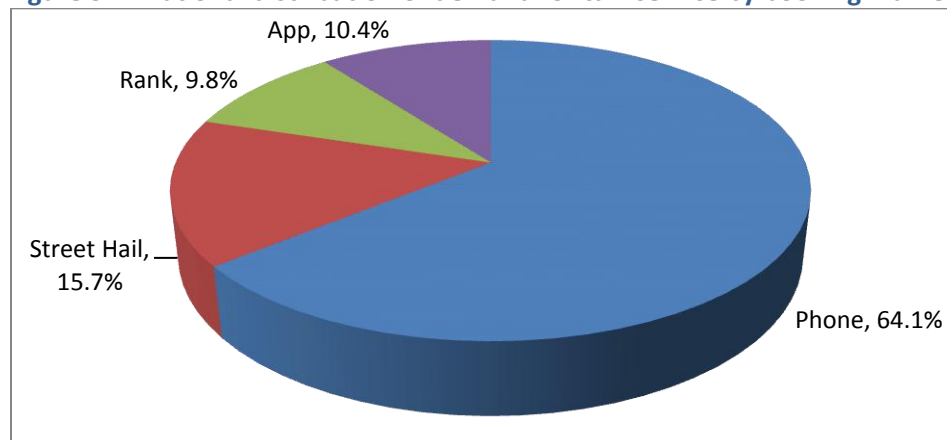
Figure 3.6: Distribution of taxi users by purpose of most recent journey



Source: Taxi Fare Review 2014 – Household Survey

Nationally, the demand for taxi services via telephone bookings is most common with 64.1% of trips arranged this way, as shown in Figure 3.7. Just under 16% of taxis are hailed on the street. Smartphone Apps for arranging taxi trips have had a substantial impact on people's behaviour since 2012 with 10.4% of all journeys now arranged via this method (compared to 0.8% in 2012). In Dublin, the street and phone markets share dominance with equal proportions of taxi users arranging their trips in these ways. In contrast the rank market is more common outside Dublin and accounted for over 10% of taxi journeys in each of the other three regions.

Figure 3.7: National distribution of demand for taxi service by booking markets



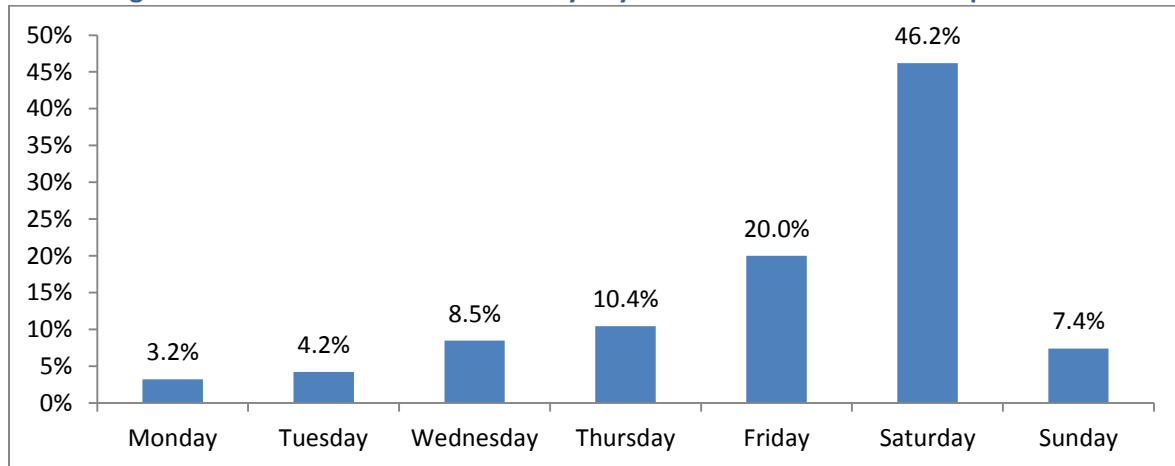
Source: Taxi Fare Review 2014 – Household Survey

⁵ 'Other' reasons include: Bad weather, preferences for taxis due to convenience/service provided, individuals having items delivered/collected

Demand patterns for taxi services

The demand for taxi services is clearly peaked around Friday and Saturday nights with two thirds of all trips taking place over these two days. This largely reflects the most common purpose for taxi use being social and recreational activities. Figure 3.8 illustrates these peaks in demand over the course of the week.

Figure 3.8: Distribution of taxi users by day of the week most recent trip taken

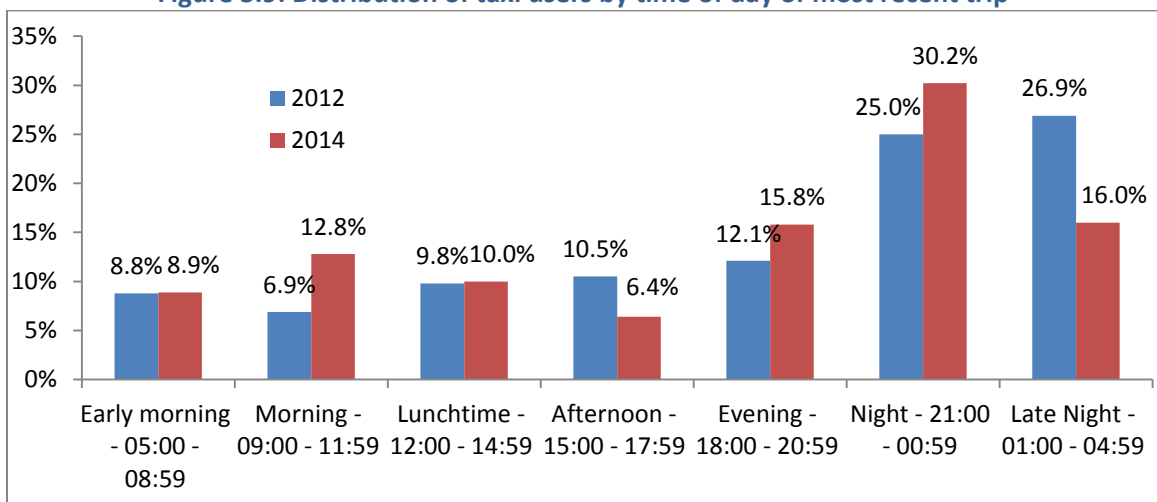


Source: *Taxi Fare Review 2014 – Household Survey*

As shown in Figure 3.9, the demand for taxis also displays peaks by time of day. Approximately 30% of taxi trips are undertaken between 9pm and 1am, while a further 15%, approximately, are undertaken between 6pm and 9pm, and equally between 1am and 5am. Once again these peaks in demand are in line with the most common purpose for taxi use being social and recreational outings.

These results indicate that the greatest concentration of taxi journeys remains in the evening and at night-time. In 2012 there had been a marked decline in the number of journeys undertaken at these times of day relative to 2010, but the 2014 data suggests that no further significant decline has ensued. The pattern of evening and night-time usage has changed though, with a greater proportion of journeys occurring between 6pm and 1am relative to 2012. Of significant note is the consumer-reported average distance travelled by taxis as the distance has fallen sharply from 10.3km in 2012 to 8.8km in 2014.

Figure 3.9: Distribution of taxi users by time of day of most recent trip



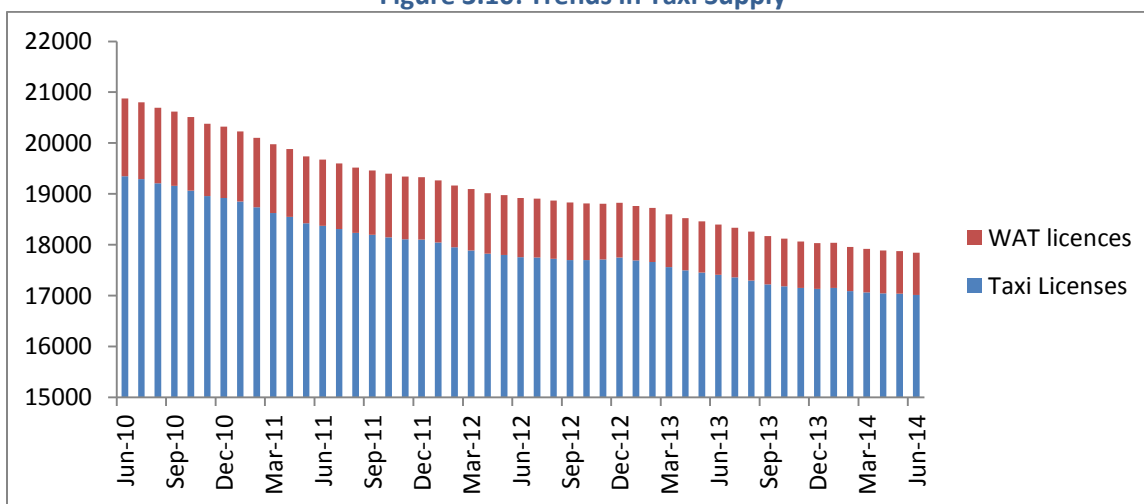
Source: Taxi Fare Review 2014 – Household Survey

3.4 Market supply

Aggregate Supply of taxi services

Since liberalisation of the taxi market in 2000, the number of taxis increased substantially and by the summer of 2009 had reached a peak of 21,213. From June 2008 to June 2014 there was a 15.9% decline in the number of taxi vehicles operating in the industry, as shown in Figure 3.10. This reflects the market adjustment to the changing economic conditions and associated fall in demand. Following the implementation in June 2010 of a policy of only issuing new licences for wheelchair accessible taxis and hackneys, there has been a 14.5% drop in active taxi vehicle licences. Taxi vehicle numbers currently stand at 17,844.

Figure 3.10: Trends in Taxi Supply

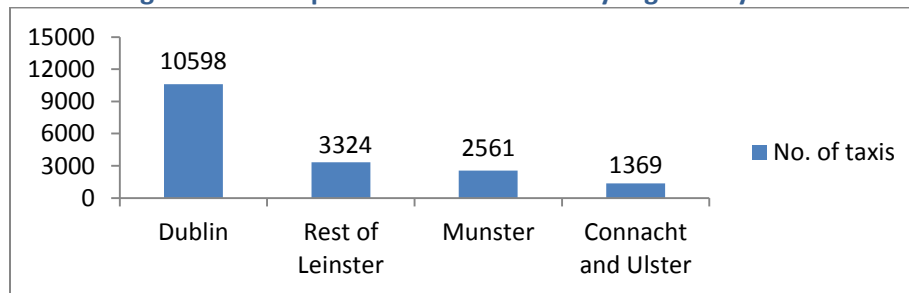


Source: Taxi Fare Review 2014 – NTA statistics

Regional breakdown of supply

On a regional basis, Dublin has approximately 10,600 active taxi vehicles in operation, representing 61% of the national supply. As shown in Figure 3.11, this compares to the Rest of Leinster which accounts for 18% of active taxis, Munster which accounts for 14% of active taxis and the Connacht/Ulster region which accounts for 7% of active taxis in Ireland. The regional breakdown has therefore remained largely unchanged since 2012.⁶

Figure 3.11: Proportion of active taxis by region July 2014



3.5 Market conditions at current fare structure

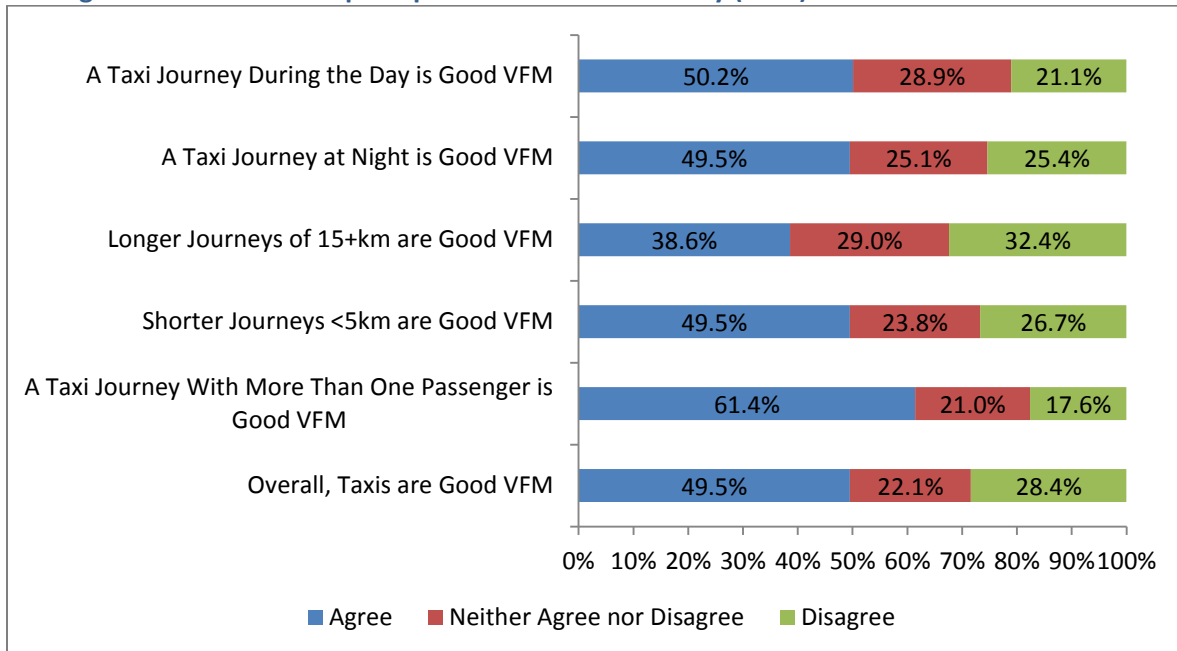
Perceptions of current fare structure and levels

The perception of value for money of the current taxi fare varied somewhat among taxi users. Figure 3.12 indicates the value for money perceived by customers of the current fare structure. Of respondents, 49.5% agreed that taxis are overall good value for money, 22.1% neither agreed nor disagreed and 28.4% disagreed. The proportion agreeing that taxis are good value for money increased considerably in relation to taxi journeys with more than one passenger (61.4%). In contrast, only 38.6% of respondents agreed that taxi usage for longer journeys (over 15 kilometres) represented good value for money.

There is a slight tendency for respondents from Connacht/Ulster and the Rest of Leinster to perceive greater value for money than respondents from Munster and Dublin. This may reflect the limited availability of alternative public transport outside of Dublin and the main cities. There is also a slight tendency for more frequent taxi users to consider taxis good value for money. However, this finding must be considered with caution as more frequent taxi users may be less concerned with the costs of taxi use.

⁶ In 2012, 58% of taxis operated from Dublin, 19% from the rest of Leinster, 15% from Munster and 8% from Connacht/Ulster

Figure 3.12: Consumer perceptions of value for money (VFM) in current fare structure

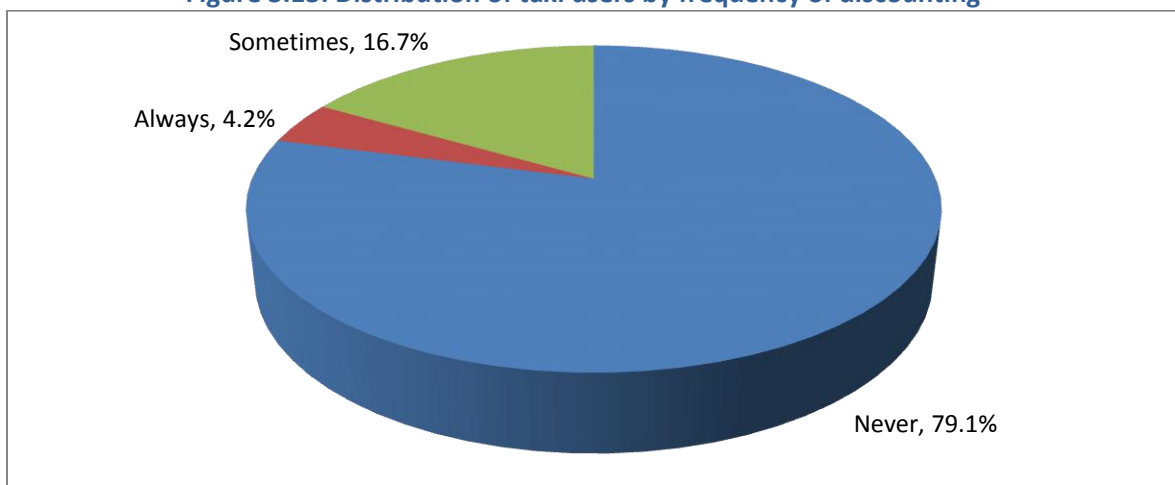


Source: Taxi Fare Review 2014 – Household Survey

Fare discounting in the market

The incidence of fare discounting in the market affects the perception of value for money. Of the respondents who use taxis, only 20.9% report having been offered a discount in the past 12 months. However, a possible explanation for this could be that customers may not be aware of receiving the discount, particularly if it relates to extra charges on the meter or simply that passengers are not offered a discount unless they ask for one. By region, Dublin had by far the highest incidence of discounting with 29.7% of taxi customers 'Always' or 'Sometimes' receiving discounted fares. Connacht/Ulster had the lowest corresponding figure (6.3%) of the regions. Rounding down (42.1% of discounts) was the most common form of discounted fare across the country, followed by percentage discounts (32%) and removal/reduction of the call- out fee (14.4%).

Figure 3.13: Distribution of taxi users by frequency of discounting



Source: *Taxi Fare Review 2014 – Household Survey*

3.6 Conclusions

Market Demand

Trends in taxi usage over the past 12 months indicate that almost a fifth of survey respondents have decreased their use of taxis while 13.5% have increased their taxi usage. The majority of those surveyed who have increased their use of taxis in the last 12 months are in the under- 55 year old age groups.

The primary reasons for a reduction in taxi usage given by adults surveyed were that taxis are too expensive (26.4%) and that they were going out less often (20.6%). The reasons for increased usage are associated with going out more often (19.6%), travelling/commuting more (18.3%), more disposable income (10.5%) and other reasons (27.1%)

Frequency of use has increased however, with 30.4% of survey respondents taking a taxi once a week or more often (up from 27.6% in 2012). Dublin had the highest frequency of journeys amongst taxi users.

Nationally, phone bookings remain the most common method of arranging a taxi journey while Smartphone apps have had a meaningful impact since 2012, with 10.4% of survey respondents now ordering taxis via this medium. The street trade in Dublin remains popular with 39.5% of trips being arranged by hailing a taxi on the street.

Demand for taxis peaks on Friday and Saturday nights. In addition, approximately 30% of taxi trips take place between the hours of 9pm and 1am, consistent with the finding that the majority of taxi trips are for social and recreational purposes.

Market Perceptions of Current Fare Structure

Overall, about half of taxi users consider current taxi fares to be good value for money, while 22.5% neither agreed or disagreed. This figure rose to 61% of consumers surveyed agreeing that taxi services are good value for money in relation to taxi journeys for more than one passenger

There is a slight tendency for respondents from Connacht/Ulster and the Rest of Leinster to perceive greater value for money than respondents from Munster and Dublin. In addition, more frequent taxi users consider taxis good value for money.

Only 21% of customers report having been offered a discount, suggesting a lack of awareness on the part of the consumer of discounting activity. Dublin had the highest incidence of fare discounting, while 'rounding down' was the most common form of discount across the country.

4. Taxi Cost Index

4.1 Background

The TCI is a quantitative tool used by the Authority to assess the change in the costs associated with operating a taxi vehicle. The primary purpose of the Index is to provide a standardised approach in assessing the need for a fare adjustment. At each two-year interval, the index has been used to determine the percentage change in operating costs, primarily through published price indices.

As such, the fare reviews between 2006 and 2012 have been based on an updating of the TCI which was derived in 2006. However, as stated in the 2006 fare review, “it is recommended that [...] more fundamental reviews of the fare structures and levels would take place from time to time”. The Authority has therefore decided that the 2014 Fare Review would incorporate a more fundamental appraisal of fare levels by rebasing the TCI i.e. through examining the costs directly rather than adjusting biennially for inflation.

Internationally, the costs included in Taxi Cost Indices are typically rebased on a periodic basis. When the TCI was first established in 2006, a periodic rebasing was anticipated; however, until now, no rebasing of the Index has taken place. Given that both driver behaviour and market conditions have changed significantly since 2006, coupled with the introduction of new regulations surrounding taxi vehicles standards, it was prudent to undertake a review of the cost components, assumptions and methodology used in the TCI until now.

A review of the TCI, undertaken on behalf of the Authority, recommended the following:

- Validation of the various cost components should be undertaken, as many costs had not been re-measured since 2005/2006 or since they were retrospectively calculated in 2008; and
- Some discretionary costs should be removed to allow for a simplification of the index.

These recommendations are adopted in the approach to calculating the 2014 Taxi Cost Index, as detailed in Section 4.3 below.

Arising from a 3.6% increase being determined as the appropriate increase in the 2012 review, but which was not ultimately implemented, the Authority has determined that the relevant base year for cost comparison purposes is 2010. As a result, Section 4.6 provides an analysis of the operating cost changes observed over the past four years in the taxi industry.

4.2 Index objectives and structure

Individual taxi drivers face unique and diverse operating costs, depending on their operating characteristics and the underlying market conditions. Therefore, the TCI does not seek to represent the absolute costs for any individual driver, but rather gain an estimate of costs facing the average driver, based on the following guiding principles:⁷

- 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 following industry leading practice; and
- The costs included in the Taxi Cost Index should consist of all running and fixed costs, and a labour cost component, with the costs being combined to achieve an overall indicative cost of taxi operation per annum.

4.3 Approach to calculating the Taxi Cost Index

Rebasing the Index

Given that many costs have not been re-measured since 2005/2006 or since they were retrospectively calculated in 2008, a review of the TCI methodology recommended that a full rebasing of costs is necessary for this fare review. In this regard, particular attention was given to those costs that are updated in line with price indices, including cleaning, spares and servicing, miscellaneous running costs and equipment replacement.

Prices for the individual cost components were sourced through industry research. Publicly available data provided the exact industry prices associated with vehicle and equipment maintenance, and these costs were extracted and analysed in order to construct a more current and representative TCI.

TCI Simplification

When compared against taxi cost indices in other jurisdictions, Ireland has a relatively detailed and comprehensive index. The number of cost components adds to the cost and complexity of both updating the index during biennial reviews and rebasing the index periodically. Furthermore, the top five cost components (by value) make up over 92% of the TCI⁸, meaning that the large number of remaining cost components represent a relatively small proportion of the index, and may not necessarily contribute to a material improvement in the utility or relevance of the TCI.

In order to simplify the TCI, while maintaining its status as a comprehensive tool for assessing the costs faced by the taxi industry, a number of discretionary costs have been removed from the index. The costs of satellite navigation equipment, business cards and receipt books have

⁷ National Maximum Taxi Fare Review 2012

⁸ The top 5 cost components of the 2014 TCI are labour (63.1%), Radio Rental (12%), Car finance (7.8%), fuel (5.1%) and insurance (4.7%)

been removed on this basis.⁹ The option of removing radio rental costs on this basis has been explored; however, given the impact of this cost in terms of driver expenditure (€4,628) and the significant proportion of drivers incurring such charges, this component has been retained in the index.

4.4 Key Assumptions

4.4.1 Activity levels

Activity levels are employed in the TCI 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 to represent 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.

Previous taxi fare reviews have calculated annual driver distance travelled based on drivers' self-reported distance travelled, with the data gathered through the medium of a driver survey. A driver survey was conducted as part of the 2014 Fare Review, and an estimate of average annual distance travelled of **62,052km** was calculated from the results.¹⁰

However, as part of a more fundamental review of the TCI, the Authority sought to identify an alternative means of estimating activity levels in order to estimate the range of running costs that face drivers with varying operating characteristics. To achieve this end, different methods for calculating activity levels were explored. Firstly, data was collected from taximeter shift reports. However, a robust sample of data could not be obtained due to low response. Instead, an estimate of activity levels was obtained from the Central Statistics Office (CSO). After adjusting for a two year time lag and drivers' personal mileage, the average annual distance travelled by taxi drivers (excluding personal/domestic use) was calculated to be **27,804km**. The detailed methodology and validation for this second activity level calculation is included in Appendix 1.

Both estimates of average annual distance travelled provide valuable information regarding the activity levels present in the industry. The estimate obtained from the driver survey approximates to the activity levels used in other countries.¹¹ However, the estimate obtained from the CSO is perhaps a closer reflection of the Irish industry as distances are relatively short by comparison with other jurisdictions and much of the demand for taxis occurs during a relatively short period associated with social activity at the weekend. Furthermore, this activity level more closely reflects the level calculated from the household survey results (21,171km).¹²

As a result, the Authority has decided to calculate the 2014 Taxi Cost Index based on both the estimates of activity level i.e. derived from CSO data and derived from driver survey data.

⁹ Given that drivers are subject to knowledge tests, satellite navigation equipment is a discretionary cost. Similarly, costs associated with business cards and receipt books (as opposed to receipt printer paper) are not mandatory for drivers

¹⁰ Initial results were calculated from the 2014 driver survey in October, representing a sample of 128 drivers. Final results from the driver survey are to be processed in November, which may have implications for the final determination

¹¹ Northern Ireland = 41,746km, Hamburg = 50,000km, Guildford (UK) = 54,717km, Norway = 59,520km

¹² The methodology employed in calculating this activity level is detailed in Appendix A

4.4.2 Labour Costs

Labour costs are included in the TCI because the value of drivers' time represents the main cost component in providing taxi services. In addition, the inclusion of labour costs should help to ensure that drivers' earnings track those of other workers in the economy.

From an economic perspective, the ideal labour cost component would involve the use of earnings in a comparable sector as this represents the opportunity cost for drivers of operating a taxi as opposed to taking up alternative employment.

The most appropriate approach is to use earnings from a comparable sector using CSO earnings data. The Earnings, Hours and Employment Costs Survey (EHECS) provides quarterly estimates of weekly earnings for three occupational categories, as shown in Table 4.1.

Table 4.1: EHECS weekly earnings estimates by employee type

EHECS occupational category (employee type)	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014Q1
Managers, professionals and associated professionals	€1,121.68	€1,149.49	€1,152.51	€1,170.03	€1,145.33
Clerical, sales and service employees	€474.31	€471.22	€467.56	€475.14	€470.12
Production, transport, craft and other manual workers	€537.03	€509.05	€485.39	€489.05	€477.20

According to the CSO definitions car, taxi and lorry drivers fall into the category of production, transport, craft and other manual workers. Therefore, we can estimate the opportunity cost of labour based on the quarterly earnings data for this category. Based on a 48-week working year, we can estimate an appropriate annual labour cost of €24,246. As this annualised figure provides an approximation of earnings in a truly comparable sector, it is a fair representation of labour costs for the purpose of the TCI.

4.4.3 Fuel type

Diesel is the most representative fuel type in the industry, as the driver survey results estimated that 74% of drivers operate diesel fuelled vehicles. As a result, diesel prices are used in the calculation of annual fuel costs.

4.4.4 Car models

The three most popular car models among taxi drivers are the Toyota Avensis (28%), Skoda Octavia (10%) and Ford Mondeo (7.8%). As above, each model is assumed to have a diesel engine, with the Avensis and Mondeo having a 2.0 litre capacity, and the Octavia 1.6 litre capacity. These three models are used in the calculation of vehicle finance and insurance costs. Vehicle maintenance (servicing, cleaning, spares, tyres) frequencies were informed by the manufacturer's recommendations, in line with industry best practice.

4.5 2014 Taxi Cost Index

The costs included in the Taxi Cost Index consist of running and fixed costs, and a labour cost component. Two separate TCIs are constructed according to the activity levels stated in Section 4.5.1.

Table 4.2: Running cost component descriptions

Index Component	Description
Fuel	Total cost of fuel used per annum
Servicing	Cost of major and minor services throughout the year
Cleaning	Cost of major valets and minor cleans throughout the year
Tyres	Cost of tyre replacements
Spares	Cost of spares required to keep car appropriately maintained
Miscellaneous Running Costs	This component is included to allow for a contingency for additional costs involved with operating a taxi

Table 4.3: Fixed costs component descriptions

Index Component	Description
Car Purchase and Finance	Annual cost of a car loan, net of resale value
Insurance	Cost of insuring a taxi
Radio/App Rental	Covers the cost of radio rental/app service from a dispatch operator/ taxi app provider
Equipment Replacement – regulatory requirements	Cost of meters, roof sign, printers, branding and necessary safety kit (fire extinguisher, first aid kit, safety triangle, vest and torch).
Taxi Vehicle Licence Renewal	Cost of renewing a taxi vehicle licence
Road Tax	Annual road 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	Cost of meter verification
Meter Calibration and Programming	Cost of meter calibration and programming
SPSV Drivers Licence	Cost of a taxi driver licence
National Drivers Licence	Cost of vehicle driver licence

Table 4.4: Labour costs component descriptions

Index Component	Description
Labour Costs	Estimate of driver earnings

The following sections detail the values attributed to each of these costs and the methodology used in order to achieve the final figures.

4.5.1 Running costs

The annual running costs refer to the day to day costs associated with operating a taxi. Running costs include the cost of fuel, servicing, cleaning, spares and tyres. A budget of €300 has been used to cover the miscellaneous costs associated with the provision of taxi services. Each of these cost components are determined based on driver activity levels, and therefore it is necessary to illustrate the running costs for both activity levels estimated in Section 4.5.1.

Table 4.5: Running costs

Index Component	Activity level	
	27,804km	62,052km
Fuel	€1,950	€4,352
Servicing	€498	€1,183
Cleaning	€698	€698
Tyres	€278	€621
Spares	€252	€563
Miscellaneous Running Costs	€300	€300
Total Running Costs	€3,977	€7,716

- **Fuel:** The cost of fuel was calculated based on three components:
 - annual distance travelled (see Section 4.4.1);
 - weighted average of the manufacturer stated fuel consumption rates for the three most popular car models¹³; and
 - the price of diesel as reported from the CSO¹⁴.

Fuel costs facing taxi drivers have decreased significantly since 2012. Diesel prices were notably high in 2012 due to strong demand from the BRIC economies¹⁵ and global conflicts affecting the supply of oil. Furthermore, the rate of fuel consumption has improved considerably since 2010 estimates. Fuel efficient vehicles now represent a majority of the taxi fleet. Applying manufacturers' fuel consumption data, the average fuel consumption rate is 4.8 litres per 100km.¹⁶

¹³ As stated in the owner manuals for the Toyota Avensis, Skoda Octavia and Ford Mondeo. This represents fuel consumption under ideal driving conditions and with ideal driving behaviour and will differ from actual fuel consumption experienced.

¹⁴ CSO – National Average Price (Euro) by Consumer Item and Month

¹⁵ Brazil, Russia, India and China

¹⁶ As stated in the owner manuals for the Toyota Avensis, Skoda Octavia and Ford Mondeo. This represents fuel consumption under ideal driving conditions and with ideal driving behaviour and will differ from actual fuel consumption experienced

- **Servicing:** In order to calculate the cost of servicing, costs were sourced from industry suppliers for the three most popular car models in the industry. Based on best practice industry standards and manufacturer guidelines, the assumption was made that a minor service is required every 10,000km and major service at every 20,000km driven.
- **Cleaning:** In line with previous fare reviews, it is assumed that taxi vehicles receive major valets twice per annum, and minor 'cleans' are undertaken twice weekly. The cost per major valet was found to be approximately €110 based on industry research. A cost of €5 is assumed for minor cleans.¹⁷
- **Tyres:** Estimates of average tyre life range between 32,000km (Department of the Environment, Community and Local Government) and 48,000km (the AA), with various other sources in between. It is assumed in the TCI that tyres are replaced every 36,000km, which approximates to the replacement rate used in previous reviews and the average of the frequencies researched in 2014. The cost of tyres was estimated based on industry research and using the three most popular car models.
- **Spares:** Research conducted regarding the cost and frequency of replacing spare vehicle parts found that approximately €900 is spent on spare parts every 100,000 km (or €1,750 every 120,000 miles). The prices included in this category involve the cost of replacing batteries, windscreen wipers, shock absorbers, brake pads and discs.
- **Miscellaneous running costs:** Historically, the Taxi Cost Index has included a miscellaneous cost component in recognition of the potential additional expenses faced by taxi drivers. Such a cost component is deemed to be particularly relevant in the 2014 TCI, given that a number of discretionary cost items have been removed. By allowing €300 for miscellaneous expenses, a level of flexibility and contingency is afforded to the index to cover such costs.

4.5.2 Fixed costs

Annual fixed costs refer to the costs faced by the industry which are independent of activity levels. Fixed costs include expenditure on radio rental, airport charges and items required under legislation such as driver licenses, road tax and insurance. The full breakdown of fixed costs for 2014 is provided in Table 4.6 below.

¹⁷The majority of drivers carry out their own car cleaning/washing. Approximately 60% of drivers have put their car through a car wash in the last year, at an average cost of around €7. Accounting for both observations, a pro-rata figure of €5 estimated.

Table 4.6: Fixed costs

Index Component	2014 Cost
Car Purchase and Finance	€3,014
Insurance	€1,817
Radio/App Rental	€4,628
Equipment Replacement – regulatory requirements	€298
Taxi Vehicle Licence Renewal	€125
Road Tax	€95
Airport Charges	€35
National Car Test (NCT)	€66
Meter Verification	€43
Meter Calibration and Programming	€45
SPSV Drivers Licence	€50
National Drivers Licence	€5.50
Total Fixed Costs	€10,221

- Car Purchase and Finance:** The cost of vehicle financing is calculated based on the weighted price of a 5 year term loan for the three most popular car models in the industry: Toyota Avensis, Skoda Octavia and Ford Mondeo. It is assumed under best practice principles that the average vehicle age is 3 years. The current value of each 3 year old model has been sourced from Motor Trade Publishers¹⁸, while the resale value is determined based on prices for 8 year old models. The finance costs are calculated using average rates, drawn from a sample of major lenders.
- Insurance:** A survey of insurance costs using the details of a representative driver resulted in an average insurance cost of €1,817. This calculation was based on the weighted average insurance prices for the three most popular car models.
- Radio/App Rental:** As a significant proportion of the taxi industry incurs radio rental or dispatch application costs, this cost component has been included in the 2014 index. The figure of €4,628 represents the average radio rental costs from the 2014 driver survey results, which identified that the average cost of is approximately €89 per week.¹⁹
- Equipment replacement – regulatory requirements:** This cost component represents a range of equipment which is required by taxi operators under current regulations. These include:

¹⁸ <http://www.mtp.ie>

¹⁹ The costs of affiliation to a taxi app provider have not been calculated, and instead the radio rental cost item seeks to cover the cost for affiliation to dispatch operators and app providers.

- Taxi meter;
- Printer;
- Roof sign;
- Branding;
- Safety kit (fire extinguisher, first aid kit, triangle, vest, torch); and
- Window fitting: The cost of removing tinted windows was determined for each of the three most popular car models.

A replacement cycle of 5 years is assumed for taxi vehicles and equipment, which has been validated by the driver survey results.

- **Airport Charges:** The cost of airport permits for taxis is calculated based on the proportion of drivers within the industry incurring the charge. Approximately 8.5% of taxi and WAT drivers hold airport permits, at an average cost of €421²⁰.
- **National Car Test (NCT):** NCT costs take account of the proportion of vehicles over 10 years of age which require two tests per annum.
- **Meter Calibration & Programming:** Based on consultation with industry sources, it has been determined that the cost of meter reprogramming is €90 every two years.
- **Other costs:** The cost of meter verification, road tax, and driver licenses have been sourced from publicly available data.

4.5.3 Labour costs

Labour costs represent the main cost component in providing taxi services. The determined value for labour costs in 2014 is shown in Table 4.7.

Table 4.7: Labour costs

Index Component	2014 costs
Labour Costs	€24,246

As described in Section 4.4.2 above, labour costs have been determined based on CSO average weekly earnings data for production, transport, craft and other manual workers outside of the agriculture industry.

²⁰ Approximately 47% of permit holders pay an annual fee of €400, while 53% pay €110 per quarter.

4.5.4 Total costs

The total costs of the TCI consist of the running, fixed and labour costs set out in the sections above. As the running costs are determined by driver activity levels, it is therefore necessary to present the TCI for both activity levels estimated in Section 4.5.1, as shown in Table 4.8

Table 4.8: 2014 Taxi Cost Index

Index Component	Activity level	
	27,804km	62,052km
Running Costs	€3,977	€7,716
Fixed Costs	€10,278	€10,221
Labour Costs	€24,246	€24,246
Total Costs	€38,501	€42,184

4.6 Cost changes

In previous fare reviews, the biennial change in taxi operating costs could be calculated by directly comparing the TCI results with those obtained two years earlier. However, given that the 2014 Fare Review comprises a rebasing of costs, methodology and assumptions, it is not appropriate to compare the results with the TCIs calculated in 2012 and 2010.

Instead, it is necessary to construct a comparable Taxi Cost Index for these years, using the methodology and assumptions employed in this year's review. A pro-rata adjustment has been made for activity levels. Similarly, labour costs are sourced from the CSO EHECS data, as per the 2014 methodology (note that this was not available for 2006).

The detailed results from comparing the 2014 TCI with the adjusted indices for 2010 and 2012 are shown in the Appendix 2. A summary is provided in Table 4.9 below.

Table 4.9: Adjusted TCI changes, 2010 - 2014

Index Component	Activity level and year					
	27,804km			62,052km		
	2010	2012	2014	2010	2012	2014
Running Costs	€3,816	€4,222	€3,977	€7,135	€8,079	€7,716
Fixed Costs	€9,478	€9,961	€10,221	€9,478	€9,961	€10,221
Labour Costs	€24,847	€25,712	€24,246	€24,847	€25,712	€24,246
Total Costs	€38,142	€39,895	€38,444	€41,460	€43,752	€42,184

This analysis shows that since 2010, costs have increased by an estimated 0.8% - 1.7%, which suggests that a fare increase is warranted. This increase is validated by observed movements in the Consumer Price Index (CPI) over this period, which show a price increase of 4.7% for all items.²¹

4.7 Summary

To conclude, the Taxi Cost Index, one of the factors used to establish whether an amendment to taxi fare levels is justified, has increased since 2010. The extent of the increase depends on the level of industry activity assumed. Assuming an activity level of 27,804km, based on CSO data, the increase is 0.8%. Assuming an activity level of 62,520km, based on a taxi driver survey, the increase is 1.7%.

Accordingly the increase in the Taxi Cost Index is between 0.8% and 1.7% (dependent on the activity level assumed) over the period 2010 to 2014. CPI movement over the period was 4.7%. Given the additional objective of simplifying the fare structure, including the potential removal of Tariff C, it is considered that an increase of approximately 4% is an appropriate adjustment to compensate for both the change in the Taxi Cost Index and the alterations to the fare structure.

²¹ CSO Consumer Price Index, September 2010 – September 2014

5. Reform of the fare structure

5.1 Objectives

One of the Authority's objectives is to simplify the current structure of the National Maximum Taxi Fare. A simpler fares structure would make it easier for customers to estimate the cost of their journey. This might encourage more people to use taxis.

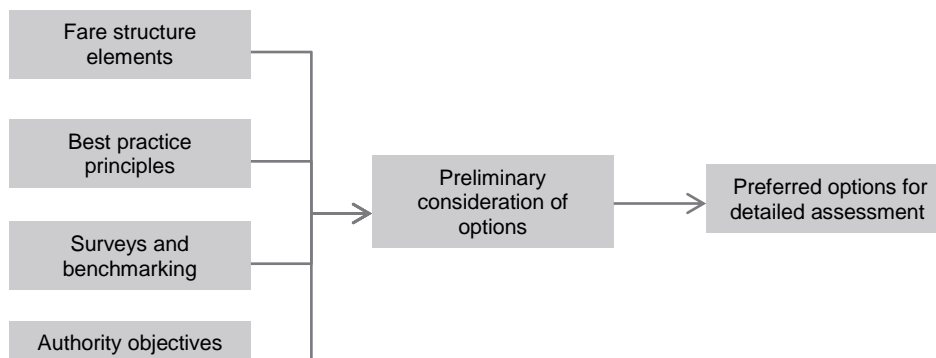
There are two types of simplification options:

- Removal or modification of some of the fare elements i.e. the initial charge, the mileage tariffs, night-time premium and/or the extras; and
- Rationalisation of the pricing itself e.g. standardising the relationships between the mileage tariffs or standard and night-time rates and/or rounding the initial charges and subsequent rates in line with increments of 20 cents²².

5.2 Consideration of options for each of the fare elements

The fare elements comprise the initial charge, the mileage tariffs, night-time premium and the extras. In determining potential fare structure adjustments the approach set out in Figure 6.1 was followed. This ensured each element of the current fare structure was considered for improvement in line with best practice principles, the issues arising from the surveys and the Authority's objectives.

Figure 6.1: Approach to developing list of preferred options



The best practice principles which were taken into account are as follows:

- Consumer protection: Minimise the potential for customers to be overcharged;
- Familiarity: Regular taxi users in Ireland, as well as those from abroad, will generally expect that the rate card follows conventions known to them;

²² As the meter increments fares by 20 cents, this would mean that fares would always be a multiple of 20 cents, reducing the current problems both drivers and customers face regarding coinage.

- **Transparency:** The fare should be understandable. If the rate card itself has a complexity then at a minimum the presentation to customers should be simplified;
- **Equity and consistency:** The structure should recognise that passengers will be willing to pay different amounts for journeys of different duration and at different times of the day, but unreasonably high pricing for any particular category of journeys (e.g. long journeys) must be avoided;
- **Cost recovery:** The fare should allow the costs of taxi operation to be recovered. The overall impact on driver earnings should be neutral or positive;
- **Programmability:** The key control of the maximum fare lies in having as many, if not all elements of the fare card programmed within the meter. This greatly improves the ability to enforce the maximum fare; and
- **Market sensitivity:** The tariff should incentivise both taxi supply and taxi demand for certain journeys (e.g. urban and rural) and at certain times (night and day).

Additionally, changes should be practical, readily programmable and not prejudice continuous improvement in future.

5.3 Standard / premium rate

The current relationship between the standard and premium fare is inconsistent, as shown in Table 5.1 below. There may be a benefit in making the premium fare a consistent multiple of the standard fare, as it would make it easier for customers to estimate fare costs and also offer scope to simplify the presentation of the fares on the fare card.

Table 5.1 Relationship between standard and premium rates

	Initial	Tariff A	Tariff B	Tariff C
Standard rate	4.10	1.03	1.35	1.77
Premium rate	4.45	1.35	1.57	1.77
Increase	9%	31%	16%	0%

A further simplification would be to round the initial fare to a multiple of 20 cents. As the meter increments fares by 20 cents, this would mean that fares would always be a multiple of 20 cents, reducing the current problems both drivers and customers face regarding coinage. The 2012 Fare Review proposed a standardisation of the premium uplift, and the rationale behind this still applies.

Proposal for Premium/Standard Rate

Retain the premium fare but consider adjustments to price differential to standardise the premium uplift.

5.4 Initial charge

The initial fare of €4.10 at the standard rate includes an allowance for 1km or 170 seconds. A benchmarking analysis undertaken in 2012 showed that the initial fare is relatively high compared with international practice, where the distance or time allowance included within the

initial charge is generally smaller. Reducing the initial charge element by way of reducing the mileage/time element, would have the following potential benefits:

- It would bring the structure more in line with practice elsewhere and consequently be more familiar for international and local users²³;
- It would improve consumer protection by reducing the opportunity for drivers to overcharge through early engagement of the meter²⁴ e.g. in a queue at the airport or a railway station; and
- It would clearly show the initial charge as a separate component of the fare that is not to be confused with any significant time or distance charge.

In accordance with best practice a small distance and time element would continue to be associated with the initial charge to ensure that the meter does not immediately begin to increment once the meter is engaged.

A disadvantage of reducing the initial charge is that it effectively reduces the minimum fare. As a result, there may be a need to compensate drivers for the increased opportunity cost from accepting shorter journeys.

The Taxi Fare Reviews in 2010 and 2012 recommended that the reduction of the initial charge be considered.

Proposal for initial charge

A reduction in the initial charge by reducing the distance and time element should be considered.

5.5 Tariffs

An increasing graduated fare applies where the rate increases above 15 km or 42 minutes and increases again above 30km. The rationale is to provide an incentive for taxi drivers to operate in rural areas where, compared with the urban areas, the distances are longer and the opportunities for a return fare are fewer.

A number of options exist for adjusting the tariffs and include:

- Remove Tariff C:
 - Benefit: it is rarely used and adds an unnecessary level of complexity. Less than 2.8% of trips are over 20km²⁵ although possibly the proportion of trips greater than 85 minutes in duration is higher;

²³ International benchmarking undertaken by the Authority in 2012 showed that lowering the initial charge (and the distance & time rate included) would bring fares more in line with other jurisdictions

²⁴ A generous allowance within the initial charge carries with it a greater risk of overcharging by drivers without their having to manipulate the meter calibration: drivers queuing in situations where they can easily anticipate the time of boarding of the next passenger (e.g. passenger queues at taxi ranks at airports and rail stations) can activate the meter in advance, thus ensuring that once a passenger boards within the next few minutes most of time allowance of the Initial Charge will have expired. The passenger thus pays more for a journey than should have been the case

²⁵ Taxi Fare Review 2014 – Household Survey

- Disadvantage: it may reduce the incentive to operate very long journeys, but these are usually booked and the fare negotiated in advance;
- Remove Tariffs B and C, so that the same rate applies regardless of distance / time:
 - Rationale: to provide greater simplicity and to remove any bias towards rural customers when the majority of customers are urban.
 - Disadvantages:
 - Reduction in driver earnings, unless the rate for short distances was to be increased;
 - Surveys indicate that customers believe that taxis are better value for money over longer distances than short, so it is better to keep the increasing graduated fare than to move to a higher flat rate; and
 - Drivers require some incentive to operate in the rural areas where distances are longer and the likelihood of a return trip is smaller.
- Remove Tariff C and reduce Tariff B relative to Tariff A to introduce a decreasing graduated fare:
 - Rationale: Most customers are in urban areas where the driver is likely to gain a return pick up; and
 - Disadvantages: As for the options to remove Tariffs B and C above.

The Taxi Fare Review 2010 recommended that the removal of Tariff C be considered. The Taxi Fare Review 2012 examined the above options and concluded that Tariff C should be removed.

Relationships between tariffs

As shown in Table 5.2, at the standard rate, each change in tariff increases the rate by over 30%. On the premium rate, when the majority of trips are made, the tariffs increase the rate by 16% (moving from A to B).

Table 5.2 Relationship between tariffs

	Initial charge	Tariff A	Tariff B	Increase	Tariff C	Increase
Standard rate	€4.10	€1.03	€1.35	31%	€1.77	31%
Premium rate	€4.45	€1.35	€1.57	16%	€1.77	13%

A standardisation of the uplift for Tariff B to 25% across both the standard and premium rates would simplify the structure.

Proposal for tariff structure

Remove Tariff C and consider a standardisation of the Tariff B uplift to 25% for both the standard and premium rate.

5.6 Extras

Preliminary options

When the National Maximum Taxi Fare was introduced in 2006, great effort was made to reduce the number of extras. As a result it is not proposed to consider introducing or re-introducing any

more extras. Currently, the only extras charged are a booking fee of €2 and an additional passenger fee of €1.

The booking fee is intended to cover the cost of driving the taxi to the required location. It also rewards the dispatch company for providing the service and encourages the taxi drivers to invest in radio equipment/smartphone app and align with a dispatch company. Driver alignment with dispatch operators is seen as desirable by the Authority as it improves accountability and passenger security. Furthermore it improves efficiency and reduces the tendency for drivers to cruise for passengers with consequent benefits for reductions in traffic congestion and greenhouse gas emissions.

The additional passenger fee is justified on the basis that multiple passenger journeys typically involve adult passengers that are sharing the cost of the journey. The household survey supports this justification. More passengers agreed that a taxi journey with more than one passenger is good value for money despite the additional charge (61.4% compared with 49.5% for a single person journey).

The reasoning behind both of the extra charges is sound; however, the Authority is concerned that the extras are open to abuse by drivers and report this as a recurring customer complaint. To reduce the potential for abuse, options to limit the extras charges were considered.

A reduction in the €2 booking charge was considered but it was concluded that this may impact on dispatch companies' operating models and may discourage drivers from aligning with dispatch companies. This would be a retrograde step given the many policy benefits that arise from taxis being pre-booked. Results from the driver survey show that 65% of drivers are not aligned with dispatch companies, so more progress is needed which would be made more difficult if the booking charge were reduced.

In rural areas, there is an argument that the €2 charge is too low to incentivise call out, and consideration should be made to increasing it. In practice, this would risk adding an extra complication to the fare card for a relatively small number of customers who may in any case negotiate a fare in advance with the taxi driver or dispatch operator and could generate further abuse.

Limiting passenger extras was also considered and rejected as an option. It was concluded that limiting the charge will have little or no effect on drivers of standard saloon cars and a disproportionate effect on drivers of larger vehicles which are often wheel chair accessible. Unintended adverse consequences would arise from penalising these drivers which serve specific markets and social needs. Instead it is suggested that the existing charges for additional adult and child passengers are retained. Given that most saloon taxis are limited to four adult passengers, this limits the 'additional passenger charge' to €3 in such cases. In the case of the larger taxi vehicles, the limit of 8 passengers in such vehicles effectively caps the additional passenger charge at €7.

Proposal for extras

No changes are proposed.

5.7 Fares increase

It is proposed that a fares increase is considered, in order to compensate drivers for the following:

- An increase in operating costs of up to 1.7% since 2010, as evidenced by the Taxi Cost Index; and
- The potential revenue loss associated with journeys over 30km and under 1km arising from a removal of Tariff C and a reduction in the initial charge respectively.

Accordingly, having regard to the TCI change of 1.7% and the CPI change of 4.7% over the same period, it is proposed to increase fares by approximately 4% to compensate drivers for the increased costs and the fare structure changes. Therefore a total fares increase of 4% is recommended for the fares review.

5.8 Christmas rate

During the Christmas period, fares are charged at the Tariff C rate immediately after the premium initial charge. With the potential abolition of Tariff C, an alternative arrangement for the Christmas period needs to be devised. In doing this, the Authority would like to take the opportunity for the Christmas premium to be addressed in a more transparent and simple manner, while still compensating drivers adequately.

Currently a special Christmas fare rate sits in the meter and can only be accessed for a few days of the year. For those few days the extras button could be raised to cover the call out charge or an alternative solution would be to increase the initial charge for those days. A special rate could also continue to be applied.

For simplicity of understanding and communication, it is proposed to avoid introducing new elements to the fare card and to consider the following adjustments:

- Apply the premium initial charge;
- Increase the Tariff A premium rate by a standard 25%; and
- Increase the Tariff B premium rate by a standard 25%.

As is currently the case, the Christmas rate would apply from 8pm on Christmas Eve to 8am on St. Stephen's Day and 8pm on New Year's Eve to 8am on New Year's Day.

6. Assessment of proposals

6.1 Summary of potential adjustments for assessment

Arising from the assessment explained in Section 5, the following four fare structure adjustments were taken forward for detailed development and assessment in establishing a preferred option for a proposed new fare:

- Remove Tariff C;
- Remove Tariff C and lower the initial charge;
- Remove Tariff C, lower the initial charge and apply around 4% fare increase; and
- Remove Tariff C, lower the initial charge, apply around 4% fare increase and standardise the premium uplift.

Each adjustment represents a further simplification on the current fare structure and is set out in detail in Section 6.2 below.

The proposed changes to the Christmas fare follow on from the above proposals as follows:

- Apply the premium initial charge;
- Increase the Tariff A premium rate by a standard 25%; and
- Increase the Tariff B premium rate by a standard 25%.

6.2 Fare structure adjustments

Option A - Removal of Tariff C

The removal of Tariff C allows a relatively straightforward simplification of the current graduated fare structure and was recommended in the 2010 Fare Review as a positive potential change to the current fare structure.

An analysis of the 2012 household survey reveals that the vast majority of taxi journeys are charged on a combination of Tariffs A and B. According to the 2014 household survey, only 2.8% of journeys are over 20km in distance. Therefore, we can expect that even less are charged on the Tariff C rate (>30km).

The effect of the removal of Tariff C can be counteracted through a minor increase to the Tariff B rates. The overall impact of this adjustment on the market is minor given that relatively few journeys are undertaken on Tariff C along with the tendency to pre-agree a fixed fare in advance of such journeys. Removing Tariff C would result in a fare structure as set out in Table 6.1.

Table 6.1: Fare structure for Option A - removal of Tariff C

	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)
Initial Charge	€4.10	€4.45
Distance Allowance (m)	1000	1000
Time Allowance (secs)	170	170
Tariff A	€1.03 per km €0.36 per min	€1.35 per km €0.48 per min
Tariff B	€1.35 per km €0.48 per min	€1.57 per km €0.55 per min
Extras		
Passengers	€1.00	€1.00
Booking Fee	€2.00	€2.00

Option B - Removal of Tariff C and reduce initial charge

The removal of Tariff C coupled with a reduction in the initial charge may alleviate some of the negative perception of value for money associated with taxi fares. According to the 2012 household survey approximately 81% of respondents stated they would use taxis more often if there was a reduction in the initial charge. The 2014 household survey found that just under half of respondents (49.5%) believe that short journeys are good value for money. In addition, a reduction in the initial charge may be perceived by consumers as a rebalancing that reduces the cost of engaging a taxi service and weights the cost towards the distance covered. This may also increase the perception of value for money.

A largely fare-neutral reduction in the initial charge can be achieved by adjusting the time and distance allowances within the initial charge. The current standard rate initial charge is set at €4.10 and incorporates 1,000 metres. This is equivalent to an initial charge of €3.07 plus 1km at Tariff A (€1.03 /km). Adjusting the distance allowances allows an equivalent initial charge of €3.59 including 500 metres. Likewise, the current Premium Rate initial charge is set at €4.45 and incorporates 1,000 metres. This is equivalent to an initial charge of €3.10 plus 1km at Tariff A (€1.35 /km). Adjusting the distance allowances allows an equivalent initial charge of €3.78 including 500 metres. In order to simplify the fare structure further and limit the need for drivers to carry large amounts of coinage, the initial charges would need to be rounded up slightly to €3.60 and €3.80 as set out in Table 6.2. This rounding ensures that fares will also end in a 20 cent increment.

Table 6.2: Fare structure for Option B - removal of Tariff C & reduce initial charge

	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)
Initial Charge	€3.60	€3.80
Distance Allowance (m)	500	500
Time Allowance (secs)	85	85
Tariff A	€1.03 per km €0.36 per min	€1.35 per km €0.48 per min
Tariff B	€1.35 per km €0.48 per min	€1.57 per km €0.55 per min
Extras		
Passengers	€1.00	€1.00
Booking Fee	€2.00	€2.00

Option C - Remove Tariff C, lower the Initial charge and apply around 4% fare increase

Section 4 deals with the TCI, outlining the costs of operating a taxi vehicle and how these have changed over the past number of years. The TCI reveals that overall costs of operating in the industry have increased by between 0.8% and 1.7% since 2010. At the same time, a fares increase equivalent to 1.8% is proposed by the Authority in order to compensate for the proposed simplification measures above. On the basis of these two elements, a proposed fare increase of around 4% is proposed for the taxi industry.

The simplest way of applying the fare increase is to adjust the initial charge and tariff rates by 4%. According to the 2012 household survey, a higher proportion of consumers perceive taxis as good value for money over long distances and at night compared to short journeys and during the day. However, the 2014 household survey suggests that shorter journeys are perceived as better value, with a minimal difference in value for money perceptions across day-time and night-time fares.

In order to ensure that cost increases are implemented where they can best be borne, rather than increasing the initial charge for the Standard rate, the increase is distributed across Tariff A. Given that customers historically perceive night-time fares as better value for money than day time fares and are likely to be less price sensitive, the 4% increase is applied across both the Premium initial charge and tariffs.

Additionally, to ensure that fares are simplified and that fares end in 20 cent increments, the premium rate initial charge is rounded to €4.00. The fare structure arising from these adjustments are set out in Table 6.3. The analysis was based on 2012 usage patterns, as observed in the 2012 household surveys.

Table 6.3: Fare structure for Option C - removal of Tariff C, reduce initial charge and around 4% fare increase

	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)
Initial Charge	€40	€4.00
Distance Allowance (m)	500	500
Time Allowance (secs)	85	85
Tariff A	€1.09 per km €0.39 per min	€1.40 per km €0.49 per min
Tariff B	€1.40 per km €0.49 per min	€1.63 per km €0.58 per min
Extras		
Passengers	€1.00	€1.00
Booking Fee	€2.00	€2.00

Option D - Remove Tariff C; lower the initial charge, apply around 4% fare increase and standardise premium uplift

While each of the fare adjustments documented above simplify the fare structure, there remains a lack of uniformity in the differential between Standard and Premium tariffs. The current fare structure has a premium uplift of 31% for Tariff A (€1.03 to €1.35) and a 16% premium uplift for Tariff B (€1.35 to €1.57). A standardised uplift of approximately 25% on Tariffs A and B whilst rounding the tariffs to the nearest five cent would simplify the fare structure further and allow consumers to more readily calculate fares. The proposed fare structure which incorporates this uplift is set out in Table 6.4.

Table 6.4: Fare structure for Option D - removal of Tariff C, lower the initial charge, apply around 4% fare increase and standardise premium uplift

	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)
Initial Charge	€3.60	€4.00
Distance Allowance (m)	500	500
Time Allowance (secs)	85	85
Tariff A	€1.10 per km €0.39 per min	€1.40 per km €0.49 per min
Tariff B	€1.40 per km €0.49 per min	€1.75 per km €0.62 per min
Extras		
Passengers	€1.00	€1.00
Booking Fee	€2.00	€2.00

6.3 Preferred option

Each of the proposed fare adjustments allow for additional simplification of the fares structure. However, each proposal needs to be assessed against best practice principles in setting fares, in order to determine a preferred option. The wider impact of this preferred option also needs to be evaluated. As documented previously, the best practice principles which need to be taken into account when setting fare structures are:

- Consumer protection;

- Familiarity;
- Transparency;
- Equity and consistency;
- Cost recovery;
- Programmability; and
- Market sensitivity.

These best practices form a set of criteria against which the various adjustments can be appraised. Each principle is scored on a seven-point scale for each adjustment proposed, which in turn allows the options to be compared with each other.

The appraisal of the adjustments is summarised below and in the summary Table 6.5.

Consumer protection – Each of the adjustments that incorporate a reduction in the initial charge reduce the potential for consumers to be overcharged by early engagement of the meter.

Familiarity – Each of the proposed adjustments are not dissimilar to the structure that is currently in operation, in that each has two initial charges and now has two tariffs for mileage thereafter. Furthermore, the graduated fare structure has been maintained in each of the proposed adjustments, as have the extras which may be applicable to journeys.

Transparency – The presentation of the fare card offers the greatest means of creating transparency in taxi fares. In this regard, a ‘ready reckoner’ for various trips, which could be developed for any of the adjustments proposed, would greatly increase the transparency of taxi fares. Of course, the standardisation of the uplift from Standard to Premium tariffs offers significant simplification of the current fare structure and should ensure that fares are easier to undertake and calculate for customers.

Equity and consistency - Each of the proposed adjustments maintains the premium for taxi travel during unsocial hours and the graduated fare structure, recognising that passengers are willing to pay more for different journey types. Adjustments involving the removal of Tariff C ensure that long journeys do not become particularly costly. Reducing the initial charge, by reducing the distance and time that it includes means that the fare for any trip is more transparently related to the distance or time covered. The application of the fare increase is adjusted so as not have an adverse impact on the cost of short day time trips which customers currently view as not offering value for money.

Cost recovery - The need to recover the costs associated with operating in the taxi industry are vital if a quality service is to be provided to customers and to ensure an adequate supply of taxis. The costs of operating in the industry have increased in the past four years and so there is a need for fares to adjust to reflect this cost.

Programmability – Each of the proposed options are broadly similar to the current fare structure in that it has two initial charges and three rates for the tariffs thereafter. This ensures that any of the adjustments should be easily programmed by the majority of the current stock of taxi meters.

Market sensitivity – Each of the proposed adjustments maintains the premium for taxi travel during unsocial hours. This is important in incentivising taxi supply at night-time when

taxi demand is at its peak. Furthermore, the application of the 4% fare increase is adjusted so as not to have an adverse impact on short day time trips.

While some of the adjustments outlined above meet some of these principles, the preferred option should incorporate as many of these principles as is possible.

Table 6.5 summarises the appraisal of the proposed adjustments against best practice criteria.

It is evident that the adjustment which incorporates all of these principles to the greatest degree possible involves the combined effects of removing Tariff C, reducing the initial charge, applying the fare increase and standardising the uplift to premium, Option D.

Table 6.5: Summary: Appraisals of proposed adjustments

	Option A	Option B	Option C	Option D
	Remove Tariff C	Remove Tariff C & Reduce Initial Charge	Remove Tariff C, Reduce Initial Charge & 4% Fare Level Increase	Remove Tariff C, Reduce Initial Charge, 4 % Fare Level Increase & Standardised Premium Uplift
Consumer Protection	0	++	++	+++
Familiarity	+	+	+	+
Transparency	0	0	0	+
Equity And Consistency	+	+	+	++
Cost Recovery	0	0	+++	+++
Programmability	0	0	0	0
Market Sensitivity	++	++	+++	+++

Key to the seven point appraisal scale

+++	Strongly positive
++	Moderately positive
+	Slightly positive
0	Neutral
-	Slightly negative
--	Moderately negative
---	Strongly negative

6.4 Impact analysis

In order to assess the impact of the preferred fare option, Option D, it is necessary to compare this option to the existing fare. Table 6.6 sets out the current fare structure and the proposed fare structure.

Table 6.6: Existing and proposed fare structure

	Existing		Proposed	
	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)
Initial Charge	€4.10	€4.45	€3.60	€4.00
Distance Allowance (m)	1000	1000	500	500
Time Allowance (secs)	170	170	85	85
Tariff A	€1.03 per km €0.36 per min	€1.35 per km €0.48 per min	€1.10 per km €0.39 per min	€1.40 per km €0.49 per min
Tariff B	€1.35 per km €0.48 per min	€1.57 per km €0.55 per min	€1.40 per km €0.49 per min	€1.75 per km €0.62 per min
Tariff C	€1.77 per km €0.63 per min	€1.77 per km €0.63 per min		
Extras				
Passengers	€1.00	€1.00	€1.00	€1.00
Booking Fee	€2.00	€2.00	€2.00	€2.00

While it is evident that the proposed structure meets a number of best practice principles in setting taxi fares, it is necessary to compare them to the existing fare and to determine the impact of any adjustment on the taxi industry and with reference to the overall objectives of the Fare Review process. In this regard consideration is given to the following issues:

- Simplification;
- Overcharging; Taxi fares;
- Taxi demand; and
- Drivers' earnings and supply.

Simplification

The removal of Tariff C allows a relatively straightforward simplification of the current graduated fare structure and is easily achievable. However, significant additional simplification of the fare card is achieved through the standardised uplift of approximately 25% from the standard to premium tariff rates. This is particularly desirable from a customer point of view, as it will ensure fares are easier to calculate at night and may ease the presentation of the fare card to the public.

- The **existing fare structure** is considered burdensome for customers and market research suggests there is difficulty in understanding fares. This is exacerbated by the number of tariffs in operation and the lack of consistency between standard and

premium tariffs. Currently the uplift from standard to premium rates varies across the mileage thereafter rates, with a 31% uplift on Tariff A from €1.03 to €1.35 to a 16% uplift on Tariff B from €1.35 to €1.57.

- The **proposed fare structure** through the removal of Tariff C achieves some simplification of the fare structure as well as ensuring that longer journeys are not overly costly for customers. However, the standardised uplift from Standard to Premium tariffs provides significant additional benefits in terms of simplification. This fare adjustment results in night-time tariffs being approximately 25% more expensive than at day, which is clearly a benefit in creating transparency for customers. Furthermore, while there is significant simplification in the proposed fare, the overall structure is not dissimilar to the existing ensuring that it is easily programmable and familiar to customers.

Overcharging

One of the arguments for reducing the initial charge on the standard and premium rates is to address the issue of overcharging by engaging the meter early. This is particularly relevant at transport terminals where drivers can easily anticipate the time of boarding of their next passenger. This can result in a situation where the majority of the initial allowance will have been used up by the time the passenger boards the vehicle, thus ensuring the passenger pays more for the journey than should have been the case.

- The **existing fare structure** retains or increases the prospect of such behaviour given the generous time and distance allowances inherent in the initial charges. It is also particularly significant to the perception of the cost of travel in Ireland among tourists visiting the country given that such behaviour is likely to be more common at transport terminals.
- The **proposed fare structure** reduces the Initial Charge and so limits the degree to which overcharging can be carried out by setting the distance and time allowances at 500 metres or 85 seconds. Furthermore, this adjustment is likely to be perceived by consumers as a rebalancing that reduces the cost of engaging a taxi service and that weights the cost towards the distance covered - which may increase the perception of value for money.

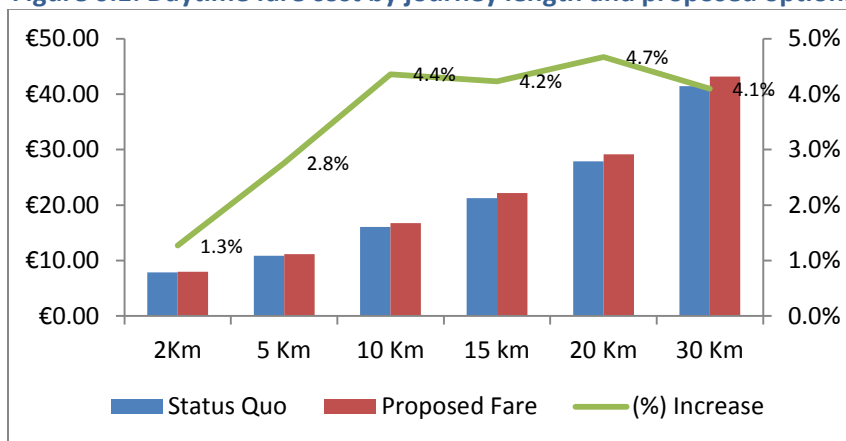
Taxi Fares

The impact of the proposed fare structure adjustments on taxi fares varies by trip type and time of day. Figure 6.1 illustrates fares and associated increase in fares relative to the existing situation across a range of standard day journeys assuming fares are calculated on a distance only basis, and assuming the usage patterns recorded in the 2012 surveys. The fares are calculated taking account of the average number of passengers and the proportion of trips which are charged a booking fee²⁶

²⁶ The average number of passengers and the proportion of trips which are charged a booking fee are derived from the household survey of taxi usage. While the calculation takes account of the meter increments, the averages used from the household survey result in fares not being rounded to the nearest 20 cent.

- The overall fare level increase impacts on all journeys to a varying degree. It is evident from Figure 6.1 that shorter journeys experience a lesser increase in fares than longer journeys due to the fare increase not being applied to the initial charge.
- Fare increases range from 1.3% for a 2km trip up to 4.7% for a 20km trip. It is also evident that the level of increase begins to diminish for longer trips, reflecting the loss of Tariff C.

Figure 6.1: Daytime fare cost by journey length and proposed options

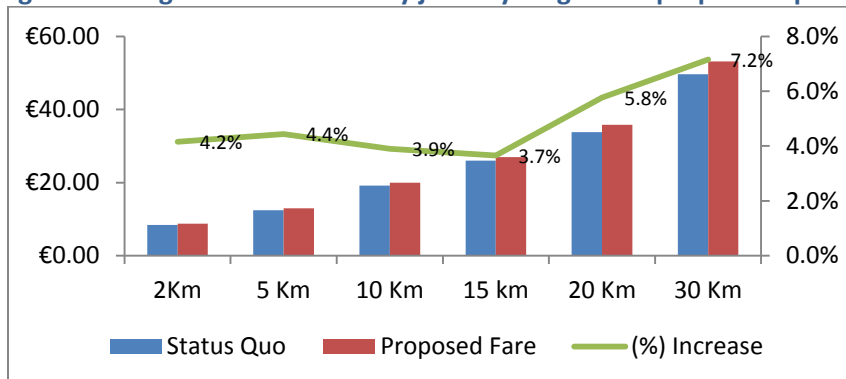


Source: DKM Economic Consultants analysis, Taxi Fare Review 2012

Likewise all night-time journeys become more expensive compared to the existing as evident in Figure 6.2.

- In this instance the application of the fare increase to the initial charge results in shorter trips increasing in price to a greater extent than was evident in day time fares.
- Fare increases range from 3.7% for a 15km trip up to 5.8% for a 20km trip.
- It is also evident that the decline in the level of fare increase for very long trips during Premium times is far more gradual, since the proposed Tariff B at night (€1.75) is very close to the existing rate for Tariff C (€1.77). As a result, fares increase in the region of 7.2% for a 30km trip.

Figure 6.2: Night-time fare cost by journey length and proposed options



Source: DKM Economic Consultants analysis, Taxi Fare Review 2012

While the aforementioned analysis is based on the assumption that fares are calculated on a distance only basis, in reality there will be intervals in the journey when part of the fare is charged on time. However, the proposed fare options have maintained the existing changeover speed (the critical speed at which taximeters charge for the progress of a journey based on either time or distance) at its current level of 21.2 km/h. Therefore, any potential change in the distance related charge has been matched with an equivalent change in the time based charge. For this reason, a journey undertaken under identical conditions of speed (either above or below the changeover speed) will achieve the same percentage increase when modelled under either distance or time.

Market demand

A significant proportion of consumers surveyed, approximately 20%, have indicated their use of taxis has fallen in the past 12 months. While the proposed fare increase may impact on customer demand, the proposed fare structures may generate additional demand for taxis, particularly over short distances, by reducing the initial fare, and provide a basis for reaping the rewards should the economic recovery maintain its momentum.

- The **existing fare structure** is a maximum taxi fare and so a lower fare may be charged by drivers. While a significant proportion of taxi drivers and dispatch companies offer discounts, there appears to be relatively little knowledge of the level of discounting in the market among customers.
- The **proposed fare structure** combines a fare increase with the removal of Tariff C and a reduction in the initial charge. As set out above, the proposed fare increase results in all fares rising relative to the existing situation. Consequently, the improvements in the fare structure which may have a positive impact on demand may be counterbalanced by the overall fare level increase. Notwithstanding that, the perception of value for money associated with taxi travel may improve among customers. In particular, the reduction in the initial charge may be perceived by customers as a rebalancing that reduces the cost of engaging a taxi service and weights the cost towards the distance covered. This may increase the perception of value for money and so have a positive impact on demand. Furthermore, the application of the fare increase on the standard rate tariffs and not the initial charge has the effect of ensuring that shorter trips are faced with less of a fare increase. This is likely to improve the perception of value for money associated with short day time trips which customers currently perceive as quite poor. Of course, given that the taxi fares are a maximum, drivers still have the option to discount on the metered fare.

Drivers' earnings and supply

The Taxi Cost Index highlights that operating costs have increased by between 0.8% and 1.7% since 2010. This increase in costs is affecting drivers' earnings and in turn supply in the industry. As outlined above, the proposed option has a varying impact on taxi fares for individual journeys. An analysis of the impact of these changes on drivers' earnings was undertaken in 2012. The main findings of this analysis were:

- Operators across Ireland would receive an average fares increase of 3.9%, with a 4.1% increase for Dublin drivers and a 3.8% increase for drivers outside of Dublin. The main reason for the higher increase among Dublin drivers is due to a higher proportion of longer night-time trips relative to drivers elsewhere in the country.
- The fare level adjustment proposed results in a greater proportion of the increase in fares attributable to night-time travel. This has the effect of generating a greater return for drivers who operate at night, and in markets where night-time travel dominates. Furthermore, the additional return for night-time travel should have the effect of stimulating supply of taxi services at night when demand is at a peak.

Summary impact assessment

This impact analysis is summarised and quantified in the summary impact assessment in Table 6.7 overleaf.

Table 6.7: Summary of Impact Assessment

	Existing	Proposed Option
Costs	1) The current stock of meters has not required mandatory reprogramming since the 2008 fare review. The majority of meter programmes have a lifespan of approximately 4 years. This implies that a number of taxi meters will have had a reprogramming recently or will require reprogramming and verification in the near future. Current best estimates maintain that these costs are approximately €190 per taxi vehicle.	1) Reprogramming and verification of a new fare structure will cost approximately €190 per taxi vehicle.
Benefits	1) The Current Fare Structure has been in operation since 2008 and so is familiar to consumers.	<p>1) The proposed structure is broadly consistent with the existing structure and so is reasonably familiar for consumers.</p> <p>2) There is reduced scope for overcharging by engaging the meter early thereby increasing consumer protection.</p> <p>3) The simplification of the proposed fare structure should ensure greater transparency of fares.</p> <p>4) The proposed fare increase enhances cost recovery for drivers.</p> <p>5) The proposed fare structure weights the cost more closely to the distance covered.</p> <p>6) The proposed structure is sensitive to market conditions. It maintains the night-time premium. It ensures the application of the fare increase does not adversely affect the cost of short day time trips.</p>
Impacts	<p>1) Previous market research suggests that the current fare structure is overly complicated and makes it difficult for customers to calculate the cost of their trip.</p> <p>2) The cost of operating a taxi has increased. Maintaining the current fare structure will not improve cost recovery for taxi drivers.</p> <p>3) The prospects of overcharging consumers through early engagement of the meter will persist by maintaining the existing.</p>	<p>1) There would possibly be increased demand arising from the simplified structure but increased fares may counter any potential additional demand given the current weak market conditions.</p> <p>2) The perception of value for money may improve among consumers. In particular, the reduction in the initial charge may be perceived by consumers as a rebalancing that weights the cost towards the distance covered. The application of the fare increase on the standard rate tariffs and not the initial charge ensures that shorter day trips are faced with a lower fare increase and so is likely to improve the perception of value for money.</p>

6.5 Christmas fare

With the potential abolition of Tariff C, an alternative arrangement for the Christmas period needs to be devised which also adheres to the best practice principles, and protects drivers' earning during the period.

For simplicity of understanding and communication, it is proposed to avoid introducing new elements to the fare card and to consider the following adjustments:

- Apply the premium initial charge;
- Increase the Tariff A premium rate by a standard 25%; and
- Increase the Tariff B premium rate by a standard 25%.

As is currently the case, the Christmas rate would apply from 8pm on Christmas Eve to 8am on St. Stephen's Day and 8pm on New Year's Eve to 8am on New Year's Day.

6.6 Summary and conclusions

Summary of proposals

The following adjustments are proposed:

- Removal of Tariff C;
- Lowering of the initial charge;
- Application of around 4% fare increase; and
- Standardisation of the premium uplift.

During the Christmas period, the premium initial charge would apply. The Tariff A rate that would apply thereafter would be the premium rate increased by 25%. The Tariff B rate would be the premium rate increased by 25%.

Summary of the assessment of the impact of the proposals

The proposed fare structure achieves a significant simplification which will make the fares easier to understand and more transparent for customers. The proposed reduction of the initial charge, and the distance and time included, will improve consumer protection and may make the pricing more attractive to customer. The proposed fare structure maintains best practice principles of setting fares in terms of market sensitivity and familiarity.

The costs of operating in the taxi industry have increased in the past four years. Additional quality requirements such as vehicle branding have contributed to the costs of operating a taxi. It is calculated that the TCI has increased by up to 1.7% since 2010. Furthermore, the Authority has decided that a further fare increase of 1.8% is suitable in order to compensate for simplification measures. On this basis, a fare increase is warranted and the proposal would result in an increase of around 4%.

Simplifications to the Christmas rate will make it more customer-friendly and transparent, while protecting drivers' earnings during the period.

7. Findings and conclusions

Since its inception in 2006, purpose of the National Maximum Taxi Fare structure has been to establish a single, simple, transparent system for taxi consumers and providers across Ireland. The system should ensure that the taxi industry receives a fair return for its work, further supply is stimulated, customers receive value for their money and additional demand is created.

In pursuit of these goals, this Fare Review has strived to improve the transparency and simplicity of the fare structure and gain a greater understanding of the operating and market conditions facing the taxi industry. The findings of the Review are outlined below.

7.1 Market recovery forecast

Following the economic recession, the demand for taxi services declined during 2008 – 2012. A further decline was experienced in the last 12 months, as evidenced by the Household survey results. In the last year, roughly a fifth of taxi users report using taxis less often.

However, meaningful and sustained growth and recovery are forecasted to take hold until 2016. Improving macroeconomic factors combined with stronger economic sentiment and increased disposable incomes could have positive consequences for the taxi industry in the coming years. As the industry is strongly influenced by social and recreational activities, increased employment and consumer expenditure may create further demand for taxis as the economy continues to recover.

7.2 Increase in industry operating costs

The calculation of the 2014 Taxi Cost Index involved a fundamental review of the cost components, assumptions and methodology employed in the tool since its establishment in 2006. As a result, an index comprised of rebased costs and a revised methodology was generated for the purpose of this year's review.

In order to calculate cost changes, a revised TCI for 2010 was estimated based on the new methodology and assumptions established. An analysis of both TCIs shows that since 2010, costs have increased by an estimated 0.8% - 1.7%. The extent of the increase depends on the level of industry activity assumed. Assuming an activity level of 27,804km, based on CSO data, the increase is 0.8%. Assuming an activity level of 62,052km, based on a taxi driver survey, the increase is 1.7%.

The observed increase in operating costs supports an increase is applied to the National Maximum Taxi fare.

7.3 Fare structure simplification merited

One of the Authority's objectives is to simplify the current structure of the National Maximum Taxi Fare. As a result, the Fare Review considered how the proposed fare levels could be implemented with the simplified fare structure that was proposed in 2012.

The Fare Review concludes that the proposed reduction of the initial charge, the removal of Tariff C and the standardisation of premium uplifts will improve consumer protection and may make the pricing more attractive to customer. In turn the new fare structure will achieve a significant simplification to make the fares easier to understand and more transparent for customer. The proposed fare structure maintains best practice principles of setting fares in terms of market sensitivity and familiarity.

An increase to the National Maximum Taxi Fare is proposed to compensate for the simplification measures and adequately incentivise the variety of different trips undertaken in both urban and rural areas.

7.4 Proposed fare card

As a result of the simplification proposals, and the increase in operating costs observed since 2010, the proposed fare card illustrated in Table 7.1 is proposed, which contains an increase of around 4% in fare levels. The existing fare card is included in the table for comparison purposes.

Table 7.1: Existing and proposed fare structure

	Existing		Proposed	
	Standard (08.00h-20.00h)	Premium (20.00h-08.00h)	Standard (08.00h- 20.00h)	Premium (20.00h- 08.00h)
Initial Charge	€4.10	€4.45	€3.60	€4.00
Distance Allowance (m)	1000	1000	500	500
Time Allowance (secs)	170	170	85	85
Tariff A	€1.03 per km €0.36 per min	€1.35 per km €0.48 per min	€1.10 per km €0.39 per min	€1.40 per km €0.49 per min
Tariff B	€1.35 per km €0.48 per min	€1.57 per km €0.55 per min	€1.40 per km €0.49 per min	€1.75 per km €0.62 per min
Tariff C	€1.77 per km €0.63 per min	€1.77 per km €0.63 per min		
Extras				
Passengers	€1.00	€1.00	€1.00	€1.00
Booking Fee	€2.00	€2.00	€2.00	€2.00

Appendix A – Activity Levels

Activity levels are employed in the TCI 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.

Previous taxi fare reviews have calculated annual driver distance travelled based on drivers' self-reported distance travelled, through the medium of a driver survey. The 2014 fare review has sought to identify alternative means of estimating activity levels.

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. Therefore, 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. Statistics demonstrating the average commuting distance travelled by car in 2012 can be found in the National Travel Survey. Assuming a 48 week working year, the annual distance travelled while commuting is 7,200 kilometers. Therefore, out of the 16,388 km driven by private cars in the same year, 9,188km can be attributed to personal mileage.

$$\therefore 2012 \text{ average annual } \textbf{operating} \text{ km} = 2012 \text{ average annual km} - \text{Personal km}$$

$$\therefore 2012 \text{ average annual operating km} = 35,408\text{km}^{27} - 9,188\text{km}$$

$$\therefore 2012 \text{ average annual operating km} = 26,220\text{km}$$

However, the use of the 2012 figure alone may be inappropriate as market conditions have changed since 2012. Demand has fluctuated and supply has contracted. Therefore, in order estimate 2014 activity levels, changes to supply and demand over the last two years have been taken into account, using a methodology which calculates the demand for taxis across time periods.

To track taxi demand, it is necessary to note the reasons for taxi travel. The 2014 consumer survey tells us that approximately 50% of taxi travel is for social reasons, 8% for business reasons and the rest of journeys constitute the purposes of shopping, personal travel and transport to other travel modes (e.g. taxi to airport).

²⁷ Source: CSO data – average km travelled (taxis) 2012

For each of these factors, it is possible to estimate the demand fluctuations based on indices from the CSO. For example, movements in the monthly demand for taxis for shopping purposes can be estimated using CSO retail sales volume data. For each of the other purposes, quarterly data is available for purpose of household travel. The table below outlines each purpose, with relevant weightings and the indices used for forecasting.

Table A.1: Demand forecasting – journey purpose

Reason for travel	Forecast method	Weighting
Business	CSO: number of trips by Irish residents - Reason for journey = business	8.1%
Shopping	CSO: Monthly Retail Sales Index Volume - All retail business excluding motor trades and bars	8.7%
Social	CSO: Monthly Retail Sales Index Volume – Bars and Restaurants	48.2%
Personal	CSO: number of trips by Irish residents - Reason for journey = visiting friends/relatives	13.4%
Connecting to transport terminals	CSO: number of trips by Irish residents - Reason for journey = holiday, outbound	9.7%
Other	Assumed constant	11.9%

Using these indices, and their relative weightings, it is possible to estimate the fluctuations in taxi demand based on reasons for journey. The 2014 demand factor is therefore calculated based on the weighted average of the observed movements in these indices since 2012. A 0.48% growth in demand for taxi services has been estimated on this basis, providing a demand factor equal to 100.48.

The next step in determining activity levels for 2014 is to take account of supply. The number of taxis in operation in Ireland has declined since the prohibition of new non-wheelchair accessible vehicle licences in 2010. It is necessary to take this into account when calculating current activity levels, as fewer licences will lead to greater activity per vehicle, holding all else is constant. Since 2012, there has been a drop in numbers from 18,831 to 17,844, or 5.2%.²⁸ Therefore, the 2014 supply factor is approximately equal to 94.8.

In light of the demand and supply considerations above, annual distance can be calculated using the following formula:

$$2014 \text{ average annual operating km} = 26,220\text{km} \times \frac{(2014 \text{ demand factor})}{(2014 \text{ Supply factor})}$$

$$\therefore 2014 \text{ average annual operating km} = 26,220\text{km} \times \frac{100.48}{94.76}$$

$$\therefore 2014 \text{ average annual operating km} = \mathbf{27,804 \text{ km}}$$

²⁸ National Transport Authority website

This result was compared against an estimate obtained from the consumer survey. The average number of fares taken per week (50.12) was determined from consumer responses regarding the frequency of taxi travel, taking into account the average number of passengers. Multiplying the 50 weekly fares by the consumer survey's estimate of average distance travelled per fare (8.8km), we calculated an average annual distance travelled of 21,171km.

Both of these values are significantly lower than the activity level assumed in previous fare reviews (57,936km in 2012), and are low by comparison with activity levels elsewhere²⁹. However, obtaining a more accurate estimate of activity levels is a key aim of the rebasing exercise. The shorter annual distances estimated through the CSO and the consumer survey appear to reflect the nature of the taxi industry in Ireland, where distances are relatively short by comparison with other jurisdictions and where much of the demand for taxis occurs during a relatively short period associated with social activity at the weekend.

Given the industry context, the level of objectivity afforded by the CSO estimate, together with the adjustments for the time lag and personal mileage limitations, we believe that an activity level of 27,804km provides a robust estimate for the Taxi Cost Index.

²⁹ Northern Ireland = 41,746km, Hamburg = 50,000km, Guildford (UK) = 54,717km, Norway = 59,520km

Appendix B – TCI Changes: 2010 - 2014

Using the methodology and assumptions employed in the 2014 TCI, it is possible to estimate comparable indices for the years 2010 – 2012. A pro-rata adjustment has been made for activity levels. Similarly, labour costs are sourced from the CSO EHECS data, as per the 2014 methodology.

The complete outcomes from this activity are shown in Table B.1 and Table B.2. Table B.1 represents the TCI for the 27,804km activity level, while Table B.2 illustrates the results using the 62,052km activity level.

Table B.1: Historic TCIs using 2014 TCI methodology and assumptions (27,804km)

Component	Comparable 2010 figure	Comparable 2012 figure	2014 Cost
Fuel	€ 1,608.94	€ 2,061.39	€ 1,949.89
Servicing	€573.97	€ 554.65	€498.43
Cleaning	€ 804.00	€776.94	€698.31
Tyres	€271.63	€ 273.80	€278.04
Spares	€239.95	€241.88	€252.07
Miscellaneous Running Costs	€318.00	€313.17	€300.00
Total Running Costs (27,804km)	€3,816.48	€4,221.83	€3,976.74
Car Purchase and Finance	€2,550.65	€ 2,677.55	€ 3,013.72
Insurance	€1,679.00	€1,951.00	€ 1,816.63
Radio Rental	€4,659.00	€4,600.00	€4,628.00
Equipment Replacement - Regulatory requirements	€168.59	€265.41	€298.32
Taxi Vehicle License Renewal	€125.00	€125.00	€125.00
Road Tax	€ 82.00	€88.00	€95.00
Airport Charges	€36.73	€36.62	€35.48
NCT Testing	€50.00	€73.56	€65.64
Meter Verification	€45.00	€46.13	€ 43.05
Meter Calibration and Programming	€30.00	€45.00	€45.00
SPSV Drivers License	€50.00	€50.00	€ 50.00
National Drivers License	€ 2.50	€2.50	€5.50
Total Fixed Costs	€9,478.47	€ 9,960.76	€10,221.34
Labour Costs	€24,846.56	€25,712.28	€24,246.24
TCI Total	€38,141.51	€ 39,894.88	€38,444.32

Table B.2: Historic TCIs using 2014 TCI methodology and assumptions (62,052km)

Component	Comparable 2010 figure	Comparable 2012 figure	2014 Cost
Fuel	€3,590.78	€4,600.55	€4,351.70
Servicing	€1,280.96	€1,237.85	€1,182.88
Cleaning	€804.00	€776.94	€698.31
Tyres	€606.21	€611.07	€620.52
Spares	€535.52	€539.81	€562.57
Miscellaneous Running Costs	€318.00	€313.17	€300.00
Total Running Costs (50,740km)	€7,135.46	€8,079.39	€7,715.98
Car Purchase and Finance	€2,550.65	€ 2,677.55	€ 3,013.72
Insurance	€1,679.00	€1,951.00	€ 1,816.63
Radio Rental	€4,659.00	€4,600.00	€4,628.00
Equipment Replacement - Regulatory requirements	€168.59	€265.41	€298.32
Taxi Vehicle License Renewal	€125.00	€125.00	€125.00
Road Tax	€ 82.00	€88.00	€95.00
Airport Charges	€36.73	€36.62	€35.48
NCT Testing	€50.00	€73.56	€65.64
Meter Verification	€45.00	€46.13	€ 43.05
Meter Calibration and Programming	€30.00	€45.00	€45.00
SPSV Drivers License	€50.00	€50.00	€ 50.00
National Drivers License	€ 2.50	€2.50	€5.50
Total Fixed Costs	€9,478.47	€ 9,960.76	€10,221.34
Labour Costs	€24,846.56	€25,712.28	€24,246.24
TCI Total	€41,460.49	€43,752.43	€42,183.57

The results of the historical analysis show that the TCI, calculated on the 2014 basis, has increased since 2010. Both fixed costs and running costs have increased, while due to the decrease in wages throughout the economy over this period, the opportunity cost of labour has fallen. The changes in cost for the three cost categories over the period 2010 to 2014 are shown in Table B.3.

Table B.3: TCI changes since 2010

Year	2010 - 2014	2012 - 2014
% change in Running Costs (27,804km activity level)	4.2%	-5.8%
(62,052km activity level)	8.1%	-4.5%
% change in Fixed Costs	7.8%	2.6 %
% change in Labour Costs	-2.4%	-5.7%
Total % change (27,804km activity)	0.8%	-3.6%
Total % change (62,052km activity)	1.7%	-3.6%