



Transforming Bus Investment in Wales: The Welsh Bus Fleet

A Report to the Welsh Government's Bus Policy Advisory Group
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Executive Summary: Key Points

- Our revised analysis of the Welsh bus fleet includes 2,150 vehicles, based on TAS analysis of operator fleets and principal business activities;
- Most bus operators are involved in the local bus and educational transport markets – an important connection in the context of tendered services and fleet investment;
- Large bus operators account for 73% of the bus fleet and generally have the most modern fleets – with high European emission standards and low average age;
- Smaller operators generally have less modern fleets - a significant proportion being technically beyond their useful economic life;
- Vehicles can be either purchased outright or leased – the choice of which has profound implications for both operating costs and net profitability (and hence, future investment);
- Vehicle specifications are determined by operating market and any contract requirements. New vehicles come with a high specification, influenced by fuel and 'soft' measures;
- Joint investment in new vehicles (Government and operators) needs to match key policy areas – particularly the links between transport and education policy.

1.1 Introduction

- 1.1.1 The TAS Partnership Limited ('TAS') is pleased to have been commissioned by the Welsh Government's Bus Policy Advisory Group to provide consultancy advice on approaches and investment required to transform bus services in Wales.

1.2 Our Previous Study: Investment

- 1.2.1 In 2014, we undertook a brief review of the operating fleets for significant bus operators in Wales, as analysed through the TAS Bus Industry Monitor database.
- 1.2.2 Over the past five years, the larger Welsh bus operators have invested over £38 million in new vehicles, representing ca. 79% of total capital expenditure. There has been a sustained approach to new vehicle investment from subsidiary operations of the major operating groups, notably Stagecoach, although municipal operators Cardiff Bus and Newport Transport have consistently acquired new vehicles.
- 1.2.3 However, the average age of the fleets of the operators analysed here is above national targets (8.0 years), with over a third of the operating fleet either towards the end of its useful economic life (average 15 years) or whose operating life has been extended.

- 1.2.4 In conclusion, we suggested that, given the age profile of the Welsh fleet, and current levels of expenditure, further considerable levels of investment will be required to maintain average fleet age below the national average.

1.3 Analysis of the Current Fleet

- 1.3.1 This section of the Report presents a high-level assessment of the current composition of the Welsh bus fleet, and the potential options available in terms of upgrading the fleet. The analysis presented here has been expanded to encompass most of the independent operators across Wales.
- 1.3.2 Through over 20 years' examination of all aspects of the UK bus industry, TAS analysis of the UK bus fleet has predicted that the rate of replacement as a whole has been insufficient to prevent its average age increasing (currently ca. 8.0 years). Since then, there have been several short-term initiatives – including challenge funding – alongside investment programmes from the major bus operating groups – not only to improve the average age but also to upgrade the overall quality of the fleet to meet regulatory requirements.
- 1.3.3 Despite a significant number of new vehicles entering service, average vehicle age remains below national benchmarks. This includes several UK regions, typically in more rural areas, which have resulted from a combination of factors including the reduction in

cascaded vehicles from London bus contracts and an overall increase in mileage operated. As we will see from our analysis of the Welsh bus fleet, an overriding factor in the profile of the fleet is linked to demand for educational transport.

Methodology

- 1.3.4 We have undertaken a review of the operational bus fleet for Wales using fleet data covering the period from Spring to Summer 2015. Sources used for shaping data for analysis include trade publications as well as the TAS fleet database – the outcomes of which are analysed periodically through our *Business Monitor* publications.
- 1.3.5 The absence of a holistic fleet database – together with government statistics relating to the fleet – make this a particularly challenging task; nonetheless, we have identified the following broad groups of operators for analysis, based on bus fleet¹ size:
- Fewer than 20 vehicles (small bus operation);
 - Between 20 and 50 vehicles (intermediate bus operation); and
 - Over 50 vehicles (large bus operation).
- 1.3.6 Our analysis covers the following:

¹ There are a number of coach operators within our data, who have been excluded from our analysis as a result of focusing on bus matters

- Principal nature of operations;
- Composition of the fleet by general vehicle type;
- Composition of the fleet by European Emissions Standard²;
- Average age; and
- Useful economic life.

- 1.3.7 The latter is of particular interest with regards to our earlier statement on the apparent influence of educational demand on fleet composition. Our assessment of useful economic life is based on the typical depreciation policies of the major UK bus operators, as summarised in Table 1.
- 1.3.8 All have adopted the straight-line basis for vehicle depreciation (assumed for its relative conceptual simplicity) – and we therefore assume an ‘average’ useful economic life of a bus to be 15 years.

Table 1: PCV Depreciation Policies: UK Bus Groups

Bus Group	Depreciation Method	Anticipated Economic Life
Arriva (Deutsche Bahn)	Straight-Line	15 years
First Group	Straight-Line	7 to 17 years
The Go-Ahead Group	Straight-Line	8 to 15 years
National Express Group	Straight-Line	8 to 15 years
Stagecoach Group	Straight-Line	7 to 16 years

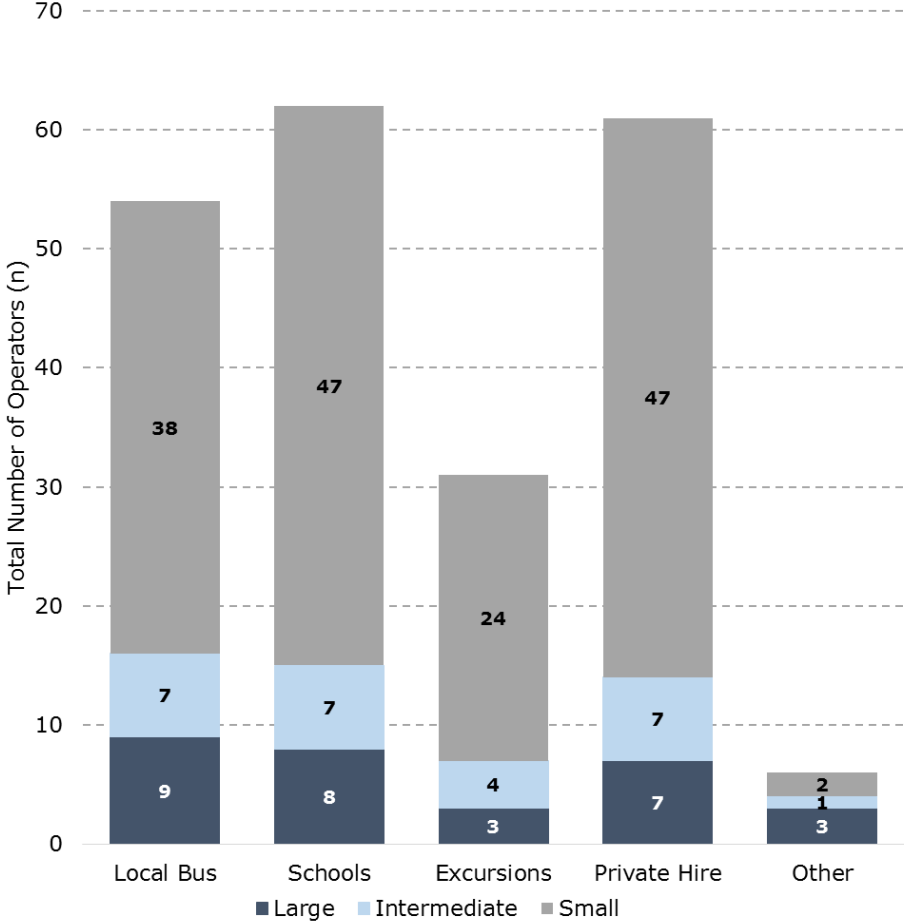
² Based on year of registration and the assumption that this tallies with the appropriate Euro emissions standard – our analysis does not, therefore, take into account vehicle refurbishments and upgrades to higher Euro emissions standards

1.4 Operations

- 1.4.1 Our analysis of the Welsh bus fleet includes some 69 different PCV (passenger carrying vehicle) operators, which operate bus services as part of their main business. The number of operators breaks down as:
- Small (<20 buses): 53
 - Intermediate (20-50 buses): 7
 - Large (>50 buses): 9
- 1.4.2 Using background data relating to the transport operations for each operating group, we can estimate the numbers of operators by service type – this is shown in Figure A.
- 1.4.3 The larger operators predominantly specialise in the provision of local bus and schools services, with some offering private hire but less excursions and tours. This group typically operates ‘other’ types of service, including park and ride and express services.
- 1.4.4 The smaller operator group predominantly operates contracted bus services – school services, together with excursions and private hire (most of these, and intermediate operators, operate a mixed coaching/bus fleet, hence the emphasis on these operations).

In terms of Welsh Government interest, most bus operators are involved in both the local bus and schools transport markets.

Figure A: Operational Scope by Operator Group



1.5 Fleet Composition by Type

- 1.5.1 Our analysis includes over **2,150 buses** currently in operation in Wales.
- 1.5.2 Definitions of what constitutes a 'bus' varies; here, our analysis focused on three main types:
- Midibus – single deck vehicle with ca. 25-35 seats (typically the Dart or variants of);
 - Single deck – larger, single deck vehicles – typically up to some 50 seats (though our analysis does incorporate some school buses);
 - Articulated buses – the longest single deck vehicles, separated into two passenger sections; and
 - Double deck – buses with two passenger floors.
- 1.5.3 Figure B summarises our estimated breakdown of the total fleet by operator group. Nine 'large' bus operators account for 73% of the total Welsh fleet, with smaller operators (of which we include 53 in our analysis) accounting for just 12%.
- 1.5.4 Figure C summarises the composition of the Welsh bus fleet by bus vehicle type. **Just over half of the fleet are midibus vehicles**, followed by single deck (36%); double deck (12%); and articulated buses (2%), the latter operating solely in Cardiff.

Figure B: Total Fleet by Operator Group

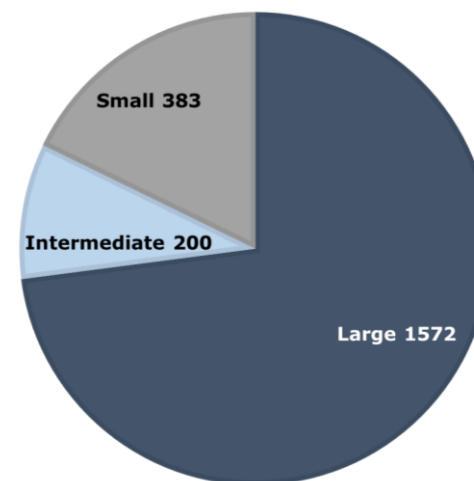
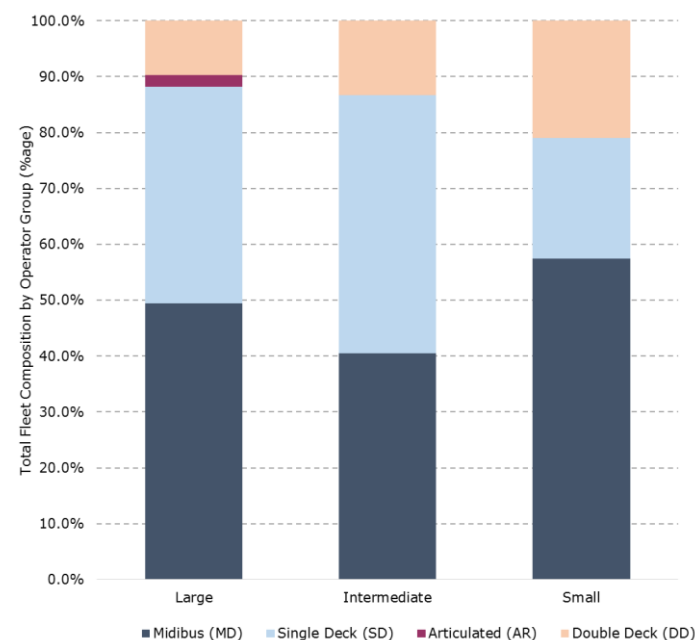


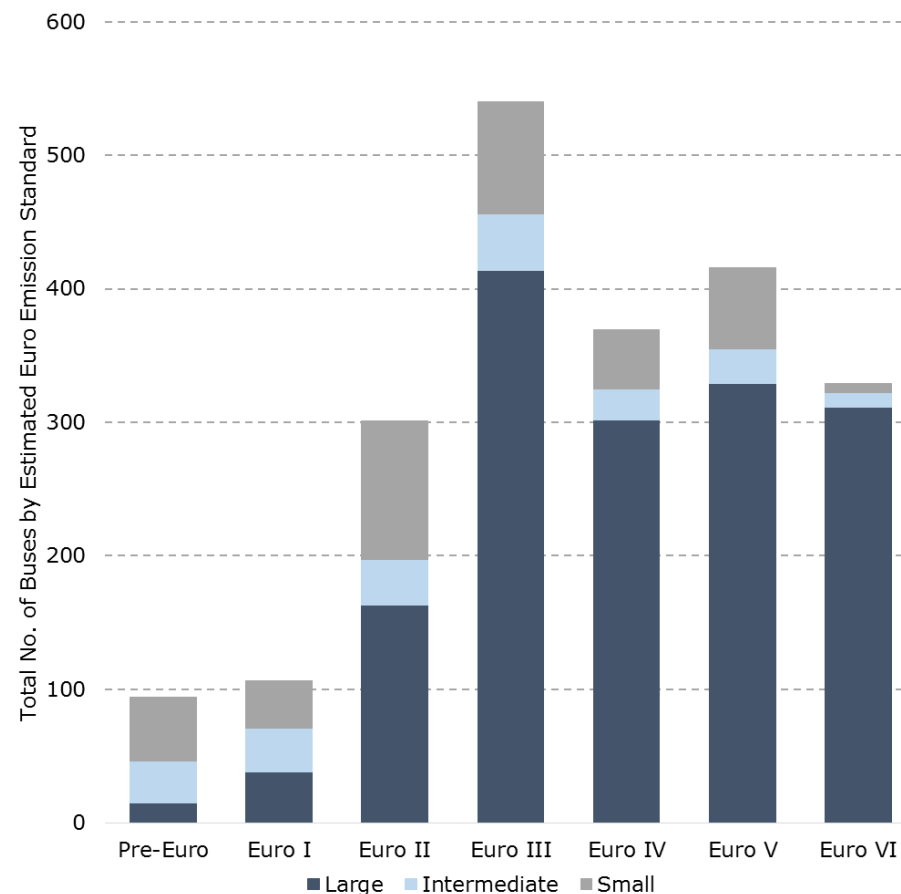
Figure C: Fleet Composition by Operator



1.6 Fleet Composition by European Emissions Standards

- 1.6.1 With the help of European standards that have become progressively tighter since their introduction in the early 1990s, emissions attributed to poor air quality (such as Carbon Monoxide, Hydrocarbons, Nitrous Oxides and Particulates) have tended to reduce over time. This process began with the introduction of the Euro 1 regime for buses in July 1993, and reached its latest stage in December 2013 with the introduction of the Euro VI emissions standard.
- 1.6.2 We can attempt to estimate the composition of the Welsh bus fleet by operator group and Euro emission standard; the results are shown in Figure D.
- 1.6.3 Fortunately, the bus industry does generally have a good story to tell in terms of its allocated responsibility for emissions against other forms of transport. Around 35% of the current fleet operates to the highest two Euro Emissions Standards (V and VI). There are fewer than 100 Pre-Euro Standard vehicles, with a peak of 540 vehicles for the Euro III emission standard. In addition, some older buses operate low mileage services, so emissions are relatively less important.
- 1.6.4 It is noticeable, however, the variance in composition by operator group. Over 86% of the larger bus operators fleet covers buses registered for Euro phases III to VI; this compares to only 51% of the smaller and intermediate operators, which operate a significant number of Pre-Euro to Euro II vehicles.

Figure D: Fleet Composition by Euro Emission Standard and Operator Group



1.7 Fleet Age and Useful Economic Life

1.7.1 Our analysis of fleet by European emissions standard gives some indication of the average age – and useful economic life – of the Welsh bus fleet. **This analysis is particularly useful given any policy towards investing to upgrade the quality of the fleet.**

Taking our 'average' useful economic life of a bus to be 15 years, we have analysed the fleet by registration date to provide an indication of age. We can usefully evaluate economic life as:

- New/Starting Life (0 to 5 years old);
- Mid-Life (6 to 10 years old);
- End of Life (11 to 15 years old); and
- Extended Life (greater than 15 years old).

1.7.2 Figure E illustrates economic life by operator group. Of note, over 25% of buses in Wales are 'new', with over 500 operated by the larger bus operators. Conversely, just over 560 vehicles can be considered to have an 'extended' life – that is, vehicles likely to be fully depreciated.

1.7.3 Figure F shows the proportion of total operator group fleet by estimated economic life. There are some stark contrasts: over one third of the larger operator's fleets are 'new' vehicles; however, over 50% of the smaller and intermediate operator's bus fleets are vehicles with 'extended' life.

Figure E: Economic Life by Operator Group

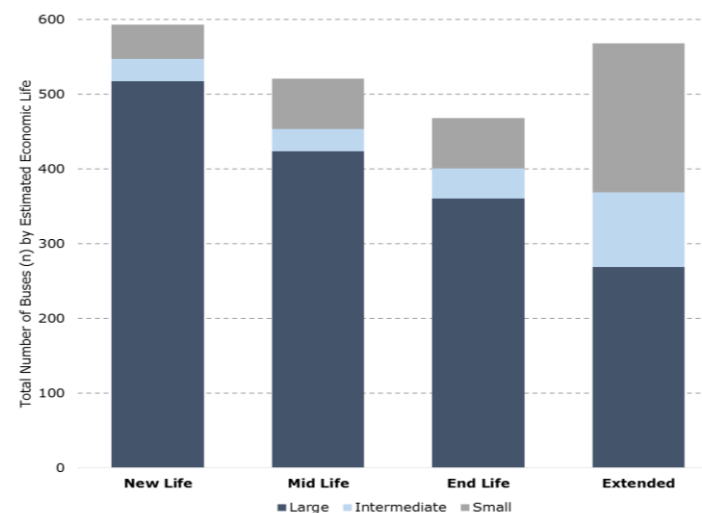
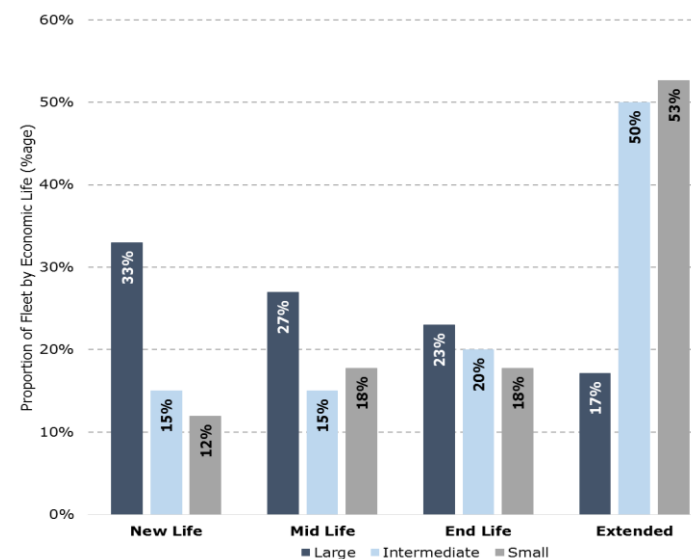


Figure F: Fleet Proportion: Economic Life



1.8 Vehicle Procurement Options

1.8.1 There are two general methods of procuring buses:

- a) Purchase (owned); or
- b) Leasing (borrowing).

Purchasing

1.8.2 Vehicles purchased outright – as a form of capital expenditure – become tangible assets owned by the operator, and are included on the Balance Sheet. Purchase costs are written off over a period of time ('depreciation'), although such vehicles do attract additional costs – in terms of interest on the purchase; and maintenance (if vehicles are maintained directly by the operator).

Leasing

- 1.8.3 Leased vehicles are effectively 'borrowed' from a vehicle supplier or distributor. There are two main types of lease:
- Financial Lease – transfers risks and rewards of operating the vehicle to the operator (lessee) (e.g. maintenance) with lessor retaining full ownership;
 - Operating Lease – risks and rewards remain with the supplier/distributor (the lessor) – may include maintenance within the terms of the lease.

1.8.4 Vehicle leases mean that the ownership of the vehicle remains with the leasing company (lessor) and appears on its Balance Sheet. A periodic (monthly or quarterly) lease payment is made to the lessor which covers three elements of the costs – initial capital cost, interest costs and the depreciation of the asset. The balance of these – compared to vehicle purchase price – provides the lessor with profit.

1.8.5 The effect of using vehicles acquired on lease is to:

- a) Reduce the capital employed by the operator – and therefore, the target profit;
- b) Reduce the operator's financing costs (e.g. interest); and
- c) Increases operating costs by the total lease payment.

1.8.6 In comparing the two approaches (ownership vs. leasing), it is likely that the cost of (c) will be equivalent to, or even slightly greater than, the savings made from (a) and (b).

1.8.7 The accounting consequences of both approaches to procurement are summarised in Table 2 below.

Table 2: Accounting Effects of Owned and Leased Models for Bus Operations

Item	Ownership Model	Leased Model
Fixed Asset Value	On operator's Balance Sheet	On lessor's Balance Sheet
Borrowing to Fund Procurement	Shown as a 'liability' on the operator's Balance Sheet	Shown as a 'liability' on the lessor's Balance Sheet
Borrowing Costs	Charged to P&L as part of overall financing costs. This is not charged to operating profit, but to pre-tax profit.	Rolled into overall leasing payment, charged to operating costs
Depreciation	Charged to operators' Profit and Loss Account	Asset depreciated by lessor, charged to operator as part of overall leasing payment, which then charges to operating costs.
Residual Value	On disposal of the asset, the proceeds of sale are compared with the book value, with any difference charged/credited to the P&L as profit/loss on sale of assets.	The lessor will dispose of the asset on expiry and accept either the profit (or the loss) into its own P&L account. The likely residual value will be factored into the overall leasing cost during the life of the asset.

1.8.8 It is possible to consider the effects of both the owned and leased model through TAS analysis of a typical 200-vehicle (large) operator with an average fleet age of 7.6 years – this is illustrated in Figure G.

1.8.9 Under the ownership model:

- operating costs are £3.3m a year lower;
- depreciation charges are £2.0m higher;
- because operating profit is calculated before interest costs, it appears to be higher, too, at £3.4m;

- the operating margin is much higher 11.2%; and
- the capital employed by the company is more than three times higher at £21.9m, giving a minimum net profit target of £1.26m to meet its obligations.

1.8.10 Under the leased model:

- the operating costs are £3.3m higher in order to meet the leasing costs;
- the depreciation charges are much lower;
- the level of operating profit seems to be lower, at £2.1m;
- the operating margin is 6.9%; and
- the capital employed by the company is £6.1m, giving a minimum target net profit of £0.76m to meet obligations to lenders and shareholders.

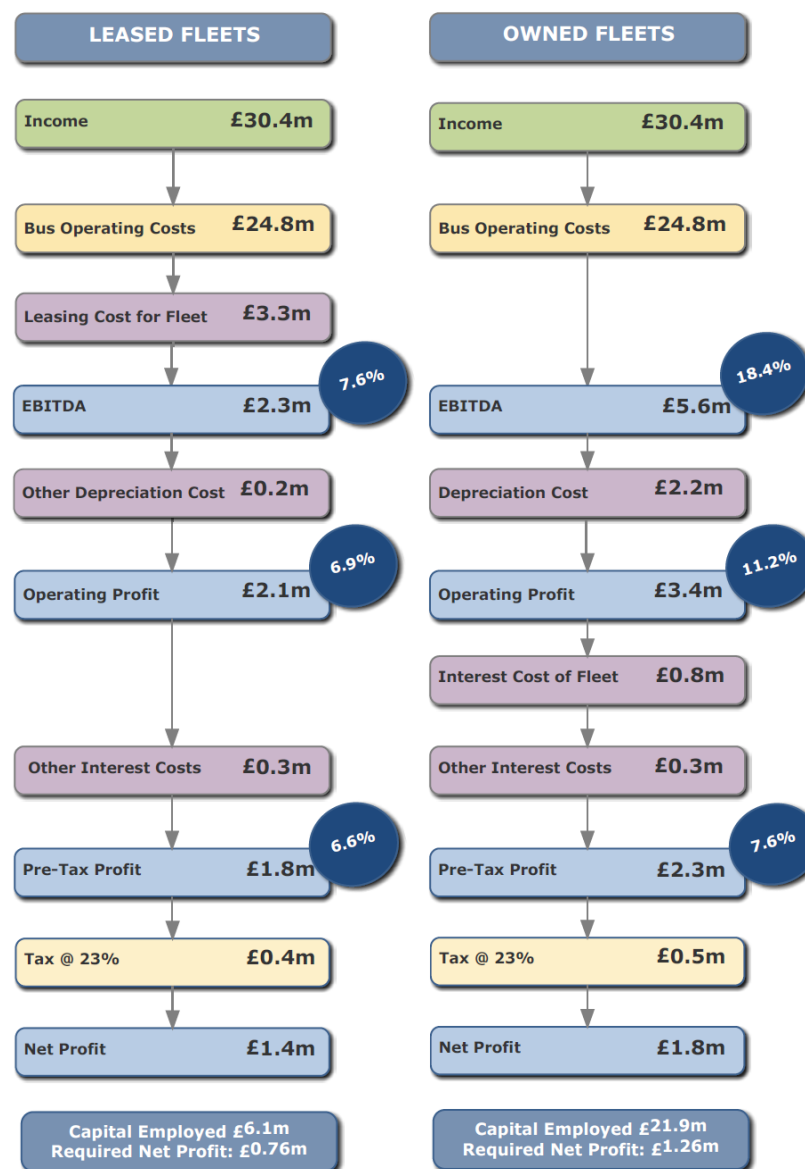
1.8.11 There are several risks in the leasing model going forwards; these may be summarised as (but not limited to)

- whether an increase in demand for leasing amongst bus operators would push the costs up;
- the effects on the second hand market for vehicles and how this would be reflected in residual value risk; and

- the overall level of interest rates compared with their current very low levels.

- 1.8.12 Should the cost of leasing vehicles rise too much, operators will naturally revert to the ownership model – which is predominant for the larger bus operators: however, the costs of that model would also be affected by the residual value risk and the level of interest rates.
- 1.8.13 Table 3 illustrates the main advantages and disadvantages for each type of vehicle procurement.
- 1.8.14 This tends to be fine for longer-term and predominantly commercial operations; the same cannot be said for short term contracts. In our paper for the Welsh Assembly Government, we stated that the purchase and lease market can be influenced by contract length – for example, operators leasing vehicles purely to fulfil the required contract period – with reciprocal implications for the second hand market.

Figure G: Profit & Loss: Vehicle Procurement



EBITDA stands for "Earnings before Depreciation, Amortisation, Interest and Taxation"

Table 3: Vehicle Procurement: Advantages and Disadvantages

Procurement Method	Advantages	Disadvantages
Purchase	<ul style="list-style-type: none"> • Outright ownership (asset) with no rental payments • No restrictions on how vehicle is operated (incl. mileage) • Disposal at any time without financial penalty – subject to economic life considerations • Can be refinanced for cash injection into the business or to release asset equity • Suited to alternatively-fuelled vehicles (less risk averse) 	<ul style="list-style-type: none"> • Full ownership responsibility, including administration and maintenance • Operational reliability • Depreciation charge throughout economic life • Risk associated with meeting estimated Residual Value
Lease (Finance)	<ul style="list-style-type: none"> • Reduces upfront vehicle costs • Flexible payment options – rental payments tailored to meet operator cash flow • Fixed or variable interest element to lease to meet operator needs • Lease charge covers full depreciation cost of the vehicle 	<ul style="list-style-type: none"> • Legal obligation to pay rental charges throughout period of lease – financial penalty for early termination of lease • Variable interest payments dependent on prevailing economic conditions • Operator remains responsible for maintenance and repair costs
Lease (Operating)	<ul style="list-style-type: none"> • Reduces upfront vehicle costs • Useful for public sector agencies as a means of retaining capital allocations • Includes maintenance and other fleet management arrangements • Budgetary control (fixed payment) 	<ul style="list-style-type: none"> • Legal obligation to pay rental charges throughout period of lease – financial penalty (incl. full payment) for early termination of lease • Vehicle returns to leasing company at end of contract • Operating constraints (e.g. mileage)

1.9 Vehicle Specifications

1.9.1 As part of our 2014 Report, TAS undertook some informal research amongst several bus vehicle manufacturers at the Euro Bus Expo at NEC Birmingham to gain a better understanding of the pricing elements of modern buses; these are summarised in Table 4.

Table 4: Sample New Vehicle Specification and Pricing

Vehicle Attribute	Supplier 1	Supplier 2	Supplier 3	Supplier 4
Standard Retail price	ca. £150k	ca. £120k	ca. £142k	ca. £160k
Vehicle length	12.0m	11.5m	11.5m	12.0m
Euro emission standard	Euro VI	Euro VI	Euro VI	Euro VI
Fuelling options	Diesel/Hybrid/ Full Electric	Diesel/Hybrid/ Full Electric	Diesel/Hybrid/ Full Electric	Diesel
Operational life expectancy	15 years	15 years	15-20 years	15 years
Est. fuel consumption	8.0-10.4 mpg	8.0-12.0 mpg	10.1-10.8 mpg	9.5 mpg
Maintenance contracts	Pence/Mile (3/5/7 years)	Pence/Mile (service centre)	Pence/Mile (operating site)	Pence/Mile (dealership)
Residual value	Calculated by Financier	Calculated by Financier	Calculated by Financier	Calculated by Supplier

1.9.2 The standard retail price for a diesel bus is dependent on a number of operational factors, specifically:

- operating terrain;
- route; and

- residual air quality issues (relating to the engine Euro Emission Standard for the vehicles).

1.9.3 All new vehicles are sold to Euro VI emissions specification with an anticipated life expectancy of ca. 15 years – in line with the vehicle depreciation policies of the major bus operating groups. In addition, most of the larger operating groups may be able to get volume-based discounts for bulk vehicle orders.

Influence of Fuel Technology on Price

1.9.4 During consultation, and subsequent research on vehicle fuel options, it became apparent that there is a significant degree of price variation; this is summarised in Table 5.

1.9.5 For an alternatively-fuelled PSV (i.e. hybrid and electric), there is an additional cost of between 90-100% against the conventional diesel specification vehicle, partly related to R&D and opportunity cost.

1.9.6 It is worth noting that almost all alternatively-fuelled vehicles (including biomethane and CNG gas buses) have been funded by the public sector as construction of the charging infrastructure is under the direction of these bodies (specific reference was made during this research to the DfT's Green Bus Fund challenge scheme as steering such investment). It is notable that operators in England – such as Reading Buses and Stagecoach – have purchased more gas buses without government funding after the charging infrastructure was paid for.

Table 5: Price Variation based on Vehicle Fuel Type

Vehicle Fuel	Standard Retail Price	Additional Capital Cost	Capital Funding	Additional Revenue Cost
Diesel	£120,000	£0	None	Diesel Fuel
Hybrid (Diesel/Electric)	£120,000	£110,000	GBF ³ provides 50% capital funding (buyer to source additional £55k)	Diesel Fuel and Electric Charging
Electric	£120,000	£120,000	GBF provides 80% capital funding (buyer to source additional £24k)	Electric Charging

Influence of 'Soft Factors' on Price

1.9.7 'Soft factors' – i.e. those factors which are designed within the vehicle specification to improve the customer journey experience – can incur the additional costs:

- Upgrading seats to higher comfort specification incl. e-Leather trim: £2,000 to £4,000 per vehicle, depending on interior specification;
- Fitment of mobile Wi-Fi: £1,500 to £2,000 per vehicle;
- Fitment of USB and power (charging) sockets: average £250 per socket, with a minimum number required in most instances (for example, 20 sockets, 1 for each row of seats);

- Fitment of on-bus audio equipment (e.g. next stop announcement): £1,500 to £3,000 per vehicle, depending on which vehicle GPS and destination equipment has been installed;
- Fitment of CCTV camera system: £4,000 to £6,000 per vehicle, depending upon recording equipment required and level of sophistication.

Thus, a high specification vehicle with all of the above attributes could cost, on average, £17,000 more than a standard specification vehicle.

³ GBF Green Bus Fund – applies to England and Scotland only and is a form of challenge funding, thus not guaranteed

2.1 Conclusions

2.1.1 From our high-level analysis, we can draw some conclusions – and assumptions – regarding the operation of the Welsh bus fleet.

2.1.2 The larger operators account for the majority of local bus operations in Wales, and have the most 'modern' fleets. In the TAS 2014 report to the Welsh Government on procurement issues, we noted that over the past five years, these operators have invested over £38 million in new vehicles – representing some 80% of their total capital expenditure. These sustained levels of investment have contributed to lowering the average age of the Welsh bus fleet to ca. 8.4 years.

2.1.3 In comparison, the intermediate and smaller bus operators – more numerous and diverse – have businesses focused largely on contract and private hire service provision. Despite some investment in new vehicles, these operators have tended to purchase vehicles second (or third) hand – those vehicles being fully depreciated, on the basis of offering lower tender prices for their bus services.

2.1.4 There are two aspects for the Welsh Government to consider:

- Firstly, most operators operate some form of educational (schools) transport service. Smaller and

independent operators will be inclined to operate older, fully depreciated vehicles at low cost to deliver these services. Thus, the overall condition of the Welsh bus fleet appears to be inexorably linked to school transport – and any policy that considers upgrading the fleet should take account of both markets; and

- Secondly, European emissions standards have a role to play in improving air quality, particularly in more urban areas (such as Cardiff, Swansea and Wrexham). Local authorities and the Welsh Government need to give due consideration to any clean air policy and its reciprocal implications for rural areas and inter-urban bus operations – in short, does having the latest, cleanest buses in these areas really matter?

2.1.5 We note that the trend over the past five years amongst the larger Welsh bus operators has been to operate a mixed fleet of both purchased and leased vehicles.

2.1.6 Our analysis of the average age of the Welsh bus fleet (based on those operators analysed) suggests that ongoing investment in new vehicles is at the forefront of the operators' efforts to improve the service offered to their passengers and is much needed to maintain the attractiveness of bus services in Wales.

- 2.1.7 It is clear from our discussion with those manufacturers with whom we consulted that they had no preference for whether their clients purchase or lease their vehicles. In most cases, finance (borrowings or loans) is available to operators at market rates. Several manufacturers are party to vehicle contract frameworks which can be a useful means of leasing vehicles for a predetermined period of time (e.g. in alignment to a specific contract).
- 2.1.8 The price for new vehicles depends mainly on the add-on costs (such as for alternative fuel arrangements or customer enhancements) against a standard, conventional diesel product, as well as the operating terrain and route of the intended service. Most larger bus operators prefer to undertake operational maintenance at their own premises for vehicle types that they are familiar with, and are more risk averse to maintaining new vehicle products that require additional capital infrastructure – for example, fuelling infrastructure.
- 2.1.9 For bus service contracts that require some form of vehicle procurement, both operators and manufacturers agreed that some form of informal consultation prior to the formal procurement process could improve efficiency and avoid unforeseen costs during the operational phase of a contract.

2.2 Recommendations: Taking this Forward

- 2.2.1 To guide the Welsh Government in deciding the most appropriate form of support for bus services, we need to consider:
- Whether revenue support (e.g. revenue support, grant income and/or assistance with operating costs) offers the most appropriate form of support in a service contract that requires vehicles;
 - Whether capital support (e.g. vehicle procurement) - makes a difference to the operating profit of the operating business; and
 - Whether a mixture of both revenue and capital really is the best approach.
- 2.2.2 There is an interesting dynamic to consider here for both the public and private sectors. It could be argued that:
- the public sector finds access to capital finance easier than revenue finance (e.g. loans); and
 - the private sector finds access to revenue easier than capital finance (e.g. farebox income).
- 2.2.3 In theory, it seems as though both parties could play to each other's strengths within a bus service contract:

- The Welsh Government could raise the capital financing for the procurement of vehicles at relatively low rates of interest; whilst
- The successful contracted bus operator manages the revenue aspects of the service/s, and takes the full financial risk.

2.2.4 In reality, however, there are a number of reasons why this isn't a more regular feature of UK bus operation:

- the reluctance, and suspicion, amongst Bus Operators in ceding aspects of operational control of deregulated bus service operations, resulting in bespoke operating networks and different procurement policies leading to varied fleet composition;
- the difficulties facing local and central government in providing revenue support to the bus industry in the face of a squeeze on public spending, and the aspiration amongst some authorities for greater operational control of bus services; and
- the general paucity in quality and quantity of formal bus partnership arrangements between the public and private sector which play to the strengths of both parties.

2.2.5 Here, the influence of the educational transport market becomes important again. Bus operators will only be prepared to purchase new vehicles if the contract pays for them. Funding bus services – and providing funding

for new vehicles – from both the Welsh Government's transport and educational budgets for tendered services would seem an obvious step to addressing latent concerns within the market.

EU State Aid Rules: An Overview

2.2.6 Alongside this, of course, are considerations regarding State Aid implications.

2.2.7 Using taxpayer-funded resources to provide assistance to one or more organisations in a way that gives an advantage over others may be considered as State Aid. State Aid rules generally apply to all public transport subsidies other than those awarded by competitive tender. Thus, challenge funds (e.g. Green Bus Fund) are subject to State Aid rules.

2.2.8 Some State Aid is illegal; under EU rules, such aid distorts competition in a way that is both harmful to citizens - and companies - within the European Union. But where it is unavoidable, State Aid can be given legally by:

- using one of a set of approved EU mechanisms for State Aid; or
- by getting approval for the particular scheme from the EU Commission.

2.2.9 Any contract between a public sector organisation and an operator valued at less than €200,000 over three years is considered to be a de minimis State Aid arrangement and will not contravene State Aid rules.

- 2.2.10 Should Government wish to pay higher levels of grant to bus operators through challenge funding, it should 'notify' the EU and seek agreement. There is also a 'block exemption' from State Aid rules for certain types of project.
- 2.2.11 We recommend that legal advice should be sought where there are concerns that government-funded projects could contravene State Aid rules. It is good practice, therefore, for both proponents and suppliers involved in challenge funding schemes to confirm that they have received legal advice on their respective positions regarding State Aid and, for bidders, why their bid does not contravene State Aid rules.