

# **COST TABLES 2024**

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Contents	Page
Introduction to the Cost Tables	3 - 4
RHA commentary on the 2024 survey results	5 - 7
Explanatory notes	8 - 12
Costs for a 44 tonne g.v.w. articulated unit	13
Costs for a 13.6 metre tri-axle curtain-sider	14
Alternative methods of vehicle and trailer acquisition	15
RHA survey on movement of costs	16
Cost movement report	17
Index of operating costs	18
Calculating charges and rates	19
Estimate of start-up capital required for 44 tonne artic & trl	20
Template for rate quotation	21 - 22
Fuel adjustment: specimen agreement and calculations	23
Calculating your carbon footprint	24
Supplementary paper – How to determine your costs	25 - 31
Useful information	
Key Performance Indicators	32 - 33
Vehicle Utilisation and cost sheets	34 - 35
Apprise Consulting Ltd	36

## Introduction to the Cost Tables

The 2024 RHA Goods Vehicle Operating Cost Tables are the thirty-second in this series and have been compiled for the Road Haulage Association by Apprise Consulting Ltd.

These Cost Tables are designed to assist members with the task of relating rates charged to costs incurred. They have two main features:

- They are the result of a survey of real costs from a large range of road freight transport companies within the RHA membership. These have been used either directly or as the basis for discussion with manufacturers and suppliers to establish actual costs.
- They make no claim to be your own costs or the increases or decreases you may have witnessed over the past year. Space is provided to build up a parallel picture of your own vehicle costs and overheads. Guidance is given as to how to do this. There is also an interactive cost table available for RHA members at <https://howtologistics.com/rha-members/> where different types of vehicle costs can be calculated.

Annual cost changes are based on the results of the Annual Survey on Movement of Costs, based on the periods 1<sup>st</sup> October to 30<sup>th</sup> September for each year. Thank you to all those companies who contributed to the survey.

This year, 68% of the survey responses related to 44 tonne gross articulated units, so we have restricted the cost tables to this vehicle type only. The principles are the same for all other types of vehicles which is why you need to include your own true costs in the calculations. Our figures are a guide only. An example 18 tonne rigid is displayed in the interactive cost table already mentioned.

Results from the 2024 survey are shown on pages 13 and 14

A summary of costs and their percentages at a typical annual mileage is provided on page 17. It is important to note that these cost percentages will vary significantly between different types of operation e.g. long / short distance journeys, tipper work / car transport / general haulage and also by geographic location.

You need to establish your own ratios in the following way:

- Substitute your own figures which you can identify as being different from those in the tables;
- Determine the total time-related cost per year;
- Apply the distance-related costs to your own estimated annual mileage to determine the total of those costs;
- Determine total time and distance costs;
- Calculate each item of cost as a percentage of the total.

Using these percentages will enable you to convince your customers how much your own costs have increased during the year and help you in obtaining those sorely needed increases in rates.

You should have a separate fuel escalator to cover the increases and decreases in fuel thus enabling you to separately negotiate increases in all other costs associated with your operations. In our tables for 2024 we show that the majority of costs have increased year on year except fuel and fuel additive with a significant increase in a number of areas.

Both the RHA and Apprise Consulting welcome your comments and suggestions for improvements and how we can make these tables even more useful to members. We are also interested in what other kinds of data you want included in this report.

Users of these tables are welcome to raise any queries with Gwynne Richards on 01446 500231 or e-mail Gwynne at [gr@appriseconsulting.co.uk](mailto:gr@appriseconsulting.co.uk)

Interactive cost tables can be found at the following web site which are available to RHA members <https://howtologistics.com/rha-members/>

## The 2024 Survey – RHA commentary

The overall percentage increase for 2024 based on our own member survey is 9.21 percent, **excluding fuel.**

Increases in the individual aspects involved in operating a truck are detailed with the adjusted cost percentages for our 2024 model in the right-hand column. There is a large variation when fuel and additive is included because of the significant fuel cost reduction throughout most of 2023.

*The 44-tonne cost model demonstrates annual costs of £151,578 excluding fuel and additive. This is an increase of £12,783 on the previous year.*

*Including fuel and additive gives the total annual costs for the 44-tonne combination as £201,326 with fuel at average price of 117.67ppl to the end of September*

**Vehicle and depreciation:** 14.3 percent (trailer 10.2 percent)

Most responding members operated at 44-tonnes (68%) and many commented about the increases once again for 6x2 tractor units with examples ranging up to 40% for purchase options. Leasing has also had similar hard hits with some commentary that previous lease arrangements would be ended in favour of purchase once more. Purchase is still the chosen method to acquire trucks with 84% of respondents saying they use this medium and 27% saying they lease, obviously some fleets have a mixed of options.

A quick look back at the past five years and the inflationary effects on truck prices; 2019 saw prices increase 2.75%, 2020 was 2.5%, 2021 started the higher momentum at 8%, last year a whopping 20% followed by another big gain this year of 14.3%. A mixture of Brexit, pandemic and Russia/Ukraine war costs have led to this. This is especially the case where trucks from a manufacturer end up being delivered to UK then immediately despatched to an EU body builder to facilitate VAT and customs rules. Net-zero, not a problem!

**VED + LEVY:** 102.86 percent

The HGV Levy has now been re-introduced. The levy will apply to heavy goods vehicles of 12 tonnes gross vehicle weight or more. It is specific to an HGV and a typical EURO VI VED & Levy combination is £1,136 per annum.

**Insurance:** 7 percent

Insurance costs have increased by 7% compared to last year. Our model shows an increase from £5,015 to £5,366 for general haulage rather than any specific sector. Very few members mentioned any form of decreases this year and those that did had very specific reasons such as splitting their fleets into differing sectors and therefore altering risk scenarios.

**Driver employment costs:** 6.5 percent

Understandably the heat has fallen out of driver pay as in many sectors work has diminished and staff levels are at acceptable levels. New drivers though are not in many cases anywhere near as productive or indeed as fuel efficient as more seasoned staff. Recently, some firms have commented that drivers are now knocking on the proverbial door looking to

change company or find themselves requiring a new employer, the result of firms going into administration.

Typically, members either caught up with pay increases last year and have offered smaller increases this year or they did not increase significantly last year and have had to do so this year. Not all the 6.5% increase is down to pay awards, it also covers National Insurance increases, training and in some cases agency costs. The National living wage is currently £10.42 and will increase by 9.8% to £11.44 in April 2024 which will add tremendous pressure to van and rigid HGV rates at the lower end of the pay scale.

*We publish an annual survey regarding employee remuneration within the haulage industry and this is due to be published early January where we will look further into the driver role and related pay.*

**Repairs and maintenance: 9.5 percent**

The effects of technician scarcity are causing concern up and down the country and is recognised by the Traffic Commissioners this year too. In short, it has been reported by members, regional councils and sector specific groups that getting good service, on time is increasingly difficult and that associated costs are spiralling. The position of fitter even hit the national press in the summer when The Times reported it was a role with one of the highest gains at nearly 20%.

Meanwhile, safety developments such as larger windscreens for clear vision also mean larger costs and more frequent down time due to damage from stone chips. Downtime awaiting new windscreens was a factor mentioned to.

**Tyres: 7.3 percent**

In many cases multiple increases through the year was commented on. Also, the hour upon hour wait for roadside assistance where tyre changes were required.

**Overhead costs: 8.8 percent**

In his March Budget, the Chancellor killed off the Energy Bill Relief Scheme which added to overhead energy costs. General overheads are a concern, the 'everything is going up' scenario rings true, and some notables were:

- Electric costs especially on-site renewal was commented on
- IT support costs including Microsoft and Google licencing rising over 10%
- Staff salaries
- Site rents

**Diesel exhaust fluid (DEF) -38.6 percent**

AdBlue pricing cooled as the price of gas reduced and sourcing became less of an issue. Last year we used our 1000 litre IBC price of 92ppl in our calculations resulting in a £2,295 spend at 6% of fuel usage. Prices remained high as we entered 2023 but fell as the month went on and from the halfway point in the year have remained reasonably static. Our price used this year is 56.5ppl again using the IBC price. Rates of mid 30's ppl are possible for bigger users.

The price range is wide, and in our report, we have reduced the annual cost from £2295 to £1,409 as 6% of fuel use. Our AdBlue inflationary position is a 39% reduction to 56.5 ppl (IBC). The percentage of overall operating cost for the DEF element was 1.16% in our December 2023 report, now this has reduced to 0.7%. Unfortunately, it remains a key requirement for the modern diesel engine.

**Fuel: -15.92% percent**

Last year, the cost of diesel for our model 44-tonne articulated truck and trailer increased by more than £16,000 with the average price to the end of September at 139.95ppl ex-vat. Those costs gradually fell through the first half of 2023 getting down to 105ppl in May before starting to rise once again going into September. Thereafter, prices once again started to fall. The average price used for 2023 being 117.67ppl up until the end of September based on the 60/40 mix of bulk and card pricing.

Many operators use fuel escalator clauses but not all.

Fuel had increased through 2022 partly because of the post-pandemic catch up globally but also and mainly due to the Russian invasion of Ukraine. Our first fuel survey weekly report of 2023 gave a price indication of 127.96ppl and as the weeks/months went by pricing gradually eased into June where pricing steadied for a while in the mid 105ppl range. However, after that point a gradual increase in fuel costs started to occur and this was largely down to Saudi Arabia deciding to cut its oil production. The cuts were announced monthly until early September when they decided to make them last at least until the end of the year. This puts a gradual squeeze on global supply meaning steady increases to products, in this case diesel. A further blow came to oil supply and costs when the Gaza/Israeli conflict erupted following 7<sup>th</sup> October attacks by Hamas on Israeli settlements and a music festival. Oil prices and fuels tend to spike following issues that likely threaten peace and free movement of goods in the Middle East however this is then tempered by traders/investors considering the global dire economic situation. In other words, Brent oil had increased to \$95 at the start of October but just over a month later, briefly it went sub \$80. This of course meant that the price of diesel (and other fuels) had started to come back down from the recent high positions.

## Explanatory notes

The following brief notes are provided to assist members fully understand these cost tables.

The costs assembled in the accompanying pages result from a combination of the annual survey undertaken by the Road Haulage Association and research by Apprise Consulting on vehicle costs. The figures are averages based on the responses received from the survey and validation thereafter. These are averages across a number of different companies and types of operations.

Accordingly, it is misleading for you to assume that the costs and increases shown in the accompanying tables relate exactly to your fleet.

As part of our research, we have compared our results with several of the published cost tables. The variations across these tables, for every cost except VED, lend weight to our contention that depending on averages is simply untenable and is no substitute for utilising your own specific costs.

It is for this reason that, alongside the average costs for the 44-tonne articulated unit as determined in the survey, there is a column in which you can insert the relevant comparable figures for the vehicles in your own fleet. This is not restricted to 44 tonne vehicles however care needs to be taken when applying these increases to other types of vehicles. The format will however work for any type of vehicle. The interactive cost tables at <https://howtologistics.com/rha-members/> allows you to enter any type of vehicle or trailer into the cost model.

### **Time-related and distance-related costs**

Although a number of companies convert their fixed and variable costs into a total cost per mile this can be wholly inaccurate when quoting for certain types of haulage work. Separation of these costs is encouraged by these tables which bring costs together but do not produce an all-encompassing cost per mile. Costs are an infinitely variable mixture of time-related and distance-related costs. Time-related costs are accruing even when the vehicle is not being used while the distances we may cover in any given period of time can vary enormously according to the type of work we are undertaking.

These tables are designed to arrive at a cost per average day (see below), which can be reduced to a cost per hour depending on the number of hours worked in a day, and then, quite separately, an average cost per mile or kilometre actually run. This is dealt with in greater detail in the section **Calculating Charges and Rates** on page 19 and in the Supplementary Paper on page 25 onwards.



## **Cost categories**

### **i) Vehicle and trailer costs**

These are given on a representative basis because of the enormous variations encountered.

These variations arise from:

- Costs from different vehicle and trailer manufacturers
- Different Euro-specifications
- Truck specification required for a particular operation
- Discounts available to large fleet purchasers
- List price differences by dealership and geographic location

### **ii) Average days per annum**

One of the most vital keys to profitability is the number of days per annum you effectively use your vehicles. This governs the rate at which you can recover time-related costs since these will mostly be accruing against you, whether you use the vehicle or not. You must determine, either from available records or from an informed view of your work, the number of days likely to be worked by each vehicle during the year.

In these tables, to be consistent, we have continued to assume 240 'Earning Days' throughout, but it is essential that you determine your own utilisation and hence your potential competitive edge. There is evidence to suggest that many companies are, in fact, achieving higher utilisation factors, particularly where multi-shifting is possible and where there is an increase in weekend working. If multi-shifting, ensure that you include the costs of a second and if applicable, a third driver.

### **iii) Typical miles per annum**

These figures are used to calculate the typical cost percentages per annum on page 17. In these cost tables we have taken an average of 75,000 miles for a 44-tonne articulated unit and trailer. This average mileage is again likely to be different for your own fleet.

### **iv) Average depreciation/residuals**

This is calculated on a straight-line basis over periods appropriate to the type of vehicle. In the 44 tonne gvw category we use a 6 year depreciation period for the tractor unit and 10 years for the trailer.

There is no allowance for residual values to compensate for the escalating price of replacing existing vehicles with new or even second-hand equipment. Within your own calculations you may wish to include a residual value and either use straight line or declining balance methods of depreciation. Many companies are now turning to declining balance methods using a 25% depreciation figure. Other companies are also looking at "double-lifeing" - re-using key cost components such as bodies and chiller units on new base vehicles - with these companies

realising significant step-change reduction in total cost of ownership. Another trend is the lease or contract hire of vehicles. In this case replace the depreciation and interest costs with a single lease or contract hire figure. You will also need to check whether the VED is included. If the contract is lease with maintenance or contract hire you will also need to adjust the R & M and tyre figures accordingly.

**v) Driver employment costs**

Employment costs must cover actual weekly wages, bonuses, holiday entitlements, relief drivers, sick leave, NHI and pension costs together with training, uniforms and PPE. In other words, the total cost of ensuring that you have a driver in the cab for every available working hour.

**vi) Insurances**

These are average premiums for the vehicle only. There are, in practice, wide variations in premiums paid, related to fleet size, use of technology such as telematics and cameras and claims record. Goods in transit insurance is included in the overheads section.

**vii) VED licences**

Rates shown are for a new, standard 44 tonne gross combination incorporating a tri-axle curtain-sider. There can, however, be some variations based on age, engine size and carbon emissions. In these cost tables we have taken into account the restoration of the HGV levy.

**viii) Interest on capital**

This has been estimated at a notional 6.0% on mid-life value, i.e. effectively half the original cost. Companies will be able to borrow money at different rates. Companies need to ensure they enter their own figures here. Interest rates are on a par at present. We try to be consistent over the years.

**ix) Overheads per vehicle**

This again is the average increase obtained from the survey. You must assess the total overheads in your own business and allocate them to vehicles. The simplest way of doing this is in proportion to vehicle carrying capacity. Remember also that if you run a business with other activities besides vehicle operations such as warehousing or vehicle recovery, only

overheads specifically attributable to the haulage operation should be allocated directly to them.

Overheads are all business costs not specifically identified in the cost sheets.

Typically, they will include:

- a) Management (including working directors), Supervisory and Clerical Salaries and Wages, including NHI, holiday, sickness pay and pension costs for those staff directly involved in the transport operation excluding drivers. Also include replacement staff. Where a manager is in charge of both transport and warehousing the costs need to be apportioned accordingly;
- b) Administration Overheads: These include total property costs incurred by the transport operation, not including the warehouse - i.e. rents and rates paid, gas, water and electricity, property repairs and maintenance, general insurance, general office expenses, postage, telephone charges, legal fees, bank charges (not interest), hire or depreciation of furniture and equipment, IT systems, depreciation or rental of staff cars, subsistence payments to managers, audit fees, management consultancy fees and sales promotion, provision for bad debts, security services, welfare and ancillary wages;
- c) Operational Overheads: Include Operator's licence, goods in transit insurance, price of equipment such as sheets, ropes, straps, dunnage, running costs of breakdown vehicles, service vans and staff cars including fuel, maintenance and cleaning of tanker/refrigerated/garage equipment, tachograph charts (if still using), tachograph analysis, tools and consumable materials.

**x) Other costs**

Additional costs such as bonuses, low emission zone charges, overtime hours and subsistence, tolls and ferry costs do not accrue on any consistent time or distance-related basis. They are specific to individual jobs. They must, therefore, be charged direct to those transport jobs as incurred and have therefore not been included in these Tables.

**Distance-related costs**

These are based on a best view of industry averages, adjusted annually by reference to the survey results shown on pages 5 - 7. These costs have been calculated as follows:

**xi) Fuel**

In the past the RHA cost tables have been based on the bulk fuel price as at 30<sup>th</sup> September each year. This year we have used a blended average to the end of September 2023. This is based on 60% bulk fuel purchases and 40% fuel card purchases.

For this year's figure the cost of fuel is calculated as 117.67 pence per litre (ppl) and Ad Blue at 56.5 ppl. Companies will purchase their fuel in different ways and therefore you need to use your own actual fuel costs to determine year on year increases/decreases.

**xii) Lubricants & additives**

These are included in the repairs and maintenance figures below.

**xiii) Tyres**

These are based on average costs per mile taken from the survey. We have used a tyre life of 65,000 miles per annum based on an annual truck mileage of 75,000.

**xiv) Repairs & maintenance**

All service and repair related costs have been included under this heading, however, routine servicing costs and contract repairs (which are often charged on a monthly basis, under contract) are frequently recovered as a separate, time-related item. Lubricants and certain additives are included in these figures.

**NOTE**

All of the costs we have outlined above will vary from operation to operation. This is why you **must** incorporate your own fleet figures when using these Tables.

## Costs for a 44 tonne gross (6x2 + tri-axle c/s) combination

Data	Average Figures	Your Figures
Vehicle price (representative) tractor only	£139,243	-----
Average depreciation period (years)	6	-----
Typical miles per annum	75,000	-----
Average days worked per annum	240	-----
Average miles per gallon	8.3	-----
 <b>Costs</b>		
Time-related per annum	£	
Driver employment costs	58,638	-----
Depreciation	23,207	-----
Licences	1,136	-----
Vehicle insurance	5,366	-----
Interest on capital (6.0%)	4,177	-----
Overhead per vehicle	36,116	-----
Ownership of 1 trailer (page 14)	4,803	-----
Total time costs	133,443	-----
Time cost per day ÷ 240	£556.01	-----

**Note** Bonuses, excess hours, subsistence and similar are not included. These should be added to costings for rates as incurred, by job. Figures are rounded to nearest pence.

Mileage-related	ppm	+ Trailer ppm	
Fuel at 117.67 p. p. litre	64.45		-----
Additive at 56.5 ppl	1.88		
Tyres	2.79	3.48	-----
Repairs and maintenance	12.69	5.22	-----
Total mileage costs	81.81	8.70	-----

N.B. Chargeable rate = time cost + mileage cost + job specific costs + profit  
There is an element of roundup in these figures.

## Costs for a tri-axle trailer (curtainsider)

Data	Average Figures	Your Figures
Vehicle price (representative)	£36,946	-----
Average depreciation period (years)	10	-----
 <b>Costs</b>		
<b>Time-related per annum</b>		
Driver employment costs		
Depreciation	3,695	-----
Licences		
Vehicle insurance		
Goods in transit insurance		
Interest on capital (6.0%)	1,108	-----
Overhead per vehicle		
<hr/>		
Total time costs (rounded up)	4,803	-----
Total daily cost	20.01	-----
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**Note** Operators using more than one trailer per tractor unit should adjust this cost as appropriate.

Mileage-related	ppm	
Fuel		
Tyres	3.48	-----
Repairs and maintenance	5.22	-----
<hr style="border-top: 1px dashed black;"/>		
Total mileage costs	8.70	-----
<hr/>		

N.B. Utilise the adjacent column to enter your own figures for this vehicle and trailer type.

## Alternative methods of vehicle and trailer acquisition

Although 84% of members purchase or part purchase their vehicles there are a number of alternative vehicle acquisition methods available. Meanwhile, 27% of the members surveyed use a combination of leasing arrangements, purchase and contract hire to acquire their trucks. Very few of our members use leasing or hiring arrangements without purchased options.

According to the BVRLA more and more companies are choosing to acquire vehicles through some form of funding agreement rather than buying them upfront. They have a choice of purchase - based funding, contract hire or leasing. These forms of funding involve paying a regular monthly amount over a specified contracted period.

Purchase-based funding methods include hire purchase and contract purchase. Lease-based methods include contract hire, finance lease and operating leases.

Before opting for a funding method, an organisation needs to consider the overall cost of each approach, the flexibility it provides, how it will affect the balance sheet and what the potential tax implications are.

The length of contract with your customer can also have an impact on the method of vehicle acquisition.

## RHA Survey on movement of costs

PERIOD: 1<sup>st</sup> OCTOBER 2022 – 30<sup>th</sup> SEPTEMBER 2023

(a)	(b)	(c)	(d)
% Total Cost 30.9.22	Cost Category	%Price Movement in period	% Total Cost 30.09.23
14.25	Vehicle, Trailer & Depreciation	13.42	15.99%
0.28	Road Tax	102.86	0.56%
2.53	Insurance	7	2.67%
27.73	Driver Employment Costs	6.50	29.13%
6.18	Repairs & Maintenance	9.5	6.67%
2.21	Tyres: Replacement tyres, tubes etc.	7.3	2.33%
16.72	Overhead Costs	8.8	17.94%
69.89	TOTAL	9.21	75.29%
28.95	Fuel	-15.92	24.01%
1.16	Additive	-38.59	0.7%
100.00	Total = Fuel + Other Costs	1.38	100

*2018 Fuel ppl (30/09/18)	101.88
*2019 Fuel ppl (30/09/19)	102.71
*2020 Fuel ppl (30/09/20)	90.61
*2021 Fuel ppl (30/09/21)	100.53
2022 Fuel ppl (30/09/22)	139.95
2023 Fuel ppl (30/09/23)	117.67

**The above figures relate to a 44-tonne artic plus tri-axle trailer. The trailer costs are included under Vehicle and depreciation. Running costs are based on 75,000 miles per annum and 8.3 mpg. \* Note the fuel costs for 2018 to 2023 are based on the blended year average of 60% bulk fuel price and 40% card rate up to the end of September 2023.**



## Cost Movement Report

September 2023

**44 tonne gross 6 x 2 articulated unit plus a 13.6 metre tri-axle curtainsider**

	<b>75,000</b>	<b>75,000</b>	
Mileage	<b>September 2023</b>	<b>September 2022</b>	<b>Change in % points</b>
	<b>%</b>	<b>%</b>	<b>2023 - 2022</b>
Wages	29.13	27.73	1.4
Depreciation	11.53	10.22	1.31
Licence	0.56	0.28	0.28
Insurance	2.67	2.53	0.14
Interest	2.07	1.84	0.23
Overheads	17.94	16.72	1.22
Trailer	2.39	2.19	0.2
	<b>66.28</b>	<b>61.51</b>	<b>4.77</b>
Fuel	24.01	28.95	-4.94
Additive	0.7	1.16	-0.46
Tyres	2.33	2.21	0.12
R & M	6.67	6.18	0.49
	<b>33.72</b>	<b>38.5</b>	<b>-4.78</b>
		<b>100.0</b>	<b>0</b>

### NOTES

1. Average miles per year is as per the RHA Cost Tables 2024, page 13. Figures are only valid at these mileages.
2. Differences relate to "roundup / rounddown" calculations

## Index of operating costs

30<sup>th</sup> September 2000 = 100 (excluding AdBlue – September 2018)

	09.10	09.11	09.12	09.13	09.14	09.15	09.16	09.17	09.18	09.19	09.20	09.21	09.22	09.23
<b>COST CATEGORY</b>														
<b>Vehicle Depreciation</b>	136	147	156	162	170	176	180	185.4	189.1	194.3	199.2	215.1	255.7	276.7
<b>Road Tax</b>	42	42	42	42	42	42	42	42	42	42	42	19.6	19.6	80.7
<b>Vehicle Insurance</b>	112	119	127	134	137	140	143.5	151.2	160.3	166.7	175	177.7	186.6	203.4
<b>Drivers: Employment Costs</b>	158	161	169	172	177	182	188	193.2	201.9	212	217.5	256.7	282.6	291.2
<b>Repairs and Maintenance</b>	155	164	171	179	182	186	190	195.7	199.6	204.1	210.4	223.1	245.4	267.5
<b>Replacement Tyres</b>	138	159	174	183	187	187	189	194.4	196	200.3	204.3	214.5	237.0	247
<b>Overheads</b>	155	161	167	172	176	180	185	190.6	196.3	204.2	210.3	235.6	259.2	278.9
<b>Fuel (Diesel)</b>	154	177	179	175	164	137	140.5	150.4	168.2	163.5	143.2	158.9	221.2	112.3
<b>AdBlue Additive</b>									100	100	103.2	139.9	260.2	52.8
<b>Index of total operating costs</b>	<b>155</b>	<b>168</b>	<b>173</b>	<b>175.2</b>	<b>174.9</b>	<b>168.8</b>	<b>173.4</b>	<b>180.5</b>	<b>191.9</b>	<b>195.5</b>	<b>193</b>	<b>215.6</b>	<b>256.5</b>	<b>221.6</b>

Note in the above table the fuel index has been changed for the years 2018 to 2023. Fuel costs are now based on 60% Bulk fuel purchases and 40% card purchases. Prior to 2018 the fuel cost was based on the fuel price as at 30/09 each year.

## Calculating rates and charges

It is a frequent mistake to approach the calculation of charges and costs on the basis of a requirement for a revenue per day or revenue per mile figure. The difference in mileage for haulage jobs undertaken necessitates having a separate cost per day/hour and cost per mile.

You must approach the task of quoting customers by assessing both the time likely to be required to complete a job and the number of miles that will be covered. You must then apply to the time element, the cost per day as determined; add any specific bonuses, extra hours, subsistence, tolls, emission zone charges, sundries and miles at the appropriate cost. This will give you a fair cost for the job for which you are quoting. To this you must add a percentage for profit. In today's market this is extremely difficult because, on many occasions, you will find the costs, as properly determined by your calculations, are greater than the revenue likely to be derived from the rates being charged by your competitors. Notwithstanding this, you must aim for a profit margin and a practical exercise is to add (say) 5% (but get more if you can!) to your total costs, when comparing yourself with what you know about competitive market rates. Yet there is such a fine margin between success and failure. Indeed, this year in recently announced figures, the Motor Transport Top 100 shows just how tough trading conditions have become for logistics operators. Last year, they announced a pre-tax profit average of 4.79% which was a considerable gain over the previous year's 3.4% and a sign of pent-up demand plus recovery following the pandemic. However, the pre-tax profit in their latest report shows a much lower average figure of 2.52% which is a 47% reduction on the previous year. Average turnover was up by 0.8%. Parcel companies, after the boom of Covid and increased online ordering have been hit the hardest. Temperature controlled storage and distribution seemed to buck the trend as did many of the smaller operators with 22 of the 42 companies with turnover below £50 million.

In the case of fuel, you should always attempt to negotiate a clause into all rate schedules and contracts allowing fuel price increases or reductions to be passed on to the customer as they occur. Note that over the last year, fuel costs have reduced, and your customers will be looking for a cost reduction.,

You need to decide whether you can accept a job at less than the rate calculated and, even more crucially, whether you can accept it at less than the true cost of undertaking it. In anything but the shortest run you cannot afford to do the latter; except perhaps for casual or special jobs which fit into the pattern of your overall work.

You should never accept work at rates which, overall, you know will not cover the costs you have identified from following the rules suggested in these notes. On page 21 we present a Template showing the steps you should take when calculating a rate.

Further guidance on rates is given in the Supplementary Paper on page 25 onwards. If you have any queries or require advice concerning these tables please contact Gwynne Richards at: [gr@appriseconsulting.co.uk](mailto:gr@appriseconsulting.co.uk). 01446 500231 or 07968 874890

## Estimate of working capital requirements

Start-up Position – 44 Tonne Artic and tri-axle trailer

<b>Wages</b>	: 8 weeks	9,021
<b>Licence</b>	: 6 months in advance	568
<b>Insurance</b>	: 6 months in advance	2,683
<b>Acquisition, unit &amp; trailer</b>	: 3 month's lease in advance	9,515
<b>Overheads</b>	: 50% for 8 weeks	2,778
<b>Fuel</b>	: 1442 miles per week for 8 weeks at 66.33 ppm	7,652
<b>Vehicle and trailer Services*</b>	:	
	<b>TOTAL (say)</b>	<b>£32,217</b>

\*Based on Actros 2548 6 x 2 Tractor unit and triaxle curtainsided trailer over 6 years

This calculation provides an indication of the money you may have to pay out before you start to receive money from your customers. Note that many customers can take up to 90 days to pay invoices.

The above figure should be viewed against the new requirements for financial standing (available cashflow) levels for standard national and international licence holders. The Government stipulates that as from 1<sup>st</sup> January 2021 the new levels are £8,000 for the first vehicle and £4,500 for each additional vehicle you request to be authorised.

Existing operators making variation applications will be required to demonstrate financial standing for the existing and additional fleet authority against the new levels. Applications received after 1<sup>st</sup> January 2021 are processed against the new rates.

Any applicant or licence holder appearing at a public inquiry before a traffic commissioner after 1<sup>st</sup> January 2021, where additional evidence of financial standing is requested, will be required to satisfy the new levels. The rates for restricted licence holders and applicants remain the same; £3,100 for the first vehicle and £1,700 for each additional authorised vehicle. Further information can be found at: <https://bit.ly/2GH8IYK>

Also note that the above figures do not take into account the initial outlay for an Operator's Licence and any specific CPC training.

## Template for rate quotation

1	Customer name	
2	<b>Job details</b>	
3	Size of Truck Required	
4	Estimated Days/Hours for Job	
5	Estimated Trip Miles	
6	Details of Market Competitor	
7	Rates if Known	
8	Anticipated Time Costs of Job	
9	Anticipated Distance Cost of Job	
	<b>Job Specific Costs:</b>	
10	Subsistence	
11	Bonus	
12	Tolls	
13	Ferry	
14	Other e.g. Emission zone charges	
15	<b>Total Cost of Job</b>	
16	Target Margin	
17	Target Revenue	
18	Target Rate	
19	Agreed rate	
20	Shortfall/Excess	
21	Return Load Time Cost	
22	Return Load Distance Cost	
23	Return Load Specific Costs	
24	Total Return Load Costs	
25	Total Round Trip Cost (15 + 24)	
26	Return Load Revenue	
27	Minimum Required Outward Revenue (25 – 26)	
	<b>Profitability</b>	
28	Actual Total Revenue	
29	Actual Time Costs	
30	Actual Mileage Costs	
31	Actual Specific Costs	
32	Actual Profit/Loss	

**Notes:**

**(a)** You will often find that a job will be completed with some hours in the day remaining. These hours will be costing you money if you haven't taken account of them in your rate to the customer.

You will need to decide whether you can use these hours for something else or, if not, can they be charged to the job without making you uncompetitive?

**(b)** Where a return load is involved, it is important that you cost the whole round trip, allowing for the revenue you are likely to earn for the return trip and deciding how much to allow against the outward job for which you are quoting.

**(c)** Ensure you are using all of your own costs.

**(d)** Rate = time cost + mileage cost + job specific costs + profit

## Fuel adjustment Specimen agreement and calculations

This Agreement dated [Enter date] is between [Enter name of haulier] and [Enter name of company].

It is agreed that:

- (a) the base price of diesel for the purpose of this Agreement is [Enter amount] pence per litre, exclusive of VAT (Based on previous month or year or start of contract)
- (b) the haulier may adjust the price(s) for work undertaken for the customer by reference to the following formula:
  - (i) a change in the price of fuel in the period (Line 7)
  - (ii) the cost of fuel to the haulier shall be determined as a percentage of the haulier's total cost, as recorded (Line 10)
  - (iii) the adjustment to be applied (by way of either increase or decrease in price) shall be the product of (i) x (ii)
  - (iv) an adjustment will be triggered when the change in cost is + / - % (to be agreed) **(Note this is discretionary)**

Such adjustments shall be calculated at [Enter frequency, eg weekly, monthly, annually] intervals.

	EXAMPLE	NOTES		
1	<b>Vehicle type</b>		44 tonne artic	
2	<b>kms in period</b>		120,675	
3	<b>Mpg / kms per litre</b>		8.3 mpg / 2.94 kms per litre	
4	<b>Litres in period</b>		41,070	
			£	%
5	<b>Fuel at base price</b>	Date		
	1.40	25/09/2022	57,837	
6	<b>Fuel at base price</b>	Date		
	1.18	30/09/2023	48,629	
7	<b>Increase/ (decrease)</b>		<b>-9,208</b>	
8	<b>Costs in period</b>	A	<b>201,326</b>	
9	<b>Fuel as a % of cost at av.</b>	B		24.71
10	<b>Fuel % at base price</b>	C		30.11%
11	<b>% increase/(decrease) during period</b>	B - C		-5.4%

1 mile = 1.609344 kilometres

1 gallon = 4.54609 litres

1 mile per gallon = 0.354 kilometres per litre

**9 & 10 inc % fuel additive**

Members must use their own actual figures throughout. The appropriate adjustment is shown in line 11.

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## Calculating carbon footprint

Supply chain managers are becoming increasingly concerned with minimising the carbon footprint of their operation. This includes all transport: vehicle operators are therefore being required to measure their own footprint profile. Some invitations to tender may well ask for this information to be included in the tender response.

To assist you in this we have produced the following calculation:

- To convert mpg to kms per litre multiply by 0.354
- To obtain litres per km divide 1 by the km/litre figure above
- To obtain CO<sub>2</sub> in kg per km multiply by 2.63
- To obtain CO<sub>2</sub> in g per km (the accepted measure) multiply by 1000

Example:

### Carbon footprint calculation

Assume a 44-tonne returning 8.3mpg:

8.3 multiplied by 0.354 gives 2.94 km/litre;

1 divided by 2.938 gives 0.34 litre/km;

0.34 multiplied by 2.63 gives 0.8942 kg of CO<sub>2</sub> / km;

Finally, that figure multiplied by 1,000 gives 894.20g of CO<sub>2</sub> / km.



## How to determine your own costs.

### THE RHA/AC COST TABLES

1. The objective of this paper is to visit the Cost tables and to view them in the context of how RHA members should use them to identify and manage their own actual costs.
2. These Tables are unique in several respects:
  - i) They are based on actual member survey costs
  - ii) They emphatically reject the idea of a single cost (and hence the rate) per mile or per day. They separate time-related and distance-related costs and keep them so. This is because both cost per mile and cost per day vary infinitely according to the number of miles travelled in the day.
  - iii) They contain numerous indices and guides to costing and rate calculation. These are all yardsticks against which you should measure your own figures.

In addition, in a comparison with other published Cost tables, they score very highly as being on or closest to the average of all costs at similar annual mileages.

They are therefore an extremely valuable tool for helping members.

This is fine but it does of course mean that members must be able to determine their own specific costs before they can take advantage of this facility. The rest of this paper is devoted to seeing how members can do this and make use of the Explanatory notes on pages 8 – 12.

3. Brian Fish, the previous author of these cost tables was often asked “what is the point of calculating costs when customers tell me the rate they want to pay?”

All too often, in this highly competitive industry, the method of rate setting consists merely of finding out what is currently being paid and undercutting it! This approach has always been prevalent in our industry, accounting for a generally unacceptably low

level of rates and a high level of company failures as can be seen in the recent MT report.

So why are accurate costs essential, even when they apparently do not, by themselves, gain profitable traffic?

All hauliers MUST be able:

- a) to know the rate at which they can earn a profit.
  - b) To react quickly, to reflect increased costs in their charges and demonstrate to customers the validity of increases.
  - c) to analyse costs, update budgets and monitor current performance regularly and frequently.
  - d) to forecast operating results and cash flow.
  - e) to know by just how much rates can be reduced under market pressure and still yield a contribution and to judge how long a business can survive on that basis.
  - f) to compare profit forecasts with achieved results, overall or by individual contract/job.
  - g) to understand which contracts are profitable and which require a rate increase or even be terminated
4. The aim of this paper is to see how the cost sheets on pages 13 - 18 relate to the actual financial performance of the operator.
5. It is vital to realise that current rates are NOT a function of historical costs. They must be related to the actual current operating costs of the fleet concerned.

In the RHA/AC Tables, as a result of surveys, an average utilisation factor of 240 days has been assumed. Not only are there considerable variations around this average, there are also other factors to be measured and taken into account e.g.:

- The number of hours used in each day, for the purposes of reducing cost per day to a cost per hour;
- The extent to which vehicles are multi-shifted, in which case additional costs will be incurred in sustaining the additional shifts. However, the overall cost per hour should reduce.
- The extent to which weight and volume capacities are filled.

6. At the outset we noted that we reject the concept of a single cost, and hence a rate per mile or rate per day. A cost per job of work is preferable.

We noted that there are two elements of cost - time and distance. Total cost is a continuously varying function of these two; thus, it is totally wrong to reduce total costs to a figure per mile, or per day, a mistake made by many operators. There is only ONE period/distance at which the supposed average cost per mile is correct; below that figure it will be too low and above, too high.

Herein lies the problem of so many operators who still rely on these figures or are forced by clients to charge on that basis!

**Example**

Among the fleet of RHA Member Ltd today, one 44-tonne tractor unit is doing local trailer shunting and will cover 100 miles. Another one is doing a trailer exchange and will cover 250 miles, a third is undertaking a single day journey over 370 miles and a fourth is working over a two-day period, traveling a total of 730 miles. We have assumed an average of 8.3 mpg. Note that it is likely that the lower mileage vehicle might not achieve 8.3 mpg. We have also included the trailer cost here. Here are the costs compared with those of the fleet average of 75,000 miles per year:

Table 11.11 - Comparison of various transport operations based on mileage travelled

	Vehicle 1	Vehicle 2	Vehicle 3	Vehicle 4	Average per vehicle p.a.
Miles	100	250	370	730	65,100
Time-related costs	£556.01	£556.01	£556.01	£1,112.02	£133,443
Distance related costs	£90.51	£226.28	£334.89	£660.72	£58,922.15
Subsistence				£26.20	£786.00
Total cost	£646.52	£782.29	£890.90	£1,798.95	£193,151.10
Margin	£32.33	£39.11	£44.55	£89.95	£9,657.55
Total revenue	£678.85	£821.40	£935.45	£1,888.90	£202,808.65
Notional mileage charge	£6.79	£3.29	£2.53	£2.59	£3.12

Note the average cost column is based on 240 days worked and 65,100 miles per annum based on the four different trips.

***So, what is our going rate per mile or rate per day?!?!***

7. As can be seen above it can be dangerous to quote a single cost per mile or per day on a fleet average. Each job needs to be quoted on a day rate plus mileage rate or a total cost per job.

8. It has now been assumed that you have established accurate costs to compare with those shown in our Cost Tables. When invited to quote for work the first task will be to assess the time needed to complete the job, the distance to be covered, any additional costs not included in the standard costs, a profit contribution and the difficult problem of dealing with return load possibilities and revenues.

It is a dangerous myth that return loads only incur the cost of diesel. You have to take into account additional driver costs, running costs and any potential work lost by taking on a backload.

Of course, it is not always as simple as a round trip with a container. If, for example we are “tramping” and have to organise the return load as well as the outward load, we must then add all the extra time and distance costs associated with the return load to our overall costs; we must then assess total required revenue on a normal basis. This will then be related to the known or anticipated revenue from the return load to help us decide how much we should or can obtain for the outward load.

This means that we are using actual figures for the whole operation instead of rules of thumb (e.g. two thirds of outward rate for return loads). These rules have never been satisfactory.

**A full template for calculating rates is provided on page 21 of the tables.**

8. Another use to which these cost figures should be put is in forecasting and monitoring operating results.
- i) The actual revenue and costs of a journey can be compared with the quotation to check performance
  - ii) Revenues of every vehicle can be determined for a week, against which standard daily costs, extra costs and distance costs are set to forecast profit for that week. That figure, built up week by week to a monthly total, will then be compared with the actual result produced in the Monthly Management Accounts.



Note here that:

- a) We must charge ourselves for every available working day, to match the Management Accounts;
- b) In using a budgeted standard distance-related cost per mile we are smoothing the impact of fluctuating costs; thus if in one month we have two sets of tyres to replace and a blown engine, actuals in the Accounts will be greater than standard. These variations must be investigated and if actuals begin to run consistently ahead of standard, the latter must be recalculated.

The monitoring process described here should be extended to provide us with data on vehicle and driver utilisation; these factors, it has been stressed, are vital to profitable operations.

### **Conclusion**

Many will say that this is all too academic for the haulage industry. Not so! Companies need to fully understand their costs. This industry has become one of low margins as witnessed over time by the Motor Transport survey of top 100 companies by turnover, where the current average rate of pre-tax profit to sales is 2.52% however in the recent past margins have been under 2% with many operations incurring losses.

Knowing costs and applying them is one of the surest ways to secure decent returns.

## RATES AND CHARGES

### Examples

- i) We are asked to give a quotation for moving 1,000 tonnes of palletised product from a factory to a customer situated 20 miles distant. We are using 44 tonne gross vehicles.
- ii) We decide from our experience and knowledge of the job that a vehicle should be able to achieve 6 trips in a normal working day, thus covering 240 miles. Each load = 25 tonnes.
- iii) Referring to the Cost Tables, we derive the following standard costs and estimate other items as indicated:

1 standard day at £556.01	£556.01
240 miles at 90.51 ppm	£217.22
Drivers' bonus and additional overtime	£29.00
Weighbridge costs	£30.00
Total Cost	£832.24
Target Margin (say 5%)	£41.61
Desired revenue	£873.85

Desired rate and quotation per tonne £5.83 (assuming 25 tonnes per load)

- iv) You must substitute your own cost figures for those shown above. Note that for a shunt operation 8.3 mpg may not be a realistic figure.
- v) If possible, and before submitting this quotation, try to determine what the "going rate" for this traffic is.
- vi) Decide whether, or to what extent, any gap between £5.83 and the market rate can be bridged.
- vii) Negotiate as strongly as possible, on the basis of identified costs, to educate the customer towards realistic figures.

**NOTE: In this illustration we use the figures in the 2024 Cost Tables.**

**Remember that you must substitute current costs, particularly for fuel.**

**Example 2**

**RATES AND CHARGES**

- i) We are asked to give a quotation for loading a container at a shipper's factory, delivering to a nominated port and returning to base with a replacement empty container. We are using a 44-tonne articulated unit. We use the same trailer cost as for a tri-axle curtain sider for this example.
- ii) We decide from our experience that this task will occupy two full working days, and we ascertain that the total distance to be covered will be 480 miles.
- iii) Referring to the Cost Tables, we derive the following standard costs and estimate other items as indicated:

2 standard days at £556.01	£1,112.02
480 miles at 90.51 ppm	£434.45
Drivers bonus and additional overtime	£29.00
Subsistence and Toll costs	£26.20
<b>Total Cost</b>	<b>£1620.67</b>
Target Margin (say 5%)	£81.03
<b>Desired revenue</b>	<b>£1,701.71</b>

- iv) The haulier will of course have substituted his/her own figures for those shown above.
- v) If possible, and before submitting this quotation try to determine what the "going rate" for this movement is.
- vi) Decide whether or to what extent the gap between £1,702 and the market rate can be bridged.
- vii) Negotiate as strongly as possible to "educate" the customer towards realistic figures.

**NOTE: In this illustration we use the figures in the 2024 Cost Tables.  
Remember you must substitute current costs, particularly for fuel.  
Numbers have been rounded to the nearest full number.**

## Useful Information

### A Key Performance Indicators

There is an old adage – “if you don’t measure you can’t manage”. The following are examples of key performance and productivity indicators which can assist companies achieve their goals and vision and let them know quickly if things are not going to plan.

### Key performance indicators

Table 1 shows examples of Freight Transport Key Performance and Productivity Indicators.

It is not suggested that all of these measures are introduced. Choose the ones which are important to you as a company and to your customers.

*Table 1 Examples of performance indicators for freight transport*

Key performance indicator	Description
<b>Cost indicators</b>	
Average cost per unit delivered (£)	Average cost of delivering a specified unit (e.g. a pallet or tonne of goods).
Total whole vehicle cost (pence per mile/kilometre)	Total cost of your fleet per mile/kilometre. Made up of running, standing and driver costs.
Average running cost (pence per mile/kilometre)	Average cost of running your fleet per mile/kilometre. These are the costs incurred for running the vehicles (fuel, tyres, lubricants and maintenance).
Average standing cost (pence per mile/kilometre)	Average standing costs for your fleet. Standing costs are those incurred whether or not the vehicle is running – depreciation of the vehicle, vehicle excise duty, operator licence fees and insurance.
<b>Operational indicators</b>	
Asset efficiency	Average utilisation of fleet in cubic capacity or tonnes carried (outbound and inbound)
Vehicle fill efficiency	This calculates the percentage of actual load carried against the potential capacity of the vehicle fleet. (tonnes or cube)
Average miles per gallon/kms per litre	Average fuel consumption rate for your fleet or by individual truck and driver
Total empty miles/kms run ('000s)	Total number of miles/kms run by your fleet without a payload.
Total miles/kms run ('000s)	Total number of miles/kms run by your fleet.
Percentage empty running total	Total distance run by your fleet without a payload as a % of total miles/kms run.
Average time utilisation	This calculates the percentage of time that the vehicle fleet was actually in use against the potential time available.



Demurrage time	Excess time spent at premises waiting to load or be unloaded
<b>Service indicators</b>	
Percentage of late deliveries / on-time deliveries	Late deliveries / on time deliveries made by your fleet as a % of total deliveries
Percentage of damaged items	Damaged items as a % of total items delivered
No. of claims	No. of claims received as a % of total deliveries
Correct paperwork	Number of delivery notes/invoices etc completed correctly / total number of deliveries
<b>Compliance</b>	
Overloading	Total number of overloads in the fleet as a % of loads moved
Traffic infringements	Total number of traffic infringements in the fleet as a % of vehicle movements
Drivers' hours infringements	Total number of drivers' hours infringements in the fleet as a % of trips
<b>Maintenance</b>	
Failed safety inspections	Percentage of failed or overdue safety inspections for your fleet as a % of total safety inspections
Vehicle maintenance downtime (VOR)	% time vehicles off road (VOR) due to maintenance/accidents /total time available to work
Total maintenance cost (pence per mile/kilometre)	Total cost of maintaining the fleet per mile/kilometre.
Vehicle downtime	Percentage of defects rectified in 24 hours total
<b>Environment</b>	
CO <sub>2</sub> produced per km	Average CO <sub>2</sub> produced (kg) per mile/km travelled by your fleet
Total CO <sub>2</sub>	Total CO <sub>2</sub> emissions produced by the fleet over a period
<b>Safety indicators</b>	
Accident record	Time lost through incidents as a % of total working days
Accident record	Number of days/miles/kms since last reportable incident

**B Vehicle Utilisation and cost sheets**

Individual vehicle records can also be kept as follows:

Vehicle Reg. No. ....

	<b>Week Ended</b>	<b>Month Ended</b>	<b>Year Ended</b>
Days Idle			
Days VOR			
Revenue			
Days at Standard			
Miles at Standard Ppm			
Drivers' Subsistence			
Drivers' Bonus, Overtime			
Relief Driver Costs			
Sundries			
Total Costs			
Contribution			

**NOTES:**

1. Idle and VOR days should desirably be coded according to reason.
2. Drivers' employment costs must allow for the fact that most drivers now have at least four weeks of paid holiday; therefore it is probable that relief drivers will be used to keep vehicles at work at peak potential. Similarly, sickness relief and training costs must be taken into account.
3. There will be changes in the standard time costs where vehicles are multi-shifted and always as costs change.

## Apprise Consulting Ltd

Apprise Consulting Ltd is a supply chain and logistics consultancy and training company assisting clients to improve all aspects of their supply chain and logistics operations.

The company was established in 2003 and has grown organically year on year. Alongside our core team we have over 20 Associates who have worked in various market sectors at Director level, mostly in operations. Our client base includes major Utility companies, retailers, FMCG manufacturers, 3PLs and the Public sector.

Our approach is one of getting to know our clients' business and working closely with them to provide solutions. We do not operate with ready-made toolkits as we believe each client is different and may require a different approach.

We have close ties with specialist consultancies in transport routing, health and safety, change management, procurement and transport planning.

If we are unable to provide a solution internally, we invariably know of a company who can assist us.

As a company we are always looking to introduce new products and services to the market. An addition to our portfolio is a web site providing supply chain and logistics tools including a transport audit ([www.howtologistics.com](http://www.howtologistics.com))

We are also involved in providing training courses in transport, warehousing and outsourcing.

These are produced in conjunction with Warwick University, UKWA and the Chartered Institute of Logistics and Transport. These courses can be accessed at <https://appriseconsulting.teachable.com/>

Gwynne Richards is currently working with Ruth Waring and the UKWA to produce a Warehouse Manager's CPC qualification.

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