## ECONOMICVALUE STUDY OF AUSTRALIA'S HISTORICAL VEHICLES SECTOR



PROUD OF OUR PAST, PASSIONATE ABOUT OUR FUTURE.


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## I. Foreword

The Report that you have here is the first to comprehensively quantify the real economic value that our Australian historic motor vehicle owners contribute annually throughout the nation. Collectively, we are strong economic contributors, no longer to be under-estimated or misunderstood.

That is the strong message that emerges from this Report. At the Foundation, we had seen reports about how much the owners of historic vehicles overseas contributed to their respective nations' economies. Our own desk studies indicated that our supporters - the owners of historic vehicles in Australia - would contribute an economic value at least as significant in Australia. But that sum was a mystery to us, and to our big supporting groups.

The question for us became "What is the real figure?" and we decided to find out.

This job demanded financial resources we did not have. We wanted to nail this question once and for all. We needed the high credibility that derives from a big dataset and skilled independent analysis. That meant a large number and a cross-section of enthusiasts across Australia to contribute reliable data on their spending patterns on their passion in various ways. Anonymity had to be assured. We needed an independent, professional consultant of the highest standing to analyse the data and answer the question as definitively and thoroughly as possible.

We turned to the motoring clubs of Australia, big and small and the response has been extraordinary. Our expert consultants at The Mercurius Group told us that we would need at least 1,000 well-spread survey responses to produce data of statistical significance; our call-out to the clubs produced over 6,000 responses from across the nation!

And we had to raise the money required for a truly professional analysis. We canvassed the peak bodies for motoring clubs in various states and they were the first to respond. We also received donations from individual clubs, very many club members and some really generous far-sighted commercial sponsors we also acknowledge in this Report. We did not have funds from any government source. The financial help and the vocal interest from the clubs encouraged us from the very start.

I want sincerely to thank all people who undertook the survey online, all our sponsors, the nation's motor clubs and the peak bodies. Without you this important Report would not exist. It has been done for you. It is a new tool to help move you to success.

My special thanks go to Geoff Piggott andTom Wheelwright from the Foundation, and to Ivo Favotto the esteemed principal of The Mercurius Group. They worked long and hard for more than eighteen months to turn what was a good idea into a superb outcome, on time and on budget.

I believe that our quest has touched a nerve. As you can read, the economic modellers have never had so large a data pool with which to work. That tells me that Australian motor enthusiasts care passionately about their vehicles. They want the ability to drive them and cherish them in the future.

Our Foundation is a registered charity, a Deductible Gift Recipient, so is not and cannot legally be a lobbyist. We are champions of our motor heritage. What we can do, as we have done with this report, is provide the facts and some tools with which the peak bodies and clubs in each state can pursue their issues with the legislators and regulatory bodies. The Report gives great new factual background for local clubs, industry suppliers, industry bodies, event organisers, insurers and others who wish to show that the historic motor vehicles sector is a major contributor to our nation's economy.

This report shows quite clearly that the sector's contribution to the Australian economy cannot be over-estimated. The numbers alone establish this, but I say that the character and commitment of all the supporting enthusiasts across the nation make it very clear.

I am proud to lead the owner of this Report, our Australian Motor Heritage Foundation

Hugh King

Chairman
Australian Motor Heritage Foundation

## 2. About the Australian Motor Heritage Foundation

## Champions of Australia's Motor Heritage

The Australian Motor Heritage Foundation is dedicated to the preservation of Australia's collective motor knowledge. We are particularly concerned with the historical knowledge that exists in the thousands of motor clubs across Australia but we are equally concerned to preserve our history of motor racing, of motor cycling, of aviation in all its forms and of road haulage by truck or bus.

We have created a library for this express purpose. It is a research library and we are aiming to make our information available in digital form as widely as possible. Our book and magazine collection has tens of thousands of volumes. We also have a substantial and growing collection of audiovisual items that includes photos, brochures, prints, film and videos.

We can assist anyone who has a genuine interest in Australia's motor heritage.

We do not want to be 'just a library' (although that is a significant part of who we are). Rather, we seek to foster social cohesion through public seminars, lectures and informal gatherings which share our passion for motoring with the widest possible audience. Indeed, we will play a role with overseas foundations and heritage centres having similar objectives.

Motor vehicles have always played a key role in the physical, economic, and social development of Australia. We are dedicated to protecting this heritage through operating a library and including by:
I. Recording and cataloguing the heritage and history of the use of motor vehicles for transportation and mobility.
2. Collecting, preserving, and exhibiting items of significance to this motoring heritage, for the benefit of the community, and making those items available through use including through lending, display and making available for reading (including over the internet).
3. Fostering public awareness and interest, through developing seminars, programs, and publications to educate Australians in this heritage.
4. Creating an educational resource for universities, TAFE colleges, schools, academics and historians; the Australian nucleus for the automotive and advertising industries, journalists, preservationists and inventive entrepreneurs; to be a resource for Australia's thousands of car clubs and a centre for community engagement.



## 3. Executive Summary

## 3.I Introduction

This study into the economic value of the Australian motoring enthusiast-owned historical vehicle sector was commissioned by the Australian Motor Heritage Foundation (AMHF) and produced by economic and advisory consultancy, The Mercurius Group (TMG).

It sets out to measure the contribution of the motoring enthusiast-owned historical vehicle sector to the Australian economy in terms of output, value added, jobs and wages/ salaries.

This was done in three key steps:

- an analysis of the fleet of Australian motor vehicles to derive an estimate of how many motoring enthusiastowned historical vehicles are in existence;
- a survey of motoring enthusiast historical vehicle owners (through motoring clubs across Australia) to determine their average annual spend on their historical vehicles; and
- the use of a recognised input-output model of the Australian economy to estimate the impact that direct spending by motoring enthusiast-owned historical vehicle owners has on the economy.

The team at TMG has extensive experience in conducting economic value studies - for major events, industries and assets. Our team has carried out economic evaluations of the Olympic Games, the Ashes cricket tests, the Rugby World Cup, the Australian Casino Association, Sydney Airport, Fox Studios, various transport assets and development projects as well as various industries seeking government support.

### 3.2 Summary

## Our main conclusions are:

1. It is estimated that there are approximately 970,000 motoring enthusiast-owned historical vehicles in Australia out of a total fleet that we estimate is around 21.8 m vehicles (4.4\%);
2. A survey distributed via 834 motoring clubs across Australia was determined as the best way to access and communicate with these historical vehicle owners about how much they spend on their vehicles and related activities each year;
3. 6,296 people responded and those people in turn owned 19,200 historical vehicles. This is one of the largest data sets TMG has ever worked with to determine economic value;
4. The owners of these vehicles spend, on average, $\$ 10,240$ each per vehicle owned per annum - around $12.5 \%$ more per vehicle (excluding financing costs) than owners of regular vehicle;
5. The three largest areas of expenditure (of the 19 surveyed) on motoring enthusiast-owned historical vehicles are mechanical repairs, parts \& accessories and bodywork;
6. By multiplying the number of motoring enthusiastowned historical vehicles by the average spend estimate derived from the survey, we can deduce the total amount spent in 2022 on motoring enthusiastowned historical vehicles in Australia;
7. The motoring enthusiast-owned historical vehicle sector has a much bigger economic footprint than most people imagine. Once all related expenditures are considered, the aggregate direct turnover of the sector is $\$ 9.92$ b p.a.;
8. This $\$ 9.92$ b p.a. expenditure also has two "multiplier" or "indirect" impacts on the economy - a supply chain effect and a consumption effect. This means that each \$ I spent on an historical vehicle has more than a \$ I overall impact on the economy;
9. The total value of expenditure on motoring enthusiastowned historical vehicles is - including direct and indirect effects - \$25.2b p.a.;
10. The impact of motoring-enthusiast owned historical vehicle expenditure creates 78,670 jobs across the country (42, 150 direct and 36,520 indirect);
II. Those jobs generate $\$ 6.2 \mathrm{~b}$ in wages and salaries p.a. (\$2.8b direct and \$3.4b indirect); and

12 The motoring enthusiast-owned historical vehicle sector's value-added (i.e. contribution to Gross Domestic Product) is $\$ 11.4 b$ p.a. (\$4.3b direct and $\$ 7.1 \mathrm{~b}$ indirect).



## 4. Introduction

This report on the economic value of Australia's historical vehicles sector has been commissioned by the Australian Motor Heritage Foundation (AMHF) with the financial and other support of a number of donor organisations within the sector as acknowledged in Section 10 of this report.

The AMHF has long been concerned by the lack of public information on, and understanding of, the historical vehicle sector and its economic and social contribution to the fabric of Australia.

Consequently, the AMHF commissioned The Mercurius Group (TMG), a leading Australian economic and commercial advisory consultancy, to conduct this study.

The study has five objectives:
I. To define - and gather widespread support behind a common definition for - the historical vehicle sector.

The historical vehicle sector is not simply the collection of all vehicles over a certain age. Rather, the sector is defined by those who do not simply own an older vehicle but who are "enthusiasts" about protecting, preserving, celebrating and enhancing the history of their vehicle. Typically, but not exclusively, these enthusiasts join motor vehicle clubs and indeed it was the motoring clubs of varying descriptions across the country that were the primary "vehicle" through which
information was gathered about this study. Enthusiasts, particularly younger ones, may not necessarily be club members but share their passion and interest on social media and when meeting at events.
2. To determine how many historical vehicles there are in Australia.

While data on the number of vehicles by their year of manufacture is published by the Australian Government's Bureau of Infrastructure and Transport Research Economics (BITRE), an older vehicle is not necessarily an historical vehicle.

Consequently, the study team contacted all State Government road authorities to determine the number of vehicles that are conditionally registered. While the definition of what constitutes a conditionally registered vehicle differs from state to state, it generally means an historical or non-standard vehicle that is conditionally registered for limited access to the road network.

The number of conditionally registered vehicles was considered the best proxy for enthusiast-owned historical vehicles and hence formed the starting point for the study team to derive a nation-wide estimate for the total number of enthusiast-owned historical vehicles.
3. To estimate how much money motoring heritage enthusiasts spend each year on their historical vehicles and pursuits related to motoring heritage.

The study team conducted a survey of motoring enthusiasts through 834 motoring clubs across all states and territories (except the NT). The study team's survey was distributed by the clubs to their membership and elicited 6,296 complete responses covering ownership of some 19,200 vehicles.

The average annual expenditure from the survey was then multiplied by the estimate of enthusiast-owned historical vehicles to derive an annual expenditure estimate.
4. To conduct economic modelling to determine the overall economic value of the survey;

The study team was able to model the annual expenditure method using the well-recognised and accepted REMPLAN input-output model of the Australian economy (initially developed by La Trobe University) to determine:

- The overall output of the sector (taking into account direct and in-direct effects);
- Value added; and
- Employment related directly and indirectly to the sector and the related wages/salaries from that employment.

5. To disseminate the findings;

The AMHF proposes to disseminate this report as widely as possible within the motoring enthusiast sector, as well as to road authorities, governments (national, state and local) and other stakeholders.

This study brings, for the first time in Australia, a deeper understanding of the important contribution the historical vehicle sector makes to economic output and employment in the Australian economy. And it's much greater - and much more widespread geographically - than previously anticipated as will be demonstrated by this Report.

For this reason, this AMHF initiated study highlights the need for a coordinated approach to the historical vehicle sector - amongst the motoring clubs, amongst road authorities and amongst governments of all persuasions and amongst the enthusiasts themselves.

The historical vehicle sector also makes a significant social contribution to the mental health and well-being of Australian society that cannot be dismissed - but that's a subject for another time.



## 5. Definitions \& Methodology

## 5.I Definitions Overview

The overall objective of the AMHF's Economic Value Study was to measure the economic contribution of the historical vehicle sector.

Before you can measure the economic contribution of the sector however, you first need to define it.

To AMHF's best knowledge, there is no standard definition - within industry or government - of the historical vehicle sector. Studies of the historical vehicles sector in other countries have all used slightly different definitions and hence only acted as a broad guide for the conduct of this Australian study.

Consequently, for the purposes of this study, two critical definitional questions needed to be answered:
I. What constitutes an historical vehicle?; and
2. How do we separate expenditure by motor heritage enthusiasts from everyday expenditure on older vehicles driven by non-enthusiasts for regular day-today purposes?

## 5.I.I Historical Vehicle Definition

For the purpose of this study, we have identified two types of historic vehicles:
I. Those between 15-30 years of age - which we will refer to as "classic" vehicles; and
2. Those over 30 years of age - which we will refer to as "heritage" vehicles.

The term historical vehicles refers to the combination of classic and heritage vehicles.

All forms of road vehicles have been considered as part of this study including:

- Passenger vehicles;
- Light commercial vehicles;
- Light rigid trucks;
- Heavy rigid trucks;
- Articulated trucks;
- Non-freight carrying vehicles;
- Campervans;
- Light buses;
- Heavy buses; and
- Motorcycles.


## 5.I. 2 Enthusiast versus Regular Vehicles

While the number of unconditionally registered historical vehicles is provided by the Bureau of Infrastructure and Transport Research Economics (BITRE), there is no known source of data to distinguish between historical vehicles owned by motor heritage enthusiasts and those who simply own and use an older vehicles without (necessarily) regard for motoring heritage.

Enthusiasts are defined as those vehicle owners that spend money on the preservation or restoration of the heritage of their vehicle - more than just typical ownership and operating costs.

To the AMHF's best knowledge, there is no known definition or count of enthusiast vehicles, necessitating the development of an estimation methodology for the purpose of this study as highlighted in Figure I.

## Figure I - Enthusiast Owned Historical Vehicles Estimation Methodology



There will also be historical vehicles in home workshops etc. that are undergoing restoration but are neither conditionally nor fully registered whilst in this process but ultimately when completed will normally go onto conditional registration. They will therefore not be captured by the estimation methodology above and hence the estimate derived from the methodology will have an element of conservatism built-in..

## Conditionally Registered Vehicles

The BITRE count of vehicles' does not include vehicles that are conditionally registered. Vehicles may be conditionally registered by each relevant State transport agency (usually at a lower registration fee) for a number of reasons:

- Historical vehicles with limited road network usage (e.g. a limited number of days use per year, use only associated with motoring events or for maintenance visits to workshops etc);
- Modified vehicles (e.g. hot rods, beach buggies);
- Off-road vehicles;
- Diplomatic and Consular vehicles; and
- Defence vehicles.

Each state and territory road authority has its own definitions of how vehicles are classified and qualify for conditional registration. Nevertheless, for the purposes of this study, the AMHF has assumed that all conditionally registered vehicles are "enthusiast" vehicles. Data on conditional registration vehicles was able to be requested and collected from most State based road agencies to confirm the validity of this assumption - i.e. that the vast majority of conditionally registered vehicles are historical or enthusiast vehicles.

Vehicles Manufactured Before 1970
The BITRE database which has annual data on the year of manufacture of all vehicles fully registered across Australia, indicates a significant number of vehicles built before 1970 (some 54 years old as at the date of this report) that are unconditionally registered (i.e. fully registered for daily or regular road usage). The AMHF has reasonably assumed that all of these vehicles are also owned by enthusiasts.

## Unconditionally Registered Post 1970 Historical Vehicles

Not all enthusiast-owned post I 970 manufactured historical vehicles (but still greater than 15 years old) from the BITRE database are therefore conditionally registered. For conservatism, the Study Team has estimated that $5 \%$ of post 1970 historical vehicles (but still greater than 15 years old) from the BITRE database are enthusiast owned (and hence included in our count) and that $95 \%$ are not enthusiastowned (and hence not included in our count).

### 5.2 Economic Value Methodology Overview

The methodology for estimating the economic value of the enthusiast-owned historical vehicle sector is based on a widely accepted, two stage approach as highlighted in Figure 2 below.

Figure 2 - Economic Value Estimation Methodology


Stage I involves determining the direct economic impact that is the total annual expenditure made directly by motor heritage enthusiasts.

Stage 2 involves determining the flow on effects - that is the impact on the broader economy (indirect and induced) of the direct spending by motor heritage enthusiasts. These effects are also known as the supply chain effects and the consumption effects.

The flow-on impacts are calculated through models of the economy (known as input-output models). For the purposes of this study, we have used the widely recognised and accepted REMPLAN economic model (Appendix 2 provides some background on the REMPLAN model).

### 5.2.I Methodology for Determining Direct Economic Impacts

The methodology for estimating the direct impact of the enthusiast-owned historical vehicle sector is set out in Figure 3 below.

Figure 3 - Direct Impact Estimation Methodology


The methodology for estimating the number of enthusiastowned historical vehicles was detailed in Section 5. I.I above.

The average annual expenditure (in the year 2022) per enthusiast-owned historical vehicle was determined via a comprehensive survey of enthusiast historical vehicle owners carried out in 2023.

The survey was conducted through 834 motoring clubs (cars, trucks, motorcycles etc) across every state in Australia and the ACT. Contact details for each club was provided to TMG by the AMHF and the clubs themselves sent out the survey directly to their individual members. The survey was conducted on a confidential basis using the Survey Monkey survey software.

The AMHF developed database of motoring clubs, while significant, does not capture all motoring clubs that exist in Australia as some may not necessarily be registered with their State Council of Motor Clubs or publicly publish any email contacts. In particular, the database used for the distribution of the survey is under-represented in Victoria and over-represented in South Australia and Western Australia. In addition, no contact details were readily available for clubs in the Northern Territory. Nevertheless, accessing motoring heritage enthusiasts through motoring clubs and public websites was determined as the most practical and representative way of communicating with and surveying historical vehicle enthusiasts.

The secretary or president of each club was emailed a link to the survey with completion instructions and asked to distribute the survey to their members. Each secretary/ president was encouraged to reach out to other clubs to recruit additional survey responses.

Figure 4 - Motoring Clubs Surveyed by State and Territory

| State/Territory | No. of Clubs | \% of Total |
| :--- | :---: | :---: |
| NSW | 385 | $47.0 \%$ |
| VIC | 112 | $13.3 \%$ |
| QLD | 87 | $9.8 \%$ |
| SA | 114 | $13.6 \%$ |
| WA | 102 | $12.2 \%$ |
| TAS | 10 | $1.2 \%$ |
| ACT | 24 | $2.9 \%$ |
| Total | 834 | $100 \%$ |

The survey generated 6,296 individual completed responses - an average of 7.5 survey responses per club. By any measure, the survey response rate was high and significant, providing significant weight to - and confidence behind - the survey results.

The methodology for estimating direct economic impacts simply involves multiplying the estimated number of enthusiast-owned historical vehicles with the average estimated annual expenditure from the survey results.

### 5.2.2 Methodology for Determining Flow-On Impacts

To determine the flow-on impacts (also known as multiplier effects or indirect effects) of the motoring heritage sector, the AMHF study utilised the REMPLAN (see Appendix 2) input-output model of the economy.

Originally developed by economists in La Trobe University in Bendigo, the REMPLAN economic analysis approach was spun out from the university as a separate business in 2006.

The team at REMPLAN has automated and systematised the process of building and updating region-specific inputoutput economic models for more than twenty years. These in-house systems, tools and resources incorporate many checks and balances that ensure the consistent and timely delivery of economic analysis software and data.

The REMPLAN approach is based on the premise that the economic value attributable to a region is reflected in the jobs that are based in that region.

REMPLAN uses Census Place of Work data (the best available data) combined with ABS National Accounts data as the basis for estimating output, value-added, regional exports etc. at a ||4-sector level. This approach is applied consistently across the nation, and it ensures that all REMPLAN estimates in total add to the latest $A B S$ estimates of Gross Domestic Product. Therefore, any region in Australia can be compared with any other confident that the basis of the modelling is the same.
Once a REMPLAN economic model is in place, the impacts of real or proposed changes in the economy can be estimated using REMPLAN Economy software. These changes can include increases or decreases in employment or output (gross revenue) in any industry sector or combination of sectors. Impacts are measured in terms of the direct and flow-on effects to output, wages \& salaries, employment and value-added.

REMPLAN Economy utilises data from the $A B S$ and other official government sources, including: ABS Census; ABS National Accounts; ABS Labour Force Survey; ABS Building Approvals; ABS Counts of Australian Businesses; Department of Employment Small Area Labour Markets; ABS Tourism Satellite Account; and Tourism Research Australia (TRA).

Further details on the REMPLAN model and its uses are available from their website: https://www.remplan.com.au/


## 6. Estimates of the Number of Enthusiast-Owned Historical Vehicles

By international standards, Australia has a relatively aged fleet of vehicles. According to BITRE, in 2022, there were around 21.2 m unconditionally registered vehicles in Australia.

The average age of Australia's fleet of registered vehicles is 11.3 years, although the average age of the passenger vehicle fleet, which makes up the majority of vehicles (72\%) is slightly lower at I I years.

According to BITRE, there is a total of 5.6 m historical vehicles unconditionally fully registered for day-to-day use in Australia as follows:

- Classic vehicles ( 15 to 30 years old): 4.95 m
- Heritage vehicles (> 30 years old): 0.64 m
- TOTAL 5.6 m

However, not all 5.6 m of these historical vehicles are owned by motor heritage enthusiasts, who typically spend more than average on their vehicles because of their interest in motoring heritage (although the AMHF is aware that many enthusiasts unconditionally register their vehicles in order to drive them on a more regular basis than is generally allowed under the State conditional registration systems).

The BITRE database therefore does not include conditionally registered vehicles which are likely to contain a high proportion of enthusiast-owned historical vehicles. In total, it is estimated based on the data provided to AMHF by the State agencies that there are some 560,000 enthusiastowned conditionally registered historical vehicles.

In order to estimate the total number of enthusiast-owned both conditionally and unconditionally registered historical vehicles, three categories of vehicles were considered as set out in Figure 5 below.

Figure 5 - Estimate of Enthusiast-Owned Historical Vehicles


Source:TMG Analysis

Each category making up this estimate of a total of 970,000 Enthusiast vehicles is explained as follows:

## Conditionally Registered Vehicles

AMHF estimates that there are an additional 560,000 enthusiast-owned historical vehicles that are conditionally registered.

Each state road authority has its own definitions of how vehicles classify for conditional registration. The typical categories include historical, off-road, Diplomatic and Consular and Defence vehicles.

The AMHF contacted the relevant road authority in each state and territory for details of conditional registrations. After excluding non-relevant categories and eliminating double counting, it was determined that on average, conditional registrations were around $10 \%$ of the BITRE total stock of unconditionally registered historical vehicles. This resulted in an estimate of a total of 560,000 conditionally registered vehicles across Australia.

## Pre-1970s Vehicles

Based on the BITRE data, there are around 140,000 vehicles manufactured prior to 1970 that are unconditionally registered. For the purposes of this study, they are all assumed to be enthusiast-owned historical vehicles. While this may not be totally accurate for every vehicle manufactured before 1970, the AMHF believes this is a reasonable assumption to make and would capture the vast majority of these vehicles.

## Unconditionally Registered Post 1970 Historical Vehicles

Based on the BITRE data, the AMHF conservatively estimates that around $5 \%$ of the remaining fleet of unconditionally registered vehicles over the age of 15 years are enthusiast owned, equating to some 270,00 vehicles.

The overall estimate of 970,000 enthusiast-owned historical vehicles by this methodology is considered reasonable and conservative.


## 7. About the Survey, Respondents \& Historical Vehicles

## 7.I Overview

Between July and September, 2023, TMG conducted the survey of motor heritage enthusiasts to determine their average annual expenditure on their historical vehicles. All data gathered related to the prior 2022 full calendar year.

The survey, conducted through 834 motoring clubs across every state and the ACT elicited 6,296 complete responses. Non-complete or unfinished responses were not considered.

An email distribution to club secretaries and presidents was sent to these motoring clubs on three occasions once in July, once in August and once in September 2023. The vast majority of responses were received through the first two email distributions. A copy of the survey can be found in Appendix 3.

The survey sought to:

- Gather limited demographic data;
- Quantify the number of historical vehicles owned by each survey respondent;
- Categorise the number of historical vehicles by the classic and heritage vehicle definitions adopted in this report;
- Categorise the number of historical vehicles by vehicle type (cars, motorcycles and trucks/buses, others);
- Determine the number of kilometres travelled per annum per historical vehicle; and
- Identify the level of annual expenditure according to 19 separate categories determined in consultation with the AMHF study management team, who are themselves enthusiasts and own historic vehicles including:
- Fuel;
- Tyres;
- Mechanical repairs;
- Bodywork;
- Upholstery;
- Auto-electrical;
- Parts \& accessories;
- Lubricants;
- Insurance;
- Racing entry and associated fees;
- Motor heritage event attendance;
- Motor heritage related holidays;
- Clothing (club shirts, caps etc);
- Storage of vehicles;
- Tools;
- Books/magazine subscriptions;
- Registrations and third party insurance costs;
- Motoring club subscriptions; and
- Motoring club organised charitable donations.

Spend level data was recorded in bands set by the AMHF based on their own experience, research and expertise in the motoring enthusiast sector. TMG reviewed and adjusted the band widths for reasonableness based on the results of an initial pilot survey.

### 7.2 About the Survey Respondents

The distribution of completed surveys was more or less in line with the distribution of the general population, although with some notable exceptions.

Western Australia stands out as a state where, the proportion of completed surveys was materially higher than the state's population distribution, while completed surveys were lower in Tasmania and ACT than their contribution to the population. In addition, there were no completed surveys from the Northern Territory as the AMHF had no ready access at the time to a database of motoring clubs in that location.

Figure 6 - Respondents by State/Territory


Source:TMG analysis of AMHF survey data

Although it is unclear if these variations between the distribution of completed surveys and the distribution of the general population are driven by different historical vehicle ownership attitudes or because of the survey distribution methodology, they are not believed to have materially impacted the results.

Together, NSW, Victoria and Queensland - where the distribution of survey respondents was more closely aligned to the population distribution - comprised $73.5 \%$ of all survey respondents and hence materially impacted the survey outcomes on a weighted average basis.

Figure 7 - General Population Distribution by State/Territory


### 7.3 About the Historical Vehicles

### 7.3.I Number of Historical Vehicles

The 6,296 survey respondents owned a total of 19,200 historical vehicles, obviously suggesting that multiple historical vehicle ownership is relatively common.

More than three quarters of all vehicles in the survey were heritage vehicles ( $76.8 \%$ ), with classic vehicles accounting for the remaining $23.2 \%$ of vehicles covered by the survey.

The majority of historical vehicles in the survey were cars (80.8\%), while $13.4 \%$ were motorcycles and $5.8 \%$ were trucks.

This compares to the BITRE data which shows that of all unconditionally registered vehicles greater than 15 years of age, $72 \%$ were cars while $5 \%$ were motorcycles and the remaining $23 \%$ were trucks of varying descriptions. It is not surprising that more motoring enthusiasts owned vehicles are cars and motorcycles rather than trucks. There are a limited number of clubs dedicated to trucks.

Figure 8 - No. of Historical Vehicles Captured in the Survey


Source:TMG analysis of AMHF survey data


### 7.3.2 Number of Historical Vehicles Per Owner

Less than half (47.7\%) of historical cars were owned by someone with just one historical vehicle. This number was higher for classic vehicles (61.7\%) and lower for heritage vehicles (42.3\%).

Around $18.7 \%$ of historical car owners owned more than three vehicles, although heritage vehicle owners are much more likely therefore to own multiple vehicles, with $22.2 \%$
owning more than three, compared to just 9.7\% of classic vehicle owners.

A small number of historical car owners (3.4\%) owned more than 10 historical vehicles and again, this was more prevalent for heritage vehicle owners than for classic vehicle owners.

Figure 9 Distribution of No. of Cars Owned


Source:TMG analysis of AMHF survey data

Multiple historical vehicle ownership is more common for motorcycles rather than cars, with just 44.5\% owning just one motorcycle, compared to $47.7 \%$ for cars.

Around 24.3\% of historical motorcycle owners owned more than three motorcycles, although heritage motorcycle owners are much more likely therefore to own
multiple motorcycles, with $30.2 \%$ owning more than three, compared to just II.7\% of classic motorcycle owners.

A small number of historical bike owners (6.5\%) owned more than 10 historical bikes and again, this was more prevalent for heritage bike owners than for classic bike owners.

Figure 10 Distribution of No. of Motorcycles Owned


Multiple historical vehicle ownership is less common for trucks rather than cars or motorcycles, with $58.7 \%$ owning just one vehicle, compared to $47.7 \%$ for cars and $44.5 \%$ for bikes.

Only around $13.5 \%$ of historical truck owners owned more than three vehicles, although heritage truck owners are much more likely therefore to own multiple vehicles,
with $15.0 \%$ owning more than three, compared to just 9.4\% of classic truck owners.

A small number of historical truck owners (3.3\%) owned more than 10 historical trucks and again, this was more prevalent for heritage truck owners than for classic truck owners.


### 7.3.3 Average Distance Travelled

The average distance travelled in 2022 by all the historical vehicles in the survey was $1,348 \mathrm{~km}$. This compares to the national average of $12,100 \mathrm{~km}$ per vehicles (all vehicle types) ${ }^{2}$ - i.e. historical vehicles travel just II. $1 \%$ of the distance travelled per year of the national all vehicle average. The more historical vehicles someone owned, the less distance that was travelled per vehicle (i.e. the IOth vehicle owned travelled less than the first). For those who only owned one historical vehicle, the distance travelled was higher than the average.

The national average is however influenced by the very high level of distance travelled for trucks and buses (more than $20,000 \mathrm{~km}$ per year). Nevertheless, the national average distance travelled by cars was $11,100 \mathrm{~km}$ and motorcycles was $1,900 \mathrm{kms}$. In summary therefore, by any measure, historical vehicles as expected, travel only a relatively small fraction of the distance of all vehicles and the more historical vehicles a motoring enthusiast owns, the less distance they travel per vehicle on average.

The total distance travelled by the historical vehicles in the survey was 24.6 mkm in 2022. The most common distance travelled in a year (by $26.4 \%$ of vehicles) was between 2,00I-5,000km. More than one-third (33.7\%) travelled less than $2,000 \mathrm{~km}$ per annum.

Figure 12 - Average Distance Travelled Per Year Per Historical Vehicle Owned, km


Source:TMG analysis of AMHF survey data

Figure I3-Average Distance Travelled Per Vehicle, km - millions


Source:TMG analysis of AMHF survey data

## 8. Average Annual Expenditure by Category

The AMHF survey sought to gather expenditure details on 19 different categories of spend.

Figure 14-Amount Spent on Fuel, CY22 \$m

## 8.I Fuel <br> Expenditure Level Category Ranking: 7th of 19

Respondents to the AMHF survey spent an estimated $\$ 10.4 \mathrm{~m}$ on fuel in CY22. This represents $\$ 0.39$ per km travelled which is higher than TMG's estimate of $\$ 0.20$ per km travelled for all vehicles ${ }^{3}$. This is in keeping with the use of higher octane (and more expensive) pump fuel, lower fuel efficiency associated with older vehicles and the inclusion of historical vehicle racing fuel, albeit in smaller quantities than pump fuel but with a much higher cost per litre - in the estimate. Historical vehicle owners spend, on average, \$542 on fuel per vehicle per year.

The most common amount spent by historical vehicle owners on fuel in CY 22 was between $\$ 2,000$ and $\$ 3,999$ - this accounted for $48 \%$ of all owners.



Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey

Figure 15 - Proportion of Vehicle Owners by Total Fuel Spend


Source:TMG analysis of AMHF survey data

### 8.2 Tyres

## Expenditure Level Category Ranking: 14th of 19

Respondents to the AMHF survey spent an estimated $\$ 4.5 \mathrm{~m}$ on tyres in CY22. This represents $\$ 0.18$ per km travelled. Historical vehicle owners spend, on average, \$234 on tyres per vehicle per year. This low amount is in keeping with the relatively low number of kilometres travelled by historical vehicles per year.

Almost half of the survey respondents (46.9\%) spent nothing on tyres in CY22. The most common levels of expenditure were up to $\$ 1,000$ (26.1\%) and between $\$ 1,000-$ \$1,999 (16.8\%).

Some historical vehicle owners spent up to $\$ 35,000$ in CY 22 on tyres - although this was typically multi-vehicle owners and those involved in historical vehicle racing.


Figure I6-Total Amount Spent on Tyres by Total Tyre Spend per Historical Vehicle Owner, \$m


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey

Figure 17 - Proportion of Vehicle Owners by Total Tyre Spend


[^0]
### 8.3 Mechanical Repairs

## Expenditure Level Category Ranking:

 Ist of 19Respondents to the AMHF survey spent an estimated $\$ 37.8 \mathrm{~m}$ on mechanical repairs by specialised and general vehicle mechanical repair businesses in CY22. This represents $\$ 1.54$ per km travelled. Historical vehicle owners spend, on average, \$1,969 on mechanical repairs per vehicle per year: Historical vehicle owners typically spend more than the average vehicle owner would on mechanical repairs, primarily due to the age of the vehicles and the cost of sourcing (if available) or repairing and restoring/remanufacturing mechanical parts if unavailable. According to a survey by Budget Direct, in 2022 the average all-vehicle spend on servicing and tyres was $\$ 1,610^{4}$, some $25 \%$ lower than by historical vehicle owners.

The largest proportion (40\%) of historical vehicle owners spend less than $\$ 10,000$ but the majority ( $60 \%$ ) spent more than $\$ 10,000$ reflecting the significant costs of mechanical restoration by skilled artisans.

Around 37\% of historical vehicle owners spent nothing on mechanical repairs. Many historical vehicle owners reported doing their own repair work. Some historical vehicle owners spent up to $\$ 500,000$ in CY 22 on mechanical repairs - although this was typically multi-vehicle owners and those involved in historical vehicle racing.


Figure 18-Total Amount Spent on Mechanical Repairs by Total Mechanical Repairs Spend per Historical Vehicle Owner, \$m


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey

Figure 19 - Proportion of Vehicle Owners by Total Mechanical Repairs Spend


Source:TMG analysis of AMHF survey data

### 8.4 Bodywork

Expenditure Level Category Ranking: 3rd of 19

Respondents to the AMHF survey spent an estimated $\$ 26.2 \mathrm{~m}$ on bodywork (body building, panel beating, spray painting etc) by specialised and general bodywork repair businesses in CY22. This represents $\$ 1.07$ per km travelled. Historical vehicle owners spend, on average, $\$ 1,365$ on bodywork per vehicle per year. Replacement body panels are often no longer manufactured and historical vehicle owners typically spend more than the average vehicle owner would on bodywork, primarily due to the age of the vehicles and the need to repair and restore various elements of the car body which mostly requires work by skilled artisans. The vast majority of ordinary vehicle owners do not spend anything on bodywork unless involved in road accidents.

The largest proportion of historical vehicle owners (34.3\%) spent up to $\$ 10,000$ on bodywork (spending a total of $\$ 9 \mathrm{~m}$ ) but the majority ( $65.7 \%$ ), spent more than $\$ 10,000$ (spending a total of $\$ 17.2 \mathrm{~m}$ ).

The vast majority of historical vehicle owners (61\%) spent nothing on bodywork repairs. Many historical vehicle owners reported doing their own repair work. Some historical vehicle owners spent up to $\$ 300,000$ in CY 22 on bodywork - although this was typically multi-vehicle owners and those involved in historical vehicle racing.


Figure 20 - Total Amount Spent on Bodywork by Bodywork Spend, \$m


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey
Figure 21 - Proportion of Vehicle Owners by Total Bodywork Spend


Source:TMG analysis of AMHF survey

### 8.5 Upholstery

## Expenditure Level Category Ranking: 8th of 19

Respondents to the AMHF survey spent an estimated $\$ 10.2 \mathrm{~m}$ on upholstery in CY22. This represents $\$ 0.41$ per km travelled. Historical vehicle owners spend, on average, \$531 on upholstery per vehicle per year. Historical vehicle owners typically spend more than the average vehicle owner would on upholstery, primarily due to the age of the vehicles and the need to repair and restore various elements of the upholstery which typically requires work by a skilled artisan. The vast majority of ordinary vehicle owners do not spend anything on upholstery (excluding car seat and other covers).

The largest proportion of historical vehicle owners (37.3\%) spent between $\$ 5,000$ and $\$ 10,000$ on upholstery (spending a total of $\$ 3.8 \mathrm{~m})$.

The vast majority of historical vehicle owners (72\%) spent nothing on upholstery repairs. Many historical vehicle owners reported doing their own upholstery repair work. Some historical vehicle owners spent significant sums in CY 22 on upholstery - although this was typically multi-vehicle owners.


Figure 22 - Total Amount Spent on Upholstery by Upholstery Spend, \$m


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey
Figure 23 - Proportion of Vehicle Owners by Total Upholstery Spend


Source:TMG analysis of AMHF survey

### 8.6 Auto-Electrical

Expenditure Level Category Ranking: 6th of 19

Respondents to the AMHF survey spent an estimated $\$ 10.6 \mathrm{~m}$ on auto-electrical repairs in CY22. This represents $\$ 0.42$ per km travelled. Historical vehicle owners spend, on average, \$552 on autoelectrical repairs per vehicle per year.

The vast majority of historical vehicle owners (62.4\%) spent nothing on auto-electrical repairs. Many historical vehicle owners reported doing their own repair work. Some historical vehicle owners spent significant sums in CY 22 on auto electricals (more than $\$ 20,000$ ) - although this was typically multivehicle owners.


Figure 24 - Total Amount Spent on Auto Electrical by Auto Electrical Spend, \$m


Figure 25 - Proportion of Vehicle Owners by Total Auto Electrical Spend


[^1]
### 8.7 Parts and Accessories

## Expenditure Level Category Ranking: 2nd of 19

Respondents to the AMHF survey spent an estimated $\$ 28.4 \mathrm{~m}$ on parts and accessories purchased from specialised and general parts and accessories businesses in CY22. This represents $\$ 1.15$ per km travelled. Historical vehicle owners spend, on average, \$1,479 on parts and accessories per vehicle per year. Historical vehicle owners typically spend more than the average vehicle owner would on parts and accessories, primarily due to the age of the vehicles and the need to replace and restore various elements.

Of those that do spend on parts and accessories, the majority (52.8\%) spend between \$5,000 and \$9,999.

Just under a third of historical vehicle owners (31.5\%) spent nothing on parts and accessories. Some historical vehicle owners spent significant sums in CY 22 on parts and accessories (more than $\$ 50,000$ ) - although this was typically multi-vehicle owners and those involved in historical vehicle racing.


Figure 26 - Total Amount Spent on Parts and Accessories, \$m


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey
Figure 27 - Proportion of Vehicle Owners by Total Parts and Accessories Spend


Source:TMG analysis of AMHF survey

### 8.8 Lubricants

## Expenditure Level Category Ranking 17th of 19

Respondents to the AMHF survey spent an estimated $\$ 2.25 \mathrm{~m}$ on lubricants (engine, gearbox, and transmission oils, brake and clutch fluid, etc) in CY22. This represents $\$ 0.09$ per km travelled. Historical vehicle owners spend, on average, \$1 I7 on lubricants per vehicle per year.

Just over a quarter of historical vehicle owners ( $25.1 \%$ ) spent nothing on lubricants. Some historical vehicle owners spent significant sums in CY 22 on lubricants (around \$50,000) - although this was typically multi-vehicle owners and those involved in historical vehicle racing.


Figure 28 - Total Amount Spent on Lubricants by Lubricants Spend, \$m


Note: Excludes those who spend \$0
Source:TMG analysis of AMHF survey

Figure 29 - Proportion of Vehicle Owners by Total Lubricants Spend


[^2]
### 8.9 Insurance

## Expenditure Level Category Ranking: 4th of 19

Respondents to the AMHF survey spent an estimated $\$ 14.4 \mathrm{~m}$ on insurance in CY22 exclusive of compulsory third party cover. This represents $\$ 0.59$ per km travelled. Historical vehicle owners spend, on average, $\$ 750$ on insurance per vehicle per year.

Of those that did take out insurance, the vast majority (70.1\%) spent less than $\$ 500$.

Just over a quarter of historical vehicle owners (28.0\%) spent nothing on insurance, suggesting a level of self-insurance occuring in the historical vehicle sector. Some historical vehicle owners spent significant sums in CY 22 on insurance (around $\$ 30,000$ ) - although this was typically multi-vehicle owners.


Figure 30 - Total Amount Spent on Insurance by Insurance Spend per Historical Vehicle Owner, \$m


Note: Excludes those who spend \$0
Source:TMG analysis of AMHF survey

Figure 3I- Proportion of Vehicle Owners by Total Insurance Spend


## 8.IO Racing and Other Historic Vehicle Motorsports

## Expenditure Level Category Ranking: 9th of 19

Respondents to the AMHF survey spent an estimated $\$ 8.7 \mathrm{~m}$ on racing (defined here to include track, regularity, sprints, gymkhanas, rallying etc.) in entry and related fees/costs for historical vehicle racing related events in CY22. This represents $\$ 0.35$ per km travelled. Historical vehicle owners spend, on average, $\$ 453$ on racing per vehicle per year.

Of those that did take part-take in racing, the vast majority (72.4\%) spent less than $\$ 20,000$.

The vast majority of historical vehicle owners (88.9\%) spent nothing on racing. Some historical vehicle owners spent significant sums in CY 22 on racing (more than $\$ 60,000$ ).


Figure 32 - Total Amount Spent on Racing by Racing per
Historical Vehicle Owner, \$m


Note: Excludes those who spend \$0
Source:TMG analysis of AMHF survey

Figure 33 - Proportion of Vehicle Owners by Total Racing Spend


## 8.II Events

## Expenditure Level Category Ranking: IIth of 19

Respondents to the AMHF survey spent an estimated $\$ 5.4 \mathrm{~m}$ on attending historical vehicle related events (such as attendance at car club meetings etc.) in CY22. This represents $\$ 0.22$ per km travelled. Historical vehicle owners spend, on average, $\$ 281$ on events per vehicle per year.

Just under a third of historical vehicle owners (32.5\%) spent nothing on events, although the largest proportion spent up to $\$ 1,250$. Very few historical vehicle owners spent significant sums in CY 22 on events - and no-one spent more than $\$ 10,000$.


Figure 34 - Total Amount Spent on Events by Event Expenditure per Historical Vehicle Owner


Note: Excludes those who spend \$0
Source:TMG analysis of AMHF survey

Figure 35 - Proportion of Vehicle Owners by Total Event Spend


### 8.12 Motor Heritage Themed Holidays

## Expenditure Level Category Ranking: 5th of 19

Respondents to the AMHF survey spent an estimated $\$ 12.0 \mathrm{~m}$ on motoring heritage themed holidays - attending regional and interstate events including race meetings, conventions, tours etc in CY22.This represents $\$ 0.49$ per km travelled. Historical vehicle owners spend, on average, $\$ 625$ on motor heritage related holidays per vehicle per year.

The majority of historical vehicle owners (57.4\%) spent nothing on motor heritage themed holidays. Of those that did spend the largest proportion spent up to $\$ 5,000$. A small number of historical vehicle owners spent significant sums in CY 22 on motor heritage themed holidays (more than $\$ 40,000$ ).


Figure 36 - Total Amount Spent on Motor-Themed Holidays by Motor-Themed Holiday Expenditure per Historical Vehicle Owner, \$m


Note: Excludes those who spend \$0
Source:TMG analysis of AMHF survey
Figure 37 - Proportion of Vehicle Owners by Total Motor-Themed Holiday Spend


[^3]
### 8.13 Motor Heritage Clothing

## Expenditure Level Category Ranking: 18th of 19

Figure 38 - Total Amount Spent on Motor-Related Clothing by Motor Heritage Related Clothing Expenditure per Historical Vehicle Owner, \$m

Respondents to the AMHF survey spent an estimated $\$ 1.6 \mathrm{~m}$ on motoring heritage related clothing including club shirts, jackets, hats etc in CY22. This represents $\$ 0.07$ per km travelled. Historical vehicle owners spend, on average, \$83 on motoring heritage related clothing per vehicle per year.

The majority of historical vehicle owners (50.9\%) spent nothing on motor heritage related clothing. Of those that did spend the largest proportion spent up to $\$ 500$. A small number of historical vehicle owners spent significant sums in CY 22 on motor heritage related clothing (up to $\$ 15,000$ ).


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey


Figure 39 - Proportion of Vehicle Owners by Motor Heritage Related Clothing Spend


### 8.14 Vehicle Storage \& Workspace Rental

## Expenditure Level Category Ranking: 15th of 19

Respondents to the AMHF survey spent an estimated $\$ 3.1 \mathrm{~m}$ on vehicle storage and workspace rental in CY22. This represents $\$ 0.13$ per km travelled. Historical vehicle owners spend, on average, $\$ 161$ on vehicle storage and workshop rental per vehicle per year.

The vast majority of historical vehicle owners (87.5\%) spent nothing on vehicle storage and workspace rental - with many reporting usage of their homes for these purposes. Some historical vehicle owners spent significant sums in CY 22 on vehicle storage and workspace rental (up to $\$ 70,000$ ) - although this was typically multi-vehicle owners and those involved in historical vehicle racing.


Figure 40 - Total Amount Spent on Vehicle Storage/Workspace Rent by Vehicle Storage/Workspace Rent per Historical Vehicle Owner, \$m


Note: Excludes those who spend \$0
Source:TMG analysis of AMHF survey

Figure 4 I - Proportion of Vehicle Owners by Vehicle Storage/Workspace Spend


[^4]
### 8.15 Purchasing Tools

## Expenditure Level Category Ranking: 13th of 19

Respondents to the AMHF survey spent an estimated $\$ 4.75 \mathrm{~m}$ on purchasing tools in CY22. This represents $\$ 0.19$ per km travelled. Historical vehicle owners spend, on average, $\$ 247$ on purchasing tools per vehicle per year.

Almost half of historical vehicle owners (45.7\%) spent nothing on purchasing tools with many reporting having built up ownership of a full set of tools over a long period of time. Some historical vehicle owners spent significant sums in CY 22 on purchasing tools (up to \$30,000) - although this was typically multi-vehicle owners and those involved in historical vehicle racing.

Figure 42 - Total Amount Spent on Tools by Tools Spend per Historical Vehicle Owner, \$m
$\$ 1.7$
(35.8\%)


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey

Figure 43 - Proportion of Vehicle Owners by Tools Spend


Source:TMG analysis of AMHF survey data

### 8.16 Purchasing Books and Magazines

## Expenditure Level Category Ranking: 16th of 19

Respondents to the AMHF survey spent an estimated $\$ 3.1 \mathrm{~m}$ on purchasing motoring related books and magazines (including annual subscriptions) in CY22. This represents $\$ 0.13$ per km travelled. Historical vehicle owners spend, on average, \$16I on purchasing books and magazines per vehicle per year.

Of those that did spend on purchasing books and magazines, almost half (48.4\%) spent between $\$ 1,250$ and $\$ 2,499$.

Almost half of historical vehicle owners (43.0\%) spent nothing on purchasing books and magazines. Some historical vehicle owners spent significant sums in CY 22 on purchasing books and magazines (up to $\$ 5,000$ ).


Figure 44 - Total Amount Spent on Books/Magazines/Subs by Books/Magazines/Subs Spend per Historical Vehicle Owner, \$m


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey

Figure 45 - Proportion of Vehicle Owners by Books/Magazines/Subs Spend


[^5]
## 8.I7 Registration \& Compulsory Third-Party Insurance

## Expenditure Level Category Ranking: 10th of 19

Respondents to the AMHF survey spent an estimated $\$ 6.9 \mathrm{~m}$ on vehicle registration (conditional and non-conditional) and compulsory third-party insurance in CY22. This represents $\$ 0.28$ per km travelled. Historical vehicle owners spend, on average, \$359 on vehicle registration and compulsory third-party insurance per vehicle per year.

As the majority of historical vehicles are conditionally registered, both registration and compulsory third-party insurance costs for historical vehicles are materially lower than the average cost of registration and compulsory third party insurance for nonconditionally registered vehicles of $\$ 1,570^{5}$.

Only 19.7\% of historical vehicle owners did not spend anything on registration or compulsory third party insurance. The largest proportion spent up to $\$ 1,250$. Some historical vehicle owners spent significant sums in CY 22 on registration or compulsory third party insurance (up to $\$ 5,000$ ). It is worth noting that this may include historical vehicles that are unconditionally registered (for whatever reason) and commercial vehicles.


Figure 46 - Total Amount Spent on Rego/TPI by Rego/TPI Spend per Historical Vehicle Owner


Note: Excludes those who spend \$0
Source:TMG analysis of AMHF survey

Figure 47 - Proportion of Vehicle Owners by Rego/TPI Spend


### 8.18 Motoring Club Subscriptions

## Expenditure Level Category Ranking: 19th of 19

Respondents to the AMHF survey spent an estimated $\$ 1.22 \mathrm{~m}$ on motoring club subscriptions in CY22. This represents $\$ 0.05$ per km travelled. Historical vehicle owners spend, on average, $\$ 64$ on motoring club subscriptions per vehicle per year.

More than a quarter (27.8\%) of historical vehicle owners did not spend anything on motoring club membership as some clubs do not levy membership fees. If membership fees are levied, they are usually quite modest and are to cover mailing and other simple costs. Motoring club membership spend is the smallest of the 19 spend categories assessed as part of this report. Some historical vehicle owners spent significant sums in CY 22 on motoring club membership (up to $\$ 2,000$ ) - although this was typically multi-vehicle owners and multiple club memberships.


Figure 48 - Total Amount Spent on Motor Club Membership by Motor Club Membership per Historical Vehicle Owner, \$m


Note: Excludes those who spend \$0
Source:TMG analysis of AMHF survey

Figure 49 - Proportion of Vehicle Owners by Motor Club Membership Spend


[^6]
### 8.19 Charitable Donations

## Expenditure Level Category Ranking:

 I2th of 19Respondents to the AMHF survey spent an estimated $\$ 5.1 \mathrm{~m}$ on charitable donations to third parties (eg. Multiple Schlerosis, Dementia, Cancer and other similar charities) organised through motoring clubs and motoring heritage organisations in CY22. This represents $\$ 0.21$ per km travelled. Historical vehicle owners spend, on average, \$266 on charitable donations per vehicle per year.

The majority of historical vehicle owners (61.4\%) did not make charitable donations organised through their motoring club or via motoring heritage organisations. Some historical vehicle owners spent significant sums in CY 22 on charitable donations (up to $\$ 100,000$ ).


Figure 50-Total Amount Spent on Charitable Donations via Motor Clubs by Historical Vehicle Owners, \$m


Note: Excludes those who spend $\$ 0$
Source:TMG analysis of AMHF survey
Figure 5 I - Proportion of Vehicle Owners by Charitable Donations Spend


[^7]
### 8.20 Summary of Expenditure

The total amount of expenditure by historical vehicle owners responding to the AMHF survey was $\$ 196.6 \mathrm{~m}$ p.a.

The average spend on a per km basis was $\$ 7.99$ and the average expenditure per historical vehicle was $\$ 10,240$ p.a.

This compares to $\$ 9,068$ spent per annum, on average, by ordinary day-to-day vehicle owners according to a survey by insurance organisation Budget Direct ${ }^{6}$.

While the level of expenditure per annum on historical vehicles is comparable to that spent on ordinary vehicles, the composition of that expenditure is very different.

For ordinary vehicles, fuel, insurance, registration and compulsory third party insurance are the largest cost categories while for historical vehicles, mechanical, parts and accessories and body work are the largest cost categories.


Figure 52 - Summary of Expenditure Estimates From AMHF Survey

| Expense Type | Total <br> Annual Spend | AVG/km | AVG/Vehicle |
| :--- | :---: | :---: | :---: |
| Fuel | $\$ 10.4 \mathrm{~m}$ | $\$ 0.39$ | $\$ 542$ |
| Tyres | $\$ 4.5 \mathrm{~m}$ | $\$ 0.18$ | $\$ 234$ |
| Mechanical | $\$ 37.8 \mathrm{~m}$ | $\$ 1.54$ | $\$ 1,969$ |
| Bodywork | $\$ 26.2 \mathrm{~m}$ | $\$ 1.07$ | $\$ 1,365$ |
| Upholstery | $\$ 10.2 \mathrm{~m}$ | $\$ 0.41$ | $\$ 531$ |
| Auto-elect | $\$ 10.6 \mathrm{~m}$ | $\$ 0.43$ | $\$ 552$ |
| Parts \& Acce | $\$ 28.4 \mathrm{~m}$ | $\$ 1.15$ | $\$ 1,479$ |
| Lubricants | $\$ 2.25 \mathrm{~m}$ | $\$ 0.09$ | $\$ 117$ |
| Insurance | $\$ 14.4 \mathrm{~m}$ | $\$ 0.59$ | $\$ 750$ |
| Racing | $\$ 8.7 \mathrm{~m}$ | $\$ 0.35$ | $\$ 453$ |
| Events | $\$ 5.4 \mathrm{~m}$ | $\$ 0.22$ | $\$ 281$ |
| Holidays | $\$ 12.0 \mathrm{~m}$ | $\$ 0.49$ | $\$ 625$ |
| Clothing | $\$ 1.6 \mathrm{~m}$ | $\$ 0.07$ | $\$ 83$ |
| Storage | $\$ 3.1 \mathrm{~m}$ | $\$ 0.13$ | $\$ 161$ |
| Tools | $\$ 4.75 \mathrm{~m}$ | $\$ 0.19$ | $\$ 247$ |
| Books/Magazines | $\$ 3.1 \mathrm{~m}$ | $\$ 0.13$ | $\$ 161$ |
| Rego/TPI | $\$ 6.9 \mathrm{~m}$ | $\$ 0.28$ | $\$ 359$ |
| Club Subs | $\$ 1.22 \mathrm{~m}$ | $\$ 0.05$ | $\$ 64$ |
| Charitable | $\$ 5 \mathrm{~m}$ | $\$ 0.21$ | $\$ 266$ |

Source:TMG analysis of AMHF survey data

Figure 53 - Budget Direct Survey of Cost of Ordinary Car Ownership, 2022

| Cost Category | Annual Spend |
| :--- | :---: |
| Fuel | $\$ 5,040$ |
| Servicing \& Tyres | $\$ 1,610$ |
| Insurance | $\$ 1,587$ |
| Rego + CTP | $\$ 1,571$ |
| Tolls | $\$ 716$ |
| Roadside Assist | $\$ 115$ |
| All Excluding Finance | $\$ 9,068$ |

Source: Car Running Costs in Australia 2022 - Budget Direct


## 9. Economic Impacts

Calculating the economic impact of the historical vehicle sector involves first estimating the direct expenditure generated by the sector and second modelling that expenditure to determine the overall impact on the Australian economy.

To determine economic impact, the 19 expenditure categories captured in the survey were matched to the most relevant sectors of the Australian economy (noting that REMPLAN's input-output model is based on 114 different sectors that match back to the ABS National Accounts).

The direct impacts were then modelled through the REMPLAN input-output model to determine multiplier/indirect/flow-on effects and thus overall economic impacts.

Figure 54 - Survey Expenditure to Economic Model Sector Match

| AMHF Survey <br> Spend Categories | REMPLAN Economic Model Sector Match |
| :--- | :--- |
| Fuel | Retail |
| Tyres | Retail |
| Mechanical | Other Services/Automotive Repair \& Maintenance |
| Bodywork | Other Services/Automotive Repair \& Maintenance |
| Upholstery | Other Services/Automotive Repair \& Maintenance |
| Auto-elect | Other Services/Automotive Repair \& Maintenance |
| Parts \& Accessories | Retail |
| Lubricants | Retail |
| Insurance | Finance \& Insurance/Insurance and Superannuation <br> Funds |
| Racing |  <br> Gambling/Sports \& Recreation |
| Events |  <br> Gambling/Sports \& Recreation |
| Holidays | Accommodation \& Food Services |
| Clothing | Retail |
| Storage | Transport, Postal \& Warehousing/Transport <br> Support Services \& Storage |
| Tools | Retail |
| Books/Magazines | Retail |
| Rego/TPI | Public Administration \& Safety/Public <br> Administration \& Regulatory Services |
| Club Subscriptions |  <br> Gambling/Sports \& Recreation |
| Charitable Donations |  <br> Social Assistance Services |

Source:TMG analysis of AMHF survey data

## 9.I Direct Economic Impacts

As highlighted in Section 3.2, the direct economic impact is determined by multiplying the estimated number of motoring enthusiast owned historical vehicles by the average expenditure from the survey on those vehicles by those owners.

TMG estimates that the number of enthusiast-owned historical vehicles across Australia is around 970,000 (refer Section 6 above).

The survey of expenditure identified that the average expenditure on enthusiast-owned historical vehicles is $\$ 10,240$ on average (refer Section 8.20 above).

By this methodology, TMG estimate the direct economic impact at $\$ 9.92$ b p.a.

Figure 55 - Direct Economic Impact - Summary


The detailed economic direct impact by sector of expenditure is provided in the Table below.

Figure 56 - Direct Economic Impact - Detail

| AMHF Survey Spend Categories | Direct Annual Economic Impact |
| :---: | :---: |
| Fuel | \$ 525.1m |
| Tyres | \$ 226.7m |
| Mechanical | \$1,907.7m |
| Bodywork | \$1,322.5m |
| Upholstery | \$ 514.5m |
| Auto-elect | \$ 534.8m |
| Parts \& Accessories | \$1,432.9m |
| Lubricants | \$ 113.4m |
| Insurance | \$ 726.6 m |
| Racing | \$ 438.9 m |
| Events | \$ 272.2 m |
| Holidays | \$ 605.5m |
| Clothing | \$ 80.4m |
| Storage | \$ 156.0 m |
| Tools | \$ 239.3m |
| Books/Magazines | \$ 156.0m |
| Rego/TPI | \$ 347.8m |
| Club Subscriptions | \$ 62.0m |
| Charitable Donations | \$ 257.7m |
| TOTAL | \$9,921.1 m |

Source:TMG analysis of AMHF survey and
REMPLAN Input-Output model

### 9.2 Indirect \& Total Economic Impacts

From a direct estimated expenditure of $\$ 9.92 \mathrm{~b}$, it is estimated that the demand for intermediate goods and services would rise by $\$ 7.4$ b p.a. This represents a Type I Output multiplier of I.747.

Indirect effects are the business-to-business purchases in the supply chain taking place across Australia that result from the initial industry input purchases. Simply, motor heritage enthusiasts spend money with various suppliers across the country and those suppliers spend money with their suppliers. This is known as the indirect effect.

A second type of indirect effect - otherwise known as induced effects - come from household spending of income from labour (i.e. wages and salaries), after the removal of taxes etc. Simply, the induced effects are generated by the spending of the employees within the motor heritage enthusiast supply chain.

Both indirect and induced effects include multiple rounds of flow-on effects.

The linkages between various sectors of the economy are provided by the Australian Bureau of Statistics and the National Accounts. While the National Accounts are a static snapshot of the economy at a given point in time, the linkages between the various sectors of the economy can be used to trace the flow-on effects on any direct expenditure.

The increases in direct and indirect output would typically correspond to the creation of jobs in the economy. Corresponding to this change in employment would be an increase in the total of wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are estimated at $\$ 7.9$ b. This represents a Type 2 Output multiplier of 2.544.

The total output therefore of the historical vehicles sector, including all direct, supply-chain and consumption effects is estimated to be $\$ 25.2$ b p.a.

Figure 57 - Indirect \& Total Economic Impacts - Summary


Source: REMPLAN Input-Output model

### 9.3 Jobs Created

From a direct estimated expenditure of $\$ 9.92 \mathrm{~b}$, the corresponding creation of direct jobs is estimated at 42,150 jobs.

From this direct expansion in the economy, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in the gain of a further 16,548 jobs. This represents a Type I Employment multiplier of I.393.

The increase in direct and indirect output and the corresponding creation of jobs in the economy are expected to result in an increase in the wages and salaries
paid to employees. A proportion of these wages and salaries is typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are estimated to further boost employment by 19,973 jobs.

Total employment, including all direct, supply-chain and consumption effects is estimated to increase by up to 78,671 jobs. This represents a Type 2 Employment multiplier of I.866.

Figure 58 - Impact on Employment - Summary


Source: REMPLAN Input-Output model

### 9.4 Salaries \& Wages

From a direct estimated expenditure of $\$ 9.92$ b, it is estimated that direct wages and salaries would increase by $\$ 2.8 \mathrm{~b}$ p.a.

From this direct impact on the economy, flow-on supplychain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in the net increase in wages and salaries of $\$ 1.7 \mathrm{~b}$ paid to workers. This represents a Type I Wages and Salaries multiplier of I.6I5.

The net increase in direct and indirect output and the corresponding jobs in the economy are expected to
correspond to an increase in the wages and salaries paid to employees. A proportion of these wages and salaries is typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are expected to result in an overall increase in wages and salaries by $\$ 1.7 \mathrm{~b}$.

Total wages and salaries, including all direct, supply-chain and consumption effects is estimated to increase by up to $\$ 6.2$ b. p.a. This represents a Type 2 Wages and Salaries multiplier of 2.214 .

Figure 59-Impact on Wages \& Salaries Impact


Source: REMPLAN Input-Output model

### 9.5 Value Added

From a direct estimated expenditure of \$9.92b, the corresponding increase in direct value-added is estimated at \$4.3b p.a.

Value added is simply the total spend of the motoring heritage sector less its intermediate inputs.

From this direct expansion in the economy, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in a further increase to valueadded of \$3.1b. This represents a Type I Value-added multiplier of 1.721 .

The increase in direct and indirect output and the corresponding boost to jobs in the economy are expected to result in an increase in the wages and salaries paid to employees. A proportion of these wages and salaries are typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under this scenario are expected to further boost value-added by $\$ 4.0 \mathrm{~b}$.

Total value-added, including all direct, supply-chain and consumption effects is estimated to increase by up to \$1I.4b p.a.This represents a Type 2 Value-added multiplier of 2.660 .

Figure 60 - Value Added Impacts - Summary


Source: REMPLAN Input-Output model

### 9.6 Summary of Economic Impact

In summary, the historical vehicles sector is estimated to contribute \$II.4b p.a. to Gross Domestic Product (i.e. value added).

Figure 6I - Total Economic Impact Summary - Annual

| Impact Summary | Direct Effect | Supply-Chain <br> Effect | Consumption <br> Effect | Total Effect | Type I <br> Multiplier | Type 2 <br> Multiplier |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Output | $\$ 9.92 \mathrm{~b}$ | $\$ 7.4 \mathrm{~b}$ | $\$ 7.9 \mathrm{~b}$ | $\$ 25.2 \mathrm{~b}$ | 1.747 | 2.544 |
| Employment (Jobs) | 42,150 | 16,548 | 19,973 | $\mathbf{7 8 , 6 7 1}$ | 1.393 | 1.866 |
| Wages and Salaries | $\$ 2.8 \mathrm{~b}$ | $\$ 1.7 \mathrm{~b}$ | $\$ 1.7 \mathrm{~b}$ | $\$ 6.2 \mathrm{~b}$ | 1.615 | 2.214 |
| Value-added | $\$ 4.3 \mathrm{~b}$ | $\$ 3.1 \mathrm{~b}$ | $\$ 4.0 \mathrm{~b}$ | $\$ 11.4 \mathrm{~b}$ | 1.721 | 2.660 |

Source: REMPLAN Input-Output model

Contributing to this is an annual direct increase in output of \$9.92b, 42, I 50 additional jobs, \$2.8b more in wages and salaries and a boost in value-added of \$4.3b.

From this direct impact, flow-on supply-chain effects in terms of local purchases of goods and services are anticipated, and it is estimated that these indirect impacts would result in a further increase to output valued at $\$ 7.4 \mathrm{~b}$, 16,548 more jobs, $\$ 1.7 \mathrm{~b}$ more paid in wages and salaries, and a gain of $\$ 3.1 \mathrm{~b}$ in terms of value-added.

These supply-chain effects represent the Type I economic multipliers as shown in the table below.

Figure 62-Type I Economic Multipliers

| Impact | Type I Multipliers |
| :--- | :---: |
| Output | 1.747 |
| Employment | 1.393 |
| Wages and Salaries | 1.615 |
| Value-added | 1.721 |

[^8]The increase in direct and indirect output and the corresponding change in jobs in the economy are expected to result in an increase in the wages and salaries paid to employees. A proportion of these wages and salaries is typically spent on consumption and a proportion of this expenditure is captured in the local economy. The consumption effects under the scenario are expected to further boost output by $\$ 7.9 \mathrm{~b}$, employment by 19,973 jobs, wages and salaries by $\$ 1.7 \mathrm{~b}$ and value-added by $\$ 4.0 \mathrm{~b}$.

In total, the total output generated by the historical vehicle sector is estimated at $\$ 25.2$ b p.a.

Corresponding to this are 78,67 I jobs, $\$ 6.2 \mathrm{~b}$ in wages and salaries and \$11.4b in value-added p.a.

The total changes to economic activity represent Type 2 economic multipliers as shown in the Table below.

Figure 63-Type 2 Economic Multipliers

| Impact | Type 2 Multipliers |
| :--- | :---: |
| Output | 2.544 |
| Employment | 1.866 |
| Wages and Salaries | 2.214 |
| Value-added | 2.660 |

Source: REMPLAN Input-Output model

## IO. Acknowledgements

Level One Donors


Level Two Donors


Level Three Donors

II. Appendix I - BITRE Data Summary

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $x_{0}^{2858}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\frac{\substack{12.20 \\ 2.240}}{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \% 20.8 |  |  |



## 12. Appendix 2 - Notes About the REMPLAN Model

The economic impact modelling conducted for this study was undertaken using REMPLAN software.

The REMPLAN model is a well-known and well-respected in the economic community and is used by corporation, industry associations, event and development proponents and governments alike to measure economic impacts.

All figures and data in the REMPLAN model are based on data sourced from the Australian Bureau of Statistics (ABS), most of which relates to the 2021, 2016, 201I, 2006 and 2001 Censuses.

Using ABS datasets and an input / output methodology, industrial economic data estimates for defined geographic regions are generated.

The software also incorporates a region-specific economic impact modelling feature that was first developed at La Trobe University, with continued development from December 2006 by REMPLAN. This feature generates
estimates of indirect or flow-on impacts from a direct change to an economy.

This software is provided in good faith with every effort made to provide accurate data and apply comprehensive knowledge. However, REMPLAN does not guarantee the accuracy of data nor the conclusions drawn from this information. A decision to pursue any action in any way related to the figures, data and commentary presented in this software is wholly the responsibility of the party concerned. REMPLAN advises any party to conduct detailed feasibility studies and seek professional advice before proceeding with any such action and accept no responsibility for the consequences of pursuing any such action.

## I3. Appendix 3 - AMHF Survey Instrument

MOTOR HERITAGE
FOUNDATION "'

1. How many heritage vehicles do you own?

|  | Cars | Trucks/Buses/other | Bikes |
| :---: | :---: | :---: | :---: |
| Age 15.30 years (classic') | \% | $\uparrow$ | F |
| Age $30+$ years ('heritage') | \% | $\uparrow$ | * |



```
7. How much did you spend in 2022 on upholstery for all of your heritage vehicle/s?
    $0
    $1-$9,999
    $ $10,000-$19,999
    $20,000-$29,999
    $30,000-549,999
    $55,000-574,999
    $75,000-5100,000
    Other (please specify)
    \square
```

8. How much did you spend in 2022 on auto electrical repairs by a third party for all of your
heritage vehicle/s?
\$0
$\$ 1-\$ 9,999$
$\$ 10,000-519,999$
\$20,000. $\$ 29,999$
\$30,000- $\$ 49,999$
$\$ 50,000-574,999$
$\$ 75,000-8100,000$
Other (please specify)
9. How much did you spend in 2022 on spare parts and accessories for all of your heritage
vehicle/s?
\$ $\$ 0$
$\$ 1-\$ 9,999$
\$10,000.-199.999
$\$ 20,000$ - $\$ 29,999$
$\$ 30,000-549,999$
\$50,000. $\mathbf{- 1 4 4 , 9 9 9}$
$\$ 75,000-5100,000$
Other (please specify)
Other (please specify)
10. How much did you spend in 2022 on auto electrical repairs by a third party for all of your
heritage vehicle/s?
\$ $\$ 0$
$\$ 1-\$ 9,999$
\$20,000-529,999
$\$ 30,000 \cdot 549,999$
$\$ 50,000-574,999$
$\$ 75,000 \cdot \$ 100,000$
Other (please specify)
11. How much did you spend in 2022 on spare parts and accessories for all of your heritage
vehicle/s?
$\$ 1$ 1-99,999
$\$ 10,000-519,999$
$\$ 20,000 \cdot 529,999$
$\$ 30,000-549,999$
$\$ 75,000-5100,000$
Other (please specify)
$\qquad$

```
14. How much did you spend in 2022 on motor-themed or motor-driven holidays in Australia?
\$0
\(\$ 1\) - \(\$ 4,999\)
\(\$ 5,000\)-59,999
\$10,000-514,999
\(\$ 15,000-\$ 19,999\)
\(\$ 20,000-539,999\)
\(\$ 40,000-\$ 60,000\)
Other (please specify)
```

15. How much did you spend in 2022 on motor-related clothing (ie. for workshop, shows,
driving etc)?
\$0 $\$ 1000 . \$ 1,499$
$\$ 1-\$ 499 \quad \$ 1,500-\$ 2,000$
© $\$ 500-\$ 999$
other (please specify)
$\square$
16. How much did you pay in 2022 for rent for vehicle storage or workspace?
\$0
$\$ 5,000-\$ 7,499$
$\$ 1$ - $\$ 2,499$
$\$ 7,500-\$ 10,000$
$\$ 2,500-54,999$
other (please specify)
17. How much did you spend in 2022 on tools for use on all of your heritage vehicle/s?
$\$ 0$ \$5,000.57,499
$\$ 1-\$ 2,499 \quad \$ 7,500-\$ 10,000$
\$2,500.54,999
Other (please specify)
```
18. How much did you spend in 2022 on heritage vehicle books/magazine/online/memorabilia subscriptions?
```



```
19. How much did you spend in 2022 on vehic
Insurance for all of your heritage vehicle/s?
```



```
20. How much did you spend in 2022 on heritage motor club membership fees?
\$0 \(\$ 1000 \cdot \$ 1,499\)
\(\$ 1\)-s499 \(\$ 1,500-2,000\)
\$500-5999
Other (please specify)
```


21. How much did you donate in 2022 to charities organised through your club?
so
\$1-54,999
\$5,000-\$9,999
\$10,000. $\$ 14,999$
$\$ 15,000-\$ 24,999$
\$25,000. $\mathbf{\$ 3 9 , 9 9 9}$
$\$ 40,000 \cdot \$ 66,000$
other (please specify)
22. Are there any other notable expenses you had in 2022 relating to motor heritage? (State amount \$ and expense type)

23. Please state your age
$18-25$
${ }^{26.35}$
$36 \cdot 45$
46.55
56.65
66.75
>75
24. Please state your gender.
$\bigcirc$ Female
Male
other
25. Please enter your postcode.
$\square$


AUSTRALIAN
MOTOR HERITAGE
FOUNDATION "

THANK YOU!
Thank you for completing our survey. Your answers our now completely disassociated from your identity and no one can change them - not even you! a copy of the report will be sent to the club you have nominated when it is completed, we expect by November 2023 .

As a small token of our gratitude for your time, effort and support, the Foundation would like to offer you the opportunity to join the AMHF for one year, free of charge Just email us at communications@motorheritage.org.au and quote the promotion
code "ECONVALUE" and we'll sort you out. code "ECONVALUE" and we'll sort you out.


PROUD OF OUR PAST, PASSIONATE ABOUT OUR FUTURE.


[^0]:    Source:TMG analysis of AMHF survey data

[^1]:    Source:TMG analysis of AMHF survey

[^2]:    Source:TMG analysis of AMHF survey

[^3]:    Source:TMG analysis of AMHF survey data

[^4]:    Source:TMG analysis of AMHF survey data

[^5]:    Source:TMG analysis of AMHF survey data

[^6]:    Source:TMG analysis of AMHF survey data

[^7]:    Source:TMG analysis of AMHF survey data

[^8]:    Source: REMPLAN Input-Output model

