



## Vehicle Fleet Management



VICTORIA

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Victorian  
Auditor-General

# Vehicle Fleet Management

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The Hon. Robert Smith MLC  
President  
Legislative Council  
Parliament House  
Melbourne

The Hon. Jenny Lindell MP  
Speaker  
Legislative Assembly  
Parliament House  
Melbourne

Dear Presiding Officers

Under the provisions of section 16AB of the *Audit Act 1994*, I transmit my performance report on *Vehicle Fleet Management*.

Yours faithfully



D D R PEARSON  
*Auditor-General*

25 November 2009



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# Audit summary

## Introduction

Vehicle fleets are a significant component of the cost of service delivery in state and local governments. It is estimated that each sector is spending around \$100 million a year to run their fleets.

This audit sought to establish whether state and local government non-executive passenger fleets are operationally justified and well managed. To do this, we reviewed how fleet sizes are justified, whether agencies are managing life-cycle costs, and whether they are actively reducing the environmental impact of their fleets.

For a vehicle fleet size and mix to be justified, the number and type of vehicles in an agency's fleet should reflect operational requirements. Too many or too few fleet vehicles can create excessive costs.

The cost of running a vehicle fleet goes beyond the purchase price. It includes insurance, registration and other life-cycle costs, such as fuel, maintenance, car parking, accident repair and possibly refurbishment. To manage these costs, agencies should monitor and report on vehicle usage and costs, and use the information to improve the running of the fleet accordingly.

Vehicle fleets also account for a large part of an agency's energy consumption and carbon emissions. In 2005, the Commonwealth Government created a new industry target to reduce the average carbon ( $\text{CO}_2$ ) emissions for all new light vehicles to 222g  $\text{CO}_2/\text{km}$  by 2010. Vehicles that can be leased by state government departments are limited to Australian-made manufacturers, with the exception of one overseas hybrid vehicle. Until recently, none of the approved Australian-made vehicles met the Commonwealth Government carbon emissions standard. Councils are not bound by the requirements of the Standard Motor Vehicle Policy (SMVP) and can therefore select from a wider range of fleet vehicles. Nonetheless, all agencies can reduce vehicle emissions in various ways and can measure the success of these initiatives by tracking the fleet's total carbon emissions over time.

Five agencies were examined:

- State Government Vehicle Pool (SGVP) – Department of Treasury and Finance
- Department of Education and Early Childhood Development (DEECD)
- Moonee Valley City Council
- Mornington Peninsula Shire Council
- Warrnambool City Council.

## Overall conclusion

There is little assurance that fleets are operationally justified, raising questions about the cost-effectiveness of these resources in service delivery.

Strategic management and oversight of fleets is missing. Evidence of this is a lack of management data on agency fleet use and costs, and a lack of any systematic review of fleet size and mix against need.

Three agencies had undertaken their own reviews of fleet operations, yet had not acted to address the findings of these reviews, which further reinforces this conclusion.

## Key findings

### Fleet performance management systems

None of the five agencies were able to provide comprehensive data relating to the life-cycle costs of their fleets or on patterns of usage.

None had a comprehensive suite of relevant performance indicators with appropriate targets against which to assess the cost-effectiveness of their fleet management, or to use, with the exception of the SGVP, in making decisions about fleet size and mix. Similarly, none had performance management systems to monitor compliance with fleet policies.

### Fleet size and mix

With the exception of the SGVP, none of the agencies could demonstrate how their fleet size and mix aligned with their business needs. There was no evidence that agencies regularly reviewed their operational requirements to confirm that the type and number of vehicles met specific business needs.

Councils provide vehicles as part of salary packages to attract and retain both executive and non-executive qualified employees. This arrangement differs from the state government, where non-executive employees use novated leasing to own and privately fund vehicles through their salary. Consequently, it is difficult to differentiate and compare council employees' salary costs and fleet costs. Furthermore, many of these vehicles were not being used substantially for business use, and were therefore not operationally justified. Our benchmarking of two councils confirmed business percentages around 50 per cent or lower, meaning that half the costs incurred on these vehicles did not contribute to service delivery.

## Managing life-cycle costs

Four out of the five agencies were not monitoring and reporting on all their fleet costs. Agency fleet data across all five was limited and lacked detail. While all agencies were managing the timely and efficient disposal of fleet vehicles, only one agency was effectively managing the timely and efficient maintenance of its fleet. None could demonstrate, where applicable, that they monitored compliance with vehicle use or fuel policies.

## Environmental impact

Only one of the five agencies' fleets was primarily 'green'. While all agencies had initiatives to reduce the environmental impact of their fleets, two agencies did not have targets to reduce their carbon emissions or were reporting or tracking their reduction.

None of the five agencies were using ethanol-blended fuels. The reasons provided for not using it indicate that ethanol use in other state and local government agencies is also likely to be low.

## Recommendations

Number	Recommendation	Page
1.	Agencies with substantial fleets should: <ul style="list-style-type: none"> <li>• implement fleet performance management systems that report data on fleet use and mix, significant components of life-cycle costs, and the extent of compliance with vehicle policies</li> <li>• review fleet size and mix against operational needs at least every three years or when there is a significant change to the activities or service delivery models.</li> </ul>	14
2.	Agencies should offer novated leases for salary-packaged vehicles that do not have a predominant business use.	14
3.	Agencies without quantity and time targets for reducing the number of high carbon-emitting 6-cylinder and petrol vehicles in their fleets should establish these, and monitor and report progress against them.	29
4.	Agencies should require staff to confirm there are no practical alternatives to using a vehicle, as part of the approval process.	29



# *Audit Act 1994 section 16— submissions and comments*

## **Introduction**

In accordance with section 16(3) of the *Audit Act 1994*, a copy of this report, or relevant extracts from the report, was provided to the Department of Education and Early Childhood Development, the Department of Treasury and Finance, Moonee Valley City Council, Mornington Peninsula Shire Council and Warrnambool City Council with a request for comments or submissions.

The comments and submissions provided are not subject to audit nor the evidentiary standards required to reach an audit conclusion. Responsibility for the accuracy, fairness and balance of those comments rests solely with the agency head.

## **Submissions and comments received**

### ***RESPONSE provided by the Secretary, Department of Education and Early Childhood Development***

*The Department for Education and Early Childhood Development welcomes the report and was pleased to have contributed to fieldwork for this audit and accepts the Auditor-General's observations.*

*DEECD notes responsibility for motor vehicle management is transferring to a shared services environment. In this context, DEECD will progress the implementation of the recommendations consistent with the role assigned to the Department.*

*In relation to Recommendation 1, DEECD notes that it went to tender in October, 2006 and in September, 2007 for development of a fleet performance management system. While the Department decided against proceeding with either of these, it was later decided to implement the same system as DHS, subject to an upgrade that was occurring at the time. The Department was subsequently advised that DTF Shared Services would be taking over responsibility for fleet management. Based on this advice it was deemed inappropriate to divert resources to the project.*

*DEECD policy in relation to Recommendation 2 is that this Department does not place any restriction on employees salary packaging vehicles whether or not they are predominantly for business use. DEECD has quantity and time targets for reducing the number of high carbon-emitting 6-cylinder and petrol vehicles in our fleet and therefore notes Recommendation 3. In relation to Recommendation 4, DEECD policy is to encourage staff to use practical alternatives to using a vehicle as part of the approval process and will continue to remind line management of this procedure.*

**RESPONSE provided by the Secretary, Department Treasury and Finance**

*The Department of Treasury and Finance notes the recommendations made by the Auditor-General in the report regarding the management of the State Government Vehicle pool and where applicable will seek to develop management practices that address the proposals identified.*

*DTF has identified improved processes around performance reporting and has sought to develop in the last twelve months a proposal for Performance Reporting for the whole of government which it is anticipated will provide a strategic oversight of vehicle management across agencies.*

**RESPONSE provided by the Chief Executive Officer, Moonee Valley City Council**

*The following is an extract of the response provided by the Chief Executive Office of Moonee Valley City Council. The full response is provided in Appendix B of this report.*

**Recommendation 1. Implementing fleet performance management systems and reviewing fleet size and mix.**

*Moonee Valley City Council notes and acknowledges the recommendations and comments on its systems and processes in this area and has either planned for or has already taken actions to address the concerns contained in the body of the report.*

*The collection of data on private vs. business use of vehicles and individual vehicle life-cycle costings, is recognised as good asset management and assists in understanding the whole cost, including passenger vehicles, in employment packages.*

*In terms of operational justification of the fleet, the report noted an industry standard of 15 000km of operational use to justify each vehicle in the fleet. This level of use may be appropriate to the State Government, rural shires or private fleet operators with a wide area of responsibilities. For an inner metropolitan Municipality, such as Moonee Valley which has an area of 43 km<sup>2</sup>, kilometre based usage standards are not appropriate as most trips are relative short in terms of distance.*

*Whilst the journeys taken are relatively short, the time taken at the destinations can be long. Council officers use vehicles to attend off-site meetings, undertake inspections, community assessments and service delivery (such as home care and program delivery). During this time vehicles are being ‘used’ but not necessarily in a way that can be measured by an odometer. Moonee Valley City Council operates a booking system for pool vehicles that is based on hourly usage—unfortunately this system does not record kilometres and so was unable to provide the kind of data requested by the auditors. Council does collect kilometre based business and private vehicle use via log books for calculation of Fringe Benefit Tax, every other year—in this case; the year before the time period selected by the auditors.*

*It is acknowledged that recording of whether vehicles are used for private or business needs (whether by hours or kilometres) can assist in determining the size and mix requirements for Council’s vehicle fleet—primarily to determine the minimum number of passenger vehicles required for business purposes.*

**RESPONSE provided by the Chief Executive Officer, Moonee Valley City Council – continued**

*In response to this, in early 2010 Council will adopt the mandatory use of logbooks across the entire passenger vehicle fleet for 13 weeks to ascertain the level of private vs. business use. This information will be collated and provided to the Executive Team for review when considering vehicle allocations and fleet strategy.*

**Recommendation 2.** Agencies should offer novated leases for salary-packaged vehicles that do not have a predominant business use.

*As noted above and in the report itself: ‘Councils provide vehicles as part of salary packages to attract and retain both executive and non-executive employees’ and that ‘This arrangement differs from the VPS (Victorian Public Sector—State Government), where non-executive employees use novated leasing to own and contribute towards vehicles through their salary.’*

*As also noted in the report, novated leasing is used by the State Government for dedicated personal use vehicles only. Moonee Valley City Council does not currently make use of novated leases for provision of passenger vehicles within the fleet as all non-executive passenger vehicles are pooled for work use—provision of novated leases would remove vehicles from the available pool as this method of leasing provides vehicles for personal use only.*

*The collation of data on business vs. private use will be used to guide the development of the Moonee Valley City Council Human Resource Strategy (which is due for completion in the first half of 2010) and would assist the consideration of providing staff the option to take up novated leases for passenger vehicles should this be appropriate for Moonee Valley.*

**Recommendation 3.** Agencies without quantity and time targets for reducing the number of high carbon-emitting 6-cylinder and petrol vehicles in their fleets should establish these, and monitor and report progress against them.

*Simply reducing the number of cylinders in engines or the number of petrol vehicles is a simplistic approach to addressing the environmental impact of operation of a vehicular fleet. The move from 6 cylinder to 4 cylinder vehicles would seem to be an obvious choice to reduce fuel consumption and also carbon emissions , however, setting emissions benchmarks such as limiting vehicle emissions to 222 grams of carbon dioxide per kilometre would become more worthwhile as new technology becomes available in vehicles.*

*As an example: the 2009 SIDI Holden Commodore is a 6 cylinder vehicle and emits 221 CO<sub>2</sub>g/km whereas the 4 cylinder 2008 Toyota Camry Altise, which currently makes up the bulk of Council’s passenger fleet, emits 233 CO<sub>2</sub>g/km—a clear example where modern technology has made a 6 cylinder car greener than a 4 cylinder one.*

*Council notes that using alternative fuels will reduce emissions and therefore encourages the use of sustainable biofuels to reduce greenhouse emissions and improve air quality. Whilst no Council vehicles are operated on E10, ethanol blended petrol fuel, the use of such fuels is being investigated.*

**RESPONSE provided by the Chief Executive Officer, Moonee Valley City Council – continued**

Council believes that consideration should also be given to air pollution ratings of each vehicle, for without such consideration, fuel efficient, low carbon emitting, yet highly polluting diesel vehicles could become attractive options to reduce the carbon footprints of passenger vehicle fleet owners.

**Recommendation 4.** Agencies should require staff to confirm there are no practical alternatives to using a vehicle, as part of the approval process.

In terms of the determining the business needs of each vehicle in the fleet, Council's draft fleet policy has been amended to include review of the following items prior to vehicle changeover:

- Is the vehicle required?
- Can the engine size of the vehicle be reduced?
- Is there a more efficient fuel source available?
- Can a hybrid vehicle be utilised?

In addition to this, justification for the allocation of a vehicle to new positions is being sought prior to consideration by the Executive Team.

**RESPONSE provided by Mornington Peninsula Shire Council**

Mornington Peninsula Shire Council did not provide a response to the report.

**RESPONSE provided by the Chief Executive Officer, Warrnambool City Council**

The Warrnambool City Council was pleased to be involved in the VAGO vehicle fleet management performance audit and believes it can use the findings to further improve its fleet management performance.

It is important to clearly state that Warrnambool City Council, along with many regional and rural councils uses its passenger fleet as a significant means of attracting suitably qualified staff. Recruiting suitably qualified staff to rural and regional areas has been and remains a significant problem.

Warrnambool City Council has considered attracting staff particularly novated leasing option as being at odds with our very effective vehicles as pool vehicles, all available for business use.

It is important to note that as a consequence of this motor vehicles are made fully available as pool vehicles flexibly by all staff for operational purposes.

Council is currently finalising a review of its Vehicle and Travel Policy which will address suggestions raised through the audit.

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# 1 Background

## 1.1 Vehicle fleets in state and local government

### 1.1.1 State government

There are an estimated 8 800 vehicles registered with departments and other budget agencies, presently valued at around \$215 million. Around 7 700 are non-executive passenger vehicles and 1 100 are executive vehicles. The vehicle fleets of the ten departments consist of around 60 per cent of these.

There is no consolidated data on the annual cost of this fleet. However, a reasonable estimate can be ascertained using approved tax rates, which are designed to capture the full cost of owning and running a vehicle for business purposes. Using these rates and a typical annual average of 20 000 kilometres, the full cost exceeds \$100 million annually.

Figure 1A shows the number of executive and non-executive passenger vehicles used at 30 June 2009 by the ten departments.

**Figure 1A**  
**Number of passenger vehicles by department, as at 30 June 2009**

Department	Executive	Operational	Total
Department of Education and Early Childhood Development	56	305	361
Department of Human Services <sup>(a)</sup>	108	1 604	1 712
Department of Innovation Industry and Regional Development	40	58	98
Department of Justice	316	653	969
Department of Planning and Community Development	30	125	155
Department of Premier and Cabinet	41	34	75
Department of Primary Industries	55	836	891
Department of Sustainability and Environment	37	915	952
Department of Transport	41	95	136
Department of Treasury and Finance	69	3	72
State Government Vehicle Pool	0	130	130
<b>Total</b>	<b>793</b>	<b>4 758</b>	<b>5 551</b>

Note: (a) Department of Human Services has subsequently been expanded to the Department of Human Services and the Department of Health.

Source: Victorian Auditor-General's Office, based on data from VicFleet.

## The role of VicFleet

VicFleet, within the Department of Treasury and Finance's (DTF) Government Services Group (GSG), manages a finance lease facility that includes vehicle acquisition, maintenance and disposal services for the state government's fleet. It is responsible for whole-of-government (WOG) vehicle-related contracts and running the State Government Vehicle Pool (SGVP), a short-term hire facility for departments and agencies.

VicFleet also provides fleet management services for agencies with small fleets of under approximately 100 vehicles, including maintenance, insurance claims, repairs and fuel cards.

In addition, it provides advice to state government agencies on motor vehicle issues and complying with the WOG Standard Motor Vehicle Policy (SMVP). The SMVP was developed in 2004 and is a framework for agencies to manage their vehicle fleets in accordance with all relevant legislation, policies and contractual arrangements. It is obligatory for all inner-budget agencies, that must:

- choose vehicles from an approved list of manufacturers, with priority given to local car makers
- select either 4-cylinder or dedicated LPG vehicles if travel distances are expected to be more than 30 000 kilometres annually
- dispose of vehicles when they reach 60 000kms, or three years after the delivery date, whichever comes first
- use ethanol-blended fuel where practical, available and cost-effective.

VicFleet records fleet numbers, and reports quarterly on significant or unexpected changes to the Minister for Finance.

## Government fleet reviews

The Efficient Government policy was introduced in 2006 as a commitment to a WOG approach to the provision of shared services. As part of this policy, DTF is undertaking a WOG Fleet Review, to establish a long-term strategic framework that will facilitate continuous improvements across all state government departments in fleet management and vehicle utilisation. A WOG Fleet Strategy is expected to be finalised between October 2009 and mid-2010.

A range of ancillary services, such as car pool management, has also been identified under this policy. DTF is currently developing a Shared Service Initiative to reduce the number of government car pools in both the central business district and regional areas.

These initiatives may provide more detailed information on the operational fleet requirements of Victorian Government agencies, and may impact on the current vehicle fleet arrangements and fuel contracts.

## 1.1.2 Local government

While there is no data on the total number and value of the local government vehicle fleet, a 2008 report commissioned by Local Government Victoria in the Department of Planning and Community Development estimated that the 79 Victorian councils spent between \$65–\$70 million in 2006–07 on passenger vehicle purchases and a further \$17–\$18 million on maintenance.

On these estimates the annual purchase and running costs of motor vehicles represent around 3 per cent of the \$2.9 billion in rates and charges that the local government sector collected in the same financial year.

There is no sector-wide approach to fleet management in local government. Councils are responsible for managing their fleets in line with their own vehicle policies.

Examples of how fleet management practices vary between councils include:

- different acquisition methods, including varying lease arrangements
- disposal policies ranging from two years/40 000kms to three years/60 000kms (the industry standard is closer to the latter)
- higher vehicle and fuel expenditure in rural and regional councils than metropolitan councils
- absence of motor vehicle policies in some councils
- varying environmental initiatives for vehicle fleets.

Councils also offer vehicles as part of salary packages to employees, which are available to both executive and non-executive staff under the same leasing arrangements. With the exception of vehicles assigned to Mayors or Chief Executive Officers, all other fleet and salary-packaged vehicles are used as part of the pool during business hours and are considered to be part of the fleet. As a result, all of these vehicles were included in audit's examination.

## 1.1.3 Common lease arrangements used

Buying a vehicle leaves all the risks of ownership with the agency, including repair and maintenance, and resale value. The alternative to outright purchase is a lease.

Lease arrangements vary predominantly in terms of the extent to which each party to the lease bears the risks of ownership. The share of risks taken affects the price paid for the leased vehicle.

### Commercial hire purchase (asset purchase)

Under a Commercial Hire Purchase (CHP) the finance company purchases the vehicle on behalf of the agency. The finance company then hires the vehicle back to the agency, which makes regular repayments. The vehicle automatically becomes the property of the lessee once all terms of the agreement have been completed (usually when the final instalment is paid). Under a CHP the agency takes on the risks and responsibilities of ownership, such as maintenance costs and residual market value.

## Finance lease

All state government vehicles are subject to finance leases arranged by VicFleet through the Treasury Corporation of Victoria.

A finance lease is effectively a loan facility that covers the cost of the vehicle less any residual value. Repayments include both principal and interest components. For the state government scheme, agencies are liable for any interest rate and residual value risks, i.e., the differences between the expected and actual interest costs and estimated residual value and the market value of the asset at disposal.

## Operating lease (rental)

Under an operating lease there is no exposure to interest rate or residual value risk. At the end of the term the vehicle is returned to the financier.

## Novated lease

Under a novation agreement the agency leases a vehicle on behalf of an employee, who pays the lease and running costs from their pre-tax income. If the employee leaves, or the lease agreement ends, the employee keeps the vehicle and takes full responsibility for its financing.

Within the state government, novated lease vehicles are for private use only and are not used for business purposes.

## 1.2 Audit objective and scope

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### 1.2.1 Audit objective

The objective of the audit was to examine whether state and local government non-executive passenger fleets are operationally justified and well managed.

The audit examined how fleet sizes were justified, whether agencies were managing the life-cycle costs of their fleets, and whether they were trying to reduce the environmental impact of their fleets.

### 1.2.2 Selected agencies

#### State Government Vehicle Pool

The State Government Vehicle Pool (SGVP) is a vehicle rental service managed by VicFleet for all Victorian Government departments and agencies. The SGVP can supply vehicles for short- or medium-term use in times of temporary vehicle shortage, when all department or agency vehicles are fully committed and public transport is unsuitable or unavailable.

In order to drive a SGVP vehicle, drivers must be authorised by their department as an 'SGVP Authorised Driver' and are expected to adhere to the SMVP rules when using these vehicles. Vehicles are available for long- and short-term hire and are charged a daily rate.

### Department of Education and Early Childhood Development (DEECD)

The Department of Education and Early Childhood Development (DEECD) has a moderately sized fleet relative to other departments, which consists of a majority of non-executive passenger vehicles. It is responsible for all its own fleet management, which it divides between the Fleet Services area in head office and fleet managers across the nine regional offices. Audit examined DEECD head office, Southern Metropolitan Region and Western Metropolitan Region.

### Councils

Three councils with different demography and geography were selected. These councils differed in fleet sizes and had different types of vehicle fleet arrangements, as outlined in Figure 1B.

**Figure 1B**  
Data from selected councils, March 2009

Council	Passenger fleet size	Fleet leasing arrangements	Capital value of passenger fleet (\$mil)
Moonee Valley City Council	69	Owned and operating leased	1.7
Mornington Peninsula Shire Council	170	Owned and operating leased	2.4 <sup>(a)</sup>
Warrnambool City Council	34	Owned	1.0

Note: (a) Includes maintenance costs, as council was unable to separate costs.

Source: Victorian Auditor-General's Office, using data collected from councils, March 2009.

### 1.2.3 Audit methodology

In addition to our qualitative assessment of fleet management systems and practices, we developed a series of key performance indicators and targets, based on industry standards. Data obtained from each agency on fleet size, life-cycle costs and environmental impact was benchmarked against these standards. For DEECD, only data from head office was used for analysis as regional offices have limited access to fleet data.

Data collected was for any vehicles that were active at any time during the FBT year ended 31 March 2009. Additional data was collected for the two prior FBT years for vehicles disposed of during those periods.

The detailed results of our quantitative benchmarking against each KPI for each agency are set out in Appendix A.

The audit conformed to the Australian Auditing Standards for performance audits, and included sufficient tests and procedures to enable audit conclusions to be reached.

The total cost of the audit was \$270 000. This cost includes staff time, overheads and printing.

## 1.3 Structure of this report

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Part 2 addresses justification of fleet size and mix. It examines whether agencies have reviewed their business needs and matched their fleet size and mix with those needs; whether agencies justify and approve fleet size increases; and whether they periodically review fleet size and mix in line with changing business needs.

Part 3 covers the effective management of fleet life-cycle costs. It examines whether agencies are minimising the running costs of passenger fleet vehicles and maximising resale values; whether they are effectively managing fuel use; and whether they are using their fleet vehicles appropriately.

Part 4 looks at the environmental impact of the fleets. It examines whether agencies are actively reducing the environmental impact of their fleets in line with established targets and strategies.

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# 2

## Justifying fleet size and mix

### At a glance

Too many or too few fleet vehicles can create excessive costs. The mix of vehicle types in the fleet should reflect operational requirements.

The level of business use of a vehicle is core to justifying its place in the fleet.

#### Findings

Only the State Government Vehicle Pool was able to coherently demonstrate that their fleet size and mix aligned with their business needs.

Two agencies were not satisfactorily distinguishing between business and private use of their vehicle fleets and one agency was not monitoring this use at all.

#### Recommendations

Agencies with substantial fleets should:

- implement fleet performance management systems that report data on fleet use and mix, significant components of life-cycle costs, and the extent of compliance with vehicle policies
- review fleet size and mix against operational needs at least every three years or when there is a significant change to activities or service delivery models.

Agencies should offer novated leases for salary-packaged vehicles that do not have a predominant business use.

## 2.1 Fleets and business needs

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### 2.1.1 Why fleet size and mix are important

The number and type of vehicles in a fleet should align with business needs. Too many vehicles in an agency's fleet can create unnecessary fleet costs. Equally, if an agency does not have enough vehicles and relies excessively on short-term rental vehicles it could be paying too much.

Business needs and fleet size can be aligned by distinguishing between business and private use of the vehicles. Determining the level and frequency of car use for agency work is a meaningful metric to justify the retention, replacement and addition of fleet vehicles.

The fleet industry standard is about 15 000 kilometres per annum for business use. Therefore, fleet vehicles that are not driven at least 15 000 kilometres annually for business purposes are not usually operationally justified. Either there is no business need for the car at all, or its low usage means that the purchase price, running and maintenance costs of the vehicle will likely outweigh its usefulness.

Certain fleet vehicles are an exception to this rule, such as emergency on-call vehicles and vehicles used for meals on wheels. Agencies should clearly address and distinguish these unique operational requirements in their vehicle policies and have appropriate approvals for them.

Fleet mix, or composition, should also align with business needs. Vehicles should be 'fit for purpose' to reflect the operational work of the agency. If an agency in a metropolitan area mainly uses vehicles to travel to meetings in and around the area then it would be difficult to justify large, 6-cylinder cars or station wagons in its fleet mix. Maintaining such vehicles creates unnecessary costs for the agency. Conversely, an agency in a rural area whose staff need to travel long distances on unmade roads would have a clear business need for larger four-wheel drive vehicles.

### 2.1.2 Fleet vehicles and salary packaging

Moonee Valley, Mornington Peninsula and Warrnambool Councils provide salary-packaged vehicles to attract and retain employees. This is conditional on these cars being available to other council staff during business hours. While the types of vehicles available to staff depend on their position, the leasing arrangements are the same for executive and non-executive vehicles.

This differs from the state government fleet arrangements whereby non-executive staff who wish to have the private use of a vehicle must use novated leasing to own and privately fund vehicles through their salary.

The approach by councils makes it difficult to differentiate council employees' salary costs from fleet costs. One consequence of this is that remuneration across the sector is less amenable to direct comparison. Furthermore, given councils pay a large part of the costs for these vehicles, these packaged vehicles need to justify their place in the fleet in terms of their level of business use.

## 2.2 Managing fleet size and mix

### 2.2.1 Overall conclusion

With the exception of the State Government Vehicle Pool, agencies could not show that their fleet size and mix aligned with their business needs. None of the other four were able to demonstrate regular review of their operational requirements, or any determination of an appropriate type and number of vehicles to meet those requirements.

### 2.2.2 Findings

To demonstrate that their fleet size and mix are operationally justified agencies need to:

- monitor reasons for, and amount of, car use
- periodically review their business needs
- justify and follow proper approval processes for changes to fleet size and mix between periodic reviews.

Figure 2A summarises what we found in each agency against these criteria.

**Figure 2A**  
**Are vehicle fleets operationally justified?**

Agency	State Government Vehicle Pool <sup>(a)</sup>	Department of Education and Early Childhood Development	Moonee Valley City Council	Mornington Peninsula Shire Council	Warrnambool City Council
Monitors fleet usage	Yes	Partial	Yes	No	Yes
Monitors business use	n/a <sup>(b)</sup>	Partial	No	No	Yes
Periodically reviews fleet size	Yes	Partial	Partial	No	Partial
Periodically reviews fleet mix	Yes	No	Yes	Partial	Yes
Changes to fleet size are justified and approved	Yes	Yes	Partial	No	Partial

*Note:* (a) As a fee for service, SGVP use is measured in terms of time vehicles are out of the pool, not kilometres travelled. Appropriateness of fleet size is determined by profitability.

(b) SGVP vehicles are provided to state government agencies for approved government business only.

Source: Victorian Auditor-General's Office, based on fleet data collected from agencies.

## State Government Vehicle Pool

VicFleet demonstrated that it identified the number and type of passenger fleet vehicles needed for the State Government Vehicle Pool (SGVP) at different times of the year and managed the size of the fleet accordingly. As vehicle allocation is on a fee-for-service basis, the appropriate number of passenger vehicles required to meet the business needs of the SGVP is measured by the overall state government usage of the pool. Where supply exceeds demand, measured by overall use falling below 85 per cent, the pool stops being profitable and VicFleet reduces the numbers of vehicles.

Due to the diverse range of agency vehicle needs, VicFleet manages its fleet mix in line with use levels and demand.

## Other agencies

The extent to which the other four agencies monitored reasons for, and amount of, car use varied. Although all vehicle policies required logbooks for all fleet vehicles:

- one agency did not maintain these and asked its staff to estimate distances travelled over the year
- two agencies did not differentiate between business and private use of their fleet vehicles
- one agency, with multiple locations, had different processes for recording vehicle usage across offices and so was unable to collate or monitor use across its entire fleet.

Two agencies reviewed vehicle usage information when disposing of vehicles to update the new lease terms; however, none of the four analysed patterns of vehicle use to better match their fleets with business needs.

Three agencies had previously done their own fleet reviews and each review made recommendations about aligning vehicles with business needs. The main recommendations in each review were:

- better use of logbooks
- more regular reporting on fleet use statistics
- addressing under-used vehicles that did not meet business needs.

However, none of these agencies had implemented their own recommendations. Consequently, they could not demonstrate that their current fleet sizes and mixes were appropriate.

In terms of fleet composition, none of the agencies had identified the optimal mix of vehicles for their business needs. One agency automatically replaced vehicles ‘like for like’ without considering whether the vehicle type was still the best fit for business needs. Another agency kept a selection of different vehicle types for staff to choose from, but there was no analysis on how to align the demand for different vehicle types with business needs.

The three councils did not require business cases for any requested increases to vehicle numbers. While they had vehicle entitlement and authorisation requirements, these did not include any requirement to justify how vehicles aligned with business needs. Furthermore, changes to fleet were not authorised by the council's executive management or by councillors, indicating little or no strategic oversight of the size and makeup of the fleet.

DEECD was the one agency where business cases and senior management approval for changes to vehicle numbers were compulsory. This is a Standard Motor Vehicle Policy requirement for all state government departments. Its only recent increase to its fleet size was 22 new vehicles for the Regional Network Leaders' (RNL) initiative. While the RNLs are part of a new service delivery model, there had been no assessment of the resource implications of this new service model with regard to the existing fleet.

The DEECD regions visited indicated that the nature of their work is changing with the acquisition of Early Childhood from the Department of Human Services, and this had affected their vehicle needs. Yet there was no evidence that these needs had been analysed. The regions were hiring SGVP vehicles on a long-term basis, contrary to DEECD's policy. According to VicFleet, the cost of hiring a SGVP car is approximately 40 per cent more than leasing a typical vehicle for 24 months.

### **2.2.3 Benchmarking**

Fleet use data provided by agencies was inconsistent and sometimes incomplete. Lack of reliable data and the underlying systems to generate this data, reinforces the lack of strategic management and oversight afforded vehicle fleets.

Agencies were unable to provide data about the extent of use of short-term rental vehicles, which is an important measure of fleet under- or over-usage. We could also only calculate the overall proportion of business use for two agencies. Since the results were both lower than 55 per cent for their fleets, this indicates that for substantial periods their vehicle fleets were not being used for operational work.

## 2.3 Case studies

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### 2.3.1 Mornington Peninsula Shire Council

*Mornington Peninsula Shire Council (MPSC) has not matched its business needs with its vehicle size and mix.*

The MPSC fleet ranged from small hatchbacks to Ford Turbos and Peugeot wagons. However, MPSC could not demonstrate that it:

- monitors how many vehicles are required to meet its business needs, compared to how many are used to attract staff as part of salary packaging
- tracks vehicle purchases, or differentiates between replacement vehicles and new allocations
- analyses lease costs for different vehicle types in line with business requirements.

While passenger fleet levels have been stable over the past five years, Fleet Services does not track the acquisition of vehicles over time. Fleet management staff also advised that requests for particular vehicle types are considered on an 'as needs basis' and that there are no guidelines or justification requirements for acquisitions.

There was no evidence that MPSC was identifying and aligning its business needs with vehicle usage. MPSC council staff do not have to complete logbooks for verification of work and private use.

Fleet data shows that the average business use of MPSC fleet vehicles is 43 per cent. While a high proportion of vehicles are part of staff salary packages that allow for private use, such low business use indicates that the council's fleet size is not in line with its business needs and that novated leasing may be more appropriate.

### 2.3.2 Moonee Valley City Council

*Moonee Valley City Council (MVCC) should review its passenger fleet against its business needs to match the appropriate size and mix to those needs.*

MVCC acquires fleet vehicles to attract staff who use them for both business and private use. However, MVCC does not record or assess whether a business need exists for the vehicle. Like MPSC, MVCC needs to balance employment incentives with business needs, and explore options other than salary packages.

Under the new draft fleet policy, MVCC is more prescriptive about the types/size of car in its fleet, based on staff seniority, cost recovery rates, environmental and safety ratings.

MVCC has approval processes for changes to its fleet; however, there are opportunities to improve the approval templates. MVCC uses a standard template to request chief executive officer approval to purchase new vehicles, which includes brief details outlining staff member name, vehicle type, purchase price and vehicle use type. Suggested improvements to the template include:

- clear justification of why a particular model of vehicle has been chosen
- rationale for not using another vehicle in the fleet
- detailing employee duties should the vehicle be approved.

MVCC regularly reviews current and projected fleet vehicle usage to determine vehicle changeover periods. However, as noted, if MVCC recorded whether vehicle use is for private or business reasons, it could gauge whether it needs to change the size and mix of its vehicle fleet.

### 2.3.3 Warrnambool City Council

*Warrnambool City Council (WCC) has approval but not justification processes for increases to its passenger fleets.*

Our calculation of fleet data showed business use was 53 per cent, reflecting the large number of salary-packaged vehicles in WCC's fleet. The council's vehicle policy sets out staff allocation and role-related entitlements, which were tightened in 2006. The relevant manager and director must authorise the allocation of an existing vehicle or the acquisition of a new one.

While the policy clearly outlines vehicle entitlements and approval processes, business cases would strengthen the council's justification for additional vehicles for people in certain roles.

WCC does an annual analysis of cost-per-kilometre by vehicle type, with the aim of finding the best fleet mix by determining which vehicles represent best value to council. WCC keeps these figures on file as a reference when purchasing new vehicles.

WCC has also begun a comprehensive review of fleet management services, including systems, processes and business requirements.

## **Recommendations**

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1. Agencies with substantial fleets should:
    - implement fleet performance management systems that report data on fleet use and mix, significant components of life-cycle costs, and the extent of compliance with vehicle policies
    - review fleet size and mix against operational needs at least every three years or when there is a significant change to activities or service delivery models.
  2. Agencies should offer novated leases for salary-packaged vehicles that do not have a predominant business use.
-

# 3

# Managing vehicle life-cycle costs

## At a glance

Agencies need to quantify fleet vehicle costs to monitor and report effectively on the full cost of the resource.

Agencies can manage the life cycle of their fleet efficiently if they identify cost metrics, gather data and use the results to improve performance.

### Findings

Four agencies could not demonstrate that they were managing all significant life-cycle costs.

The fleet cost and vehicle use data from all agencies had errors and omissions, which indicated they were not using this information to monitor fleet costs.

There was minimal reporting of fleet costs and appropriate use to senior management and a lack of strategic oversight on vehicle fleet decisions.

## 3.1 The life-cycle costs of vehicle fleets

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The cost of running and maintaining a vehicle fleet goes beyond the initial purchase price, insurance and registration expenses. Operational or ‘life-cycle’ costs include fuel, maintenance, tyres, car parking, accident repair, and refurbishment before disposal. Where significant, these costs need to be clearly identified and tracked if they are to be understood and well managed.

This requires tracking both financial and non-financial data on use of vehicles. For example, minimising fleet costs requires managing timely and appropriate maintenance, repair and disposal of vehicles. Vehicles not serviced when they reach their designated milestones are at risk of deteriorating faster, requiring expensive unscheduled maintenance and losing residual value. Agencies should also regularly check the kilometres that vehicles are travelling against their expected lease terms, because if they are too high this may result in lower than expected residual value, or end-of-lease penalties for vehicles on operating leases.

In addition, agencies need to make staff aware of and compliant with usage policies for vehicles. Inappropriate or unnecessary use can create excessive costs for the agency. Examples of unwarranted fleet expenses due to driver behaviour include drivers misusing an agency fuel card or related item (such as a car parking pass) for their private vehicle, and drivers using vehicles for unauthorised or private use.

As well as managing and monitoring vehicle fleet costs, it is also important for agencies to report on all vehicle fleet costs so they can quantify the full cost of the resource, analyse areas where costs are too high or too low and use this information to improve fleet performance.

## 3.2 Managing vehicle fleet costs

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### 3.2.1 Overall conclusion

Four out of the five agencies could not demonstrate that they were monitoring and reporting on the significant life-cycle costs of their fleets. Management of the timely and efficient maintenance of fleets; vehicle retention, usage and control where applicable; and fuel use was inconsistent. Fleet data across all five agencies was limited and most lacked the detail needed to manage costs adequately.

### 3.2.2 Findings

To minimise the life-cycle costs of their fleets, agencies need to:

- undertake timely maintenance, repair and disposal of fleet vehicles, and
- enforce policies on the appropriate use of vehicles, fuel and related items.

To do this, agencies need to:

- monitor their fleet costs and regularly track these against their budgets
- regularly report fleet costs to senior management, identify unusual or high fleet costs, and use this information to improve the running of the fleet.

Where possible, agencies should be managing and monitoring these costs for each vehicle to address fleet cost issues associated with particular vehicles or drivers.

Figure 3A summarises the audit findings against these criteria.

**Figure 3A**  
**Are agencies managing, monitoring and reporting on all fleet costs?**

Agency	State Government Vehicle Pool	Department of Education and Early Childhood Development	Moonee Valley City Council	Mornington Peninsula Shire Council	Warrnambool City Council
<b>Managing – agencies could demonstrate:</b>					
Timely and efficient maintenance and repair of vehicles	Partial	Partial	Yes	No	Partial
Timely and efficient disposal of vehicles	Yes	Yes	Yes	Yes	Yes
Appropriate use of fuel and related items	n/a <sup>(a)</sup>	Partial	Yes	No	Partial
Appropriate use of vehicles	as above	Partial	No	No	Partial
<b>Monitoring – agencies could provide reliable data on:</b> <sup>(b)</sup>					
Maintenance costs:					
• scheduled	n/a	n/a	Partial	n/a	Yes
• unscheduled	aggregate only	No		Partial	
Tyre and glass costs	No	No	Partial	Yes	Partial
Accident costs	Yes	Yes	Yes	Yes	Yes
Fuel costs	Partial	No	Yes	Partial	Yes
Refurbishment and/or other end-of-life costs	aggregate only	No	No	No	n/a
Residual value	Yes	Yes	Yes	n/a	No
Vehicle utilisation	No <sup>(c)</sup>	Yes	Partial	Yes	Partial
<b>Reporting – agencies could demonstrate:</b>					
Fleet data reported to senior management	Yes	No	Yes	No	No
Data used to improve fleet performance	Yes	No	Yes	No	No

Note: (a) Home agency of driver using SGVP vehicle is responsible for enforcing appropriate use of vehicle, fuel and other items.

(b) Yes = data provided was complete; Partial = data provided was incomplete or incorrect; No = data was not provided; n/a = cost included in lease payments.

(c) It is noted that SGVP utilisation is measured primarily in terms of time vehicles are out of the pool and not kilometres travelled.

Source: Victorian Auditor-General's Office, based on data provided by agencies.

### 3.2.3 Managing fleet costs

Vehicle management practices varied across the five agencies.

#### Maintenance

Four of the agencies could not demonstrate the timely maintenance of their vehicles at their required milestones. Reasons for this varied and included:

- fleet staff unable to check logbooks against odometer readings due to not being in the same location as the vehicle
- basing maintenance on reported odometer readings that were not checked against actual vehicles and having maintenance reports that were not up to date
- monitoring the costs of vehicle maintenance work but not its timeliness
- incomplete or missing logbooks, meaning there was no evidence of the timely or efficient maintenance of vehicles or any way of tracking odometer readings.

#### Disposal

Agencies were efficiently managing the disposal of vehicles.

Three agencies had vehicle retention and disposal policies that detailed milestones for maximum years of use and/or kilometres travelled. The other two agencies did not have documented milestone policies.

As seen in Appendix A, under ‘Replacement Cycle’ on page 32, four of the five agencies could demonstrate that their vehicles were usually disposed of between about 50 000 to 69 000 kilometres, which is close to industry standard. The average lease duration of the three agencies that provided relevant data was between 2–2.5 years.

#### Appropriate use

Four out of the five agencies had fuel policies that required drivers to provide odometer readings when refuelling; however, this was not consistently enforced. Missing and inaccurate odometer readings meant that none of the agencies could fully track their fuel use.

Most vehicle policies required drivers to complete logbooks when using fleet vehicles. However, agencies varied in the way they managed staff compliance with this and other vehicle policies. The accuracy and completeness of the logbooks we reviewed varied. One agency that mandated logbooks in its vehicle policy was unable to produce any.

Agency methods for checking vehicle and fuel use ranged from strong controls—closely monitoring fleet bookings, requiring drivers to document travel reasons before the journey, as well as checking fuel records, infringement notices and tollway receipts for any evidence of unauthorised use; to weak controls—only checking adherence to policies through indirect inquiry and observation. While the State Government Vehicle Pool (SGVP) has policies for appropriate use of fuel and vehicles, it is not responsible for monitoring or managing driver behaviour.

### 3.2.4 Benchmarking fleet costs

As part of the audit, we asked agencies to provide data on the life-cycle costs of their fleets so we could analyse performance against an agreed set of indicators. However, none of the five agencies provided all of the requested data and explained that they were either not monitoring certain fleet costs, that the data was unavailable or they were not recording the data. In some cases, the data supplied was inaccurate or incomplete.

Although all three councils owned some or all their fleet vehicles outright, and are therefore responsible for paying for any maintenance, only one provided data on the total cost of maintenance for its vehicle fleets to date.

Accident procedures were consistent across all five agencies; however, only three agencies provided information on the numbers of accidents and our data analysis showed high incidents of at-fault accidents in two of these. The costs associated with these show the need for better risk management, for example driver training.

Each agency gets monthly invoices from fuel suppliers, from which fuel cost, type and usage data can be extracted; but only two agencies provided complete fuel data. The inability of the other agencies to provide fuel data indicates that, despite being a significant proportion of vehicle fleet costs, information on fuel cost is not used or readily available.

Operationally leased vehicles usually incur end-of-lease inspection costs and the lease company will invoice any refurbishment figures to the agency. However, none of the three agencies with operationally leased vehicles could provide accurate information on refurbishment or other end-of-life costs. Financed leased vehicles have an amount to cover refurbishment costs built into their lease payments with anything exceeding this amount charged back to the agency at disposal. Of the two agencies with financed leased vehicles, one provided this information as a total monthly cost for the fleet, and the other did not provide any data to indicate whether any of their vehicles had exceeded this amount. Agencies should periodically review these costs to address any ongoing driver education and fleet efficiency issues with drivers or vehicles.

In terms of managing vehicle use:

- two agencies had more than 70 per cent of their fleet vehicles travelling outside 10 per cent of their planned kilometres, indicating that vehicles did not have accurately defined lease terms and distances, leading to inappropriate monthly rentals
- three agencies did not provide enough data on planned terms or odometer readings of their active fleet vehicles for us to do a proper analysis.

These inaccuracies affect planning and budgeting, giving a false picture of vehicle use from a fleet-size justification perspective. Analysis of vehicles that exceed agreed distances would result in more accurate life-cycle cost estimates, and allow agencies to limit or modify any leases as appropriate.

While Warrnambool City Council does an annual analysis of costs per kilometre by vehicle type, no agencies were tracking vehicle life-cycle costs against individual vehicles. The SGVP stated that it manages fleet costs at the pool level so does not need to track them at the vehicle level.

### 3.2.5 Reporting fleet life-cycle costs

Only two agencies, Moonee Valley City Council (MVCC) and State Government Vehicle Pool (SGVP) could demonstrate that they regularly reported some of their fleet-associated data to senior management to inform decision-making and improve fleet performance. While neither agency identified vehicle-level costs, both regularly reported on the operational costs of the overall fleet. SGVP tracks the profitability of its fleet each month, and MVCC includes this information in a finance report.

The other agencies indicated that vehicle fleet issues were handled solely by their fleet areas, with no reporting to senior management. This was due to either having no fleet reporting requirements, or having ‘exception’ reporting requirements whereby senior management were informed only of major fleet issues if they arose.

## 3.3 Case studies

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### 3.3.1 Mornington Peninsula Shire Council

*Mornington Peninsula Shire Council (MPSC) was unable to demonstrate that it is managing the timely and efficient maintenance and repair of passenger vehicles well.*

The fleet coordinator is not responsible for making sure passenger vehicle repair and maintenance is timely and efficient. There were no records of fleet maintenance or monitoring of repair. MPSC could not demonstrate that it was effectively monitoring compliance with the vehicle policy’s servicing requirements, and it could not produce evidence to show that drivers were servicing their vehicles as required. Council also had a number of very old vehicles in the fleet that were inefficient to maintain and posed occupational health and safety risks.

While staff are provided with a copy of the vehicle policy, there is no requirement to acknowledge or demonstrate understanding of the expectations of appropriate vehicle use. We found no evidence that appropriate vehicle use, including the consequences of misuse, was communicated to staff. As compliance is not monitored, the level of adherence to policy is unknown and non-compliance is not reported or actioned.

In several instances, data we received could not be analysed because it was not complete. In some instances, there was no data available. Examples of this include:

- lack of appropriate data on disposed vehicles
- data showing vehicles that use both petrol and diesel (which is impossible)
- insufficient fuel use data.

Council had no record of the costs per kilometre associated with its fleet by vehicle types, role types and organisational divisions. While MPSC records some vehicle life-cycle costs, they are not subject to divisional or strategic review. Senior management does not get any reports on fleet performance and fleet data are not used as the basis of decision-making or oversight of staff compliance with policy requirements.

### 3.3.2 Department of Education and Early Childhood Development

*The Department of Education and Early Childhood Development (DEECD) does not inform regional offices about the full costs of fleet vehicles.*

We found there was uncertainty about the fleet management roles and responsibilities in DEECD's head and regional offices.

DEECD regional staff believe their fleet management responsibilities are limited to managing the running of their allocated cars, while Fleet Services at head office is responsible for the acquisition, disposal and financial management of the entire department's fleet. Such decentralised fleet management arrangements mean:

- Fleet Services can manage the timely and efficient maintenance of the central fleet and mandate compliance with policies on appropriate use of passenger vehicles, but cannot demonstrate that the regions are doing this.
- Responsibility for resources are not fully allocated to regions or made fully transparent to them. Regional fleet managers handle the maintenance of their fleet vehicles, but they charge any maintenance expenses that exceed their prepaid services back to the Fleet Services. As a result, there is less incentive to closely monitor the maintenance schedules of their fleet vehicles and they may view fleet costs as 'free' or a 'general overhead' for them.
- Regions do not receive monthly fuel data from the fuel suppliers showing their usage and monthly costs because this is centralised. They cannot match fuel data to staff travel, and there is variance across the regions in the recording and monitoring of fuel usage.

Although DEECD stores all fleet-related invoices, such as maintenance, parking and car washing on their invoice system, it does not monitor or report on these costs to senior management, and regions do not report on their fleets at all. Cost information on tyres, glass, unscheduled maintenance or refurbishment were not available because the department does not separate out individual fleet costs. Fuel data was not available for further analysis.

### 3.3.3 Moonee Valley City Council

*Moonee Valley City Council (MVCC) monitors maintenance and disposal of its passenger fleet effectively.*

MVCC is conducting timely and efficient maintenance and disposal of passenger fleet vehicles. MVCC has an on-site workshop and follows the vehicle manufacturer requirement that most cars are serviced every 15 000 kilometres (km). MVCC also does safety inspections between these service intervals.

However, while council staff must comply with current fleet management policies, MVCC does not monitor compliance. There are opportunities to improve the way MVCC analyses and reports on passenger vehicle use.

The council downloads all fuel transactions into the fleet management database, and uses the information to compile various reports and comparisons. It did not provide glass and refurbishment costs, and maintenance data was not particular to each vehicle. However, MVCC recognised that this needed to be addressed and has begun to record individual vehicle costs.

MVCC reports on fleet costs in a number of ways to manage and monitor the fleet, including:

- reporting capital and recurrent fleet expenditure to the executive team monthly
- fleet management monitors and analyses fuel consumption monthly, by supplier, litres per 100km, and odometer readings. Forecasts of consumption and expenses are projected in the financial system quarterly
- reviewing the capital plan annually and making estimates for budgeting at the beginning of each year. It uses a 10-year replacement program, which is updated with the annual budget.

Fleet Services and the executive area use this reporting to keep improving the fleet. Acquisitions are made based on the annual capital budget, and details on all disposals and acquisitions are maintained in both the fleet management and finance systems. Regular reports on the number of fleet vehicles, recent acquisitions and use are available to the executive team on request. Fleet Services has also developed a template for a proposed standard fleet report that will detail fleet mix, fuel consumption, carbon emissions, acquisitions, disposals, servicing and accident repair each quarter.

# 4

# Environmental impact

## At a glance

Reducing the environmental impact of a vehicle fleet requires not only increasing the proportion of fuel-efficient cars and investigating alternative means of transport, but also setting and achieving targets to reduce carbon emissions.

### Findings

Four out of five agencies had fewer than 30 per cent of green vehicles in their fleets.

Two agencies did not have carbon emission targets or reported on their reduction.

### Recommendations

Agencies without quantity and time targets for reducing the number of high carbon-emitting 6-cylinder and petrol vehicles in their fleets should establish these, and monitor and report progress against them.

Agencies should require staff to confirm there are no practical alternatives to using a vehicle, as part of the approval process.

## 4.1 Greener government, greener fleets

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Vehicle fleets account for a large part of an agency's energy consumption and carbon emissions. The level of carbon emissions is linked to the amount of fuel the vehicle consumes and the type of fuel used.

Motor vehicles create 2.3 kilograms of carbon dioxide (CO<sup>2</sup>), a major greenhouse gas, for every litre of petrol used. According to the federal Department of Environment, Water, Heritage and the Arts, the Australian transport sector generates about 76 million tonnes of Australia's total net greenhouse gas emissions, representing 13.5 per cent of Australia's total emissions.

In 2005 the Australian Government established a new industry target to reduce the average carbon emissions for all new light vehicles to 222 grams (g) CO<sup>2</sup>/km by 2010. This target applies to a broad range of vehicles, including cars, Sport Utility Vehicle (SUVs) and light trucks, as well as all fuel types, including petrol, diesel and LPG. All new vehicles sold in Australia are required to report emissions in terms of grams of CO<sup>2</sup>/km.

The requirement of the Standard Motor Vehicle Policy (SMVP) that VPS agencies select vehicles from an approved list of mainly local manufacturers has meant that the only approved vehicles that emitted less than 222g were an overseas hybrid vehicle and more recently, one locally manufactured vehicle.

However, both the state government and local councils can reduce their vehicle fleet emissions in various ways, such as encouraging the use of alternative fuels and purchasing more energy efficient vehicles in line with operational requirements. Alternative transport solutions, such as public transport, walking/cycling, taxis and car pooling can also reduce an agency's reliance on vehicles and its overall environmental impact. Agencies can measure the success of such environmental initiatives by tracking the overall carbon emissions of the fleet over time.

### 4.1.1 State government

The Victorian Government has introduced a number of environmental initiatives in the past decade to reduce its environmental impact in a number of areas, including office-based energy, water, transport, fuel and paper consumption, and waste disposal.

The Environmental Management System (EMS) was launched in 2002 to help departments monitor, report on, and reduce their environmental impact. Financial Reporting Direction (FRD) 24C sets out the reporting requirements for the office-based environmental data of all government departments and the two environmental agencies, the Environment Protection Authority and Sustainability Victoria. These entities must report annually on a number of transportation metrics, including their vehicle fleet's greenhouse gas emissions.

The 2005 Environmental Sustainability Framework, *Our Environment, Our Future* provides direction on environmental issues for government, businesses and the community. The 2006 *Action Statement* was a \$200 million package of 150 priority sustainability initiatives.

The Standard Motor Vehicle Policy (SMVP) includes a number of environmental initiatives to address the environmental impact of government vehicles, such as requiring agencies to select fuel and emission-efficient fleet vehicles and to use ethanol-blended fuel, where practical, available and cost-effective. However, there are no targets for ethanol usage across government agencies obtaining vehicles under the SMVP. VicFleet stated that this is due to the limited availability of the fuel.

VicFleet reports to the Department of Sustainability and Environment on fleet carbon emissions for the VPS fleet annually. It does this by counting the number of days the vehicle has been in service during the year, calculating an approximate number of kilometres per day and the appropriate carbon emission levels per day. The Commissioner for Environmental Sustainability audits this information and reports to Parliament each year. In 2007–08, VicFleet began using the National Greenhouse Accounts Factors to calculate emissions, meaning that it is not possible to compare the data across the VPS for more than the past two years.

#### 4.1.2 Local government

There is no overarching environmental strategy for local government. The three councils examined for this audit have introduced environmental strategies and plans to address their overall environmental impact, and have dealt with reducing the impact of their vehicle fleets in different ways.

### 4.2 The environmental impact of vehicle fleets

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#### 4.2.1 Overall conclusion

There is a high level of awareness of the environmental issues associated with fleets, and fleet composition is changing to address these concerns. However, benchmarking of fuel data found that four of the fleets examined were not yet predominantly ‘green’. Not all agencies had targets to reduce their carbon emissions or were reporting or tracking their reduction.

There has been no take up of ethanol-blended fuels, reflecting its limited availability as well as agencies’ reluctance to use this option for improving environmental outcomes.

## 4.2.2 Findings

To reduce the environmental impact of their fleets, agencies need to:

- monitor and report on the carbon emissions of their fleet vehicles
- have targets to reduce fleet vehicle carbon emissions
- have strategies to achieve the targets
- regularly track their success against the targets.

A summary of the audit findings against these criteria is set out in Figure 4A.

**Figure 4A**  
**Are agencies reducing the environmental impact of their vehicle fleets?**

Agency	State Government Vehicle Pool	Department of Education and Early Childhood Development	Moonee Valley City Council	Mornington Peninsula Shire Council	Warrnambool City Council
Reports on the carbon emissions of their vehicle fleet	Yes	Yes	Yes	Yes	No
Has targets to reduce the carbon emissions of the fleet	No	Yes	Yes	Yes	No
Has approved strategies to achieve targets	Partial	Partial	Yes	Yes	Yes
Tracks success against their targets	No	Yes	Yes	Yes	No

Source: Victorian Auditor-General's Office, based on agency information.

With the exception of WCC, agencies reported on the environmental impact of their fleet vehicles. Three had set targets for reducing their emissions and were tracking their success.

Although all agencies were reducing the proportion of 6-cylinder and petrol vehicles in their fleets where not operationally required, and were introducing more 4-cylinder and LPG vehicles, only the three councils had approved environmental strategies to reduce carbon emissions.

None of the five agencies used ethanol-blended fuel in their vehicle fleets. In each case, one of four reasons was advanced:

- ethanol fuel was not readily available from all petrol stations
- the ethanol fuel card was separate from the other three major accounts (Shell, Mobil and Caltex) and the agency did not want to manage a fourth fuel account
- the agency did not mandate driver use of a particular fuel
- agency fleet staff did not believe that the environmental benefits of ethanol-blended fuel outweighed the costs, due to ethanol's lower energy content than petrol (and as a result, its higher fuel consumption and fewer kilometres per tank of fuel).

With the exception of its ready availability, the other reasons advanced largely reflect the attitude and behaviours of agency management and staff, none of which provided any practical limitation to the use of ethanol-blended fuel.

### 4.2.3 Benchmarking

DEECD has been reducing its 6-cylinder vehicles annually since 2005. At the end of 2007–08, 100 per cent of the department's non-executive operational vehicles were LPG, 4 cylinder, or hybrid. While the department could not provide any fuel data to calculate carbon emissions information, the fleet mix implies that these results would be positive.

We calculated a 'green' rating for the fleets of the other four agencies based on the percentage of fleet vehicles that emitted fewer than 222g of carbon per kilometre. None of vehicle fleets in these four agencies was predominantly 'green'. The combined proportion of green vehicles in these fleets was less than 30 per cent, with one as low as 17 per cent.

## 4.3 Case studies

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### 4.3.1 Warrnambool City Council

*Warrnambool City Council (WCC) has environmental strategies, but has not set targets to monitor or reduce fleet vehicle carbon emissions.*

WCC has a number of environmental initiatives to reduce the overall environmental impact of its vehicle fleet. These include reducing the number of 6-cylinder vehicles in its fleet in favour of energy-efficient cars.

The council's environmental management plan—Environmental Sustainability Strategy (ESS) details the council's directions, planning and management options from 2008–2013 in meeting environmental sustainability challenges.

However, the ESS does not detail the fleet's carbon emissions or have specific targets for reducing them. In addition, the data we reviewed indicates that there are few green vehicles in WCC's current fleet mix.

If WCC calculated its carbon emissions, the council could report on how green its fleet is, set clear targets for reducing annual emissions, and quantify the annual reduction of these as large fleet vehicles are phased out.

### 4.3.2 State Government Vehicle Pool

*VicFleet is increasing the number of environmentally friendly vehicles in the State Government Vehicle Pool (SGVP), but did not have any targets for reducing carbon emissions, or provide us with important environmental data.*

Given the policy constraints on the SMVP, there are limited 'green' vehicles for the SGVP to choose from. Data analysis showed that only 29 per cent of the SGVP fleet was currently emitting less than 222g of CO<sup>2</sup>/km. However, VicFleet stated it is transitioning the fleet to hybrid and 4-cylinder vehicles over the next three years, while retaining some station wagons to meet agency requests.

There was no evidence of any formal environmental strategies or targets to reduce carbon emissions. VicFleet's 2008 carbon emissions report shows that the emissions of the SGVP have reduced in the past few years, with a 14.5 per cent reduction in carbon emissions between 2007–08 and 2008–09. However, without set targets for reductions it is difficult to judge whether this rate of progress is satisfactory.

### 4.3.3 Department of Education and Early Childhood Development

*The Department of Education and Early Childhood Development (DEECD) is effectively reducing the environmental impact of its passenger vehicle fleet and tracking its success against set targets.*

DEECD reports on its transport-related fuel emissions and other environmental measures in its annual report, as required under FRD 24C. The department calculates the emissions using vehicle data on kilometres travelled and fuel consumed, as well as data on DEECD use of SGVP vehicles.

VicFleet's annual report on departmental carbon emissions shows that the emissions of the DEECD fleet have reduced every year since 2005.

DEECD's target is to reduce its carbon footprint by 50 per cent by 2030. This target roughly aligns with the Victorian Government's 25 to 40 per cent target by 2020, outlined in the June 2009 Victorian Climate Change Green Paper. A comparison of the total greenhouse gas emissions from 2006–07 with 2007–08 have not shown any reductions of total energy use.

However, DEECD's transport target was to reduce unleaded petrol use in its passenger vehicle fleet by 5 per cent for 2008–09, compared with 2007–08. DEECD has exceeded this target, reducing its use by 18 per cent. While this success largely reflects the changed composition of the fleet to 4-cylinder and hybrid vehicles, the department has not provided any data to date showing the contribution of its transport target towards its overall 2030 target.

DEECD also promised to make Metcards and V/Line tickets available for staff business travel within departmental divisions and regions by 30 June 2009. The department has promoted this information to staff through posters, the intranet and new staff induction material. It has yet to assess whether this has had a direct impact on reducing vehicle use.

## **Recommendations**

3. Agencies without quantity and time targets for reducing the number of high carbon-emitting 6-cylinder and petrol vehicles in their fleets should establish these, and monitor and report progress against them.
  4. Agencies should require staff to confirm there are no practical alternatives to using a vehicle, as part of the approval process.
-



# Appendix A.

## Key performance indicators

We developed a series of performance indicators for fleet size justification, life-cycle costs and environmental impact.

The most critical indicators against each of the three sub-objectives were chosen for analysis and discussed with each of the five agencies. As part of this, we:

- provided the rationale for the indicator/diagnostic to show it was a suitable and credible for measuring performance (i.e., industry standard)
- explained the indicators/diagnostics with the selected agencies
- requested relevant data from agencies, identifying the data fields needed for each indicator.

Following this, we collected agency fleet data and analysed it against the established performance indicators/diagnostics and formulated results.

Each agency's results were examined, focusing on the three sub-objectives. Figure A1 shows the quantitative results of the five agencies against each of these.

**Figure A1**  
**Vehicle fleet management key performance indicators: results by agency**

	Industry standard (where applicable)	SGVP	DEECD <sup>(a)</sup>	MVCC	MPSC	WCC
<b>Justifying fleet size</b>						
<b>Use and suitability criteria</b>						
Average kilometres travelled per annum for business use	15 000	n/a	15 977	No data	12 399	11 420
Average percentage of business use of vehicles	100%	99%	No data	43%	53%	
<b>Pool vehicles</b>						
Percentage of pool vehicle overall costs compared to overall fleet costs	n/a	No data	No data	0%	No data	
<b>Managing life-cycle costs</b>						
<b>Replacement cycle</b>						
Vehicle retention by average months (terminated in FBT year ending 31/3/09 only)	3 years	29.6 months (average planned term 25.3 months)	No data	28 months (average planned term 24 months)	No data	22.8 months (no planned term)
Vehicle retention by average kilometres (terminated in FBT year ending 31/3/09 only)	60 000kms	68 519 (60 000 planned kms)	55 988 (60 000 planned kms)	49 949 (no planned kms)	No data	63 566 (no planned kms) <sup>(b)</sup>
<b>Maintenance: cents per kilometre (cpk) for active vehicles</b>						
Total service and maintenance costs life to date	0.024	No data	No data	No data	Insufficient data	0.0150
Total tyre costs	0.0321	No data	No data	0.0062	0.00226	0.0112
Total glass costs		No data	No data	No data	0.00017	No data

**Figure A1**  
**Vehicle fleet management key performance indicators: results by agency – *continued***

	Industry standard (where applicable)	SGVP	DEECD <sup>(a)</sup>	MVCC	MPSC	WCC
<b>End of life costs</b>						
Average total refurbishment costs for terminated vehicles	under \$500	n/a	n/a	No data	No data	No data
Other end-of-life costs		Insufficient data	No data	No data	No data	No data
<b>Fuel costs by fuel type compared to cost of total fuel purchased</b>						
Percentage of unleaded	94.1%	No data	100%	57.9%	57.9%	93.2%
Percentage of premium	0%	No data	0%	4.6%	4.6%	0%
Percentage of diesel	0%	No data	Insufficient data	22.8%	22.8%	0%
Percentage of ethanol	0%	No data	0%	0%	0%	0%
Percentage of LPG	5.9%	No data	0%	2.4%	2.4%	6.8%
Percentage of bio-diesel	0%	No data	0%	12.3%	12.3%	0%
<b>Fuel usage</b>						
Litres per 100 kilometres by fuel category (all vehicles)	Depends on fleet mix	No data	No data	Petrol 11.2 (benchmark 10.2) Diesel 10.2 (benchmark 8.1)	16.44 (benchmark 10) Diesel 10.1 (benchmark 10.3)	Insufficient data
<b>Accident Management</b>						
Accidents per million kilometres	25–40	20	6	17	5	8
Total accident repair costs	\$260 658	\$41 732	\$59 262	\$134 911	\$9 447	
Average accident repair costs per accident	\$2 265	\$1 848	\$1 896	\$2 498	\$787	
Percentage of at-fault accidents	58.6%	82%	91%	No data	33%	33%

**Figure A1**  
**Vehicle fleet management key performance indicators: results by agency – continued**

	Industry standard (where applicable)	SGVP	DEECD <sup>(a)</sup>	MVCC	MPSC	WCC
<b>Residual/Future value achievement</b>						
Percentage of vehicles within \$1 000 of budgeted RV/expected proceeds FBT year ending 03/09	90%	24.2%	10.7%	50%	n/a	No data
Percentage of vehicles within \$1 000 of budgeted RV/expected proceeds FBT year ending 03/08	As above	25.8%	5.7%	29.2%	n/a	No data
Percentage of vehicles within \$1 000 of budgeted RV/expected proceeds FBT year ending 03/07	As above	33.3%	7.5%	5.6%	n/a	No data
<b>Vehicle Utilisation Management</b>						
Percentage of vehicles within 10% of budgeted kilometres	90%	No data	29.6%	Insufficient data	24.8%	82.9%
<b>Environmental impact</b>						
<b>Vehicle selection</b>			29%	No data	25%	30%
Percentage of fleet vehicles with low CO <sup>2</sup> (Below 222 grams per kilometre) emissions.					17%	
<b>CO<sup>2</sup> scope and measure</b>						
Greenhouse gas emissions tonnes (CO <sup>2</sup> equivalent) life to date (or termination)	No data	No data		296	494.7	177.8
Greenhouse gas emissions tonnes (CO <sup>2</sup> equivalent) life to date (or termination). Per active vehicle in FBT year ending 31/3/09	No data	No data		3.84	3.00	5.08
Number of full time employees (FTE)	n/a	No data		556	653	340

**Figure A1**  
**Vehicle fleet management key performance indicators: results by agency – *continued***

	Industry standard (where applicable)	SGVP	DEECD <sup>(a)</sup>	MVCC	MPSC	WCC
Fleet carbon footprint per FTE (tonnes)	n/a	No data	0.5	0.5	0.8	0.5
Kilometres travelled per FTE	n/a	No data	4 959	17 728	4 327	
<b>LPG or 4-cylinder commitment</b>						
Percentage of 4-cylinder or LPG vehicles travelling over 30 000 kilometres per annum	2%	15%	8%	53%	20%	
Percentage of vehicles travelling over 30 000 kilometres per annum and <b>not</b> 4-cylinder or LPG	14%	0%	13%	12%	51%	
<b>Ethanol commitment</b>						
Ethanol percentage usage for non-diesel vehicles	0%	No data	0%	0%	0%	0%
<b>Summary information (active vehicles in FBT Year Ending 31/03/2009)</b>						
Number of active vehicles	228	27	77	165	35	
Total kilometres travelled	2 756 059 <sup>(c)</sup>	3 231 049	1 141 026	5 100 071	749 100	
Business use kilometres	n/a	431 375	No data	2 194 620	399 694	
Litres purchased	No data	No data	129 835	557 327	81 290	
Total CO <sup>2</sup> (tonnes)	No data	No data	296	495	178	

## Table notes

- (a) Head office data only.
- (b) Vehicle changeover at fleet manager's discretion, however agency stated that this is around 60 000kms/2 years.
- (c) Terminated vehicles only.

Note: Victorian Auditor General's Office, data collected from agencies.



## Appendix B.

### *Audit Act 1994 section 16— submissions and comments*

#### Submissions and comments received

***RESPONSE provided by the Chief Executive Officer, Moonee Valley City Council***

##### ***Section 2 – Justifying fleet size and mix***

*This section of the audit sought to establish whether the fleets of the audited agencies were operationally justified. It is likely that this was initially determined under the assumption that both the State and local governments wholly contributed to the costs of operating their vehicle fleets.*

*The majority of passenger vehicles in Council's fleet are provided as part of an attraction and retention scheme for senior employees, not on the basis of operational requirements.*

*However, all non-executive vehicles are made available for pool use by all staff during each work day.*

*The Moonee Valley City Council recovers costs for private usage of fleet vehicles through reduced cash components in the employment packages of the employees that have private use of Council vehicles.*

##### ***Recommendation 1. Implementing fleet performance management systems and reviewing fleet size and mix.***

*Moonee Valley City Council notes and acknowledges the recommendations and comments on its systems and processes in this area and has either planned for or has already taken actions to address the concerns contained in the body of the report.*

*The collection of data on private vs. business use of vehicles and individual vehicle life-cycle costings, is recognised as good asset management and assists in understanding the whole cost, including passenger vehicles, in employment packages.*

*In terms of operational justification of the fleet, the report noted an industry standard of 15,000km of operational use to justify each vehicle in the fleet. This level of use may be appropriate to the State Government, rural shires or private fleet operators with a wide area of responsibilities. For an inner metropolitan Municipality, such as Moonee Valley which has an area of 43 km<sup>2</sup>, kilometre based usage standards are not appropriate as most trips are relative short in terms of distance.*

***RESPONSE provided by the Chief Executive Officer, Moonee Valley City Council – continued***

*Whilst the journeys taken are relatively short, the time taken at the destinations can be long. Council officers use vehicles to attend off-site meetings, undertake inspections, community assessments and service delivery (such as home care and program delivery). During this time vehicles are being ‘used’ but not necessarily in a way that can be measured by an odometer. Moonee Valley City Council operates a booking system for pool vehicles that is based on hourly usage —unfortunately this system does not record kilometres and so was unable to provide the kind of data requested by the auditors. Council does collect kilometre based business and private vehicle use via log books for calculation of Fringe Benefit Tax, every other year—in this case; the year before the time period selected by the auditors.*

*It is acknowledged that recording of whether vehicles are used for private or business needs (whether by hours or kilometres) can assist in determining the size and mix requirements for Council’s vehicle fleet—primarily to determine the minimum number of passenger vehicles required for business purposes.*

*In response to this, in early 2010 Council will adopt the mandatory use of logbooks across the entire passenger vehicle fleet for 13 weeks to ascertain the level of private vs. business use. This information will be collated and provided to the Executive Team for review when considering vehicle allocations and fleet strategy.*

***Recommendation 2. Agencies should offer novated leases for salary-packaged vehicles that do not have a predominant business use.***

*As noted above and in the report itself: ‘Councils provide vehicles as part of salary packages to attract and retain both executive and non-executive employees’ and that ‘This arrangement differs from the VPS (Victorian Public Sector—State Government), where non-executive employees use novated leasing to own and contribute towards vehicles through their salary.’*

*As also noted in the report, novated leasing is used by the State Government for dedicated personal use vehicles only. Moonee Valley City Council does not currently make use of novated leases for provision of passenger vehicles within the fleet as all non-executive passenger vehicles are pooled for work use—provision of novated leases would remove vehicles from the available pool as this method of leasing provides vehicles for personal use only.*

*The collation of data on business vs. private use will be used to guide the development of the Moonee Valley City Council Human Resource Strategy (which is due for completion in the first half of 2010) and would assist the consideration of providing staff the option to take up novated leases for passenger vehicles should this be appropriate for Moonee Valley.*

***RESPONSE provided by the Chief Executive Officer, Moonee Valley City Council  
– continued***

***Section 3 – Managing vehicle life-cycle costs***

*As part of the assessment of whether the agencies' fleets were well managed, the audit looked at monitoring and reporting of vehicle usage and costs over the lifetime of the vehicle (life-cycle costs).*

*It is noted that the report found that no agency could demonstrate that they were managing all significant life-cycle costs. For the Moonee Valley City Council, the only elements of life-cycle costing that were not provided to the auditors were glass and refurbishment costs for vehicles (both available, but not separately recorded against individual vehicles in the fleet management system) and individual maintenance costs (again available, but not separately recorded against individual vehicles). Following the audit, recording of individual servicing costs against each vehicle is now being undertaken.*

*The introduction of this additional data recording (such as business use and services costs) will improve Council's ability to provide reports and analysis.*

*Council's fleet use policies include a number of statements, such as keeping the vehicle in a clean condition, which indicate to staff the standards and expectations upon them when they have private use of a vehicle.*

*When an issue arises regarding non-compliance with vehicle use policies, appropriate action, including disciplinary proceedings, can be utilised to ensure compliance. A new process is being developed to record periodic observations of vehicle cleanliness and damage that were being and continue to be undertaken but were not recorded.*

***Section 4 – Environmental impact***

*As part of the assessment of whether the agencies' fleets were well managed, the audit also looked at whether the agencies have successfully reduced the environmental impact of their fleets.*

*Moonee Valley City Council is committed to reducing the environmental impact of its passenger fleet — as acknowledged in Figure 4A of the report.*

*Council's Environmental Sustainability Plan sets targets for a net reduction of fuel use by all Council vehicles of 20% by 2010 and 50% by 2015. Council is scheduled to receive a report on a draft Greenhouse Strategy in November 2009 which is likely to include a series of actions aimed at working towards avoiding, reducing or offsetting carbon emissions from Council vehicles.*

***RESPONSE provided by the Chief Executive Officer, Moonee Valley City Council – continued***

**Recommendation 3.** Agencies without quantity and time targets for reducing the number of high carbon-emitting 6-cylinder and petrol vehicles in their fleets should establish these, and monitor and report progress against them.

Simply reducing the number of cylinders in engines or the number of petrol vehicles is a simplistic approach to addressing the environmental impact of operation of a vehicular fleet. The move from 6 cylinder to 4 cylinder vehicles would seem to be an obvious choice to reduce fuel consumption and also carbon emissions, however, setting emissions benchmarks such as limiting vehicle emissions to 222 grams of carbon dioxide per kilometre would become more worthwhile as new technology becomes available in vehicles.

As an example: the 2009 SID1 Holden Commodore is a 6 cylinder vehicle and emits 221 CO<sub>2</sub>g/km whereas the 4 cylinder 2008 Toyota Camry Altise, which currently makes up the bulk of Council's passenger fleet, emits 233 CO<sub>2</sub>g/km — a clear example where modern technology has made a 6 cylinder car greener than a 4 cylinder one.

Council notes that using alternative fuels will reduce emissions and therefore encourages the use of sustainable biofuels to reduce greenhouse emissions and improve air quality. Whilst no Council vehicles are operated on E10, ethanol blended petrol fuel, the use of such fuels is being investigated.

Council believes that consideration should also be given to air pollution ratings of each vehicle, for without such consideration, fuel efficient, low carbon emitting, yet highly polluting diesel vehicles could become attractive options to reduce the carbon footprints of passenger vehicle fleet owners.

**Recommendation 4.** Agencies should require staff to confirm there are no practical alternatives to using a vehicle, as part of the approval process.

In terms of the determining the business needs of each vehicle in the fleet, Council's draft fleet policy has been amended to include review of the following items prior to vehicle changeover:

- Is the vehicle required?
- Can the engine size of the vehicle be reduced?
- Is there a more efficient fuel source available?
- Can a hybrid vehicle be utilised?

In addition to this, justification for the allocation of a vehicle to new positions is being sought prior to consideration by the Executive Team.

***Appendix A – Key Performance Indicators***

Appendix A provided a table of performance indicators, developed by the auditors, for fleet size justification, life-cycle costs and environmental impact.

(Refer to following tables for Moonee Valley City Council's response to Appendix A.)

VAGO Indicator		Industry Standard	Moonee Valley	Additional Data	Comment
<b><i>Justifying fleet size</i></b>					
Use and suitability criteria	Average kilometres travelled per annum for business use	15 000	No data	Nil	Moonee Valley operates a booking system for pool vehicles that records date and hours utilised. The data held in this system was not kilometre based and, as such, did not match the requirements of auditor.
Average percentage of business use of vehicles	55%	No data	Nil		
<b><i>Pool Vehicles</i></b>					
Percentage of pool vehicle overall costs compared to overall fleet costs		No data	Nil	All vehicles within the audit paramaters are available for pool use by staff within work hours. There is no differentiation in costings.	
<b><i>Managing life-cycle costs</i></b>					
Replacement cycle					
Vehicle retention by average months (terminated in FBT year ending 31/03/2009 only)	3 years	28 months (average planned term 24 months)	Nil	Moonee Valley has moved to a retention period of 24 to 36 months.	
Vehicle retention by average kilometres (terminated in FBT year ending 31/3/2009 only)	60 000 kms	49 949 (no planned kms)	Nil	Moonee Valley's changeover period is driven by age not km's	
Maintenance: cents per kilometre (cpk) for active vehicles					
Total service and maintenance costs life to date	0.024	No data	Nil	As indicated in the body of the report, Moonee Valley is now capturing these costs in the service and maintenance database. This information was previously kept at an aggregate level within the corporate financial system. For the audit period this data was not able to be fully disaggregated thus unable to be supplied.	
Total tyre costs	0.0321	0.0062	Nil	Costs provided were accurate	

VAGO Indicator	Industry Standard	Moonee Valley	Additional Data	Comment
Total glass costs	No data	0.000011207		Moonee Valley rarely has any windscreen costs. A more extensive review of data indicated that there were two windscreen replacements in the review period with a total cost \$309
End of life costs				
Average total refurbishment costs for terminated vehicles	under \$500	No data	NA	Moonee Valley owned vehicles' repairs are undertaken as required - as such, there are no end of life costs generally associated with these vehicles. Refurbishment costs for the 29 leased vehicles are available on hard copy but are not recorded in the fleet database. Audit deadlines prevented the provision of this data for the leased vehicles.
Other end of life costs		No data	NA	
Fuel costs by fuel type compared to cost of total purchased				
Percentage of unleaded	100%	94.09%		
Percentage of premium	0%	3.45%	In supplying the initial data to the auditors, Moonee Valley did not distinguish between ULP and PULP.	
Percentage of diesel	0%	2.46%	Diesel usage was provided to the auditors, however this data was not reported in the VAGO summary.	
Percentage of ethanol	0%	0%		
Percentage of LPG	0%	0%		
Fuel costs by fuel type compared to cost of total purchased	0%	Nil	Bio-diesel is currently being trialled for use in some trucks, tractors and mowers, but not in passenger vehicles.	
Percentage of bio-diesel				

VAGO Indicator	Industry Standard	Moonee Valley	Additional Data	Comment
Fuel usage Litres per 100 kilometres by fuel category (all vehicles)	Depend on fleet mix Petrol 11.2 (b/m 10.2) Diesel 10.2 (b/m 8.1)	Nil	Nil	Note comments in the body of the report.
Accident Management Accident per million kilometres Total accident repair costs Average accident repair costs per accident Percentage of at fault accidents	25-40 \$2 265 58.60%	17 \$59 262 \$1,260 No data	Nil Nil Nil 66%	At the time of reporting data was not provided. The majority of the at fault accidents are caused by drivers hitting stationary objects whilst reversing. Council's vehicle standard has been upgraded to include mandatory reversing sensors on all new vehicles, however for the period of the audit, not all vehicles were fitted with such sensors. Additionally, any driver that has three accidents within a two year period is sent on a compulsory RACV driving education course.
Residual/Future value achievement Percentage of vehicles within \$1000 of budgeted RV/expected proceeds FBT year ending 03/09	90%	50%	Nil	
Percentage of vehicles within \$1000 of budgeted RV/expected proceeds FBT year ending 03/08	As above	29.20%	Nil	
Percentage of vehicles within \$1000 of budgeted RV/expected proceeds FBT year ending 03/07	As above	5.60%	Nil	

VAGO Indicator	Industry Standard	Moonee Valley	Additional Data	Comment
<b>Vehicle Utilisation Management</b>				
<b>Percentage of Vehicles within 10% of budgeted kilometres</b>				
90%	Insufficient data	Nil		Mooonee Valley determines an average kilometre rate of use across all vehicles to assist with budgeting of vehicle change over and fuel costs. These estimates are not available for individual vehicles.
<b><i>Environmental Impact</i></b>				
<b>Vehicle selection</b>				
Percentage of fleet vehicles with low CO2 (Below 222 grams per kilometre) emissions.	25%	Nil		
<b>CO2 scope and measure</b>				
Greenhouse gas emissions tonnes (CO2 equivalent) life to date (or termination)	296	Nil		
<b>CO2 scope and measure</b>				
Greenhouse gas emissions tonnes (CO2 equivalent) life to date (or termination). Per active vehicle in FBT year ending 31/03/2009	3.84	Nil		
Number of full time employees (FTE)	556	Nil		
Fleet carbon footprint per FTE (tonnes)	0.5	Nil		
Kilometers travelled per FTE	4959	Nil		
<b>LPG or 4-cylinder commitment</b>				
Percentage of 4-cylinder or LPG vehicles travelling over 30 000 kilometres per annum	8%	Nil		Mooonee Valley has 20 LPG vehicles in its fleet, these are operational vehicles that were not considered in the audit.
Percentage of vehicles travelling over 30 000 kilometers per annum and not 4-cylinder or LPG	13%	Nil		

VAGO Indicator	Industry Standard	Moonee Valley	Additional Data	Comment
<b>Ethanol commitment</b>				
Ethanol percentage usage for non-diesel vehicles	0%	Nil		
<b>Summary information (Active vehicles in FBT Year Ending 31/03/2009)</b>				
Number of active vehicles	77	Nil	Data from 119 vehicles was considered in the audit * 77 cars operated during the FBT period ending 31/3/09 * 53 were still current at the end of the FBT period * 24 were sold during the FBT year * 24 cars were utilised in the FBT year ending 2008 * 18 cars were utilised in the FBT year ending 2007	
Total kilometres travelled	1 141 026	Nil		
Business use kilometres	No data	Nil		
Litres purchased	129 835	Nil		
Total CO2 (tonnes)	296	Nil		







# Auditor-General's reports

## Reports tabled during 2009–10

Report title	Date tabled
Local Government: Results of the 2008–09 Audits (2009–10:1)	November 2009
Public Hospitals: Results of the 2008–09 (2009–10:2)	November 2009
Towards a 'smart grid'— <i>the roll-out of Advanced Metering Infrastructure</i> (2009–10:3)	November 2009
Responding to Mental Health Crises in the Community (2009–10:4)	November 2009
Management of the Community Support Fund (2009–10:5)	November 2009
Auditor-General's Report on the Annual Financial Report of the State of Victoria, 2008–2009 (2009–10:6)	November 2009
Water: Results of the 2008–09 Financial Audits (2009–10:7)	November 2009
Maintaining the Integrity and Confidentiality of Personal Data (2009–10:8)	November 2009

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