

Victorian Alpine Resorts

**Summer 2007/2008**

**Vehicle Counting  
Survey Report**



**Alpine Resorts  
Co-ordinating Council**



Published by the Alpine Resorts Co-ordinating Council, June 2008. An electronic copy of this document is also available on [www.arcc.vic.gov.au](http://www.arcc.vic.gov.au).

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Authorised by Victorian Government, Melbourne.

Printed by Typo Corporate Services, 97-101 Tope Street, South Melbourne  
100% Recycled Paper

ISBN 978-1-74208-668-2 (print)

ISBN 978-1-74208-669-9 (PDF)

Front Cover: Picnic point at Wire Plain, Mount Hotham Alpine Resort.

Acknowledgements:

Front cover photo: Mount Hotham Alpine Resort Management Board.

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# **VICTORIAN ALPINE RESORTS**

**2007 / 2008**

## **SUMMER VEHICLE COUNTING SURVEY REPORT**

**JUNE 2008**

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**Alpine Resorts Co-ordinating Council**

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## CHAIRPERSON'S FOREWORD



This report is the first Summer Vehicle Counting Report produced by the Council, as part of what the Council intends to be an annual publication.

Council's summer vehicle count survey is a key element in measuring the success of current actions in delivering the Victorian Government's Alpine Resort 2020 Strategy vision of 'four season, vibrant, sustainable resorts'.

I would like to especially acknowledge the assistance of each of the Victorian Alpine Resort Management Boards in undertaking the vehicle counts at their respective Resorts.

A handwritten signature in black ink, appearing to read 'Andrew Fairley'.

**Andrew Fairley**

Chairperson





## 1. BACKGROUND

- 1.1 The Alpine Resorts Co-ordinating Council (the 'Council') is a statutory body established under the *Alpine Resorts (Management) Act 1997*. It reports to the Hon Gavin Jennings MLC, Minister for Environment and Climate Change. It performs a co-ordinating function across Alpine Resorts, focused on: strategic planning, research, attraction of investment and overall promotion of resorts. It also provides advice to the Minister on a wide range of alpine resort issues.
- 1.2 Information on visitation to Alpine Resorts, both during the winter season and outside the winter season is important for a wide range of planning purposes in resorts. Ski lift companies, accommodation providers, retailers, suppliers, Alpine Resort Management Boards ('Boards'), as well as various service providers and government agencies, all require this information.
- 1.3 Visitation during the winter season has been recorded in a systematic way for many years and is now published by the Council on a regular basis.
- 1.4 Historically, recording of summer visitation to Alpine Resorts has proven to be more challenging. There has been widely variable continuity and consistency in available information. Some Boards have undertaken road traffic counts, car park counts, and, on occasion face-to-face surveys and mail surveys to gain an appreciation of summer visitor numbers.
- 1.5 The Government's strategy for Alpine Resorts, the *Alpine Resorts 2020 Strategy*, is based on a vision of '*four season, vibrant, sustainable resorts*'. Consistent measurement of summer visitation is critical to the assessment of the success of actions taken to increase four season use of Alpine Resorts.
- 1.6 This report presents information on summer vehicle numbers at each Alpine Resort during 2007/2008, taken from vehicle counters placed on all Alpine Resort access roads.
- 1.7 Whilst the current survey focuses on vehicle numbers, the results none-the-less provides a useful proxy for ascertaining actual visitation.
- 1.8 It is intended that Council's vehicle counting project will provide baseline data which the Council and Boards will build upon in future years.



## 2. METHODOLOGY

- 2.1 Prior to the 2006/2007 summer season the Council and all Boards determined to undertake consistent vehicle counts at all Alpine Resorts. The bushfires that raged across much of Victoria's high country and Gippsland from December 2006 until February 2007 resulted in the closure of many roads, including some Alpine Resort access roads, and much of Victoria's high country. As a result, the vehicle counting project was abandoned for that summer season. The project was implemented for the 2007/2008 summer season.
- 2.2 Automatic counters have been permanently installed on the access roads to each Victorian Alpine Resort. Loops buried in the roads detect passing axles, from which an estimate of vehicles is determined. In some cases the counters have been in place for a period of years and this has enabled some historical information to be presented in this report.
- 2.3 This year's survey was designed to be undertaken from early November 2007 until late April 2008, i.e. to cover the period from Melbourne Cup Day until Anzac Day. The procedures provided for Boards to collect vehicle count information on at least a weekly basis. In the case of Mount Baw Baw, Mount Buller and Mount Stirling the format of the information provided has enabled the Council to also determine weekend vehicle numbers.
- 2.4 The methodologies employed to analyse the results at each resort are set out below.
- 2.5 Falls Creek  
The Board has recorded vehicle count information for all inbound lanes and the outbound lane at Howman's Gap entry station since 1994. For the purposes of this report, the vehicle counts of all inbound lanes have been used. The counter was operational for the whole of the survey period. Construction traffic associated with the Bogong High Plains Road sealing project has been excluded from the figures used in this report.
- 2.6 Lake Mountain  
The Board has a counter at the entry gate that has recorded the number of vehicles entering the resort since 1997. These records have been used for this report. The counter was operational for the whole of the survey period.
- 2.7 Mount Baw Baw  
The Board has a counter at the entry to the village. Detailed information is available for the 2007/2008 summer season and has been used in this report. Incomplete historical records are available for some years back to 2000. The counter was operational for the whole of this year's survey period.
- 2.8 Mount Buller  
The Board has recorded vehicle count information for all inbound lanes and the outbound lane at the Mirimbah entry station since 2001. For the purposes of this report, the vehicle count used is the average of the inbound and outbound counts.
- 2.9 Mount Hotham  
The Board installed permanent counters on the Great Alpine Road on either side of the village in late 2007. During the survey period 56% of recorded vehicle entries were from the Harrietteville direction, with 44% from the Omeo direction. The Great Alpine Road is a well used through road, thus the vehicle



counts from the inbound lanes of both counters have been summed for this report. As the village straddles the Great Alpine Road and has multiple entry points it is not possible to determine whether vehicles are visiting or travelling through the resort. For the purposes of this report it is assumed that all vehicles counted visited the Resort. There were some reliability issues, as a consequence of which, the counter was not operational for much of the survey period.

#### 2.10 Mount Stirling

The Board recorded vehicle count information for the inbound and outbound lanes of the Mount Stirling Road at the Mirimbah entry station. During the survey period 47% of recorded vehicle movements were on the inbound lane of the Mount Stirling Road at the Mirimbah entry station, with 53% on the outbound lane. A significant proportion of vehicles passing through the resort entry gain access either to or from destinations beyond the Mount Stirling Alpine Resort, i.e. they make one-way journeys through the resort. For the purposes of this report it has been assumed that 50% of summer vehicles make such one-way journeys.



### 3. SURVEY RESULTS – FULL SUMMER SEASON

- 3.1 Summary results for weekly vehicle counts during the period November 2007 – April 2008, for each Alpine Resort and the combined figure for all Resorts, are shown in Table 1.
- 3.2 During the survey period, a total of 114,000 vehicles were recorded visiting the resorts. However, this total is likely to be significantly lower than the actual number of vehicles entering the Resorts, as a result of the lack of recording at Mount Hotham for much of the survey period.
- 3.3 The 5 weeks of records at Mt Hotham gave a total of 13,374 vehicles. If it is assumed that the proportion of vehicles accessing Mount Hotham for the remaining survey period approximates the same proportion of vehicles recorded at the other Resorts over the same period, then a total of 62,000 vehicles is a reasonable estimate of the total number of vehicles at Mount Hotham during the summer season.
- 3.4 If this estimate for Mount Hotham is used, then a total of approximately 163,000 vehicles accessed Victoria's Alpine Resorts during the 2007/2008 summer period.

**Table 1 - Vehicle Count Totals**

	Falls Creek	Lake Mountain	Mt Baw Baw	Mt Buller	Mt Hotham	Mt Stirling	All Resorts
<b>November 2007 - April 2008</b>							
<b>Total Summer Vehicles</b>	33,550	7,438	12,608	34,505	62,038 <sup>1</sup>	12,641	162,781
<b>Average Weekly Vehicles</b>	1,342	298	504	1,380	2,675	506	-
<b>Minimum Weekly Vehicles</b>	884	137	227	365	2,117	51	-
<b>Maximum Weekly Vehicles</b>	2,506	730	885	2,724	3,432	982	-

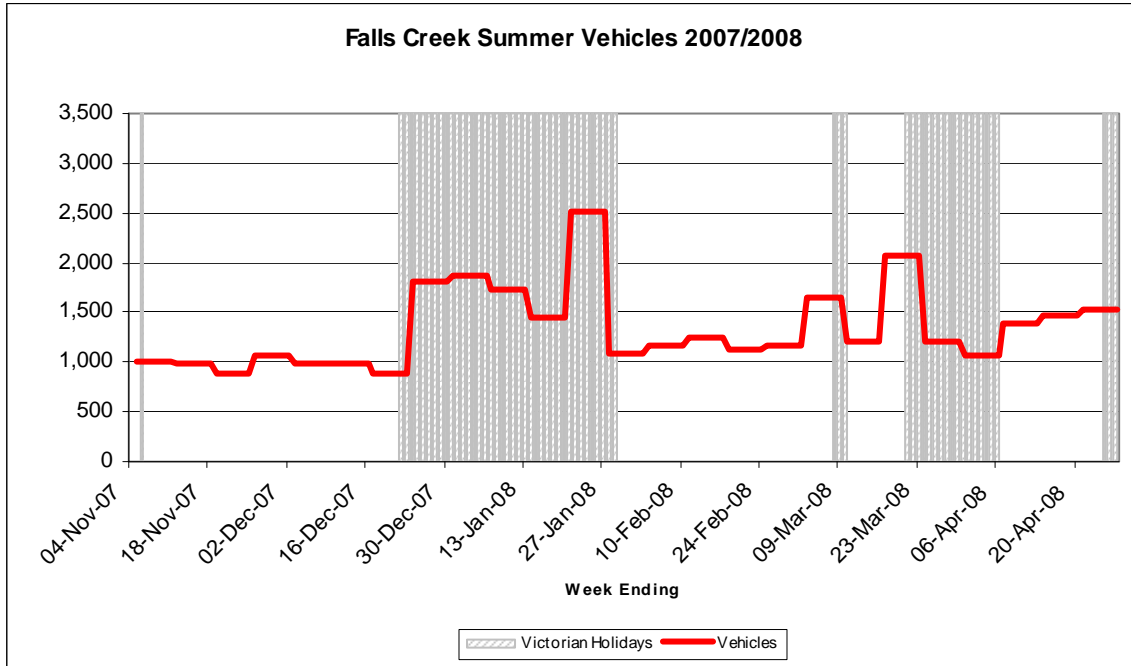
<sup>1</sup> Based on extrapolation of 5 weeks of data - see text.



#### 4. SURVEY RESULTS – WEEKLY NUMBERS

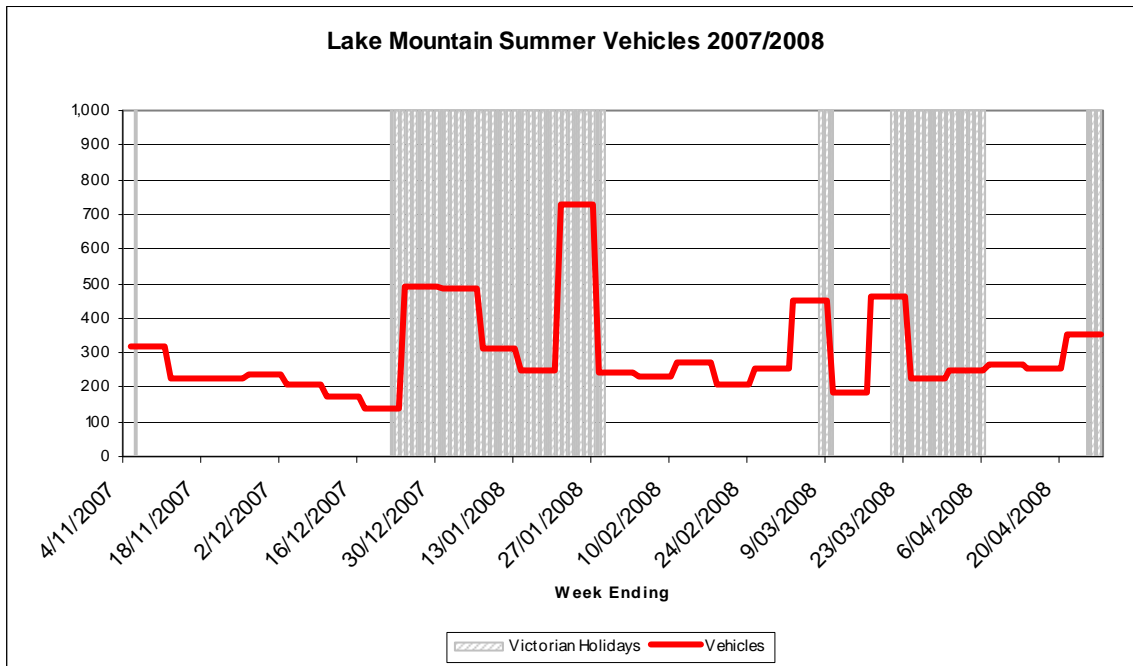
4.1 Figures 1 to 6, below, show weekly vehicle numbers to the six Victorian Alpine Resorts during the survey period, together with a list of events held during that time. Figure 7 shows aggregated vehicle counts for the six Alpine Resorts. Victorian school and public holidays are also shown on the figures.

Figure 1



Events: Dragon Boat Races - Australia Day; Artists' Camp – Labour Day; Easter Festival.

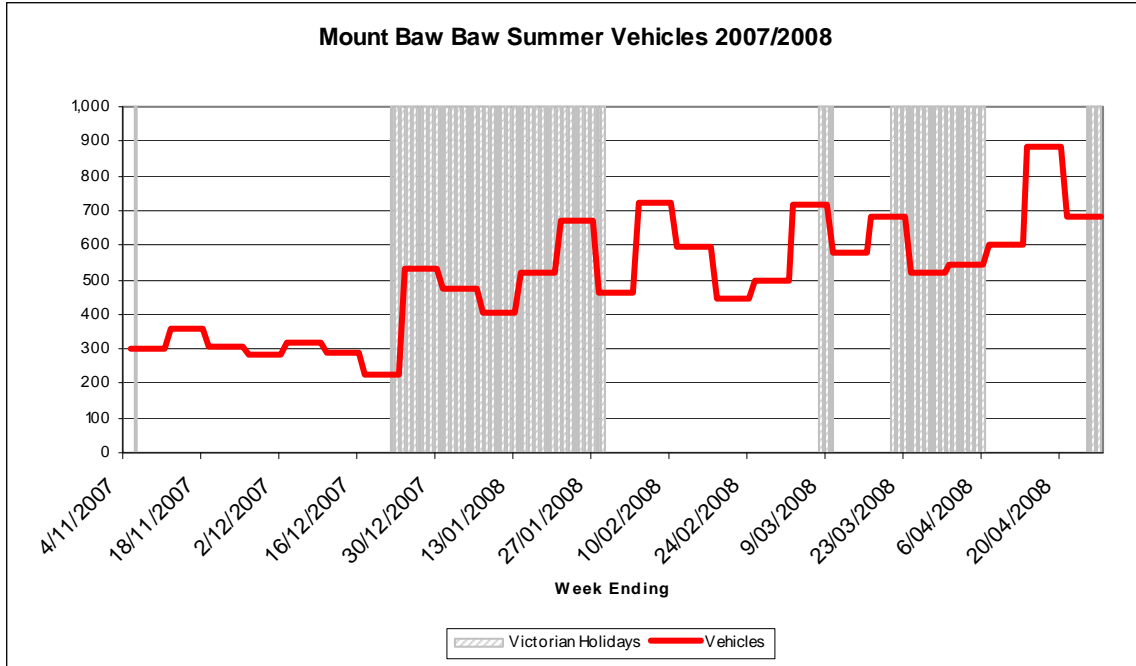
Figure 2



Events: Tarmac Sprints - Australia Day.

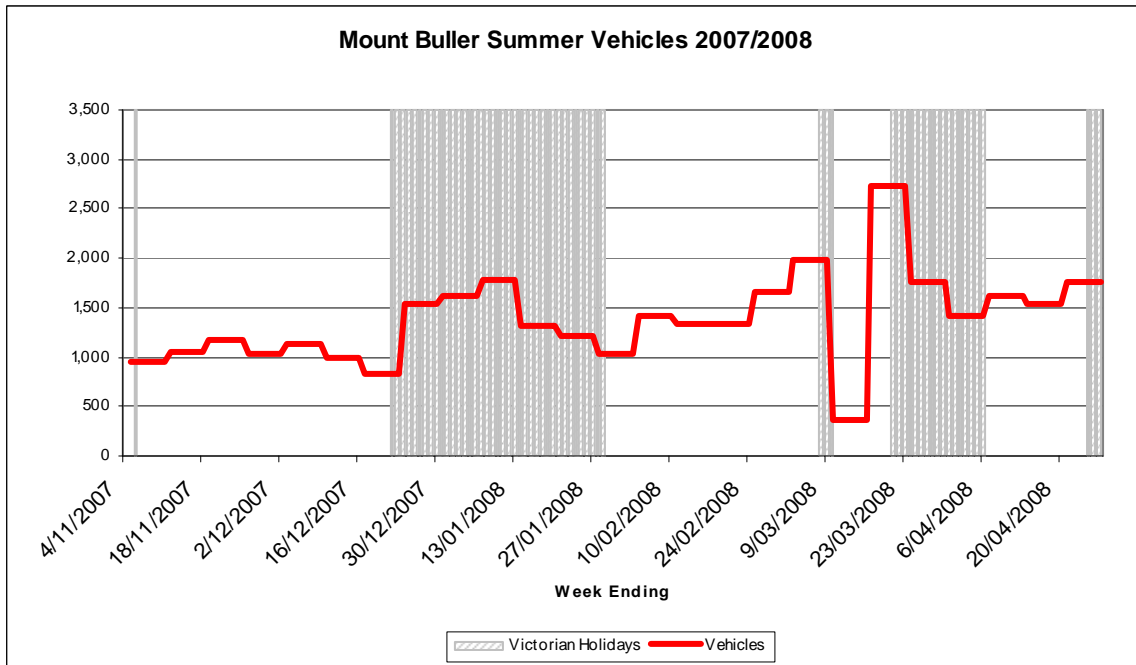


Figure 3



Events: Art Exhibition – Christmas - New Year; Family Adventure - Australia Day; Mountain Bike Racing – 9,10 February; Wine & Music – Labour Day; Easter Festival; Cycle Classic – 19,20 April.

Figure 4

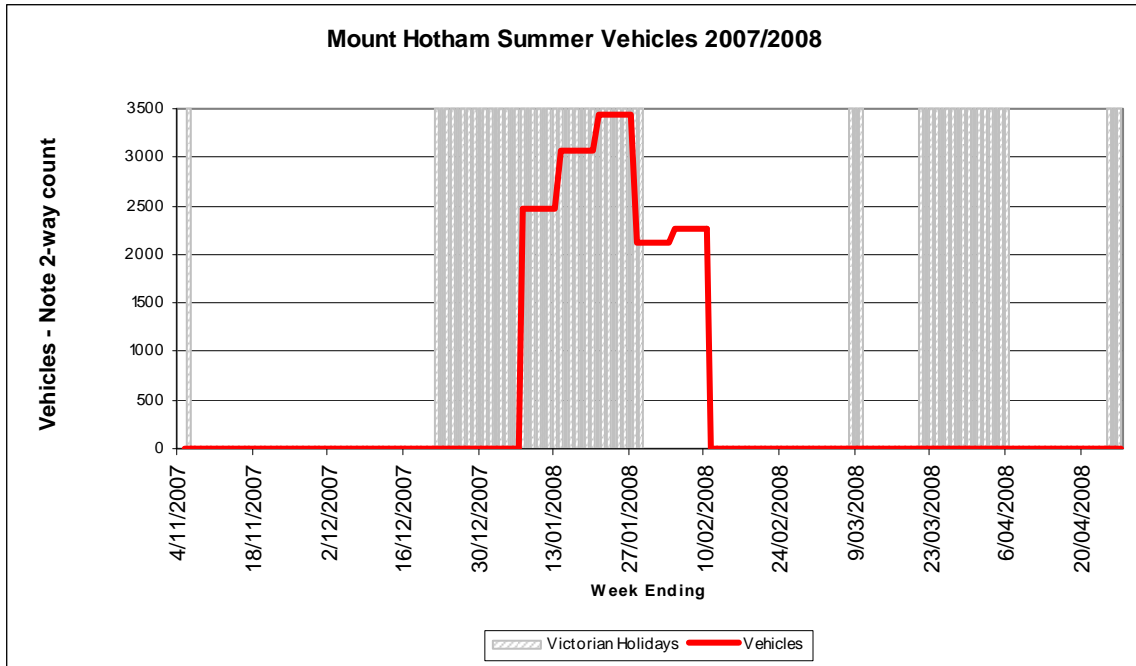


Events: Mountain Bike Racing, Beerfest – 12,13 January; Children’s weekend – Australia Day; Cycle Challenge – 1,2 March; Mirimbah Picnic – Labour Day; Artists’ workshops, exhibition and prize, Mountain Bike Racing – Easter.

Note: Due to an anomaly in the reading day for the week ending 9 March, that week’s vehicle count is high and the following week’s vehicle count is low. The total figure is unaffected.

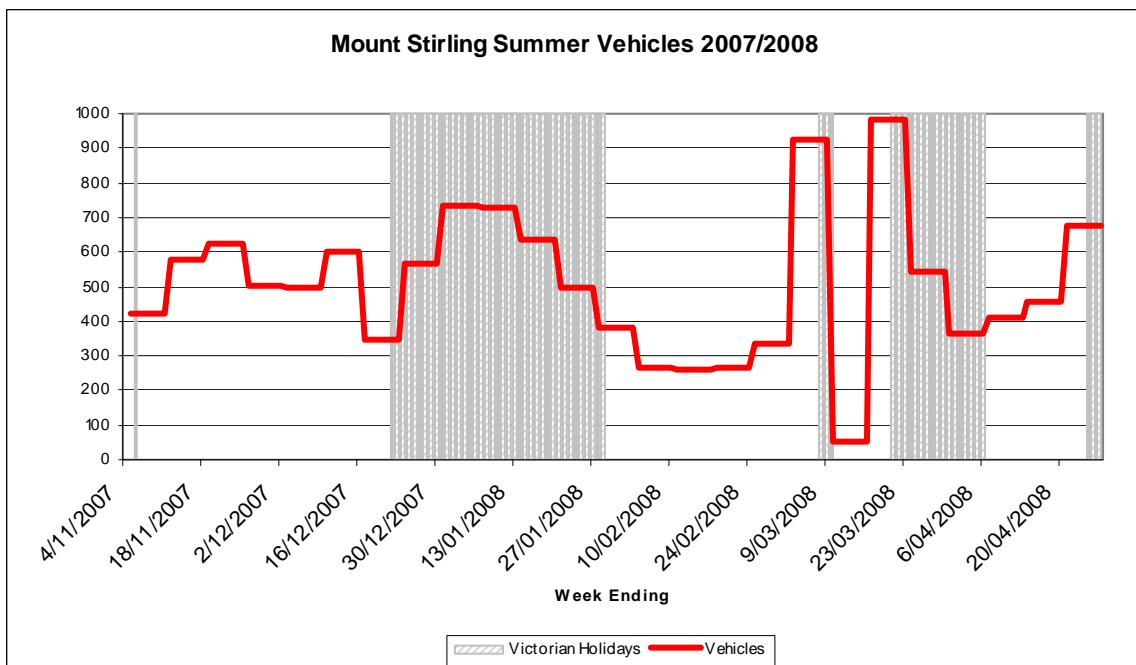


Figure 5



Events: Hottest Hits Countdown – Australia Day; Cool Summer Festival - 29 February - 2 March; Cobungra Polo – Easter; 4WD Expo – 17 – 20 April.  
 Note: Zero readings correspond to weeks during the survey period when counters were inoperable.

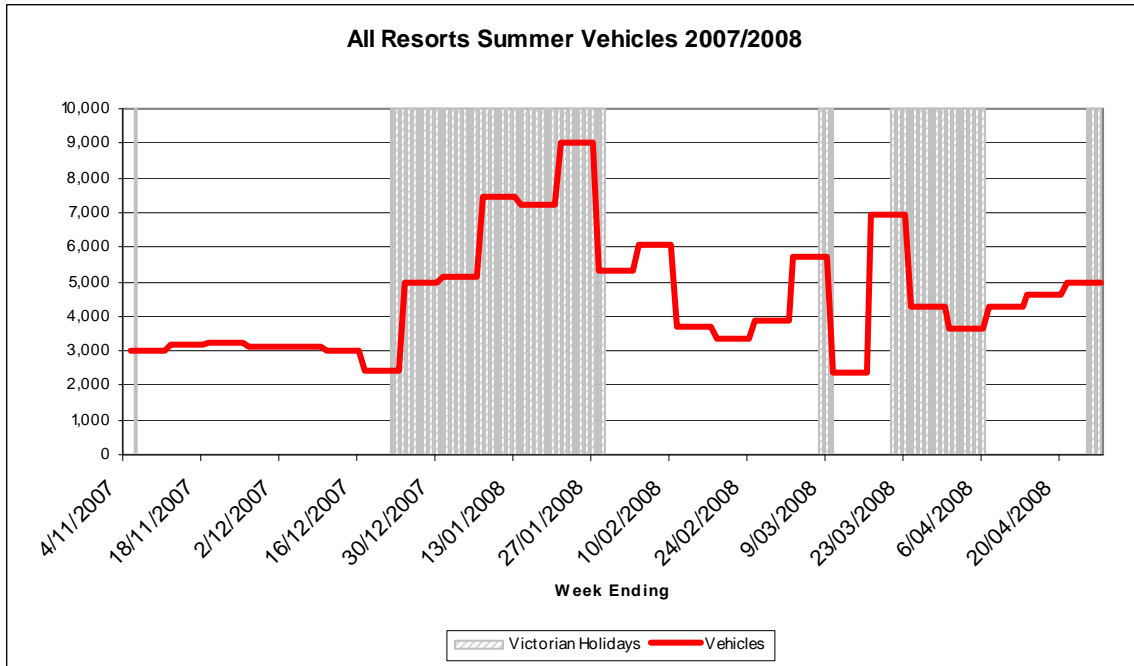
Figure 6



Note: Due to an anomaly in the reading day for the week ending 9 March, that week's vehicle count is high and the following week's vehicle count is low. The total figure is unaffected.



Figure 7



Note: Due to an anomaly in the reading day for the week ending 9 March at both Mount Buller and Mount Stirling, that week's vehicle count is high and the following week's vehicle count is low. The total figure is unaffected.

- 4.2 From the information provided, Council was also able to compare weekend and weekday vehicle counts for the Mount Baw Baw, Mount Buller and Mount Stirling Alpine Resorts. The results are shown in Table 2, below.

Table 2 - Weekend - Weekday Comparison

	Mt Baw		
	Baw	Mt Buller	Mt Stirling
<b>November 2007 - April 2008</b>			
<b>Total Summer Vehicles</b>	12,608	34,505	12,641
<b>Total Weekend Vehicles</b>	5,109	15,915	4,524
<b>Total Weekday Vehicles</b>	7,499	18,591	8,117
<b>% Weekend/Total Vehicles</b>	41%	46%	36%



## 5. HISTORICAL VISITATION

- 5.1 Historical information on visitation to Alpine Resorts outside of the winter season can be difficult to obtain. Such data as exists principally relates to vehicle counts and was often collected by VicRoads and local government for road planning purposes rather than visitation. The timing and duration of counts varies. Parks Victoria and tourism bodies also have some records on summer visitation. Because of the disparate nature of summer visitation data, past studies of the economic significance of Alpine Resort have used those data records with caution in determining visitation and the economic significance of that visitation.
- 5.2 The results of historical vehicle counts at Falls Creek, Lake Mountain, Mount Baw Baw and Mount Buller Alpine Resorts, taken outside the winter season, are shown in Figures 8 to 11 below. It should be noted that in the case of Falls Creek, Lake Mountain and Mount Buller Alpine Resorts these figures relate to the whole of the year outside the winter season, i.e. October to June. In the case of Mount Baw Baw the figures related to the period November to May. In all cases the non-winter figures differ from the results of this survey, which presents results for the 'summer' period, i.e. November 2007 to April 2008.
- 5.3 Records are not available for all years. Records are incomplete in some cases and thus have not been plotted in the figures below. In addition, results for 2006/2007, in the case of Falls Creek and Mount Baw Baw, and 2007, in the case of Lake Mountain, are lower than may otherwise have been the case, as a result of the closure of many roads and much of the high country during the 2006/2007 bushfires.

**Figure 8**

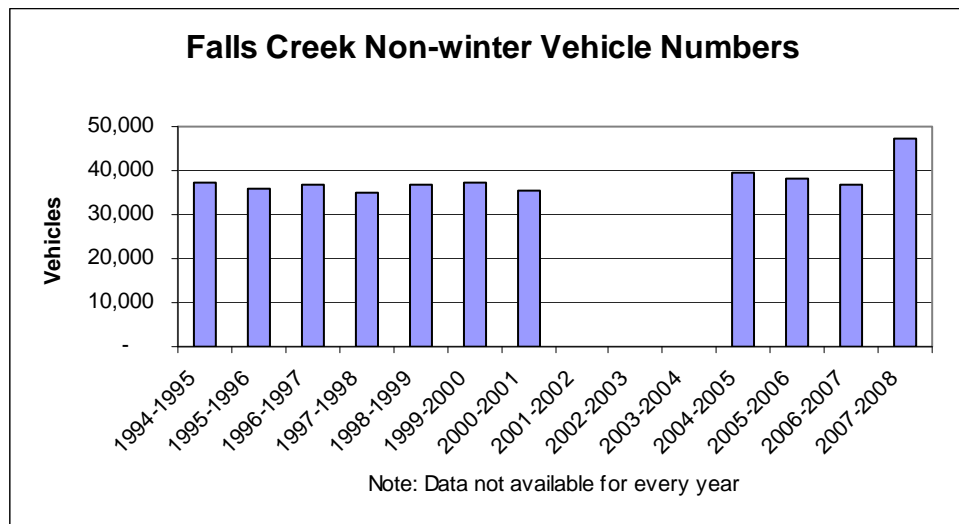


Figure 9

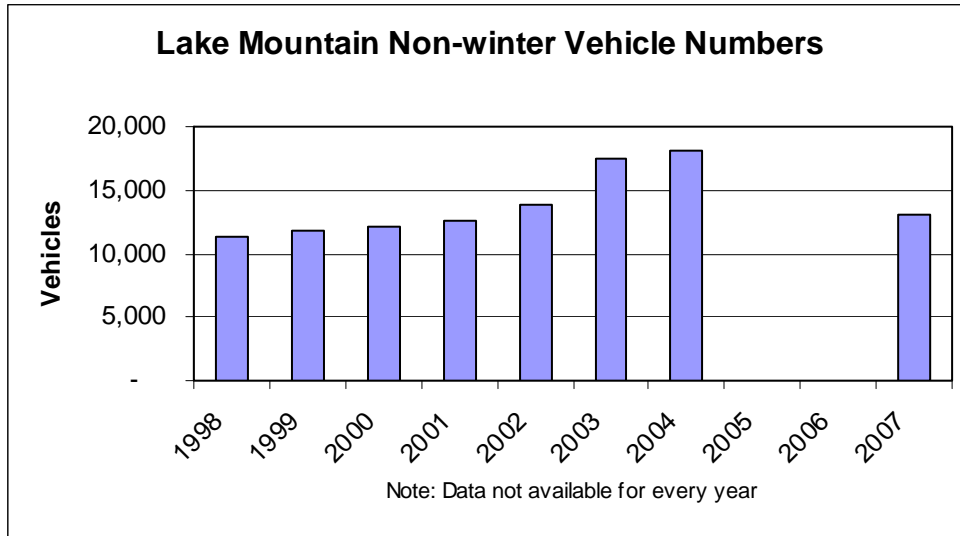


Figure 10

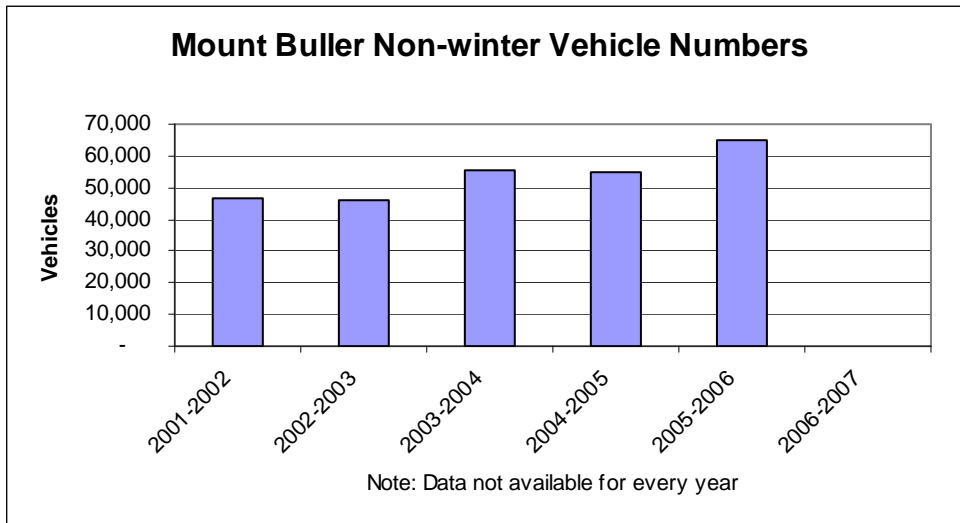
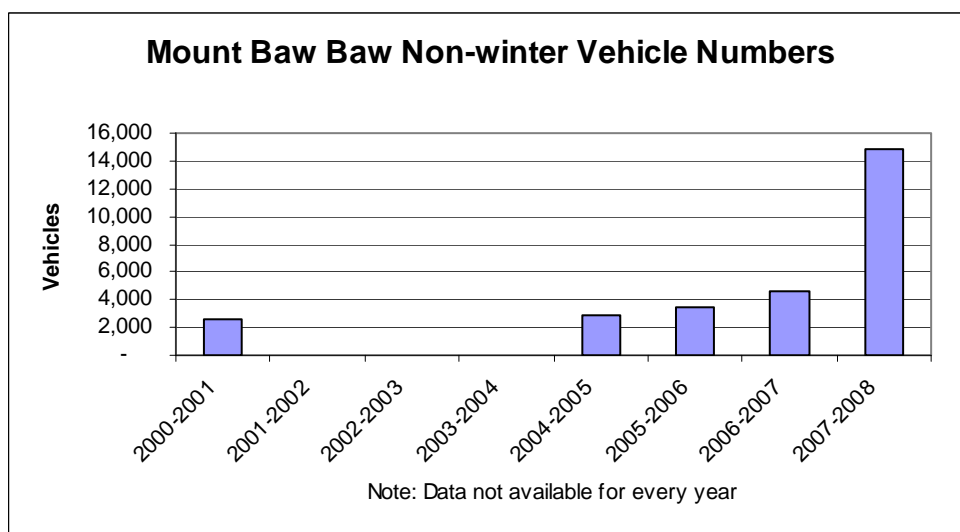


Figure 11



## 6. DISCUSSION

### Vehicle Counts

- 6.1 The 2007/2008 summer survey is the first vehicle count undertaken at all Victorian Alpine Resorts using consistent methodology and timing.
- 6.2 The survey shows that there is a marked variation in the vehicle counts on a weekly basis during the summer season at all Alpine Resorts. Maximum weekly counts are approximately double the weekly average vehicle counts at most Resorts, although it is not possible to verify this in the case of Mount Hotham due to the lack of data. From the data available, it is also evident that a higher proportion of visitation takes place at weekends compared to weekday visitation.
- 6.3 For most Resorts, peak vehicle counts appear to coincide with school holidays and/or long weekends, traditional holiday times in which Victorians travel. Australia Day, Labour Day and Easter show significant increases in the number of vehicles.
- 6.4 The staging of major events coincident with those key holiday times results in an additional increase in recorded vehicle numbers. Examples of major events seen as influencing vehicle numbers include the Dragon Boat races at Falls Creek and the Tarmac Sprints at Lake Mountain on Australia Day weekend; and the Art Prize, Art Exhibition and mountain bike racing State finals at Mount Buller at Easter.
- 6.5 At Mount Baw Baw, peaks in vehicle numbers matched the Resort's full summer events program, whether or not the event coincided with a holiday. Examples included the Wine and Food Festival on Labour Day weekend and the Baw Baw Cycle Classic on a non-holiday weekend in late-April.
- 6.6 Historical visitation records suggest that there are modest increases in summer vehicles at Alpine Resorts over time, assuming that the decrease in 2006/2007 relates to the bushfire-related closure of access roads and much of the high country. The Mount Baw Baw vehicle records appear to demonstrate the positive effect of last summer's full events program compared to the historical record.

### Visitation

- 6.7 Whilst vehicle counts are not the same as visitation, they can be used as a proxy for visitation. If a vehicle occupancy of between 2 and 3 persons per vehicle is assumed (as has been used in a range of past reports), a combined vehicle count for all Resorts of approximately 163,000 (estimated figure for Mount Hotham included) would be equivalent to more than 400,000 visitors during the 6 month survey period<sup>1</sup>.
- 6.8 By way of comparison, average winter season visitation (over a 4 month period) to Victoria's Alpine Resorts over the last decade was 636,000 visitors.

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<sup>1</sup>The survey methodology enables an estimation of 'visitors' to be made from vehicle arrivals at Resorts. Length of stay cannot be determined and thus 'visitor days', generally considered a better reflection of the level of activity, cannot be calculated – but would be significantly higher.



- 6.9 If the summer survey results are extrapolated over an additional 2 months to encompass all of the period outside the winter season, total annual visitation to Resorts may be around 1.1 -1.2 million visitors.
- 6.10 Whilst the summer survey methodology does not distinguish between the types of visitors accessing Resorts, preliminary assessment of data provided by the Mount Buller and Mount Stirling Board for 2004/2005 non-winter visitation indicates that residents, staff and contractors may represent up to 25% of the vehicle count.
- 6.11 An increase in visitation to Victorian Alpine Resorts in all seasons of the year is a key aim of the Alpine Resorts 2020 Strategy. It is proposed to conduct further surveys in coming summer seasons and to continue to improve the survey, as a way of measuring the success in achieving this important strategic aim.





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