



Traffic Volumes Monthly Report
March 2012

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Quality Assurance Statement

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Revision Schedule

Rev. No	Date	Description	Prepared by	Reviewed by	Approved by
1	11/04/2012	Final	Gerald Wen	Philip Blagdon	

Overview

Summary

The purpose of this document is to report on the monthly changes in traffic volumes on the state highway. This report also covers annual state highway traffic trends for the period of 1989 to 2012.

In March 2012, compared with March 2011, the monthly average daily traffic (MADT) for all vehicles decreased by 2.3%; the MADT for heavy vehicles decreased by 3.3%.

In this report

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Technical Notes

What is MADT and AADT

Monthly Average Daily Traffic (MADT) is the average of daily traffic volume measured in a given month. MADT is the statistical term used throughout this report.

A more commonly reported statistical term is Annual Average Daily Traffic (AADT), which measures the average of daily traffic volume over a given calendar year.

Purpose

Monthly Average Daily Traffic (MADT) reporting enables us to provide a month-by-month indication of traffic trends, and to allow the effects of specific events (e.g. storms, fuel price shifts, economy, etc.) to be monitored.

Sample coverage

There are 104 telemetry¹ sites in use on the state highway network to provide this traffic data.

The table below shows the number of sites in each NZ Transport Agency region. These numbers represent the sample sizes that are used to report the regional MADT results.

NZ Transport Agency Region	Number of Telemetry Sites
Northland and Auckland	19
Waikato and Bay of Plenty	23
Taranaki, Manawatu-Wanganui, Hawkes Bay and Gisborne	16
Wellington, Nelson, Marlborough and Tasman	16
Canterbury and West Coast	14
Otago and Southland	16

Sources of variation in MADT

The number of weekends in a specific month can affect the MADT comparison between years. Also, public holidays that can occur in different months can also affect comparison between years. This report does not attempt to compensate for these variations.

¹ Telemetry sites are continuously monitored 24/7.

Key Results

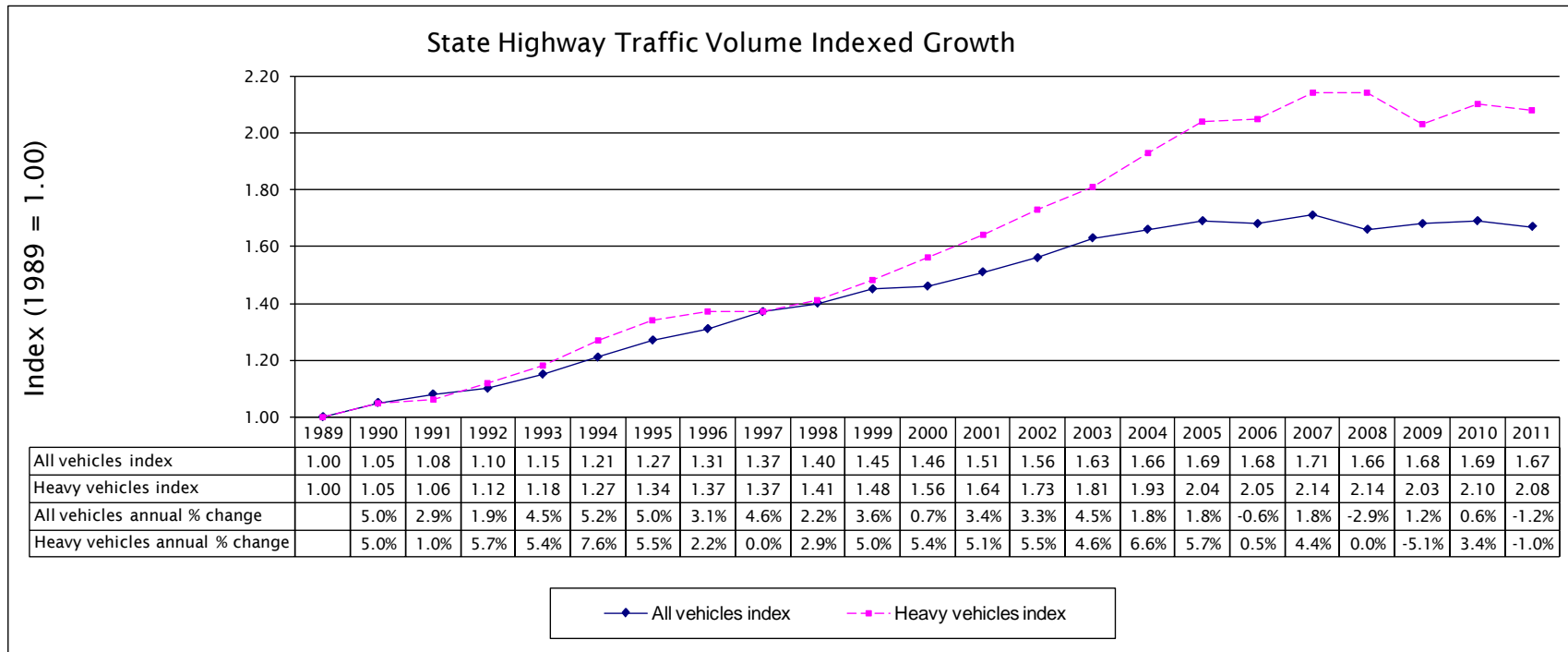
The State Highway Traffic Volume growth indexes measures the change in the yearly traffic volume (All vehicles and heavy vehicles) compared to 1989 when our systematic traffic data records began.

2011 All Vehicles

There has been a decrease of 1.2% in the all vehicles, compared to 2010.

2011 Heavy Vehicles

There has been a decrease of 1.0% in the heavy vehicles, compared to 2010.



**Results:
Monthly
traffic at key
sites**

Five key sites have been selected to represent five main centres in NZ.

The MADT values for March 2011, March 2012 and percentage of difference compared are reported in the table below.

Note the MADT values include all vehicles.

Site	City	MADT (All Vehicles) March-11	MADT (All Vehicles) March-12	% Change
Auckland harbour bridge (SH1)	Auckland	161640	153995	-5%
Greenwood (SH1)	Hamilton	22717	23099	2%
Ngauranga Interchange (SH 1 and SH2 combined)	Wellington	90231	89858	0%
Waimakariri Bridge	Christchurch	40341	42798	6%
Burnside	Dunedin	27293	26732	-2%

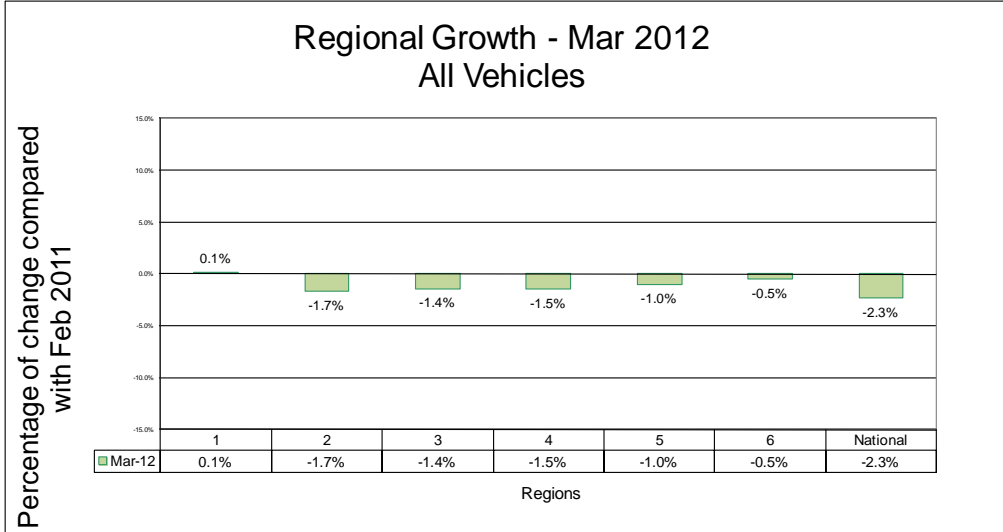
In March 2012, the MADT values for the sites representing Christchurch and Hamilton indicated an increase; Wellington remained at a similar level, while the site representing Auckland and Dunedin showed a decrease, compared to the same period in the previous year.

Results: All Vehicles

Regions

Comparisons across the NZ Transport Agency regions have also been carried out.

The graph below shows the percentage of difference compared with the same month last year. The MADT values here represent all vehicle types. In March 2012, regionally, almost all regions had a decrease, except region 1 remained at a similar level. Nationally, the MADT for all vehicles decreased by 2.3%, compared with March 2011.



NZTA Region Number	NZTA Region
1	Northland and Auckland
2	Waikato and Bay of Plenty
3	Taranaki, Manawatu-Wanganui, Hawkes Bay and Gisborne
4	Wellington, Nelson, Marlborough and Tasman
5	Canterbury and West Coast
6	Otago and Southland

Regional MADT Growth (All vehicles) – Sum of weighted MADT (All vehicles) percentage change compared with the same month previous year from each telemetry site in a region.

National MADT Growth (All vehicles) – Average of MADT (All vehicles) percentage change compared with the same month previous year from all telemetry sites (not weighted).

More graphs

The graphs (as above) dated back to January 2008 are attached to this report.

All sites

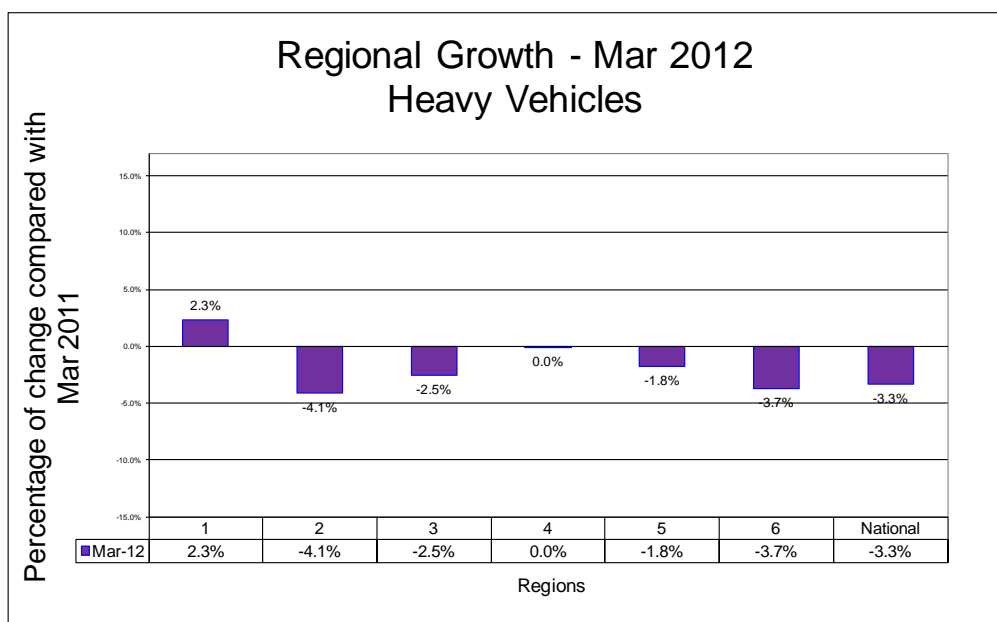
A table of MADT (all vehicles) values for all national telemetry sites is attached to this report.

Results: Heavy Vehicles

Regions

Comparisons across the NZ Transport Agency regions have also been carried out, focusing on heavy vehicles¹.

The graph below shows the percentage of difference compared with the same month last year. The MADT values here represent heavy vehicles only. In March 2012, regionally, the most of regions had a decrease, except region 1 showed an increase and region 4 remained at a similar level. Nationally, the MADT for heavy vehicles decreased by 3.3%, compared with March 2011.



NZTA Region Number	NZTA Region
1	Northland and Auckland
2	Waikato and Bay of Plenty
3	Taranaki, Manawatu-Wanganui, Hawkes Bay and Gisborne
4	Wellington, Nelson, Marlborough and Tasman
5	Canterbury and West Coast
6	Otago and Southland

Regional MADT Growth (Heavy vehicles) – Sum of weighted MADT (Heavy vehicles) percentage change compared with the same month previous year from each telemetry site in a region.

National MADT Growth (Heavy vehicles) – Average of MADT (Heavy vehicles) percentage change compared with the same month previous year from all telemetry sites (not weighted).

More graphs

The graphs (as above) dated back to January 2008 are attached to this report.

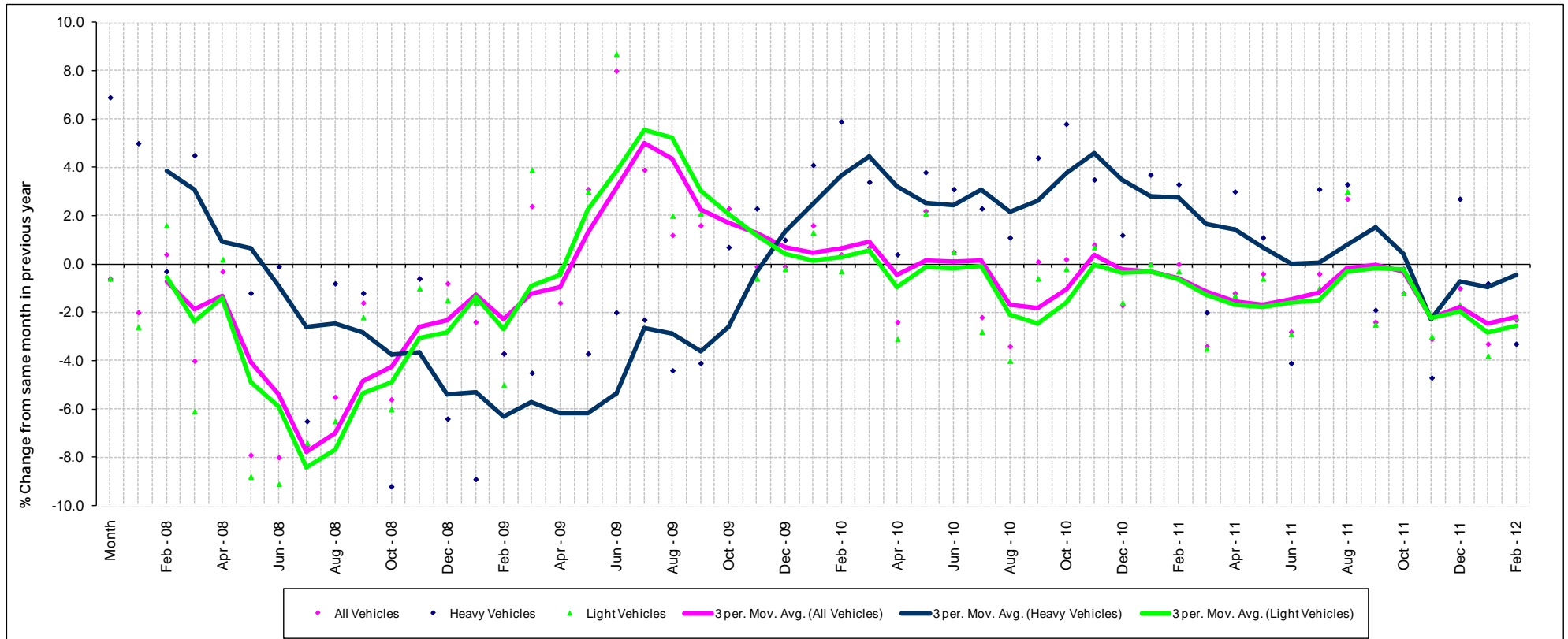
All sites

A table of MADT (heavy vehicles) values for all national telemetry sites for 2011 is attached to this report.

¹ Heavy vehicles are those with a gross vehicle mass exceeding 3.5 tonnes.

Summary of Percentage Change from Same Month in Previous Year

The graph and table below shows 5 years national percentage change from the same month in the previous year, summarising the figures published in previous monthly reports.



Year	2008			2009			2010			2011			2012		
Month	All Vehicles	Light Vehicles	Heavy Vehicles	All Vehicles	Light Vehicles	Heavy Vehicles	All Vehicles	Light Vehicles	Heavy Vehicles	All Vehicles	Light Vehicles	Heavy Vehicles	All Vehicles	Light Vehicles	Heavy Vehicles
January	-0.6	-0.6	6.9	-0.8	-1.5	-6.4	-0.1	-0.2	1.0	-1.7	-1.6	1.2	-1.0	-1.7	2.7
February	-2.0	-2.6	5.0	-2.4	-1.6	-8.9	1.6	1.3	4.1	0.0	0.0	3.7	-3.3	-3.8	-0.8
March	0.4	1.6	-0.3	-3.7	-5.0	-3.7	0.4	-0.3	5.9	0.0	-0.3	3.3	-2.3	-2.2	-3.3
April	-4.0	-6.1	4.5	2.4	3.9	-4.5	0.7	0.6	3.4	-3.4	-3.5	-2.0			
May	-0.3	0.2	-1.4	-1.6	-0.2	-10.3	-2.4	-3.1	0.4	-1.2	-1.3	3			
June	-7.9	-8.8	-1.2	3.1	3.0	-3.7	2.2	2.1	3.8	-0.4	-0.6	1.1			
July	-8.0	-9.1	-0.1	8.0	8.7	-2.0	0.5	0.5	3.1	-2.8	-2.9	-4.1			
August	-7.5	-7.4	-6.5	3.9	5.0	-2.3	-2.2	-2.8	2.3	-0.4	-1.0	3.1			
September	-5.5	-6.5	-0.8	1.2	2.0	-4.4	-3.4	-4.0	1.1	2.7	3.0	3.3			
October	-1.6	-2.2	-1.2	1.6	2.1	-4.1	0.1	-0.6	4.4	-2.4	-2.5	-1.9			
November	-5.6	-6.0	-9.2	2.3	2.1	0.7	0.2	-0.2	5.8	-1.2	-1.2	-0.2			
December	-0.6	-1.0	-0.6	-0.1	-0.6	2.3	0.8	0.7	3.5	-3.1	-3	-4.7			

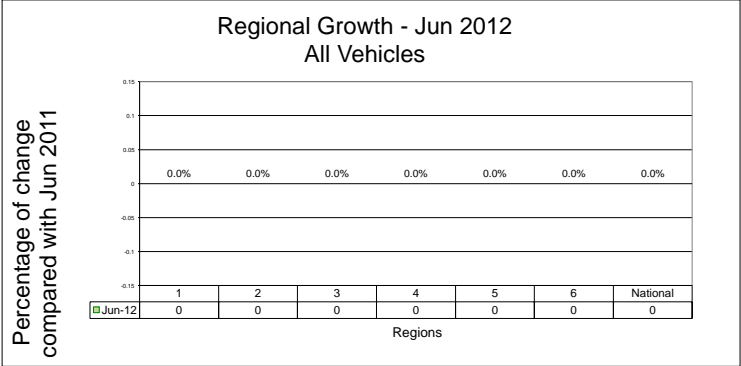
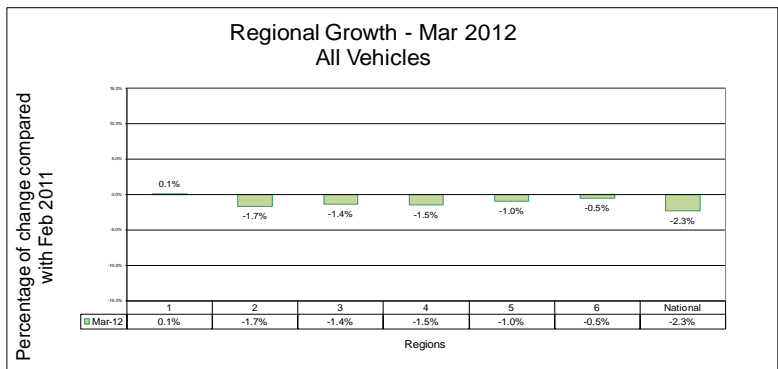
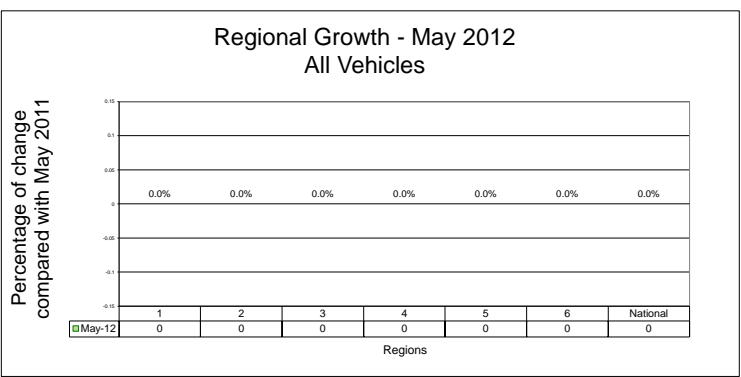
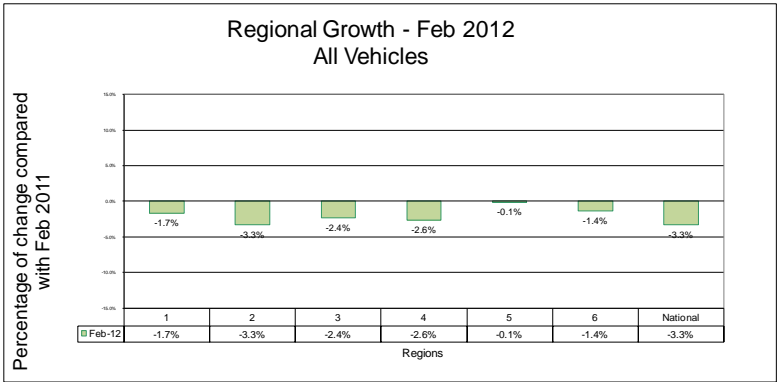
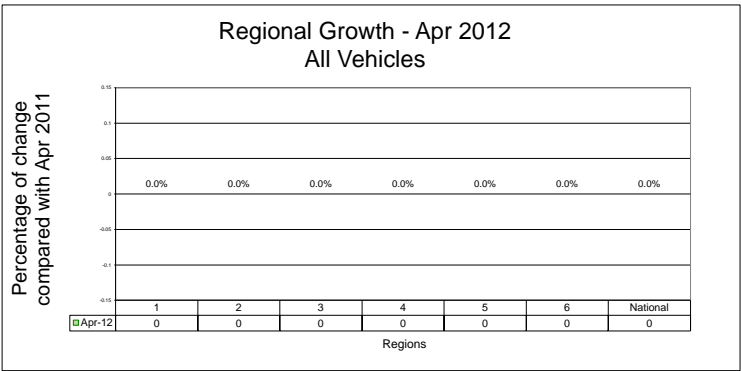
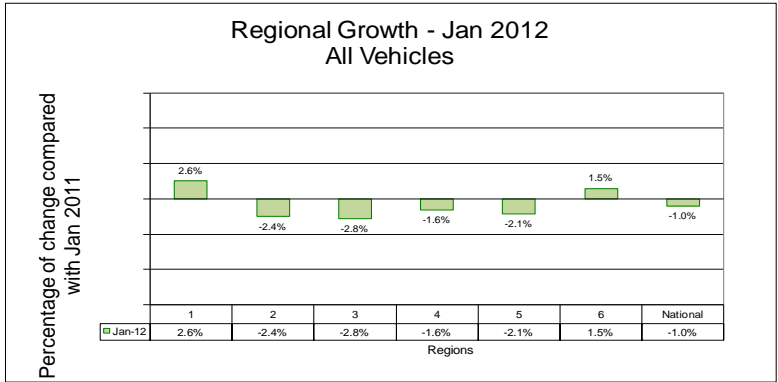
Appendices

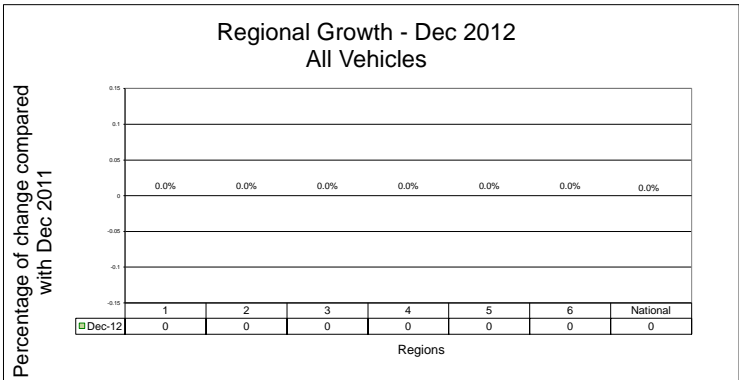
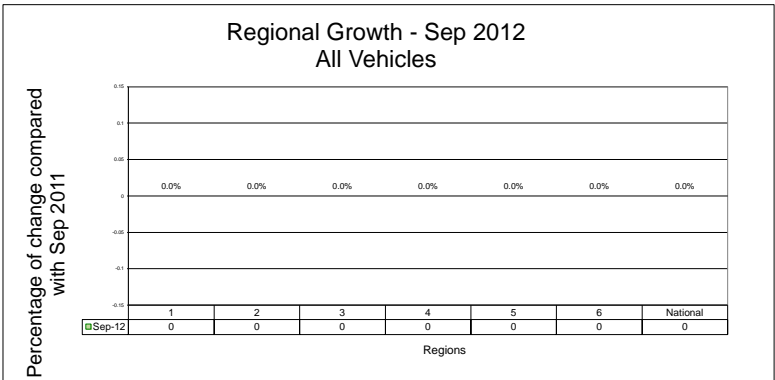
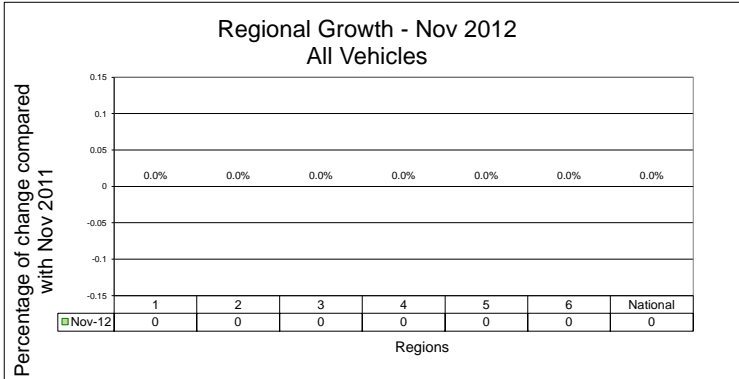
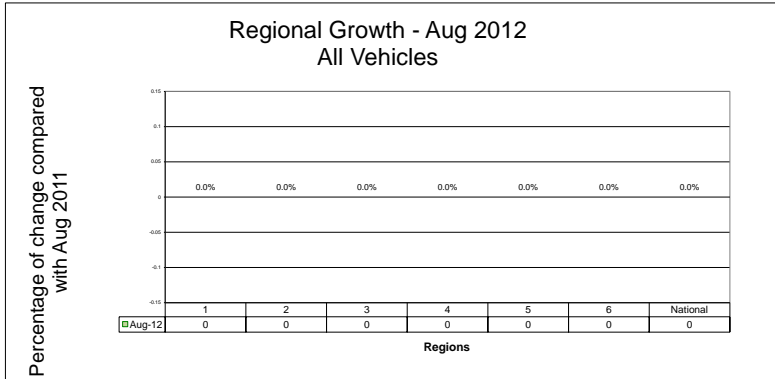
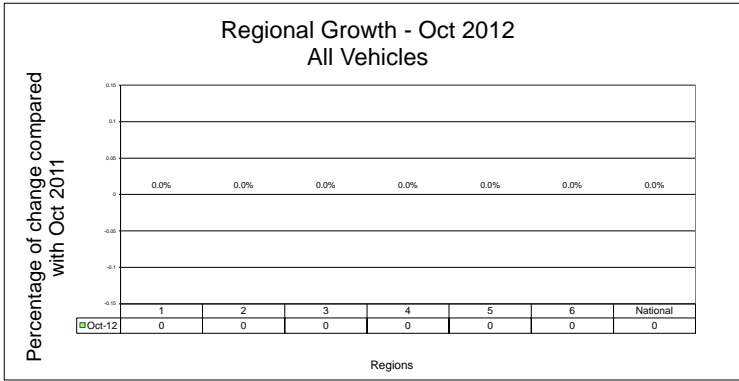
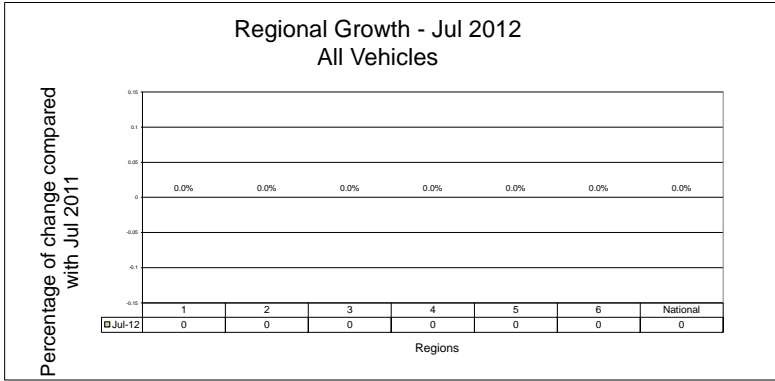
Current and Previous Years Growth Graphs: 2011, 2010, 2009 and 2008

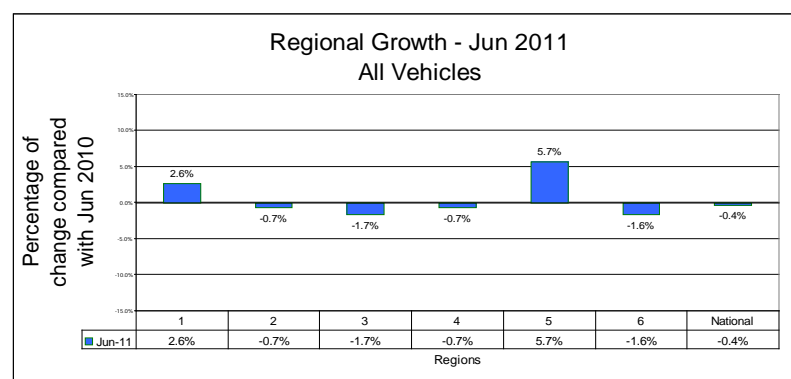
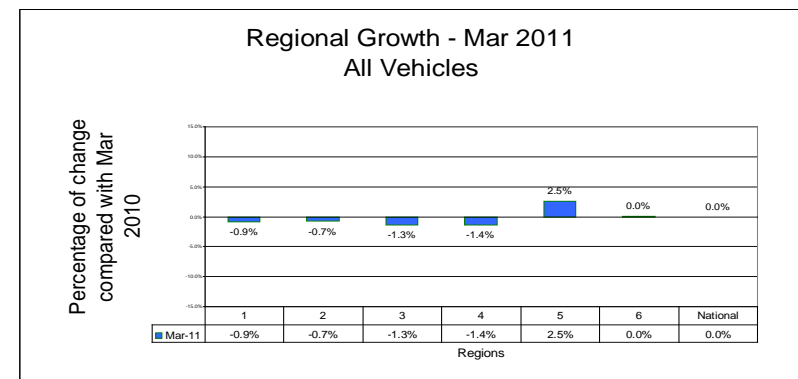
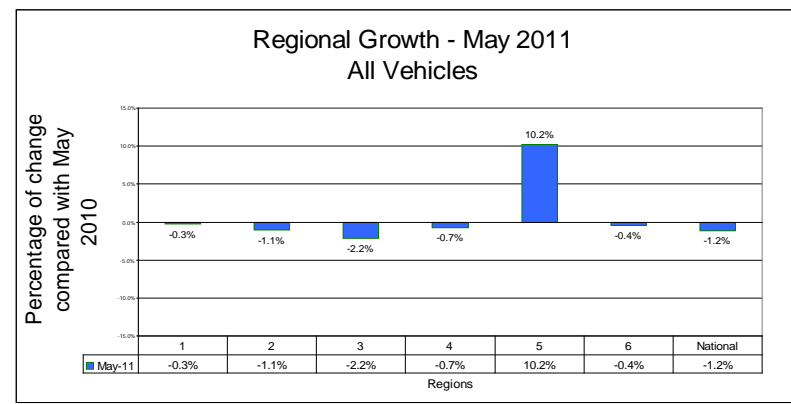
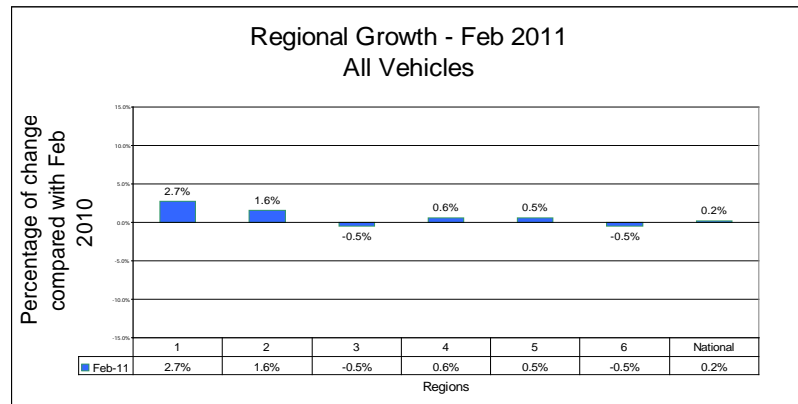
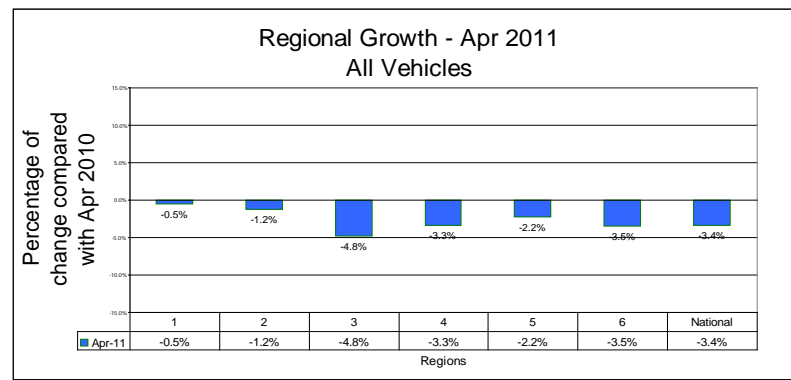
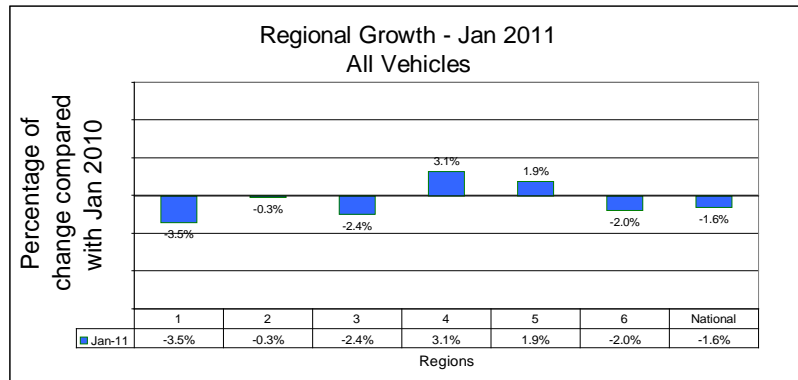
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- Heavy Vehicles

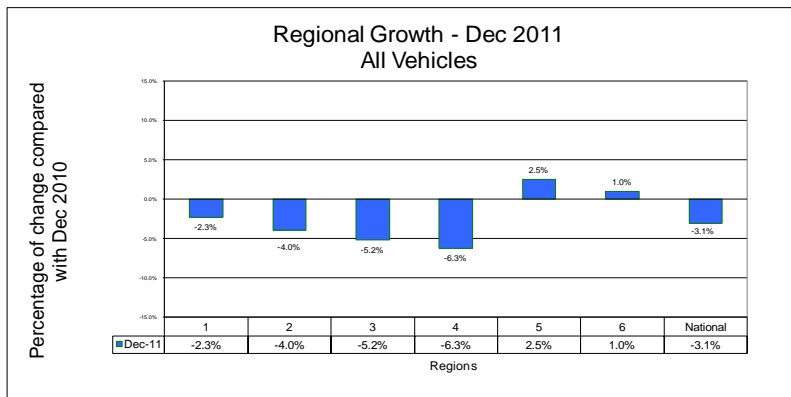
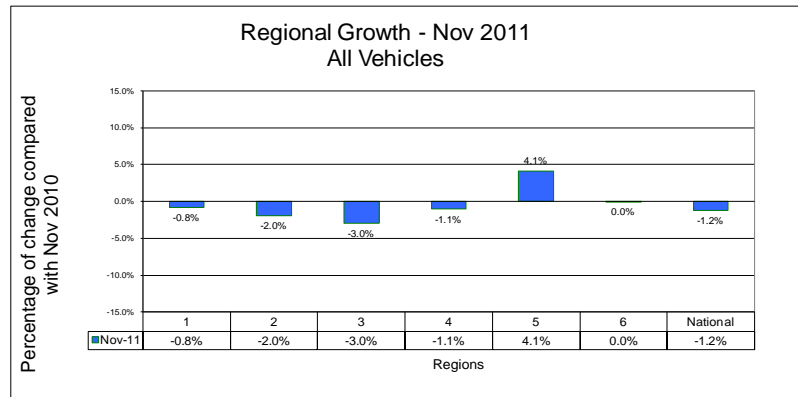
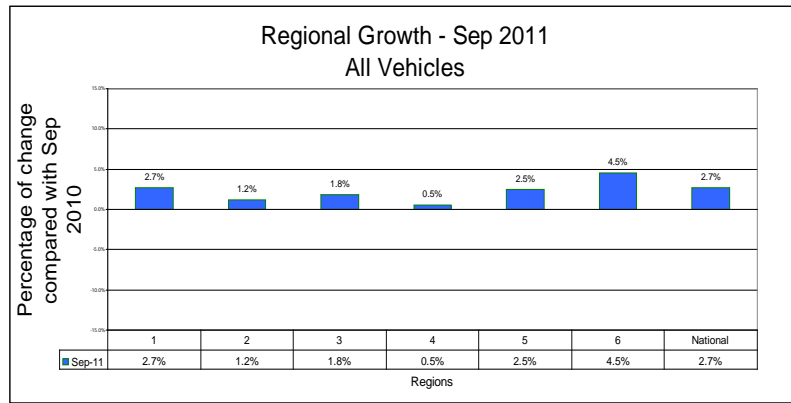
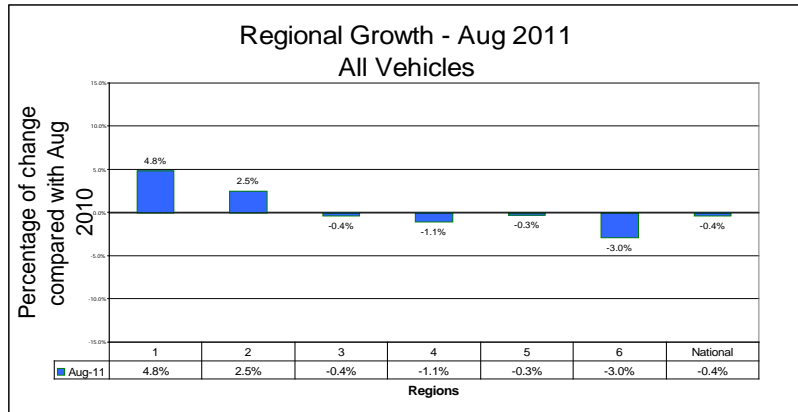
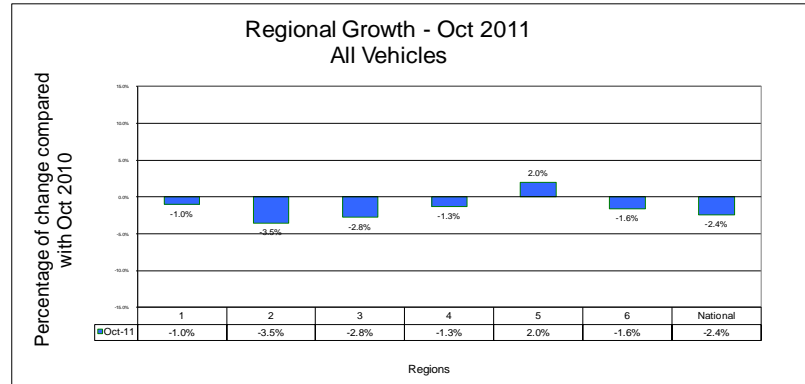
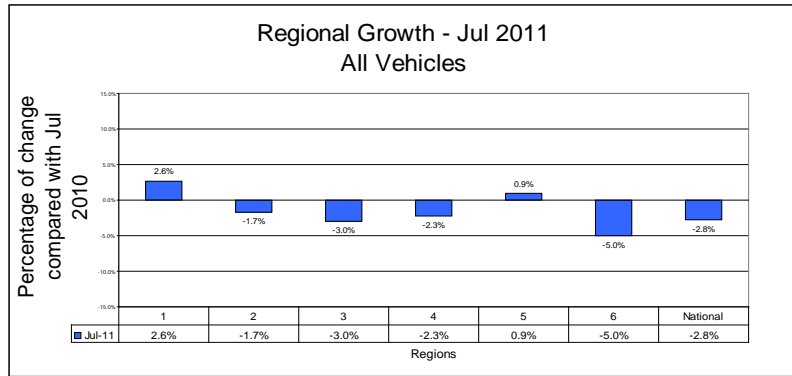
Telemetry Site MADT's for the past thirteen months

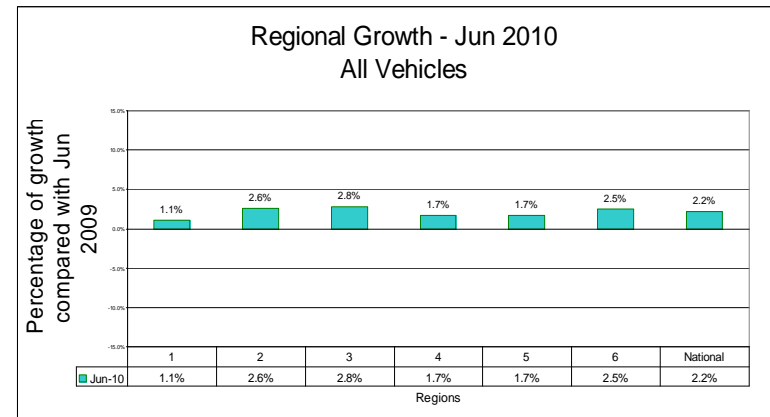
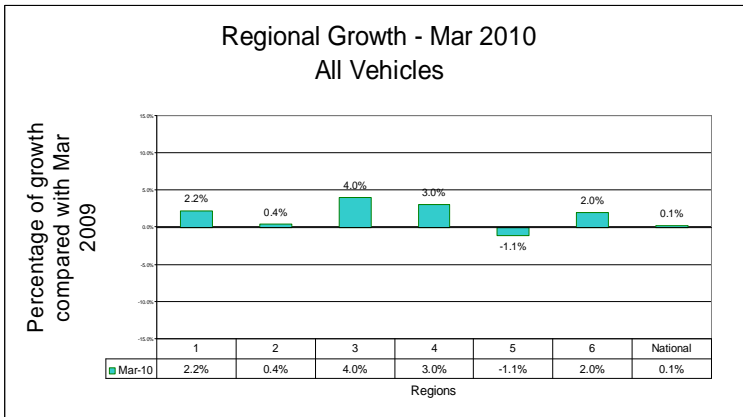
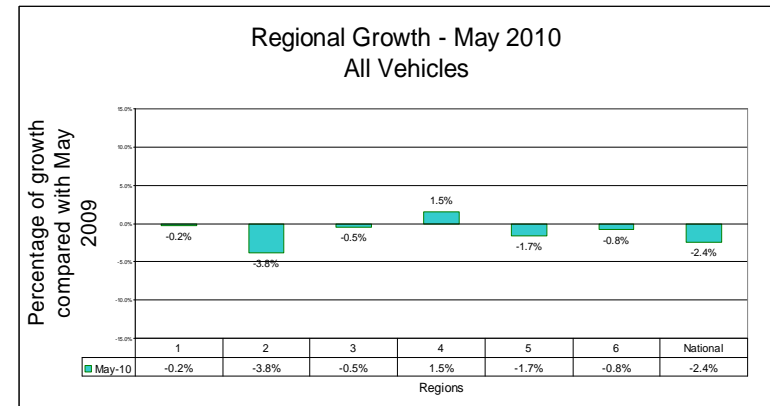
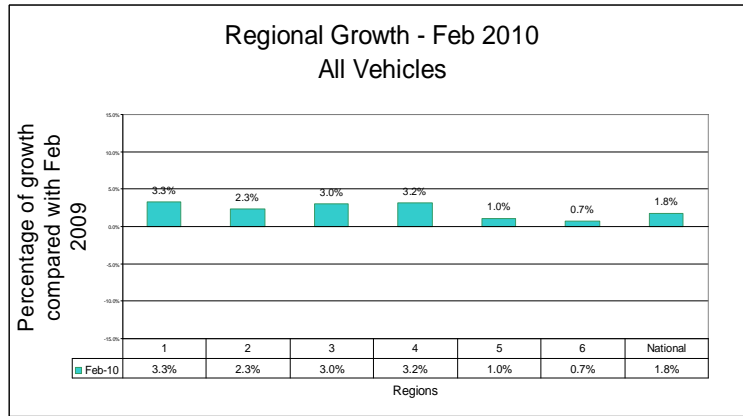
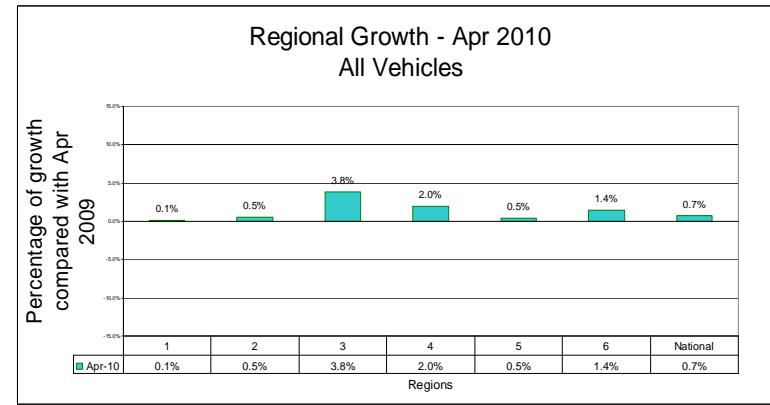
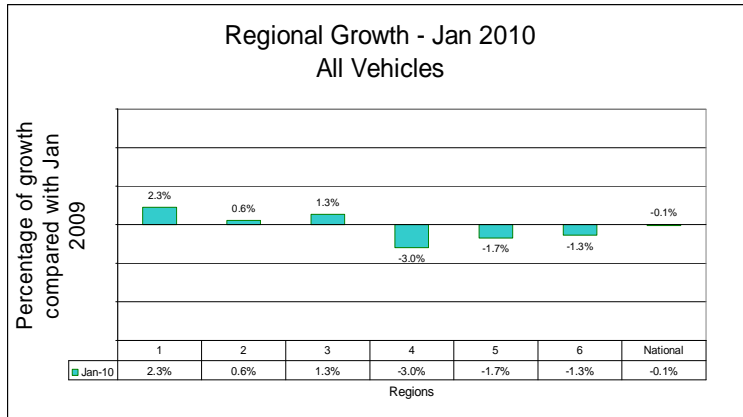
- All Vehicles
- Heavy Vehicles

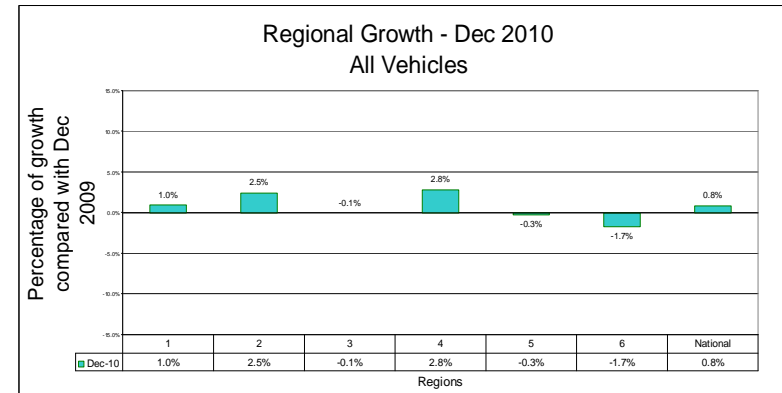
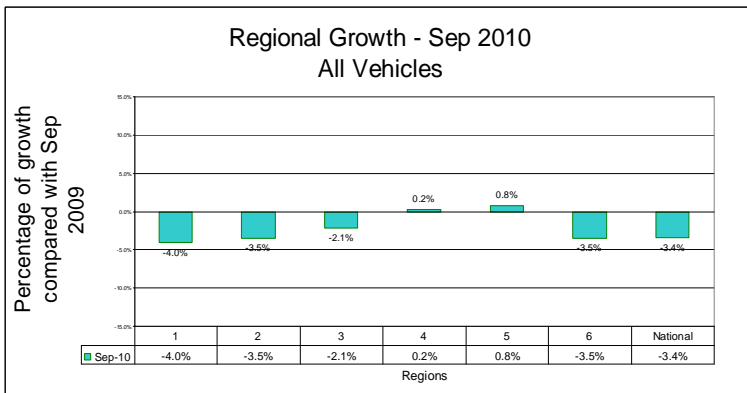
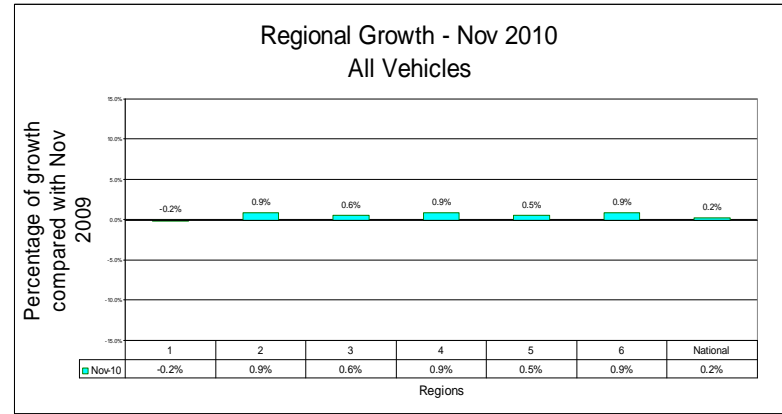
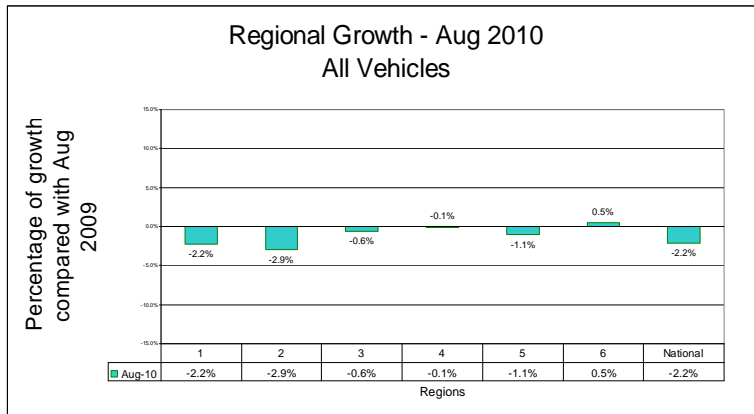
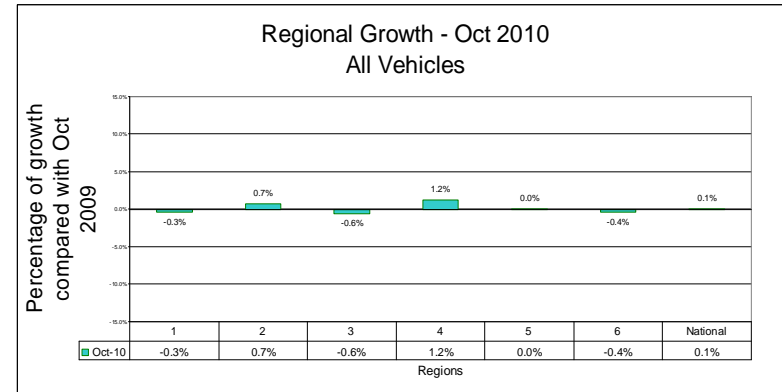
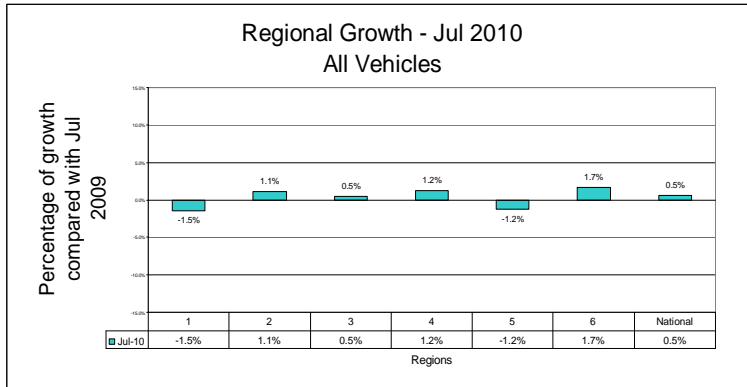




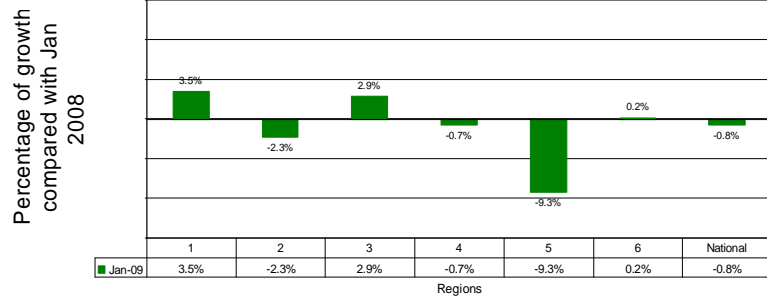




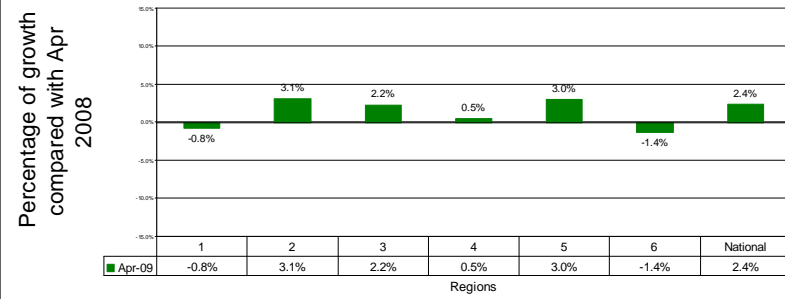




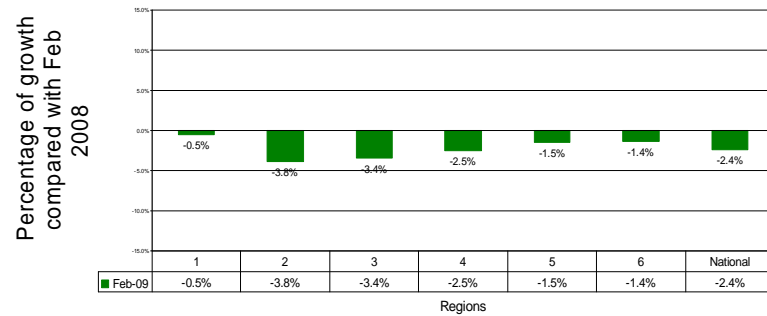
Regional Growth - Jan 2009
All Vehicles



Regional Growth - Apr 2009
All Vehicles



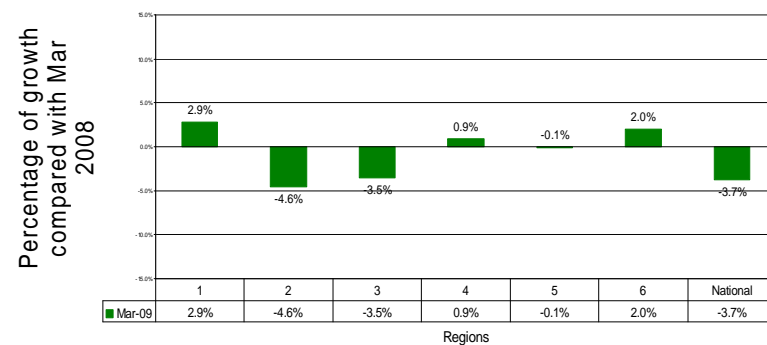
Regional Growth - Feb 2009
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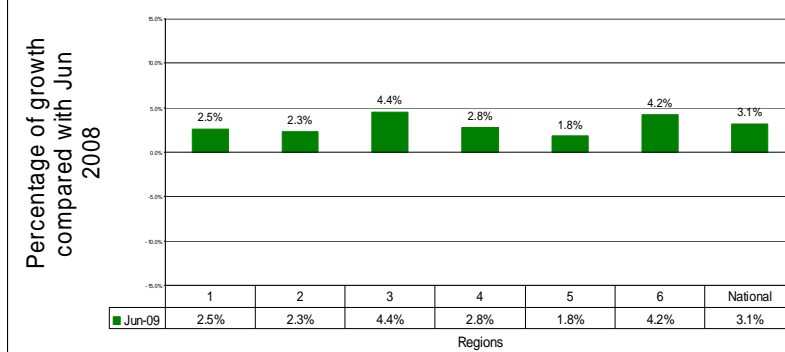
Regional Growth - May 2009
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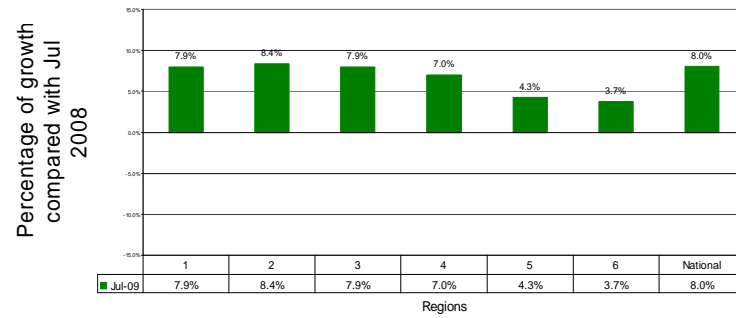
Regional Growth - Mar 2009
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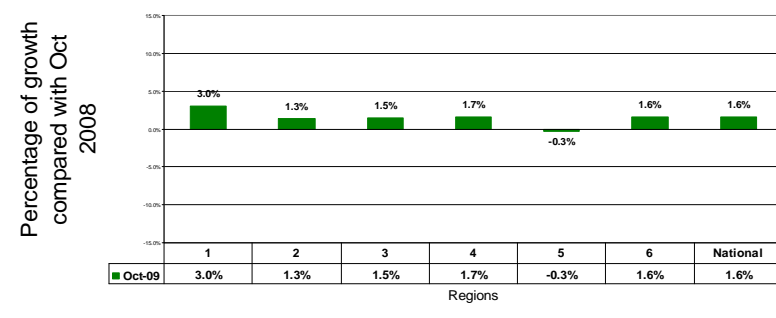
Regional Growth - Jun 2009
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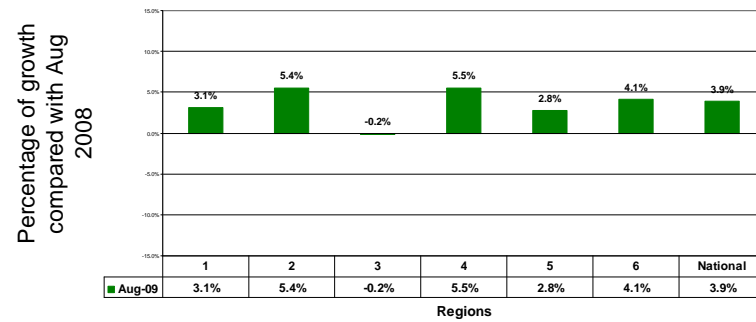
Regional Growth - Jul 2009
All Vehicles



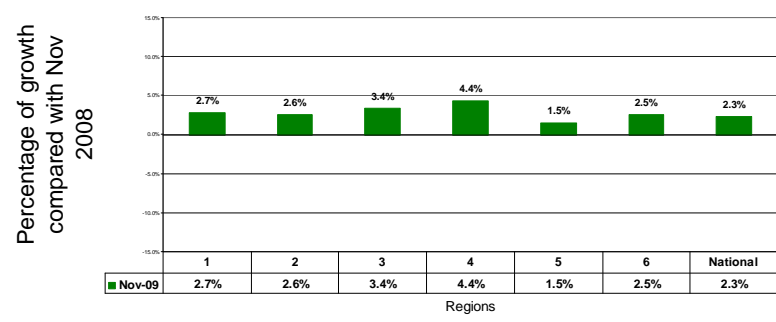
Regional Growth - Oct 2009
All Vehicles



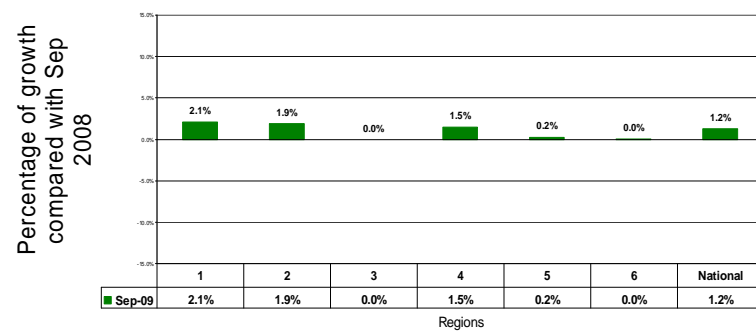
Regional Growth - Aug 2009
All Vehicles



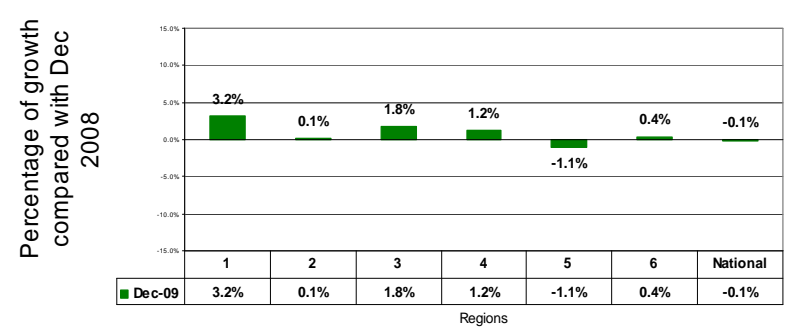
Regional Growth - Nov 2009
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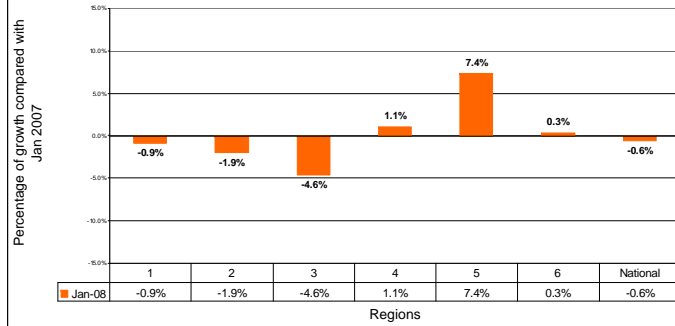
Regional Growth - Sep 2009
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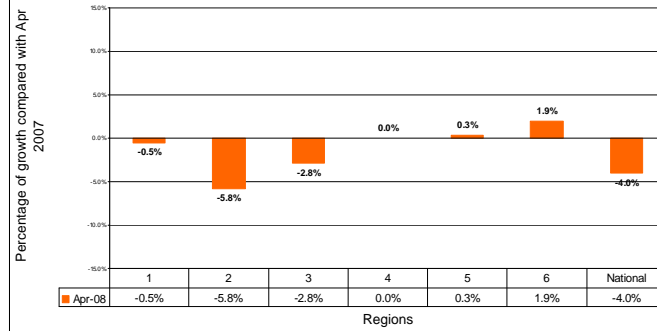
Regional Growth - Dec 2009
All Vehicles



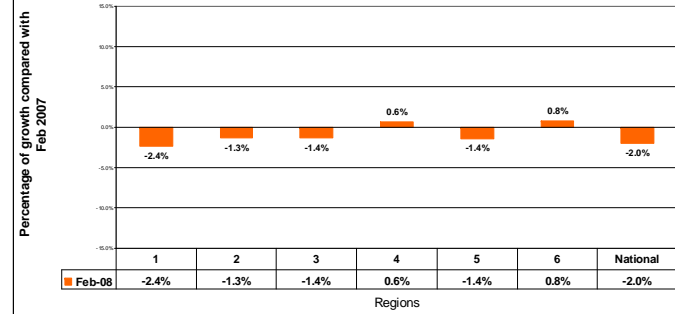
Regional Growth - Jan 2008
All Vehicles



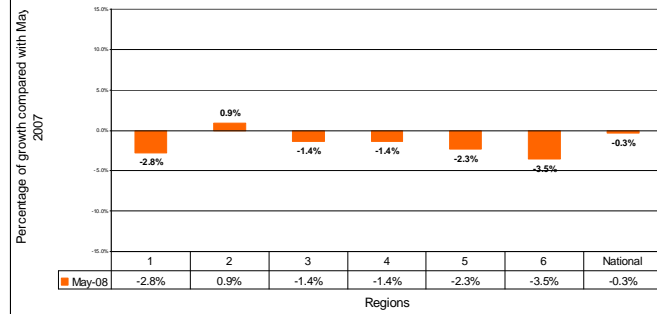
Regional Growth - Apr 2008
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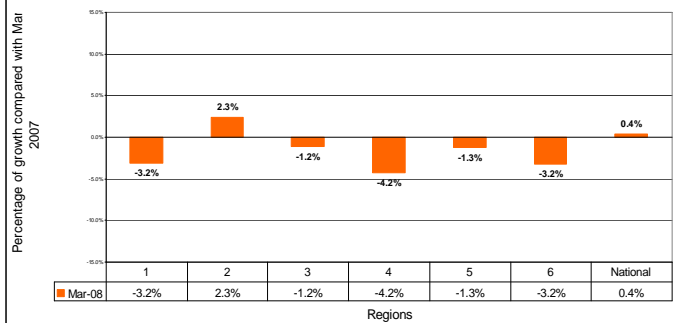
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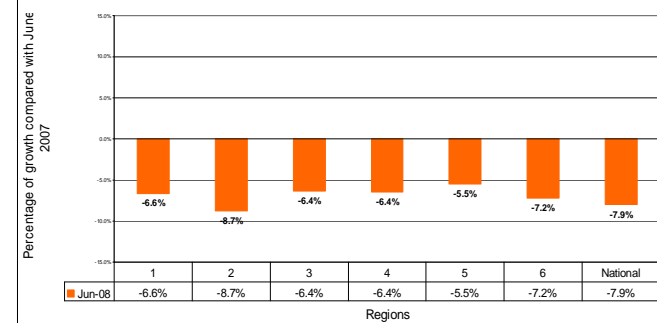
Regional Growth - May 2008
All Vehicles



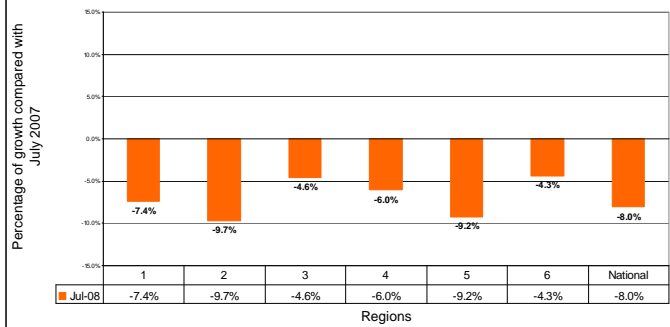
Regional Growth - Mar 2008
All Vehicles



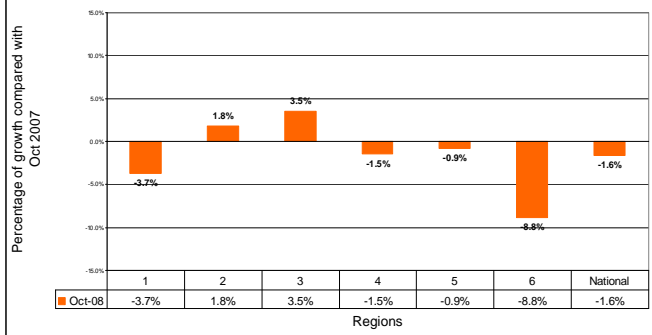
Regional Growth - June 2008
All Vehicles



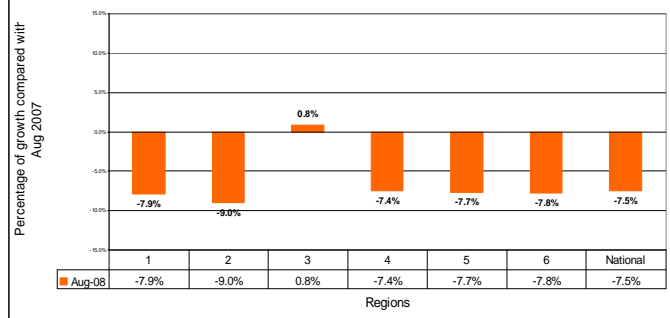
Regional Growth - July 2008
All Vehicles



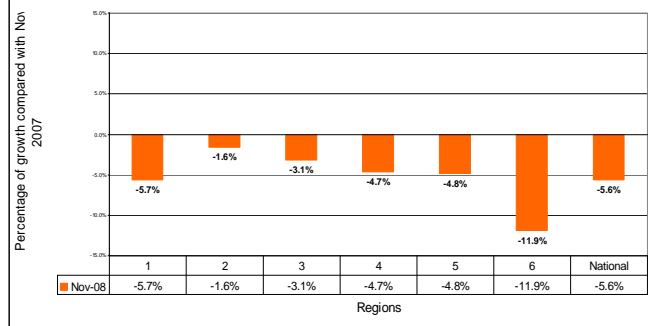
Regional Growth - Oct 2008
All Vehicles



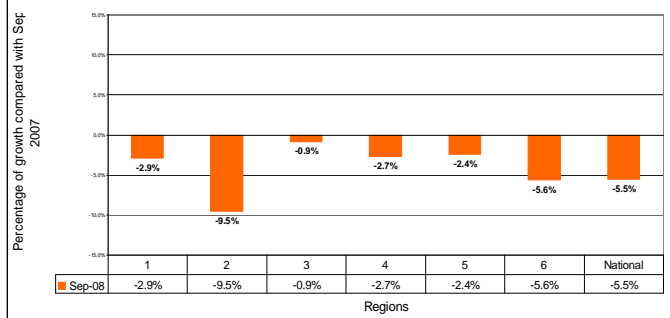
Regional Growth - Aug 2008
All Vehicles



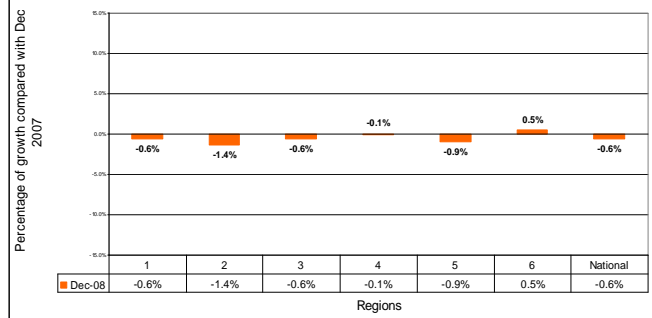
Regional Growth - Nov 2008
All Vehicles



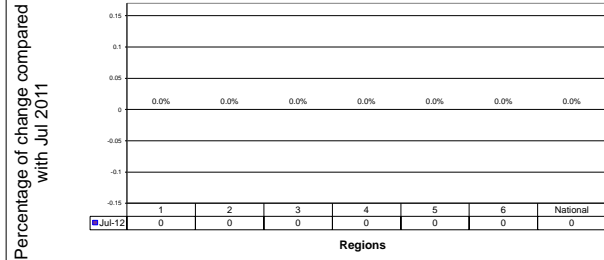
Regional Growth - Sep 2008
All Vehicles



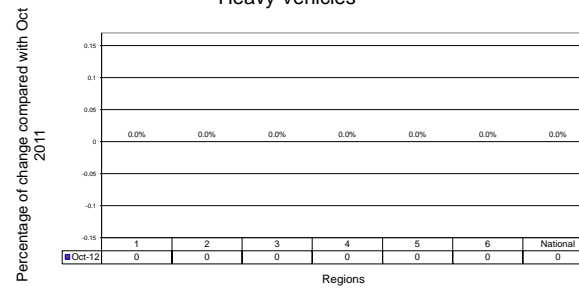
Regional Growth - Dec 2008
All Vehicles



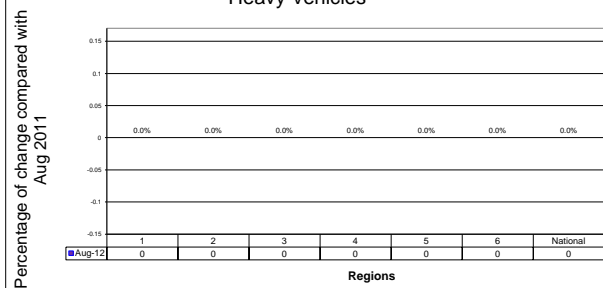
Regional Growth - Jul 2012
Heavy Vehicles



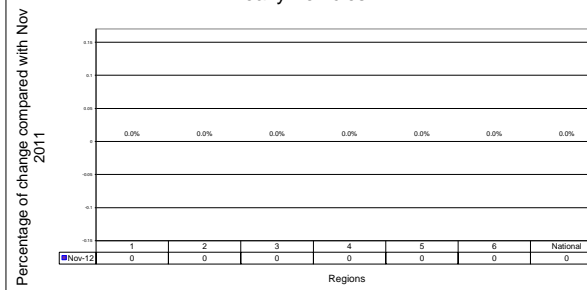
Regional Growth - Oct 2012
Heavy Vehicles



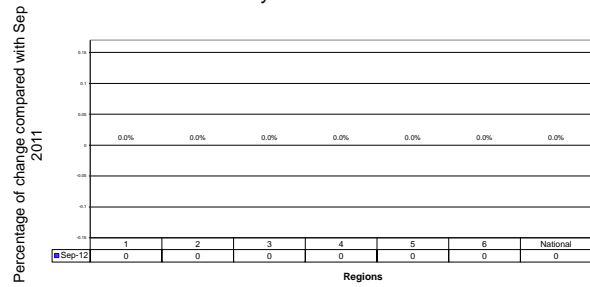
Regional Growth - Aug 2012
Heavy Vehicles



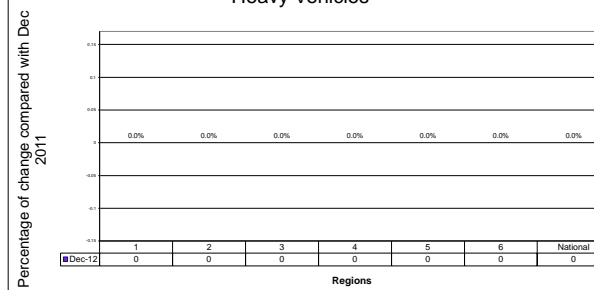
Regional Growth - Nov 2012
Heavy Vehicles

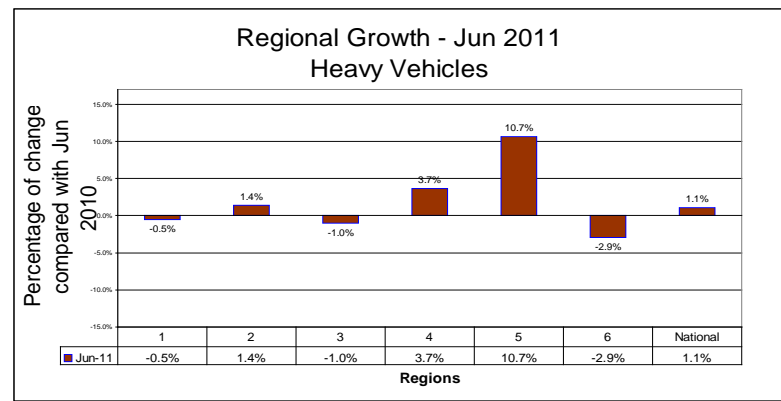
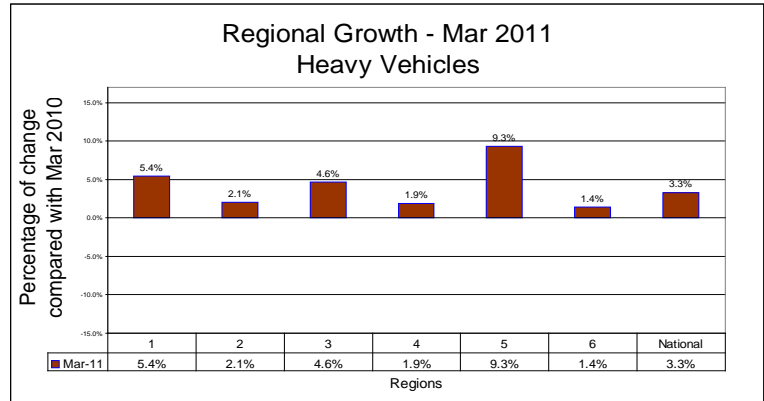
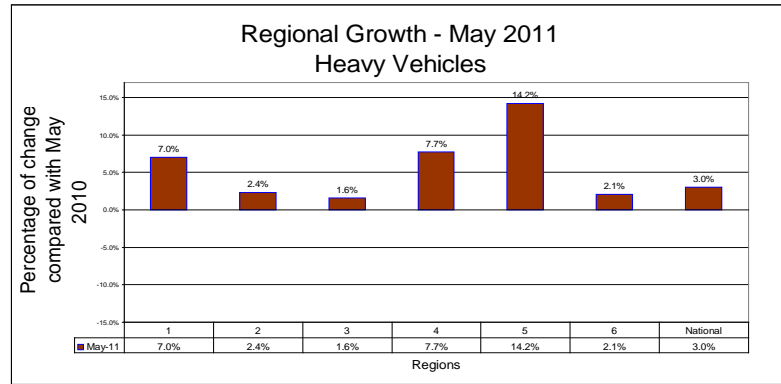
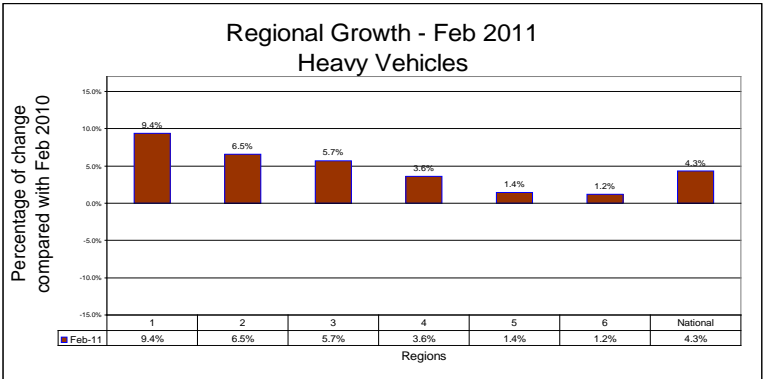
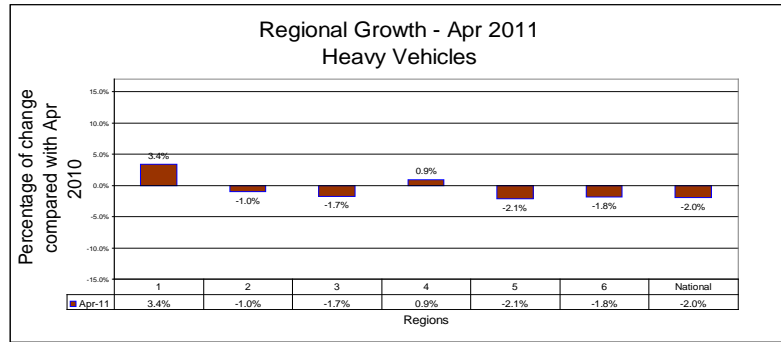
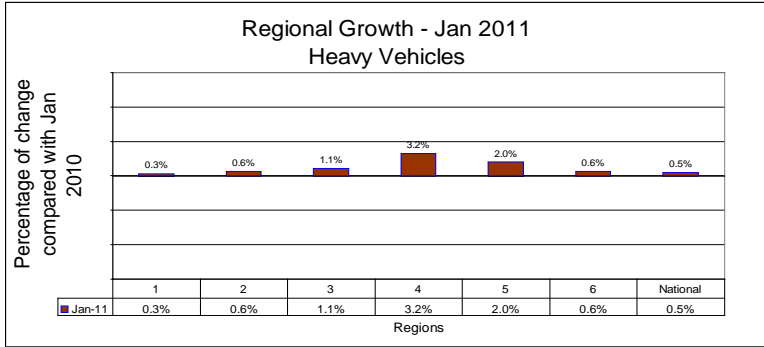


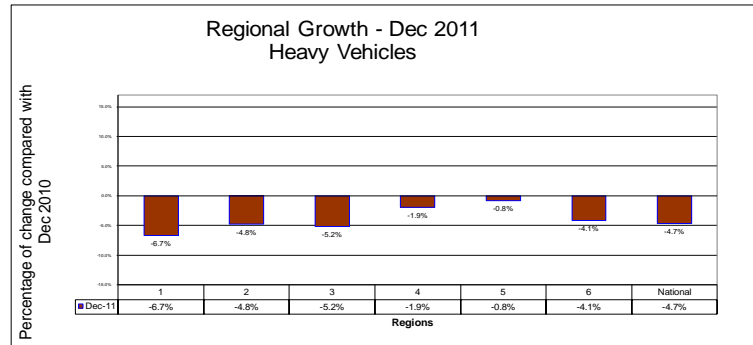
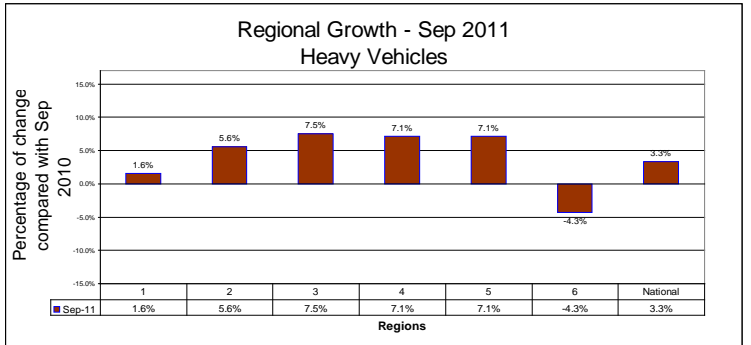
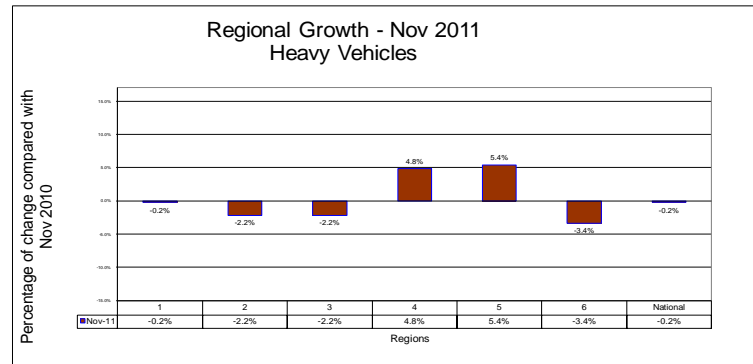
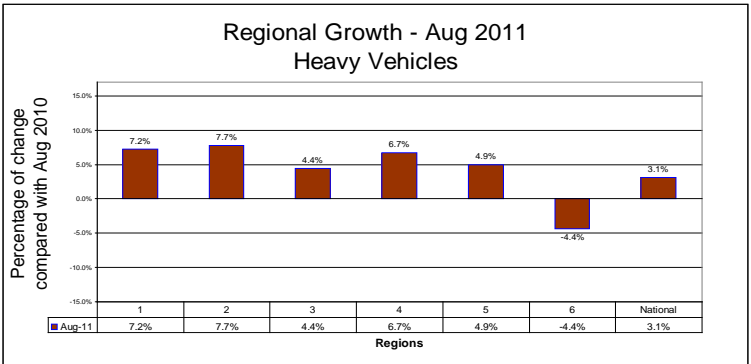
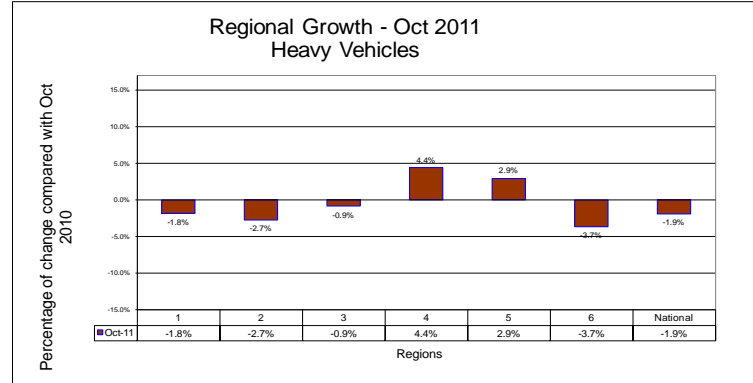
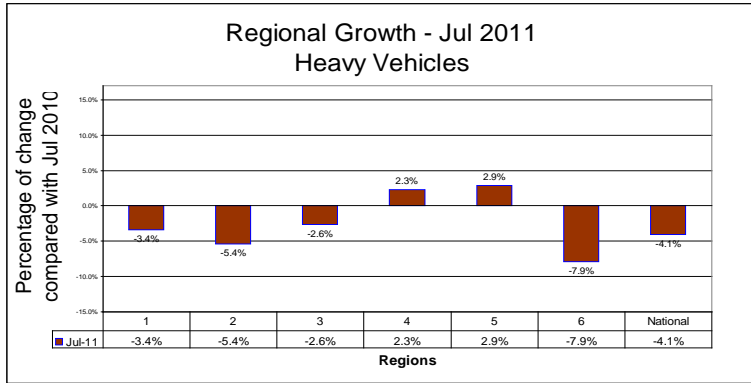
Regional Growth - Sep 2012
Heavy Vehicles



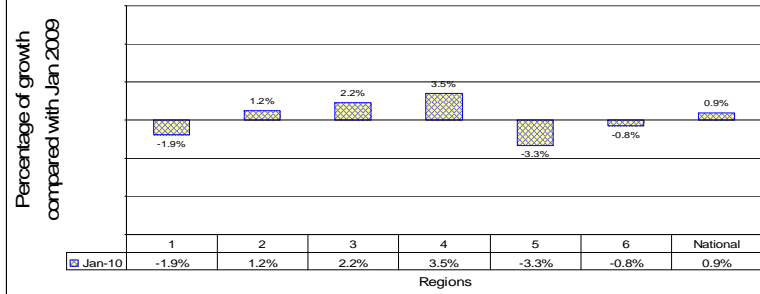
Regional Growth - Dec 2012
Heavy Vehicles



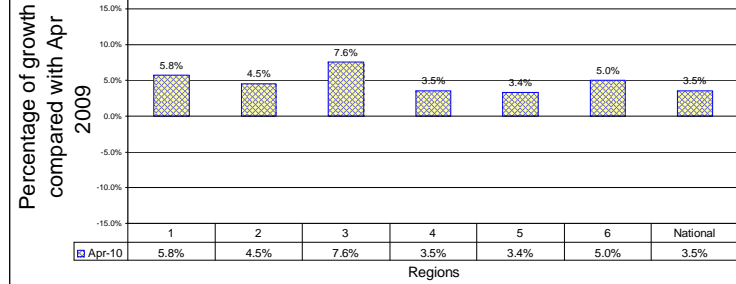




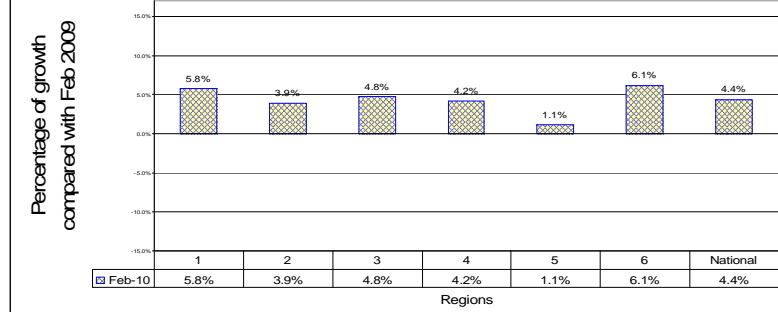
Regional Growth - Jan 2010
Heavy Vehicles



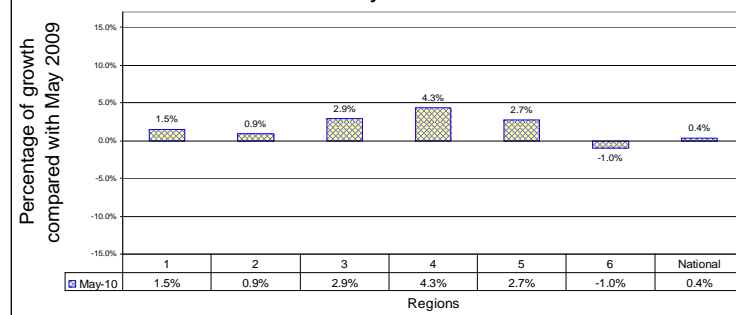
Regional Growth - Apr 2010
Heavy Vehicles



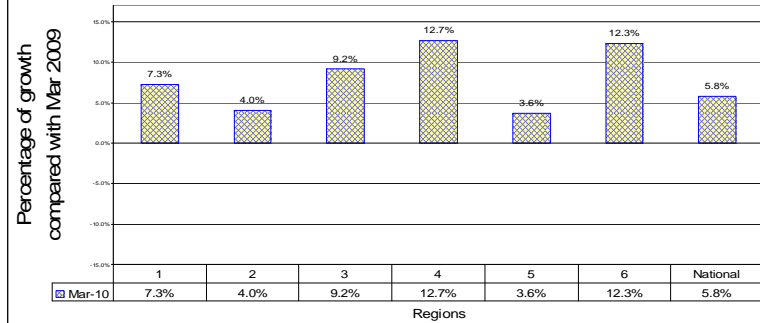
Regional Growth - Feb 2010
Heavy Vehicles



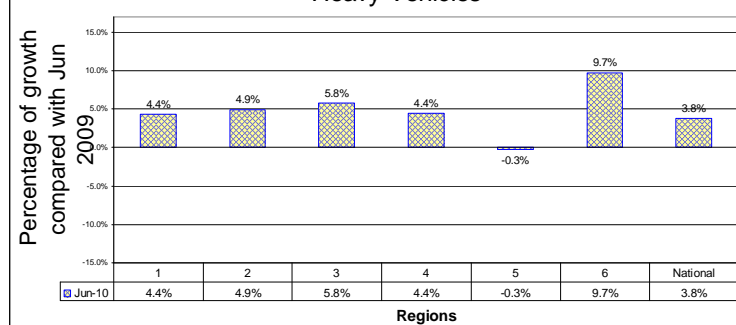
Regional Growth - May 2010
Heavy Vehicles

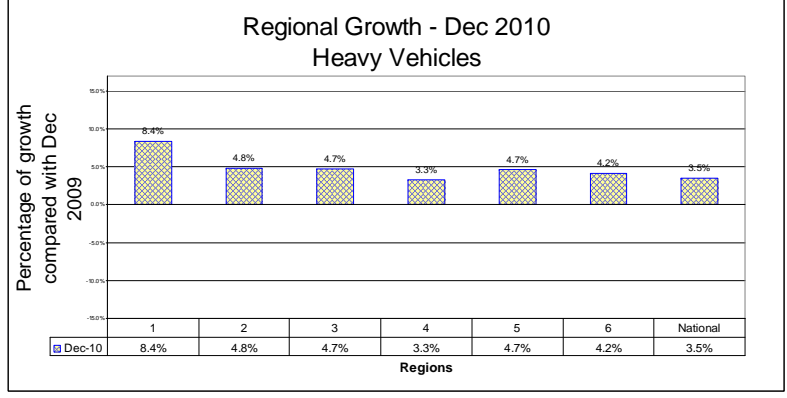
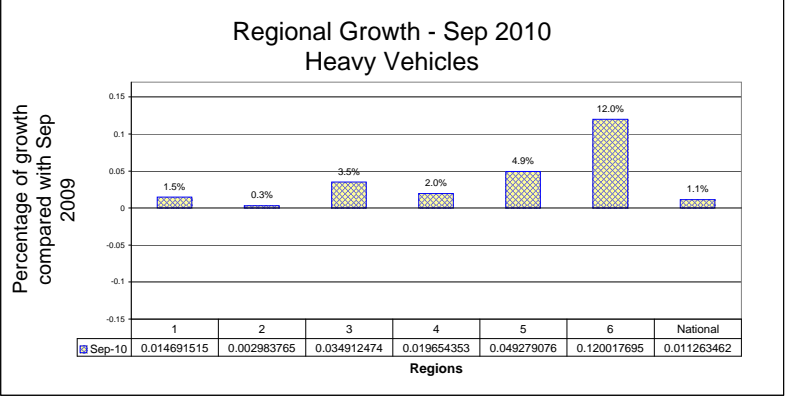
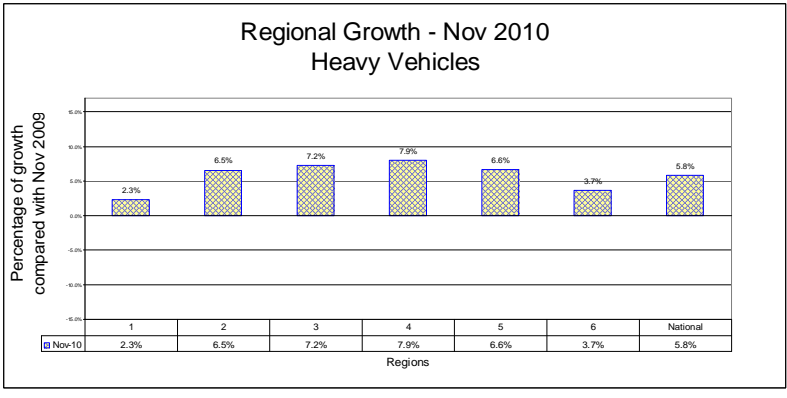
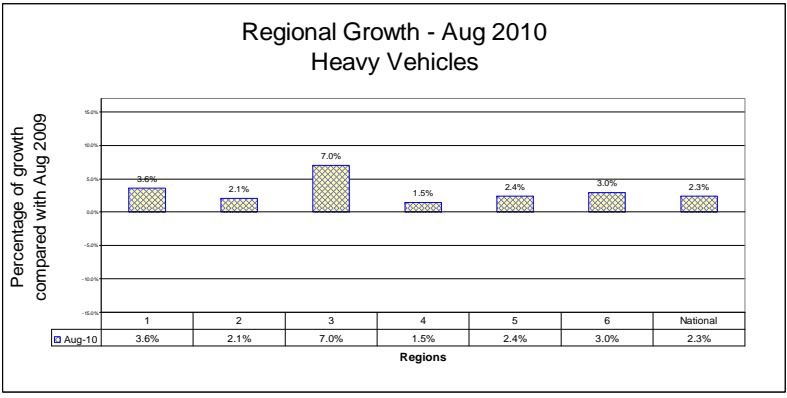
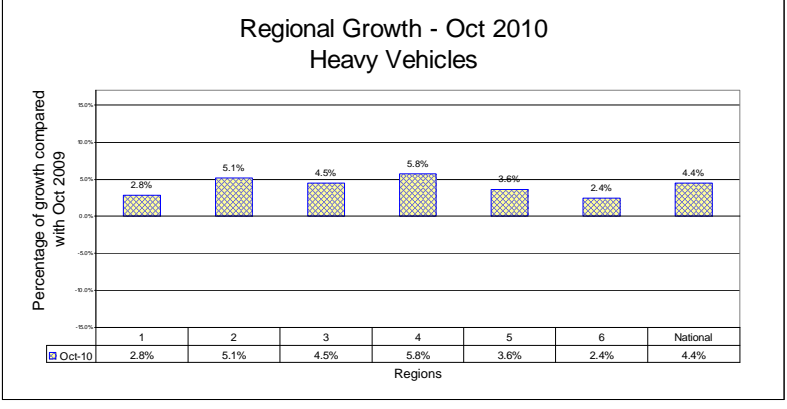
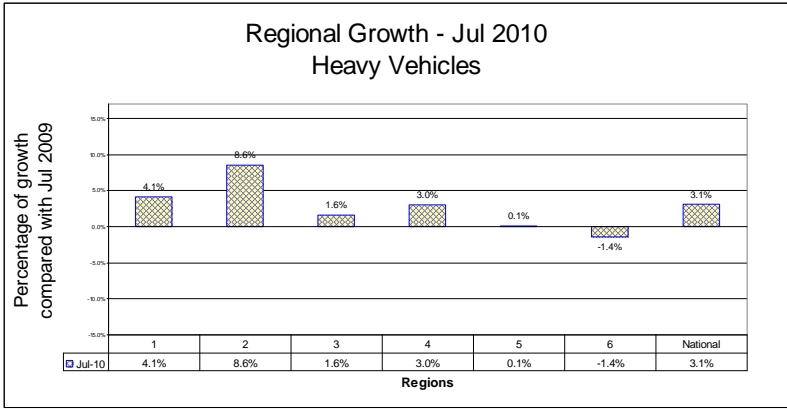


Regional Growth - Mar 2010
Heavy Vehicles

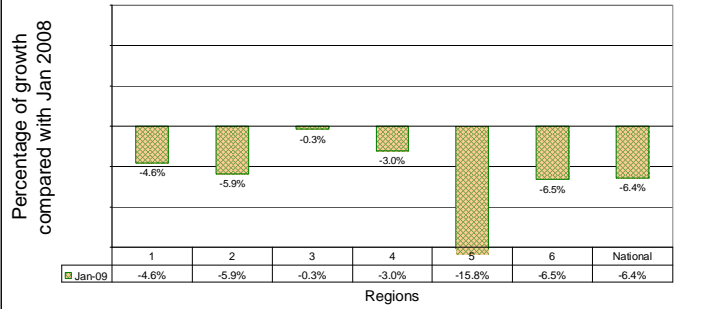


Regional Growth - Jun 2010
Heavy Vehicles





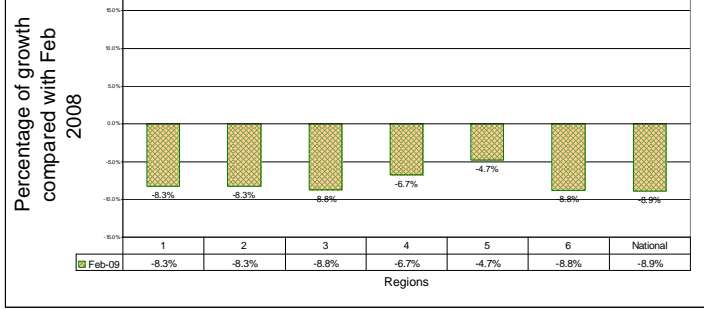
Regional Growth - Jan 2009
Heavy Vehicles



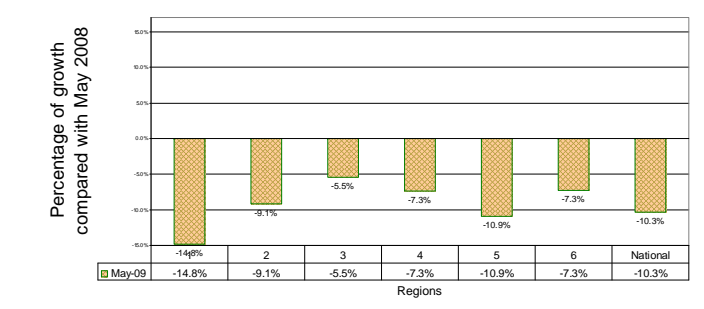
Regional Growth - Apr 2009
Heavy Vehicles



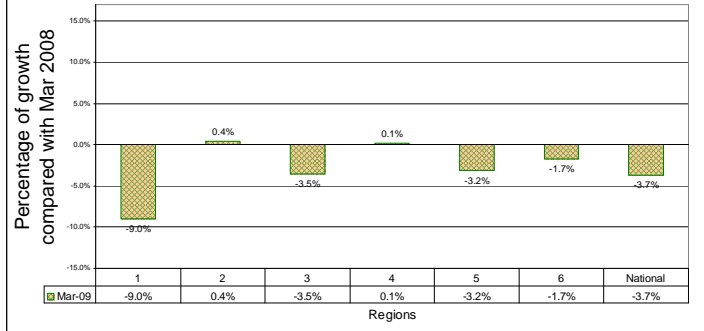
Regional Growth - Feb 2009
Heavy Vehicles



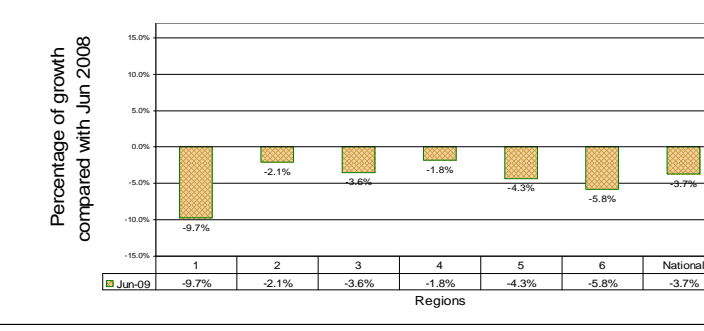
Regional Growth - May 2009
Heavy Vehicles

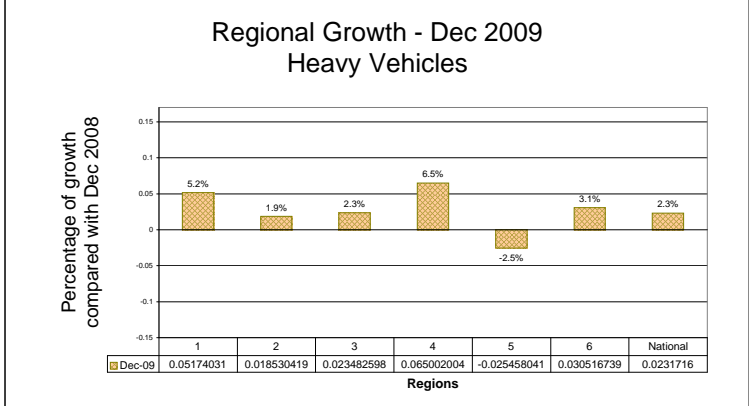
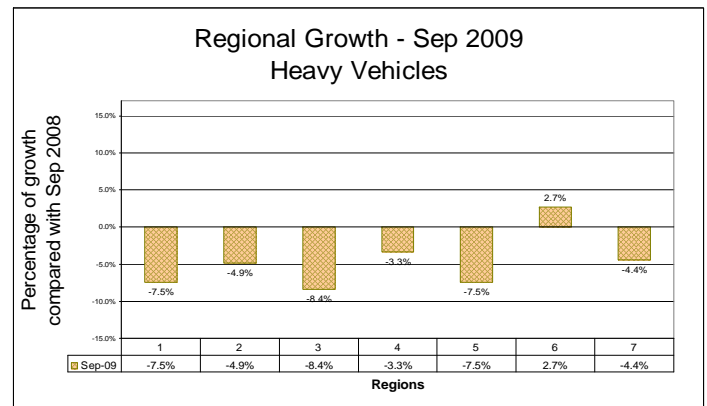
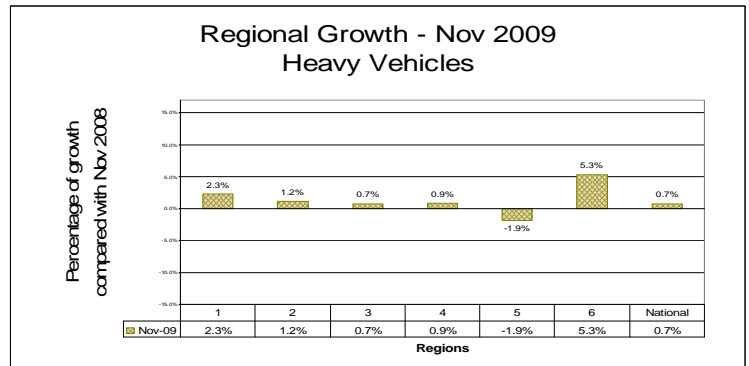
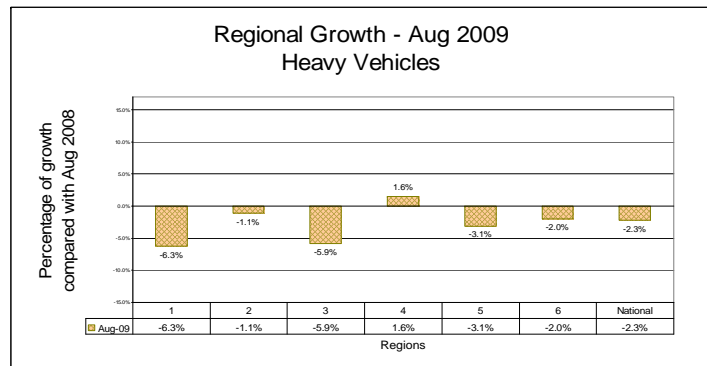
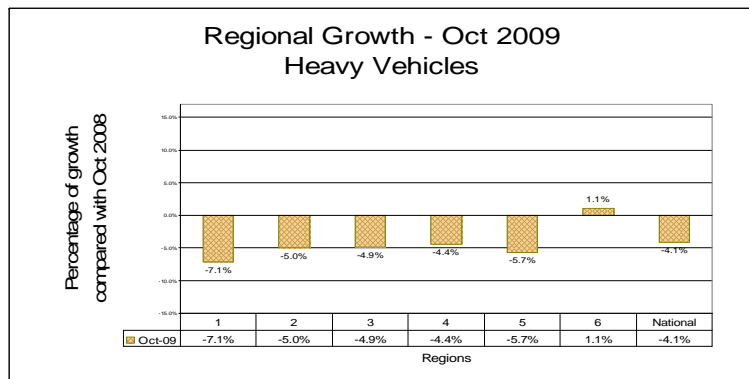
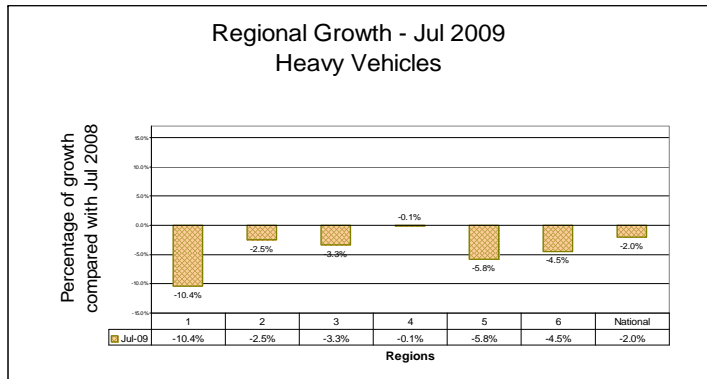


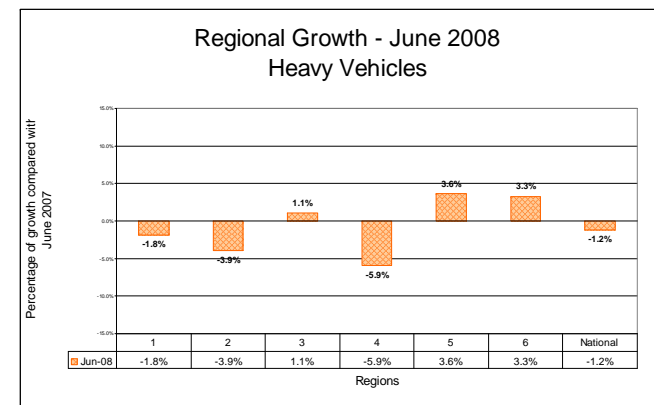
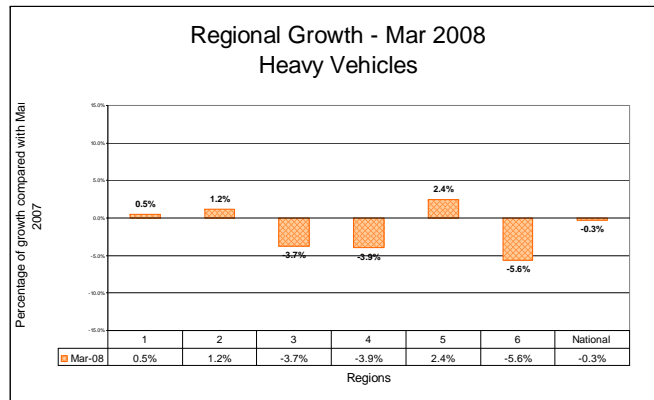
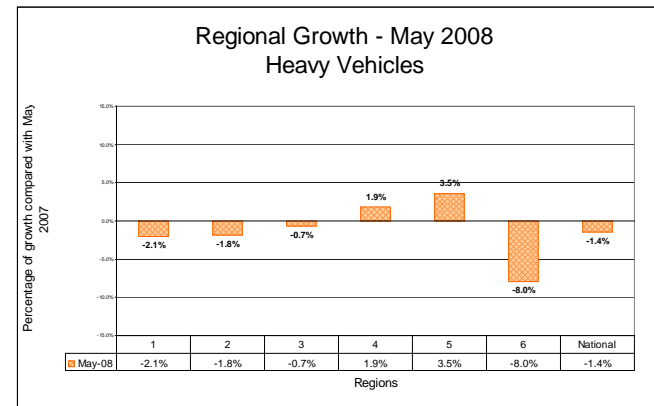
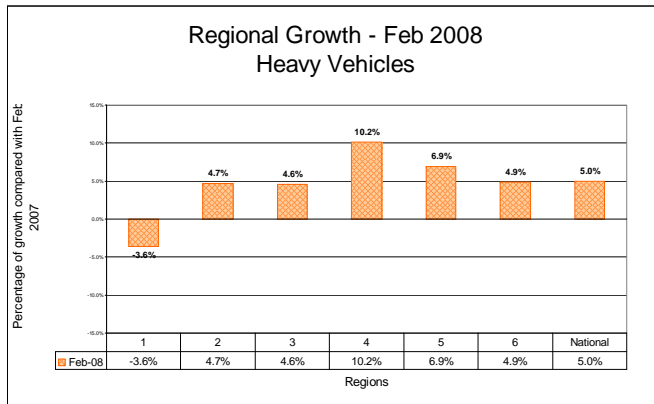
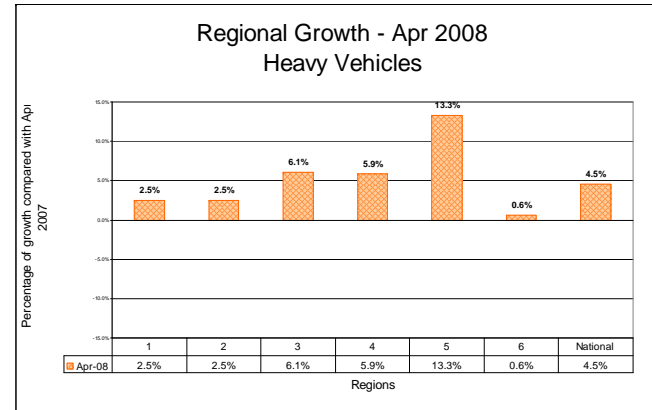
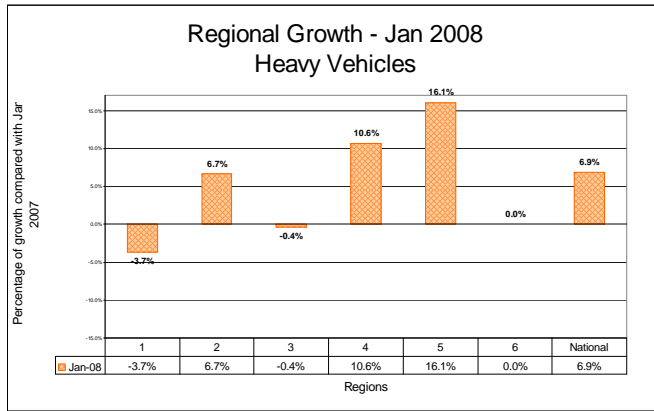
Regional Growth - Mar 2009
Heavy Vehicles



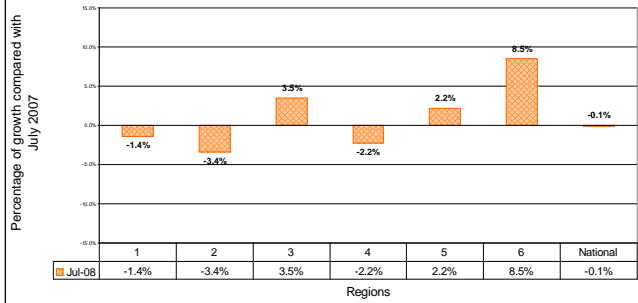
Regional Growth - Jun 2009
Heavy Vehicles



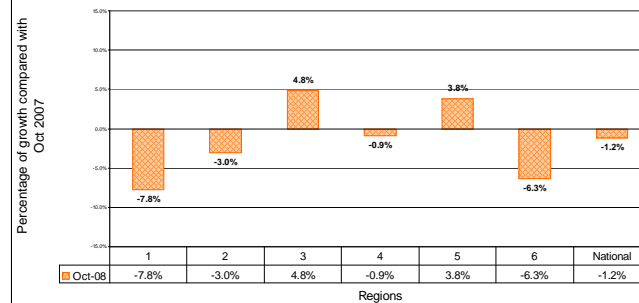




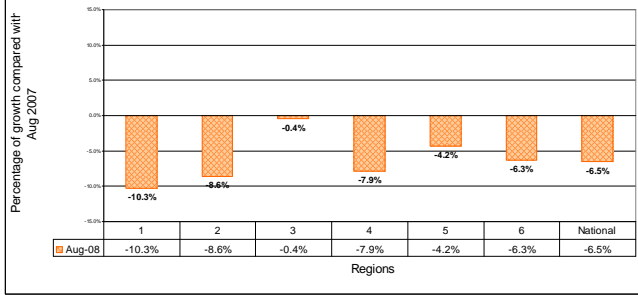
Regional Growth - July 2008
Heavy Vehicles



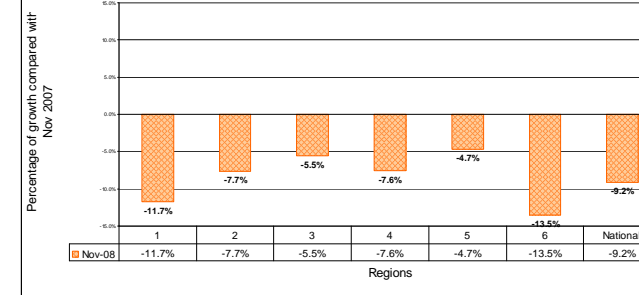
Regional Growth - Oct 2008
Heavy Vehicles



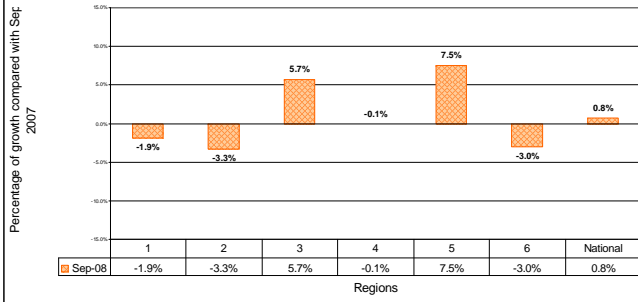
Regional Growth - Aug 2008
Heavy Vehicles



Regional Growth - Nov 2008
Heavy Vehicles



Regional Growth - Sep 2008
Heavy Vehicles



Regional Growth - Dec 2008
Heavy Vehicles

