



Traffic Volumes Monthly Report July 2013

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Revision Schedule

Rev. No	Date	Description	Prepared by	Reviewed by	Approved by
1	8/08/2013	Final	Bernadette Bañez	Philip Blagdon	

Overview

Summary

The purpose of this report is to provide information about changes to and trends in Monthly Average Daily Traffic (MADT) on state highways.

July 2013 State Highway Traffic Insight

3.0%

Nationally, the MADT of all vehicles was up by 3.0% versus July 2012.

All the regions MADT went up by at least 2% except for region 4 (Wellington, Nelson, Marlborough and Tasman)

8.3%

Nationally, the MADT for heavy vehicles had increased by 8.3 % versus July 2012.

In the July 2013 month, heavy vehicles showed increases in all regions compared to the July 2012. Regions 2 (Waikato and Bay of Plenty) and 3 (Taranaki, Manawatu-Whanganui, Hawkes Bay and Gisborne) were the only regions showed below the national percentage increase of 8.3% with 6.0% and 6.5%, respectively.

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Technical Notes

What is MADT? Monthly Average Daily Traffic (MADT) is the average of daily traffic volume in a given month. Each monitored location (count site), MADT is reported for all vehicles and heavy vehicles¹.
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.

How is MADT Change Reported Each month? We report MADT change for all vehicles and for heavy vehicles, at a national and regional level.
We first calculate the percentage change in MADT (all and heavy vehicles separately) of each site for the current month compared to the same month in the previous year.
We then calculate the median of those percentage changes across all sites and report it as the national MADT change for the current month.
To report each regional MADT change, we calculate the median of percent changes of the sample sites in each region.

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.

Site Coverage The table below shows the number of traffic counting sites in each NZ Transport Agency region. These numbers represent the sample sizes that are used to report the National and regional MADT changes in this report.

NZ Transport Agency Region	Number of Sites
Northland and Auckland	17
Waikato and Bay of Plenty	25
Taranaki, Manawatu-Wanganui, Hawkes Bay and Gisborne	17
Wellington, Nelson, Marlborough and Tasman	16
Canterbury and West Coast	14
Otago and Southland	19
Total	108

These sites are mostly NZTA’s national telemetry site. There are also a few regional continuous sites used in Auckland.

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

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

**Results:
Monthly
traffic at key
sites**

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

The MADT values for July 2012, July 2013 and percentage change compared are reported in the table below.

Note the MADT values include all vehicles.

Site	City Represented	MADT (All Vehicles) July - 12	MADT (All Vehicles) July - 13	% Change
Auckland Harbour Bridge (SH1)	Auckland	155,170	158,763	2%
Greenwood (SH1)	Hamilton	22,145	24,226	9%
Ngauranga Interchange (SH 1 and SH2)	Wellington	85,063	85,596	1%
Waimakariri Bridge	Christchurch	39,749	45,099	13%
Burnside	Dunedin	25,434	26,517	4%

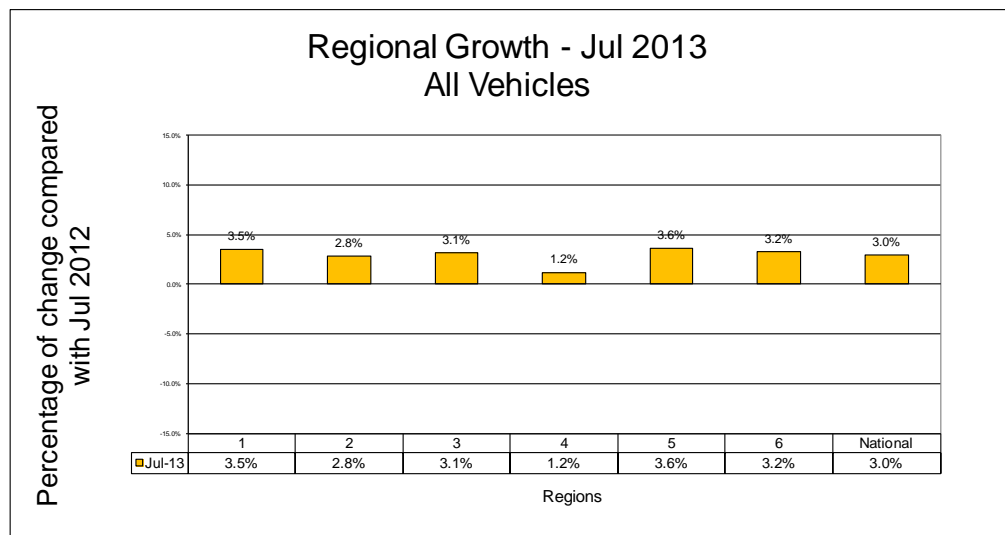
Results: All Vehicles

Regions

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

The graph below shows the MADT change compared with the same month last year. The MADT values here represent all vehicle types.

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



More graphs

The graphs (as above) dated back to January 2008 are available from the NZTA website:

<http://www.nzta.govt.nz/resources/state-highway-traffic-growth/>

All sites

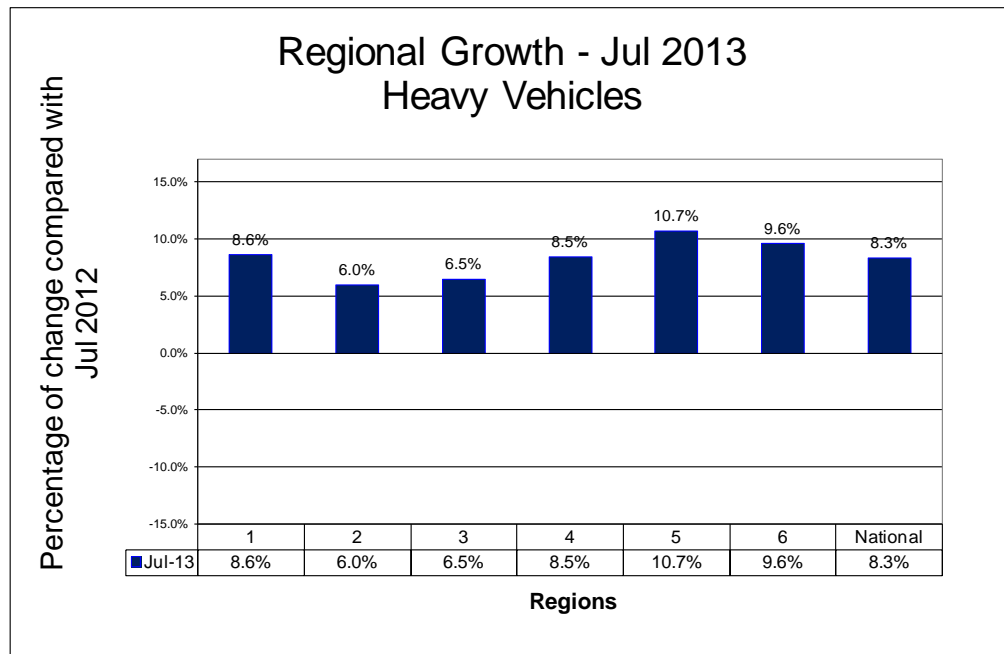
A table of MADT (all vehicles) values for the past thirteen months is attached to this report.

Results: Heavy Vehicles

Regions

Comparisons of heavy vehicle traffic across NZ Transport Agency regions as detailed below.

The graph shows the MADT change compared with the same month last year. The MADT values here represent heavy vehicles only.



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

More graphs

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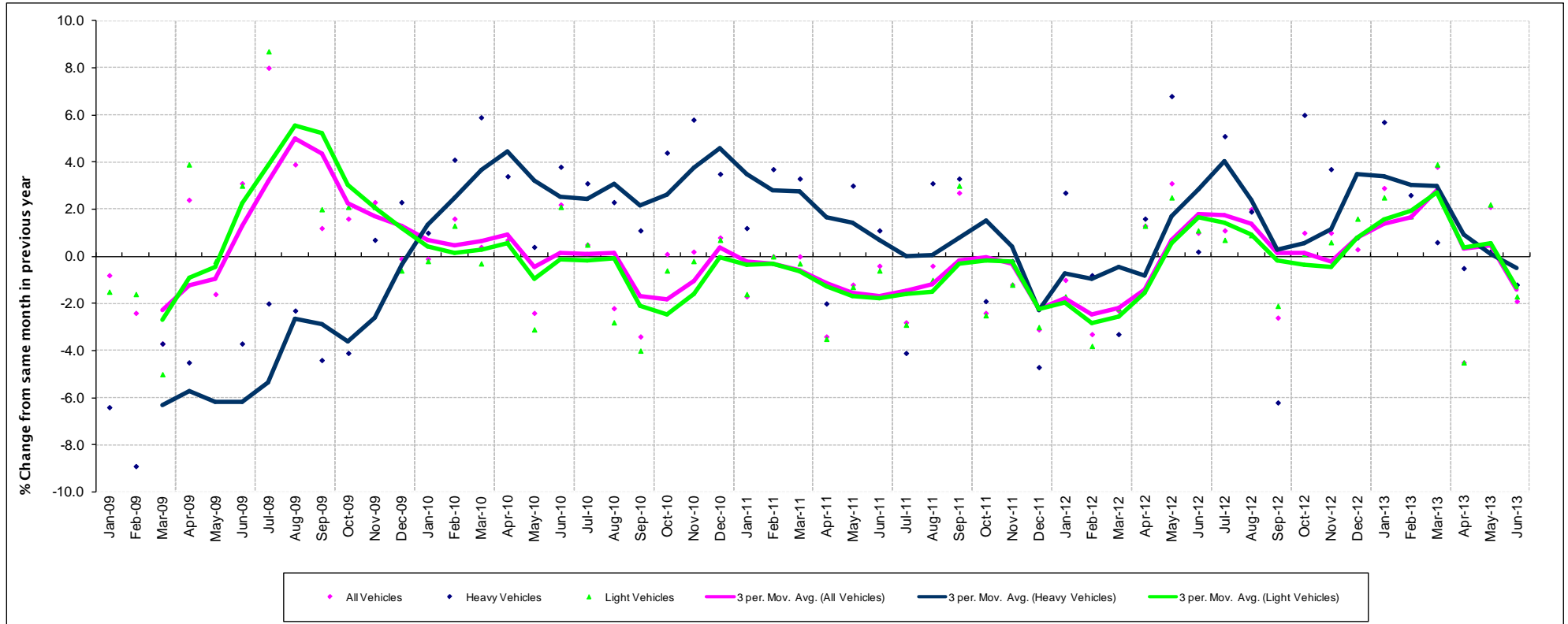
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All sites

A table of MADT (heavy vehicles) values for the past thirteen months is attached to this report.

Summary of MADT Change from Same Month in Previous Year

The graph and table below shows 5 years national MADT % change versus the same month of the previous year, summarising the figures published in the previous monthly reports.



Year	2009			2010			2011			2012			2013		
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	-0.8	-1.5	-6.4	-0.1	-0.2	1.0	-1.7	-1.6	1.2	-1.0	-1.7	2.7	2.9	2.5	5.7
February	-2.4	-1.6	-8.9	1.6	1.3	4.1	0.0	0.0	3.7	-3.3	-3.8	-0.8	1.7	1.7	2.6
March	-3.7	-5.0	-3.7	0.4	-0.3	5.9	0.0	-0.3	3.3	-2.3	-2.2	-3.3	3.8	3.9	0.6
April	2.4	3.9	-4.5	0.7	0.6	3.4	-3.4	-3.5	-2.0	1.3	1.3	1.6	-4.5	-4.5	-0.5
May	-1.6	-0.2	-10.3	-2.4	-3.1	0.4	-1.2	-1.3	3	3.1	2.5	6.8	2.1	2.2	0.2
June	3.1	3.0	-3.7	2.2	2.1	3.8	-0.4	-0.6	1.1	1	1.1	0.2	-1.9	-1.7	-1.2
July	8.0	8.7	-2.0	0.5	0.5	3.1	-2.8	-2.9	-4.1	1.1	0.7	5.1	3.0	2.5	8.3
August	3.9	5.0	-2.3	-2.2	-2.8	2.3	-0.4	-1.0	3.1	2.0	0.9	1.9			
September	1.2	2.0	-4.4	-3.4	-4.0	1.1	2.7	3.0	3.3	-2.6	-2.1	-6.2			
October	1.6	2.1	-4.1	0.1	-0.6	4.4	-2.4	-2.5	-1.9	1.0	0.1	6.0			
November	2.3	2.1	0.7	0.2	-0.2	5.8	-1.2	-1.2	-0.2	1.0	0.6	3.7			
December	-0.1	-0.6	2.3	0.8	0.7	3.5	-3.1	-3	-4.7	0.3	1.6	0.8			

Appendices

Current Year Growth Graphs

- All Vehicles
- Heavy Vehicles

MADTs of the sample sites for the past thirteen months

- All Vehicles
- Heavy Vehicles

