



Traffic Volumes Monthly Report September 2015

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Quality Assurance Statement

Project Manager: Gerald Wen

Prepared by: Gerald Wen

Reviewed by: Pradeep Ranasinghe

Revision Schedule

Rev. No	Date	Description	Prepared by	Reviewed by	Approved by
1	15/10/2015	Draft	Gerald Wen		
2		Final	Gerald Wen	Pradeep Ranasinghe	Emma Harris

Overview

Summary

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

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

September 2015 State Highway Traffic Highlights

Light Vehicles

Nationally, the MADT for light vehicles was up 10%, when compared to the same period last year. The average monthly growth rate for the last eight month in 2015 was 4.7%.

All regions had an increase in September with a range of 7.2% to 12.9%.

Heavy Vehicles

Nationally, the MADT for heavy vehicles was up 7.6%, when compared to the same period last year. The average monthly growth rate for the last eight month in 2015 was 2.3%.

All regions had an increase in September with a range of 4.2% to 10.7%.

What's behind this move?

There was a strong increase for both the light and heavy MADT in September. The probable reasons could be attributed to the following factors, based on the information available to the date.

- Fuel prices remained below 2014 levels.
- *“Mortgage interest rates continue to fall and regional housing markets benefit as Auckland’s strength spills over.”*- ANZ Bank
- Consumer confidence raised
“The September ANZ consumer confidence survey suggests the economic ship is holding its course.” “Business confidence stopped free-falling in September.” - ANZ Bank
- *“Dairy prices have risen a stunning 63% in two months, and some products are now trading at prices that we regard as above the long-run sustainable level.”* - Westpac Bank
- *“Total international visitor arrivals are up 11% compared to the same period last year.”*- Statistics NZ

In this report

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Technical Notes

What is MADT? Monthly Average Daily Traffic (MADT) is the average daily traffic volume in a given month. At each monitored location (count site), MADT is reported for light vehicles, 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 daily traffic volume over a given calendar year.

How is MADT change reported each month? We report MADT change for light, heavy and all vehicles, at a national and regional level. We first calculate the percentage change in MADT (light, heavy and all 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	27
Taranaki, Manawatu-Wanganui, Hawkes Bay and Gisborne	19
Wellington, Nelson, Marlborough and Tasman	17
Canterbury and West Coast	15
Otago and Southland	19
Total	114

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

Report should be used with caution, because of the limited sample sizes.

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.

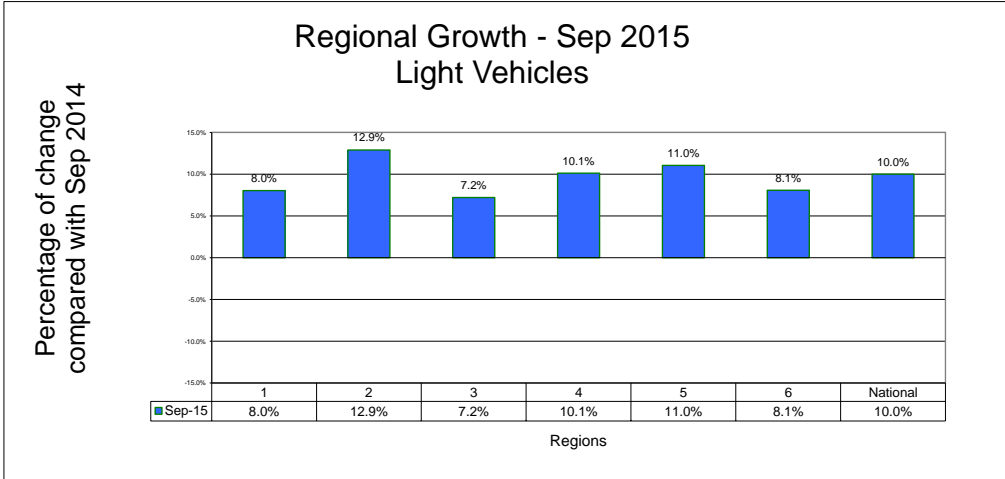
¹ Heavy vehicles are those with a gross vehicle mass exceeding 3.5 tonnes.

Results: Light 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 light vehicle types.



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6	Otago and Southland

All sites

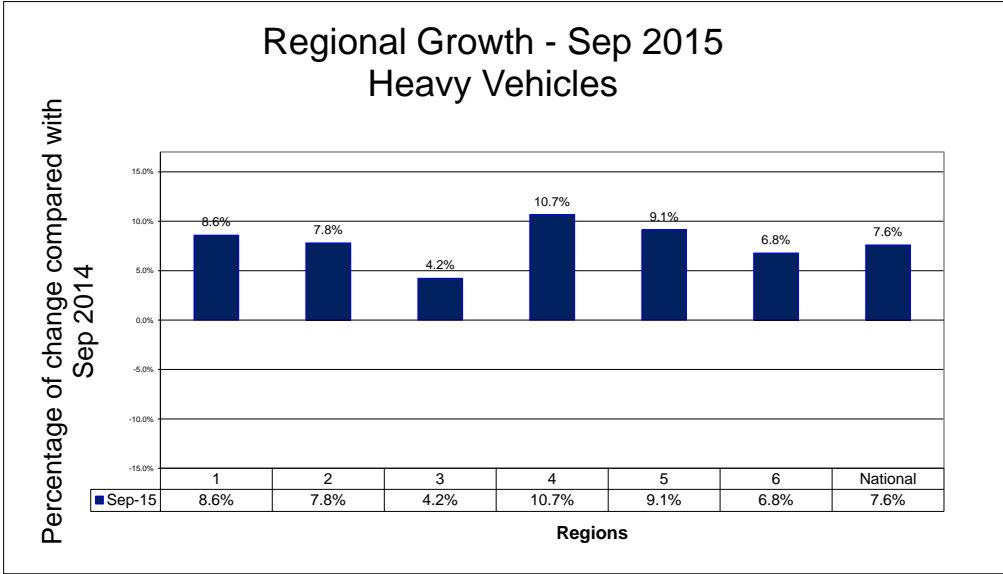
An Excel table of MADT (light vehicles) values for the past thirteen months is released with this report.

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

All sites

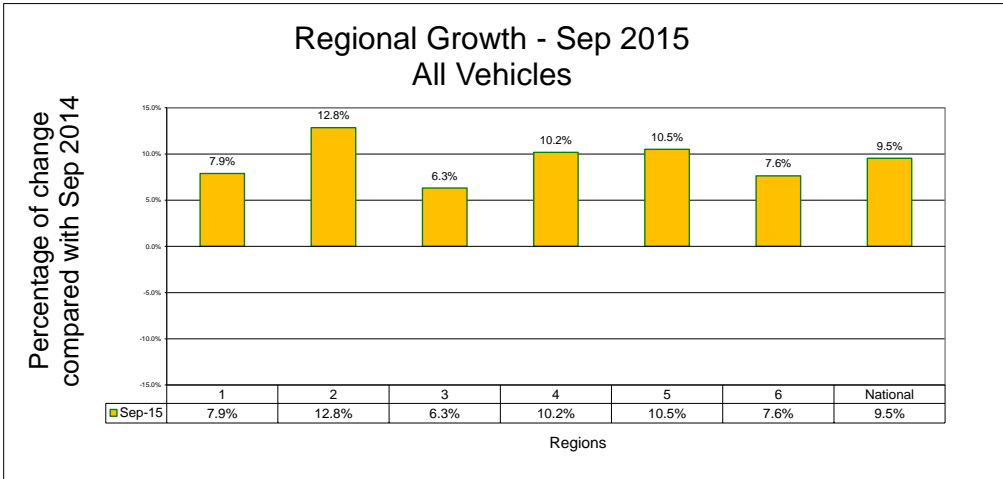
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Results: All Vehicles

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.



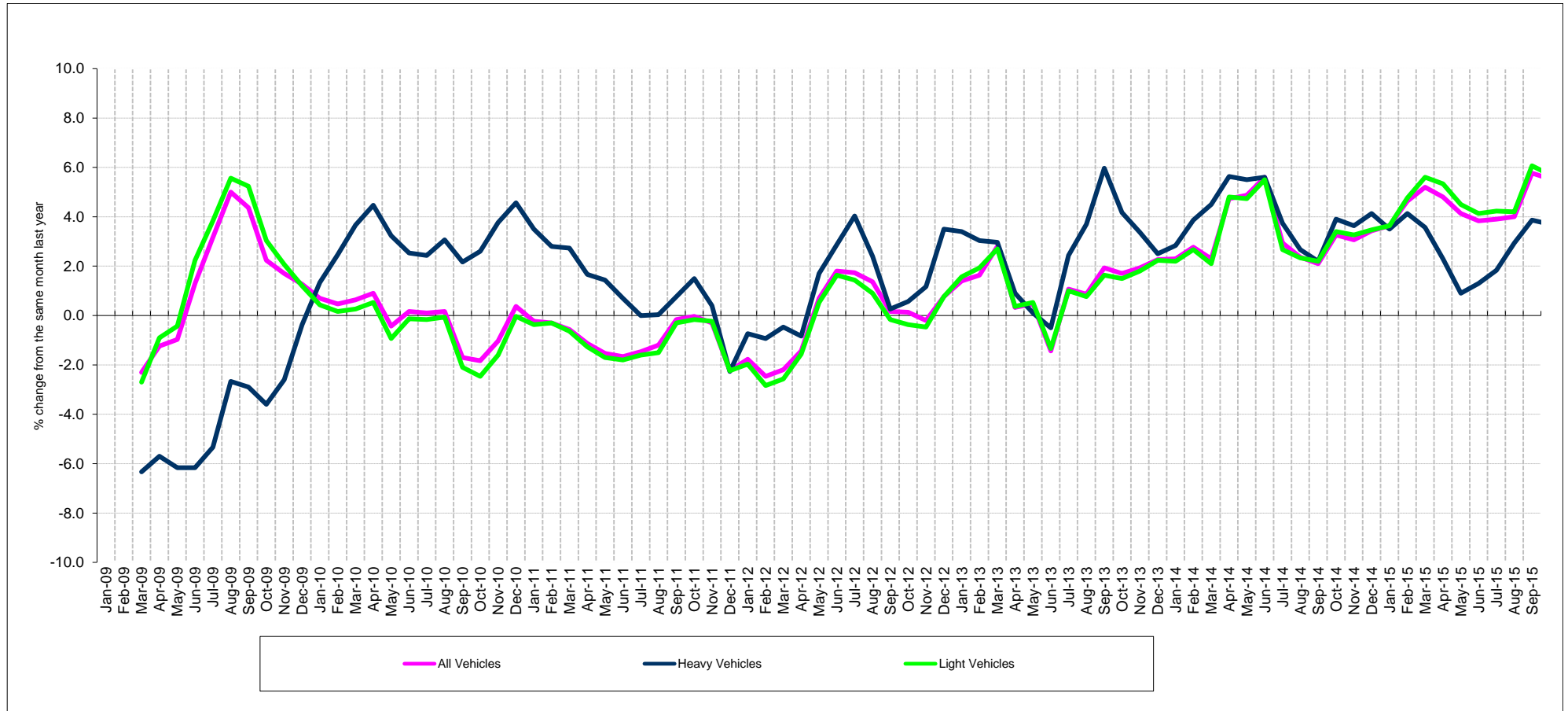
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All sites

An Excel table of MADT (all vehicles) values for the past thirteen months is released with this report.

Nationwide State Highway Traffic Growth

Moving three months average of % change from the same month last year



Nationwide State Highway Traffic Growth

MADT percentage change from the same month a year ago

Year	2009			2010			2011			2012			2013			2014			2015		
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	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	2.4	2.0	3.9	5.8	5.7	4.9
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	3.6	3.8	4.7	4.7	5.6	2.2
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	0.9	0.5	4.9	5.1	5.5	3.6
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	9.7	10.1	7.3	4.6	4.9	1.1
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	4.0	3.6	4.3	2.7	3.1	-2.0
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	3.1	2.8	5.2	4.2	4.4	4.8
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	1.7	1.6	1.7	4.8	5.2	2.7
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	1.5	1.5	4.0	2.3	2.6	1.1	3.0	3.0	1.3
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	1.3	0.9	5.6	2.3	2.4	3.8	9.5	10.0	7.6
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	2.3	2.1	2.9	5.2	5.2	6.8			
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	2.2	2.4	1.6	1.7	2.2	0.3			
December	-0.1	-0.6	2.3	0.8	0.7	3.5	-3.1	-3	-4.7	0.3	1.6	0.8	2.3	2.2	3	3.4	3.0	5.3			

Appendices

MADTs of the sample sites for the past thirteen months in Excel format.

- Light Vehicles
- Heavy Vehicles
- All Vehicles