

# NORTHLAND REGION Traffic Data Summary 2009



# NORTHLAND REGION TRAFFIC DATA SUMMARY

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2009.doc

## EXECUTIVE SUMMARY

This report presents the Annual Average Daily Traffic (AADT) data calculated by the New Zealand Transport Agency's Traffic Monitoring System (TMS) database for the Northland Region count sites, and posted to RAMM for the 2009 year. The sites include both monitored and calculated ('virtual') sites. Agfirst commenced this contract in May 2008.

### **Annual Average Daily Traffic (AADT) Data**

The traffic data contained in this document is an approximate indication of traffic flows in the region. The flows are calculated from non-continuous weekly counts collected four times throughout the year. Telemetry sites are counted on a continuous basis.

Seasonal variations and the limitations of the traffic counters generate uncertainty in the data. These factors should be taken into account when using the data.

AADT data is sourced from the NZTA TMS database.

For non-continuous sites the NZTA TMS database calculates the site AADT by applying daily adjustment factors to the daily counts for the site, sourced from the site's assigned parent. The assigned parent site is a continuous count site with similar annual traffic patterns. The daily factors for the parent are the ratio of the parent AADT to the parent daily count, for each day.

### **Continuous Telemetry Sites**

The Northland Region contains one continuous National telemetry site, located at Kawakawa (01N00212). One further National telemetry site located south of the Region 1/2 boundary, but north of Wellsford on SH1N (01N00339) is included also.

The eight local telemetry sites are nominally located at:

- SH1N South of Kaitaia (01N00130)
- SH1N Western Hills Dr, Whangarei (01N00265)
- SH1N South of Whangarei (01N00274)
- SH10 North of Kerikeri (01000029)
- SH12 East of Maungaturoto (01200220)
- SH12 East of Kaikohe (01200004)
- SH 14 Whangarei (01400000)
- SH 15A Marsden Point (15A00003)

### **HCV Data**

The TMS database applies the parent Annual Average Daily HCV proportion (HCV%) to the non-continuous sites, if no classified count data is available for the site.

Prior to 2004, TMS considered axle count data only as valid for HCV reclassification. Hence all HCV% data for 2003 was adopted from parent sites.

From 2004 onwards, length count data is also used by the TMS database to determine the HCV% at non-continuous sites (if axle data is not available).

For 2009, 5 of the non-continuous sites adopted the parent HCV% (or the prior-year HCV% if it was based on classified data). The remaining 48 sites were based on length classification counts. All 9 continuous sites had one axle classification count each during the year.

### **New Sites**

No new sites were added to the network in 2009. The following sites were upgraded to telemetry 01200004, 01400000 and 15A00003. A number of sites were upgraded from single-loop volume to double-loop length count sites for the year.

### **TMS Parent Site Updates**

The TMS parent sites were updated during 2007 to better reflect the greater seasonal variations experienced across the Northland region, than the National Telemetry sites outside the region could mirror. The primary parents are now all local telemetry sites, with few of the secondary and tertiary parents from outside the region.

The effects on 2007 data have been: - to increase AADT's for most sites because of the higher seasonal flows in the region; and to estimate a better HCV% for sites having to adopt data from the parent, as many National Telemetry sites used as parents were volume-only, having default HCV% values of 5%.

### **Count Frequency**

Over the period 2003 to 2009 the total number of days counted has increased from 1114 to 4493 days, ie approx 400%.

Over the same period the available length data has increased from 625 to 4330, ie approx 700%. This shows the increase of double loop sites being installed.

Count frequency has remained at four times per annum.

We have typically loaded 8 weeks of data per site instead of the required 4 weeks as per contract.

Northland Region and sites



Region: 1

01 - Northland - Site Details

SH	RS	RP	Site Ref	Description	NZMG East	NZMG North	Lane	Equipment (current)
10	0	7.38	01000007	Sth of Puketona Rd (SH11)	2598403	6654696	Both	Dual Loop
10	17	11.14	01000029	About 1km south of Takou Bay Rd	2591274	6672236	Both	Dual Loop
10	48	11.93	01000060	About 1.1 km north of Salvation Rd	2569884	6686063	Both	Dual Loop
10	7	3.34	01000011	Nth of Wakelin Rd (about 3.5km north of SH11)	2597401	6657706	Both	Dual Loop
10	7	8.23	01000015	Springbank Road, 1km south of Waimate Nth Rd	2594816	6661592	Both	Dual Loop
10	79	12.86	01000092	East of Lake Ohia Bridge, midway btwn Inland Rd & Pekaerau Rd	2544874	6690253	Both	Dual Loop
10	79	2.2	01000076	By Doubtless Bay Croquet Club, 50-100m W of Stratford Dr, Cable Bay	2554580	6689961	Both	Dual Loop
11	0	12.33	01100013	Nth of Waimangaro Rd (actually just S of Waimangaro R btwn Paihia & Opuia)	2610972	6654159	Both	Dual Loop
11	0	3.74	01100004	Sth of Taumarere Bridge, just N of level crossing, N of Kawakawa	2609931	6648282	Both	Dual Loop
11	14	13.41	01100027	Puketona Rd (East of SH10)	2599846	6655785	Both	Dual Loop
12	0	4.2	01200004	South of Old School Rd (about 7km east of Kaikohe)	2588310	6646322	Both	Dual Loop
12	0	9.74	01200010	Broadway, Kaikohe, about 20m west of Quarry Rd	2584141	6643881	Both	Dual Loop
12	106	7.22	01200114	800m north of Aranga Station Rd	2566547	6606332	Both	Dual Loop
12	122	3.13	01200125	Nth of Ahikiwi Rd	2575965	6601344	Both	Dual Loop
12	132	19.27	01200151	Normanby St, about 100m east of Beach Rd/Victoria St, Dargaville	2588781	6583883	Both	Single Loop
12	132	8.37	01200141	About 1.5km north of Babylon Coast Rd (about 9km north of Dargaville)	2582911	6589548	Both	Dual Loop
12	153	10.35	01200163	North of Curnows Culvert, approx 250m south of Mittai Road, Mittai	2594850	6575703	Both	Dual Loop
12	17	10.81	01200027	West of Otua Rd (250m east of Horeke Rd, Taheke)	2570383	6637861	Both	Dual Loop
12	185	14.2	01200198	About 1.5km east of Ararua Rd, 1km west of Petley Rd	2618805	6564097	Both	Dual Loop
12	202	11.2	01200214	East of Blakey Rd	2630679	6563659	Both	Single Loop
12	202	18.34	01200220	East of Brynderwyn Brg 161 (about 2.2km from SH1)	2636853	6566178	Both	Dual Loop
12	61	0.81	01200062	West of Waiotemarama Gorge Rd, Pakanae	2547476	6633634	Both	Dual Loop
12	74	5.19	01200079	About 200m south of Weka Weka Rd/Goodwin Rd, Waimamaku	2554889	6626516	Both	Dual Loop
12	89	0.04	01200089	Sth of Wairau River Bridge, Waipoua Forest	2558890	6621946	Both	Dual Loop
14	0	0.13	01400000	Maunu Road, Whangarei, about 200m from SH1	2629038	6606713	Both	Dual Loop

14	0	3.27	01400002	West of Kowhai Park Rd, Whangarei	2626345	6605685	Both	Dual Loop
14	0	8.59	01400009	East of Kara Rd	2621381	6605763	Both	Dual Loop
14	30	3.18	01400034	East of Kara Rd (about 7km west of SH1 Whangarei)	2602331	6596371	Both	Dual Loop
14	44	6.76	01400052	East of Te Wharau Rd, about 5km north of SH12, Dargaville	2590844	6588923	Both	Dual Loop
1N	0	20.42	01N00020	North of Te Hapua Rd	2496074	6743014	Both	Dual Loop
1N	104	13	01N00117	Sth (physically East) of Fryer Rd (about 1.3km W of Ruaroa Rd)	2539385	6675507	Both	Dual Loop
1N	104	2.66	01N00107	Sth of Brott Rd (2km S of SH10 at Awanui)	2534362	6681265	Both	Dual Loop
1N	104	7.72	01N00112	About 150m south of Empire St, Kaitaia	2535015	6676513	Both	Dual Loop
1N	119	11.46	01N00130	Nth of Ramseys Bridge, Mangataiore	2550356	6670699	Both	Dual Loop
1N	167	4.35	01N00171	Sth of Sturge Rd (near Lewis Rd, Waihou Valley)	2575215	6656741	Both	Dual Loop
1N	185	0.09	01N00185	Nth of Hariru Rd (20m S of Te Puka Rd)	2586147	6651109	Both	Dual Loop
1N	185	5.19	01N00190	Sth of Mason Culvert (about 500m N of SH12, Ohaeawai)	2590573	6649840	Both	Dual Loop
1N	190	2.13	01N00192	North (actually 150m west) of Old Bay Road, 2km east of Ohaeawai.	2592887	6650349	Both	Dual Loop
1N	198	0.05	01N00198	About 50m east of SH10 junction, Pakaraka	2597770	6648851	Both	Dual Loop
1N	198	11.37	01N00209	Nth of Whangae Rd, about 1.2km NW of Kawakawa	2606729	6647069	Both	Single Loop
1N	198	13.2	01N00211	Queen St, Kawakawa, just W of junc with SH11	2608000	6646120	Both	Dual Loop
1N	198	8.59	01N00207	West of Saies Rd, just east of Moerewa	2604196	6645973	Both	Dual Loop
1N	20	0.01	01N00021	South of Te Hapua Rd, about 100m S of restaurant/service station.	2496303	6742542	Both	Dual Loop
1N	211	1.28	01N00212	KAWAKAWA - Telemetry Site 18, about 1.2km south of SH11	2608156	6644895	Both	Telemetry
1N	245	1.03	01N00246	About 1100m south of Corbett Rd/Whananaki North Rd	2627181	6624925	Both	Dual Loop
1N	245	15.67	01N00261	Kamo Bypass, about 250m north of Kamo Rd (just N of railway bridge)	2629389	6611371	Both	Dual Loop
1N	245	9.06	01N00254	About 250m north of north arm of Salesyards Rd	2628129	6617318	Both	Dual Loop
1N	245	9.7	01N00255	About 400m north of Apotu Rd & south arm of Salesyards Rd, Kauri	2628092	6616684	Both	Dual Loop
1N	261	1.33	01N00262	50m N of Titoki Place, 200m S of Percy St, Whau Valley	2629448	6609907	Both	Dual Loop
1N	261	3.17	01N00264	Western Hills Drive, about 350m north of Selwyn Avenue, Whangarei	2629684	6608240	Both	Single Loop
1N	261	3.17	01N10264	Western Hills Drive, about 350m north of Selwyn Avenue - Inc	2629684	6608240	Inc	Single Loop
1N	261	3.17	01N20264	Western Hills Drive, about 350m north of Selwyn Avenue - Dec	2629684	6608240	Dec	Single Loop
1N	261	3.71	01N00265	About 180m south of Selwyn Avenue, Whangarei	2629522	6607738	Both	Dual Loop

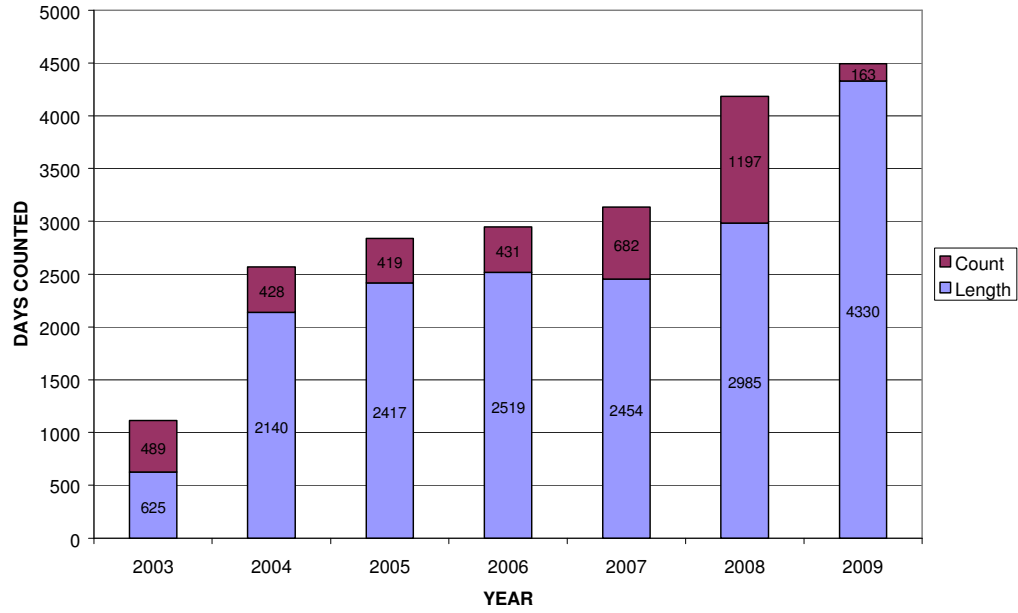
1N	261	4.3	01N10265	Virtual Site Sth of Wilson Avenue - Inc (S/B)	2629126	6607312	Inc	Virtual
1N	261	4.3	01N20265	Virtual Site Sth of Wilson Avenue - Dec (N/B)	2629126	6607312	Dec	Virtual
1N	266	0.62	01N00267	Otakia Rd, N of Raumanga Valley Rd, 100m S of Tarewa Rd, Whangarei	2629283	6606203	Both	Dual Loop
1N	266	2.21	01N00268	Imm S of Cemetery Bridge, 100m N of Tauroa St, Raumanga	2629017	6604791	Both	Dual Loop
1N	266	5.3	01N00271	About 400m north of northern Loop Rd exit, north of Otaika	2629162	6601801	Both	Dual Loop
1N	266	7.88	01N00274	Nth of Maungakarama Rd, Puwera	2627662	6599833	Both	Dual Loop
1N	273	13.86	01N00287	About 300m north of Yovich Rd/Flyger Rd	2636954	6591625	Both	Dual Loop
1N	292	6.14	01N00299	Nth of Uretiti Rd, about 2.5km S of Ruakaka	2641834	6584982	Both	Dual Loop
1N	303	5.75	01N00309	About 400m south of Glenmohr Rd, about 650m N of Schultz Rd	2638387	6574290	Both	Dual Loop
1N	319	16	01N00335	Virtual Site at Region 1/2 Boundary, about 1km north of Ross Rd	2643700	6553055	Both	Virtual
1N	65	2.5	01N00067	Sth of Motutango S of Salvation Rd (600m S of Turk Valley Rd)	2526632	6700476	Both	Dual Loop
1N	83	13.79	01N00097	Nth of Ninety Mile Beach Rd (about 1.5km S of Waiharara)	2528589	6693305	Both	Dual Loop
1N	83	19.36	01N00102	Sth of Spains Rd (about 400m S of Big Flat Rd/Srhoj Rd)	2527862	6697980	Both	Dual Loop
15A	0	2.92	15A00003	Port Marsden Highway, about 250m north of One Tree Point Rd/McCathie Rd	2640896	6591431	Both	Dual Loop



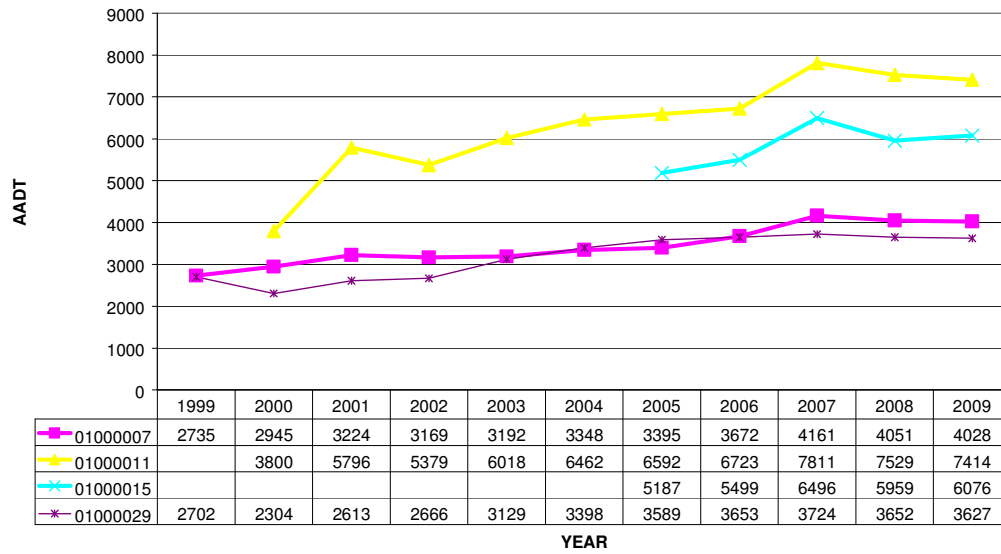
01-Northland 2009 Results						
Site Ref	AADT (2009)	HCV (2009)	% Heavy	Days Accepted	AADT Growth %	R^2
01000007	4028	318	7.9	44	2.9	0.9
01000011	7414	482	6.5	46	3.5	0.8
01000015	6076	322	5.3	46	3.8	0.6
01000029	3627	279	7.7	347	5.2	0.5
01000060	1914	180	9.4	41	2.6	0.7
01000076	3854	239	6.2	41	2.5	0.7
01000092	2794	212	7.6	41	1.2	0.3
01100004	2556	130	5.1	44	1.2	0.4
01100013	3999	156	3.9	42	1.5	0.4
01100027	3843	215	5.6	44	3.6	0.6
01200004	3555	203	5.7	116	1.6	0.2
01200010	7063	311	4.4	39	1.8	0.4
01200027	1451	93	6.4	39	5.6	0.3
01200062	1313	56	4.3	39	1.7	0.6
01200079	392	26	6.6	39	1.2	0.1
01200089	330	25	7.6	39	1.7	0.1
01200114	452	45	10	39	-0.1	0.0
01200125	797	71	8.9	39	1.2	0.0
01200141	1041	101	9.7	39	1.7	0.1
01200151	5762	553	9.6	39	-0.3	0.1
01200163	1764	159	9	42	-0.2	0.0
01200198	1855	156	8.4	39	-7	0.3
01200214	2635	253	9.6	39	0.4	0.1
01200220	2750	261	9.5	351	-2.1	0.0
01400000	19291	521	2.7	170	0.4	0.1
01400002	10740	440	4.1	39	2.6	0.8
01400009	5675	278	4.9	47	1.2	0.7
01400034	1860	171	9.2	39	0.6	0.1
01400052	2277	232	10.2	40	-1	0.2
15A00003	2002	943	47.1	127	4.3	0.4
01N00020	342	60	17.5	29	4.1	0.7
01N00021	365	32	8.8	42	1.4	0.1
01N00067	1047	102	9.7	29	0	0.0
01N00097	1636	200	12.2	41	-3.7	0.7
01N00102	3241	285	8.8	41	-3.3	0.5
01N00107	6335	405	6.4	41	1.1	0.5
01N00112	5217	219	4.2	41	-2.3	0.4
01N00117	2889	220	7.6	41	-0.1	0.0
01N00130	1101	154	14	244	-0.1	0.0
01N00171	1688	223	13.2	44	1.2	0.4
01N00185	1464	183	12.5	50	-1.6	0.5
01N00190	1503	189	12.6	38	-0.3	0.0
01N00192	4557	383	8.4	44	1.6	0.3
01N00198	5875	552	9.4	46	2	0.5
01N00207	7448	559	7.5	46	2.2	0.4
01N00209	7306	782	10.7	46	0.3	0.1

01N00211	8617	560	6.5	46	1.2	0.5
01N00212	6095	652	10.7	364	1.1	0.2
01N00246	8114	771	9.5	44	1.5	0.5
01N00254	11067	1129	10.2	39	-3.6	0.9
01N00255	9936	944	9.5	39	1.6	0.4
01N00261	8992	674	7.5	39	2.2	0.4
01N00262	15156	970	6.4	39	2.2	0.5
01N00264	22838	959	4.2	39	0.3	0.0
01N10264	11409	479	4.2		0.7	0.1
01N20264	11429	480	4.2		-0.7	0.1
01N00265	22141	930	4.2	267	-0.2	0.0
01N10265	11071	465	4.2		-2.3	0.5
01N20265	11071	465	4.2		-2.3	0.5
01N00267	25357	1293	5.1	39	0.2	0.0
01N00268	18012	1153	6.4	39	2.7	0.5
01N00271	15977	1374	8.6	39	1.8	0.4
01N00274	13869	1429	10.3	346	0.4	0.2
01N00287	11257	1283	11.4	39	2.7	0.4
01N00299	9775	968	9.9	35	1.5	0.7
01N00309	7973	933	11.7	41	1.5	0.6
01N00335	8959	905	10.1		-0.8	0.8

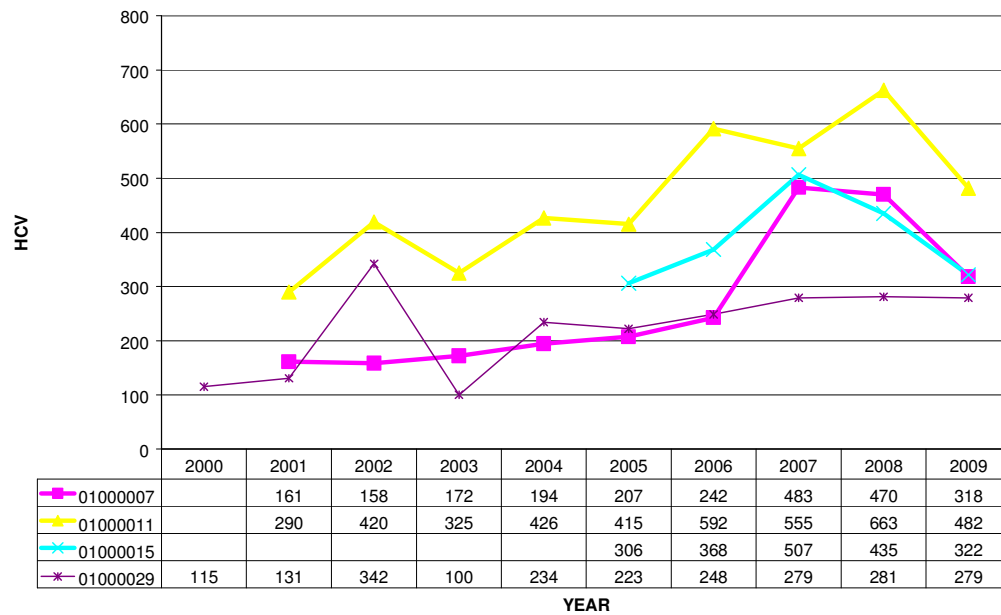
MEASURE OF QUALITY



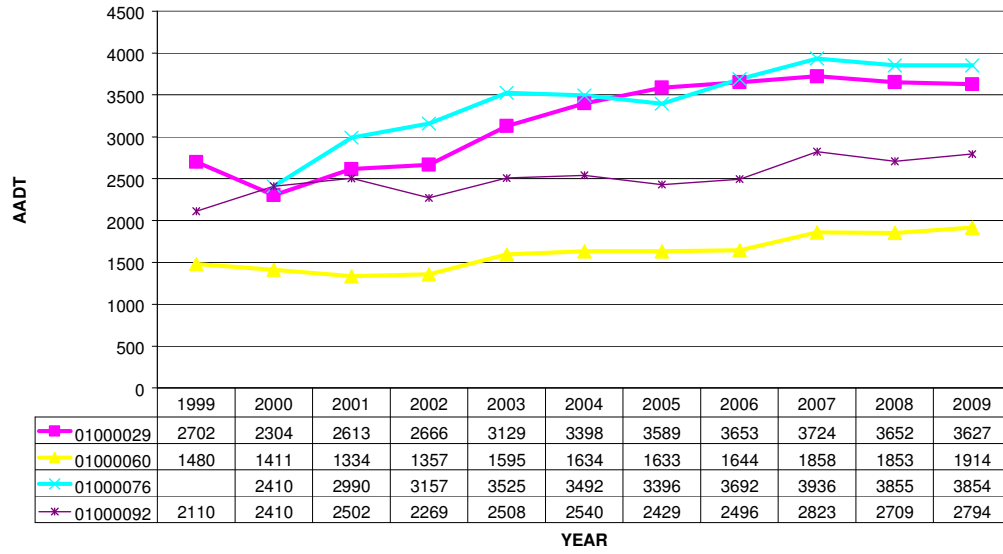
SH 10 AADT



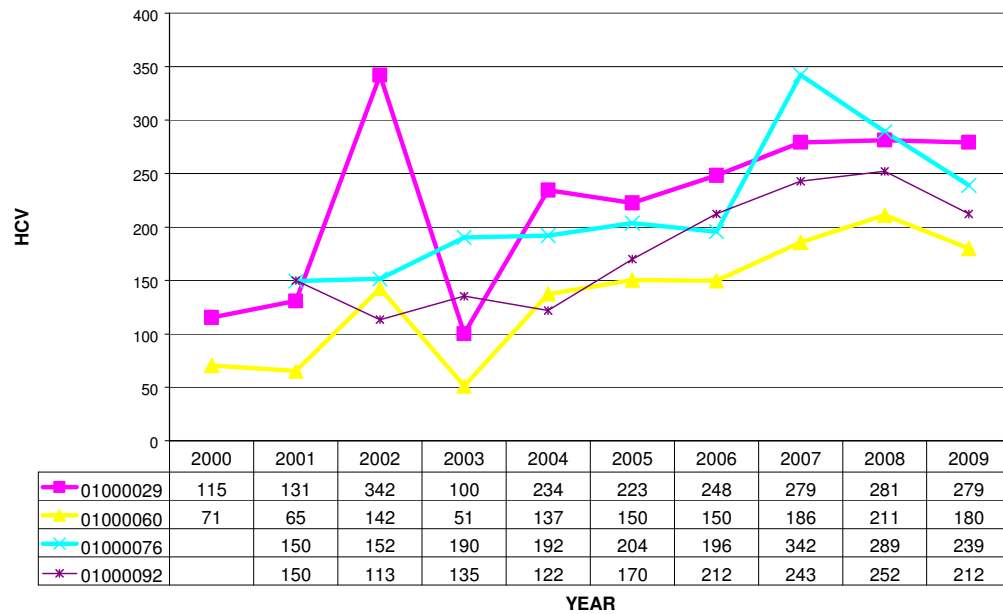
SH 10 HEAVY VEHICLES



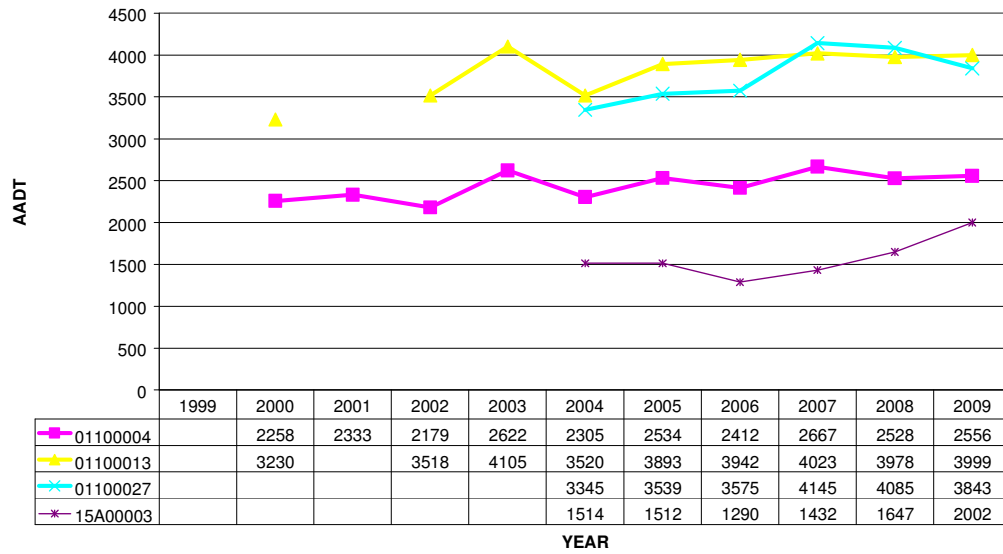
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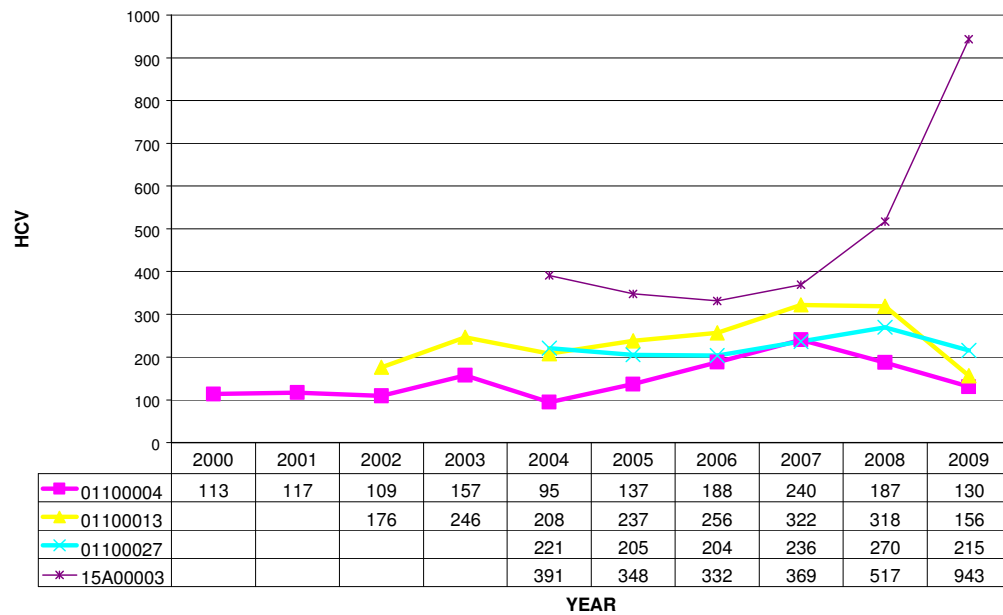
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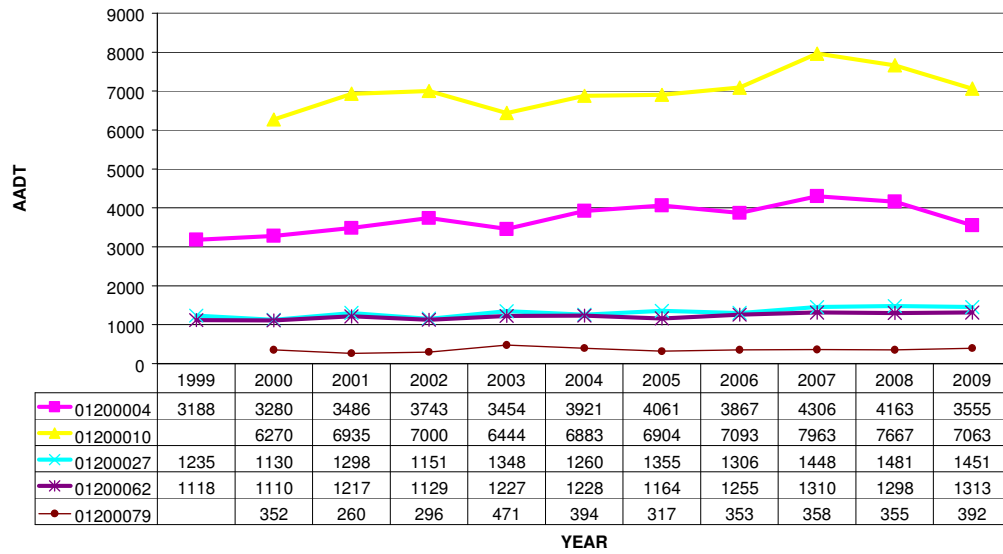
SH 11 AND 15A



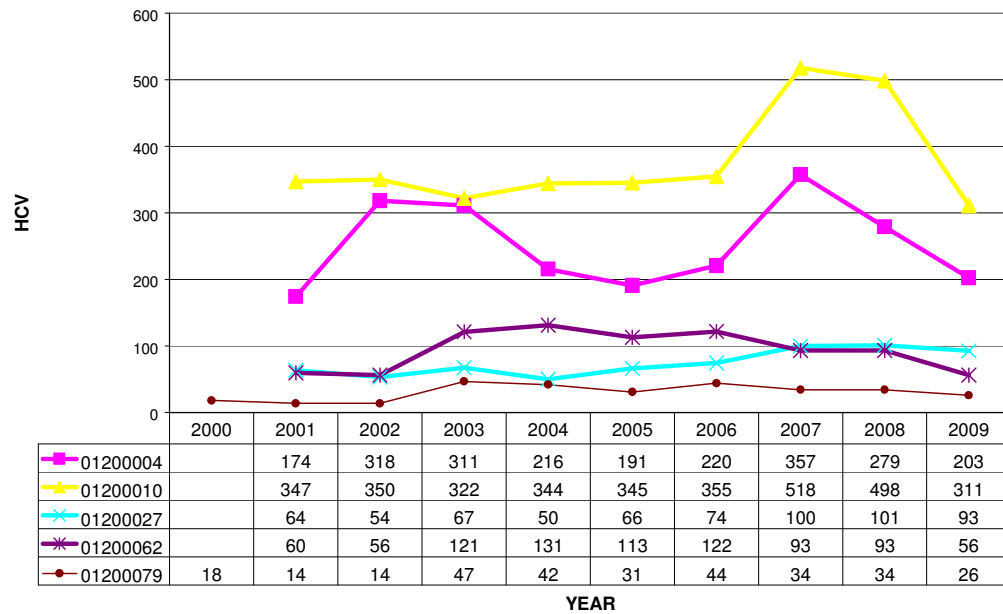
SH 11 15A HEAVY VEHICLES



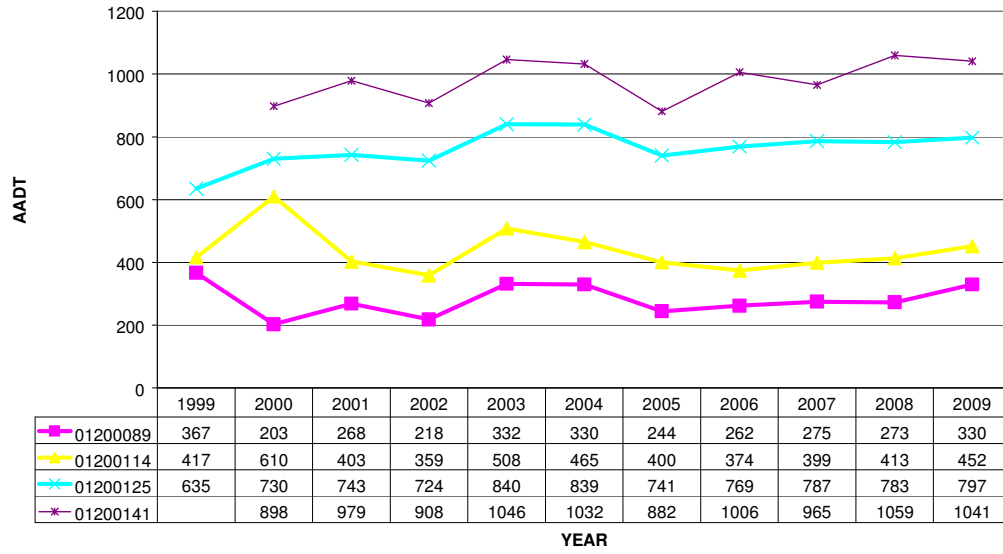
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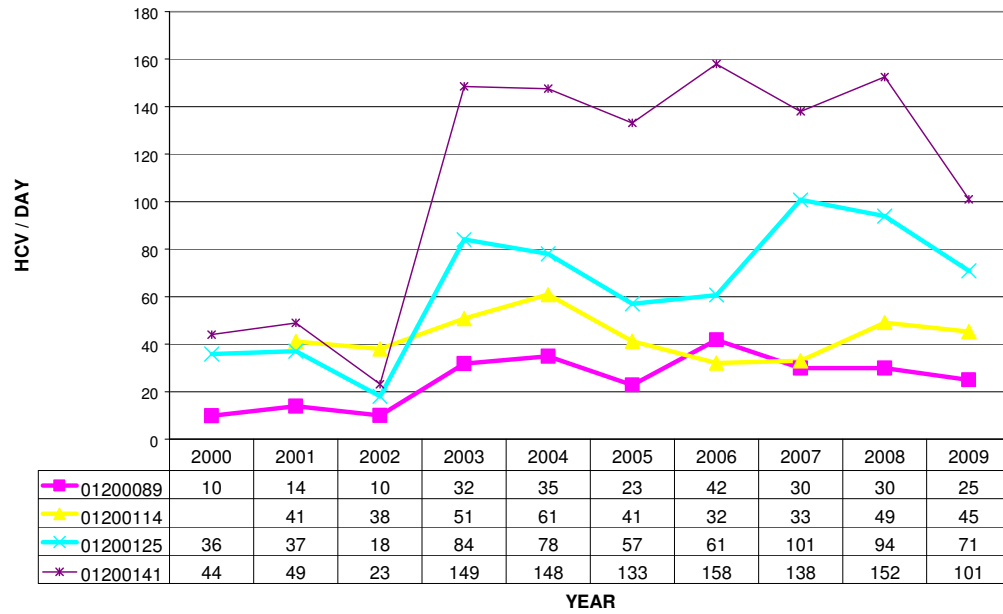
SH 12 HEAVY VEHICLES



SH 12 AADT

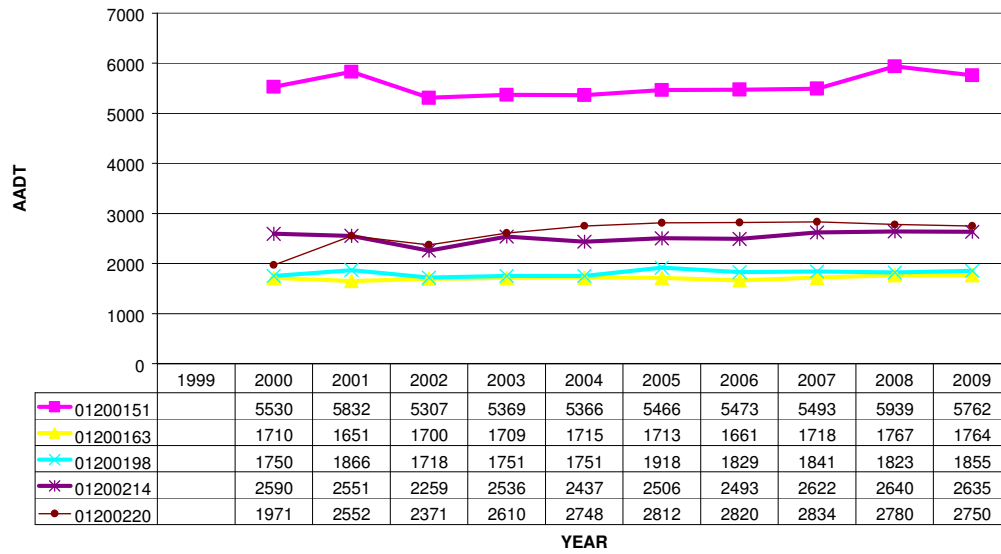


SH 12 HEAVY VEHICLES

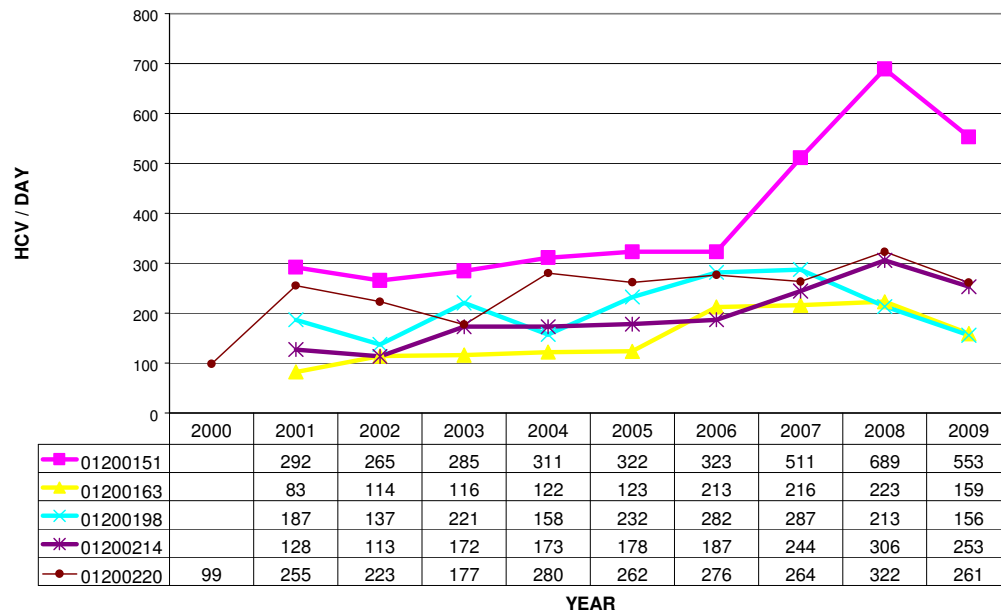




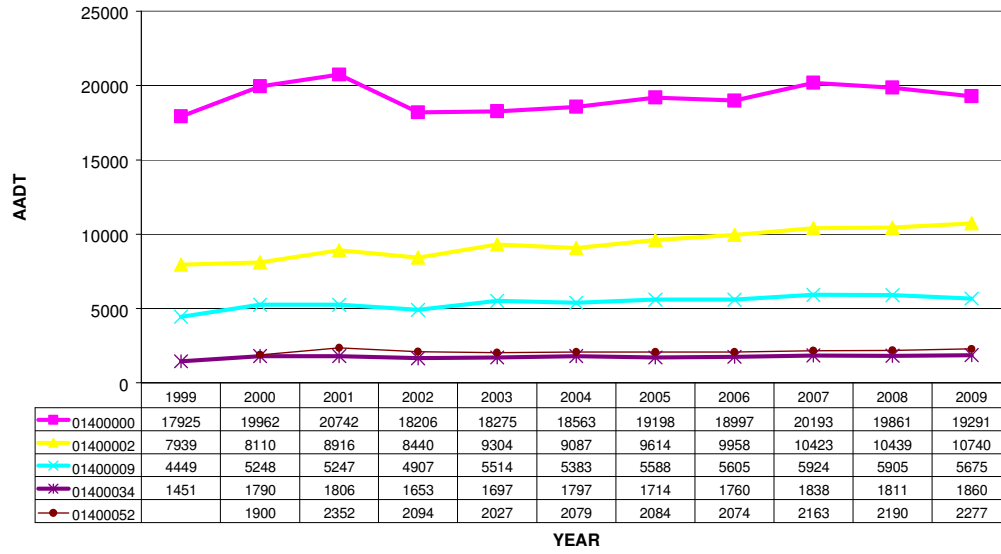
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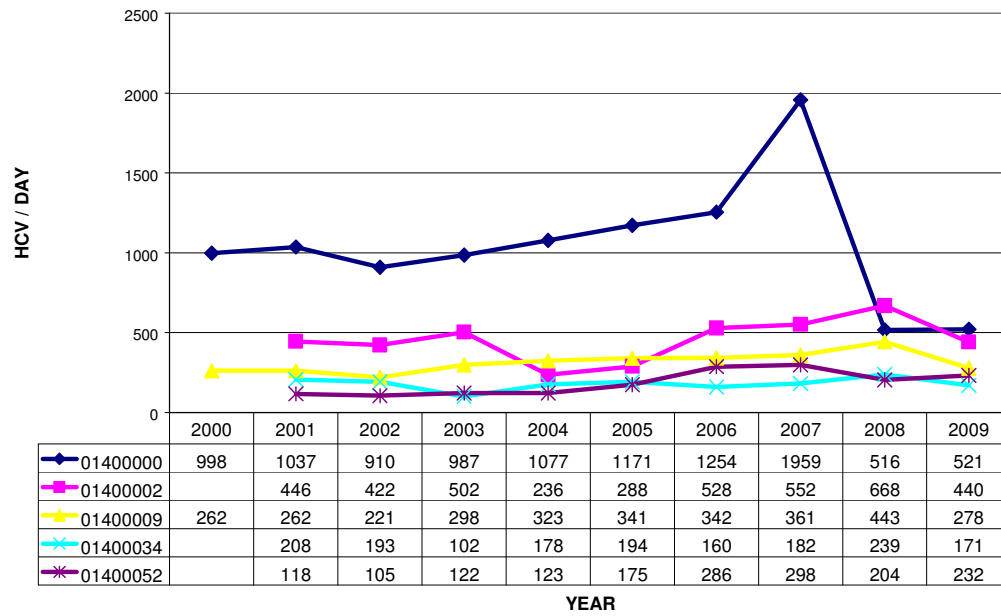
SH 12 HEAVY VEHICLES



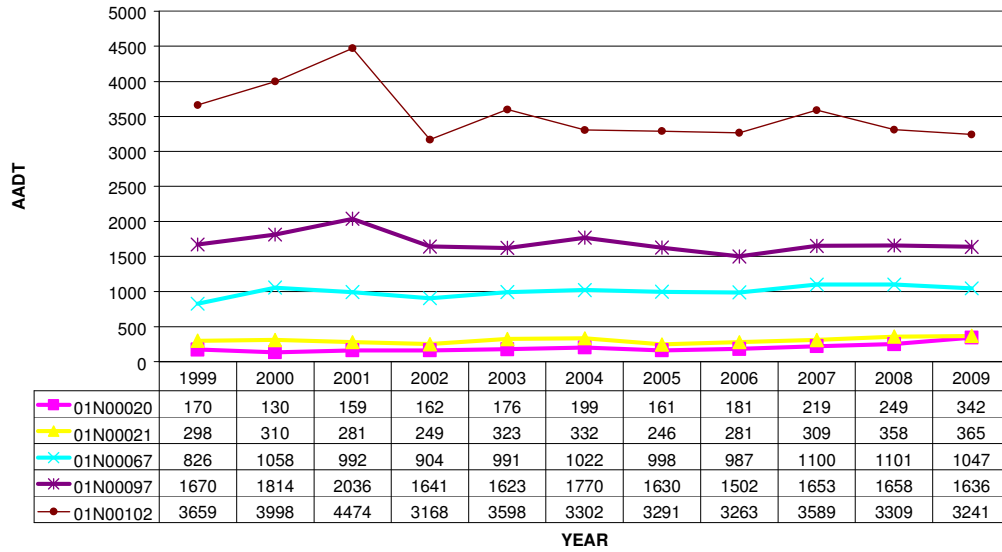
SH 14 AADT



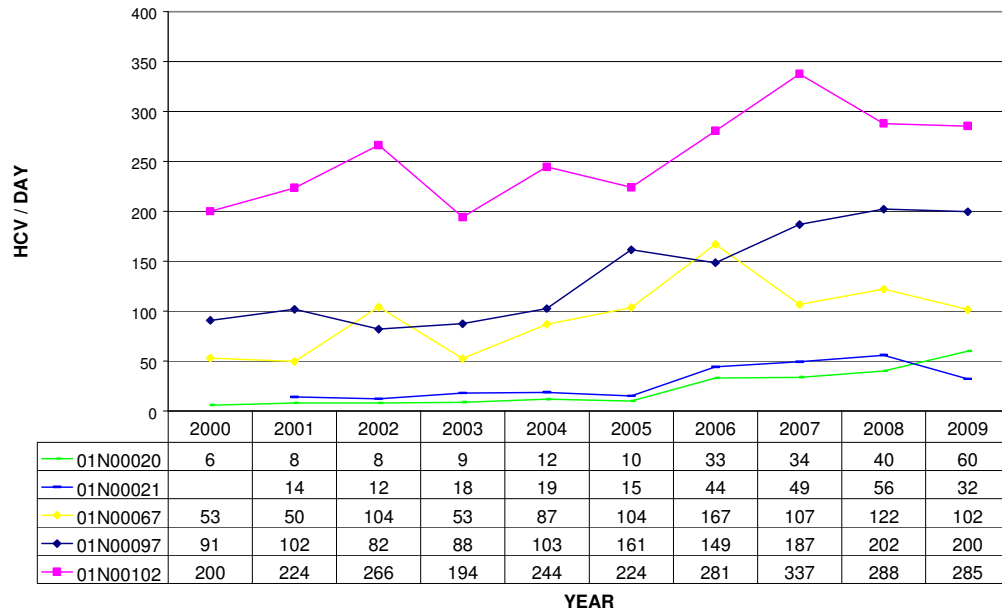
SH 14 HEAVY VEHICLES



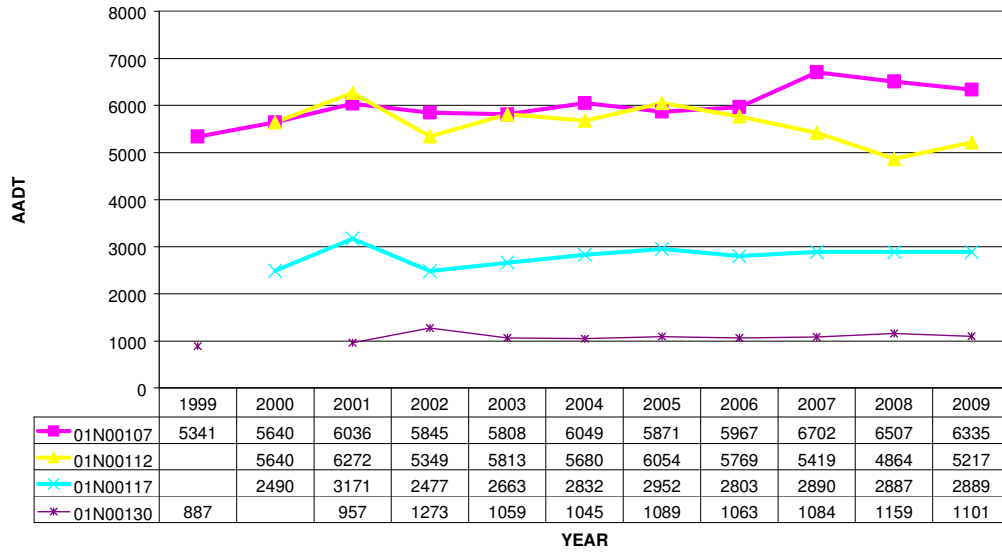
SH 01N AADT



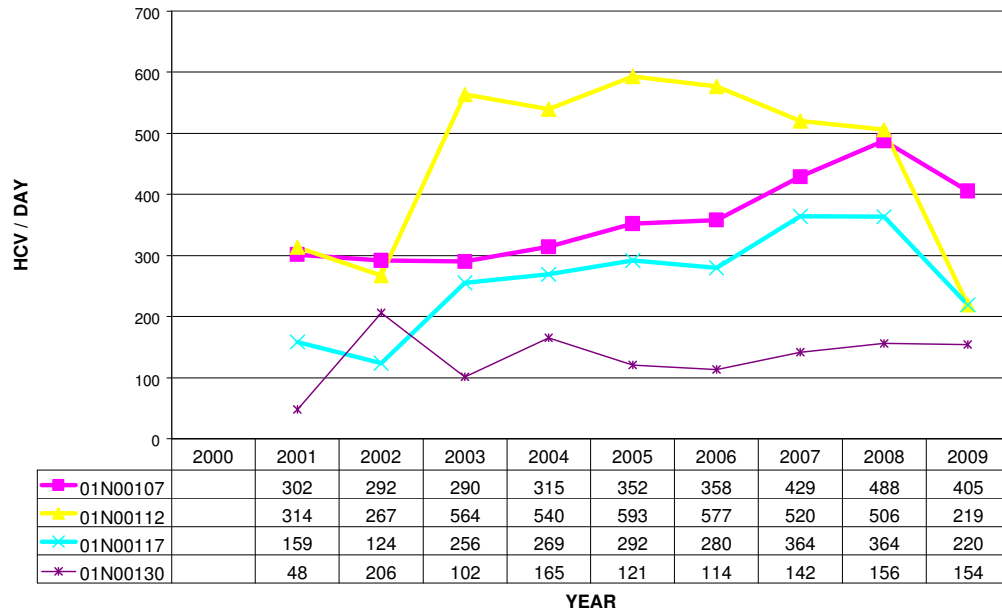
SH 01N HEAVY VEHICLES



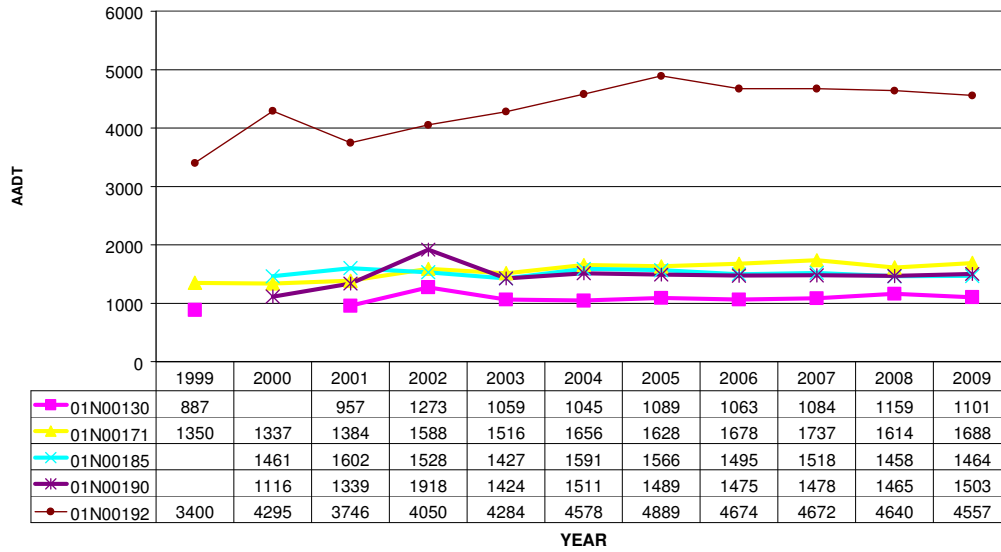
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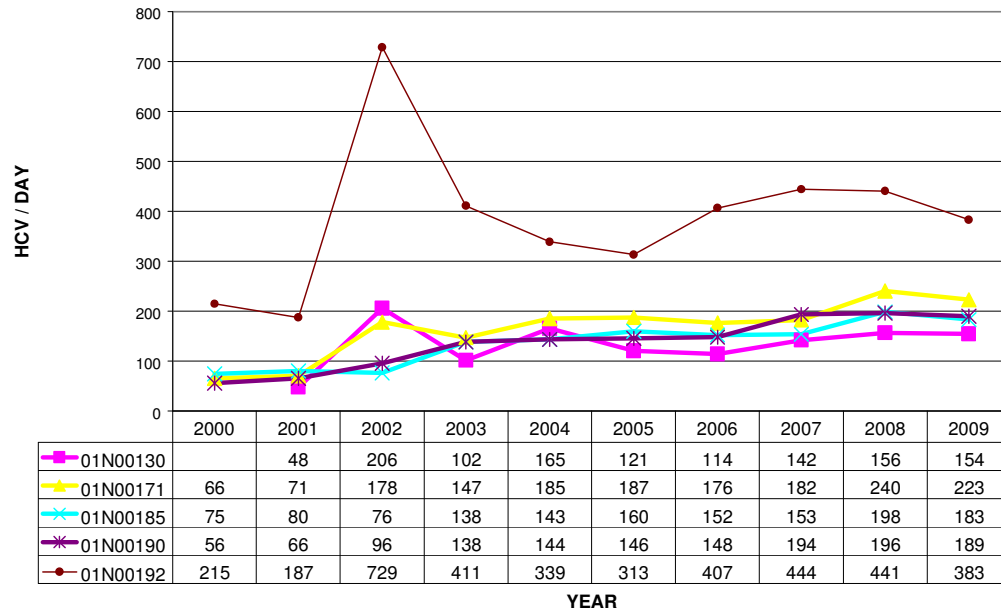
SH 01N HEAVY VEHICLES



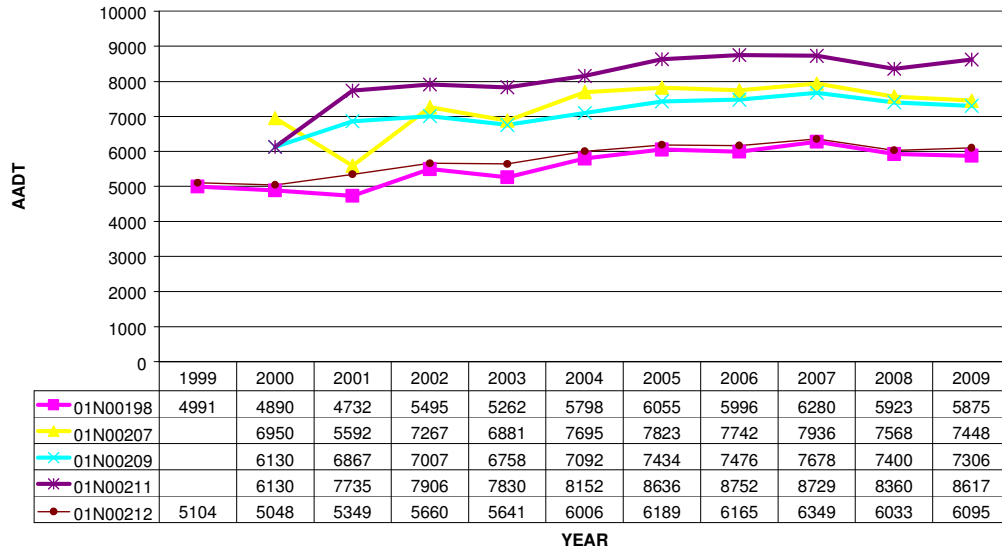
SH 01N AADT



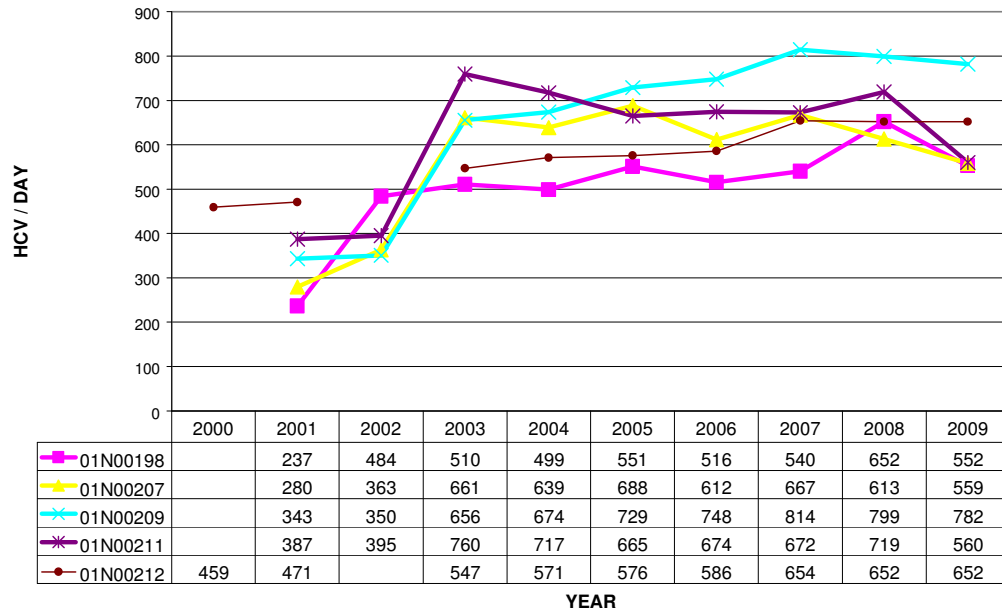
SH 01N HEAVY VEHICLES



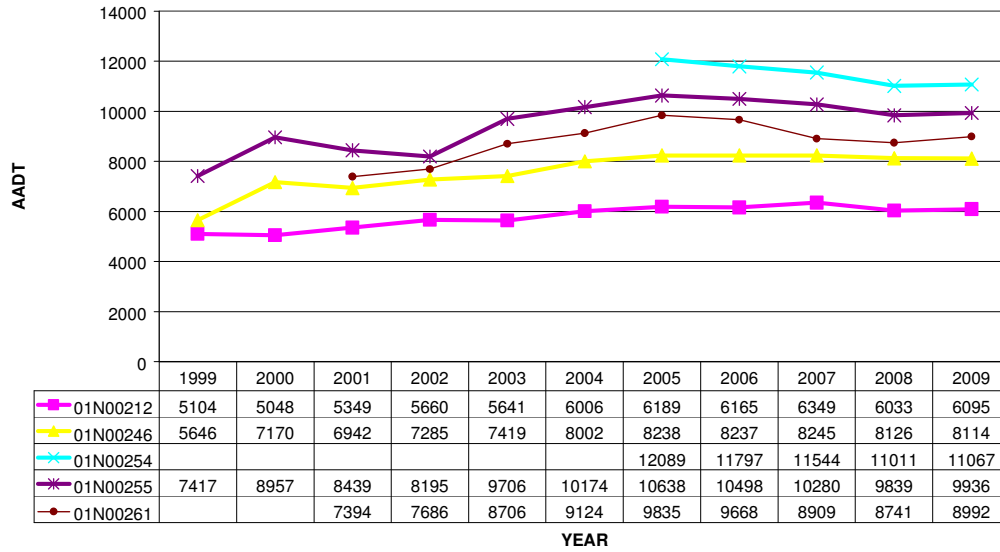
SH 01N AADT



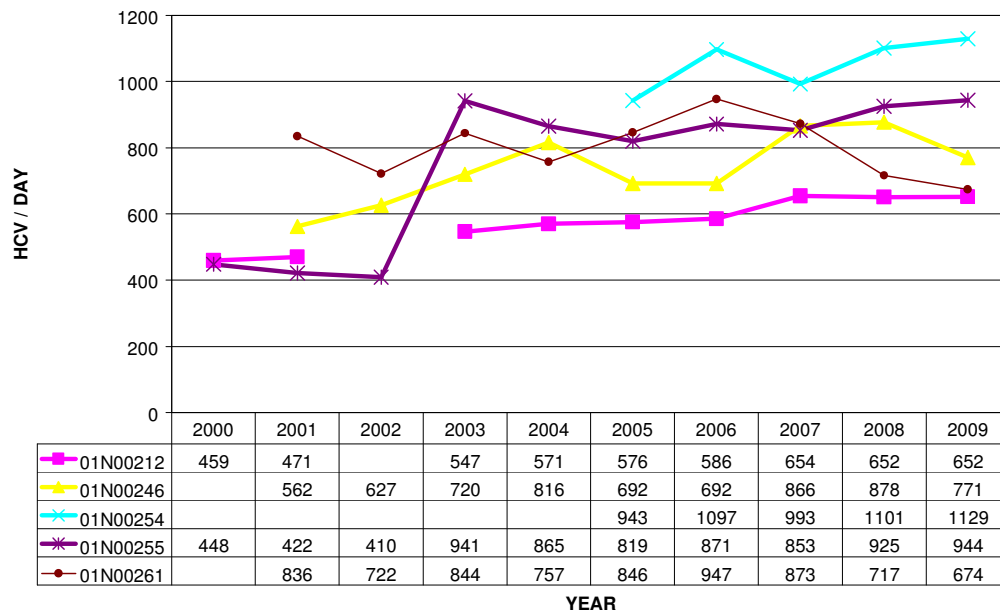
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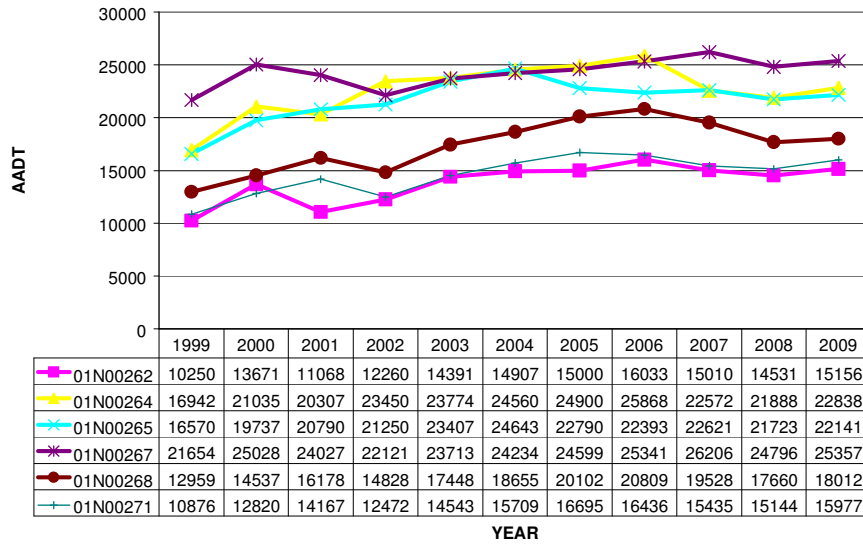
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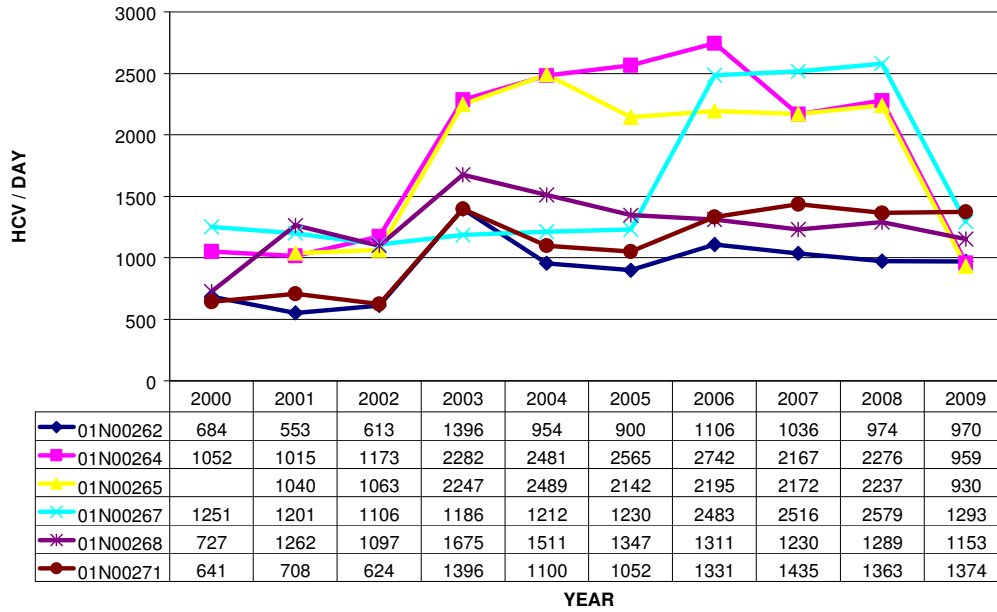
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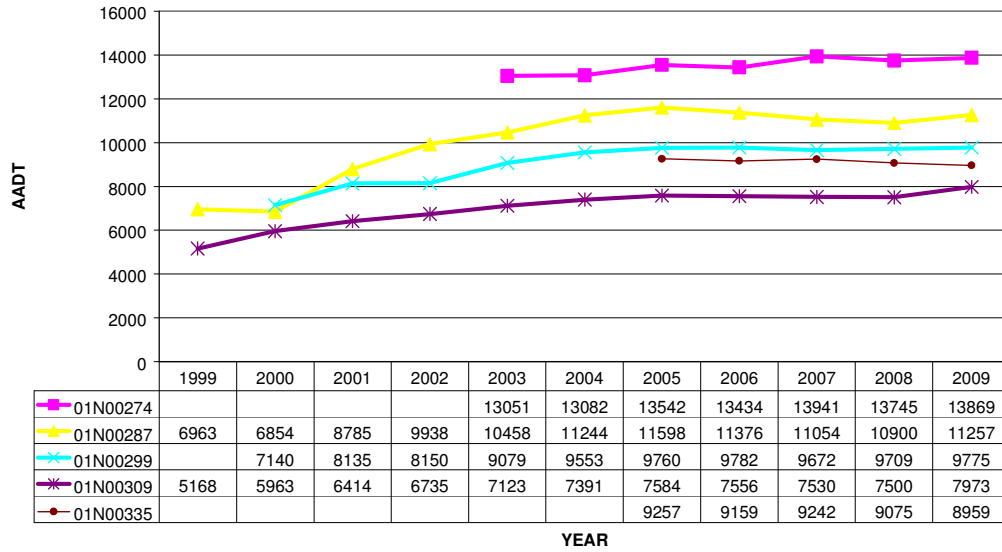


SH 01N HEAVY VEHICLES





SH 01N AADT



SH 01N HEAVY VEHICLES

