

**From the office of the  
Director Infrastructure Services**



17 April 2014

Mr Ian C Blayney MLA  
Chairman  
Economics and Industry Standing Committee  
1<sup>st</sup> Floor, 1 Harvest Terrace  
WEST PERTH WA 6005

Dear Sir

**SHIRE OF KALAMUNDA – REVIEW OF CLOSURE OF TIER 3 RAIL NETWORKS**

The Shire has undertaken a brief review of the potential impacts on the Shire's road network of the proposed closure of the Tier 3 bulk commodity rail networks currently operated by Brookfield Rail.

We have undertaken a review of the *Freight Strategic Grain Network Report* prepared by the Strategic Grain Network Committee Report (SGNC) (2009) for the Freight and Logistics Council. The following points summarise our understanding of the potential impacts to the Shire's road network:

- During peak harvest periods which typically can extend from November through the end of January, the local road network in regional areas is used extensively for concentrated short haul movements of grain from farms to bin terminals in country areas. From some areas close to ports, longer journeys are taken from the farm direct to CBH bulk handling terminals at York/Northam and Kwinana or directly to MetroGrain at Forrestfield.
- After the harvest period, there is typically a peak export period to the middle of the year. During this time, road deliveries from farm, private (non-CBH) storage and CBH bins continue to arrive at ports and domestic consumers and container packer. These movements typically use State road corridors for the most part. At the same time, CBH increasingly uses trucks to consolidate stocks into key rail loading sites.
- The existing rail network transports around 60% of bulk grain by volume but its share is declining as road transport is being increasingly used in to transport grain to the bulk handling destinations such as York and Northam as well as Kwinana.
- It is expected that grain from bins without future rail services would be trucked either north towards sides on the Eastern Goldfields Railway (EGR), or west towards Brookton en route to port.
- Roads affected by the extra traffic from the northern catchment (including the Perenjori-Latham and Merredin-Trayning lines) would utilise the higher order road network north

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of York and Northam to access bulk handling locations. The southern catchment affected by the closure include the Merredin, Corrigin, Kondinin and Kulin line as well as the Quairading spur line. In general terms, the 'desire line' for road traffic haulage for bulk handling would access York and Northam via Brookton Highway and the Great Southern Highway. Access to the Kwinana CBH Terminal would more than likely be via the higher order road network via Brookton Highway, Albany Highway, Roe Highway/Tonkin Highway and then onto the freeway network and Thomas Road.

- It is unlikely that Kalamunda Road, Canning Road and Welshpool Road will be impacted to any significant degree simply because the routing from these southern catchment areas results in a more efficient, cost-effective, direct routing. It should also be noted that the current RAV Network generally would limit the size of heavy vehicles on these Shire roads; however, roads such as Abernethy Road where the MetroGrain terminal is located has been classified as a RAV Network 7 road which is capable of handling the larger road trains carrying bulk grain.
- Existing haulage into and out of the MetroGrain terminal on Abernethy Road may increase; however, this would be dependent upon cost and capacity of the terminal to handle additional bulk handling demands. Current access is via the Tonkin and Roe Highways into and out of the recently upgraded full interchange at Abernethy Road fully loaded. The 'desire line' to haul grain into this location will be largely dependent upon operational capacity of the existing terminal which is a commercial operation and less so on the perceived transfer from road to rail by bulk train haulage.
- Approximately 600,000 tonnes would be lost to the rail network, and would reach port by road. The Brookton Strategy has been developed as part of this review and is shown on the figures below.

Figure 16 - Brookton Strategy Phase 2 rail closures with Kulin/Yealering open

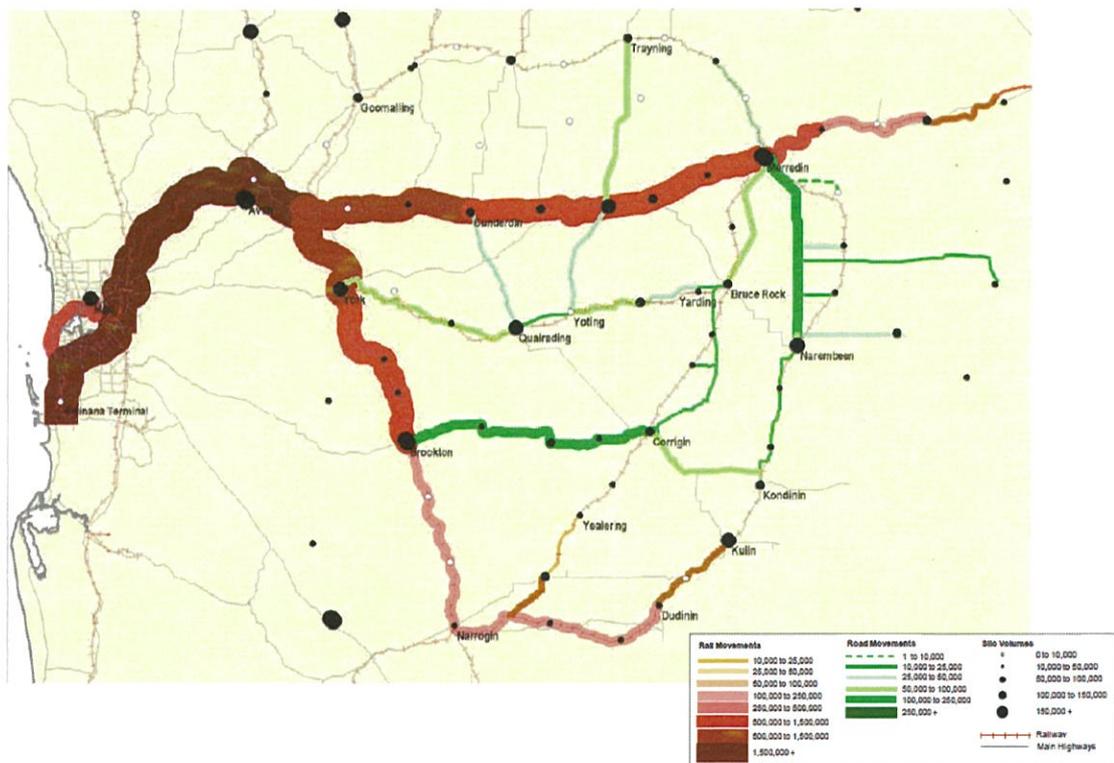
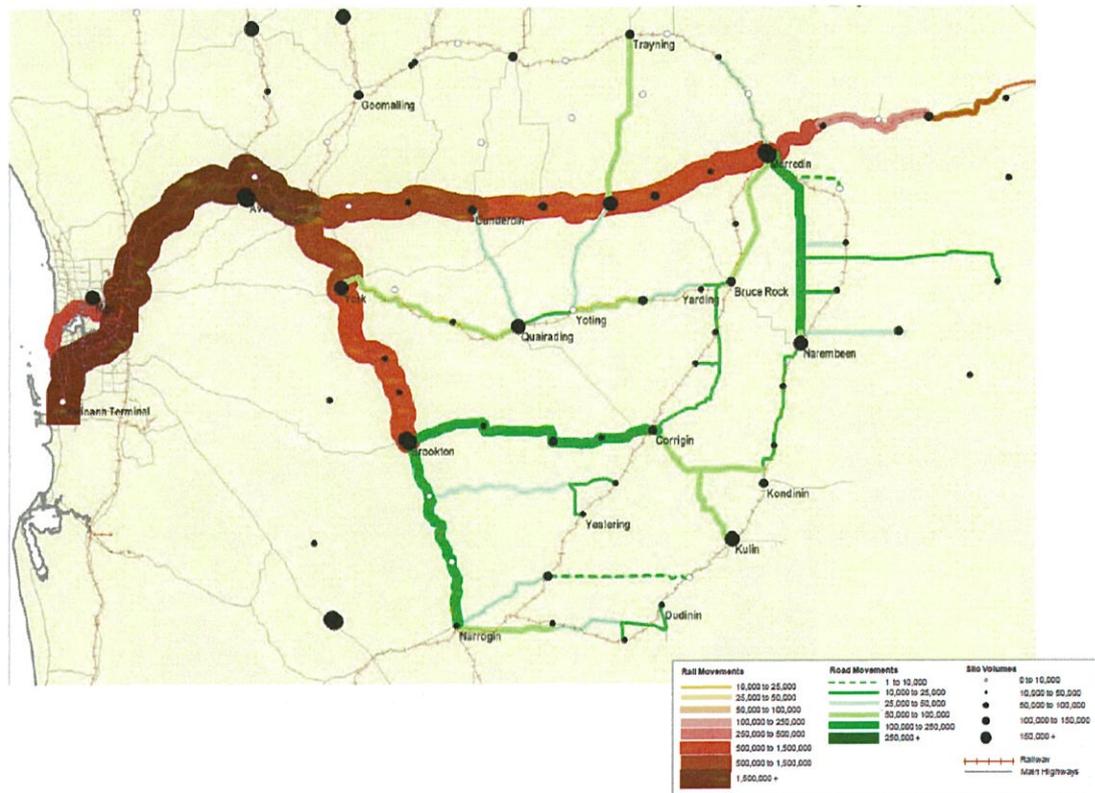


Figure 17 - Brookton Strategy Phase 3 with all Tier 3 lines closed



Based upon a review of the typical travel patterns and origins/destinations for the types of bulk grain commodities destined from areas in the regions where Tier 3 railway lines are proposed to be closed, the following conclusions can be drawn:

- There will be a minimal impact on local to second tier higher order roads within the Shire as the vast majority of the transference of bulk grain transport will occur via the higher order road network (MRWA) via Great Southern Highway, Great Eastern Highway, Tonkin Highway and Roe Highway.
- The impacts from the northern catchment affected by the proposed Tier 3 closures will be negligible. The impacts from the southern catchment will be minimal due to the desire to effectively, efficiently and directly transport grain to either the York/Northam or Kwinana bulk handling destinations which would be more effectively accessed via the MRWA RAV Network-appropriate road network via Great Southern Highway, Roe Highway and Tonkin Highway.
- It should also be noted that the existing access arrangements to Abernethy Road from Tonkin Highway do allow for direct access by both inbound and outbound vehicles.
- Cost, direct routing, efficient travel and a safe road network would play the key roles in determining the location to which the grain would ultimately be hauled to. Another key factor will be the RAV Network classification of the road network with Abernethy Road classified as a RAV Network 7 and therefore able to handle additional demand by larger bulk haulage vehicles.

- Abernethy Road is a local government responsibility, not MRWA. This road is already very heavily trafficked by commercial vehicles and hence places a significant maintenance cost on the Shire of Kalamunda. Traffic counts carried out along Abernethy Road in November 2013 (see attached files) prove that the percentage of heavy vehicles varies between 17% and 25%.
- Any increase in heavy vehicles such as the B Double or B Triple along this road as a result of the grain haulage causes increased maintenance costs to the Shire.

Either myself or the Elected Representatives of the Shire would be pleased to appear before the Committee to present the evidence above and further elaborate on the Shire's position.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Charles Sullivan', with a stylized, cursive flourish at the end.

Charles Sullivan  
**Director Infrastructure Services**

Attach: Abernethy Road Traffic Counts

## MetroCount Traffic Executive Class Speed Matrix

### ClassMatrix-127 -- English (ENA)

#### Datasets:

**Site:** [Abernethy-01] Abernethy Road - between Tonkin Hwy OP & Beyer PI  
**Direction:** 1 - North bound, A hit first. Lane: 2  
**Survey Duration:** 11:42 Saturday, 16 November 2013 => 12:06 Wednesday, 27 November 2013  
**File:** Abernethy-01 0 2013-11-27 1206.EC2 (Plus)  
**Identifier:** AS388DSD MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

**Site:** [Abernethy-01] Abernethy Road - between Tonkin Hwy OP & Beyer PI  
**Direction:** 1 - North bound, A hit first. Lane: 1  
**Survey Duration:** 11:41 Saturday, 16 November 2013 => 13:52 Wednesday, 27 November 2013  
**File:** Abernethy-01 0 2013-11-27 1353.EC1 (Plus)  
**Identifier:** FP63W9DR MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

#### Profile:

**Filter time:** 11:41 Saturday, 16 November 2013 => 13:52 Wednesday, 27 November 2013  
**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound)  
**Separation:** All - (Headway)  
**Name:** Default Profile  
**Scheme:** Vehicle classification (ARX)  
**Units:** Metric (meter, kilometer, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 69135 / 69192 (99.92%)

## Class Speed Matrix

**ClassMatrix-127**

**Site:** Abernethy-01.2N Abernethy-01.1N

**Description:** Multiple sites - See Header sheet for site descriptions.

**Filter time:** 11:41 Saturday, 16 November 2013 => 13:52 Wednesday, 27 November 2013

**Scheme:** Vehicle classification (ARX)

**Filter:** CIs(1 2 3 4 5 6 7 8 9 10 11 12 ) Dir(NESW) Sp(10,160) Headway(>0)

Speed (km/h)	Class												Speed Totals	
	1	2	3	4	5	6	7	8	9	10	11	12		
10 - 20	3	5	.	4	1	.	.	.	.	2	.	.	15	0.0%
20 - 30	46	14	.	3	2	1	.	.	.	12	.	1	79	0.1%
30 - 40	11	51	3	28	29	6	.	1	16	122	8	25	300	0.4%
40 - 50	4	360	18	269	178	18	3	20	11	158	29	86	1154	1.7%
50 - 60	32	3555	102	1338	592	79	22	75	133	968	198	493	7587	11.0%
60 - 70	210	25234	362	3879	1704	227	119	239	347	2895	598	799	36613	53.0%
70 - 80	273	17313	156	1239	569	58	95	68	103	686	138	159	20857	30.2%
80 - 90	96	1915	15	84	32	3	6	11	3	24	5	4	2198	3.2%
90 - 100	30	208	.	9	5	1	1	.	2	1	.	.	257	0.4%
100 - 110	9	39	.	2	.	.	.	.	.	.	.	.	50	0.1%
110 - 120	3	12	.	.	.	.	.	.	.	.	.	.	15	0.0%
120 - 130	3	7	.	.	.	.	.	.	.	.	.	.	10	0.0%
130 - 140	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
140 - 150	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
150 - 160	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
<b>Class Totals</b>	<b>720</b>	<b>48713</b>	<b>656</b>	<b>6855</b>	<b>3112</b>	<b>393</b>	<b>246</b>	<b>414</b>	<b>615</b>	<b>4868</b>	<b>976</b>	<b>1567</b>	<b>69135</b>	
	1.0%	70.5%	0.9%	9.9%	4.5%	0.6%	0.4%	0.6%	0.9%	7.0%	1.4%	2.3%		

## MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

### VirtWeeklyVehicle-128 -- English (ENA)

#### Datasets:

**Site:** [Abernethy-01] Abernethy Road - between Tonkin Hwy OP & Beyer PI  
**Direction:** 1 - North bound, A hit first. **Lane:** 2  
**Survey Duration:** 11:42 Saturday, 16 November 2013 => 12:06 Wednesday, 27 November 2013  
**File:** Abernethy-01 0 2013-11-27 1206.EC2 (Plus)  
**Identifier:** AS388DSD MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

**Site:** [Abernethy-01] Abernethy Road - between Tonkin Hwy OP & Beyer PI  
**Direction:** 1 - North bound, A hit first. **Lane:** 1  
**Survey Duration:** 11:41 Saturday, 16 November 2013 => 13:52 Wednesday, 27 November 2013  
**File:** Abernethy-01 0 2013-11-27 1353.EC1 (Plus)  
**Identifier:** FP63W9DR MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

#### Profile:

**Filter time:** 11:41 Saturday, 16 November 2013 => 13:52 Wednesday, 27 November 2013  
**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound)  
**Separation:** All - (Headway)  
**Name:** Default Profile  
**Scheme:** Vehicle classification (ARX)  
**Units:** Metric (meter, kilometer, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 69135 / 69192 (99.92%)

## Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-128

Site: Abernethy-01.2N Abernethy-01.1N  
 Description: Multiple sites - See Header sheet for site descriptions.  
 Filter time: 11:41 Saturday, 16 November 2013 => 13:52 Wednesday, 27 November 2013  
 Scheme: Vehicle classification (ARX)  
 Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 ) Dir(NESW) Sp(10,160) Headway(>0)

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
0000-0100	32.5	16.5	19.5	44.0	50.0	34.0	39.0	28.9	31.2
0100-0200	21.0	9.5	16.0	28.0	34.0	32.0	19.0	19.4	20.5
0200-0300	42.0	17.0	15.5	32.0	46.0	20.0	17.0	28.4	25.5
0300-0400	53.0	33.5	32.0	58.0	50.0	44.0	24.0	43.1	39.7
0400-0500	155.0	72.5	62.0	127.0	142.0	67.0	51.0	106.0	92.5
0500-0600	479.0	249.0	226.0	478.0	518.0	132.0	74.0	363.0	289.5
0600-0700	771.5	396.0	371.5	802.0<	725.0	123.0	65.5	575.6	441.7
0700-0800	824.0<	418.0<	426.0<	785.0	789.0<	179.0	108.0	613.8<	482.3<
0800-0900	681.0	343.5	334.5	672.0	726.0	152.0	105.5	514.5	407.2
0900-1000	529.5	264.5	255.5	508.0	525.0	200.0	114.5	391.5	323.7
1000-1100	527.5	283.5	254.0	561.0	524.0	233.0<	132.0	401.9	337.5
1100-1200	545.5	285.0	287.0	499.0	541.0	175.0	161.0<	409.4	328.9
1200-1300	555.5	282.0	298.0	516.0	610.0	259.0<	155.5	424.6	352.2
1300-1400	574.5	307.0	309.0	601.0	611.0	183.0	161.5	449.1	356.8
1400-1500	735.5	354.0	689.0	642.0	718.0	182.0	161.0	604.0	446.7
1500-1600	854.0	413.0	809.0	894.0	946.0<	170.5	162.5<	740.4	531.7
1600-1700	1017.0<	522.0<	1029.0<	1024.0<	927.0	138.0	154.5	865.4<	603.9<
1700-1800	857.0	430.5	872.0	837.0	759.0	152.5	157.5	720.4	514.8
1800-1900	208.5	182.5	334.0	356.0	337.0	112.0	113.0	258.4	205.4
1900-2000	77.0	96.0	201.0	192.0	201.0	81.0	80.5	134.3	114.8
2000-2100	61.0	76.5	127.0	123.0	133.0	67.0	78.5	94.0	86.3
2100-2200	58.0	61.0	89.0	120.0	110.0	56.5	60.0	79.6	71.8
2200-2300	36.5	33.5	65.0	66.0	76.0	55.0	38.0	49.6	48.5
2300-2400	18.5	15.0	40.0	61.0	69.0	59.5	29.0	33.9	37.6
<b>Totals</b>									
0700-1900	7909.5	4085.5	5897.0	7895.0	8013.0	2136.0	1686.5	6393.5	4891.1
0600-2200	8877.0	4715.0	6685.5	9132.0	9182.0	2463.5	1971.0	7276.9	5605.7
0600-0000	8932.0	4763.5	6790.5	9259.0	9327.0	2578.0	2038.0	7360.4	5691.8
0000-0000	9714.5	5161.5	7161.5	10026.0	10167.0	2907.0	2262.0	7949.1	6190.6
AM Peak	0700	0700	0700	0600	0700	1000	1100		
	824.0	418.0	426.0	802.0	789.0	233.0	161.0		
PM Peak	1600	1600	1600	1600	1500	1200	1500		
	1017.0	522.0	1029.0	1024.0	946.0	259.0	162.5		

\* - No data.

## MetroCount Traffic Executive Class Speed Matrix

### ClassMatrix-131 -- English (ENA)

#### Datasets:

**Site:** [Abernethy-01] Abernethy Road - between Tonkin Hwy OP & Beyer PI  
**Direction:** 3 - South bound, A hit first. Lane: 3  
**Survey Duration:** 11:43 Saturday, 16 November 2013 => 13:21 Wednesday, 27 November 2013  
**File:** Abernethy-01 0 2013-11-27 1321.EC3 (Plus)  
**Identifier:** FQ869JJK MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

**Site:** [Abernethy-01] Abernethy Road - between Tonkin Hwy OP & Beyer PI  
**Direction:** 3 - South bound, A hit first. Lane: 4  
**Survey Duration:** 11:43 Saturday, 16 November 2013 => 14:37 Wednesday, 27 November 2013  
**File:** Abernethy-01 0 2013-11-27 1438.EC4 (Plus)  
**Identifier:** FR62BYDT MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

#### Profile:

**Filter time:** 11:43 Saturday, 16 November 2013 => 14:37 Wednesday, 27 November 2013  
**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound)  
**Separation:** All - (Headway)  
**Name:** Default Profile  
**Scheme:** Vehicle classification (ARX)  
**Units:** Metric (meter, kilometer, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 58184 / 58288 (99.82%)

## Class Speed Matrix

**ClassMatrix-131**

**Site:** Abernethy-01.3S Abernethy-01.4S

**Description:** Multiple sites - See Header sheet for site descriptions.

**Filter time:** 11:43 Saturday, 16 November 2013 => 14:37 Wednesday, 27 November 2013

**Scheme:** Vehicle classification (ARX)

**Filter:** Cls(1 2 3 4 5 6 7 8 9 10 11 12 ) Dir(NESW) Sp(10,160) Headway(>0)

Speed (km/h)	Class												Speed Totals	
	1	2	3	4	5	6	7	8	9	10	11	12		
10 - 20	10	4	.	1	1	.	1	.	.	.	.	.	17	0.0%
20 - 30	47	40	1	9	46	4	.	3	1	40	.	3	194	0.3%
30 - 40	28	343	11	142	75	13	.	11	16	115	6	23	783	1.3%
40 - 50	10	1209	46	379	259	38	2	30	47	541	73	144	2778	4.8%
50 - 60	46	4477	81	1016	630	81	5	60	109	1059	178	451	8193	14.1%
60 - 70	170	21363	295	2570	1288	211	60	155	267	2029	438	656	29502	50.7%
70 - 80	200	11947	118	836	350	57	76	47	50	323	67	60	14131	24.3%
80 - 90	89	1870	17	116	37	4	4	16	9	10	1	2	2175	3.7%
90 - 100	38	268	.	12	6	2	.	.	.	1	.	.	327	0.6%
100 - 110	8	44	1	3	1	.	.	.	1	.	.	.	58	0.1%
110 - 120	5	12	.	.	.	.	.	.	.	.	.	.	17	0.0%
120 - 130	1	4	.	.	.	.	.	.	.	.	.	.	5	0.0%
130 - 140	.	2	.	.	.	.	.	.	.	.	.	.	2	0.0%
140 - 150	.	2	.	.	.	.	.	.	.	.	.	.	2	0.0%
150 - 160	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
<b>Class Totals</b>	<b>652</b>	<b>41585</b>	<b>570</b>	<b>5084</b>	<b>2693</b>	<b>410</b>	<b>148</b>	<b>322</b>	<b>500</b>	<b>4118</b>	<b>763</b>	<b>1339</b>	<b>58184</b>	
	<b>1.1%</b>	<b>71.5%</b>	<b>1.0%</b>	<b>8.7%</b>	<b>4.6%</b>	<b>0.7%</b>	<b>0.3%</b>	<b>0.6%</b>	<b>0.9%</b>	<b>7.1%</b>	<b>1.3%</b>	<b>2.3%</b>		

## MetroCount Traffic Executive Weekly Vehicle Counts (Virtual Week)

### VirtWeeklyVehicle-130 -- English (ENA)

#### Datasets:

**Site:** [Abernethy-01] Abernethy Road - between Tonkin Hwy OP & Beyer PI  
**Direction:** 3 - South bound, A hit first. Lane: 3  
**Survey Duration:** 11:43 Saturday, 16 November 2013 => 13:21 Wednesday, 27 November 2013  
**File:** Abernethy-01 0 2013-11-27 1321.EC3 (Plus)  
**Identifier:** FQ869JJK MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

**Site:** [Abernethy-01] Abernethy Road - between Tonkin Hwy OP & Beyer PI  
**Direction:** 3 - South bound, A hit first. Lane: 4  
**Survey Duration:** 11:43 Saturday, 16 November 2013 => 14:37 Wednesday, 27 November 2013  
**File:** Abernethy-01 0 2013-11-27 1438.EC4 (Plus)  
**Identifier:** FR62BYDT MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

#### Profile:

**Filter time:** 11:43 Saturday, 16 November 2013 => 14:37 Wednesday, 27 November 2013  
**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound)  
**Separation:** All - (Headway)  
**Name:** Default Profile  
**Scheme:** Vehicle classification (ARX)  
**Units:** Metric (meter, kilometer, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 58184 / 58288 (99.82%)

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-130

Site: Abernethy-01.3S Abernethy-01.4S

Description: Multiple sites - See Header sheet for site descriptions.

Filter time: 11:43 Saturday, 16 November 2013 =&gt; 14:37 Wednesday, 27 November 2013

Scheme: Vehicle classification (ARX)

Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12 ) Dir(NESW) Sp(10,160) Headway(&gt;0)

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
0000-0100	30.0	18.0	22.0	46.0	42.0	30.0	24.0	28.5	27.8
0100-0200	26.5	11.5	14.5	37.0	43.0	41.0	18.5	23.1	23.9
0200-0300	28.5	13.5	15.0	32.0	39.0	25.0	19.5	23.1	22.6
0300-0400	36.0	16.5	19.5	43.0	44.0	20.0	25.5	28.9	27.5
0400-0500	88.0	50.0	47.5	96.0	105.0	36.0	44.0	71.5	63.3
0500-0600	368.5	191.0	185.0	346.0	337.0	90.0	58.0	271.5	216.2
0600-0700	656.5	349.0	335.5	688.0	667.0	164.0	71.5	504.6	394.9
0700-0800	886.5<	441.5<	413.0<	804.0<	829.0<	154.0	81.0	639.4<	493.7<
0800-0900	634.0	326.0	331.0	649.0	634.0	219.0	116.0	483.1	392.4
0900-1000	564.0	268.0	268.5	510.0	553.0	242.0	118.0	408.0	340.2
1000-1100	527.5	253.0	247.5	441.0	538.0	243.0<	143.0	379.4	324.0
1100-1200	514.5	259.0	259.0	490.0	510.0	116.0	151.0<	383.1	299.9
1200-1300	484.0	256.5	244.5	476.0	524.0	219.0<	152.0<	371.3	309.3
1300-1400	521.0	259.5	256.5	522.0	548.0	145.5	147.5	393.0	310.8
1400-1500	568.5	293.5	281.5	559.0	602.0	131.0	143.5	431.0	333.1
1500-1600	674.5<	326.0	612.0	661.0	662.0<	117.5	128.5	562.3<	402.5
1600-1700	665.0	341.0<	619.0<	673.0<	616.0	124.5	141.0	560.0	404.6<
1700-1800	526.0	263.5	487.0	495.0	504.0	131.0	133.0	437.9	326.6
1800-1900	154.5	125.0	264.0	258.0	279.0	96.0	108.0	194.3	160.7
1900-2000	76.0	80.0	146.0	120.0	163.0	78.5	68.5	105.9	94.1
2000-2100	57.0	55.0	101.0	114.0	114.0	49.5	67.0	79.0	71.5
2100-2200	31.5	35.0	81.0	75.0	72.0	43.0	48.5	51.6	49.5
2200-2300	36.0	49.0	82.0	95.0	69.0	35.0	42.5	59.4	51.9
2300-2400	31.5	32.0	51.0	63.0	41.0	25.0	23.5	40.3	34.5
<b>Totals</b>									
0700-1900	6720.0	3412.5	4283.5	6538.0	6799.0	1938.5	1562.5	5242.7	4098.0
0600-2200	7541.0	3931.5	4947.0	7535.0	7815.0	2273.5	1818.0	5983.7	4707.9
0600-0000	7608.5	4012.5	5080.0	7693.0	7925.0	2333.5	1884.0	6083.4	4794.3
0000-0000	8186.0	4313.0	5383.5	8293.0	8535.0	2575.5	2073.5	6530.1	5175.5
AM Peak	0700	0700	0700	0700	0700	1000	1100		
	886.5	441.5	413.0	804.0	829.0	243.0	151.0		
PM Peak	1500	1600	1600	1600	1500	1200	1200		
	674.5	341.0	619.0	673.0	662.0	219.0	152.0		

\* - No data.