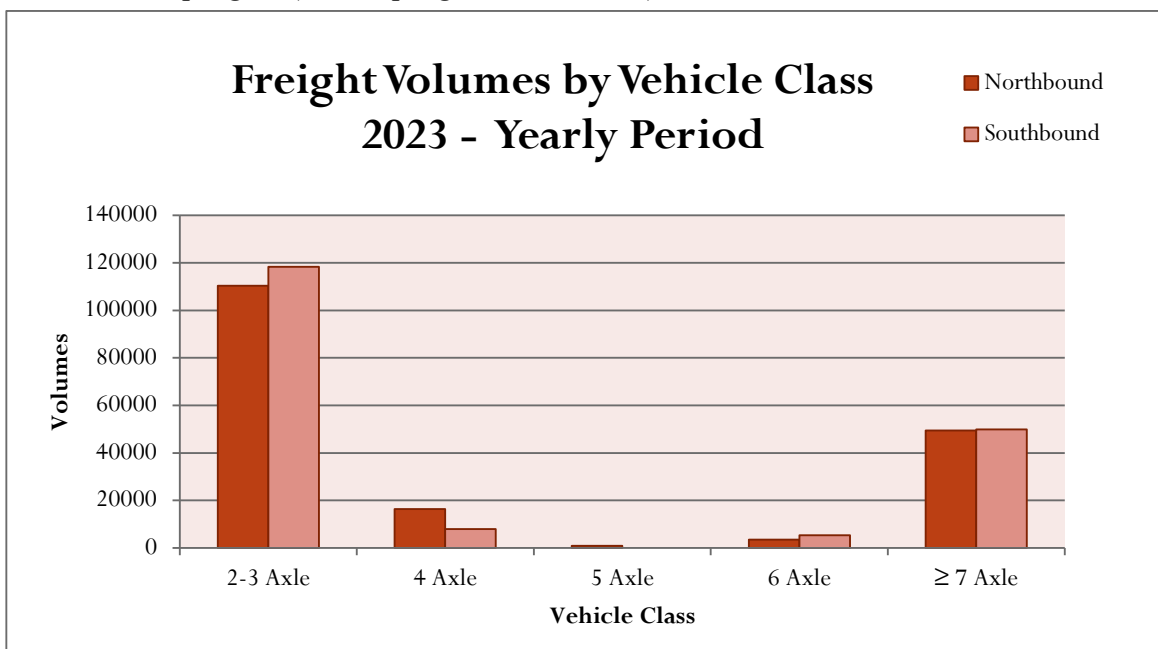
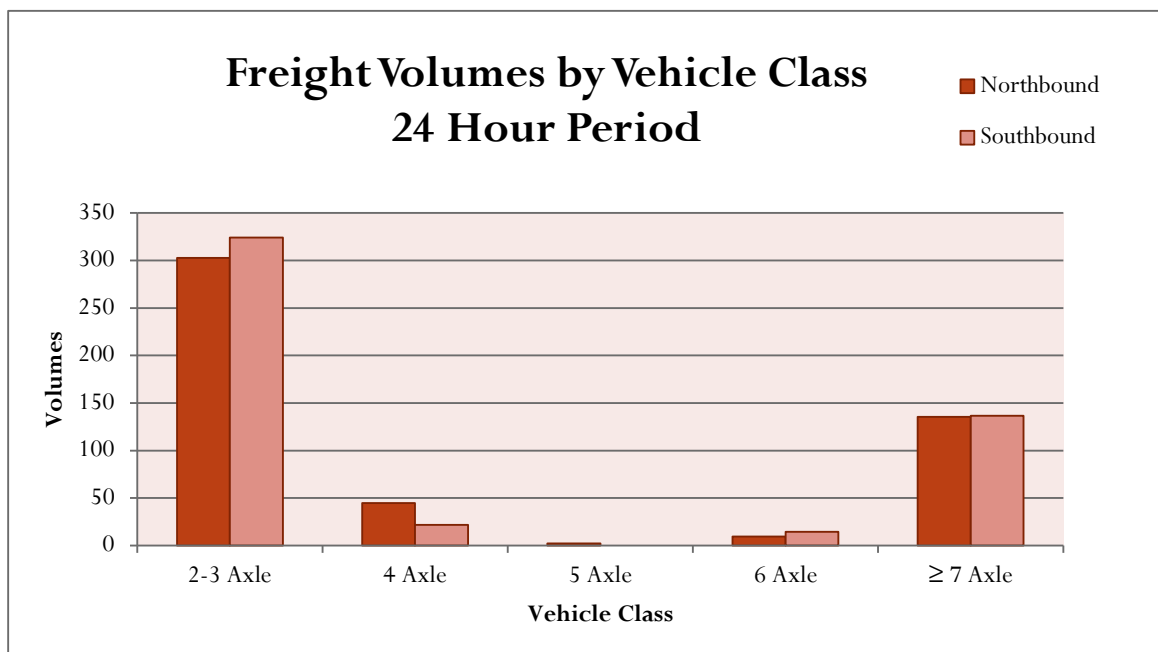
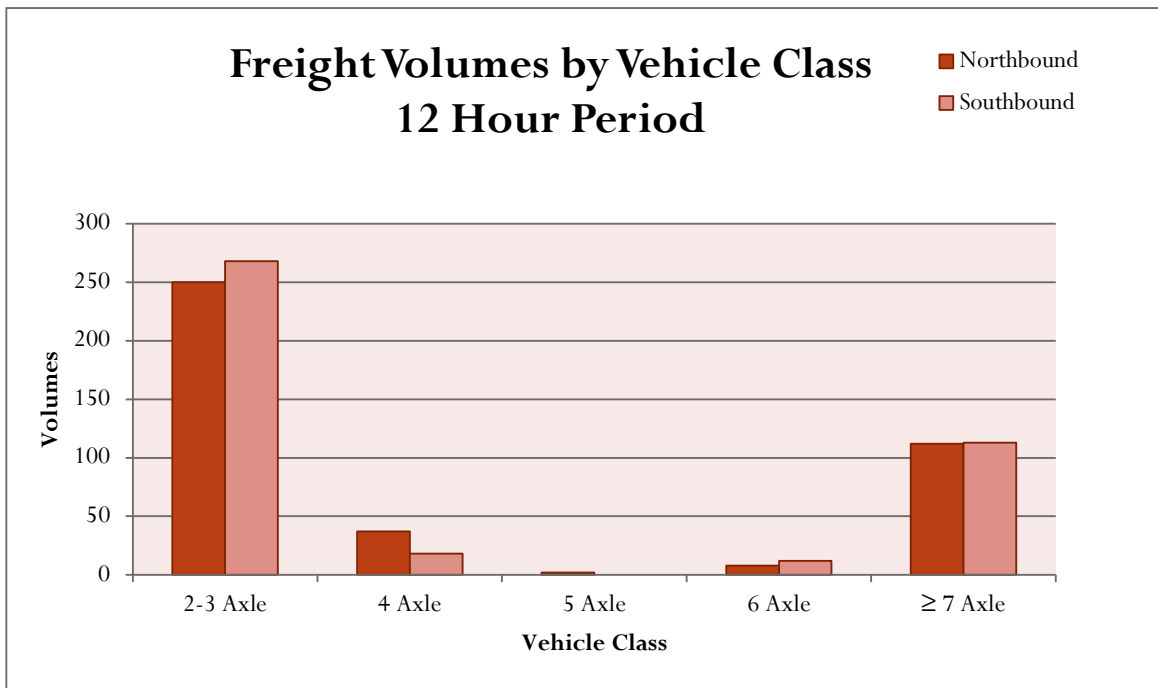


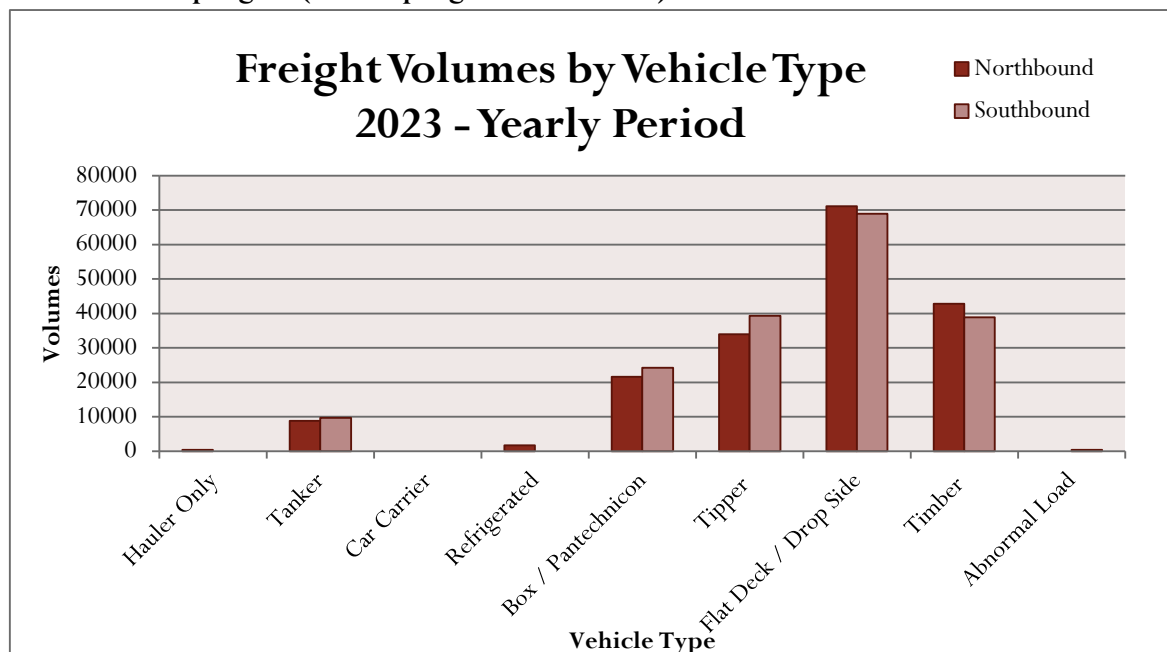
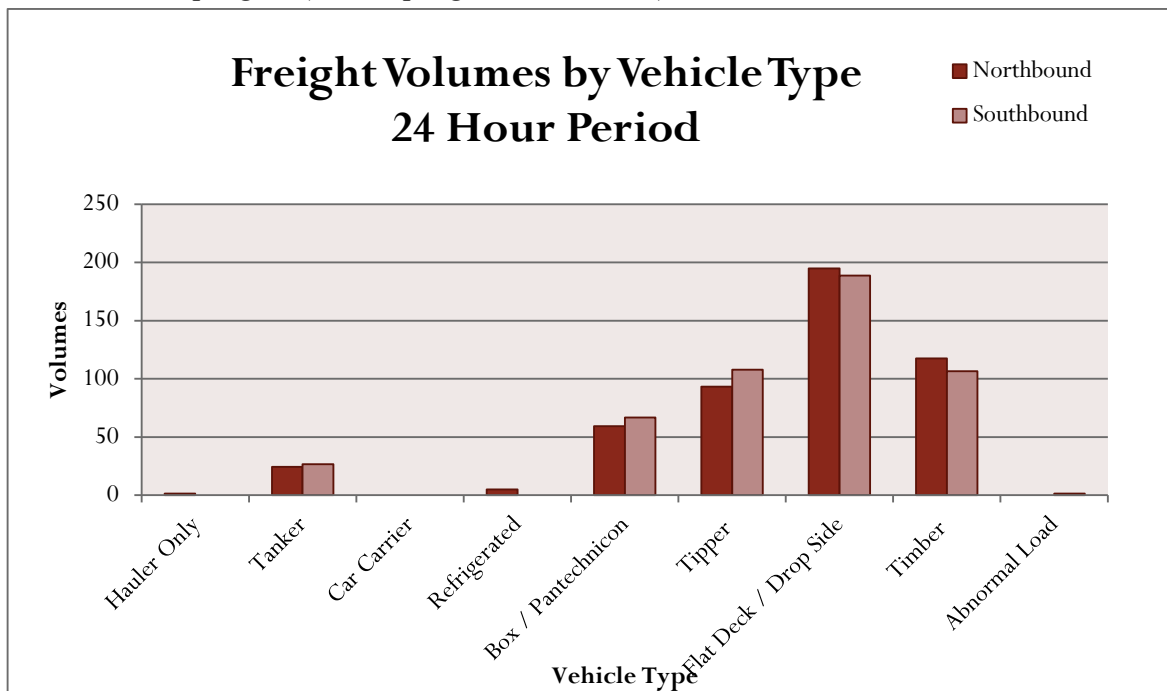
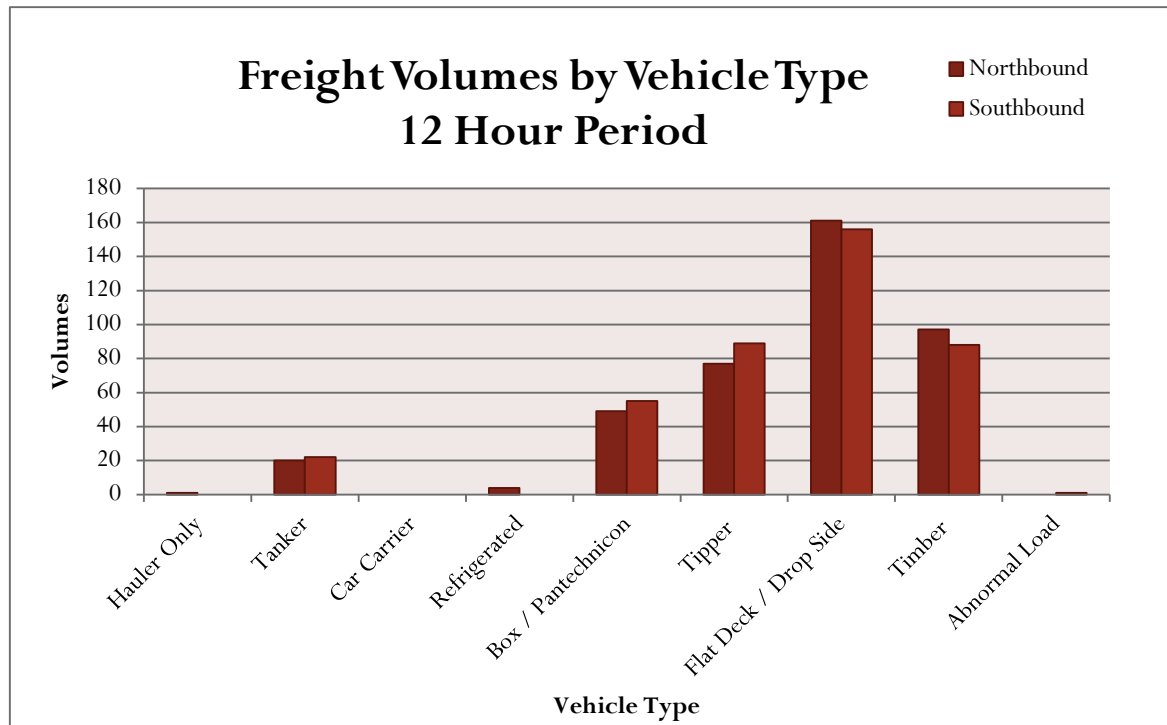
TRAFFIC HIGHLIGHTS OF SITE 1098			
1.1	Site Identifier	1098	
1.2	Site Name	Mtunzini Alt North	
1.3	Site Description	Between Gingindlovu & Empangeni	
1.4	Road Description	Route : R102 Road : P002 Section : 04 Distance : 24.0km	
1.5	GPS Position	31 47 27.4E -28 54 55.0S	
1.6	Number of Lanes	2	
1.7	Station Type	Permanent Piezo	
1.8	Requested Period	2023/01/01 - 2023/12/31	
1.9	Length of record requested (hours)	8760	
1.10	Actual First & Last Dates	2023/06/06 - 2023/12/22	
1.11	Actual available good data (hours)	4767	
1.12	Percentage good data available for requested period	54.4	
		To Empangeni	Total
2.1a	Total number of vehicles (counted)	250828	492948
2.1b	Total number of vehicles (projected for period)	460877	905753
2.2	Average daily traffic (ADT)	1263	2482
2.3	Average daily truck traffic (ADTT)	142	290
2.4	Percentage of trucks	11.3	11.7
2.5	Truck split % (short:medium:long)	35 : 12 : 53	34 : 13 : 53
2.6	Percentage of night traffic (20:00 - 06:00)	10.7	10.7
3.1	Speed limit (km/hr)		100
3.2	Average speed (km/hr)	77.2	75.5
3.3	Average speed - light vehicles (km/hr)	79.0	77.3
3.4	Average speed - heavy vehicles (km/hr)	62.9	62.3
3.5	Average night speed (km/hr)	71.3	70.3
3.6	15th centile speed (km/hr)	60.9	59.9
3.7	85th centile speed (km/hr)	94.0	92.0
3.8	Percentage vehicles in excess of speed limit	6.8	6.0
4.1	Percentage vehicles in flows over 600 vehicles/hr	0.0	0.3
4.2	Highest volume on the road (vehicles/hr)	2023/06/14 16:00:00	871
4.3	Highest volume in the North-East (vehs/hr)	2023/06/14 16:00:00	308
4.4	Highest volume in the South-West (vehs/hr)	2023/06/14 16:00:00	563
4.5	Highest volume in a lane (vehicles/hr)	2023/06/14 16:00:00	563
4.6	15th highest volume on the road (vehicles/hr)	2023/07/16 17:00:00	292
4.7	15th highest volume in the North-East direction (vehs/hr)	2023/11/05 19:00:00	157
4.8	15th highest volume in the South-West direction (vehs/hr)	2023/11/03 17:00:00	151
4.9	30th highest volume on the road (vehicles/hr)	2023/06/15 16:00:00	276
4.10	30th highest volume in the North-East direction (vehs/hr)	2023/09/05 16:00:00	137
4.11	30th highest volume in the South-West direction (vehs/hr)	2023/07/07 17:00:00	141
5.1	Percentage of vehicles less than 2s behind vehicle ahead		
6.1	Total number of heavy vehicles (projected for period)	51992	105946
6.2	Estimated average number of axles per truck	5.0	5.1
6.3	Estimated truck mass (Ton/truck)	28.6	29.0
6.4	Estimated average E80/truck	1.6	1.6
6.5	Estimated daily E80 on the road		478
6.6	Estimated daily E80 in the North-East direction		231
6.7	Estimated daily E80 in the South-West direction		247
6.8	Estimated daily E80 in the worst North-East lane		231
6.9	Estimated daily E80 in the worst South-West lane		247
6.10	ASSUMPTION on Axles/Truck (Short:Medium:Long)		(2.0 : 5.0 : 7.0)
6.11	ASSUMPTION on Mass/Truck (Short:Medium:Long)		(10.9 : 31.5 : 39.8)
6.12	ASSUMPTION on E80s/Truck (Short:Medium:Long)		(0.6 : 2.5 : 2.1)

L/H/Volume Report

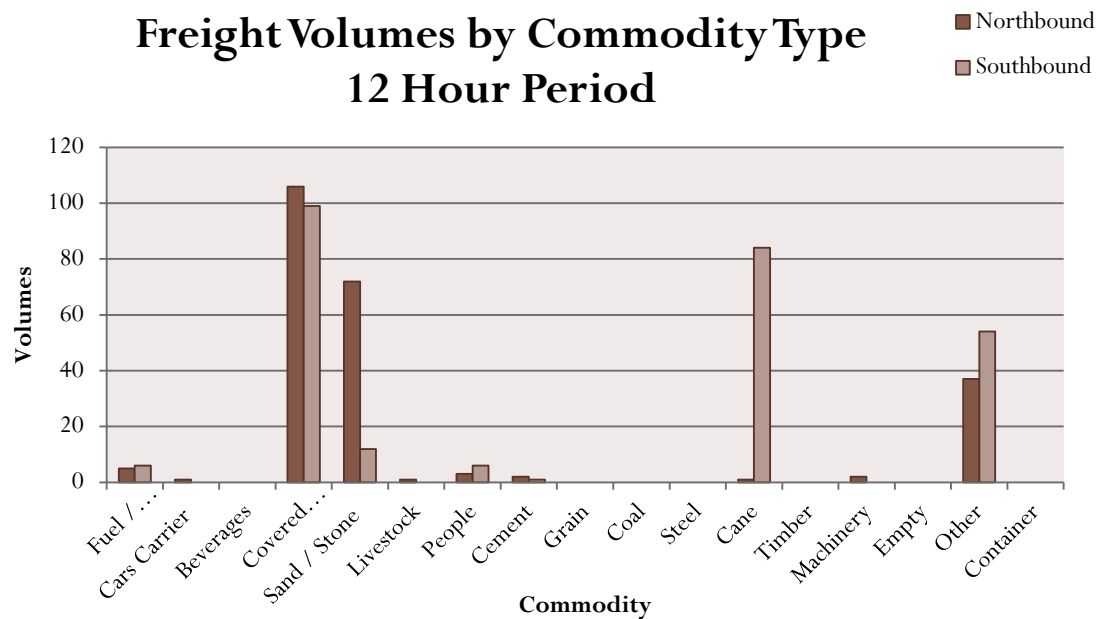
Date : 2023/10/02
Site : 1098 - Mtunzini Alt North
Description : Between Gingindlovu & Empangeni

Date	Time	Dur.	Lane 1			Lane 2			To Empangeni			To Gingindlovu		
			Light	Hvy	Total	Light	Hvy	Total	Light	Hvy	Total	Light	Hvy	Total
231002	00:00	24:00	1275	108	1383	1171	93	1264	1275	108	1383	1171	93	1264
231003	00:00	24:00	1163	147	1310	1110	155	1265	1163	147	1310	1110	155	1265
231004	00:00	24:00	1107	176	1283	1021	207	1228	1107	176	1283	1021	207	1228
231005	00:00	24:00	1117	178	1295	1054	205	1259	1117	178	1295	1054	205	1259
231006	00:00	24:00	1301	195	1496	1286	194	1480	1301	195	1496	1286	194	1480
231007	00:00	24:00	1154	147	1301	1171	166	1337	1154	147	1301	1171	166	1337
231008	00:00	24:00	1145	95	1240	1011	124	1135	1145	95	1240	1011	124	1135

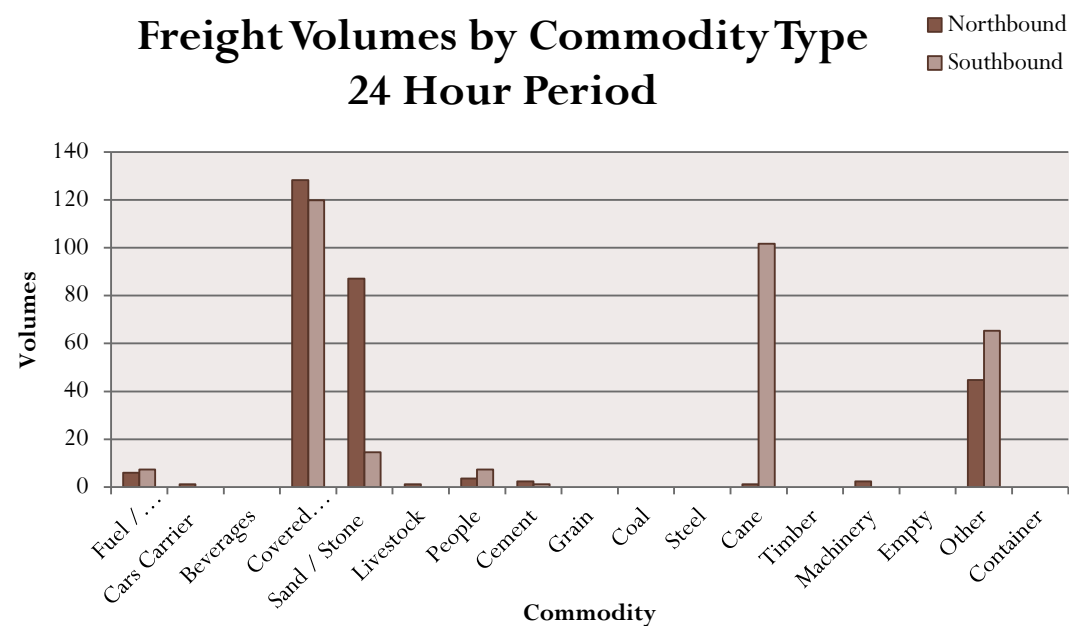




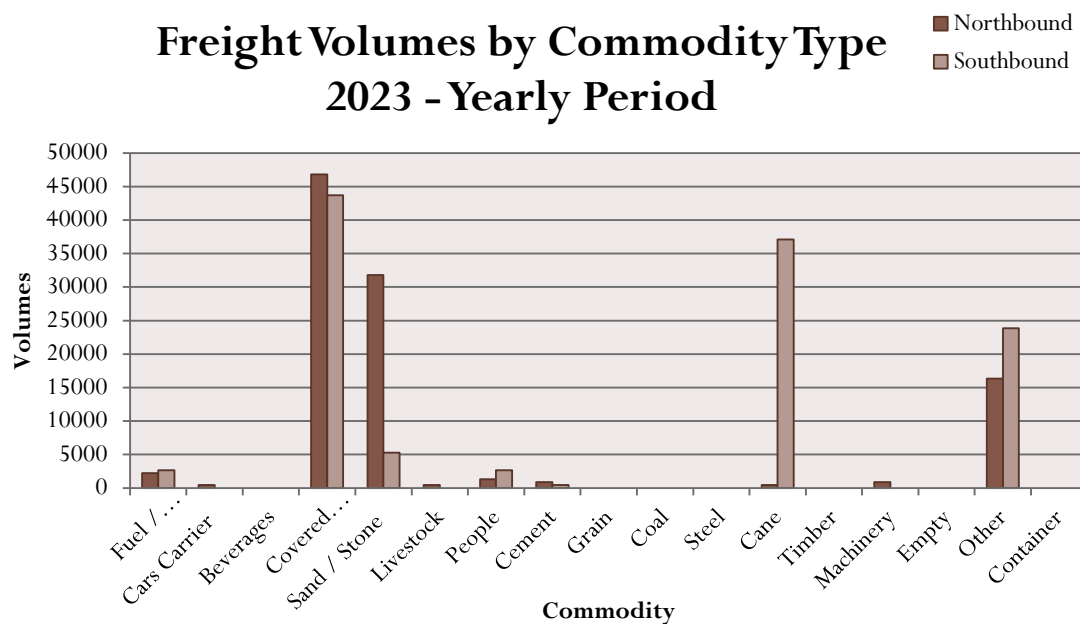
Freight Volumes by Commodity Type 12 Hour Period



Freight Volumes by Commodity Type 24 Hour Period

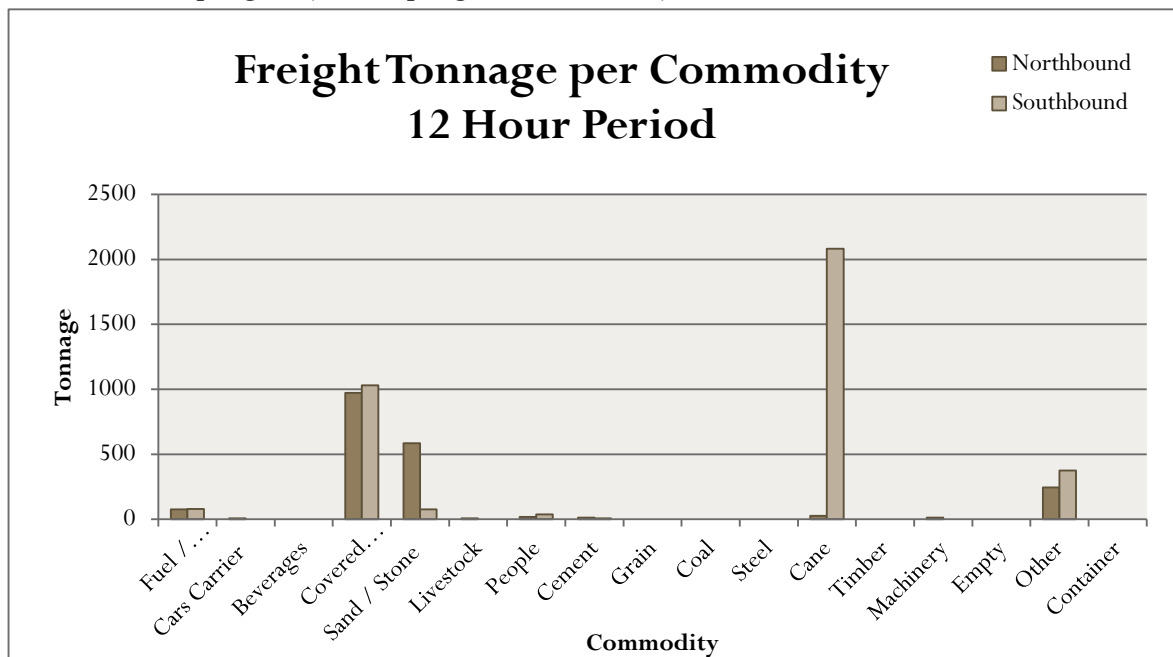


Freight Volumes by Commodity Type 2023 - Yearly Period



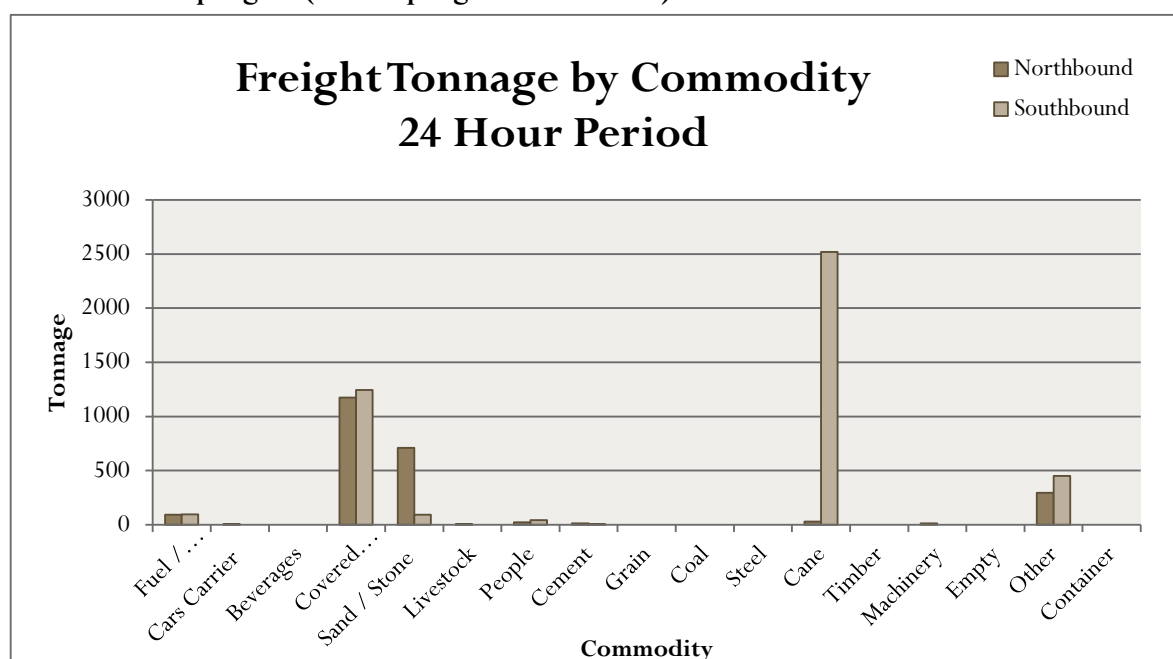
Empangeni (R34 Empangeni to Nkwalini)

Date: 27/09/2023

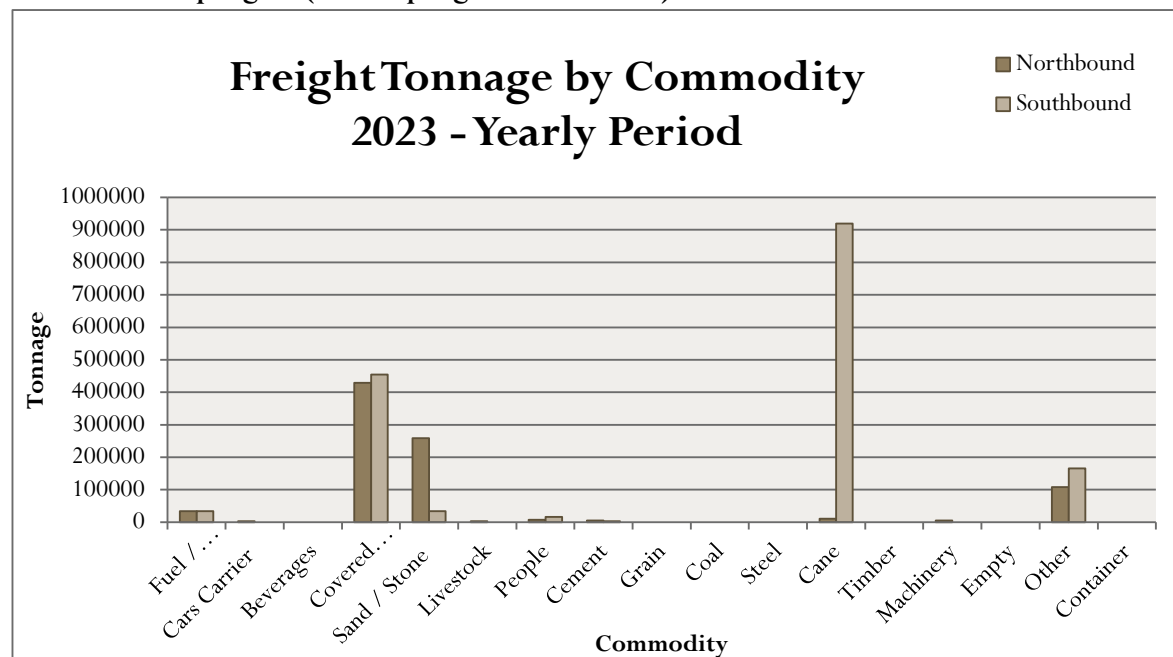


Empangeni (R34 Empangeni to Nkwalini)

Date: 27/09/2023



Empangeni (R34 Empangeni to Nkwalini)



Empangeni (R34 Empangeni to Nkwalini)													
Freight Tonnage by Commodity by Vehicle Class (12 Hours)												Date: 27/09/2023	
Northbound							Southbound						
	2-3 Axle	4 Axle	5 Axle	6 Axle	≥ 7 Axle	Total		2-3 Axle	4 Axle	5 Axle	6 Axle	≥ 7 Axle	Total
Fuel / Chemicals	6	10	0	60	0	76	Fuel / Chemicals	18	0	0	60	0	78
Cars Carrier	6	0	0	0	0	6	Cars Carrier	0	0	0	0	0	0
Beverages	0	0	0	0	0	0	Beverages	0	0	0	0	0	0
Covered Load / Sail or Tarp	522	0	0	100	350	972	Covered Load / Sail or Tarp	450	0	0	80	500	1030
Sand / Stone	216	340	30	0	0	586	Sand / Stone	66	10	0	0	0	76
Livestock	6	0	0	0	0	6	Livestock	0	0	0	0	0	0
People	18	0	0	0	0	18	People	36	0	0	0	0	36
Cement	12	0	0	0	0	12	Cement	6	0	0	0	0	6
Grain	0	0	0	0	0	0	Grain	0	0	0	0	0	0
Coal	0	0	0	0	0	0	Coal	0	0	0	0	0	0
Steel	0	0	0	0	0	0	Steel	0	0	0	0	0	0
Cane	0	0	0	0	25	25	Cane	6	0	0	0	2075	2081
Timber	0	0	0	0	0	0	Timber	0	0	0	0	0	0
Machinery	12	0	0	0	0	12	Machinery	0	0	0	0	0	0
Empty	0	0	0	0	0	0	Empty	0	0	0	0	0	0
Other	210	10	0	0	25	245	Other	294	20	0	60	0	374
Container	0	0	0	0	0	0	Container	0	0	0	0	0	0

Empangeni (R34 Empangeni to Nkwalini)													
Freight Tonnage by Commodity by Vehicle Class (24 Hours)												Date: 27/09/2023	
Northbound							Southbound						
	3 Axle	4 Axle	5 Axle	6 Axle	≥ 7 Axle	Total		3 Axle	4 Axle	5 Axle	6 Axle	≥ 7 Axle	Total
Fuel / Chemicals	7	12	0	73	0	92	Fuel / Chemicals	22	0	0	73	0	94
Cars Carrier	7	0	0	0	0	7	Cars Carrier	0	0	0	0	0	0
Beverages	0	0	0	0	0	0	Beverages	0	0	0	0	0	0
Covered Load / Sail or Tarp	632	0	0	121	424	1176	Covered Load / Sail or Tarp	545	0	0	97	605	1246
Sand / Stone	261	411	36	0	0	709	Sand / Stone	80	12	0	0	0	92
Livestock	7	0	0	0	0	7	Livestock	0	0	0	0	0	0
People	22	0	0	0	0	22	People	44	0	0	0	0	44
Cement	15	0	0	0	0	15	Cement	7	0	0	0	0	7
Grain	0	0	0	0	0	0	Grain	0	0	0	0	0	0
Coal	0	0	0	0	0	0	Coal	0	0	0	0	0	0
Steel	0	0	0	0	0	0	Steel	0	0	0	0	0	0
Cane	0	0	0	0	30	30	Cane	7	0	0	0	2511	2518
Timber	0	0	0	0	0	0	Timber	0	0	0	0	0	0
Machinery	15	0	0	0	0	15	Machinery	0	0	0	0	0	0
Empty	0	0	0	0	0	0	Empty	0	0	0	0	0	0
Other	254	12	0	0	30	296	Other	356	24	0	73	0	453
Container	0	0	0	0	0	0	Container	0	0	0	0	0	0

Empangeni (R34 Empangeni to Nkwalini)													
Freight Tonnage by Commodity by Vehicle Class (Yearly Period)													
Northbound							Southbound						
	3 Axle	4 Axle	5 Axle	6 Axle	≥ 7 Axle	Total		3 Axle	4 Axle	5 Axle	6 Axle	≥ 7 Axle	Total
Fuel / Chemicals	2650	4417	0	26499	0	33565	Fuel / Chemicals	7950	0	0	26499	0	34449
Cars Carrier	2650	0	0	0	0	2650	Cars Carrier	0	0	0	0	0	0
Beverages	0	0	0	0	0	0	Beverages	0	0	0	0	0	0
Covered Load / Sail or Tarp	230541	0	0	44165	154578	429284	Covered Load / Sail or Tarp	198743	0	0	35332	220825	454900
Sand / Stone	95396	150161	13250	0	0	258807	Sand / Stone	29149	4417	0	0	0	33565
Livestock	2650	0	0	0	0	2650	Livestock	0	0	0	0	0	0
People	7950	0	0	0	0	7950	People	15899	0	0	0	0	15899
Cement	5300	0	0	0	0	5300	Cement	2650	0	0	0	0	2650
Grain	0	0	0	0	0	0	Grain	0	0	0	0	0	0
Coal	0	0	0	0	0	0	Coal	0	0	0	0	0	0
Steel	0	0	0	0	0	0	Steel	0	0	0	0	0	0
Cane	0	0	0	0	11041	11041	Cane	2650	0	0	0	916424	919074
Timber	0	0	0	0	0	0	Timber	0	0	0	0	0	0
Machinery	5300	0	0	0	0	5300	Machinery	0	0	0	0	0	0
Empty	0	0	0	0	0	0	Empty	0	0	0	0	0	0
Other	92747	4417	0	0	11041	108204	Other	129845	8833	0	26499	0	165177
Container	0	0	0	0	0	0	Container	0	0	0	0	0	0

Empangeni (R34 Empangeni to Nkwalini)													
Twenty Foot Equivalent Unit (TEU) (12 Hours)												Date: 27/09/2023	
Northbound							Southbound						
	1x6	2x6	3x6	1x12	1x6 + 1x12	TOTAL		1x6	2x6	3x6	1x12	1x6 + 1x12	TOTAL
2 Axle						0	2 Axle						0
3 Axle						0	3 Axle						0
4 Axle						0	4 Axle						0
5 Axle						0	5 Axle						0
6 Axle						0	6 Axle						0
≥ 7 Axle						0	≥ 7 Axle						0
TOTAL						0	TOTAL						0

Empangeni (R34 Empangeni to Nkwalini)													
Twenty Foot Equivalent Unit (TEU) (24 Hours)											Date: 27/09/2023		
Northbound							Southbound						
	1x6	2x6	3x6	1x12	1x6 + 1x12	TOTAL		1x6	2x6	3x6	1x12	1x6 + 1x12	TOTAL
2 Axle	0	0	0	0	0	0	2 Axle	0	0	0	0	0	0
3 Axle	0	0	0	0	0	0	3 Axle	0	0	0	0	0	0
4 Axle	0	0	0	0	0	0	4 Axle	0	0	0	0	0	0
5 Axle	0	0	0	0	0	0	5 Axle	0	0	0	0	0	0
6 Axle	0	0	0	0	0	0	6 Axle	0	0	0	0	0	0
≥ 7 Axle	0	0	0	0	0	0	≥ 7 Axle	0	0	0	0	0	0
TOTAL						0	TOTAL						0

Empangeni (R34 Empangeni to Nkwalini)													
Twenty Foot Equivalent Unit (TEU) (Yearly Period)													
Northbound							Southbound						
	1x6	2x6	3x6	1x12	1x6 + 1x12	TOTAL		1x6	2x6	3x6	1x12	1x6 + 1x12	TOTAL
2 Axle	0	0	0	0	0	0	2 Axle	0	0	0	0	0	0
3 Axle	0	0	0	0	0	0	3 Axle	0	0	0	0	0	0
4 Axle	0	0	0	0	0	0	4 Axle	0	0	0	0	0	0
5 Axle	0	0	0	0	0	0	5 Axle	0	0	0	0	0	0
6 Axle	0	0	0	0	0	0	6 Axle	0	0	0	0	0	0
≥ 7 Axle	0	0	0	0	0	0	≥ 7 Axle	0	0	0	0	0	0
TOTAL						0	TOTAL						0