

NETWORK SUMMARY

Network: new airport pm 2031 v8 62k

New Network

Network Performance - Hourly Values				
Performance Measure	Vehicles	Per Unit Distance	Pedestrians	Persons
Network Level of Service (LOS)	LOS E			
Travel Time Index	3.14			
Speed Efficiency	0.38			
Congestion Coefficient	2.61			
Travel Speed (Average)	21.1 km/h		1.9 km/h	20.5 km/h
Travel Distance (Total)	6666.4 veh-km/h		21.2 ped-km/h	8020.9 pers-km/h
Travel Time (Total)	316.5 veh-h/h		11.3 ped-h/h	391.1 pers-h/h
Desired Speed	55.0 km/h			
Demand Flows (Total)	27446 veh/h		661 ped/h	31730 pers/h
Arrival Flows (Total)	26442 veh/h		661 ped/h	31730 pers/h
Percent Heavy Vehicles (Demand)	0.0 %			
Percent Heavy Vehicles (Arrival)	0.0 %			
Degree of Saturation	1.250			
Control Delay (Total)	185.95 veh-h/h		6.80 ped-h/h	229.94 pers-h/h
Control Delay (Average)	25.3 sec		37.1 sec	26.1 sec
Control Delay (Worst Lane)	257.0 sec			
Control Delay (Worst Movement)	257.0 sec		41.8 sec	257.0 sec
Geometric Delay (Average)	1.7 sec			
Stop-Line Delay (Average)	23.6 sec			
Queue Storage Ratio (Worst Lane)	1.00			
Total Effective Stops	14523 veh/h		577 ped/h	18005 pers/h
Effective Stop Rate	0.55 per veh	2.2 per km	0.87 per ped	0.57 per pers
Proportion Queued	0.46			
Performance Index	721.8		14.5	736.4
Cost (Total)	10136.25 \$/h	1.52 \$/km	238.00 \$/h	10374.25 \$/h
Fuel Consumption (Total)	915.5 L/h	137.3 mL/km		
Fuel Economy	13.7 L/100km			
Carbon Dioxide (Total)	2151.4 kg/h	322.7 g/km		
Hydrocarbons (Total)	0.989 kg/h	0.148 g/km		
Carbon Monoxide (Total)	8.515 kg/h	1.277 g/km		
NOx (Total)	1.482 kg/h	0.222 g/km		

Network Model Accuracy Level (largest change in degree of saturation for any lane): 17.7 %

Number of Iterations: 10

Network Level of Service (LOS) Method: SIDRA Speed Efficiency.

Model used: New Zealand.

Network Performance - Annual Values

Performance Measure	Vehicles	Pedestrians	Persons
Demand Flows (Total)	13,173,930 veh/y	317,053 ped/y	15,230,430 pers/y
Delay	89,255 veh-h/y	3,265 ped-h/y	110,371 pers-h/y
Effective Stops	6,971,132 veh/y	277,137 ped/y	8,642,497 pers/y
Travel Distance	3,199,886 veh-km/y	10,181 ped-km/y	3,850,045 pers-km/y
Travel Time	151,900 veh-h/y	5,440 ped-h/y	187,720 pers-h/y
Cost	4,865,398 \$/y	114,240 \$/y	4,979,638 \$/y
Fuel Consumption	439,438 L/y		
Carbon Dioxide	1,032,679 kg/y		
Hydrocarbons	475 kg/y		
Carbon Monoxide	4,087 kg/y		
NOx	711 kg/y		

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