

NETWORK SUMMARY

☐☐ Network: new airport pm 2017 Base 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	2.53			
Speed Efficiency	0.33			
Congestion Coefficient	3.05			
Travel Speed (Average)	18.0 km/h		2.3 km/h	17.6 km/h
Travel Distance (Total)	5122.5 veh-km/h		19.7 ped-km/h	6166.7 pers-km/h
Travel Time (Total)	284.3 veh-h/h		8.7 ped-h/h	349.9 pers-h/h
Desired Speed	55.0 km/h			
Demand Flows (Total)	24963 veh/h		611 ped/h	28517 pers/h
Arrival Flows (Total)	23764 veh/h		611 ped/h	28517 pers/h
Percent Heavy Vehicles (Demand)	0.0 %			
Percent Heavy Vehicles (Arrival)	0.0 %			
Degree of Saturation	1.406			
Control Delay (Total)	184.29 veh-h/h		4.51 ped-h/h	225.67 pers-h/h
Control Delay (Average)	27.9 sec		26.6 sec	28.5 sec
Control Delay (Worst Lane)	397.4 sec			
Control Delay (Worst Movement)	397.9 sec		29.3 sec	397.9 sec
Geometric Delay (Average)	1.7 sec			
Stop-Line Delay (Average)	26.2 sec			
Queue Storage Ratio (Worst Lane)	3.90			
Total Effective Stops	16946 veh/h		530 ped/h	20865 pers/h
Effective Stop Rate	0.71 per veh	3.3 per km	0.87 per ped	0.73 per pers
Proportion Queued	0.50		0.87	0.52
Performance Index	810.1		11.7	821.8
Cost (Total)	9241.69 \$/h	1.80 \$/km	183.22 \$/h	9424.91 \$/h
Fuel Consumption (Total)	825.7 L/h	161.2 mL/km		
Fuel Economy	16.1 L/100km			
Carbon Dioxide (Total)	1940.4 kg/h	378.8 g/km		
Hydrocarbons (Total)	0.751 kg/h	0.147 g/km		
Carbon Monoxide (Total)	6.624 kg/h	1.293 g/km		
NOx (Total)	1.339 kg/h	0.261 g/km		

Network Model Accuracy Level (largest change in degree of saturation for any lane): 10.0 %

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)	11,982,470 veh/y	293,053 ped/y	13,688,250 pers/y
Delay	88,461 veh-h/y	2,166 ped-h/y	108,320 pers-h/y
Effective Stops	8,134,078 veh/y	254,397 ped/y	10,015,290 pers/y
Travel Distance	2,458,781 veh-km/y	9,461 ped-km/y	2,959,998 pers-km/y
Travel Time	136,481 veh-h/y	4,188 ped-h/y	167,964 pers-h/y
Cost	4,436,012 \$/y	87,944 \$/y	4,523,955 \$/y
Fuel Consumption	396,337 L/y		
Carbon Dioxide	931,393 kg/y		
Hydrocarbons	360 kg/y		
Carbon Monoxide	3,180 kg/y		
NOx	643 kg/y		

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