

# NETWORK SUMMARY

Network: new airport pm 2031 v8 340k

New Network

Network Performance - Hourly Values				
Performance Measure	Vehicles	Per Unit Distance	Pedestrians	Persons
Network Level of Service (LOS)	LOS F			
Travel Time Index	0.71			
Speed Efficiency	0.16			
Congestion Coefficient	6.10			
Travel Speed (Average)	9.0 km/h		1.9 km/h	8.9 km/h
Travel Distance (Total)	8161.9 veh-km/h		21.2 ped-km/h	9815.4 pers-km/h
Travel Time (Total)	905.7 veh-h/h		11.3 ped-h/h	1098.1 pers-h/h
Desired Speed	55.0 km/h			
Demand Flows (Total)	38284 veh/h		661 ped/h	40559 pers/h
Arrival Flows (Total)	33799 veh/h		661 ped/h	40559 pers/h
Percent Heavy Vehicles (Demand)	0.0 %			
Percent Heavy Vehicles (Arrival)	0.0 %			
Degree of Saturation	4.604			
Control Delay (Total)	742.90 veh-h/h		6.77 ped-h/h	898.25 pers-h/h
Control Delay (Average)	79.1 sec		36.9 sec	79.7 sec
Control Delay (Worst Lane)	3412.3 sec			
Control Delay (Worst Movement)	3412.3 sec		41.8 sec	3412.3 sec
Geometric Delay (Average)	1.9 sec			
Stop-Line Delay (Average)	77.3 sec			
Queue Storage Ratio (Worst Lane)	8.75			
Total Effective Stops	31639 veh/h		575 ped/h	38541 pers/h
Effective Stop Rate	0.94 per veh	3.9 per km	0.87 per ped	0.95 per pers
Proportion Queued	0.52		0.87	0.53
Performance Index	2115.6		14.5	2130.1
Cost (Total)	26059.70 \$/h	3.19 \$/km	237.28 \$/h	26296.97 \$/h
Fuel Consumption (Total)	1816.6 L/h	222.6 mL/km		
Fuel Economy	22.3 L/100km			
Carbon Dioxide (Total)	4269.0 kg/h	523.0 g/km		
Hydrocarbons (Total)	1.933 kg/h	0.237 g/km		
Carbon Monoxide (Total)	13.454 kg/h	1.648 g/km		
NOx (Total)	2.110 kg/h	0.258 g/km		

Network Model Accuracy Level (largest change in degree of saturation for any lane): 16.3 %

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)	18,376,240 veh/y	317,053 ped/y	19,468,330 pers/y
Delay	356,592 veh-h/y	3,248 ped-h/y	431,158 pers-h/y
Effective Stops	15,186,610 veh/y	275,805 ped/y	18,499,740 pers/y
Travel Distance	3,917,692 veh-km/y	10,181 ped-km/y	4,711,412 pers-km/y
Travel Time	434,719 veh-h/y	5,423 ped-h/y	527,086 pers-h/y
Cost	12,508,650 \$/y	113,893 \$/y	12,622,550 \$/y
Fuel Consumption	871,966 L/y		
Carbon Dioxide	2,049,120 kg/y		
Hydrocarbons	928 kg/y		
Carbon Monoxide	6,458 kg/y		
NOx	1,013 kg/y		

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