

# NETWORK SUMMARY

Network: new airport pm 2031 v8 103k

New Network

Network Performance - Hourly Values				
Performance Measure	Vehicles	Per Unit Distance	Pedestrians	Persons
Network Level of Service (LOS)	LOS E			
Travel Time Index	2.78			
Speed Efficiency	0.35			
Congestion Coefficient	2.86			
Travel Speed (Average)	19.3 km/h		1.9 km/h	18.8 km/h
Travel Distance (Total)	7161.3 veh-km/h		21.2 ped-km/h	8614.7 pers-km/h
Travel Time (Total)	371.9 veh-h/h		11.3 ped-h/h	457.6 pers-h/h
Desired Speed	55.0 km/h			
Demand Flows (Total)	30148 veh/h		661 ped/h	34505 pers/h
Arrival Flows (Total)	28754 veh/h		661 ped/h	34505 pers/h
Percent Heavy Vehicles (Demand)	0.0 %			
Percent Heavy Vehicles (Arrival)	0.0 %			
Degree of Saturation	1.390			
Control Delay (Total)	231.32 veh-h/h		6.77 ped-h/h	284.35 pers-h/h
Control Delay (Average)	29.0 sec		36.9 sec	29.7 sec
Control Delay (Worst Lane)	384.7 sec			
Control Delay (Worst Movement)	384.7 sec		41.8 sec	384.7 sec
Geometric Delay (Average)	1.8 sec			
Stop-Line Delay (Average)	27.2 sec			
Queue Storage Ratio (Worst Lane)	1.00			
Total Effective Stops	16568 veh/h		575 ped/h	20457 pers/h
Effective Stop Rate	0.58 per veh	2.3 per km	0.87 per ped	0.59 per pers
Proportion Queued	0.48		0.87	0.50
Performance Index	857.1		14.5	871.6
Cost (Total)	11804.26 \$/h	1.65 \$/km	237.33 \$/h	12041.59 \$/h
Fuel Consumption (Total)	1028.4 L/h	143.6 mL/km		
Fuel Economy	14.4 L/100km			
Carbon Dioxide (Total)	2416.8 kg/h	337.5 g/km		
Hydrocarbons (Total)	1.134 kg/h	0.158 g/km		
Carbon Monoxide (Total)	9.437 kg/h	1.318 g/km		
NOx (Total)	1.616 kg/h	0.226 g/km		

Network Model Accuracy Level (largest change in degree of saturation for any lane): 11.5 %

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)	14,470,990 veh/y	317,053 ped/y	16,562,440 pers/y
Delay	111,034 veh-h/y	3,249 ped-h/y	136,490 pers-h/y
Effective Stops	7,952,541 veh/y	276,071 ped/y	9,819,120 pers/y
Travel Distance	3,437,409 veh-km/y	10,181 ped-km/y	4,135,072 pers-km/y
Travel Time	178,501 veh-h/y	5,425 ped-h/y	219,626 pers-h/y
Cost	5,666,047 \$/y	113,917 \$/y	5,779,963 \$/y
Fuel Consumption	493,643 L/y		
Carbon Dioxide	1,160,061 kg/y		
Hydrocarbons	544 kg/y		
Carbon Monoxide	4,530 kg/y		
NOx	776 kg/y		

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