

# NETWORK SUMMARY

Network: new airport pm 2031 v8 23k

New Network

Network Performance - Hourly Values				
Performance Measure	Vehicles	Per Unit Distance	Pedestrians	Persons
Network Level of Service (LOS)	LOS E			
Travel Time Index	3.99			
Speed Efficiency	0.46			
Congestion Coefficient	2.18			
Travel Speed (Average)	25.3 km/h		1.9 km/h	24.4 km/h
Travel Distance (Total)	5941.5 veh-km/h		21.2 ped-km/h	7151.0 pers-km/h
Travel Time (Total)	235.2 veh-h/h		11.4 ped-h/h	293.6 pers-h/h
Desired Speed	55.0 km/h			
Demand Flows (Total)	23545 veh/h		661 ped/h	27727 pers/h
Arrival Flows (Total)	23106 veh/h		661 ped/h	27727 pers/h
Percent Heavy Vehicles (Demand)	0.0 %			
Percent Heavy Vehicles (Arrival)	0.0 %			
Degree of Saturation	1.115			
Control Delay (Total)	118.88 veh-h/h		6.84 ped-h/h	149.51 pers-h/h
Control Delay (Average)	18.5 sec		37.3 sec	19.4 sec
Control Delay (Worst Lane)	143.1 sec			
Control Delay (Worst Movement)	124.6 sec		41.8 sec	124.6 sec
Geometric Delay (Average)	1.7 sec			
Stop-Line Delay (Average)	16.8 sec			
Queue Storage Ratio (Worst Lane)	1.00			
Total Effective Stops	11757 veh/h		580 ped/h	14689 pers/h
Effective Stop Rate	0.51 per veh	2.0 per km	0.88 per ped	0.53 per pers
Proportion Queued	0.44		0.88	0.46
Performance Index	546.8		14.6	561.4
Cost (Total)	7694.12 \$/h	1.29 \$/km	238.90 \$/h	7933.02 \$/h
Fuel Consumption (Total)	751.6 L/h	126.5 mL/km		
Fuel Economy	12.7 L/100km			
Carbon Dioxide (Total)	1766.4 kg/h	297.3 g/km		
Hydrocarbons (Total)	0.772 kg/h	0.130 g/km		
Carbon Monoxide (Total)	7.148 kg/h	1.203 g/km		
NOx (Total)	1.289 kg/h	0.217 g/km		

Network Model Accuracy Level (largest change in degree of saturation for any lane): 3.9 %

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)	11,301,550 veh/y	317,053 ped/y	13,308,770 pers/y
Delay	57,065 veh-h/y	3,285 ped-h/y	71,763 pers-h/y
Effective Stops	5,643,483 veh/y	278,470 ped/y	7,050,649 pers/y
Travel Distance	2,851,926 veh-km/y	10,181 ped-km/y	3,432,492 pers-km/y
Travel Time	112,889 veh-h/y	5,461 ped-h/y	140,927 pers-h/y
Cost	3,693,175 \$/y	114,673 \$/y	3,807,848 \$/y
Fuel Consumption	360,790 L/y		
Carbon Dioxide	847,857 kg/y		
Hydrocarbons	371 kg/y		
Carbon Monoxide	3,431 kg/y		
NOx	618 kg/y		

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