

NETWORK SUMMARY

☐☐ Network: new airport pm 2017 Base v8 43k

New Network

Network Performance - Hourly Values				
Performance Measure	Vehicles	Per Unit Distance	Pedestrians	Persons
Network Level of Service (LOS)	LOS E			
Travel Time Index	4.35			
Speed Efficiency	0.49			
Congestion Coefficient	2.03			
Travel Speed (Average)	27.0 km/h		2.3 km/h	26.1 km/h
Travel Distance (Total)	4928.7 veh-km/h		19.7 ped-km/h	5934.2 pers-km/h
Travel Time (Total)	182.3 veh-h/h		8.7 ped-h/h	227.5 pers-h/h
Desired Speed	55.0 km/h			
Demand Flows (Total)	22938 veh/h		611 ped/h	27351 pers/h
Arrival Flows (Total)	22792 veh/h		611 ped/h	27351 pers/h
Percent Heavy Vehicles (Demand)	0.0 %			
Percent Heavy Vehicles (Arrival)	0.0 %			
Degree of Saturation	1.030			
Control Delay (Total)	85.62 veh-h/h		4.51 ped-h/h	107.26 pers-h/h
Control Delay (Average)	13.5 sec		26.6 sec	14.1 sec
Control Delay (Worst Lane)	59.7 sec			
Control Delay (Worst Movement)	59.7 sec		29.3 sec	59.7 sec
Geometric Delay (Average)	1.7 sec			
Stop-Line Delay (Average)	11.9 sec			
Queue Storage Ratio (Worst Lane)	1.34			
Total Effective Stops	12210 veh/h		530 ped/h	15182 pers/h
Effective Stop Rate	0.54 per veh	2.5 per km	0.87 per ped	0.56 per pers
Proportion Queued	0.48		0.87	0.50
Performance Index	475.6		11.7	487.3
Cost (Total)	6396.10 \$/h	1.30 \$/km	183.22 \$/h	6579.31 \$/h
Fuel Consumption (Total)	659.7 L/h	133.8 mL/km		
Fuel Economy	13.4 L/100km			
Carbon Dioxide (Total)	1550.2 kg/h	314.5 g/km		
Hydrocarbons (Total)	0.639 kg/h	0.130 g/km		
Carbon Monoxide (Total)	6.024 kg/h	1.222 g/km		
NOx (Total)	1.211 kg/h	0.246 g/km		

Network Model Accuracy Level (largest change in degree of saturation for any lane): 1.1 %

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)	11,010,370 veh/y	293,053 ped/y	13,128,390 pers/y
Delay	41,100 veh-h/y	2,166 ped-h/y	51,486 pers-h/y
Effective Stops	5,860,791 veh/y	254,397 ped/y	7,287,347 pers/y
Travel Distance	2,365,790 veh-km/y	9,461 ped-km/y	2,848,409 pers-km/y
Travel Time	87,502 veh-h/y	4,188 ped-h/y	109,190 pers-h/y
Cost	3,070,127 \$/y	87,944 \$/y	3,158,071 \$/y
Fuel Consumption	316,640 L/y		
Carbon Dioxide	744,104 kg/y		
Hydrocarbons	307 kg/y		
Carbon Monoxide	2,892 kg/y		
NOx	581 kg/y		

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