

NETWORK SUMMARY

Network: new airport pm 2031 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	3.63			
Speed Efficiency	0.43			
Congestion Coefficient	2.35			
Travel Speed (Average)	23.5 km/h		1.9 km/h	22.7 km/h
Travel Distance (Total)	6278.3 veh-km/h		21.2 ped-km/h	7555.1 pers-km/h
Travel Time (Total)	267.7 veh-h/h		11.4 ped-h/h	332.6 pers-h/h
Desired Speed	55.0 km/h			
Demand Flows (Total)	25270 veh/h		661 ped/h	29494 pers/h
Arrival Flows (Total)	24579 veh/h		661 ped/h	29494 pers/h
Percent Heavy Vehicles (Demand)	0.0 %			
Percent Heavy Vehicles (Arrival)	0.0 %			
Degree of Saturation	1.149			
Control Delay (Total)	144.45 veh-h/h		6.83 ped-h/h	180.16 pers-h/h
Control Delay (Average)	21.2 sec		37.2 sec	22.0 sec
Control Delay (Worst Lane)	166.0 sec			
Control Delay (Worst Movement)	166.0 sec		41.8 sec	166.0 sec
Geometric Delay (Average)	1.8 sec			
Stop-Line Delay (Average)	19.4 sec			
Queue Storage Ratio (Worst Lane)	0.99			
Total Effective Stops	12813 veh/h		579 ped/h	15954 pers/h
Effective Stop Rate	0.52 per veh	2.0 per km	0.88 per ped	0.54 per pers
Proportion Queued	0.44		0.88	0.46
Performance Index	619.6		14.6	634.1
Cost (Total)	8668.83 \$/h	1.38 \$/km	238.53 \$/h	8907.36 \$/h
Fuel Consumption (Total)	818.6 L/h	130.4 mL/km		
Fuel Economy	13.0 L/100km			
Carbon Dioxide (Total)	1923.7 kg/h	306.4 g/km		
Hydrocarbons (Total)	0.859 kg/h	0.137 g/km		
Carbon Monoxide (Total)	7.717 kg/h	1.229 g/km		
NOx (Total)	1.367 kg/h	0.218 g/km		

Network Model Accuracy Level (largest change in degree of saturation for any lane): 6.7 %

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)	12,129,420 veh/y	317,053 ped/y	14,157,260 pers/y
Delay	69,335 veh-h/y	3,277 ped-h/y	86,479 pers-h/y
Effective Stops	6,150,039 veh/y	277,937 ped/y	7,657,984 pers/y
Travel Distance	3,013,564 veh-km/y	10,181 ped-km/y	3,626,458 pers-km/y
Travel Time	128,502 veh-h/y	5,452 ped-h/y	159,655 pers-h/y
Cost	4,161,039 \$/y	114,496 \$/y	4,275,535 \$/y
Fuel Consumption	392,927 L/y		
Carbon Dioxide	923,379 kg/y		
Hydrocarbons	412 kg/y		
Carbon Monoxide	3,704 kg/y		
NOx	656 kg/y		

SIDRA INTERSECTION 6.1 | Copyright © 2000-2015 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: TRANSPORT FUTURES LTD. | Processed: Friday, 14 August 2015 4:21:31 p.m.

Project: C:\Sidra\sidra project files and modelling results\Version 8\new airport pm model version 8 2031 43k.sip6