

NETWORK SUMMARY

Network: 1 [new airport pm 2021 340k (July 2016 version)]

New Network

Network Cycle Time = 70 seconds (Network Cycle Time - User-Given)

Network Performance - Hourly Values				
Performance Measure	Vehicles	Per Unit Distance	Pedestrians	Persons
Network Level of Service (LOS)	LOS F			
Travel Time Index	0.62			
Speed Efficiency	0.16			
Congestion Coefficient	6.40			
Travel Speed (Average)	8.6 km/h		2.3 km/h	8.5 km/h
Travel Distance (Total)	6460.6 veh-km/h		19.7 ped-km/h	7772.4 pers-km/h
Travel Time (Total)	752.0 veh-h/h		8.7 ped-h/h	911.1 pers-h/h
Desired Speed	55.0 km/h			
Demand Flows (Total for all Sites)	34503 veh/h		611 ped/h	36555 pers/h
Arrival Flows (Total for all Sites)	30463 veh/h		611 ped/h	36555 pers/h
Percent Heavy Vehicles (Demand)	0.0 %			
Percent Heavy Vehicles (Arrival)	0.0 %			
Degree of Saturation	2.339			
Control Delay (Total)	628.60 veh-h/h		4.47 ped-h/h	758.79 pers-h/h
Control Delay (Average)	74.3 sec		26.4 sec	74.7 sec
Control Delay (Worst Lane)	1233.3 sec			
Control Delay (Worst Movement)	1233.8 sec		29.3 sec	1233.8 sec
Geometric Delay (Average)	1.8 sec			
Stop-Line Delay (Average)	72.5 sec			
Queue Storage Ratio (Worst Lane)	6.95			
Total Effective Stops	31472 veh/h		527 ped/h	38293 pers/h
Effective Stop Rate	1.03 per veh	4.9 per km	0.86 per ped	1.05 per per:
Proportion Queued	0.57		0.86	0.59
Performance Index	1984.5		11.6	1996.1
Cost (Total)	22280.98 \$/h	3.45 \$/km	182.30 \$/h	22463.29 \$/h
Fuel Consumption (Total)	1601.7 L/h	247.9 mL/km		
Fuel Economy	24.8 L/100km			
Carbon Dioxide (Total)	3763.9 kg/h	582.6 g/km		
Hydrocarbons (Total)	1.461 kg/h	0.226 g/km		
Carbon Monoxide (Total)	10.559 kg/h	1.634 g/km		
NOx (Total)	2.021 kg/h	0.313 g/km		

Network Model Accuracy Level (largest change in degree of saturation for any lane): 11.3 %

Number of Iterations: 10

Network Level of Service (LOS) Method: SIDRA Speed Efficiency.

Setup used: New Zealand.

Network Performance - Annual Values			
Performance Measure	Vehicles	Pedestrians	Persons
Demand Flows (Total for all Sites)	16,561,240 veh/y	293,053 ped/y	17,546,440 pers/y
Delay	301,729 veh-h/y	2,145 ped-h/y	364,220 pers-h/y
Effective Stops	15,106,330 veh/y	252,951 ped/y	18,380,550 pers/y
Travel Distance	3,101,085 veh-km/y	9,461 ped-km/y	3,730,763 pers-km/y
Travel Time	360,979 veh-h/y	4,167 ped-h/y	437,342 pers-h/y
Cost	10,694,870 \$/y	87,505 \$/y	10,782,380 \$/y
Fuel Consumption	768,799 L/y		
Carbon Dioxide	1,806,677 kg/y		
Hydrocarbons	701 kg/y		
Carbon Monoxide	5,069 kg/y		
NOx	970 kg/y		

Project: C:\Users\doug\Documents\2 Projects\1 Kapitil\00 PDP\3 evidence Airport Private Plan Change\analysis\new airport pm model July 2016 version 2031- 340k (Beca) revised .sip7