

NETWORK SUMMARY

☒☒ Network: new airport pm 2017 Base v8 23k

New Network

| Network Performance - Hourly Values | | | | |
|-------------------------------------|-----------------|-------------------|---------------|------------------|
| Performance Measure | Vehicles | Per Unit Distance | Pedestrians | Persons |
| Network Level of Service (LOS) | LOS D | | | |
| Travel Time Index | 4.99 | | | |
| Speed Efficiency | 0.55 | | | |
| Congestion Coefficient | 1.82 | | | |
| Travel Speed (Average) | 30.2 km/h | | 2.3 km/h | 28.9 km/h |
| Travel Distance (Total) | 4551.1 veh-km/h | | 19.7 ped-km/h | 5481.0 pers-km/h |
| Travel Time (Total) | 150.8 veh-h/h | | 8.7 ped-h/h | 189.6 pers-h/h |
| Desired Speed | 55.0 km/h | | | |
| Demand Flows (Total) | 21167 veh/h | | 611 ped/h | 25401 pers/h |
| Arrival Flows (Total) | 21167 veh/h | | 611 ped/h | 25401 pers/h |
| Percent Heavy Vehicles (Demand) | 0.0 % | | | |
| Percent Heavy Vehicles (Arrival) | 0.0 % | | | |
| Degree of Saturation | 0.998 | | | |
| Control Delay (Total) | 62.28 veh-h/h | | 4.52 ped-h/h | 79.25 pers-h/h |
| Control Delay (Average) | 10.6 sec | | 26.6 sec | 11.2 sec |
| Control Delay (Worst Lane) | 39.9 sec | | | |
| Control Delay (Worst Movement) | 39.9 sec | | 29.3 sec | 39.9 sec |
| Geometric Delay (Average) | 1.6 sec | | | |
| Stop-Line Delay (Average) | 9.0 sec | | | |
| Queue Storage Ratio (Worst Lane) | 0.88 | | | |
| Total Effective Stops | 10208 veh/h | | 530 ped/h | 12780 pers/h |
| Effective Stop Rate | 0.48 per veh | 2.2 per km | 0.87 per ped | 0.50 per pers |
| Proportion Queued | 0.45 | | 0.87 | 0.47 |
| Performance Index | 381.9 | | 11.7 | 393.6 |
| Cost (Total) | 5370.11 \$/h | 1.18 \$/km | 183.27 \$/h | 5553.38 \$/h |
| Fuel Consumption (Total) | 576.8 L/h | 126.7 mL/km | | |
| Fuel Economy | 12.7 L/100km | | | |
| Carbon Dioxide (Total) | 1355.4 kg/h | 297.8 g/km | | |
| Hydrocarbons (Total) | 0.542 kg/h | 0.119 g/km | | |
| Carbon Monoxide (Total) | 5.353 kg/h | 1.176 g/km | | |
| NOx (Total) | 1.077 kg/h | 0.237 g/km | | |

Network Model Accuracy Level (largest change in degree of saturation for any lane): 1.0 %

Number of Iterations: 9

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) | 10,160,310 veh/y | 293,053 ped/y | 12,192,370 pers/y |
| Delay | 29,895 veh-h/y | 2,168 ped-h/y | 38,042 pers-h/y |
| Effective Stops | 4,900,072 veh/y | 254,397 ped/y | 6,134,483 pers/y |
| Travel Distance | 2,184,533 veh-km/y | 9,461 ped-km/y | 2,630,900 pers-km/y |
| Travel Time | 72,365 veh-h/y | 4,189 ped-h/y | 91,027 pers-h/y |
| Cost | 2,577,651 \$/y | 87,971 \$/y | 2,665,622 \$/y |
| Fuel Consumption | 276,842 L/y | | |
| Carbon Dioxide | 650,579 kg/y | | |
| Hydrocarbons | 260 kg/y | | |
| Carbon Monoxide | 2,569 kg/y | | |
| NOx | 517 kg/y | | |

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 Project: C:\Sidra\sidra project files and modelling results\Version 8\new airport pm model version 8 2017 23k.sip6