

PLATFORM STOPS - PASSENGER AREA ASSESSMENT

Based on pedestrian movement data (by gate) and mode.

Fruin Level of Service based on Victorian Rail Industry Operators' Group Standards (VRIOGS).

WANSEY ROAD - 2020

Alighting

100% of pedestrians via Gate 9 (southern end of stop)

Alighting (Average per LRV)	Platform Length (m)	Platform Width (m)	Space (m ² /ped)	Platform Storage (Fruin LOS)	Ramp Access - if arrive by signals (Fruin LOS)
448	45	6.0	0.55	E	E
448	45	7.0	0.65	E	D
448	45	8.0	0.75	E	D
448	45	9.0	0.85	E	D
300	45	6.0	0.83	E	D
300	45	7.0	0.98	D	C
300	45	8.0	1.13	D	C
300	45	9.0	1.28	D	C

Boarding

100% of pedestrians via Gate 9 (southern end of stop)

Boarding (Average per LRV)	Platform Length (m)	Platform Width (m)	Space (m ² /ped)	Platform Storage (Fruin LOS)	Ramp Access - if arrive by signals (Fruin LOS)
248	45	6.0	1.00	D	C
248	45	7.0	1.18	D	B
248	45	8.0	1.36	D	B
248	45	9.0	1.54	C	A

Alighting volumes are higher than boarding volumes at Wansey Road.

Therefore, cover requirements for passengers waiting at the platform are not as high.

If each passenger takes up 1 sqm, this is approximately 250 sqm. A stop of 45m x 8.4m has an area of 378sqm. Coverage would be 65%.

ANZAC PARADE - 2020

Alighting

100% of pedestrians via Uni Mall

Boarding (Average per LRV)	Platform Length (m)	Platform Width (m)	Space (m ² /ped)	Platform Storage (Fruin LOS)	Ramp Access - if arrive by signals (Fruin LOS)
452	45	7.0	0.65	E	D
452	45	8.0	0.75	E	D
300	45	7.0	0.98	D	C
300	45	8.0	1.13	D	C

Boarding

100% of pedestrians via Uni Mall

Boarding (Average per LRV)	Platform Length (m)	Platform Width (m)	Space (m ² /ped)	Platform Storage (Fruin LOS)	Ramp Access - if arrive by signals (Fruin LOS)
617	45	4.4	0.28	F	F
617	45	5.0	0.33	F	E
617	45	6.0	0.40	F	D
617	45	7.0	0.47	E	D

70% via Uni Mall (for boarding ramp calculations only)

Boarding (Average per LRV)	Platform Length (m)	Platform Width (m)	Space (m ² /ped)	Platform Storage (Fruin LOS)	Ramp Access - if arrive by signals (Fruin LOS)
432	45	4.4	0.00	0	D
432	45	5.0	0.00	0	D
432	45	6.0	0.00	0	C
432	45	7.0	0.00	0	C

30% via Uni Walk (for boarding ramp calculations only)

Boarding (Average per LRV)	Platform Length (m)	Platform Width (m)	Space (m ² /ped)	Platform Storage (Fruin LOS)	Ramp Access - if arrive by signals (Fruin LOS)
185	45	4.4	0.00	0	B
185	45	5.0	0.00	0	A
185	45	6.0	0.00	0	A
185	45	7.0	0.00	0	A

Boarding volumes are higher than alighting volumes at Wansey Road.

Therefore, cover requirements for passengers waiting at the platform are very high.

Maximum boarding passenger numbers will take up a significant area. A platform of 45m x 7.3m has an area of 330sqm.

Even at 0.5sqm per passenger, they will take up the whole platform. Therefore, coverage should be for the full platform.

Fruin	Space (m ² /ped)	Density (ped/m ²)	Flow Rate (ped/min/m)
Level of Service			
LoS A	≥ 3.24	≤ 0.27	≤ 23
LoS B	2.32 to 3.24	0.43 to 0.31	23 to 33
LoS C	1.39 to 2.32	0.72 to 0.43	33 to 49
LoS D	0.93 to 1.39	1.08 to 0.72	49 to 66
LoS E	0.46 to 0.93	2.17 to 1.08	66 to 82
LoS F	≤ 0.46	≥ 2.17	variable