

Modelling Request 5	<p>Attachments 2 and 3 provided by Stantec included Mill Road (Papakura and Southern) to be upgraded by 2025/2026. However, we note that Mill Road does not yet have a designation and the consent is indicated to be lodged in 2021. In the event that the upgrade is delayed, the modelling should take this into account. Please provide the Saturn model and .UFC files so we can assess the sensitivity of the traffic effects to the Mill Road southern section.</p> <p><i>[Note: Stantec has provided this information]</i></p>	<p>No further response required from Stantec.</p> <p>The following modelling files have been provided to Flow:</p> <ul style="list-style-type: none"> • 17/03/2020 Revised SATURN files (.UFM and .UFS) • 09/04/2020 Revised SATURN files (.UFC) • 16/04/2020 Revised SIDRA files (Great South Road / Waihoehoe Road signal).
Modelling Request 18	<p>It is not clear how the land use assumptions have been used to determine peak hour trip generation. The modelling report discusses residential trip rates but does not show how trip volumes are calculated. Information on the calculation of trips from other land use activities seems to be absent.</p> <p>Please provide a tabulated summary of the trips (private vehicle and public transport) associated with all land use activities (dwellings, commercial GFA, retail GFA etc) for each PPC area by modelling year.</p>	<p>The trip demands have been calculated by the MSM based on land use data that is stratified by 64 population, 8 household, and 6 employment classes. As with most top down strategic models this is done at daily trip person demand level by trip purpose, split by mode (car/PT) and then aggregated and factored to peak period vehicle trips. It is not a bottom up approach based on vehicle trip rates per dwelling and/or retail/commercial GFA. As most MSM zones contain employment it is not possible to dis-aggregate the total trips per zone. The reported trips per household are indicative only and do not represent a bottom-up household trip rate, and only approximate a household trip rate when no employment is present in the zone (but still include employment related trips from other zones).</p> <p>The mode split by bus and train could be derived from the PT assignment but we do not have that data readily to hand. Likewise the PPC areas are not modelled individually so it is not possible to report the level of detail requested.</p>
N/A	<p>Can you please advise on progress developing a funding agreement.</p>	<p>Refer to the planning response.</p>

Stantec

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Appendix A - PT Person Trips Forecast

Notes	E	Drury East (MSM Zone 550, 551, 554, 555, 556)
	W	Drury West (Zone 557, 558, 559, 560, 561, 562)
	X	External to Drury East and Drury West
Internal PT person trips (per 2 hours)	Person trips undertaken on public transport either internally within the Drury East or Drury West area, or between Drury East and Drury West area. These trips can be assumed to be predominantly bus trips.	
External PT person trips (per 2 hours)	Person trips undertaken on public transport between Drury East or Drury West and external areas. This exercise considers the trips in peak direction only (i.e. outbound in AM peak, and vice versa). Based on the 2013 Census for Papakura Central, the bus/rail split for commuter is 29%/71%. The proportion of external bus trips for Drury has been estimated accordingly.	

AM 2028 PT Person Trips (2hr)

	E	W	X
E	27	6	1055
W	11	18	862
X	138	94	129748
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			62
Total external person trips in peak direction (E-X and E-W) : 29% of which is assumed as bus trips			556

PM 2028 PT Person Trips (2hr)

	E	W	X
E	21	8	146
W	6	17	137
X	733	636	111917
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			53
Total external person trips in peak direction (X-E and X-W) : 29% of which is assumed as bus trips			397

AM 2038 PT Person Trips (2hr)

	E	W	X
E	163	36	1834
W	109	73	1733
X	459	229	158539
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			380
Total external person trips in peak direction (E-X and E-W) : 29% of which is assumed as bus trips			1034

PM 2038 PT Person Trips (2hr)

	E	W	X
E	152	87	491
W	43	67	346
X	1378	1339	138866
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			349
Total external person trips in peak direction (X-E and X-W) : 29% of which is assumed as bus trips			788

AM 2048 PT Person Trips (2hr)

	E	W	X
E	227	54	2304
W	190	136	2640
X	635	338	200354
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			607
Total external person trips in peak direction (E-X and E-W) : 29% of which is assumed as bus trips			1434

PM 2048 PT Person Trips (2hr)

	E	W	X
E	213	151	666
W	69	123	506
X	1733	2023	175754
Total internal person trips (E-E, E-W, W-W, W-E): assumed to be predominantly by bus.			556
Total external person trips in peak direction (X-E and X-W) : 29% of which is assumed as bus trips			1090