City of Hobsons Bay: social needs, gaps in transit

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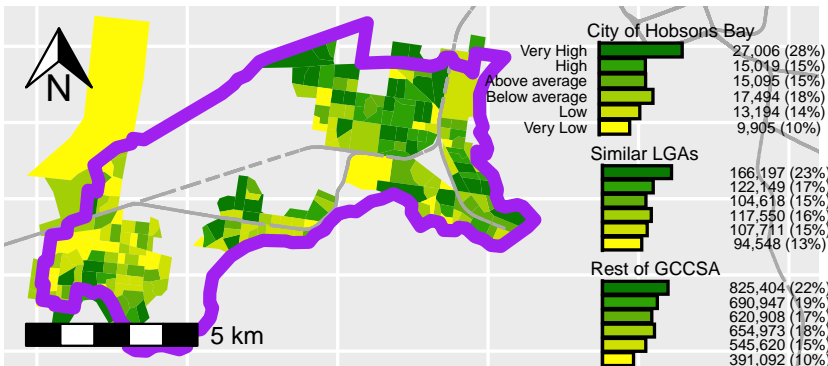
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This note is part of a series examining transit social needs-gaps in Greater Melbourne[1]. In Victoria, public transport is the responsibility of state government, although Local Government Authorities (LGAs) may have some influence through planning processes and advocacy. However, it is unclear how much transit is supplied or how well social needs for transport are met for each LGA. This note uses the Currie and Sendbergs (2007) methodology[2]. to explore social transport need, and transit provision in 2021 and 2023 in the City of Hobsons Bay.

METHODS:

Scores for transit supply and transport needs were calculated based on the Victorian GTFS feed[3] and Australian Bureau of Statistics (ABS) data using the *gtfssupplyindex* R package[4] as per Reynolds, Currie and Qu (in drafting)[5]. Results are shown for the ABS' Statistical Area 1s (SA1s), categorized based on averages across the Melbourne Greater Capital City Statistical Area (GCCSA).

RESULTS: Social needs for transport Figure 1 compares social needs for nearby LGAs[6] and the rest of Greater Melbourne, with those for the City of Hobsons Bay.

[1] See https://tinyurl.com/4rctaxfc

[2] Graham Currie and Zed Senbergs, "Identifying Spatial Gaps in Public Transport Provision for Socially Disadvantaged Australians: The Melbourne 'Needs Gap' Study," 2007; Graham Currie, "Quantifying Spatial Gaps in Public Transport Supply Based on Social Needs," *Journal of Transport Geography* 18, no. 1 (2010): 31–41.

[3] Results are based on GTFS feeds for August 2021 and 2023, so may not match services run.

[4] See https://github.com/James-Reynolds/gtfssupplyindex

[5] James Reynolds, Graham Currie, and Yanda Qu, "Social Needs for Transport and Gaps in Transit Service: New GTFS Tools," *In Drafting*, 2024.

[6] Brimbank, Maribyrnong, Wyndham and Moonee Valley.

Figure 1: Needs in 2021 by population

Needs were higher than the Melbourne average for 58% of the City of Hobsons Bay's population, and not significantly different from either nearby seats[7] or the rest of Greater Melbourne[8].

Figure 2 shows the distribution of transit service in 2021 and 2023. Transit service levels were below the Melbourne average for 73% of

[7] Although the City of Melbourne borders Hobsons Bay, it has not been included in this comparison group given that it is dissimilar to other LGAs.

[8] $\chi^2(5) = 4.23$, $p = .517$ and $\chi^2(5) = 3.09$, $p = .686$.

	Rest of GCCSA
	149,130 (4%)
	278,532 (7%)
	336,023 (9%)
	933,846 (25%)
	902,483 (24%)
	970,410 (26%)
	164,950 (4%)

	City of Hobsons Bay	Similar LGAs
Very High	0 (0%)	37,867 (5%)
High	8,630 (9%)	62,835 (9%)
Above average	17,828 (18%)	51,322 (7%)
Below average	35,301 (36%)	166,858 (23%)
Low	24,758 (25%)	227,724 (32%)
Very Low	10,877 (11%)	148,104 (21%)
Zero Supply	389 (0%)	21,490 (3%)

	Rest of GCCSA
	351 (4%)
	647 (7%)
	778 (9%)
	2,158 (25%)
	2,103 (24%)
	2,272 (26%)
	420 (5%)

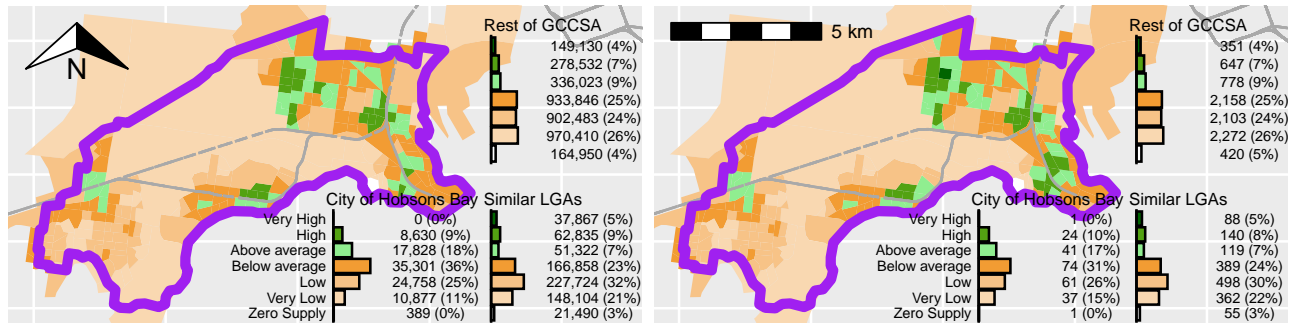|	City of Hobsons Bay	Similar LGAs
Very High	1 (0%)	88 (5%)
High	24 (10%)	140 (8%)
Above average	41 (17%)	119 (7%)
Below average	74 (31%)	389 (24%)
Low	61 (26%)	498 (30%)
Very Low	37 (15%)	362 (22%)
Zero Supply	1 (0%)	55 (3%)

Figure 2: Transport Supply 2021 (left, by population) and 2023 (right, by SA1)

City of Hobsons Bay residents in 2021, which a lower proportion than in the nearby LGAs (79%)[9] or in the rest of Greater Melbourne (80%)[10]. Distribution of transit supply, categorised with respect to Melbourne's average, appears similar in 2023 (Figure 2, right). Figure 3 directly compares 2021 and 2023 service levels.

[9] Differences were statistically significant ($\chi^2(6) = 51.96$, $p < .001$).

[10] Differences were statistically significant ($\chi^2(6) = 50.58$, $p < .001$).

	All Hobsons Bay SA1s	Similar LGAs	Rest of GCCSA
Not served in 2023	389 (0%)	19,422 (3%)	162,640 (4%)
Reduced 10% or more	0 (0%)	32,370 (5%)	126,434 (3%)
Reduced 3 to 10%	404 (0%)	156,760 (22%)	150,427 (4%)
Reduced 1 to 3%	1,825 (2%)	81,987 (11%)	180,240 (5%)
Within 1%	55,029 (56%)	282,684 (39%)	1,775,165 (48%)
Increased 1 to 3%	27,734 (28%)	79,493 (11%)	550,523 (15%)
Increased 3 to 5%	2,696 (3%)	34,133 (5%)	222,950 (6%)
Increased 5 to 10%	1,194 (1%)	17,498 (2%)	186,315 (5%)
Increased 10 to 30%	4,663 (5%)	5,213 (1%)	209,719 (6%)
Increased 30%+ or new	3,849 (4%)	6,640 (1%)	170,961 (5%)

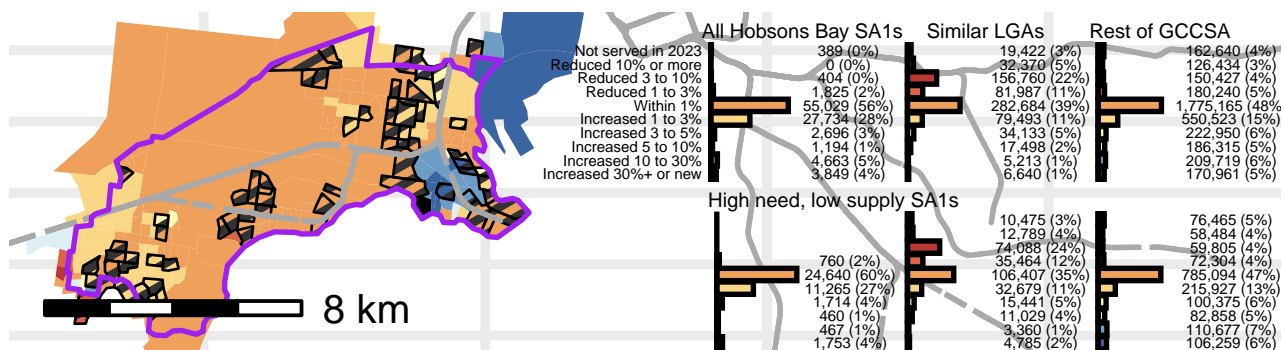| High need, low supply SA1s			
		10,475 (3%)	76,465 (5%)
		12,789 (4%)	58,484 (4%)
		74,088 (24%)	59,805 (4%)
		35,464 (12%)	72,304 (4%)
	760 (2%)	106,407 (35%)	785,094 (47%)
	24,640 (60%)	32,679 (11%)	215,927 (13%)
	11,265 (27%)	15,441 (5%)	100,375 (6%)
	1,714 (4%)	11,029 (4%)	82,858 (5%)
	460 (1%)	3,360 (1%)	110,677 (7%)
	467 (1%)	4,785 (2%)	106,259 (6%)
	1,753 (4%)		

Figure 3: Transit service change 2021 to 2023, by population. SA1s with needs above, but supply below, average highlighted in black.

[11] Differences were statistically significant ($\chi^2(9) = 203.19$, $p < .001$).

[12] Differences were statistically significant ($\chi^2(9) = 69.87$, $p < .001$).

[13] Shown with black in Figure 3. This compares to 43% of residents in the rest of the middle suburban LGAs and 45% of those in more outer parts of Melbourne.

[14] Differences were statistically significant (Fisher test p = 5e-04).

[15] Differences were statistically significant (Fisher test p = 5e-04).

Transit levels increased by 1% or more by 2023 in SA1s that were home to 41% of City of Hobsons Bay residents in 2021, which is a higher proportion than for those in the nearby LGAs (20%)[11] or across the rest of Greater Melbourne (36%)[12]. 42% of the City of Hobsons Bay population lived in SA1s with *needs above, but supply below* the Melbourne averages in 2021[13]. However, for 38% of this cohort service levels increased 1% or more, a higher proportion than for the similar cohorts in the nearby LGAs (22%)[14] or for those with above average needs and below average supply across the rest of Greater Melbourne (37%)[15].

Overall, City of Hobsons Bay residents appear more likely than similarly located, middle suburban, LGAs to have had transit service levels lower than the Melbourne average, but also more likely to have seen transit increase by 2023.