



2017/2018 Regional Travel Survey In-Depth Analysis

Transit use, free parking, and transit subsidies

Revised 12/22/2021

In the Fall of 2019, TPB staff began releasing the preliminary results of the 2017/2018 Regional Travel Survey (RTS). The RTS is a once-a-decade household travel survey which collected detailed information about households and their daily travel obtained from a travel diary. TPB staff asked regional stakeholders to offer questions that the RTS might help inform. This piece is part of a series of responses to thought-provoking questions offered by our stakeholders.

QUESTION

Do free parking and transit subsidies play a role in the choice of taking public transit? Did it change between 2007/2008 and 2017/2018?

INTRODUCTION

The RTS collected detailed information on observed travel and can reveal insights on factors that correspond with individuals' mode choices. For example, research have shown that the cost of parking may play a role in how people choose to travel.¹ This question examines commute mode choices (either transit or non-transit) based on residential location within the TPB Planning Area and the availability of free parking and transit benefits. It provides interesting findings on the role of free parking in commute mode choices. This question compares the availability of free parking and transit benefits between transit and non-transit commuters between the two survey periods (2007/2008 and 2017/2018). It also summarizes differences across subregional areas, including the core, inner suburbs, and outer suburbs.

APPROACH

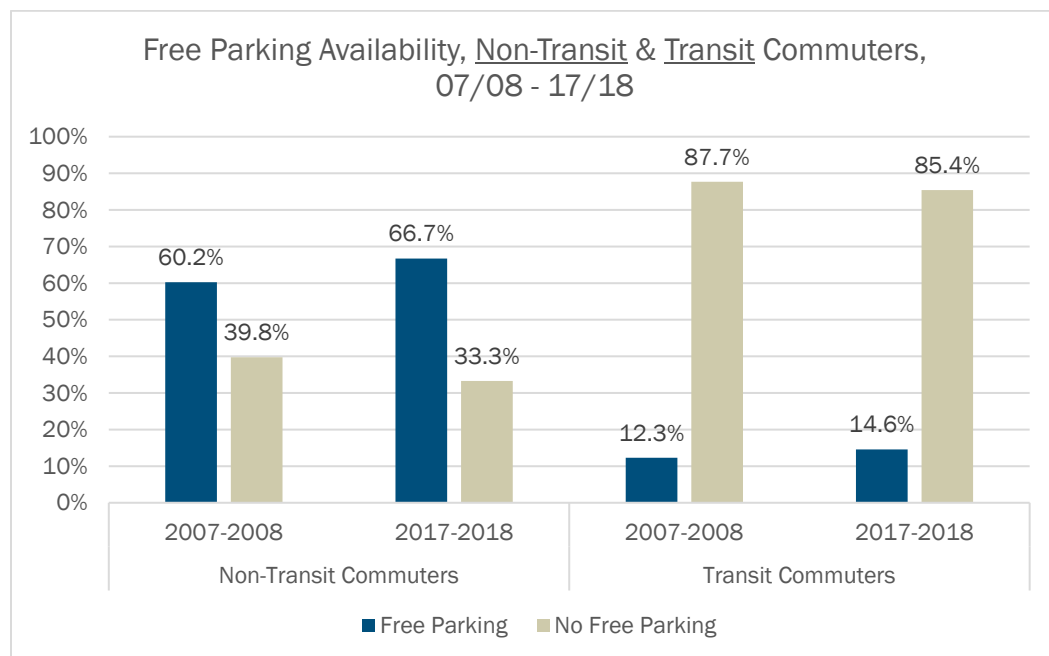
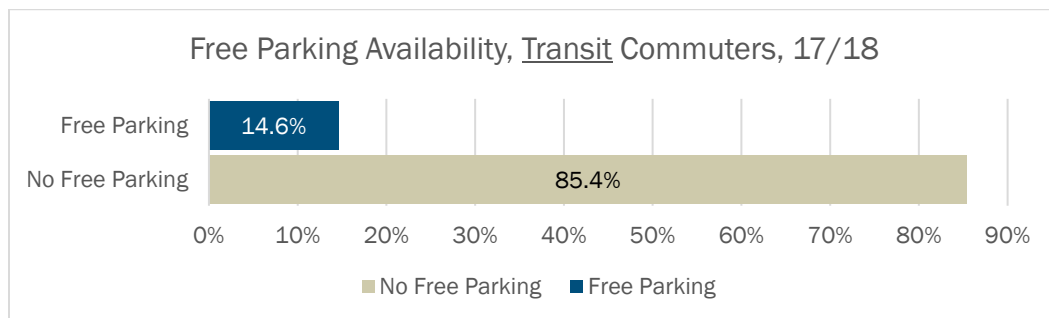
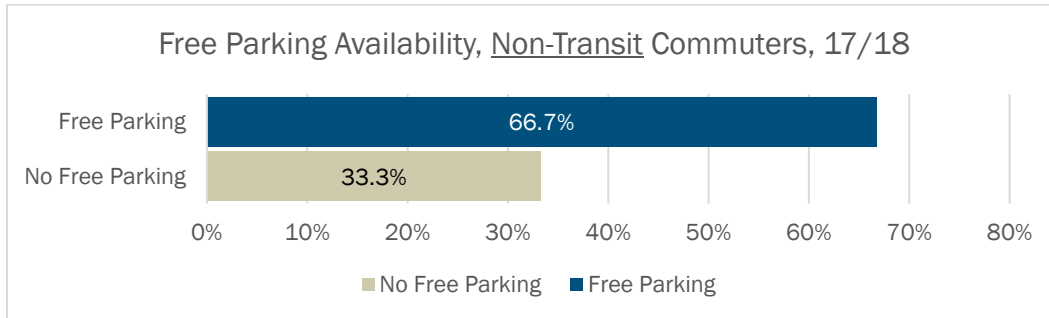
For this question, we first compared the association of free parking availability and transit subsidies, (transit benefits availability) on the choice of taking transit between transit commuters and non-transit commuters. Then we evaluated how these varied based on residential location in the TPB Planning Region (core, inner suburbs, or outer suburbs). We also examined temporal changes between 2007/2008 and 2017/2018. Transit commuters are defined as any person who travels to or from work by rail (commuter rail, subway, or light rail) or bus (express commuter bus, local bus, or paratransit).

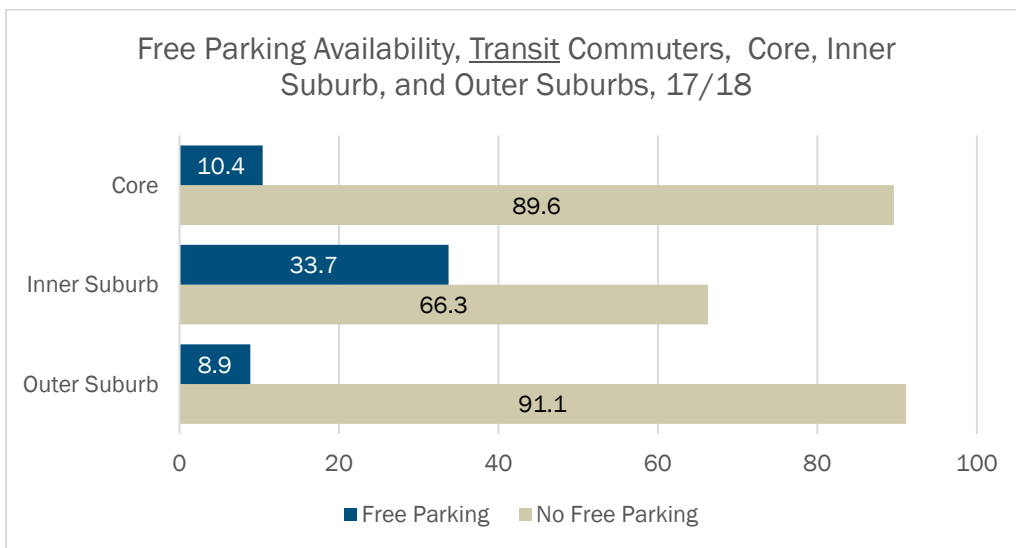
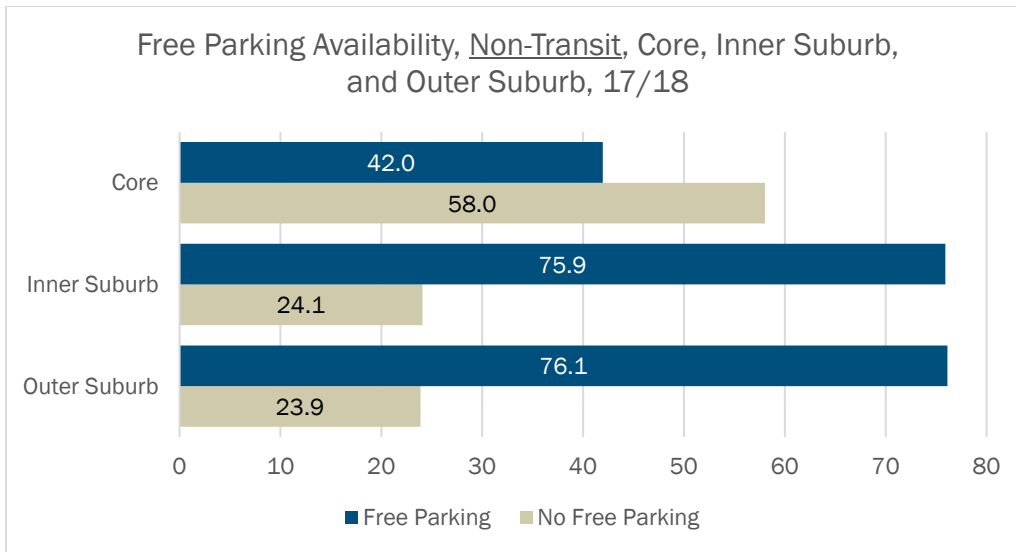
Detailed breakdowns of each part of this question are shown in the tables and charts below, with key takeaways for each. Highlighting is used in certain tables for emphasis. In advance of preparing these responses, the tabulations were reviewed for accuracy and robustness. To create these tables for the TPB Planning Region, the survey results were expanded using weights that considered the probability of selection of individual households as well as adjustments for household size, workplace location, and Metrorail ridership.

¹ Shoup, D. C. (1997). The High Cost of Free Parking. *Journal of Planning Education and Research*, 17(1), 3–20. <https://doi.org/10.1177/0739456X9701700102>

ANALYSIS AND KEY FINDINGS

- A. Did free parking play a role in the choice of taking public transit? Has this changed over time?

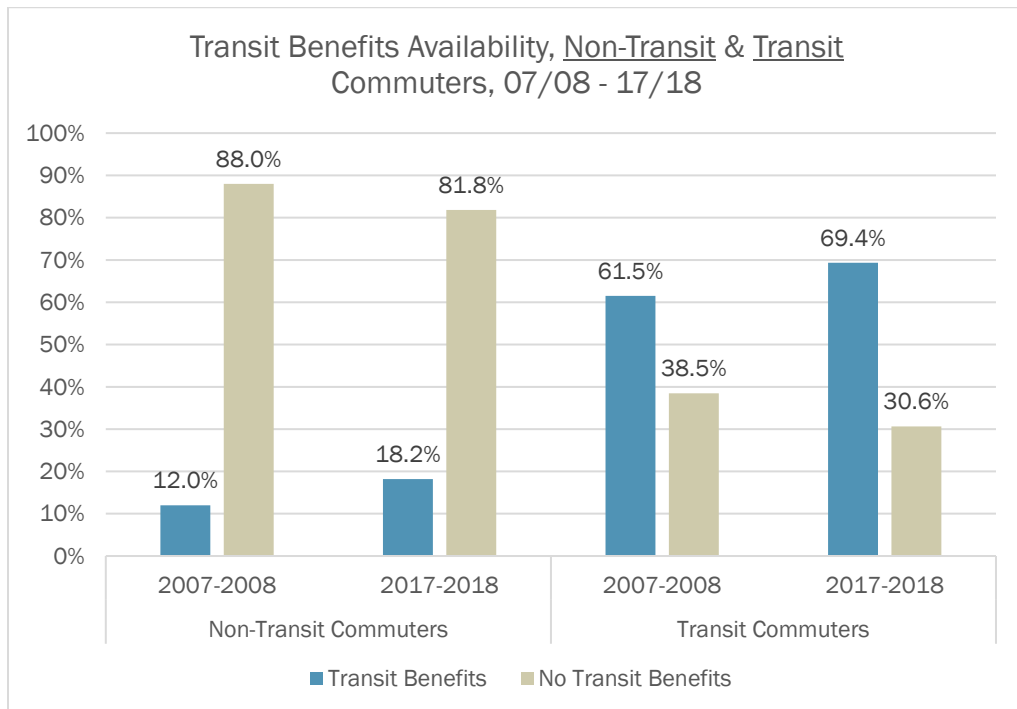
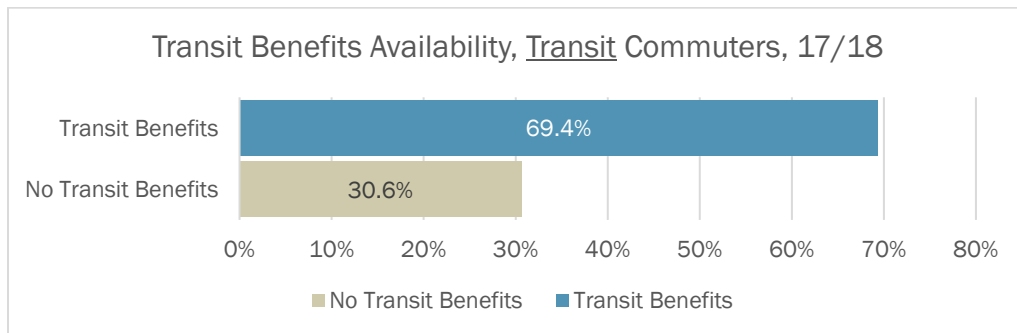
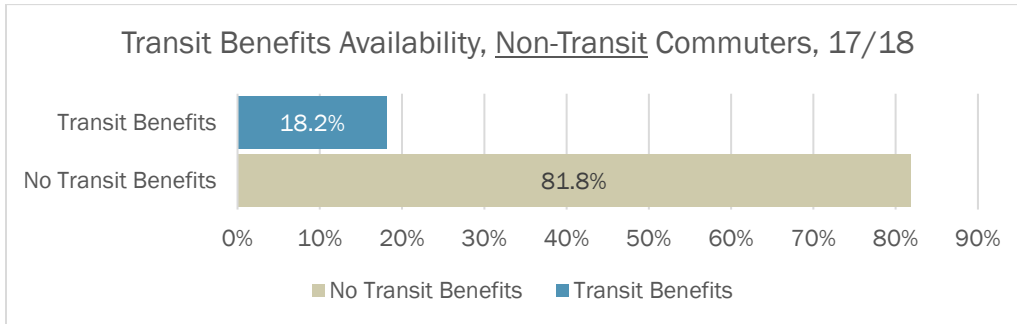


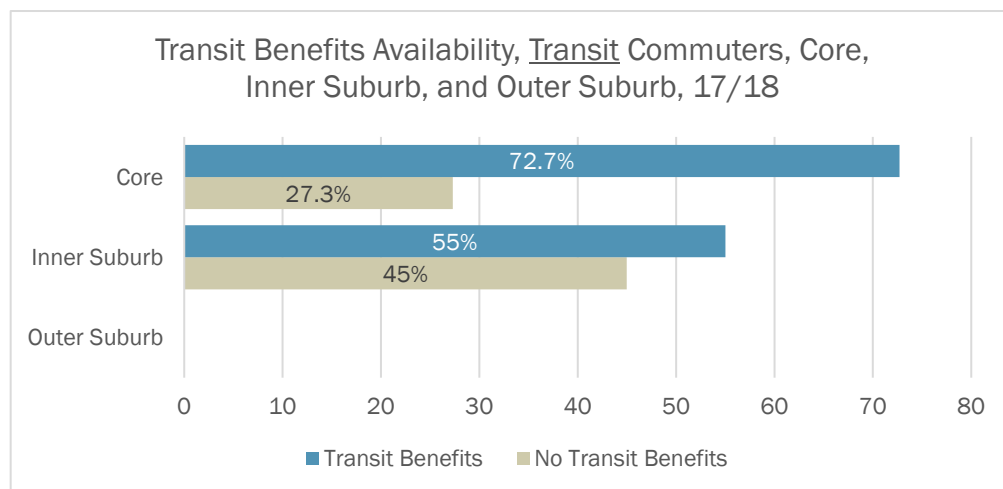
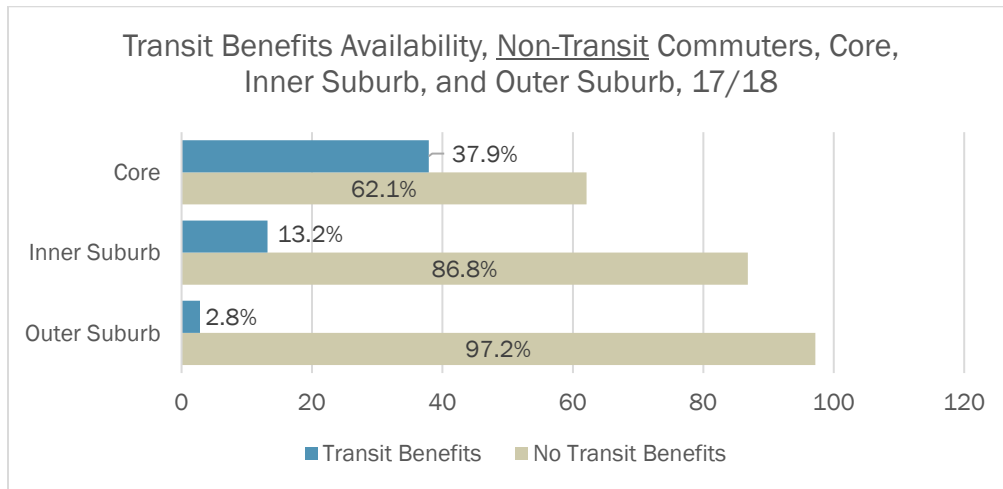


Key Findings for free parking availability:

- For non-transit commuters, 67 percent have free parking available
- For transit commuters, 15 percent have free parking available
- From 2007/08 to 2017/18, free parking for non-transit commuters increased from 60 to 67 percent (by 7 percent). Transit commuters with free parking also increased but only from 12 to 15 percent (by 3 percent).
- Across subregional areas, only 42 percent of residents in the core have free parking while about three-quarters of residents in the inner and outer suburbs have free parking available.
- Regardless of residential location, the share of transit commuters who do not have free parking is much higher than those with free parking available.

B. Did transit subsidies play a role in the choice of taking public transit? Has this changed over time?





Note: The results for outer suburb residents who receive transit benefits are not reported due to insufficient responses from this group in the survey.

Key Findings for transit benefits and transit use:

- For non-transit commuters, 18 percent receive transit benefits
- For transit commuters, nearly 70 percent receive transit benefits
- From 2007/08 to 2017/18, the share of commuters with transit benefits for both non-transit and transit commuters increased. Overall, a much higher share of non-transit commuters do not receive any transit benefits.
- The share of non-transit commuters that do not receive transit benefits is consistently higher than those that receive transit benefits across the entire TPB region. However, the share of non-transit commuters receiving transit benefits increases with proximity to the core.
- The shares of transit commuters with transit benefits are higher for those who live in the core and inner suburbs.

SUMMARY OF FINDINGS

			Free parking availability		Transit benefits availability	
			No	Yes	No	Yes
Non-Transit Commuters	Core	2007-2008	57.7	42.3	77.3	22.7
		2017-2018	58.0	42.0	62.1	37.9
	Inner Suburb	2007-2008	32.1	67.9	91.7	8.3
		2017-2018	24.1	75.9	86.8	13.2
	Outer Suburb	2007-2008	27.7	72.3	98.8	1.2
		2017-2018	23.9	76.1	97.2	2.8
	TPB Region	2007-2008	39.8	60.2	88.0	12.0
		2017-2018	33.3	66.7	81.8	18.2
Transit Commuters	Core	2007-2008	89.5	10.5	35.8	64.2
		2017-2018	89.6	10.4	27.3	72.7
	Inner Suburb	2007-2008	77.6	22.4	53.7	46.3
		2017-2018	66.3	33.7	45.0	55.0
	Outer Suburb	2007-2008	59.4	40.6	62.4	37.6
		2017-2018	91.1	8.9	100.0	0.0
	TPB Region	2007-2008	87.7	12.3	38.5	61.5
		2017-2018	85.4	14.6	30.6	69.4

Based on these key findings, the availability of free parking is associated with transit use in the TPB Planning Region. The share of non-transit commuters is much higher if free parking is available; public transit use tends to increase when free parking is not available. Across the region in 2017/18, two-thirds of non-transit commuters receive free parking while only 15 percent of transit commuters receive free parking. In terms of differences by subregional area, free parking is much less common in the core compared with the inner and outer suburbs. These findings illustrate how the availability of free parking plays a role in modal choice, particularly the decision to take public transit. These findings support previous research examining the impacts of free parking on travel mode choice.

In terms of transit benefits, the share of commuters who receive transit benefits increased from 2007/08 to 2017/18 for both transit and non-transit commuters. By subregional area, core residents were much more likely to receive transit benefits than those who live in the inner and outer suburbs. Additionally, a much higher share of transit commuters received transit benefits compared with non-transit commuters. This shows that transit benefits encourage the use of public transit in the region.