

# RydeFreeRT Evaluation Study: User Demographics, Attitudes, and Impacts on Travel Behavior



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Cover image credit: Sacramento RT

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## Executive summary

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During fall 2019, K-12 students living within the Sacramento Regional Transit (RT) service area became eligible for a free public transit pass called RydeFreeRT (RFRT). To evaluate RFRT's impacts, researchers at The University of Texas at Austin administered surveys to students before and after the program's implementation. Approximately 5,600 survey responses were received and analyzed.

Key findings from the study include:

- A statistically significant increase in the share of students reporting RT use to get to and from school as well as a corresponding statistically significant decrease in the share of students reporting automobile use. This finding is in contrast to prior research showing that new transit riders tend to be pulled from slower modes such as walking and cycling and shows that the program has a potential to create a new generation of new public transit riders.
- Youth who reported using RT also reported that they can more easily access important non-school destinations because of RFRT.
- Many students not necessarily using RT to get to school regularly reported they are using the service more to get to after-school and non-school activities because of RFRT.
- Fewer Latinx youth reported knowing about the program after its implementation demonstrating that outreach efforts may have been inadequate.

The evidence summarized in this report provides an overall positive early assessment of RFRT's impacts. Importantly, the program appears to have achieved a number of key goals in terms of transit ridership and student attendance. Future research will be needed to continue to track knowledge of the program over time and to tease out the factors driving student travel decisions so that communication and outreach materials can be tailored appropriately. In the long-term, research should focus on how the elimination of a barrier to school attendance impacts areas such as chronic absenteeism and school choice.

## Introduction

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RydeFreeRT (RFRT) is a free youth transit pass program implemented during fall 2019 through a partnership between the City of Sacramento, Sacramento Regional Transit (RT), local school districts, and other municipalities in the region. Under the program, all K-12 students living within the RT service area are eligible to receive a free transit pass that can be used at any time. In this report, we describe the results of two online surveys administered within the Sacramento City Unified School District (SCUSD) before and after RFRT went into effect.<sup>1</sup> The surveys were intended to evaluate various aspects of the pass's efficacy and rates of use. We collected information about student travel behavior, attitudes towards public transit, and demographic information. Collecting data at two points in time allowed us to evaluate the likely impact of RFRT implementation.

The first survey was administered in school during class time beginning September 9th, 2020. Students were sent home with an informed consent form explaining the purposes of the survey and allowing caregivers to opt out of participation. Students were also able to opt out on the day of administration. Instructors dedicated about 20 minutes of class time to allow students to complete the survey.

The second survey was administered online beginning in April 2020, during the Covid-19 pandemic. By that time, SCUSD had already cancelled in-person instruction. Accordingly, the survey was distributed using an invitation that was emailed to students who had not previously opted out. The email list and invitations were managed by SCUSD. The earliest responses were received on April 7th, 2020, and we ended the survey on June 11th, 2020.



*Credit: Tulane Public Relations - CC BY 2.0*

Both surveys aimed at generating a representative sample of students in 7th, 8th, 9th, and 11th grades at 16 SCUSD middle and high schools. For the first wave, we targeted all students enrolled in mandatory English classes in each of these grades. The email list used for enrollment in the second wave included all enrolled students at the 16 schools. This report compares results generated between the first and second waves and draws conclusions about the RFRT program's impact.

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<sup>1</sup> For the purposes of evaluating the impact of the program, the research team elected to focus on the Sacramento City Unified School District (SCUSD) because SCUSD is the district serving the largest number of youth within the RT service boundaries, and the team had existing contacts with the district.

## How RydeFreeRT changed student public transit use

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### More students traveled to and from school using RT

Table 1 summarizes how students got to school on the day they took the survey before and after RFRT implementation. Because of the differences in survey administration and the Covid-19 pandemic, the first wave survey asked students how they got to school on the day they took the survey in class while the second wave survey asked how they got to school the last time they traveled there.

Notably, the share of students reporting using RT to get to school on the survey day/last day of school travel increased from 10% to 15% between the first and second wave survey:

- The first wave survey asked which mode students used the day of the survey with 302 (10% of valid responses) responding that they used public transit (bus or light rail).
- The second wave survey asked which mode students used on the last day of school they attended in person (to account for Covid-19-related disruptions) with 369 (15% of valid responses) responding with public transit (bus or light rail).<sup>2</sup>

The share of students reporting automobile use dropped by approximately five percentage points between the two surveys. Both changes are statistically significant and shares of students reporting using other travel modes did not change between the survey waves.

These results suggest that public transit use increased with RFRT implementation and that new users were drawn mostly from students who previously got to and from school using a car. When other free transit passes have been implemented around the world, new transit users were more typically people who previously walked or biked (e.g., Cats, Susilo, and Reimal 2017; McDonald, Librera, and Deakin 2004). The fact that RFRT appears to have engendered a mode shift from automobile to public transit is a very positive result consistent with California’s broader climate change goals that involve reducing driving.

**Table 1. Share of survey responses by travel mode on day of survey/last day of travel.**

Travel mode on survey day/last day of travel	First wave	Second wave	Change in % of responses	z-score*
Auto	73.9%	68.9%	-5.02%	<b>-4.1</b>
Bike	3.8%	3.2%	-0.62%	-1.2
RT	10.1%	15.0%	4.87%	<b>5.4</b>
Walk	10.9%	11.4%	0.44%	0.5
School bus	1.18%	1.51%	0.33%	1.1

\*The final column shows the results of a two-proportion z-test, bold red values show statistically significant differences ( $p < 0.001$ ).

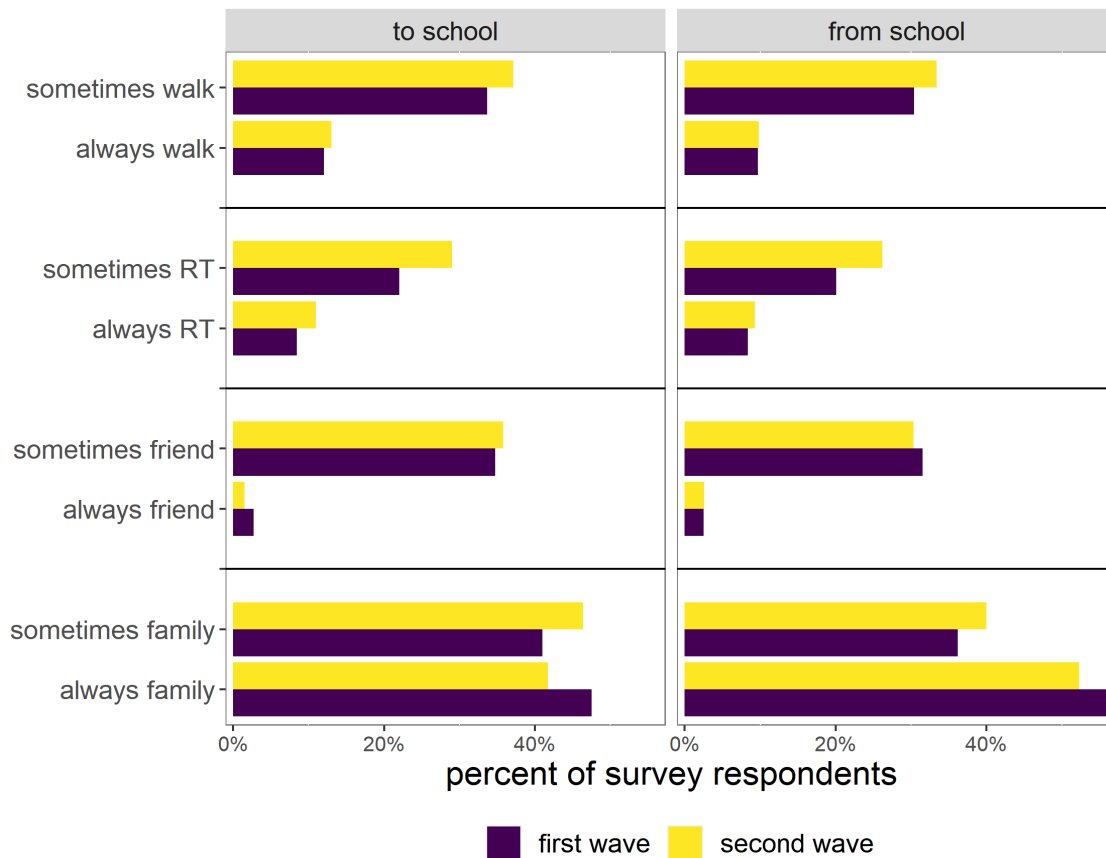
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<sup>2</sup> Statistically significant difference using a two-proportion z-test, z-score = -5.4,  $p < 0.05$ .



### More students reported occasional RT use

Students were asked how often they used a particular mode to get to or from school (Figure 1). Shares of students reporting that they sometimes or always use RT to get school increased from the first wave to the second wave.<sup>3</sup> Results are similar for students returning home from school.<sup>4</sup> Changes for other modes are less dramatic. Notably, the share of students reporting that they always use the family car decreases from the first to second wave. These results are consistent with those reported in Table 1 and are suggestive of increasing public transit use after RFRT implementation with a simultaneous decrease in private car use.



**Figure 1. Comparison of respondents' use of different modes between waves 1 and 2.**

We also asked students if they had ever used RT to get to school during the school year. From the first-wave survey, 720 students answered yes (26% of valid responses). The second-wave survey results show a greater share of students reporting that they use RT with 726 students answering yes (36% of valid responses), a statistically significant difference.<sup>5</sup>

<sup>3</sup> Statistically significant difference using a two-proportion z-test, z-score = 48.1, p < 0.05.

<sup>4</sup> Statistically significant difference using a two-proportion z-test, z-score = 45.6, p < 0.05.

<sup>5</sup> Statistically significant difference using a two-proportion z-test, z-score = -7.76, p < 0.05.

## Students used RydeFreeRT for more than just school trips

Because it was not yet implemented, the first wave survey did not ask questions about RFRT use. But it did ask students if they planned to use RFRT. In the first wave survey, 275 (18.0% of respondents) responded “No”; 692 (45.4%) responded “Yes”; 556 (36.5%) responded “Don’t Know”; and all other students did not provide a response (1,515 students). The second-wave survey asked students more detailed questions about RFRT use.

Students responding to the second wave survey were asked if they had used RFRT to get to school or other places. Results are as follows:

- Getting to school
  - 594 students (43% of respondents) said they used RFRT to get to school;
  - 695 said they had not (50% of respondents); and
  - 93 said they did not know (7% of respondents), and all other students did not provide a response (1,198 students).
  
- Getting to places other than school
  - 569 students said they used RFRT to get to places other than school (41%);
  - 813 said they did not (59% of respondents); and
  - All other students did not provide a response (1,198 students).<sup>6</sup>

Over the entire second-wave sample, about 55% of student respondents had used RFRT to make at least one or more trips. A substantial portion of students used RFRT regularly—27% of respondents reported using RFRT for more than 15 trips since the beginning of the school year.

## RT users, demographics, and outreach

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### Black and low-socioeconomic status students use RT at high rates

Table 2 shows the demographics of respondents who answered they used RT on the day of the survey or the last day they traveled to school. Compared to other racial groups, white and Asian students are the least likely to use RT prior to RFRT implementation while Black students are clearly more likely than other groups to be RT users before and after the pass went into effect. But the share of students reporting RT use after RFRT implementation increases for all groups except “Other.” The share of white students increases substantially after RFRT implementation.

Number of computers at home is meant to be a proxy measure of socioeconomic status with a lower number of computers indicating a lower socioeconomic status. As might be expected, having

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<sup>6</sup> The survey did not allow students to answer “I don’t know” for this question.



fewer computers at home is associated with a higher likelihood of public transit use. Thus, RFRT benefitted high-needs and underserved demographics, as the program intended.

**Table 2. RT user respondent demographics.**

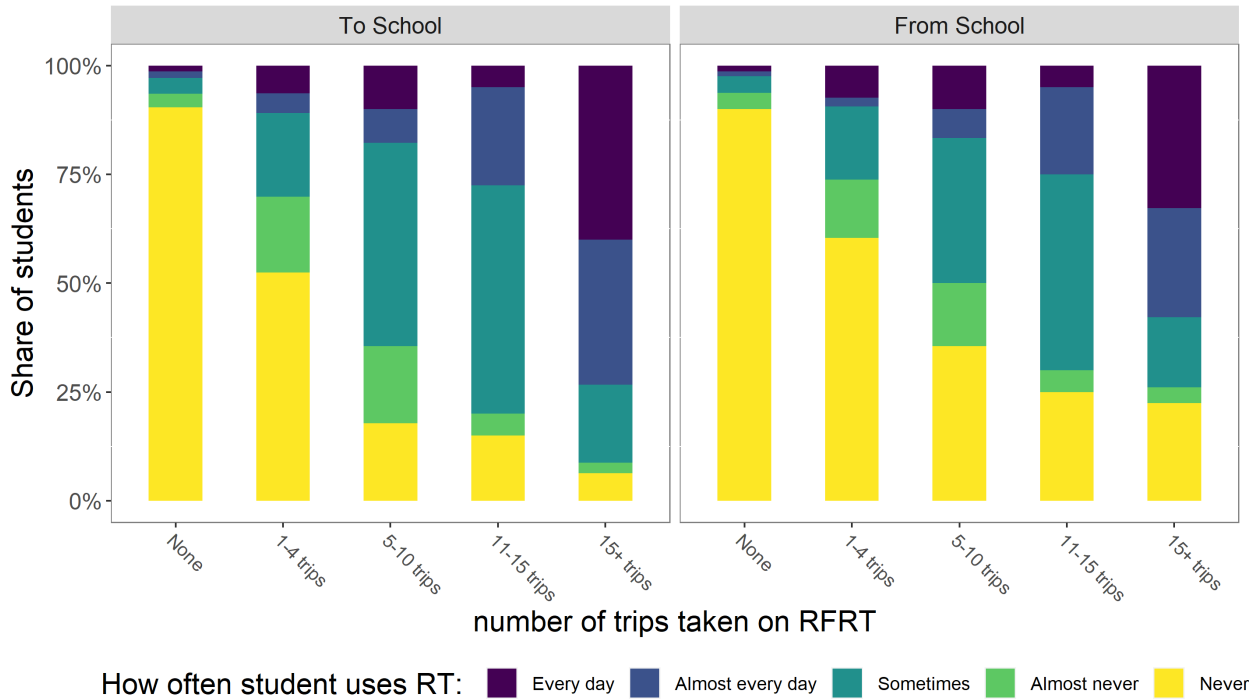
	first wave		second wave	
	RT user respondents	all other respondents	RT user respondents	all other respondents
<b>Race</b>				
Black	22.8% (57)	82.1% (193)	30.2% (42)	69.8% (97)
Latino	8.1% (61)	91.9% (690)	12.7% (69)	87.3% (475)
White	7.4% (28)	92.6% (352)	21.5% (50)	78.5% (183)
Asian	3.6% (16)	96.4% (432)	7.7% (37)	92.3% (441)
Other	12.0% (38)	88.0% (278)	10.7% (16)	89.3% (134)
Biracial	14.3% (56)	85.7% (336)	23.2% (51)	76.8% (169)
Triracial	16.4% (23)	83.6% (117)	27.7% (18)	72.3% (47)
Multiracial > 3	7.2% (5)	92.8% (64)	4.8% (1)	95.2% (20)
<b>Number of computers at home</b>				
None	8.9% (40)	91.1% (407)	17.5% (30)	82.5% (141)
One	8.4% (83)	91.6% (907)	18.5% (82)	81.5% (361)
Two	5.6% (62)	94.4% (1047)	13.3% (63)	86.7% (411)
Three+	5.3% (96)	94.7% (1712)	12.8% (100)	87.2% (684)

Table 3 provides further information about how often students in different racial/ethnic groups used RFRT. The table designates cells that are higher (green) or lower (red) than a group’s total population shares to facilitate comparisons across groups. The results show that white and Black respondents as well as respondents with fewer computers at home tend to use RFRT at higher rates than would be expected based on their population shares alone. Latinx students are underrepresented in the highest RFRT use category, echoing the results summarized in Table 2.

Figure 2 shows the share of survey respondents reporting how often they use RT to get to/from school compared to the number of trips they made using RFRT. The figure demonstrates that students that use RT more often tend to rely heavily on RFRT. It also shows that there are students using RT often but who are for some reason not using RFRT. This finding suggests that further outreach may be needed to increase awareness of the program among some students.

**Table 3. Respondent demographics and RFRT use.**

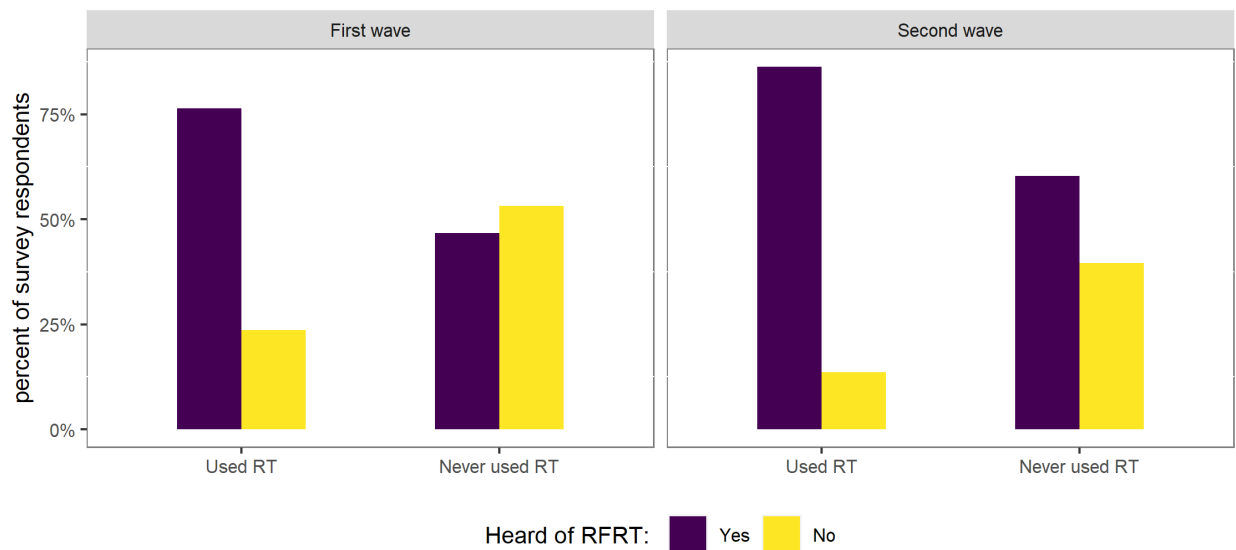
	None	1-4 trips	5-10 trips	11-15 trips	15+ trips
<b>Race</b>					
Asian	53.6% (173)	17.3% (56)	5.6% (18)	3.4% (11)	20.1% (65)
Latinx	53.0% (186)	15.1% (53)	6.6% (23)	3.4% (12)	21.9% (77)
Black	33.6% (38)	17.7% (20)	11.5% (13)	4.4% (5)	32.7% (37)
White	24.9% (51)	23.9% (49)	10.7% (22)	3.4% (7)	37.1% (76)
Other	59.1% (52)	14.8% (13)	6.8% (6)	3.4% (3)	15.9% (14)
Biracial	41.5% (71)	15.8% (27)	4.7% (8)	1.8% (3)	36.3% (62)
Triracial	29.6% (16)	18.5% (10)	7.4% (4)	5.6% (3)	38.9% (21)
Multiracial > 3	27.8% (5)	27.8% (5)	16.7% (3)	0.0% (0)	27.8% (5)
No race reported	45.3% (34)	21.3% (16)	10.7% (8)	2.7% (2)	20.0% (15)
<b>Number of computers at home</b>					
None	37.2% (42)	14.2% (16)	10.6% (12)	3.5% (4)	34.5% (39)
One	42.9% (121)	15.2% (43)	8.9% (25)	3.5% (10)	29.4% (83)
Two	44.5% (151)	19.2% (65)	8.3% (28)	2.9% (10)	25.1% (85)
Three+	47.2% (264)	18.6% (104)	5.5% (31)	3.0% (17)	25.6% (143)
<b>Total</b>					
<b>Totalled by trips</b>	<b>44.8% (626)</b>	<b>17.8% (249)</b>	<b>7.5% (105)</b>	<b>3.3% (46)</b>	<b>26.6% (372)</b>



**Figure 2. Comparison of RT use and how many trips students took using RFRT.**

### Knowledge of RydeFreeRT increased over time

As expected, larger share of students from the second wave survey said that they had heard of RFRT compared to the first wave (54% and 70%, respectively).<sup>7</sup> Figure 3 compares the share of students who have heard of RFRT to the share of students who have ever used RT. Students who have never used RT are more likely to report that they have not heard of the free pass. This result suggests that there is still potential to reach non-RT users with information about the program. Surprisingly, there are some respondents who have used RT but who claim to be unaware of RFRT.<sup>8</sup> Thankfully, their share of responses drops from the first to second wave.



**Figure 3. Comparison of respondents who use RT and have heard of RFRT.**

### More RydeFreeRT outreach is needed in Latinx communities

Each cell in Table 4 shows the share of respondents in the indicated group that had or had not heard of RFRT during the first wave and second wave surveys. The total number of respondents in each cell is shown in parentheses. We performed a two-proportion z-test to determine whether the proportion significantly differed between survey waves. Almost all z-scores are positive and significant, meaning that there is a substantial increase in SCUSD student awareness of RFRT across the board.

<sup>7</sup> Statistically significant difference using a two-proportion z-test, z-score = -10.74,  $p < 0.05$ .

<sup>8</sup> Some transit operators have reported anecdotally that obvious-looking youth were allowed to ride free even if they did not have an appropriate RFRT sticker or card.

Students residing in Sacramento City Council District 6 are the only group in which fewer than 70% of the second wave respondents reported having heard of RFRT. The district's large Latinx population indicates that that further outreach to this population may be warranted.

**Table 4. Comparisons of respondents who have and have not heard of RFRT.**

	First Wave		Second Wave		z-score*
	Yes	No	Yes	No	
<b>Race</b>					
Latinx	50.3% (375)	49.7% (371)	63.9% (351)	36.1% (198)	<b>4.9</b>
White	63.4% (242)	36.7% (140)	81.7% (205)	18.3% (46)	<b>5.0</b>
Asian	48.4% (216)	51.6% (230)	66.2% (323)	33.8% (165)	<b>5.5</b>
Black	61.9% (154)	38.2% (95)	80.7% (113)	19.3% (27)	<b>3.8</b>
Other	48.9% (153)	51.1% (160)	56.4% (88)	43.6% (68)	1.5
Biracial	59.6% (233)	40.4% (158)	74.0% (171)	26.0% (60)	<b>3.6</b>
Triracial	61.4% (86)	38.6% (54)	83.1% (54)	16.9% (11)	<b>3.1</b>
Multiracial reporting > 3	50.0% (34)	50.0% (34)	75.0% (18)	25.0% (6)	<b>2.1</b>
<b>Mode on day of survey/last day of travel</b>					
Auto	51.1% (1060)	48.9% (1016)	65.1% (904)	34.9% (484)	<b>8.2</b>
RT	81.7% (237)	18.3% (53)	90.0% (269)	10.0% (30)	<b>2.9</b>
Walk	50.8% (158)	49.2% (153)	70.8% (165)	29.2% (68)	<b>4.7</b>
Bike	54.7% (58)	45.3% (48)	70.3% (45)	29.7% (19)	<b>2.0</b>
School bus	64.3% (18)	35.7% (10)	76.9% (20)	23.1% (6)	1.0
<b>Gender</b>					
Female	56.7% (732)	43.3% (558)	72.3% (765)	27.7% (293)	<b>7.8</b>
Male	52.9% (693)	47.1% (616)	64.9% (471)	35.1% (255)	<b>5.2</b>
prefer not to say	46.1% (41)	53.9% (48)	74.1% (60)	25.9% (21)	<b>3.7</b>
self-describe	52.6% (20)	47.4% (18)	68.2% (15)	31.8% (7)	1.2
<b>Council District</b>					
1	66.7% (6)	33.3% (3)	0.0% (0)	100.0% (1)	-1.3
2	57.1% (8)	42.9% (6)	71.4% (5)	28.6% (2)	0.6
3	50.0% (29)	50.0% (29)	73.5% (25)	26.5% (9)	<b>2.2</b>
4	57.6% (137)	42.4% (101)	78.2% (86)	21.8% (24)	<b>3.7</b>
5	57.0% (253)	43.0% (191)	71.1% (155)	28.9% (63)	<b>3.5</b>
6	47.6% (353)	52.4% (389)	68.0% (387)	32.0% (182)	<b>7.4</b>
7	59.3% (64)	40.7% (44)	81.3% (52)	18.8% (12)	<b>3.0</b>
8	58.6% (41)	41.4% (29)	78.1% (64)	22.0% (18)	<b>2.6</b>

\*These columns report the results of a two-proportion z-test, bolded values indicate statistical significance ( $p < 0.05$ ), bold red values indicate even smaller p values ( $p < 0.0001$ ).

## Student outcomes

### Students report somewhat fewer absences and tardies with RydeFreeRT

Figure 4 summarizes results for the number of times students report being absent or tardy using the first and second wave data. Students were prompted to answer the first wave survey for absences or tardies since “the beginning of the school year.”<sup>9</sup> For the second wave survey students were asked to answer based on the “first two weeks of March.” These were roughly comparable lengths of time based on the survey administration date. Students using RT on the survey day or their last travel day are again considered separately as in the above examples.

No substantial differences between rates of absenteeism and tardiness are apparent between the first- and second-wave surveys. But all respondents, regardless of mode use, report slightly less tardiness and absenteeism overall in the second-wave survey. Any decrease in students missing instructional time should be acknowledged, and these results provide some evidence that increasing RT access has provided students with more reliable school transportation options.

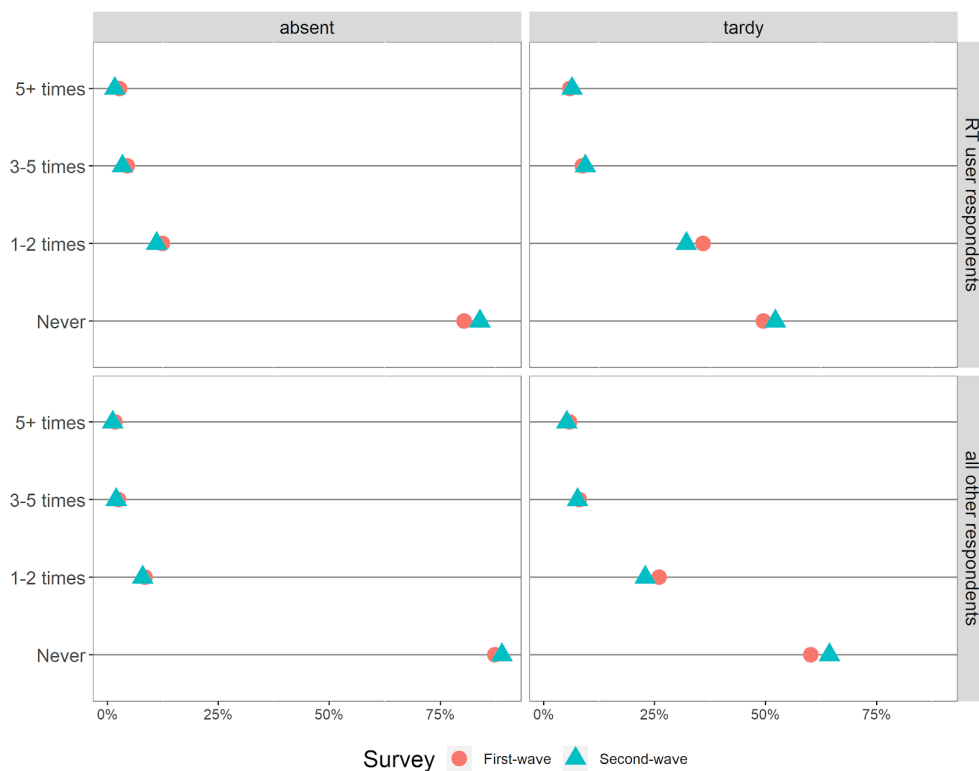


Figure 4. First- and second-wave tardiness and absenteeism.

<sup>9</sup> SCUSD 2019 academic year began on Aug. 29th, 2019 (See: <https://www.scusd.edu/e-connections-post/benefits-earlier-start-date-2020-21-school-year#:~:text=The%20start%20date%20for%20the,their%20access%20to%20enrichment%20opportunities.>)

## Attitudes towards public transit and RydeFreeRT

### Even non-RT commuters report benefits from free transit

Figure 5 shows results from four attitudinal questions that were asked in the second wave survey. They all compare respondents stating that they used RT on the last day they traveled to school to respondents using all other modes. The questions asked about how much easier RFRT has made it for students to get to school and other activities and whether their public transit use had increased because of RFRT.

The results show that RT users increased their use of transit and can more easily access important destinations because of RFRT. Notably, about a quarter of those who did not use RT the last time they got to school also indicated that RFRT was useful to them, more often for after-school and non-school activities. This is an encouraging result; many students not necessarily using RT to get to school regularly are using public transit more because of RFRT, advancing the city’s efforts to increase inclusive economic development in underserved communities and the state’s work to address climate change.

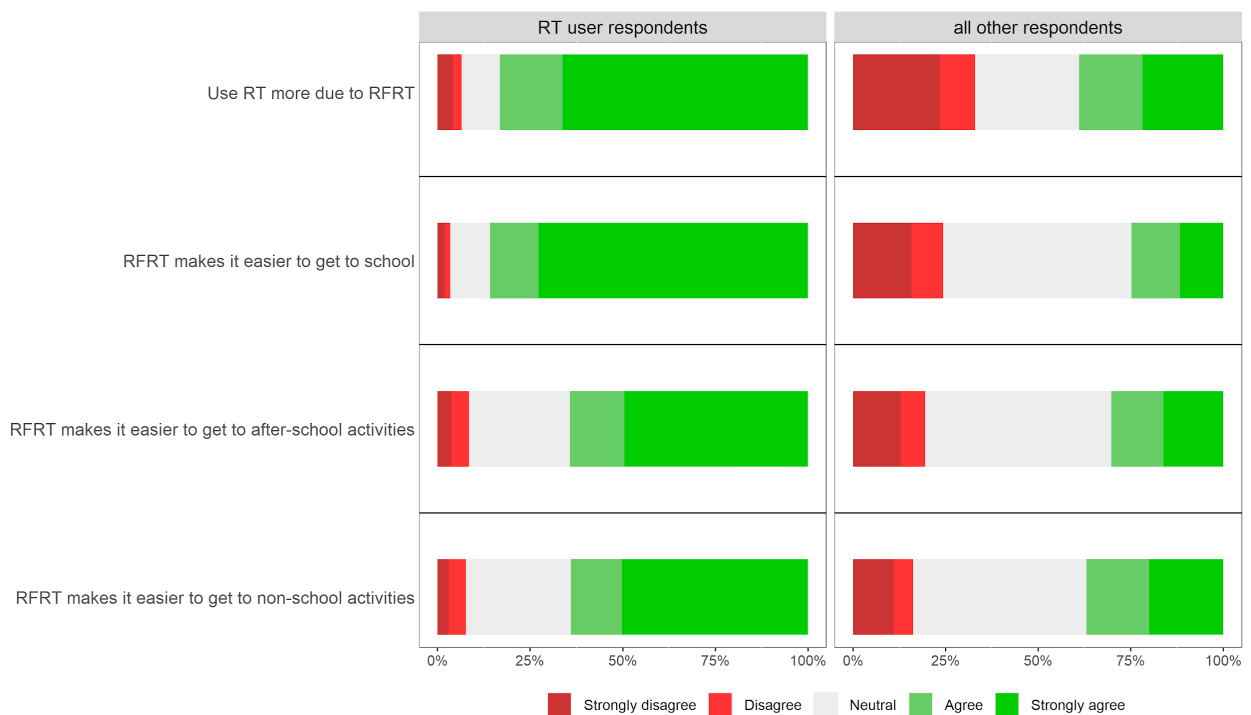


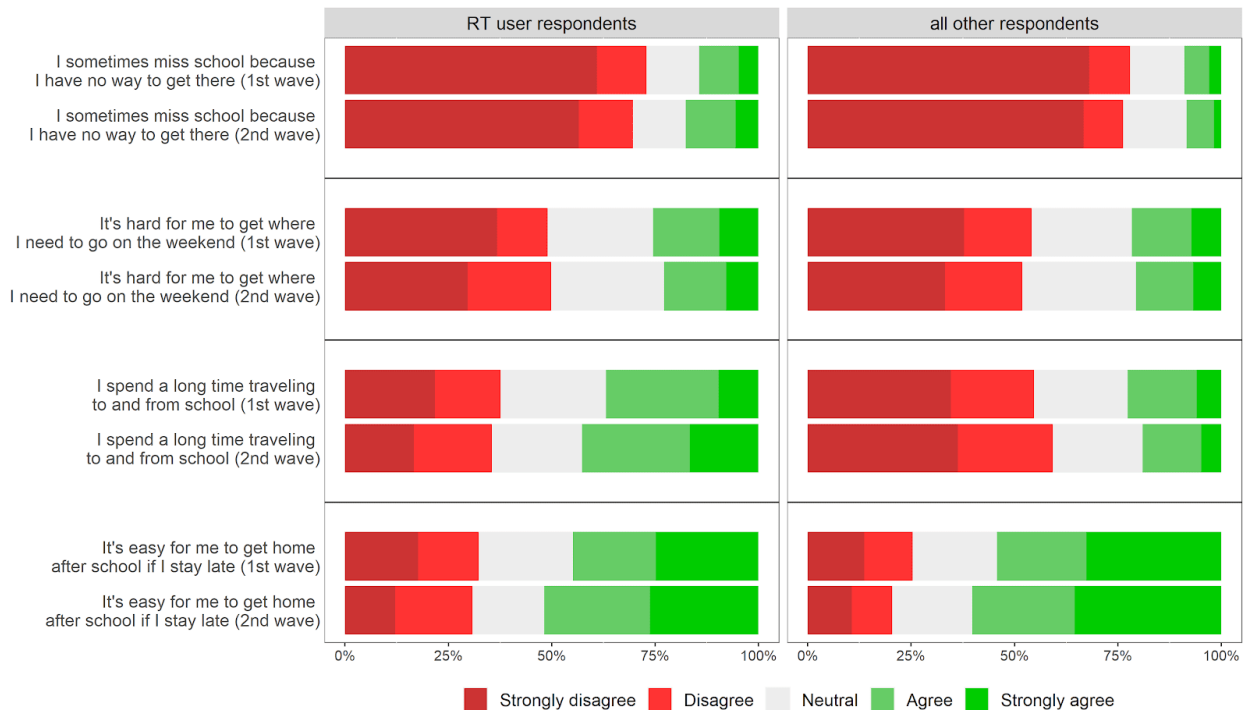
Figure 5. Second-wave respondent attitudes towards RFRT.



## RT users may need more time to become familiar with the system

Figures 6 and 7 compare various attitudinal questions from the first and second wave survey. Again, these figures separate respondents who used RT to get to school on the survey day or the last time they traveled there from those who reported using other modes. The results are more mixed than those summarized in Figure 5.

On the one hand, RT users report they can more easily reach weekend destinations and return home from school after staying late because of RFRT. On the other, the share of RT users reporting that they sometimes miss school because they have no way to get there or who spend a long time traveling increases somewhat after the initiative is launched. This increase in students who miss school can be understood with reference to decades of travel behavior research showing that fare decreases lead to ridership increases (TCRP 2004; Studenmund and Connor 1982; Cats, Susilo, and Reimal 2017). In the case of RFRT, the new transit users are most likely to be those who previously traveled to school in a car (Table 1). These new users are likely to be unfamiliar with the system.



**Figure 6. First and second-wave respondent attitudes towards their mobility.**

Figure 7 addresses questions related to student attitudes towards RT and shows some generally positive movement across the survey waves. More second-wave respondents report that RT can get them where they need to go compared to the first wave survey. To better understand whether public transit use is stigmatized, a survey question focused on this topic. Results show that RT user respondents find RT less embarrassing overall, and fewer students in both groups report that they agree or strongly agree with the statement that “It’s embarrassing to ride RT.”

RT users find the service more inconvenient in terms of wait times when comparing the second wave results to the first wave results. Again, this could be an effect of new RT users and unfamiliarity. Both groups agree more strongly since the first-wave survey that they have heard that RT is unsafe. While all our results should be interpreted in light of the Covid-19 pandemic, students' attitudes around safety may be a response to attitudes towards transit during a public health crisis. Communicating clearly about public transit's safety will be important to ensure ridership growth post pandemic.



Figure 7. First and second-wave respondent attitudes towards RT.

## Survey representativeness

In this section, we compare the two survey samples to one another as well as to the broader demographics of the SCUSD. In the first wave survey, 3,038 students agreed to participate. Responses for the second wave were somewhat lower with 2,592 students agreeing to participate. The second-wave survey instrument was similar to the first wave, but we added questions regarding RT and RFRT use to identify how the free pass may have changed students' travel behavior. Given the disruptions related to Covid-19, we specified that students should respond based on their pre-pandemic travel behavior.

Tables 5 through 8 compare the share of surveys returned across different demographic and travel behavior categories for both survey waves. Table 5 shows that the share of responses at each school differed substantially between the waves. Schools with large shares of respondents in the first wave generally saw those shares decrease, whereas many schools with low shares in the first wave

increased them in the second. The notable exception is Will C. Wood Middle School, whose share increased by 20 percentage points from the first to the second wave.

Table 6 shows the number of cars and number of computers at the respondent’s home, both proxy measures for socioeconomic status. Shares of respondents in each category are largely similar across all categories.

**Table 5. Share of survey responses by school.**

School	First wave	Second wave	Change in % of responses
Will C. Wood Middle	21.6%	42.7%	21.2%
California Middle	23.8%	5.37%	-18.5%
Rosemont High	18.7%	4.77%	-14.0%
Hiram W. Johnson High	11.9%	13.0%	1.15%
Kit Carson International Academy	11.1%	3.76%	-7.38%
Sutter Middle	4.59%	7.82%	3.22%
Sam Brannan Middle	6.15%	0.72%	-5.43%
C. K. McClatchy High	0.08%	6.15%	6.07%
John F. Kennedy High	0.12%	5.67%	5.55%
West Campus	0.16%	3.94%	3.78%
Albert Einstein Middle	0.08%	2.92%	2.84%
Health Professions High	1.40%	0.66%	-0.74%
Fern Bacon Middle	0.12%	1.07%	0.95%
Rosa Parks Elementary	0.04%	0.84%	0.80%
School of Engineering & Sciences	0.08%	0.42%	0.34%
Sacramento Charter High	0.04%	0.18%	0.14%

**Table 6. Share of survey responses by socioeconomic measures.**

Number of computers	First wave	Second wave	Change in % of responses
None	11.5%	9.18%	-2.30%
One	22.8%	23.6%	0.83%
Two	24.7%	25.3%	0.59%
More than two	41.0%	41.9%	0.88%
Number of Cars	First wave	Second wave	Change in % of responses
None	2.85%	3.68%	0.83%
One	24.7%	25.16%	0.50%
Two+	72.5%	71.16%	-1.33%

Table 7 shows an increase in the percentage of female respondents between survey waves. Table 8 shows the reported racial composition of the entire SCUSD as compared to the first and second wave survey respondents. Both waves of the survey appear to have underrepresented most racial categories and overrepresented students grouped under “other” and multiracial. It is possible that

students felt more comfortable selecting these categories in our surveys.<sup>10</sup> The share of Asian students in the second wave notably increases. This increase is offset by decreases in the “other” and multiracial categories.

**Table 7. Share of survey responses by stated gender.**

Gender	First wave	Second wave	Change in % of responses
Female	47.2%	56.0%	8.80%
Male	48.0%	38.4%	-9.63%
Prefer not to say	3.29%	4.33%	1.04%
Prefer to self-describe	1.42%	1.21%	-0.21%

**Table 8. Respondent race/ethnicity compared to SCUSD demographic data.**

Race/ethnicity	SCUSD 2016-2017	First wave	Second wave
Asian	19.1%	16.3%	25.5%
Black	13.9%	9.09%	7.42%
Latinx	39.8%	27.4%	28.8%
White	18.0%	13.9%	13.2%
Other	3.80%	11.50%	8.25%
Biracial	6.40%*	14.3%	12.1%
Triracial		5.09%	3.45%
Multiracial reporting greater than 3		2.51%	1.25%

\*SCUSD reports “Two or more races” as a single category (See <https://www.scusd.edu/enrollment-dashboard>)

While the second wave survey was conducted under less-than-ideal circumstances, it appears to have captured a reasonably similar population of students judging by the demographic shares. In most instances, the share of students selecting a particular response changed by less than 5 percentage points.

<sup>10</sup> Statewide collection of race/ethnicity information occurs annually when the California Basic Educational Data System (CBEDS) is updated. Districts collect race/ethnicity information from students. They use the census approach of asking about Hispanic/Latino origin first (referred to as an “ethnicity”) and then follow up with a race question. In many cases, parents/guardians (i.e. not the student) report this information. If a student’s race/ethnicity is unreported, districts are able to use visual identification, although this practice is discouraged. In any case, race and ethnicity data collection methods differed substantially between our survey--based on student self-reports--and the CBEDS. More information is available here: <https://www.cde.ca.gov/ds/dc/es/refaq.asp#q1>.

## Conclusions and future directions

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School districts across the country are struggling to provide affordable, reliable, and convenient student transportation in the face of tightening fiscal constraints. Multiple governments and agencies came together in the Sacramento region to demonstrate a possible solution—free student public transit passes.

We evaluated the program using two surveys administered to SCUSD students before and after the pass was implemented. Despite data-collection challenges arising from the Covid-19 pandemic, we were able to achieve high participation rates and generate two samples appropriate for evaluating RFRT's impact.

The results demonstrated substantial uptake and a real shift in travel behavior. In contrast to other free transit passes around the world, students in Sacramento appear to have increased public transit use without reducing the shares of students walking and cycling. This result suggests that the RFRT program has reduced driving for school trips. A diverse set of students have taken advantage of the program, with low-socioeconomic status students and Black students participating at high rates.

As RFRT was implemented, knowledge of it grew. Future research should examine the extent to which this trend continues. Gaps in knowledge in certain places (Sacramento City Council District 6) and among certain populations (Latinx students) should be tracked over time to ensure that access to information is not a barrier to participation.

With the currently collected survey data, we will also be able to conduct more detailed evaluations to tease out the relative importance of different factors on student travel choices. For example, determining whether student socioeconomic status or distance from school more strongly predicts transit use can inform how best to target future communication and outreach efforts.

Ultimately, future research should focus how a policy eliminating one barrier to students' ability to fully engage in school impacts students' educational outcomes. Studying issues such as rates of chronic absenteeism or school choice as they relate to transportation equity can provide strong guidance for future policymaking.

The evidence summarized in this report provides an overall positive early assessment of RFRT's impacts. The program appears to have achieved a number of key goals in terms of transit ridership and student outcomes.

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