THROUGH THE GATE℠
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TRANSFER ODDS

Technical Report Examining Factors That Impact Whether Students Achieve Transfer or Get Stuck Near or At the Gate

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Research • Planning • Professional Development
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Introduction

When students make significant progress toward a transfer goal, what impacts their likelihood for making it to a university? Which student groups are more likely to achieve transfer success and which ones may need strategic support to make it across the finish line? The Research and Planning Group for California Community Colleges (RP Group) is exploring these questions as part of our Through the Gate transfer study, which aims to identify strategies for increasing transfer among "high-leverage" learners—students who complete all or most of their transfer requirements but who do not make it to university (see sidebar, *Through the Gate Transfer Study Overview*).

During the first phase of this research, the RP Group mapped the transfer landscape across California's community colleges, examining a sample of over 875,000 students enrolled during a recent five year period (2010-2015) whose course-taking signaled a transfer goal and measuring their transfer outcomes through spring 2016.[1] This analysis identified and profiled nearly 300,000 high-leverage students who were stuck either "near" or "at" the transfer gate, and compared them to "transfer achievers" (see *Figure 1. Through the Gate Study Populations*, p. 2).

Through the Gate Transfer Study Overview

The RP Group's Through the Gate Transfer Study includes:

Phase 1: Mapping the Transfer Landscape (2016 – 2018)

Quantitative research to understand the transfer landscape, determining: (1) how many students in California arrived at or near the transfer gate, but did not go through, and (2) who they are and where they reside

Phase 2: Getting Better Directions (2019)

Qualitative research with students who are ready or nearly prepared to transfer to understand what factors impact their journey and how policy and practice might change to propel them through the transfer gate

The RP Group is conducting this research with support from the College Futures Foundation. For more information, visit www.rpgroup.org/through-the-gate.

Reader's Guide

Building on this initial analysis, the RP Group further explored what characteristics and regional factors increase or decrease students' transfer odds. This technical report begins with an overview of the data and sample used in this component of research. This overview is followed by descriptive statistics of the independent and dependent variables used in the analysis. We provide a quick description of the statistical model before offering a detailed explanation of the study's results.

[1] For a full technical report of these findings, visit *Mapping the Transfer Landscape for California Community College Students* at https://rpgroup.org/Portals/0/Documents/Projects/ThroughtheGate/Through-the-Gate-Phase-I-Technical-Report.pdf.

Figure 1. Through the Gate Study Populations

This extended quantitative research lays additional groundwork for the study's second phase focused on gathering perspectives from students near or at the transfer gate and identifying opportunities for improving their success. The RP Group anticipates that educators, executives, and system-level leaders in the state's community college and university systems can glean insights from both phases of the *Through the Gate* study—informing equity-focused transfer initiatives and Guided Pathways development. Planning, research, and institutional effectiveness (PRIE) professionals may find this report particularly useful for guiding transfer-focused inquiry, data collection, analysis, and dialog with campus student success and institutional redesign teams.

Data Sources

The RP Group sourced data for this study from multiple locations, beginning with the California Community Colleges Chancellor's Office Management Information System (COMIS)—a centralized administrative database. Comprising administrative data from the state's 114 community colleges, COMIS holds student unit records with enrollment, grade, course,

completion, and demographic information. We joined student records retrieved from COMIS with records from the National Student Clearinghouse to identify which students transferred to a baccalaureate-granting institution from a California community college. In addition, we used the Chancellor's Office Datamart[2] to retrieve college-specific data and the California State University (CSU) Division of Institutional Research and Analyses webpage[3] to retrieve data pertaining to CSU admission rates. Finally, we secured data related to the number of baccalaureate-granting institutions near community colleges from the Integrated Postsecondary Education Data System[4] (IPEDS).

Sample

The sample used in this analysis was composed of students with enrollment records at a California community college anytime from fall 2010 through spring 2016, excluding students who had earned a bachelor's degree prior to transfer. Together, masked Social Security Number and District ID served as the unique identifiers for each student's records. We excluded any students first enrolling in a college during the 2015-2016 academic year from the analysis, as they likely did not have enough time to reach the study's milestones of interest, and reporting these students may have created misleading findings about student outcomes. Moreover, this study's sample is limited to students with (1) at least 60 completed transferable units, (2) a record at a baccalaureate-granting institution following enrollment at a California community college (i.e., transferred), and/or (3) an awarded Associate Degree for Transfer. After some additional exclusions and data cleaning, 749,193 students remained in the study sample. For a full listing of the data exclusions, please see Appendix A.

Variables

The outcome or dependent variable used in this study is a categorical variable with three categories (see Table 1):

- **Near the gate:** Students who completed at least 60 transferable units with 2.0 GPA, but had not completed both a transfer-level math and English course
- **At the gate:** Students who completed at least 60 transferable units with 2.0 GPA, transfer-level math and English, and/or earned an Associate Degree for Transfer
- **Transferred:** Students with a record at a baccalaureate-granting institution following enrollment at a California community college[5]

[2] View the Chancellor's Office Datamart at https://datamart.cccco.edu/.
[3] View the California State University (CSU) Division of Institutional Research and Analyses webpage at http://www.calstate.edu/as/index.shtml.
[4] View the Integrated Postsecondary Education Data System at https://nces.ed.gov/ipeds/use-the-data.
[5] To define the transfer-achieving group, students who had an enrollment record at any baccalaureate-granting institution prior to any enrollment record at a California community college, as well as students who had earned a bachelor's degree prior to their transfer from a college to a university were excluded from analysis.

Table 1. Number/Percent of Sample by Outcome Variable Categories, Statewide

Categories	Number	Percent
Near the Gate	131,906	17.6%
At the Gate	115,096	15.4%
Transferred	502,191	67.0%
Total	749,193	100.0%

Table 2 provides another view of the outcome categories by region. Notice that the region with the highest transfer rate is San Diego (74.1%), and the region with the lowest transfer rate is Central Valley/Mother Lode (56.0%).

Table 2. Number/Percent of Sample by Outcome Variable Categories and Region

Region	Near the Gate		At the Gate		Transferred		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
San Diego/ Imperial	9,813	14.5%	7,684	11.4%	50,052	74.1%	67,549	100%
Inland Empire	10,318	18.7%	8,973	16.2%	35,949	65.1%	55,240	100%
Los Angeles/ Orange County	46,781	17.4%	41,630	15.5%	180,532	67.1%	268,943	100%
South Central	11,113	15.4%	12,226	16.9%	48,998	67.7%	72,337	100%
Central Valley/Mother Lode	11,347	25.6%	8,161	18.4%	24,798	56.0%	44,306	100%
Santa Cruz and Monterey Bay/Silicon Valley/East Bay/North Bay	28,349	17.6%	24,286	15.1%	108,657	67.4%	161,292	100%
Northern Coastal/ Northern Inland/Greater Sacramento	14,185	17.8%	12,136	15.3%	53,205	66.9%	79,526	100%
Total	**131,906**	**17.6%**	**115,096**	**15.4%**	**502,191**	**67.0%**	**749,193**	**100%**

We present the predictor variables used in this analysis, along with some descriptive statistics on each variable in Tables 3 and 4. We selected variables based on feedback from the College Futures Foundation, the study's Advisory Committee,[6] and community college practitioners.

[6] For a complete list of Through the Gate advisors, see "Project Team" at www.rpgroup.org/through-the-gate.

Table 3 displays the mean, standard deviation, minimum value, and maximum value for college FTES, the number of college ADT programs, the miles between each community college and the nearest CSU or University of California (UC), the admissions rate at the nearest CSU to each college, and the number of baccalaureate-granting institution within the CSU service area within which each college is located.

Table 3. Descriptive Statistics for Institutional Variables

	Mean	Standard Deviation	Min	Max
College FTES	13,786.5	5,897.9	1,567.7	25,609.9
Number of College ADT Programs	22.3	5.4	0	33
Miles to Nearest CSU or UC	16.1	19.5	0.8	210.7
Admission Rate at Nearest CSU	56.4	18.9	21.0	85.6
Number of Baccalaureate Granting Institution within Each College's CSU Service Area (Higher Education Density)	27	22	2	55

Whereas Table 3 displays institution-level variables, Table 4 contains descriptive information for student-level variables, showing the number and percent of students within each category of each listed variable divided by each level of the outcome variable.

Note that the initial list of student-level variables included one for financial aid. However, in testing the model, financial aid was highly collinear with the variable for first-generation status. Meaning, the variation attributed to financial aid was completely explained by the variation of the variable for first generation. Between the two variables, the model included first generation rather than financial aid, since the former variable had more explanatory power. Stated simply, we included first-generation status in the model because it was a better predictor (than financial aid) of whether students were stuck near or at the gate versus transferred.

Table 4. Descriptive Statistics for Student Variables

	Near the Gate		At the Gate		Transferred		Total	
	#	%	#	%	#	%	#	%
Demographic								
Age (median)	25		21		21		21	
Gender								
Male	54,016	41.0%	53,980	46.9%	222,486	44.3%	330,482	44.1%
Female	77,890	59.0%	61,116	53.1%	279,705	55.7%	418,711	55.9%
Ethnicity								
Asian	20,354	15.4%	23,258	20.2%	89,450	17.8%	133,062	17.8%
African American	7,316	5.6%	3,353	2.9%	31,757	6.3%	42,426	5.7%
Hispanic	47,211	35.8%	44,079	38.3%	147,771	29.4%	239,061	31.9%
Native American	895	0.7%	455	0.4%	2,059	0.4%	3,409	0.5%
Pacific Islander	628	0.5%	449	0.4%	2,492	0.5%	3,569	0.5%
Two or More Races	3,561	2.7%	3,935	3.4%	19,277	3.8%	26,773	3.6%
White	45,398	34.4%	34,638	30.1%	186,991	37.2%	267,027	35.6%
Unknown	6,543	5.0%	4,929	4.3%	22,394	4.5%	33,866	4.5%
Special Populations								
Disability								
Any Disability	5,455	4.1%	3,161	2.8%	6,092	1.2%	14,708	2.0%
No Disability	126,451	95.9%	111,935	97.3%	496,099	98.8%	734,485	98.0%
First Generation								
First Generation	35,607	27.0%	34,020	29.6%	73,103	14.6%	142,730	19.1%
Not First Generation	96,299	73.0%	81,076	70.4%	429,088	85.4%	606,463	81.0%
Limited English Proficiency								
Limited English Proficiency	3,903	3.0%	2,211	1.9%	3,278	0.7%	9,392	1.3%
Not Limited English Proficient	128,003	97.0%	112,885	98.1%	498,913	99.4%	739,801	98.8%
Extended Opportunity Programs and Services (EOPS)								
Accepted to EOPS	10,801	8.2%	11,183	9.7%	28,122	5.6%	50,106	6.7%
Not Accepted to EOPS	121,105	91.8%	103,913	90.3%	474,069	94.4%	699,087	93.3%
Veteran								
Veteran	2,684	2.0%	2,442	2.1%	8,744	1.7%	13,870	1.9%
Not a Veteran	129,222	98.0%	112,654	97.9%	493,447	98.3%	735,323	98.1%

	Near the Gate		At the Gate		Transferred		Total	
	#	%	#	%	#	%	#	%
Academic								
Cumulative GPA (Mean)	2.99		3.07		3.20		3.13	
Education Goal*								
University	74,012	56.1%	89,924	78.1%	283,075	56.4%	447,011	59.7%
Other	57,894	43.9%	25,172	21.9%	219,116	43.6%	302,182	40.3%
AA/AS Degree								
Awarded	34,892	26.5%	30,640	26.6%	108,232	21.6%	173,764	23.2%
Not Awarded	97,014	73.5%	84,456	73.4%	393,959	78.4%	575,429	76.8%
Total	**131,906**	**17.6%**	**115,096**	**15.4%**	**502,191**	**67.0%**	**749,193**	**100.0%**

**Note: Students were assigned to Education Goal: University if they indicated as such on SM01 (Matriculation Goal) or SS01 (Education Goal).*

Statistical Model

To investigate factors and characteristics associated with the likelihood students remain near or at the gate rather than achieve transfer from a California community college to a university, the RP Group's research team conducted a multinomial logistic regression with transfer as the base outcome and near the gate and at the gate as the alternative outcome categories. Predictor variables entered into the model can be found in Tables 3 and 4 on page 6 and 7. For each binary predictor variable, having the characteristic or being part of a group is the indicator. For example, being a veteran is the indicator, while not being a veteran is the base group. In addition, we included an indicator variable for region with San Diego/Imperial (region with highest proportion of transfers) as the base category to which all other regions were compared. Similarly, the indicator variable for ethnicity established White students as the reference group (ethnic group with highest proportion of transfers). Note that the model relaxes the usual requirement that observations be independent by allowing intragroup (within college) correlation of standard errors.

Results Overview

Table 5 summarizes the statistically significant findings from the multinomial logistic regression model. The variable names under "Near the Gate" and "At the Gate" represent those student groups with higher odds of stopping near or at the transfer gate (than transitioning to university), whereas the variable names under the column labeled "Transferred" represent those student groups with higher odds of achieving transfer (than stopping near or at the gate). To review the multinomial logistic regression results with all included predictor variables, please see Appendix B.

Table 5. Results Summary of Significant Findings

Variables	Near the Gate	At the Gate	Transferred
Demographic			
(Higher) Age	*	*	
Female			*
Asian		*	
African American			*
Hispanic	*	*	
Native American	*		
Special Populations			
Any Disability	*	*	
First Generation	*	*	
Limited English Proficiency	*	*	
EOPS	*	*	
Veterans			*
Academic			
(Higher) GPA			*
Transfer Educational Goal	*	*	
AA/AS Attainment	*	*	
Region			
Central Valley/Mother Lode	*	*	
Inland Empire		*	
Santa Cruz and Monterey Bay/Silicon Valley/East Bay/North Bay		*	

High-Leverage Learners

In exploring what characteristics increase the odds the high-leverage learners in our study sample get stuck rather than transfer, we found several common factors among our near and at the gate student populations.

Demographic Variables

Among significant student demographic variables, results revealed **older students, and students from Hispanic backgrounds were more likely to be near and at the gate than to achieve transfer**:

- With each additional year of age, students are 1.09 times more likely to remain near the gate than transferred, and 1.03 times more likely to remain at the gate than transferred
- In comparison to White students, Hispanic students are 1.41 times more likely to remain at the gate than to transfer, and 1.30 times more likely to remain near the gate than to transfer

In addition to these shared characteristics, the model found that in comparison to White students, Native-American students are 1.31 times more likely to remain near the gate, while Asian students are 1.52 times more likely to remain at the gate than to transfer.

In interpreting some of these significant student demographic variables, results point to the need for further investigation of the disproportionate impact for some of these students in regards to their transfer goals. In the next phase of this research, we will examine some of these characteristics through an equity lens and take into account the sociocultural expectations underlying some of the impacted racial/ethnic groups.

Special Populations Variables

All the significant variables identifying special populations of students were common in terms of increasing the likelihood students were stuck near and at the gate. Results revealed that **students with any stated disability, who are first generation, involved in EOPS, and who have limited English proficiency were more likely to get stuck rather than achieve transfer**:

- Students with any stated disability were 1.50 times more likely to be near the gate and 1.28 times more likely to be at the gate than transfer in comparison to students with no disability
- First-generation students were 1.75 times more likely to be near the gate and 1.94 times more likely to be at the gate than transfer in comparison to non-first-generation students
- EOPS students were 1.14 times more likely to be near the gate and 1.27 times more likely to be at the gate than transfer in comparison to non-EOPS students
- Students with limited English proficiency (LEP) were 1.69 times more likely to be near the gate than transfer and 1.32 times more likely to remain at the gate than transfer in comparison to non-LEP students

The increased likelihood of these special populations students to stop short of transferring merits further exploration.

Academic Factors

Similar to the special populations variables, **academic factors played significant roles in increasing the likelihood of students stopping** near and at the gate rather than achieving transfer:

- In comparison to students with an education goal of anything other than transfer, students with an education goal of transferring are 1.10 times more likely to be near the gate than transferred and 2.65 times more likely to be at the gate than transferred

- Students with an AA and/or AS degree are 1.22 times more likely to be near the gate and 1.11 times more likely to be at the gate than transfer in comparison to students without an AA and/or AS degree

Jointly, these two findings seem contradictory as students who have a stated goal of transfer are more likely to get stuck, while those who earn an AS or AA degree—are also more more likely to be in the near and at the gate groups. Together, these **results point to the complexity of trying to identify students' actual education goal, and how that goal may change (or not) over the course of their college career**.

Regional Differences

Within the multinomial logistic regression, we also explored regional differences related to students' likelihood of transferring or being stuck near or at the gate. The San Diego/Imperial region was used as the comparison region since in our sample, it had the highest proportion of transfer-achieving students.

Results revealed that compared to students enrolled at a college in the San Diego region:

- Students in the Inland Empire (1.52 times more likely), Santa Cruz and Monterey Bay/Silicon Valley/East Bay/North Bay (1.85 times more likely), and Northern Coastal (1.59 times more likely) regions were more likely to remain at the gate than to transfer

- Students in the Central Valley/Mother Lode region were both 1.84 times more likely to remain near the gate than to transfer and 1.68 times more likely to remain at the gate than to transfer

Given the regional differences emerging from the model, it appears that **students attending colleges within certain regions may be facing unique barriers to transfer since they are more likely to get stuck near and at the transfer gate**.

Transfer Achievers

Based on the results from the multinomial logistic regression**, students with higher GPAs, female students, veterans, and those from African-American backgrounds are more likely to transfer than get stuck at or near the gate:**

- For every unit increase in GPA, students are 1.27 times more likely to transfer than to remain near the gate

- In comparison to male students, female students are 1.19 times more likely to transfer than to remain at the gate

- In comparison to non-veteran students, veteran students are 1.75 times more likely to transfer than remain near the gate and 1.35 times more likely to transfer than remain at the gate

- Compared to White students, African-American students are 2.04 times more likely to transfer than remain near the gate and 1.17 times more likely to transfer than remain at the gate

Limitations

We faced several broad limitations when conducting this additional analysis, which mirror those limitations outlined in our initial Phase I report[7] and that the majority of transfer research faces. However, we also confronted data-specific limitations that adjusted our sample and statistical modeling, as discussed below.

Data Availability and Imperfections

As previously discussed, this study utilized data available in the California Community Colleges Chancellor's Office Management Information System. Among a handful of colleges, we found missing, incomplete, or erroneous data that resulted in some students exhibiting a GPA of 0.00. We therefore omitted the data from these colleges from the analysis.

Additionally, certain data were not available in COMIS and therefore were not included in the statistical model. We were unable to account for all the special programs available to our community college students such as Umoja and Puente, which utilize culturally-responsive curriculum and practices in order to promote student success, with an emphasis on African-American and Hispanic students (respectively). This study collected data on students who were enrolled between 2010-2011 to 2014-2015, however the Chancellor's Office began requiring data on many of these special programs in 2012. We were also unable to identify which students participated in athletic programs since this variable is not collected at the statewide level.

Participation in these high-touch programs may be an effective driver for getting students near, at, or through the gate given some of their academic eligibility requirements, most commonly having a specific GPA or full-time enrollment. Above and beyond the requirements, the additional services included with participation in these programs may enhance the likelihood students become transfer achievers.

Modeling for College Factors

None of the college factors that were included in our multinomial logistic regression demonstrated a statistically-significant relationship between students who were near or at the gate compared to transfer achievers. It is important to note that this result may be due to how we built the model. First, there is lack of variation among the college factors since there were only 114 colleges in the model, and thus only up to 114 unique observations. Statistically

[7] Find a description of the limitations of the Through the Gate transfer research at http://rpgroup.org/Portals/0/Documents/Projects/ThroughtheGate/Through-the-Gate-Phase-I-Technical-Report.pdf.

speaking, the lack of variation may have created a very narrow and essentially non-existent confidence interval (see *Appendix B, Table 1A*) from which to accurately judge statistical significance of the institutional variables. It is therefore important to recognize that **while the college factors included in this model did not exhibit a statistically significant relationship to students achieving transfer, this finding does not mean college factors do not have an impact on the likelihood students make it through the gate to a university**.

Key Takeaways and Conclusions

This additional quantitative analysis bridges our Phase I transfer mapping analysis and our Phase 2 student perspectives research, surfacing three key takeaways at this stage of our research.

DETERMINING WHO IS A TRANSFER-SEEKING STUDENT BASED ON QUANTITATIVE DATA ALONE HAS LIMITATIONS.

Among our high-leverage population, it continues to be **difficult to nail down which students (based on quantitative data) are truly transfer-seeking**. While students with a stated transfer goal were more likely to stop short of this milestone, these students were also more likely to earn an associate degree and not transfer. Jointly, these two findings lead us to question whether these students were ever really on a transfer path, and if they were, when, if, and why their education goal changed. This analysis may also call into question how we assess students' transfer outcomes and hold colleges accountable for increasing students' transfer success.

THE COMMON NARRATIVE ABOUT WHO ACHIEVES TRANSFER MAY NOT FULLY REFLECT REALITY.

We also must continue to **challenge our assumptions about which student groups are more likely to achieve transfer, and where intervention points are located along their transfer paths.** Our initial analysis[8] followed by the additional quantitative research summarized in this technical report collectively demonstrate that some factors align with the existing narrative about which students reach their transfer goal, while others challenge common stereotypes.

These results support further exploration of the factors responsible for certain groups of students having higher odds of transferring, while at the same time, point to specific student groups that may need additional assistance moving through the transfer gate. For example, why are Asian, Hispanic, and Native-Americans likely to stop short of their transfer goal? For what reasons are students in the Central Valley/Mother Lode region getting stuck? What barriers do first-generation students grapple with as they traverse their transfer journey? What struggles are students with limited English proficiency encountering? What can be done to

[8] Find full analysis in *Mapping the Transfer Landscape for California Community College Students* at https://rpgroup.org/Portals/0/Documents/Projects/ThroughtheGate/Through-the-Gate-Phase-I-Technical-Report.pdf.

support older learners who want to transition to a university but may have life circumstances that limit their options? What issues do these student populations uniquely encounter and what can be gleaned across these different groups?

EFFECTIVELY IDENTIFYING HOW TO IMPROVE TRANSFER OUTCOMES REQUIRES STUDENT PERSPECTIVES AND INPUT.

The quantitative data have taken us as far as we can go in identifying who gets stuck, who makes it through the transfer gate, and what factors impact students' transfer odds. As we conclude Phase 1 of our Through the Gate study and move onto Phase 2, we are reminded that to truly understand students' decision-making process, we **need to learn from students themselves about what impacts their transfer progress and how to improve their success.**

Next Steps

Through the Gate's next phase will explore these and other questions, seeking to understand *why students who are so close to transferring do not make the transition to a university.* Through an online survey of students and interviews with former students who were at the gate but decided not to transfer, the RP Group will collect a broad range of students' perspectives to identify the most salient factors affecting their transfer journey. The primary goal is to create a taxonomy of factors by student groups and regions to describe the most significant drivers of students' decision to not transfer. This taxonomy will help determine the weights students place on these factors while making these decisions, and the extent to which these decisions vary by student subgroup. In the end, this research ultimately aims to inform strategies for increasing the transfer success of this high-leverage population.

Appendix A: Data Exclusions

The total number of students included in this stage of our quantitative analysis differs from the number (875,630) found in our initial research and reported in *Mapping the Transfer Landscape for California Community Colleges Students*, given a series of new exclusions, including:

- Students with an unknown gender (0.7%)
- Student with missing data (1.4%)
- Students with a bachelor's degree prior to transfer (4.4%)
- Students from LA ITV (Instructional Television) (0.02%)
- Students from continuing education colleges (0.1%):
    - North Orange Adult
    - San Francisco Centers
    - Santa Barbara Continuing Education
- Students with a cumulative GPA of 0.00 (7.4%) or 9.99 (1.0%), which eliminated all students from:
    - Cabrillo College
    - Clovis Community College
    - Copper Mountain College
    - Fresno City College
    - West Hills Lemoore College
    - Ohlone College
    - Reedley College
    - College of the Redwoods
    - Woodland College
    - Yuba College
- Students with a reported age under 12 and over 65 (1.9%). The distribution for age ranged from 0 to 999, requiring more practical boundaries to be established. Beginning with age 14 and ending with age 65 captured 99.7% of the sample and exclude ages typically outside the range of what one would expect.

Appendix B: Multinomial Logistic Regression Results

Table 1A displays selected output from the multinomial logistic regression. Reported in the table is the relative risk ratio (RRR, also referred to as odds ratio) for each variable, the corresponding 95% confidence interval, and significance values. Note that an odds ratio of 1.00 indicates no increase or decrease in the odds of the outcome occurring. An odds ratio over 1.00 indicates an increase in odds, while an odds ratio less than 1.00 indicates a decrease in odds. Because the reference category is "Transfer Achievers" in the regression model, it does not appear in the table. The two alternative categories (i.e., near the gate, at the gate) should be read as a comparison against the reference category. For example, looking at Age, the significant odds ratio of 1.09 indicates that with each additional year of age, students are 1.09 times more likely to remain near the gate than transferred. For dichotomous variables in the model (e.g., first generation), the reference group is comprised of students who are not first generation. Lastly, for regional comparisons, the reference group is the San Diego/Imperial region since it exhibited the highest transfer rate among our Through the Gate student sample.

Table 1A. Multinomial Logistic Regression Results

	Near the Gate	At the Gate
	RRR [95% CI]	RRR [95% CI]
Demographic		
Age	1.09***	1.03***
	[1.09,1.09]	[1.03, 1.04]
Male	1.02	1.15***
	[0.99,1.07]	[1.11,1.19]
Ethnicity *(reference group: White)*		
Asian	1.11	1.52***
	[0.97,1.26]	[1.31,1.67]
African American	0.60***	0.49***
	[0.52, 0.70]	[0.43,0.55]
Hispanic	1.30***	1.41***
	[1.18, 1.42]	[1.29,1.54]
Native American	1.31***	1.04
	[1.18,1.46]	[0.92,1.18]

	Near the Gate	At the Gate
Pacific Islander	1.99	0.92
	[0.84,1.16]	[0.81,1.05]
Two or More Ethnicities	0.91*	1.11*
	[0.84,0.98]	[1.04,1.20]
Unknown	1.22*	1.22
	[1.00,1.49]	[0.91,1.63]
Special Populations		
Disability	1.50***	1.28***
	[1.36,1.65]	[1.18,1.40]
First Generation	1.75***	1.94***
	[1.60,1.91]	[1.70,2.21]
Limited English Proficiency	1.69***	1.32**
	[1.43,1.99]	[01.12,1.55]
EOPS	1.14*	1.27***
	[1.03, 1.27]	[1.17,1.39]
Veteran	0.57***	0.74***
	[0.51,0.63]	[0.67,0.82]
Academic		
Cumulative GPA	0.79*	.97
	[0.65,0.96]	[0.82,1.15]
Education Goal	1.10*	2.65***
	[1.00,1.21]	[2.34, 3.01]
AA/AS Degree	1.22***	1.11**
	[1.11,1.34]	[1.04,1.19]
Institutional		
College full-time equivalent students (FTES)	1.00***	1.00*
	[1.00,1.00]	[1.00,1.00]
Number of College ADT Programs	1.00	1.02*
	[0.98,1.03]	[1.00,1.04]
Miles to Nearest CSU or UC	1.00*	1.00***
	[1.00,1.00]	[1.00,1.01]

	Near the Gate	At the Gate
Admission Rate at Nearest CSU	1.00	1.00
	[1.00,1.00]	[0.99,1.00]
Number of baccalaureate granting institution within the CSU service area within which each college is located (Higher Education Density)	1.00*	1.00*
	[1.00,1.01]	[1.00,1.01]
Region *(reference group: San Diego/Imperial)*		
Central Valley/ Mother Lode	1.84*	1.68*
	[1.12,3.03]	[1.11,2.56]
Inland Empire	1.28	1.52*
	[0.85,1.94]	[1.14,2.04]
Los Angeles/ Orange County	0.97	1.26
	[0.67,1.42]	[0.96,1.65]
South Central Coastal	0.90	1.21
	[0.56,1.45]	[0.87,1.70]
Santa Cruz and Monterey Bay/	1.47	1.85**
Mid-Peninsula/Silicon Valley/	[0.87, 2.50]	[1.29, 2.64]
East Bay/North Bay		
Northern Coastal/Northern Inland/	1.42	1.59*
Greater Sacramento	[0.76,2.65]	[1.05,2.41]
Observations = 749,193		
MacFadden's R^2 Adjusted = .09		
Model $\chi^2(54) = 22{,}051.19$ ***		
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$		

The Research and Planning Group for California Community Colleges

The RP Group strengthens the ability of California community colleges to discover and undertake high-quality research, planning, and assessments that improve evidence-based decision-making, institutional effectiveness, and success for all students.

Project Team

Darla Cooper, EdD

Kristen Fong, PhD

Kelley Karandjeff, EdM

Andrew Kretz, PhD

Alyssa Nguyen, MA

Kay Nguyen, EdD

Tim Nguyen, MA

Rogéair Purnell-Mack, PhD

www.rpgroup.org