Trellis Strategies

### STUDENT SUCCESS TOOLKIT

# Transportation Toolkit for Community College Leaders: Appendices

### **About Trellis Strategies**

Trellis Strategies is a leading strategic nonprofit research and technical assistance firm focused on advancing postsecondary education and strengthening the workforce. Our commitment is to provide unparalleled insights into the modern learner experience, spanning from application through graduation. Leveraging over four decades of experience in serving higher education institutions and assisting students in navigating intricate processes, Trellis Strategies' dedicated team possesses the knowledge, insight, and expertise to empower organizations to turn data into impactful action and tangible results.

As experts in gathering and analyzing both local and national data, we identify opportunities and provide scalable, tailored solutions for our partners. Our approach involves the transformation of institutions through the enhancement of the learner experience leading to higher enrollment yields, retention rates, and improved student post-graduation outcomes.

Guided by our mission, we navigate the non-linear landscape of postsecondary education, assisting institutions in adapting policies and programs to accommodate diverse learner journeys. By dismantling barriers in policy and processes, we aim to enhance learner outcomes and rebuilding trust in the credentialing process. We are dedicated to the belief that education serves as the cornerstone for unlocking new opportunities, fostering individual economic mobility, and growing community prosperity. For more information, visit our website: <a href="https://www.trellisstrategies.org/about-us/">www.trellisstrategies.org/about-us/</a>

### The Transportation Toolkit for Community College Leaders

This document is part of a larger toolkit containing multiple resources for community college stakeholders, which is available at: www.trellisstrategies.org/research-studies/transportation-toolkit-for-community-college-leaders/

### The Modern Learner Journey

At Trellis Strategies, we understand the modern learner as someone whose educational journey is shaped by ambition, resilience, and the realities of everyday life. These students often balance multiple roles, such as working full time, caring for dependents, or being the first in their household to pursue higher education, all while striving to achieve their academic goals.

The pathway of the modern learner is rarely linear. Interruptions, restarts, and shifts in direction are common, reflecting the complex interplay of education with work, finances, and personal responsibilities. These nonlinear journeys reflect the persistence and determination these learners bring to higher education. By understanding their experiences, we can better support progress, re-entry, and completion—creating opportunities that align with both educational goals and workforce demands.

### **Funding Statement**

Trellis Strategies would like to thank Lumina Foundation for its support of the Community College Transportation Project. The views expressed in this report are those of its authors and do not necessarily represent the views of Lumina Foundation, its officers, or its employees.

### Recommended Citation

Plumb, May Helena and Schuette, Anthony. (2025). *Transportation Toolkit for Community College Leaders: Appendices*. Trellis Strategies.

### About the Authors

May Helena Plumb, Ph.D., is a Research Associate at Trellis Strategies, where she leads mixed-methods research and evaluation projects to address evolving challenges in today's postsecondary education landscape. Before joining Trellis, she leveraged academic research to build learning communities and develop pedagogical resources as part of an international team of scholars. May holds a Master of Arts and a doctorate in Linguistics from The University of Texas at Austin.

Anthony Schuette is a Research Associate at Trellis Strategies. He received his B.S. in Economics from the University of St. Thomas and later received his M.S. in Applied Economics from the University of Minnesota. Before working at Trellis, Anthony worked as a researcher for the Transportation Policy and Economic Competitiveness Program at the Humphrey School of Public Affairs.



### Table of Contents

Appendix A: The Community College Transportation Project	4
About the project	5
Participating institutions	5
Methods	6
Demonstration of transit agency partnership	6
Appendix B: Detailed Data Tables	8
Transportation	
Table 1. Car and parking access among two-year SFWS respondents, 2018–2024	9
Table 2. Public transit use among two-year SFWS respondents, 2018–2024	9
Table 3. Modes of transport used by students at case-study institutions	10
Table 4. Transportation and attendance among two-year SFWS respondents, 2022–2024	10
Working students	
Table 5. Two-year student employment in NPSAS:20	11
Table 6. Impacts of employment among two-year employed SFWS respondents, 2024	11
Caregiving students	
Table 7. Caregiving status among two-year students in NPSAS:20	11
Table 8. Federal loan balances among two-year students in NPSAS:20, by caregiving status	12
Table 9. Caregiving & work hours among two-year caregiving SFWS respondents, 2024	12
Table 10 Employment and worker vs. student identity among two-year SEWS respondents. 2024	12

# Appendix A



# Appendix A: The Community College Transportation Project

### About the project

Between March 2024 and May 2025, Trellis Strategies (Trellis) undertook a mixed-methods research initiative to study transportation access at community colleges.

The project was guided by three overarching goals:

- Improve our understanding of how transportation barriers undermine educational attainment;
- 2. Explore transportation models and their associated regulatory frameworks and revenue sources; and
- 3. Develop knowledge and tools to support collaboration between institutions of higher education and local transit agencies.

The project was funded by Lumina Foundation. The Community Transportation Association of America (CTAA) was brought on as a subcontractor to assist with transit stakeholder engagement and guide mobility strategy development.

### **Participating institutions**

Rural Hills Community College is a small institution operating a main campus and several small centers in a rural region of the South. A network of nonprofit organizations offers public transit access between various towns in the region, including a mix of fixed-route and curb-to-curb services. Students at Rural Hills can access

some services via discounted, semester-long passes, and transit costs are eligible to be covered by financial aid.

Suburban Valley Community College is a mid-sized institution that operates two campuses in the eastern Midwest, one on the outskirts of a large metropolitan area and one in a more rural city. Suburban Valley operates a shuttle which connects their main campus to the city center. The nearest public transportation is a fixed-route bus stop about a mile from campus; however, Suburban Valley is fostering a growing partnership with the regional transit authority to improve transportation access for students.

Metro Ridge Community College serves over 25,000 students across four campuses in and around a major metropolitan area in the eastern Midwest. The college has a partnership with the metropolitan transit agency to provide an opt-out Universal Transit Pass (U-Pass) program to their students, providing unlimited access to the city's buses and trains, and Metro Ridge further offers emergency funds to support students' transportation needs.

Capital District Community College is a large, urban community college district operating over 10 campuses in the western South. The college provides a U-Pass program to students, which includes access to the metropolitan transit agency's bus routes, light-rail line, bikeshare program, and on-demand pickup service. However, the dispersed nature of their many campuses poses a challenge for transit connectivity.

Institution	S	ize			
(Pseudonym)	Campuses	Enrollment*	Census Region	Urbanicity	Transit context
Rural Hills Community College	1	~2,500	East South Central	Rural	Network of independent transportation organizations
Suburban Valley Community College	2	~10,000	East North Central	Suburban-rural	Private shuttle service; limited connection to regional transit
Metro Ridge Community College	4	~25,000	East North Central	Urban-suburban	Universal Transit Pass for metropolitan transit network
Capital District Community College	>10	~55,000	West South Central	Urban	Universal Transit Pass for metropolitan transit network

<sup>\*</sup>Source: Integrated Postsecondary Education Data System, 2022-2023 Academic Year Undergraduate Headcount

#### Methods

Qualitative research: Trellis conducted eight focus groups with stakeholders from three community colleges—Rural Hills, Metro Ridge, and Capital District—and a further three focus groups (supported by CTAA) with leaders from local transit agencies and organizations. In total, 10 transit professionals, 24 faculty and staff, and 30 current community college students shared their perspectives and expertise on the current state of student transportation use, barriers to transportation access, and future opportunities to improve transportation security.

Student Financial Wellness Survey: To provide additional context for community college student transportation use, Trellis analyzed previously collected data from the Student Financial Wellness Survey (SFWS), a voluntary annual survey fielded to current students at postsecondary institutions across the country that provides a snapshot of student wellness, including financial stressors, mental health, and transportation security.

From Fall 2018 to Fall 2024,183 unique two-year institutions participated in the SFWS, collecting over 150,887 responses from students. Capital District, Metro Ridge, and Suburban Valley have all participated in SFWS multiple times, providing case studies which show the variability between different community colleges. By creating a panel dataset of responses to each implementation of the SFWS, Trellis was able to see how transportation habits have changed at these institutions over time, relative to other SFWS participating institutions. (See table on following page.)

The results of the SFWS were weighted using a poststratification weighting technique. Two-year institutions and four-year institutions were separately weighted by gender, age, and enrollment intensity

### Demonstration of transit agency partnership

To put theory into practice, Trellis and CTAA collaborated with Suburban Valley Community College (pseudonym) and the transit agency serving the Suburban Valley region to explore opportunities for improving transportation access among community college students.

	20	018	2	019	2	020	2	021	2	022	2	023	20	024
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Control														
Public 2-year	36	97%	54	100%	39	100%	71	100%	61	100%	93	99%	53	96%
Private 2-year	1	3%	0	0%	0	0%	0	0%	0	0%	1	1%	2	4%
State			1											
Alabama	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%	3	5%
Arizona	0	0%	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%
California	0	0%	0	0%	1	3%	2	3%	1	2%	0	0%	0	0%
Florida	2	5%	1	2%	0	0%	1	1%	1	2%	0	0%	1	2%
Georgia	0	0%	1	2%	1	3%	2	3%	2	3%	1	1%	1	2%
lowa	0	0%	0	0%	0	0%	1	1%	0	0%	1	1%	0	0%
Illinois	0	0%	2	4%	0	0%	2	3%	0	0%	3	3%	1	2%
Kentucky	0	0%	0	0%	0	0%	0	0%	16	26%	16	17%	0	0%
Louisiana	0	0%	0	0%	0	0%	0	0%	1	2%	1	1%	2	4%
Maine	0	0%	0	0%	1	3%	1	1%	1	2%	1	1%	0	0%
Michigan	0	0%	0	0%	17	44%	5	7%	6	10%	8	9%	5	9%
North Carolina	2	5%	6	11%	3	8%	10	14%	16	26%	9	10%	8	15%
Nebraska	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%	0	0%
New Mexico	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%	0	0%
New York	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	2%
Ohio	0	0%	17	31%	0	0%	19	27%	0	0%	14	15%	9	16%
Oregon	0	0%	1	2%	0	0%	0	0%	1	2%	0	0%	1	2%
Pennsylvania	0	0%	0	0%	0	0%	1	1%	0	0%	2	2%	2	4%
South Carolina	0	0%	0	0%	0	0%	0	0%	0	0%	1	1%	1	2%
Tennessee	0	0%	1	2%	0	0%	1	1%	0	0%	1	1%	4	7%
Texas	33	89%	20	37%	16	41%	24	34%	15	25%	35	37%	15	27%
Washington	0	0%	1	2%	0	0%	1	1%	1	2%	1	1%	1	2%
Wisconsin	0	0%	1	2%	0	0%	0	0%	0	0%	0	0%	0	0%

© 2025 Trellis Strategies www.trellisstrategies.org

# Appendix B



### **Transportation**

TABLE 1. CAR AND PARKING ACCESS AMONG TWO-YEAR SFWS RESPONDENTS, 2018-2024

	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Fall 2024
Do you have a car? (Students who answere	ed 'Yes'.)						
All 2-year	79.0%	82.9%	80.3%	79.6%	81.0%	78.7%	74.0%
Capital District	-	81.3%	-	79.4%	-	77.0%	-
Metro Ridge	-	78.1%	-	76.1%	-	74.5%	74.3%
Suburban Valley	-	87.3%	-	90.2%	-	91.1%	86.7%
How reliable is your c (Students who answer		e' or 'Reliable'. 'I D	on't Know' respo	onses are exclude	d from the analys	sis.)	
All 2-year	59.5%	64.5%	58.7%	61.0%	63.8%	62.0%	58.2%
Capital District	-	60.8%	-	61.3%	-	60.7%	-
Metro Ridge	-	60.7%	-	57.7%	-	58.6%	58.0%
Suburban Valley	-	65.7%	-	70.9%	-	71.0%	65.7%
Parking is available o (Students who answere			-'. 'Not Applicable	' responses are e	xcluded from the	analysis.)	
All 2-year	-	-	-	-	9.5%	9.3%	10.8%
Capital District	-	-	-	-	-	12.7%	-
Metro Ridge	-	-	-	-	-	4.2%	4.4%
Suburban Valley	-	-	-	-	-	3.6%	2.8%

Source: Trellis Strategies, Student Financial Wellness Survey, Fall 2018–Fall 2024, two-year respondents only. Analysis of case-study institutions (identified by pseudonyms) conducted as part of the Community College Transportation Project.

TABLE 2. PUBLIC TRANSIT USE AMONG TWO-YEAR SFWS RESPONDENTS, 2018-2024

	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Fall 2024	
Do you use public transportation to get to school? (Students who answered 'Yes' (2018-2020), or 'Always', 'Often', or 'Sometimes' (2021-2024). 'Not Applicable' responses (2022-2024) are excluded from the analysis.)								
All 2-year	8.92%	6.59%	4.59%	5.56%	4.29%	5.79%	8.41%	
Capital District	-	10.39%	-	4.96%	-	8.36%	-	
Metro Ridge	-	16.12%	-	9.53%	-	13.82%	16.67%	
Suburban Valley	-	4.40%	-	1.83%	-	1.70%	4.35%	

Source: Trellis Strategies, Student Financial Wellness Survey, Fall 2018–Fall 2024, two-year respondents only. Analysis of case-study institutions (identified by pseudonyms) conducted as part of the Community College Transportation Project.

TABLE 3. MODES OF TRANSPORT USED BY STUDENTS AT CASE-STUDY INSTITUTIONS

	Capital District (n=820)	Metro Ridge (n=184)	Rural Hills (n=53)
What mode(s) of transportation do you use? (Select all that apply)			
Personal vehicle	84.3%	81.5%	84.9%
Carpool	14.1%	12.5%	26.4%
Ride-share	18.9%	17.4%	13.2%
Walking	20.0%	17.9%	20.8%
Bicycle	4.8%	7.6%	3.8%
Public transit	14.4%	23.4%	1.9%
Other	4.3%	2.7%	3.8%
Rail	5.1%	6.0%	0.0%
Motorcycle or scooter	2.1%	1.6%	0.0%
Summary statistics			
Respondents who selected >1 mode	38.7%	38.6%	39.6%
Average number of modes selected	1.68	1.71	1.55

Source: Surveys conducted at three case-study institutions (identified by pseudonyms) as part of the Community College Transportation Project (2024-2025).

TABLE 4. TRANSPORTATION AND ATTENDANCE AMONG TWO-YEAR SFWS RESPONDENTS, 2022-2024

	Fall 2022	Fall 2023	Fall 2024
Have you ever missed class due to lack of (Students who answered 'Always', 'Often', or		es are excluded from the analy	sis.)
All 2-year	12.6%	12.7%	15.2%
Capital District	-	15.0%	-
Metro Ridge	-	14.4%	13.8%
Suburban Valley	-	5.2%	10.8%

Source: Trellis Strategies, Student Financial Wellness Survey, Fall 2018–Fall 2024, two-year respondents only. Analysis of case-study institutions (identified by pseudonyms) conducted as part of the Community College Transportation Project.

### **Working students**

TABLE 5. TWO-YEAR STUDENT EMPLOYMENT IN NPSAS:20

	Had a job while enr	olled in 2019-20	Hours worked per week			
	No	Yes	Less than 20	20-39	40 or more	
Full-time	28.7%	71.3%	20.1%	49.6%	30.3%	
Part-time	22.3%	77.7%	13.1%	43.8%	43.1%	
Total	26.4%	73.6%	14.4%	44.1%	41.5%	

Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study: 2020 Undergraduate Students (NPSAS:UG). Computation by NCES PowerStats on 9/2/2025. Results are filtered by NPSAS institution level (2-year) [LEVEL] and disaggregated by fall attendance intensity [ATTEND]. The weight variable used in this analysis is WTA000. Employment [JOBANY2] is based on the number of jobs held for pay while enrolled, including work-study and fellowship, during the 2019-20 academic year [NUMJOB2]. The code to retrieve employment results is zjckiy. Hours per week [JOBHOUR3] is based on student survey question asked of each job held while enrolled, "How many hours per week have you usually worked [for this employer] while you have attended school?" (N20DWKHR01). For respondents who held more than one paid job, the job in which the student worked the most hours per week was used. The code to retrieve hours worked results is oxyzac.

TABLE 6. IMPACTS OF EMPLOYMENT AMONG TWO-YEAR EMPLOYED SFWS RESPONDENTS, 2024

Approximately how many days of classes did you miss last semester [Spring 2024] due to conflicts with your job?								ability to eng al events at m		
	None	One to two days	Three to five days	More than five days	N/A*	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Full-time	52%	13%	7%	4%	24%	23%	33%	22%	16%	6%
Part-time	56%	15%	7%	3%	19%	26%	33%	21%	14%	5%
Total	55%	14%	7%	3%	21%	25%	33%	22%	15%	6%

Source: Trellis Strategies, Student Financial Wellness Survey, Fall 2024, two-year respondents only. Questions were posed only to respondents who answered "Yes" to "Do you work for pay?".

### **Caregiving students**

### TABLE 7. CAREGIVING STATUS AMONG TWO-YEAR STUDENTS IN NPSAS:20

	NPSAS:20
No dependents	74.8%
Has only dependent children	21.2%
Has only dependent(s) over than children	1.5%
Has both dependent children and other dependent(s)	2.5%

Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study: 2020 Undergraduate Students (NPSAS:UG). Computation by NCES PowerStats on 9/2/2025. Results are filtered by NPSAS institution level (2-year) [LEVEL]. The weight variable used in this analysis is WTA000. Types of legal dependents [DEPTYPE] for the 2019-20 academic year is determined based on FAFSA data and NPSAS survey responses. The code to retrieve results is jdeubd.

<sup>\*</sup>Full response text: "Not applicable - I was not enrolled in Spring 2024 or did not have a job"

TABLE 8. FEDERAL LOAN BALANCES AMONG TWO-YEAR STUDENTS IN NPSAS:20, BY CAREGIVING STATUS

		Cumulative Federal Loan Balance Owed			
	No loans	≤ \$10,000	≤ \$10,000		
No dependents	72.6%	14.8%	12.6%		
Has dependents	55.7%	8.2%	28.0%		
Total	68.3%	15.2%	16.5%		

Source: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study: 2020 Undergraduate Students (NPSAS:UG). Computation by NCES PowerStats on 9/2/2025. Results are filtered by NPSAS institution level (2-year) [LEVEL] and disaggregated by whether the student has legal dependents [DEPANY]. The weight variable used in this analysis is WTA000. Cumulative federal loan balance owed [FEDDUE1] is based primarily on the total loan amount outstanding as reported in the National Student Loan Data System files and includes principal & interest. The code to retrieve results is twovy.

TABLE 9. CAREGIVING & WORK HOURS AMONG TWO-YEAR CAREGIVING SFWS RESPONDENTS, 2024

		Weekly Work						
		Non-workers	Less than 20 hours	20-39 hours	40 or more hours			
y ing	Less than 20 hours	6.7%	1.9%	4.0%	12.4%			
Weekly Caregiving	20-39 hours	4.6%	0.8%	3.3%	8.5%			
Car	40 or more hours	17.1%	3.0%	11.1%	26.5%			

Source: Trellis Strategies, Student Financial Wellness Survey, Fall 2024, two-year respondents only. Results are shown for respondents who were identified as caregivers. Caregivers are respondents who answered 'Yes' to either "Are you a parent, primary caregiver, or legal guardian to any children?" or "Are you a caregiver or legal guardian to any other dependents?". Caregiving commitment based on survey question "About how many hours do you spend in a typical 7-day week providing care for dependents (children, parents, etc.)?". Work commitment based on survey question "During the school year, about how many hours do you spend in a typical 7-day week working for pay?" (posed only to students who indicated they work for pay). Portion of caregivers who spent at least 40 hours per week on employment and/or dependent care combined is calculated as the sum of highlighted cells.

TABLE 10. EMPLOYMENT AND WORKER VS. STUDENT IDENTITY AMONG TWO-YEAR SFWS RESPONDENTS, 2024

	Do you work for pay?			Do you consider yourself a student who works or a worker that goes to school?*	
	Yes	No	I Don't Know	Student	Worker
Caregivers	71%	26%	3%	37%	63%
Non-caregivers	66%	30%	4%	72%	28%
Total	67%	29%	4%	64%	36%

Source: Trellis Strategies, Student Financial Wellness Survey, Fall 2024, two-year respondents only. Caregivers are identified as students who answered 'Yes' to either "Are you a parent, primary caregiver, or legal guardian to any children?" or "Are you a caregiver or legal guardian to any other dependents?".

\*Question posed only to respondents who said they work for pay.

Evolving for the modern learner.



www.trellisstrategies.org © 2025 Trellis Strategies