

**STUDENT SUCCESS TOOLKIT**

# Transportation Toolkit for Community College Leaders: Taskforce Resources

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## 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: [www.trellisstrategies.org/about-us/](http://www.trellisstrategies.org/about-us/)

## 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/](http://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

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# Discussion Guides



# Phase 1: Assess existing transportation resources

## What modes of transportation are accessible to campus?

Select all that apply.

- |  |   |
|--|---|
| <input type="checkbox"/> Public transit routes   | <input type="checkbox"/> On-campus parking        |
| <input type="checkbox"/> Private shuttles  | <input type="checkbox"/> Off-campus parking       |
| <input type="checkbox"/> Pedestrian infrastructure<br>(e.g., sidewalks, traffic calming) | <input type="checkbox"/> Carpooling opportunities |
| <input type="checkbox"/> Cycling infrastructure<br>(e.g., bike lanes, bike storage)      | <input type="checkbox"/> Rideshare services       |
|  | <input type="checkbox"/> Other: _____             |

**Further Reflection:** Consider the affordability, length & complexity of commute, physical accessibility, and personal safety level of each mode of transport. What data do you currently have, and what data might you want to collect to get a full picture of student transportation to campus?

## What transportation resources or programs does the institution currently offer?

Select all that apply.

- | Financial supports/subsidies for...      | Programmatic offerings, such as...                         |
|--|--|
| <input type="checkbox"/> Public transit  | <input type="checkbox"/> Transportation safety initiatives |
| <input type="checkbox"/> Rideshare       | <input type="checkbox"/> Inter-campus transportation       |
| <input type="checkbox"/> Vehicle repairs | <input type="checkbox"/> Educational programs              |
| <input type="checkbox"/> Gas             | <input type="checkbox"/> Prospective student outreach      |
| <input type="checkbox"/> Other: _____    | <input type="checkbox"/> Other: _____                      |

**Further Reflection:** Note the specific resources offered, which students are eligible, and how the institution communicates with students about these resources. What evidence do you have about the effectiveness of these prior initiatives, and where would you like more information?

## What steps are likely to be important in your planning process?

For each point, note any areas of opportunity and/or limiting factors, and identify the key parties for future discussion. Keep these steps in mind as you progress with gathering data and developing solutions.

- ☐ Funding discussions
- ☐ Engaging with key stakeholders
- ☐ Scheduling regular communication between teams
- ☐ Recruiting and training staff
- ☐ Other: \_\_\_\_\_



## Phase 2: Investigate the transportation needs of your student body

### Where do students live?

*Consider grouping by neighborhood, zip code, or transit sector.*

Are there areas with large clusters of students, or are they all spread out?

How does the geographic spread of current students with the regional college-ready population?

### How do students get to campus?

*Reflect on what resources are used for each type of commute.*

Where else do students need to go? (e.g., other campuses, workplaces, child care centers)

What student groups who might have specific transportation needs are prevalent on your campuses?  
(e.g., parenting students, full-time students, dual-enrollment students)

### How well are the current transportation resources serving students' needs?

*Consider affordability, length & complexity of commute, physical accessibility, and personal safety.*

Do students have access to back-up modes of transportation?

☐ Yes ☐ No

Are students aware of the existing resources available to them?

☐ Yes ☐ No

### What transportation challenges do students report?



#### Where to Start: Sources of Information

1. Analyze geographic and route data from student records, shuttle logs, parking meters, etc.
2. Survey and/or interview students on their habits and attitudes.
3. Collaborate with local transportation organizations, such as public transit agencies or access-oriented community organizations, to pool data.



## Phase 3: Establish a plan for expanding transportation access

**Based on previous assessments, what gaps exist in the current transportation resources?**

*Define 2-3 priority areas.*

**Based on your resources, what solutions could address these gaps?**

### Administrative support

- ☐ Align class times with shuttle/transit schedules
- ☐ Incorporate transportation planning into academic advising
- ☐ Help students apply Title IV funds to transportation costs
- ☐ Other ideas:

### Programmatic interventions

- ☐ Provide resources to coordinate carpooling
- ☐ Offer low-cost vehicle repair through a workforce program
- ☐ Provide emergency financial resources such as gas cards
- ☐ Other ideas:

### Infrastructure improvements

- ☐ Invest in bike lanes, sidewalks, and/or pedestrian throughways
- ☐ Expand parking availability
- ☐ Upgrade campus safety features
- ☐ Other ideas:

### Partnerships with local transportation organizations

- ☐ Educate students about existing regional transit resources
- ☐ Align transportation-related credentials with regional workforce needs
- ☐ Provide discounted public transit services for campus community
- ☐ Expand public transit routes that service campus and/or student residential areas
- ☐ Other ideas:

### Longer-term investments

- ☐ Become an active partner in regional transportation initiatives and policy advocacy
- ☐ Establish a satellite campus in an area with high college readiness but low transportation connectivity
- ☐ Other ideas:



### Where to Start: Build a Plan of Action

1. Define key priority areas based on institutional assessment.
2. Identify three gaps in transportation accessibility—small, medium, and large—and brainstorm solutions.
3. Reach out to institutional and regional stakeholders to collaborate.



# Planning template for transportation initiatives

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**Motivation**

*(Problem area to be addressed)*

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**Initiative/Intervention**

*(Brief description)*

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**Project Lead(s)**

*(Optional: Which other internal or external stakeholders will be involved?)*

---

**Anticipated Results**

*(What metrics will measure success?)*

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**Required Resources**

*(Personnel, equipment, etc.)*

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**Time Frame**

*(Initial estimates of planning, implementation, and evaluation phases)*

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**Key Planning Steps (from Phase 1)**

*(Funding discussions, scheduling team communication, etc.)*

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**Once the initiative is implemented, what's the next step?**

*(Optional: What are the ongoing resource costs for this initiative?)*

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The background of the slide features two broad, parallel diagonal stripes in shades of green. One stripe is a medium sage green, and the other, positioned below it, is a darker forest green. Both stripes run from the top-left corner towards the bottom-right corner.

# Gathering & Visualizing Transportation Data



# Example A: Analyzing hourly service demand

Analyzing when and for how long students use on-demand services, shuttles, buses, parking, and emergency transportation resources can enable institutions to provide more efficient and effective services, ultimately helping students get where they need to be, when they need to be there. Campuses with existing programs can analyze usage data to better understand student transportation patterns.

In the hypothetical example below, riders of this campus shuttle system most frequently use the shuttle in the morning hours. Additionally, ridership on the shuttle is highest during the middle of the week. Utilizing this data, along with enrollment data, institutional leaders can better allocate resources with respect to transportation. For instance:

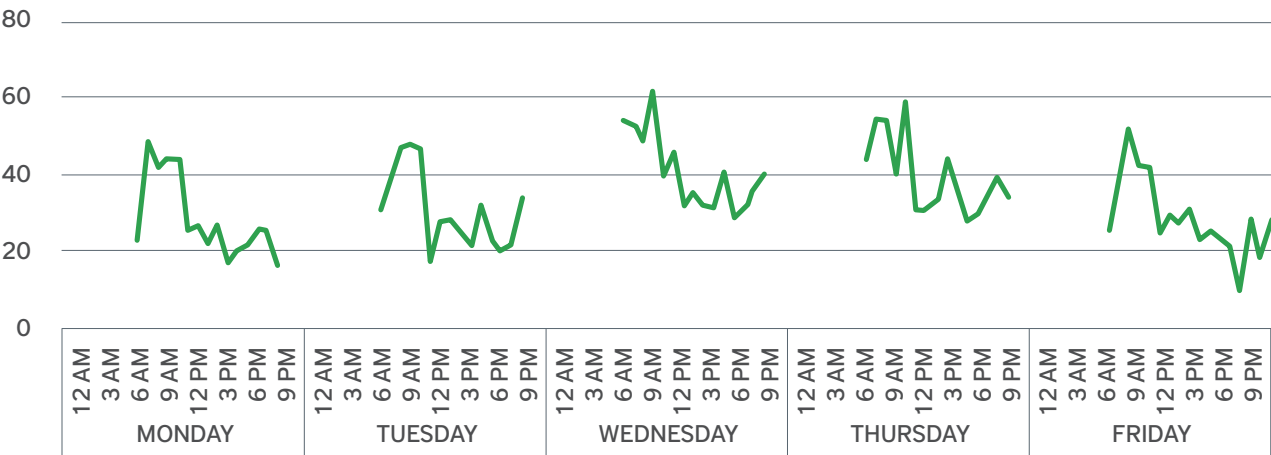
- Late-night spikes near the end of regular shuttle service hours on Tuesdays and Wednesdays may suggest that there is **demand for extended service hours** on these days. For students who may rely on shuttle service, the end of service at 9PM may force them to leave campus earlier than they would like to in order to make it home.
- High ridership numbers in the morning may require **more frequent service** during these times. For students taking morning classes, more frequent service can support greater flexibility in their schedule, allowing them to more easily attend to their other non-school obligations such as child care.

While the appropriate responses to these data are campus specific, ridership data can be viewed in combination with enrollment information and survey responses to help contextualize on-campus transportation issues.

## Incorporate data-gathering into transportation service design

Quantitative data can be time-consuming to collect and analyze. However, detailed information about student transportation patterns can enable campus leaders to more effectively address access issues. Taking proactive steps to gather data about campus resources—for example, using student ID swipes to track use of campus shuttles—can support future evaluation and planning.

Example of quantitative transportation data:  
Average hourly shuttle ridership in # of individual riders



\* Sample data represents a hypothetical campus shuttle scenario based on observations from prior Trellis Strategies research projects.



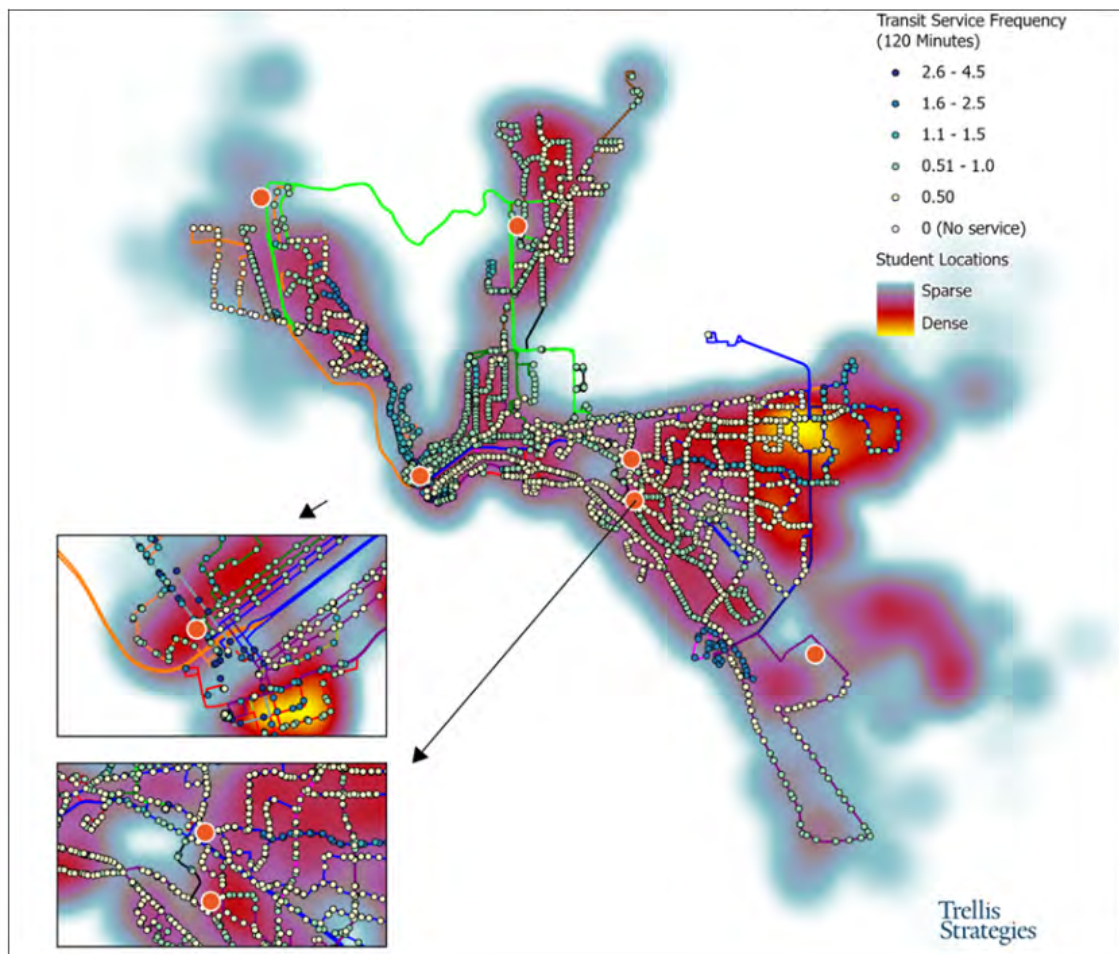
## Example B: Visualizing public transit access

The map below uses Geographic Information System (GIS) software, public transit data, and student geographic data to visualize public transit access for potential students at a community college. Orange dots represent campus locations. Colored lines mark bus routes, with bus stops coded as dots whose colors to show how often a bus stops at that location within a 2-hour timeframe. Darker dots denote more frequent service at those stops. Finally, the heat map overlay is shaded such that areas with high numbers of applicants are shown in yellow and areas with few applicants are shown in blue. Visually, we can see that the **areas with high numbers of applicants are served by bus stops, but the frequency of this service lags behind that of some other areas.** This type of analysis also can discern how many students in designated areas can commute to campus using public transportation.

### Quantitative analysis can illuminate areas for improvement

Combining data from multiple sources can help paint a more complete picture of transportation access. By working with local transit organizations, institutions can pair student data with broader transportation metrics. GIS applications can be a powerful tool for visualizing complex data, enabling campus leaders to more effectively understand and address transit challenges.

Example of quantitative transportation data:  
Transit service frequency relative to potential student population density



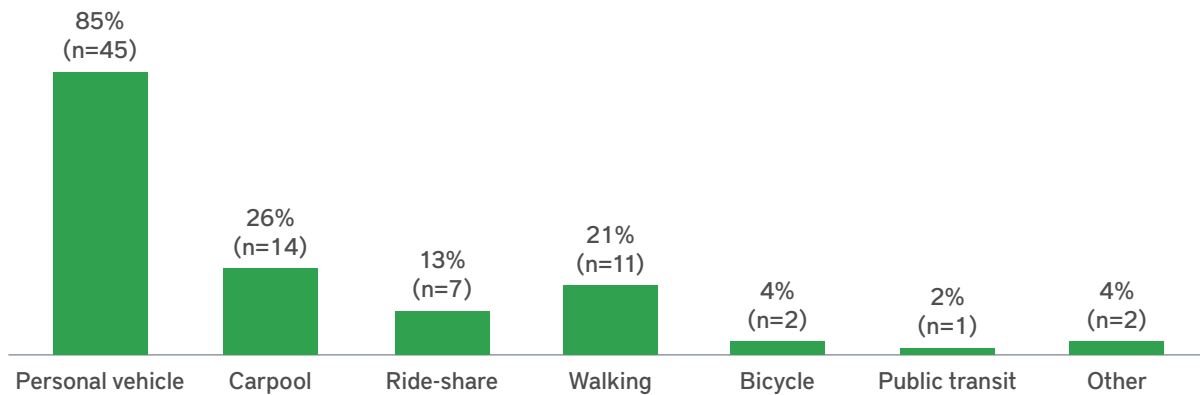
\* Sample data visualization from a Trellis Strategies research partner, a large, urban community college in the South.



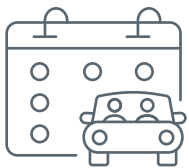
## Example C: Student surveys and focus groups

In a survey of 53 students at Rural Hills Community College, most students reported using a personal vehicle to access campus. However, about half of the respondents (49 percent) reported using more than one mode of transportation, with students supplementing their personal vehicle with carpooling, ride-shares, and walking.

Example of survey transportation data:  
Modes of transport used by Rural Hills students



Focus groups with Rural Hills students provided further insight into how learners piece together transportation from multiple resources and how their transportation needs vary based on their class schedule and non-school commitments. This qualitative research provided the institution with a more nuanced picture of student transportation patterns and insights into access barriers.



"[MY TRANSPORTATION] DEPENDS ON MY WORK SCHEDULE AND MY CLASS SCHEDULE... IT REALLY DEPENDS ON THE NIGHT THAT I HAVE AT WORK. SOME MORNINGS WHEN I COME HOME, IF I'M REALLY SLEEPY, I JUST HAVE MY BOYFRIEND DRIVE IN. HE'LL WAIT FOR ME AND DRIVE ME BACK HOME, AND I JUST GO TO SLEEP WHEN I GET HOME... IF I DON'T HAVE TO WORK AT ALL, I ACTUALLY COMMUTE WITH SOMEONE ELSE. I'M FRIENDS WITH ONE OF THE FACULTY MEMBERS, SO I RIDE TO SCHOOL IN THE MORNING WITH THEM [AND] I JUST STAY THERE AND WORK ON HOMEWORK IN THE LIBRARY AND STUFF, AND WHEN THEY GET READY TO LEAVE, I LEAVE WITH THEM."



"I USUALLY RIDE WITH SOMEONE MONDAY THROUGH THURSDAY, AND I HAVE MY CLASSES AT 8:00 AM TO 3:00 PM. SO SOMETIMES I HAVE TO FIND ANOTHER RIDE. AND NOW IT'S TO THE POINT WHERE I'M GOING TO HAVE TO USE THE SCHOOL TRANSPORTATION SERVICES. FOR [THE MAIN CAMPUS], THEY HAVE TWO PICK UP TIMES, WHICH IS 12:45 PM AND 5:25 PM. BUT THOSE TIMES DON'T REALLY WORK FOR ME BECAUSE MY CLASS IS IN AT 3:00 PM, SO I'M JUST STILL SITTING AT THE SCHOOL UNTIL 5:25 PM. ABOUT THE TIME I MAKE IT HOME, IT'S ABOUT 7:00 PM."

"[I'M USING] MY GRANDMOTHER'S CAR... I LIVE [WITH] MY MOM, BUT STARTING THIS MONTH, I WILL BE LIVING WITH MY GRANDMOTHER BECAUSE SHE HAS WAY MORE SPACE... I'M BASICALLY HER CAREGIVER. AND SHE LETS ME USE THE VEHICLE TO GET BACK AND FORTH TO WORK AND BUY HER GROCERIES AND PAY HER BILLS."



\* Example data drawn from focus groups and a survey conducted by Trellis Strategies as part of the Community College Transportation Project (2024-2025). Quotes have been edited for brevity. Rural Hills Community College [pseudonym] is a small two-year institution serving a rural region in the South.

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modern learner.

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