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Executive Summary

The 2024 Articulation and Transfer Report provides an update on the progress made toward full articulation between public institutions in Tennessee. This report uses data from National Student Clearinghouse Student Tracker (NSC), the Tennessee Higher Education Commission's Student Information System (THECSIS), and the Tennessee Board of Regents (TBR) to analyze transfer patterns and demographics of the fall 2017 first-time freshmen cohort.¹

For the purposes of this report, **transfer students** are defined as **any student who attended more than one institution during the six years following first enrollment**, which covers fall 2017 through summer 2023 for the fall 2017 cohort. Highlights of the report's findings include:

- In the fall 2017 cohort, **31.9% of students attended more than one institution in six years** (**Figure 1**). A vertical transfer from a two-year institution to a four-year institution, categorized here as a "24" transfer, remains the most common transfer pattern for those students who do transfer in the fall 2017 cohort, representing over 46% of all transfers (**Figure 8**).
- Transfer students have higher six-year graduation rates (63.0%) than non-transfer students (44.5%) in the cohort. This gap is driven by many students who begin enrollment at a two-year institution, do not transfer, and do not graduate (**Figure 7**).
- Students who complete a "24" transfer are more likely than all other transfer patterns in the fall 2017 cohort to earn any type of award within six years. These students also earn a wide variety of awards. Of students in this transfer pattern, 73.8% graduated in six years, including 37.2% of students who earned both an associate and a bachelor's degree (Figure 13). For more on "24" transfer success, see page 21.
- The Complete College Tennessee Act (2010) created Tennessee Transfer Pathways (TTPs) to facilitate seamless transfer between Tennessee's community colleges and universities. See Appendix E for a complete list of TTPs. Of the students in the fall 2017 cohort who ever enrolled in a TTP, 48.4% transferred (Figure 15).
- Of the 8,372 cohort students who enrolled in a TTP, **21.6% obtained an associate degree in a TTP major (Appendix F)**. Overall, 41.1% of TTP participants earned any award in the six years following initial enrollment (**Figure 21**).

Tennessee's students take many paths to and through higher education. For those encountering higher education for the first time with aspirations to earn a bachelor's degree, efforts like Tennessee Promise and Tennessee Transfer Pathways encourage these students to start their education at a community college, then transfer to a university. The data show that this pattern is most common – for students who successfully transfer – and most successful of all transfer patterns. However, many students begin their enrollment at a community college and do not progress to a university. To improve these transfer rates and help all students reach their goals, THEC/TSAC should:

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¹ For more information about specific features of the data and limitations, see pages 10-11.

- Continue to provide opportunities for colleagues to collaborate at events such as annual transfer convenings, regional meetings, and webinars. These opportunities will include discussions of ways to remove barriers to transfer, including using the Articulation & Transfer Council and Subcouncils to ensure success for the transfer provisions in statute.
- Continue to define best practices for transfer to maximize credit articulation and support degree completion.
- Support innovative approaches to articulating credit from technical colleges and from prior learning credits and assessments.
- Research the financial aid needs of transfer students, specifically those transferring from community colleges to universities, who have accessed higher education through the support of Tennessee Promise.

Legislative Overview

The annual Articulation and Transfer Report is prepared pursuant to Tennessee Code Annotated § 49-7-202 (r)(5), which directs the Tennessee Higher Education Commission (THEC) to: "...report... on the progress made toward full articulation between all public institutions." See **Appendix A** for full text of T.C.A. § 49-7-202 (r)(1-5).

The 2024 Articulation and Transfer Report presents an update on the implementation of the articulation and transfer mandate through three primary sections:

- 1) The first section provides information on the composition and charge of the Articulation and Transfer Council, as well as an update on the current activities of the Council.
- 2) The second section examines the demographics, transfer behavior, and degree outcomes for the fall 2017 first-time freshmen cohort who enrolled at Tennessee public community colleges or universities. This section follows these students in the six years after their initial enrollment to provide a full, longitudinal view of their transfer behavior and resulting degree outcomes.
- 3) The third section examines the demographics, transfer behavior, and degree outcomes of those students in the fall 2017 cohort who ever enrolled in a Tennessee Transfer Pathway (TTP) associate degree program. TTPs are designed to facilitate a seamless transfer between Tennessee's public community colleges and four-year colleges and universities. For more information about TTPs, see page 24.

Section One: Articulation and Transfer Initiatives and Council

Articulation and Transfer Initiatives

With a continued focus on invigorating cross-sector collaboration on issues facing transfer students, the Tennessee Higher Education Commission (THEC) hosted over 200 colleagues during articulation and transfer meetings held in each grand division across the state in spring 2024. Each meeting included a regional presentation, information related to strengthening pathways, and group discussions. The regional presentations highlighted innovative partnerships between Tennessee Colleges of Applied Technology (TCATs) and four-year institutions. These partnerships allow credit articulation from a technical college and provide students the opportunity to stack credentials. As part of these meetings, THEC staff presented on Tennessee Transfer Pathways (TTP), with a focus on reducing footnotes and exceptions, understanding course substitutions, and minimizing the number of students graduating with University Parallel degrees that are not considered a TTP degree. These meetings allowed colleagues to share, learn, and network as work continues to improve the transfer student experience.

Articulation and Transfer Council

The Articulation and Transfer (A&T) Council is necessary to fulfill the requirements in Tennessee Code Annotated § 49-7-202 (r)(1-5), including collaboration on the development and maintenance of Tennessee Transfer Pathways and of common course numbering. In 2020, the A&T Council was restructured by THEC to focus on a five-year period (2020-2025) with an emphasis on aligning the work of the Council with the various requirements of T.C.A. § 49-7-202 (r)(1-5). See **Appendix A** for the full text of this section.

Current composition of the A&T Council consists of members from the Tennessee Higher Education Commission, Tennessee Board of Regents, University of Tennessee System Office and University of Tennessee campuses, Tennessee Independent Colleges and Universities Association, and Locally Governed Institutions. See **Appendix B** for complete membership. The council met twice in spring 2024, where they approved six new pathways and a new sub-council. New TTPs approved and effective Fall 2025 are: Fermentation Science, Middle School – English, Middle School – History, Middle School – Science, Middle School – Social Studies, and Urban Studies. The council also began updating sub-council membership designed to support articulation and transfer initiatives in statute. The council's charter will be updated in future meetings.

The work to improve the Tennessee Transfer Pathway program continues as we look for ways to eliminate barriers for students. In the past, TTP curriculum files included footnotes that delineated exceptions for certain institutions. These exceptions can make it difficult for students to have a seamless transfer experience. During the February 2024 review of the Arts and Humanities pathways, 31 footnotes were identified and eliminated with the work of faculty and staff across the state. This work will continue in the subsequent review cycles.

The four primary focus areas for the 2020–2025 council are:

- Streamlining Tennessee Transfer Pathways (TTPs) to minimize exceptions;
- Expanding data collection and dissemination on TTP utilization, completion, and transferability for the annual THEC Articulation and Transfer Report;
- Implementing common course numbering; and
- Incorporating Reverse Transfer.

The 2020-2025 Articulation and Transfer Council has developed five sub-councils to support this work: (1) Tennessee Transfer Pathways; (2) Technical Tennessee Transfer Pathways; (3) Common Course Numbering; and (4) Reverse Transfer; the newest sub-council in development is (5) Dual Admissions. Sub-council membership is made up of subject matter experts from a variety of roles from the entities represented on the Council. A brief overview of each existing sub-council and their work is presented below.

Tennessee Transfer Pathways Sub-council

This sub-council is charged with reviewing, updating, and developing transfer policies, principles, and systemwide expectations to ensure legislative compliance. The sub-council will use multiple taskforce groups to develop a continuous improvement plan, ensuring the credits students earn through a Tennessee Transfer Pathway program will apply to degree pathways at Tennessee's public universities and participating private universities. The next curriculum review for 2024-25 will be Health Sciences. Future curriculum reviews will take place on a three-year review cycle, rather than the five-year cycle used previously.

- *Membership:* Campus representatives in various roles including, but not limited to, admissions, records, advising, faculty, transfer centers, adult services, and veteran services.
- *Outcomes:* Present the annual TTP curriculum reviews to the A&T Council, provide updates to the A&T Council, review pathway categories and possible expansions.

Technical Tennessee Transfer Pathways Sub-council

This sub-council is working to create a systematic approach to the development, tracking, and stacking of technical pathways similar in structure to the existing Tennessee Transfer Pathways. This work focuses on the transferability of Tennessee College of Applied Technology diplomas and certificates and Associate of Applied Science (AAS) degrees to both community colleges and universities. The sub-council is charged with researching other existing or proposed articulation agreements within technical education across the state.

- Membership: Campus representatives from the Tennessee Colleges of Applied Technology, community colleges, and universities in various roles including presidents, student services, workforce development, and records.
- Outcome: Create a process for implementation and maintenance of statewide technical pathways.

Common Course Numbering Sub-council

This sub-council will facilitate the ease of transfer for community college students from one community college to another and from community colleges to universities, improve program planning, and increase communication among all colleges. Per T.C.A. § 49-7-202 (r)(3), courses with common content will carry the same prefix, number, title, credits, description, and competencies. The sub-council will identify other state systems that have developed common course numbering and will connect to share best practices.

• *Membership:* Campus representatives from various roles including, but not limited to, faculty, advising, records, and information technology.

• *Outcome:* Create a process and database for a uniform set of course designations for students to use in determining course equivalency and to facilitate transfer.

Reverse Transfer Sub-council

This sub-council will advance the effectiveness of the Tennessee Reverse Transfer Program. The sub-council will have oversight of the Reverse Transfer process and will review the policies and their impact annually. To date, over 6,700 associate degrees have been awarded through Tennessee's Reverse Transfer program.

- *Membership:* Representation from diverse campus roles including, but not limited to, records, information technology, admissions, advising, and academic affairs.
- Outcomes: Provide expertise and guidance in an advisory capacity to improve Reverse Transfer
 processes in Tennessee, establish Reverse Transfer best practices to facilitate effective
 collaboration among state partners and to aid in degree completion, provide recommendations
 for Reverse Transfer Policy, and provide updates to the A&T Council.

Section Two: Transfer Behavior of the Fall 2017 Cohort

Transfer Behavior of the Fall 2017 Cohort

This year's report continues the work of previous reports by tracking the transfer behavior of a cohort of students across six years. The report examines transfer behavior and degree outcomes for the cohort of first-time freshmen who enrolled at a Tennessee public university or community college in fall of 2017.² By using a cohort view and data from the National Student Clearinghouse Student Tracker (NSC), we can track students at most public and private, two-year and four-year, in-state and out-of-state institutions across the United States to see their transfers and degree attainment.³ The resulting dataset is a robust picture of the transfer behavior and degree outcomes of the students who began in Tennessee public community colleges and universities in fall 2017.

Our dataset consists of **38,154** Tennessee students in the fall 2017 cohort who are captured in NSC enrollment and graduation records. Of these students, **12,159** (**31.9 percent**) attended more than one institution in six years; throughout this section, these students are identified as "transfer students," while the remaining **25,995** are identified as "non-transfer students."

When tracking students across institutions, we captured every instance of a student's enrollment at an institution as well as a count of the unique institutions a student attended. This allows us to examine the enrollment patterns of students who enroll at one institution, transfer to another, and subsequently return to the first institution. In instances where students were simultaneously enrolled at multiple institutions, we used previous enrollments, enrollment intensity (i.e., part-time, full-time, etc.), and length of enrollment at both institutions to determine whether a student changed institutions. For example, a student who first enrolls at University of Tennessee, Knoxville, subsequently enrolls at Pellissippi State Community College, and then returns to take courses at UT Knoxville would be shown in the data as enrolled at UTK (a four-year institution), PSCC (two-year), then UTK (four-year), translating to a "424" transfer pattern. However, a student taking a full-time course load at University of Tennessee, Knoxville and a part-time course load at Pellissippi State Community College in the same term would be shown as enrolled at UTK with a concurrent enrollment and as a non-transfer student. Thus, "concurrent enrollment" represents a student who is enrolled at more than one institution for overlapping dates in the same term. Concurrently enrolled students may or may not be transfer students. For more on transfer patterns and concurrent enrollment, see pages 18-19.

Data Sources

All data in this report are provided by the Tennessee Higher Education Commission and Student Assistance Corporation (THEC/TSAC), the National Student Clearinghouse Student Tracker (NSC), and the Tennessee Board of Regents (TBR). The data used in each section are as follows:

Transfer Behavior of the Fall 2017 Cohort: This section examines enrollment and degree outcomes of the fall 2017 first-time freshmen cohort. In addition to the NSC data, demographic and academic details are sourced from THEC Student Information System (THECSIS), and financial aid information is available

² The fall 2017 cohort includes first-time freshmen (FTF) who initially enrolled in fall 2017 or who initially enrolled in summer 2017 and returned in fall 2017 across Tennessee public community colleges and universities. The completion data provide degree outcomes through summer 2023 (within six years of initial enrollment). This represents all FTF identified by THECSIS and found in National Student Clearinghouse Student Tracker records.

³ In the enrollment years included in this section of the report (2017-2023), between 96.1% and 97.4% of all Title IV, degree-granting institutions reported enrollment and graduation data to the National Student Clearinghouse Student Tracker. Additional information about National Student Clearinghouse data is available on their website at https://www.nscresearchcenter.org/.

through the Financial Aid System of Tennessee (FAST), managed by TSAC. Financial aid information is missing for students who did not file a Free Application for Federal Student Aid (FAFSA) or for whom we do not have a FAFSA record (e.g., non-residents) in the six years of enrollment. Missing FAFSA information impacts 8.9% of records; subsequent figures and notes clarify how missing data are handled. Using NSC data provides a broad picture of a student's enrollment history, including at institutions outside of Tennessee. However, the Tennessee Colleges of Applied Technology (TCATs)⁴ are not a part of the NSC data.

Tennessee Transfer Pathways (TTP): This section examines enrollment and degree outcomes of a subset of the fall 2017 cohort who ever enrolled in a TTP at one of Tennessee's public community colleges. This section matches the NSC and THECSIS data with additional data on TTP enrollment and completions from TBR. This section also includes financial aid information from TSAC's FAST database.

Privacy Notice

Throughout this report, THEC complies with the federal Family Educational Rights and Privacy Act (FERPA) requirements to protect students' personally identifiable information. Therefore, when tables are presented, individual observations containing fewer than ten observations are suppressed. The suppressed counts are included in table totals.

Transfer and Non-Transfer Students in the Fall 2017 Cohort

This section summarizes differences between transfer and non-transfer students in gender, race/ethnicity, economic status, and first-generation status. **Table 1** provides demographic data for the overall fall 2017 cohort. Notably, the fall 2017 cohort increased, by almost 800 students, compared to the fall 2016 cohort. The fall 2015 cohort represented the statewide implementation of Tennessee Promise and saw a spike in enrollments, particularly at community colleges. Fall 2016 represents a cohort that began to level out following that spike. The fall 2017 cohort had slightly more students participate in the Tennessee Promise program relative to the fall 2016 cohort, but due to the increase in the overall cohort size, a slightly smaller proportion of students participated in the Tennessee Promise program – 35.9% of the fall 2017 cohort compared to 36.3% of the fall 2016 cohort.

The fall 2017 cohort is relatively similar to the fall 2016 cohort in terms of demographics. Students in the fall 2017 cohort are less likely to be White compared to the fall 2016 cohort. In particular, Black, not Hispanic and Hispanic students, as well as students whose race/ethnicity is unknown, grew their shares in the fall 2017 cohort. Students in the fall 2017 cohort were slightly more likely than students in the fall 2016 cohort to be Pell eligible.

⁴ TCAT Chattanooga is considered an academic division within Chattanooga State Community College. As a result, several diplomas conferred by TCAT Chattanooga are captured as awards in this analysis.

Table 1: Demographics of Fall 2017 Cohort

	Count	Percent
Gender		
Female	21,303	55.8%
Male	16,850	44.2%
Race/Ethnicity		
Black, not Hispanic	7,529	19.7%
Hispanic	1,997	5.2%
Other	2,135	5.6%
Unknown	1,196	3.1%
White, not Hispanic	25,297	66.3%
Pell Eligible	22,945	60.1%
First-Generation	14,538	38.1%
Fall 2017 Promise Participant	13,679	35.9%
Overall	38,154	100%

Notes: The "Other" race/ethnicity category includes Alaskan Native, American Indian, Asian or Pacific Islander, and Multiracial. Pell eligibility describes any student who was eligible for the Pell grant at any point during the six-year period following initial enrollment. First-generation status is self-reported on the FAFSA by parent education level and describes any student who was categorized as first-generation at any point in the six-year period. Students who did not file a FAFSA or for whom we do not have a FAFSA record (e.g., non-residents) are categorized as not eligible for the Pell grant and not first-generation in this report.

Figure 1 displays the overall percent of students in the 2017 cohort who transferred at any point in the six-year period following their initial enrollment. In the 2017 cohort, 68.1% of students attended only one institution during this time and are "Non-Transfer". Transfer students in the cohort attended as few as two unique institutions and as many as six.

Figure 1: Overall Transfer Status of Fall 2017 Cohort

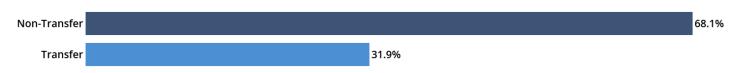


Figure 2 displays the proportion of transfer students by gender. Women comprised a majority of the fall 2017 first-time freshmen cohort (55.8%). Women were also more likely to transfer than men.

Figure 2: Overall Transfer Status of the Fall 2017 Cohort by Gender

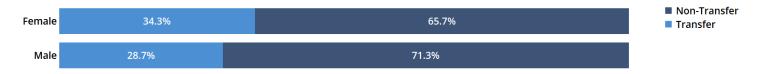


Figure 3 disaggregates transfer behavior by race/ethnicity. The chart shows the percent of each racial or ethnic subgroup that transferred at any point in the six-year period following their initial enrollment. Black, not Hispanic and Hispanic students and students who fall into the "Other" race/ethnicity category were slightly less likely to transfer than students in other groups.

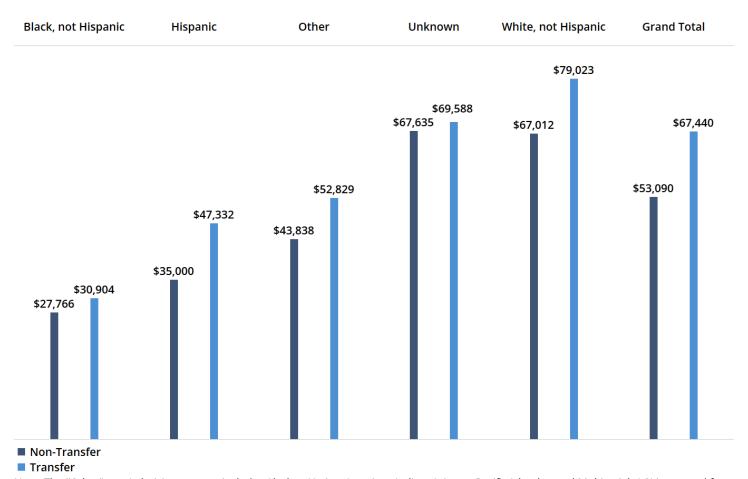
Figure 3: Overall Transfer Rates of the Fall 2017 Cohort by Race/Ethnicity



Note: The "Other" race/ethnicity category includes Alaskan Native, American Indian, Asian or Pacific Islander, and Multiracial.

Figure 4 shows the median adjusted gross income (AGI) for the 2017-18 academic year, the first year of enrollment for the cohort, disaggregated by race/ethnicity and transfer status. Transfer students come from higher income backgrounds than their non-transfer peers, on average. Across all racial/ethnic groups, the median AGI for 2017-18 is \$67,440 for transfer students and \$53,090 for non-transfer students. Income gaps are widest for Hispanic students, and the income gap between transfer and non-transfer students is only about \$3,138 for Black, not Hispanic students.

Figure 4: Median 2017-18 AGI of the Fall 2017 Cohort, by Race/Ethnicity and Transfer Status



Note: The "Other" race/ethnicity category includes Alaskan Native, American Indian, Asian or Pacific Islander, and Multiracial. AGI is sourced from the FAFSA, so students who did not file a FAFSA or for whom we do not have a FAFSA record (e.g., non-residents) are not included in this figure.

Figure 5 displays the breakdown of the unique number of institutions attended for the 2017 cohort within six years of initial enrollment. Most students, 68.1%, attended only one institution during the six years immediately following enrollment (i.e., did not transfer). Students who transferred usually attended only two (81.7% of transfer students) or three (15.9% of transfer students) unique institutions during this period. A small number of students attended four or more unique institutions.

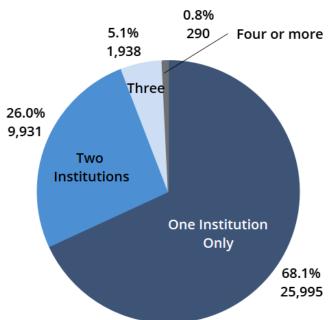
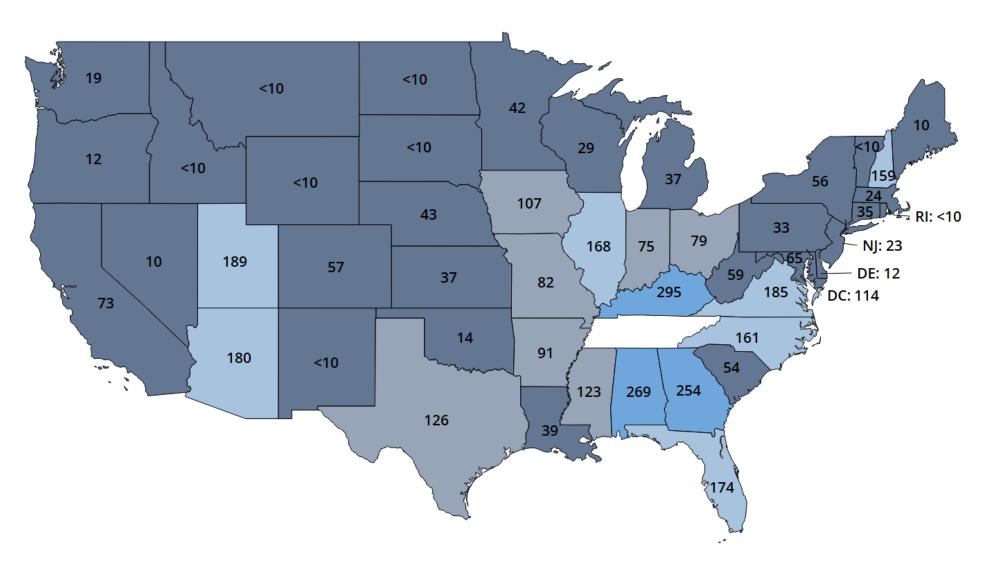


Figure 5: Number of Unique Institutions Attended, Fall 2017 Cohort

Figure 6 (next page) shows the outmigration of fall 2017 cohort students by the first state these students transferred to. This map includes all students who began at a Tennessee institution in fall 2017 and ever transferred to an out-of-state institution. Overall, 9.6% of all students in the cohort who began at a Tennessee institution transferred to an out of state institution at some point during the six years following initial enrollment (representing 30.2% of all transfer students). Out-of-state transfer was slightly higher in the fall 2017 cohort (9.6%) than in the fall 2016 cohort (9.5%). These data also show students who enrolled in online programs headquartered elsewhere (e.g. Southern New Hampshire University in New Hampshire or University of Phoenix in Arizona). In these cases, it is likely that the student did not move to the state where the primarily or exclusively online institution is headquartered.

Figure 6: Tennessee Transfers to Out-of-State Institutions, Fall 2017 Cohort



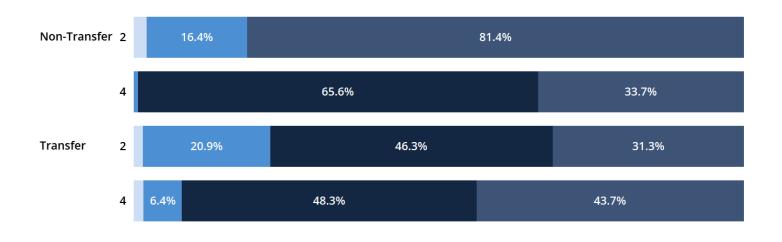
Note: Colors in the map represent four quartiles of the range of values, with dark navy blue as the lowest quartile values and bright blue as the highest quartile values.

Individual cells containing fewer than ten observations are suppressed, in accordance with FERPA requirements; missing values do not indicate zero students. Alaska, Hawaii, and Puerto Rico are not shown, though each did receive students. These counts are not shown in accordance with FERPA requirements.

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Overall, 63.0% of transfer students earned a credential within six years of initial enrollment, while only 44.5% of non-transfer students earned a credential in the same time frame. This disparity is largely driven by the low attainment rates (18.6%) of non-transfer students in the two-year sector, including students who drop out after the first semester or first year. **Figure 7** shows the highest degree earned for students from the fall 2017 cohort, disaggregated by transfer status and sector (two-year or four-year) of initial enrollment.

Figure 7: Highest Degree Earned by Transfer and Non-Transfer Students and Initial Enrollment Sector, Fall 2017 Cohort



No award

■ Bachelor's

Associate

Certificate/Diploma

Note: Diplomas are a small portion of awards; in the fall 2017 cohort, 0.2% (n=91) of students obtained a diploma within six years of initial enrollment. Diplomas are presented here with certificates. A very small number of students (n=37) obtained both a diploma and a certificate; these students are counted only once in the "certificate/diploma" category. Additionally, NSC data shows students who have obtained an award with no additional details. Where possible, these students were matched with THECSIS data to fill in award information. The remaining students whose award details were unknown (n=121) were considered as "no award" in this figure and graduation rate calculations.

Transfer Patterns of the Fall 2017 Cohort

To further examine transfer behavior of the students in the fall 2017 cohort, this section provides data disaggregated by transfer pattern. A transfer pattern codes each sector (two-year or four-year) in which a student was enrolled, chronologically. For example, a student who began at a two-year institution then enrolled in a four-year institution student is coded as "24" transfer in this section; similarly, a student who began at a four-year institution then enrolled in a different four-year institution is coded as "44" transfer.

Returns to a previously attended institution are included in the full transfer pattern. The transfer pattern does not include information about when a student transferred, only the order of institutions attended. Using NSC data, these transfer patterns include non-public and out-of-state institutions in addition to Tennessee public institutions, allowing us to determine the full transfer pattern of a student. There were 97 different transfer patterns within the fall 2017 cohort, which demonstrates the many pathways of transfer students.

Figure 8 provides a look at the first two institutions attended by transfer and non-transfer students. Most students (68.1%) attended only one institution in the six years following initial enrollment and are considered non-transfer students. Transfer students generally performed a vertical transfer, moving either from a two-year institution to a four-year ("24") or vice versa ("42"). More common among vertical transfer students were those students who started at a two-year institution and transferred to a four-year institution ("24"); this pattern is slightly less common in the fall 2017 cohort (14.8%) than it was in the fall 2016 cohort (15.3%). A smaller number of students took advantage of horizontal transfer or transfer from one institution to another institution in the same sector ("44" and "22"). Given that 91.3% of students in the cohort attended either one or two total institutions, examining transfer patterns by first two institutions captures most of the variation in transfer behavior. Students who attended more than two total institutions are categorized in this section according to the sectors of the first two institutions they attended.

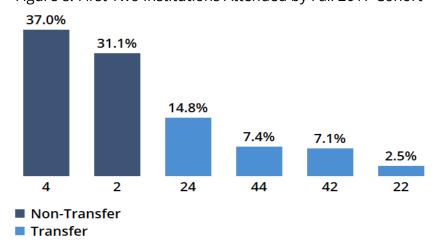


Figure 8: First Two Institutions Attended by Fall 2017 Cohort

See **Appendix C** for a matrix of sending and receiving institutions for students who make a "24" transfer between Tennessee public institutions and **Appendix D** for students who make a "42" transfer between Tennessee public institutions. These appendices show common transfer patterns for students moving between in-state public institutions.

Summer Swirl and Concurrent Enrollment

Students transfer between institutions for a variety of reasons. In addition to vertical transfers, from a two-year institution to a four-year institution, or transfers due to institutional fit or change of educational plans, students may also use transfer strategically. Students may transfer between institutions to maximize their success in particular courses, to leverage winter or summer breaks to complete credits, or to take advantages of opportunities not offered at their current institutions. When students take coursework at a different institution over a summer term, then continue enrollment at their original institution in the following fall, this behavior is known as "summer swirl". Liu and Fay (2020) found that four-year students who enrolled in limited numbers of credits at community colleges had higher numbers of credits earned, both overall and in STEM courses; higher bachelor's degree attainment; and better employment outcomes than four-year students who never earned credits from a two-year college.

Utilizing the National Student Clearinghouse Student Tracker (NSC) data allows us to track when a student leaves and later returns to the same institution, including instances of summer swirl. Additionally, we can see when a student enrolls concurrently at multiple institutions. This year's report utilizes a series of rules and technical improvements made to coding to capture concurrent enrollment in the same term, so that this behavior is not categorized as transfer. Where a student was enrolled at multiple institutions in the same term, we used previous enrollments, enrollment intensity (i.e., part-time, full-time, etc.), and length of enrollment at both institutions to determine whether a student changed institutions. These improvements reduced the number of total institutions a student attended. With this improvement, all students with multiple enrollments at different institutions over the same dates were flagged as concurrently enrolled. Overall, 44.1% of students in the fall 2017 cohort were concurrently enrolled at some point in six years. Concurrent enrollment is much more common for transfer students, as seen in **Figure 9** below, with 63.4% of transfer students concurrently enrolling at least one term; by contrast, just over a third of non-transfer students concurrently enroll.

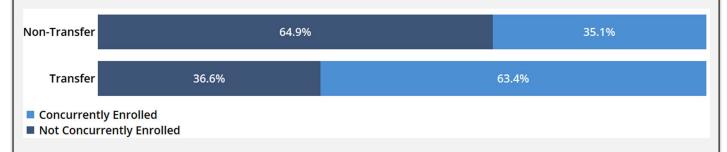


Figure 9: Concurrent Enrollment by Transfer Status, Fall 2017 Cohort

Note: For more information on summer swirl and additional trends in nationwide transfer, see Bobbitt, R., Causey, J., Kim, H., Lang, R., Ryu, M., and Shapiro, D. (Aug 2021), COVID-19 Transfer, Mobility, and Progress, Academic Year 2020-2021 Report, Herndon, VA: National Student Clearinghouse Research Center or https://nscresearchcenter.org/transfer-mobility-and-progress/. For research on strategic course taking, see Lui, V. and Fay, P. (June 2020), Does Taking a Few Courses at a Community College Improve the Baccalaureate, STEM, and Labor Market Outcomes of Four-Year College Students?, New York, NY: Columbia University Community College Research Center.

For transfer students in the fall 2017 cohort, the total number of institutions attended accounts for cases where a student returned to a previously attended institution (as opposed to the unique institutions counts shown in **Figure 5**). The distribution of total number of institutions attended for transfer students <u>only</u> is shown in **Figure 10**. Students attended as many as eleven non-unique institutions. Students who returned to an institution are students whose total number of institutions attended is higher than their unique number of institutions attended. In the cohort, student "swirlers" represent 1.9% of students, or 5.8% of students who ever transfer.

Figure 10: Total Number of Institutions Attended, Fall 2017 Cohort Transfer Students

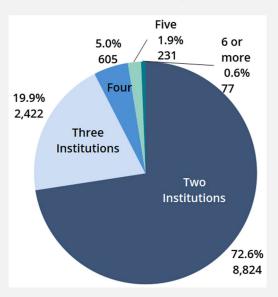


Figure 11 disaggregates the transfer patterns of the fall 2017 cohort by race/ethnicity. The distribution of racial and ethnic demographics varies across transfer patterns. For example, students identified as Black, non-Hispanic comprise 19.7% of the overall cohort, as shown in the "Overall" column on the right, but only 13.5% of students who completed a "24" transfer; they are over-represented among students who complete a "42" or "44" transfer.

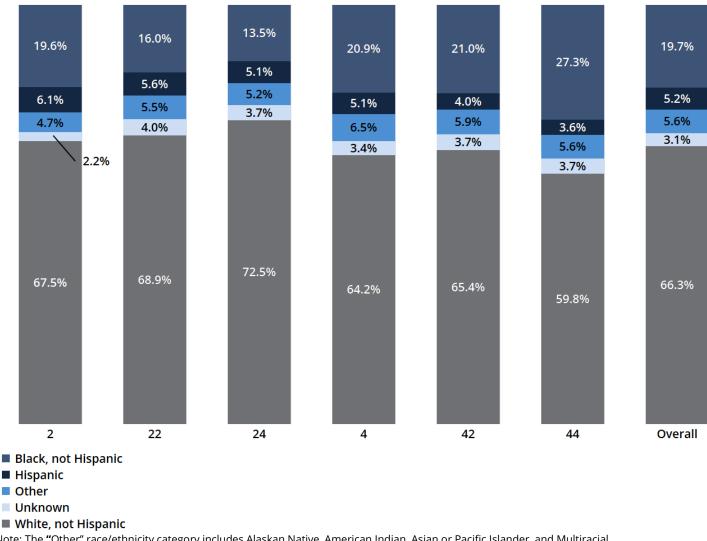
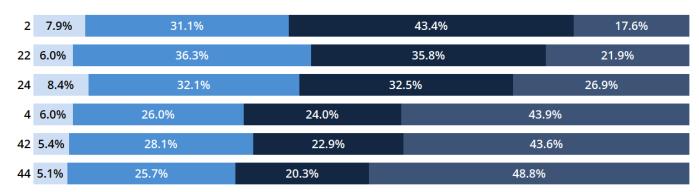


Figure 11: Race/Ethnicity of Fall 2017 Cohort by First Two Transfer Pattern

Note: The "Other" race/ethnicity category includes Alaskan Native, American Indian, Asian or Pacific Islander, and Multiracial.

Figure 12 illustrates the proportion of students in each transfer pattern who are Pell eligible, firstgeneration, or both. Students who attended a two-year institution as their first enrollment are more likely to be Pell eligible, first-generation, or both than their four-year counterparts. Students who start at a community college and do not transfer are more likely to be Pell eligible, first-generation, or both than students who start in the same sector and do transfer. This same pattern does not hold for students who start at a four-year institution.

Figure 12: First-Generation and Pell Eligibility Statuses by First Two Transfer Pattern, Fall 2017 Cohort

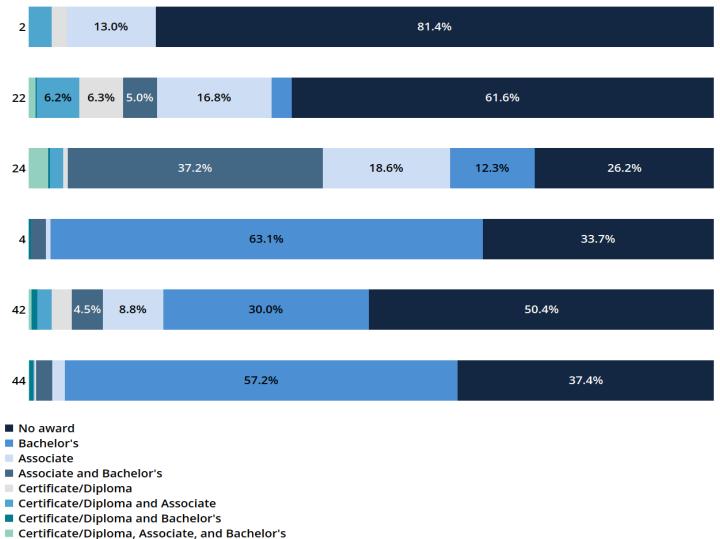


- Neither/Unknown
- Both
- Pell Eligible
- First Generation

Note: Pell eligibility describes any student who was eligible for the Pell grant at any point during the six-year period following initial enrollment. First-generation status is self-reported on the FAFSA by parent education level and describes any student who was categorized as first-generation at any point in the six-year period. Neither/Unknown describes a student who filed a FAFSA and did not meet either criteria or a student who did not file a FAFSA or for whom we do not have a FAFSA record (e.g., non-residents) at any point in the six-year period following initial enrollment. Students who did not file a FAFSA are classified as ineligible for the Pell grant and are not categorized as first-generation in this figure.

Figure 13 displays the percentage of students within each transfer pattern who earned a certificate/diploma, associate, or bachelor's degree. Degree outcomes vary widely across transfer patterns. Only 18.6% of non-transfer students who began at a two-year institution earned a credential in the six years following enrollment, but 38.4% of students who transferred from one two-year institution to another ("22") obtained an award. Students who transferred from one four-year institution to another ("44") saw similar overall outcomes to non-transfer four-year students. Nearly half (49.6%) of students whose first two institutions were a four-year and then a two-year ("42") earned a credential, lower than counterparts who started at a four-year and did not transfer, who have a 66.3% graduation rate. Students who utilized a "24" transfer had a diverse set of credentials within six years and were most likely of all transfer patterns to have obtained at least one award. Overall, completion is slightly lower in the fall 2017 cohort (50.4%) than in the fall 2016 cohort (50.9%).

Figure 13: Degrees Earned by First Two Transfer Pattern, Fall 2017 Cohort



Note: Diplomas are a small portion of awards; in the fall 2017 cohort, 0.2% (n=91) of students obtained a diploma within six years of initial enrollment. Diplomas are presented here with certificates. A very small number of students (n=37) obtained both a diploma and a certificate; these students are counted only once in the "certificate/diploma" category. Additionally, NSC data shows students who have obtained an award with no additional details. Where possible, these students were matched with THECSIS data to fill in award information. The remaining students whose award details were unknown (n=121) were considered as "no award" in this figure and graduation rate calculations.

Section Three: Transfer Behavior of Tennessee Transfer Pathway Students

Tennessee Transfer Pathways

This section explores the transfer and success of students within the fall 2017 cohort who utilized a Tennessee Transfer Pathway (TTP) at any point during the six-year period following initial enrollment. Of the **38,154** students identified in the National Student Clearinghouse Student Tracker (NSC) data, **8,372** students enrolled in a TTP at some point during the six-year period following initial enrollment. Throughout this section, these students are identified as "TTP Students" while the remaining **29,782** students are referred to as "Non-TTP Students". By definition, all students who never enrolled at a Tennessee two-year public institution are "Non-TTP" students; TTPs are only offered at TBR community colleges and designed to transfer to all public and participating private four-year colleges in Tennessee.⁵

Tennessee Transfer Pathways are a creation of the Complete College Tennessee Act (2010) and are provided for in T.C.A. § 49-7-202 (r)(1-2), which states that THEC will "require all state institutions of higher education to collaborate and develop a transfer pathway for at least the fifty (50) undergraduate majors for which the demand from students is the highest and in those fields of study for which the development of a transfer pathway is feasible based on the nature of the field of study." For a complete listing of Tennessee Transfer Pathways, see **Appendix E.**

What is a Tennessee Transfer Pathway?

According to the Tennessee Board of Regents, TTPs are advising tools. For community college students who plan to transfer to a Tennessee public university, or to select non-profit private colleges and universities in Tennessee, the TTP provides a guarantee that courses will transfer. TTPs are also an agreement between community colleges and four-year colleges and universities that the community college courses transferred satisfy major preparation requirements.⁶

How do the pathways work?

Students who complete all courses on a Tennessee Transfer Pathway will earn an associate degree at the community college. Their transcript will show that the pathway has been followed, and the student will earn transfer credits accepted at the college or university toward completion of a particular major. If the student transfers to another Tennessee community college, courses taken on the pathway are also guaranteed to transfer.⁷

Table 2 exhibits the demographic characteristics of students in the fall 2017 cohort who participated in a TTP at any point in the six years following initial enrollment (not just in fall 2017) compared to students in the cohort who ever enrolled at a two-year institution but did not enroll in a TTP (n=13,092). TTP students are nearly equally likely to be male or female, while two-year non-TTP students show a greater gender disparity, which could be related to the non-TTP program types, namely AAS degrees, offered at two-year

⁵ Due to discrepancies in student matching methodologies between THECSIS, TBR, and the National Student Clearinghouse Student Tracker, a small number of students (n=58) were identified as having participated in a TTP despite no Student Tracker record of enrollment at a two-year institution. These observations have been dropped from all subsequent figures.

⁶ Tennessee Transfer Pathway. (2014, September 26). Retrieved December 11, 2024, from https://www.tbr.edu/initiatives/tennessee-transfer-pathway

⁷ Tennessee Transfer Pathway. (2014, September 26). Retrieved December 11, 2024, from https://www.tbr.edu/initiatives/tennessee-transfer-pathway

institutions. TTP students were less likely to be Black, not Hispanic, but slightly more likely to be in the Hispanic or Other race/ethnicity categories compared to their non-TTP counterparts. TTP students were nearly equally likely to be Pell eligible or identified as first-generation compared to two-year students who did not enroll in a TTP.

Compared to the 2016 cohort, TTP students were slightly less likely to be Black, not Hispanic or White, not Hispanic and slightly more likely to be Hispanic or to have an unknown race/ethnicity. Other demographics of TTP students stayed largely consistent when compared to the 2016 cohort.

Table 2: Demographics of TTP Students in Fall 2017 Cohort

			Two-Year, N	lon-TTP	All Two-Year			
	Two-Year, TTF	Students	Studer	Students		Students		
	Count	Percent	Count	Percent	Count	Percent		
Gender								
Female	4,321	52.0%	7,694	58.8%	12,015	56.1%		
Male	3,393	48.0%	5,398	41.2%	9,391	43.9%		
Race/Ethnicity								
Black, not Hispanic	1,232	14.8%	2,637	20.1%	3,869	18.1%		
Hispanic	526	6.3%	654	5.0%	1,180	5.5%		
Other	458	5.5%	618	4.7%	1,076	5.0%		
Unknown	240	2.9%	378	2.9%	618	2.9%		
White, not Hispanic	5,858	70.5%	8,805	67.3%	14,663	68.5%		
Pell Eligible	5,732	68.9%	8,921	68.1%	14,653	68.5%		
First-Generation	3,662	44.0%	5,951	45.5%	9,613	44.9%		
Overall	8,314	100%	13,092	100%	21,406	100%		

Notes: The "Other" race/ethnicity category includes Alaskan Native, American Indian, Asian or Pacific Islander, and Multiracial. Pell eligibility describes any student who was eligible for the Pell grant at any point during the six-year period following initial enrollment. First-generation status is self-reported on the FAFSA by parent education level and describes any student who was categorized as first-generation at any point in the six-year period. Students who did not file a FAFSA or for whom we do not have a FAFSA record (e.g., non-residents) are categorized as not eligible for the Pell grant and not first-generation in this report. This table is limited to students who ever enrolled at a two-year institution, but that two-year institution was not necessarily in Tennessee.

Students are categorized as TTP participants if they have any record of enrollment in a TTP at any point in the six-year period examined. However, the number of terms enrolled in a TTP varies widely. **Figure 14** shows the distribution of the number of terms that students are found enrolled in a TTP within six years. Most students (29.9%) are only enrolled in a TTP for one term. Over 17%, remain enrolled in a TTP for five or more terms, longer than 100% of time to an associate degree, which is four terms. Prolonged TTP enrollment may indicate enrollment in summer terms, part-time enrollment, or additional time taken to earn a degree.

Figure 14: TTP Participation, Number of Terms Enrolled, Fall 2017 Cohort

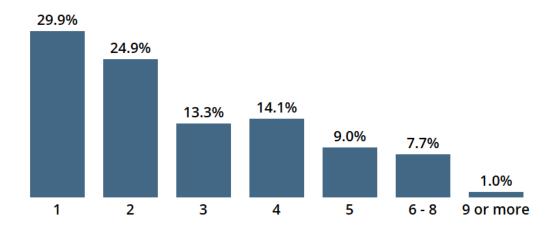


Figure 15 displays the overall transfer rates of students in the fall 2017 cohort who ever participated in a TTP (n=8,314). Nearly half of TTP students (48.4%) transferred during the six-year period following initial enrollment. Additionally, TTP students were also more likely than the overall cohort to complete a transfer (see **Figure 1**).

Figure 15: Overall Transfer in Fall 2017 Cohort TTP Students



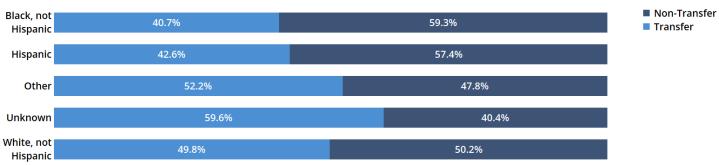
Figure 16 breaks down transfer of TTP students by gender. As in the overall cohort (see **Figure 2**), females are more likely to transfer than males.

Figure 16: Fall 2017 Cohort TTP Transfer by Gender



Figure 17 compares the transfer rates of TTP students by race/ethnicity. Similar to the trends seen in the overall cohort (see **Figure 3**), Black, not Hispanic and Hispanic TTP students are less likely to transfer than White, not Hispanic students. Students whose race/ethnicity is unknown are more likely to transfer than other students, though this is a small group (n=240).

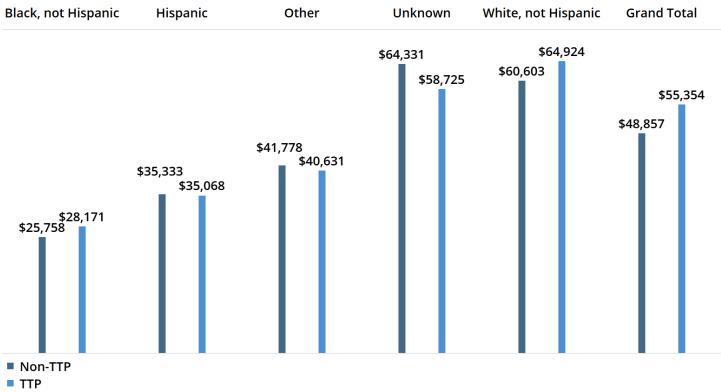
Figure 17: Fall 2017 Cohort TTP Transfer by Race/Ethnicity



Note: The "Other" race/ethnicity category includes Alaskan Native, American Indian, Asian or Pacific Islander, and Multiracial.

Figure 18 disaggregates the median Adjusted Gross Income (AGI) in the students' first academic year (2017-18) by race/ethnicity and TTP enrollment. TTP students' economic backgrounds vary by race/ethnicity; however, the income gaps between TTP and non-TTP students are generally small, with TTP students from the two largest groups (Black, not Hispanic and White, not Hispanic students) having slightly higher AGIs than their non-TTP counterparts, while this pattern is reversed for TTP students in the Hispanic, "Other", and "Unknown" race/ethnicity groups.

Figure 18: Median 2017-18 AGI of the Fall 2017 Two-Year Cohort by Race/Ethnicity and TTP Status

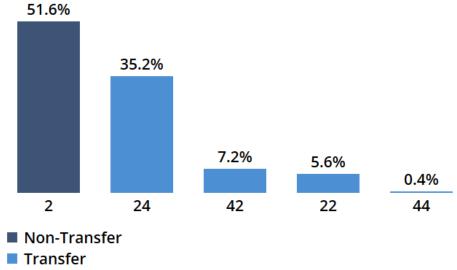


Note: The "Other" race/ethnicity category includes Alaskan Native, American Indian, Asian or Pacific Islander, and Multiracial. By definition all students who never enrolled at a two-year are "Non-TTP" students. To provide a reasonable comparison group, this figure shows only "Non-TTP" students who ever enrolled at a two-year institution (n=13,092). AGI is sourced from the FAFSA, so students who did not file a FAFSA or for whom we do not have a FAFSA record (e.g., non-residents) are dropped from this figure.

Figure 19 displays the first two institutions attended by TTP students. Over half of TTP students enrolled at a two-year institution and did not transfer during the six-year period following initial enrollment. 35.2%

of all TTP students completed a "24" transfer as their first two institutions, which is lower than the 36.3% of all TTP students in the fall 2016 cohort that completed a "24" transfer first.

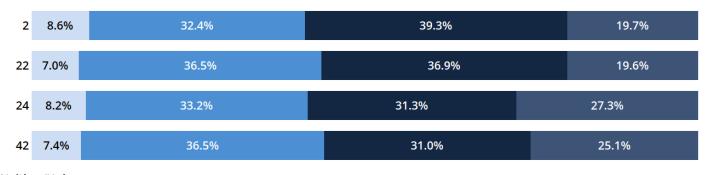
Figure 19: First Two Institutions Attended by TTP Students in the Fall 2017 Cohort



Note: Due to discrepancies in student matching methodologies between THECSIS, TBR, and the National Student Clearinghouse Student Tracker, 58 students were identified as having participated in a TTP despite no Student Tracker record of enrollment at a two-year institution. These students have been removed from the graphic above. The remaining students in the "44" group (n=34) ultimately did enroll at a two-year institution, just not as one of their first two enrollments.

Figure 20 demonstrates the first-generation and Pell eligibility statuses of TTP students in the fall 2017 cohort by transfer pattern. First-generation and/or Pell eligible students are generally represented at lower rates among transfer TTP students than non-transfer TTP students.

Figure 20: First-Generation and Pell Eligibility Statuses of Fall 2017 Cohort TTP by First Two Transfer Pattern



Neither/Unknown

Both

Pell Eligible

First Generation

Note: Due to discrepancies in student matching methodologies between THECSIS, TBR, and the National Student Clearinghouse Student Tracker, 58 students were identified as having participated in a TTP despite no Student Tracker record of enrollment at a two-year institution. These students have been removed from the graphic above. The "44" transfer group is suppressed here, in accordance with FERPA regulations. Pell eligibility describes any student who was eligible for the Pell grant at any point during the six-year period following initial enrollment. First-generation status is self-reported on the FAFSA by reported parent education level and describes any student who was categorized as first-generation at any point in the six-year period. Neither/Unknown describes a student who filed a

FAFSA and did not meet either criteria or a student who did not file a FAFSA or for whom we do not have a FAFSA record (e.g., nonresidents) at any point in the six-year period following initial enrollment. Students who did not file a FAFSA are classified as ineligible for the Pell grant and are not categorized as first-generation in this figure.

Figure 21 shows the degrees earned within six years for TTP students within the fall 2017 first-time freshman cohort. TTP students in the fall 2017 cohort were more likely than the overall cohort to have earned both an associate and a bachelor's degree six years after initial enrollment, with 16.9% of TTP participants obtaining both degrees compared to 11.5% of the full cohort who ever attended a two-year institution. Students completing a "24" transfer were most likely of all transfer patterns to have an award after six years. For a complete listing of Tennessee Transfer Pathways and participation of fall 2017 cohort students in each, see Appendix E. See Appendix F for a list of TTP degrees awarded to the fall 2017 cohort.

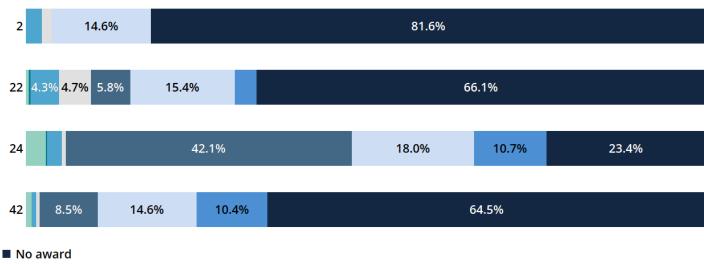


Figure 21: Degrees Earned, Fall 2017 Cohort TTP Students by First Two Transfer Pattern

- Bachelor's
- Associate
- Associate and Bachelor's
- Certificate/Diploma
- Certificate/Diploma and Associate
- Certificate/Diploma and Bachelor's
- Certificate/Diploma, Associate, and Bachelor's

Note: Diplomas are a small portion of awards; in the fall 2017 cohort of TTP participants, 29 students obtained a diploma within six years of initial enrollment. Diplomas are presented here with certificates. A very small number of students (n=11) obtained both a diploma and a certificate; these students are counted only once in the "certificate/diploma" category. Additionally, NSC data shows students who have obtained an award with no additional details. Where possible, these students were matched with THECSIS data to fill in award information. The remaining students whose award details were unknown (n=21) were considered as "no award" in this figure and graduation rate calculations. Associate degrees earned are not necessarily Tennessee Transfer Pathways degrees (See Appendix F for TTP Awards). The "44" transfer group is suppressed here, in accordance with FERPA regulations.

Conclusion

This report continues the work of previous Articulation and Transfer reports by examining the demographics, transfer patterns, and degree outcomes of the fall 2017 first-time freshman cohort and presenting an update on the work of the Articulation and Transfer Council.

Over 30% of students in the fall 2017 cohort attended more than one institution in the six years following their initial enrollment, making them transfer students for purposes of this report (**Figure 1**). For students who do transfer, most attend a two-year institution, then a four-year institution as their first two institutions (**Figure 8**). Over 90% of the students in the cohort attended only one or two institutions.

Transfer students have higher six-year graduation rates (63.0%) than non-transfer students (44.5%) in the cohort. This gap is driven by many students who begin enrollment at a two-year institution, do not transfer, and do not graduate (**Figure 7**). Students who complete a vertical transfer from a two-year institution to a four-year institution are more likely than all other transfer patterns in the fall 2017 cohort to earn any type of award within six years. These students also earn a wide variety of awards. Of students in this transfer pattern, 73.8% graduated in six years, including 37.2% of students who earned both an associate and a bachelor's degree (**Figure 13**).

Of the 8,372 cohort students who enrolled in a Tennessee Transfer Pathway (TTP), 48.4% transferred. Of all TTP participants, 21.6% obtained an associate degree in a TTP major (**Appendix F**), and 41.1% of TTP participants earned any award in the six years following initial enrollment (**Figure 21**).

The time has come for all institutions across Tennessee, whether community colleges, TCATs, or universities, to contribute to transfer student success. Current success rates, as highlighted in this report, are not sufficient to meet Tennessee's workforce needs, nor to meet the aspirations of the many students in Tennessee who aim to earn a bachelor's degree. While efforts like **Tennessee Promise** and **Tennessee Transfer Pathways** intend to support students who start at a community college to transfer, students are not successfully transferring at expected rates. Tennessee higher education needs to do more to deliver on the promises of these policy efforts. To improve transfer student success statewide, THEC/TSAC should:

- Continue to provide opportunities for colleagues to collaborate at events such as annual transfer convenings, regional meetings, and webinars. These opportunities will include discussions of ways to remove barriers to transfer, including using the Articulation & Transfer Council and Sub-councils to ensure success for the transfer provisions in statute.
- Continue to define best practices for transfer to maximize credit articulation and support degree completion.
- Support innovative approaches to articulating credit from technical colleges and from prior learning credits and assessments.
- Research the financial aid needs of transfer students, specifically those transferring from community colleges to universities, who have accessed higher education through the support of Tennessee Promise.

Appendix A: Tennessee Code Annotated § 49-7-202(r)

(r)

(1) The commission shall require all state institutions of higher education to collaborate and develop a transfer pathway for at least the fifty (50) undergraduate majors for which the demand from students is the highest and in those fields of study for which the development of a transfer pathway is feasible based on the nature of the field of study.

(2)

- (A) A transfer pathway shall consist of sixty (60) hours of instruction that a student can transfer and apply toward the requirements for a bachelor's degree at a public institution that offers the transfer pathway. The sixty (60) hours of instruction in a transfer pathway shall consist of forty-one (41) hours of general education courses instruction and nineteen (19) hours of pre-major courses instruction, or elective courses instruction that count toward a major, as prescribed by the commission, which shall consider the views of chief academic officers and faculty senates of the respective campuses. Courses in a transfer pathway shall transfer and apply toward the requirements for graduation with a bachelor's degree at all public universities.
- **(B)** An associate of science or associate of arts degree graduate from a Tennessee community college shall be deemed to have met all general education and university parallel core requirements for transfer to a Tennessee public university as a junior. Notwithstanding this subdivision (r)(2)(B), admission into a particular program, school, or college within a university, or into the University of Tennessee, Knoxville, shall remain competitive in accordance with generally applicable policies.
- **(C)** The forty-one-hour lower division general education core common to all state colleges and universities shall be fully transferable as a block to, and satisfy the general education core of, any public community college or university. A completed subject category, for example, natural sciences or mathematics, within the forty-one-hour general education core shall also be fully transferable and satisfy that subject category of the general education core at any public community college or university.
- **(D)** The nineteen-hour lower division AA/AS area of emphasis articulated to a baccalaureate major shall be universally transferable as a block satisfying lower division major requirements to any public university offering that degree program major.
- (3) It is the legislative intent that community college students who wish to earn baccalaureate degrees in the state's public higher education system be provided with clear and effective information and directions that specify curricular paths to a degree. To meet the intent of this section, the commission, in consultation with the governing boards of all state institutions of higher education, shall develop, and the governing boards of all state institutions of higher education shall implement, the following:
 - **(A)** A common course numbering system, taking into consideration efforts already undertaken, within the community colleges to address the requirements of subdivision (r)(1);

- **(B)** Listings of course offerings that clearly identify courses that are not university parallel courses and therefore not designed to be transferable under subdivision (r)(1); and
- **(C)** A dual admissions policy in which a person who satisfies the admissions requirements of a two-year institution governed by the board of regents and a public university while pursuing a degree program within a transfer pathway program of study is authorized to be admitted to both such institutions.
- **(4)** This subsection (r) shall be fully implemented no later than the fall 2024 semester. Until this subsection (r) is fully implemented, prior to the beginning of each semester, the commission shall report to the chairs of the education and finance, ways and means committees of the senate and the chairs of the education administration and planning and finance, ways and means committees of the house of representatives on the progress made toward completion of the nineteen (19) pre-major course blocks provided in subdivision (r)(2)(D).
- **(5)** The commission shall have ongoing responsibility to update and revise the plans implemented pursuant to this subsection (r) and report to the chairs of the education and finance, ways and means committees of the senate and the chairs of the education administration and finance, ways and means committees of the house of representatives no later than October 1 of each year on the progress made toward full articulation between all public institutions.

For full text of Tennessee Code Annotated, see https://www.tncourts.gov/Tennessee%20Code.

Appendix B: Articulation and Transfer Council 2020-2025 Membership

Name	Title	Affiliation
Tucker Brown	Senior Vice Provost & Associate Vice President	Austin Peay State University
William Flora	Associate Provost for Curriculum	East Tennessee State University
Amy Aldridge Sanford	Academic Support Service Provost & Vice Provost	Middle Tennessee State University
Cheryl Seay	Assistant Vice President for Academic Affairs & Global Online	Tennessee State University
Brandi Fletcher	Registrar	Tennessee Technological University
Carol Danehower	Interim Vice Provost for Undergraduate Education	University of Memphis
Matt Matthews	Associate Vice President for Academic Affairs	University of Tennessee System
Lauren Ingraham	Vice Provost & Professor	University of Tennessee, Chattanooga
Allen Dupont	Associate Vice Chancellor for Institutional Effectiveness & Decision Support, SACSCOC Accreditation Liaison	University of Tennessee, Health Science Center
Elizabeth Avery Foster	Vice Provost for Academic Affairs	University of Tennessee, Knoxville
Philip Acree Cavalier	Provost & Vice Chancellor for Academic Affairs	University of Tennessee, Martin
Judy Cheatham	Provost & Vice President for Academic Affairs	University of Tennessee, Southern
Chuck Lopez	Assistant Vice Chancellor for Academic Affairs	Tennessee Board of Regents
Laura Cornick	Vice President	Tennessee Independent Colleges and Universities Association
Julie A. Roberts	Chief Academic Officer	Tennessee Higher Education Commission

Appendix C: "24" Students by Sending and Receiving Institutions, Fall 2017 Cohort

Sending Institution	APSU	ETSU	MTSU	TSU	TTU	UM	UTC	UTK	UTM	Total
Chattanooga State	<10	<10	23	<10	15	<10	193	13	<10	262
Cleveland State	-	>10	12	-	10	<10	41	17	-	92
Columbia State	12	<10	162	<10	30	<10	33	39	26	312
Dyersburg State	<10	-	11	<10	<10	39	<10	<10	43	104
Jackson State	14	<10	18	<10	<10	65	<10	10	71	188
Motlow State	<10	10	295	15	68	<10	16	13	<10	429
Nashville State	49	<10	75	23	17	<10	<10	12	11	200
Northeast State	-	274	<10	-	11	<10	<10	22	<10	316
Pellissippi State	<10	56	38	<10	31	<10	28	404	<10	575
Roane State	-	31	18	<10	96	<10	>10	55	<10	214
Southwest	10	<10	15	<10	<10	258	<10	<10	13	318
Volunteer State	59	11	105	26	147	<10	16	31	<10	401
Walters State	<10	158	15	<10	15	<10	13	83	<10	292
Total	169	569	792	86	445	387	368	709	178	3,703

Note: Individual cells containing fewer than ten observations are suppressed, in accordance with FERPA requirements. University of Tennessee Southern and University of Tennessee Health Science Center are not included here. Martin Methodist College merged with the University of Tennessee System as UT Southern on July 1, 2021. The most common receiving institution (columns) for each sending institution (rows) is shown in **bold**.

Appendix D: "42" Students by Sending and Receiving Institutions,
Fall 2017 Cohort

Receiving Institution	APSU	ETSU	MTSU	TSU	TTU	UM	UTC	UTK	UTM	Total
Chattanooga State	<10	23	10	-	12	<10	161	21	<10	242
Cleveland State	-	<10	<10	<10	<10	-	<10	<10	-	21
Columbia State	15	<10	34	<10	37	<10	60	172	14	343
Dyersburg State	<10	<10	<10	<10	<10	20	<10	<10	26	72
Jackson State	10	-	12	<10	<10	17	12	<10	38	105
Motlow State	<10	-	42	<10	13	<10	13	<10	<10	88
Nashville State	45	<10	31	20	18	13	32	12	>10	186
Northeast State	-	78	<10	-	<10	-	<10	15	-	104
Pellissippi State	<10	28	<10	<10	14	-	26	253	-	340
Roane State	<10	18	<10	<10	29	<10	13	48	<10	123
Southwest	23	<10	33	33	<10	124	26	27	16	288
Volunteer State	23	<10	25	<10	60	<10	32	19	-	169
Walters State	<10	31	<10	<10	<10	<10	<10	27	<10	81
Total	155	199	214	77	209	186	392	617	113	2,162

Note: Individual cells containing fewer than ten observations are suppressed, in accordance with FERPA requirements. University of Tennessee Southern and University of Tennessee Health Science Center are not included here. Martin Methodist College merged with the University of Tennessee System as UT Southern on July 1, 2021. The most common receiving institution (rows) for each sending institution (columns) is shown in **bold**.

Appendix E: TTP Enrollment by Concentration, Fall 2017 Cohort

TTP Major Name	Count	Percent
Unknown	2,047	24.5%
Business Administration	1,021	12.2%
Psychology	513	6.1%
Criminal Justice	411	4.9%
Pre-Health Professions	393	4.7%
Biology	344	4.1%
Accounting	221	2.6%
Computer Science	214	2.6%
Social Work	206	2.5%
Pre-Physical Therapy	197	2.4%
Mechanical Engineering	171	2.0%
Early Childhood Education (PreK-3)	164	2.0%
Marketing	160	1.9%
Exercise Science	151	1.8%
Art (Studio)	146	1.7%
History	144	1.7%
Mass Communication	142	1.7%
Management	141	1.7%
English	114	1.4%
Music	106	1.3%
Civil Engineering	94	1.1%
Pre-Dental Hygiene	94	1.1%
Elementary Education (K-5)	89	1.1%
Information Systems	80	1.0%
Sociology	80	1.0%
Finance	77	0.9%
Political Science	71	0.8%
Electrical Engineering	67	0.8%
Chemistry	63	0.8%
Special Education	55	0.7%
Math	48	0.6%
Theatre Arts	48	0.6%
Foreign Language	47	0.6%
Sport and Leisure Management	45	0.5%
Pre-Occupational Therapy	44	0.5%
Economics*	41	0.5%
Communication Studies**	39	0.5%
Engineering Technology	33	0.4%
Agriculture - Agricultural Business	32	0.4%
Physical Education	30	0.4%
Anthropology	27	0.3%

TTP Major Name	Count	Percent
Nutrition and Food Science	27	0.3%
Agriculture - Plant and Soil Science	21	0.3%
Philosophy	18	0.2%
Agriculture - Animal Science	16	0.2%
Physics	16	0.2%
Geosciences	10	0.1%
Imaging Sciences	10	0.1%
Pre-Clinical Laboratory Sciences	<10	*
International Affairs	<10	*
Theatre Arts - Performance	<10	*
Secondary Education - Social Studies	<10	*
Art	<10	*
Family and Consumer Sciences	<10	*
Secondary Education - English	<10	*
Geography***	<10	*
Secondary Education - Math	<10	*
Theatre Arts - Design/Tech	<10	*
Kinesiology	<10	*
Religious Studies^	0	0%
Supply Chain Management^	0	0%
TOTAL	8,372	100%

Notes: All current TTPs (last updated December 2023) are listed here, including those with no enrollments by students in the fall 2017 cohort. "Unknown" is a high share of TTP majors due to historical issues in TTP data tracking. Some TBR institutions do not collect data on the specific TTP in which a student is enrolled; TBR and THEC are making efforts to improve collection of this data. Individual cells containing fewer than ten observations are suppressed, in accordance with FERPA requirements. Due to discrepancies in student matching methodologies between THECSIS, TBR, and the National Student Clearinghouse Student Tracker, 58 students were identified as having participated in a TTP despite no Student Tracker record of enrollment at a two-year institution. These students are included in the table above.

^{*} Includes students enrolled in Economics concentrations for specific institutions, which were phased out in November 2017.

^{**} Renamed "Communication Studies" effective Fall 2020; includes "Speech Communication" students prior to Fall 2020.

^{***} Phased out by August 2019.

[^] Effective Fall 2024.

Appendix F: TTP Awards by Concentration, Fall 2017 Cohort

TTP Major Name	Count	Percent
Business Administration	317	17.5%
Psychology	187	10.3%
Criminal Justice	136	7.5%
Accounting	108	6.0%
Mass Communication	81	4.5%
Unknown	79	4.4%
History	69	3.8%
Social Work	62	3.4%
Pre-Health Professions	54	3.0%
Biology	51	2.8%
Computer Science	45	2.5%
Marketing	42	2.3%
Art (Studio)	41	2.3%
Management	38	2.1%
Finance	34	1.9%
Political Science	34	1.9%
Sociology	32	1.8%
Mechanical Engineering	31	1.7%
English	27	1.5%
Exercise Science	27	1.5%
Elementary Education (K-5)	26	1.4%
Music	26	1.4%
Early Childhood Education (PreK-3)	25	1.4%
Pre-Physical Therapy	25	1.4%
Foreign Language	23	1.3%
Information Systems	23	1.3%
Civil Engineering	14	0.8%
Communication Studies*	14	0.8%
Math	12	0.7%
Agriculture - Agricultural Business	11	0.6%
Theatre Arts	10	0.6%
Electrical Engineering	<10	*
Pre-Dental Hygiene	<10	*
Sport and Leisure Management	<10	*
Agriculture - Plant and Soil Science	<10	*
Anthropology	<10	*
Chemistry	<10	*
Special Education	<10	*
Agriculture - Animal Science	<10	*
Pre-Occupational Therapy	<10	*
Nutrition and Food Science	<10	*
Philosophy	<10	*

TTP Major Name	Count	Percent
Theatre Arts - Performance	<10	*
Physics	<10	*
Art	<10	*
Economics**	<10	*
International Affairs	<10	*
Engineering Technology	<10	*
Imaging Sciences	<10	*
Pre-Clinical Laboratory Sciences	<10	*
Physical Education	<10	*
Family and Consumer Sciences	<10	*
Geosciences	<10	*
Total	1,812	100%

Notes: Only TTPs with awards in the fall 2017 cohort are shown here. Individual cells containing fewer than ten observations are suppressed, in accordance with FERPA requirements. For some students (n=35), we do not have a record of their TTP enrollment, but do have record that they received a TTP award. Students identified as having earned a TTP award despite no National Student Clearinghouse Student Tracker record of enrollment at a two-year institution (n<10) are included in this table.

^{*} Renamed "Communication Studies" effective Fall 2020; includes "Speech Communication" students prior to Fall 2020.

^{**} Includes students graduating in Economics concentrations for specific institutions, which were phased out of enrollments in November 2017.

Institutional and System Abbreviations

APSU: Austin Peay State University

CHSCC: Chattanooga State Community College
CLSCC: Cleveland State Community College
COSCC: Columbia State Community College
DSCC: Dyersburg State Community College
ETSU: East Tennessee State University
JSCC: Jackson State Community College

LGI: Locally Governed Institution

MSCC: Motlow State Community College
MTSU: Middle Tennessee State University
NASCC: Nashville State Community College
NESCC: Northeast State Community College
PSCC: Pellissippi State Community College
RSCC: Roane State Community College

STCC: Southwest Tennessee Community College

TSU: Tennessee State University

TTU: Tennessee Technological University

UM: University of Memphis

UTC: The University of Tennessee at Chattanooga

UTHSC: The University of Tennessee Health Science Center

UTK: The University of Tennessee, Knoxville
 UTM: The University of Tennessee at Martin
 UTS: The University of Tennessee Southern
 VSCC: Volunteer State Community College
 WSCC: Walters State Community College
 TBR: Tennessee Board of Regents

TCAT: Tennessee College of Applied Technology **THEC:** Tennessee Higher Education Commission

TICUA: Tennessee Independent Colleges and Universities Association

UT: The University of Tennessee