

Articulation and Transfer in Tennessee Higher Education

2016-2017



Tennessee Higher Education Commission

Tennessee Higher Education Commission 2017-18 Commission Members

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I. Executive Summary

During academic year (AY) 2016-17, comparable proportions of undergraduate students transferred into the public sector and member institutions of the Tennessee Independent Colleges and Universities Association (TICUA) in each semester. The majority of new transfers—62.4 percent in the public sector and 65.8 percent at TICUA institutions—occurred in the fall semester (**Figure 1**). Most transfer activity (58.7 percent) occurred within the Tennessee higher education system, while 37.2 percent of transfer students arrived from out-of-state (**Figure 2**). Approximately half of students transferring from out-of-state institutions (49.7 percent) were actually Tennessee residents returning home (**Figure 3**).

55.3 percent of transfers into the public sector were from other Tennessee public institutions (**Figure 2**), and transfer activity within the public sector was multidirectional. The majority of transfers were vertical (70.9 percent), with community college-to-university transfers outnumbering university-to-community college transfers 2.5 to 1. The direction and relative shares of transfers among Tennessee public institutions have been consistent for the past several years (**Table 3**). The traditional model of transfer—from community colleges to universities—accounted for half of all new transfer activity within Tennessee public higher education (50.8 percent).

Among public universities, the share of new transfer students in the fall semester, measured as a percent of public undergraduate enrollment, has been consistent across institutions and systems over time (**Table 4**). The community college sector, however, has seen a slight decline in the share of transfer students over the last five years, from 6.8 percent to 5.5 percent of undergraduate fall enrollment. In Fall 2016, new transfers made up 6.9 percent of all public undergraduate enrollment (**Figure 5**).

Transfer students are very similar to native students in terms of their demographic and academic characteristics, with the exception that adult students make up a larger share of the transfer student population (**Figure 6**). 15 percent of public students transferred before earning more than 12 credits, and 53.3 percent transferred before earning more than 48 credits (**Figure 13**). More than one-third (34.1 percent) of students transferred with more than 60 credit hours, and the majority students transferred before earning an associate degree (**Figure 13**).

During AY 2016-17, the number of students transferring from Tennessee Colleges of Applied Technology (TCATs) to the state's public colleges and universities (1,072 students) was much smaller than the number of traditional transfers (**Table 7**, **Table 8**). TCAT transfers¹ were similar to traditional public transfers in terms of their demographic characteristics but included a larger percentage of traditional age students (**Figure 15**). Approximately 80 percent of TCAT transfers changed majors after transferring (**Table 10**).

Tennessee's student population has become highly mobile. Among 2015-16 bachelor's degree completers, 44.9 percent changed institutions at least once during their prior academic history. Of all 2015-16 bachelor's degree completers, 29.4 percent previously attended a Tennessee community college.

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¹ TCAT transfer is defined on page 9.

II. Background

The annual Articulation and Transfer Report fulfills the statutory requirement of the Tennessee Higher Education Commission (THEC) to report to the chairs of the Senate and House education and finance, ways and means committees of the General Assembly each year on the progress made toward full articulation between all public institutions.²

The 2017 Articulation and Transfer Report presents an update on the implementation of the articulation and transfer mandate of the Complete College Tennessee Act (CCTA) of 2010. It also examines student transfer activity in AY 2016-17, as well as characteristics and mobility patterns of former students of the TCATs.

This report analyzes student transfer activity for the entire academic year. Specifically, it looks at new transfer students at Tennessee higher education institutions in Summer 2016, Fall 2016, and Spring 2017. To be consistent with the reports published prior to 2013, select tables and figures present data for the fall semester only.

In the coming years, we will report on transfer behavior of Tennessee Promise students and will examine changes in transfer patterns at the institution level, in light of the Focus on College and University Success (FOCUS) Act of 2016.

Definitions

In the postsecondary context, **articulation** is the process of comparing the content of courses transferred between institutions. Seamless articulation ensures that courses completed at the sending institution need not be repeated at the receiving institution. Articulation agreements between postsecondary institutions or systems may differ relative to courses in the general education curriculum, the pre-major block, and the academic major.

In this report, a **transfer student** is a student who enrolled as an undergraduate at the receiving institution (transfer-to institution) for the first time (that is, was not a returning or readmitted student) and brought in credits earned at another postsecondary institution (sending institution). Transfer students include individuals returning to higher education with degrees at the baccalaureate level or above. This definition differs from those used in the *Tennessee Higher Education Fact Book* and in the outcomes based funding formula.³ Therefore, the reader should not compare the number of transfer students and the number of credit hours transferred that are produced by these distinct methodologies.

A **native student** is a student at a Tennessee public institution who never transferred from another institution during his/her academic career. However, native students include individuals who took

² Tenn. Code Ann. § 49-7-202(r)(5)

³ The *Fact Book* relies on transfer data reported by institutions, while this report checks institutional codes for transfer students against student enrollment history and registration type in the current and prior terms.

courses at a higher education institution different from their current institution of enrollment while in high school (dual enrollment).

A **non-transfer student** is a student at a public Tennessee institution who was not identified as a transfer student at any time during the academic year of interest. By definition, non-transfer students include native students as well as students who transferred into the Tennessee public sector prior to AY 2016-17.

A **TCAT transfer** is a student who was enrolled at a Tennessee public institution in AY 2016-17 and had taken classes at a TCAT in the previous semester of enrollment. For fall public enrollees, enrollment in TCAT classes may have occurred in either summer or spring. No assumption of transferred credit is made with these students.

Articulation and Transfer Policies

To meet the requirements of CCTA, the Tennessee Board of Regents (TBR), University of Tennessee (UT) System, and THEC developed a Tennessee Transfer Pathways program. This program designated 51 transfer pathways between the state's community colleges and public universities. These pathways—and the common general education requirements—provide seamless transfer for community college students to any Tennessee public university in certain fields of study.⁴

Additionally, the systems and THEC have developed a reverse transfer policy and accompanying transcript analysis system, which allows transfer students who have accrued the appropriate number and distribution of credits after transferring to a public university to retroactively earn an associate degree from the originating community college.⁵

The Tennessee Prior Learning Assessment (PLA) initiative promotes the evaluation of non-traditional learning for academic credit at Tennessee public institutions and ensures transferability of PLA credit among systems and institutions.

To further expand the opportunities available to students in Tennessee, THEC invited participation from TICUA in the development of each of the above initiatives. To date, 22 private not-for-profit institutions accept all or some of the 51 transfer pathways; six private not-for-profit institutions are involved with the reverse transfer initiative; and many private not-for-profit institutions accept PLA credit.

Protecting Personally Identifiable Information

Throughout this report, THEC seeks to comply with federal Family Educational Rights and Privacy Act (FERPA) requirements to protect students' personally identifiable information by suppressing individual

⁴ Additional information about the Tennessee Transfer Pathways is available at http://www.tntransferpathway.org/

⁵ The Reverse Transfer Policies, Procedures, and Guidelines are available at https://policies.tbr.edu/policies/reverse-transfer-policies-procedures-and-guidelines-0

cells containing five observations or fewer. As a result, the totals reported in some tables may not equal the actual total due to the omission of these suppressed values. All such cases are identified with a special note under the respective table, and the unsuppressed grand total is reported separately.

Acknowledgments

This report is made possible through the ongoing efforts of UT, TBR, and their member institutions to provide quality data on their student populations and updates on articulation and transfer policy implementation. Additionally, THEC gratefully acknowledges the unremitting effort of TICUA and its member institutions to provide data on transfer students. This collaboration has made possible statewide snapshots of student transfer activity in the public and private sectors.

III. Complete College Tennessee Act: Articulation and Transfer Policies

The State of Tennessee continues to develop and implement policies that provide for better articulation among institutions and a more efficient transfer of college credit. A central focus of CCTA was to improve the transferability and articulation of college credit between the community college and university sectors. Specifically, CCTA directed THEC, in cooperation with UT and TBR, to ensure that the 60 hours of instruction in defined Tennessee Transfer Pathways can be fully transferred from community colleges and applied toward the requirements for a bachelor's degree at public universities.

Tennessee is making great strides to implement the articulation and transfer mandate of CCTA. The systems, in collaboration with THEC, continue to monitor the health and productivity of the transfer process and implement new policies to support that effort. In the area of articulation and transfer, CCTA implementation has been structured around the following key initiatives: (a) establishing Tennessee Transfer Pathways; (b) developing a reverse transfer policy; and (c) ensuring transferability of PLA credit.

Tennessee Transfer Pathways

The Tennessee Transfer Pathways are designed to expedite student progression toward a bachelor's degree. A transfer pathway provides for 60 hours of fully transferrable instruction in a designated major. The 60 hours of instruction in a transfer pathway consists of 41 hours of general education and 19 hours of pre-major or elective courses. Students can earn an associate degree from a Tennessee community college that ensures a smooth transition into the corresponding baccalaureate degree program at a public university. These pathways provide seamless transfer for community college students to any participating four-year institution in Tennessee that offers the baccalaureate degree in those majors (including participating TICUA institutions). Currently, there are 51 pathways within eight academic focus areas⁶ that have been developed by UT and TBR. A curricular map is available for each pathway, which lists all degree requirements (including general education courses and major-specific electives).

A key method of communicating information about transfer pathways to students is through the Tennessee Transfer Pathways website (www.tntransferpathway.org). In July 2017, TBR launched a redesigned Tennessee Transfer Pathways website, with the goal of providing a more comprehensive, user-friendly resource for students, faculty, advisors, and administrators. The website provides essential information for students concerning steps for successful transfer, degree requirements for each pathway, and curricular maps that provide a four-semester sequence for completing each pathway at the community college. Additionally, the website provides salary and employment outlook information.

⁶ The eight academic focus areas are as follows: Applied Technology, Arts, Business, Education, Health Sciences, Humanities, Social Sciences, and STEM.

Reverse Transfer Policy

In April 2012, Governor Haslam signed HB 2827, which "authorized and encouraged" the TBR community colleges to enter into reverse transfer agreements with the state's public and private four-year institutions accredited by the Southern Association of Colleges and Schools Commission on Colleges. Likewise, the TBR and UT four-year institutions were "authorized and encouraged" to enter into reverse transfer agreements with the TBR community colleges.

In July 2012, a task force was convened to develop and implement a reverse transfer policy for the state. The task force was comprised of members from THEC, TBR, UT, and TICUA and provided policy recommendations that informed the Reverse Transfer Policies, Procedures, and Guidelines currently in place. This policy allows students who transferred to a participating four-year institution to also receive an associate degree from their originating Tennessee community college if, after transferring, they accumulated the number and distribution of credit hours required for that degree. Potential reverse transfer degree candidates must have earned a minimum of 15 college credits at the Tennessee community college (to meet regional accreditation residency requirements) and a minimum of 60 combined credits from the community college and the four-year institution.

Significant progress has been made in the development and implementation of the reverse transfer process to award associate degrees to students who transfer from community colleges to participating four-year institutions before receiving an associate degree. In 2014, UT Knoxville received nearly \$400,000 from a Lumina Foundation grant program, entitled "Credit When It's Due." This grant, coupled with generous state support, has provided the funding for software development and personnel required to facilitate marketing, research, and training for community college and university staff.

Through a competitive bid process, AcademyOne, Inc. was selected as the software vendor for the reverse transfer project in 2014. Statewide implementation of the reverse transfer software was phased in, with half of the institutions participating in December 2014 reverse transfer graduations and the remainder participating in May 2015 reverse transfer graduations. Of the 1,200 potential degree candidates, 350 associate degrees were awarded by Spring 2015.

During the Fall 2015 term, implementation of the reverse transfer project was launched statewide. Participation included all public community college and universities, along with eight private universities. A total of 828 associate degrees were awarded through reverse transfer in AY 2015-16, representing an 8.7 percent increase over total associate degrees awarded in AY 2014-15. Data for reverse transfer associate degrees awarded in AY 2016-17 will be available in October 2017.

⁷ The Reverse Transfer Policies, Procedures, and Guidelines are available at https://policies.tbr.edu/policies/reverse-transfer-policies-procedures-and-guidelines-0

Prior Learning Assessment

THEC continues to lead statewide and national efforts for promoting and expanding the evaluation of postsecondary credit through PLA. While THEC continues to support efforts aimed at standardizing PLA at public and private institutions, THEC's activities have shifted to providing direct assistance to public campuses in their own efforts to grow their PLA programs. Beginning in 2014, THEC (with support from the Ford Foundation) provided marketing, awareness, and technical assistance to Tennessee's public institutions to grow capacity and enhance program offerings related to PLA.

While Tennessee has made great strides to develop clearer, more comprehensive PLA standards and to provide more PLA options, some students still find it difficult to locate information about PLA opportunities. In early 2015, THEC began working with a marketing firm to develop a common identity for all PLA programs in the state. The result is Timewise TN: Turn Your Years of Knowledge into College Credit. An associated logo, student orientation brochure, and video have been made available to any institution that chooses to use the Timewise TN moniker. Institutional PLA programs will not change in form; however, the goal is to develop a common language that will be clear to students and allow them to easily find PLA resources on campus. The adoption of the logo and program name (Timewise TN) is voluntary.⁸

In April 2015, Public Chapter 219 was signed into law and directed THEC to coordinate the improvement of institutional polices relevant to awarding PLA to student veterans and service members. The legislation directed THEC to convene representatives from UT and TBR to "identify and develop uniform methods to assess and maximize academic credit awarded by public institutions of higher education to veterans and military service members for military experience, education, and training obtained during military service." THEC convened representatives from both UT and TBR in March 2016 to discuss best practices in awarding academic credit for military training and experience. UT and TBR subsequently worked to revise policies relevant to awarding academic credit for military experience between March and August of 2016. The resulting changes, which include provisions for addressing excess credit and prioritizing the Joint Services Transcript, were enacted by institutions in Fall 2016. These changes help ensure that student veterans and service members receive an appropriate amount of academic credit for their prior military training and experience.

Regarding articulation and transfer policies, the main goal is to ensure that relevant PLA credits accepted by one institution will continue to be accepted by all other institutions at the time of transfer in the same manner as traditional classroom credit. In Fall 2012, the Tennessee Prior Learning Assessment Task Force drafted *Recommended Standards in Prior Learning Assessment (PLA) Policy and Practice for Tennessee Public Colleges and Universities*, which included guidelines for the transcription and transfer of PLA credit at public institutions. The standards were formally adopted by TBR in September 2013. Although UT has not adopted the standards as a formal system-wide policy, it uses them to improve practice: PLA that is

⁸ Additional information about Timewise TN is available at http://tn.gov/thec/article/timewise-about

recognized as a course equivalent in a completed pathway, course cluster, or associate degree program will transfer accordingly. Therefore, both systems have agreed to accept PLA credit in transfer if the credit falls within the aforementioned parameters. Furthermore, the standards were formally endorsed by the TICUA Board in Fall 2013.

As THEC has worked with UT and TBR to standardize the tracking and collection of PLA-related data, PLA credits that meet the standards agreed upon will now be used to trigger progression and transfer-out metrics within the public higher education funding formula. Additionally, articulation and transfer policies play through Tennessee's outcomes based funding formula for public higher education. They impact, directly and indirectly, the metrics for degree completion, progression, graduation rate (for universities only), and Prior Learning Assessment. This fact has elevated the stakes around the articulation and transfer policy, an important aspect of academic policy. This is desirable in that it ensures incentives for students and institutions are aligned on this issue, as both have an interest in sound articulation and transfer policy and practices. However, care must be taken that concerns about the outcomes based funding formula do not drive articulation and transfer policy.

IV. Tennessee Transfer Student Profile: AY 2016-17

This section examines patterns in Tennessee student transfers in AY 2016-17 and, when appropriate, trends over time. The analysis of student transfer activity is conducted and presented at the following levels: (a) statewide student transfer activity, (b) transfer activity in public higher education, (c) student transfer activity by public institution, and (d) academic characteristics of transfer students. This section also compares various characteristics of transfer and native students.

Statewide Student Transfer Activity

<u>Patterns in Student Transfer Activity</u>

During AY 2016-17, 21,929 students transferred into Tennessee public higher education institutions, and 6,071 students transferred into TICUA member institutions (**Figure 1**). Roughly commensurate proportions of students moved into both sectors in each semester of the academic year. Most students transferred in the fall semester: 62.4 percent in the public sector and 65.8 percent at TICUA institutions. 27.7 percent of public transfers and 23.1 percent of TICUA transfers arrived in spring. The smallest share of transfer students arrived in the summer semester: 9.9 percent into public institutions and 11.2 percent into TICUA institutions.

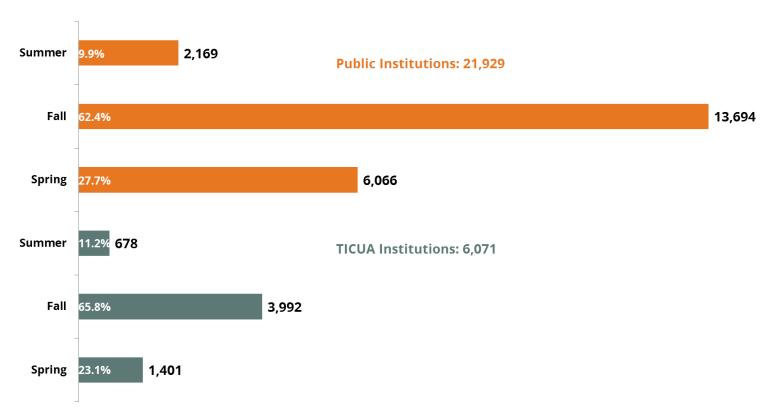


Figure 1. Student Transfer by Receiving Sector and Semester, AY 2016-17

During AY 2016-17, a total of 28,000 students transferred into a Tennessee public or TICUA member institution (**Figure 2**).

- The majority of students (58.7 percent or 16,423 students) moved within Tennessee higher education, from one state public or private non-profit institution to another. This number comprises 12,121 within-public-sector transfers, 302 within-TICUA transfers, 2,324 transfers from publics to TICUA, and 1,676 transfers from all independent institutions into the public sector.
- 37.2 percent (10,420 students: 8,132 public and 2,288 private transfers) transferred in from out-of-state institutions.
- The remaining 4.1 percent of students transferred into TICUA institutions from unknown locations (1,157 students).

Comparable proportions of out-of-state students moved into the public sector (37.1 percent) and TICUA institutions (37.7 percent). In sharp contrast, within-sector transfers accounted for 55.3 percent (12,121 students of 21,929 transfers) of the public institution total, but only 5 percent (302 students of 6,071 transfers) of TICUA transfers were from other TICUA institutions. This indicates that more intense internal transfer activity takes place within the public sector, as compared to transfers among TICUA member institutions.

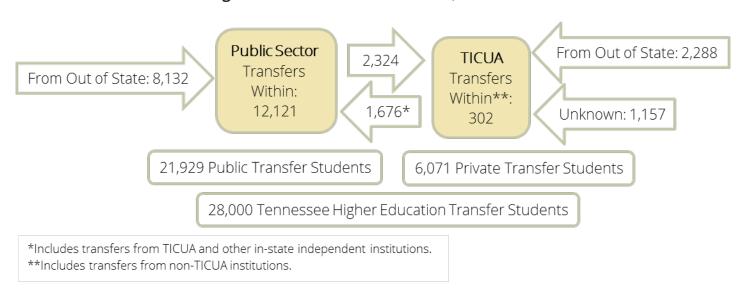


Figure 2. Student Transfer Patterns, AY 2016-17

Student Transfer Activity by Sector of Origin

In AY 2016-17, the public sector received 21,929 transfer students (78.3 percent of the total), while TICUA institutions received 6,071 transfers (21.7 percent of the total). A majority of students (14,445 students or 51.6 percent) came from Tennessee public institutions; out-of-state institutions sent 10,420 students (37.2 percent); and 1,978 students (7.1 percent) transferred from Tennessee's independent sector (**Table 1**).

Table 1. Student Transfer Activity by Sector of Origin, AY 2016-17

	Trar	nsfers by Sect	Total	Overall		
Receiving Sector	Tennessee Public	Tennessee Independent	Out-of- State	Unknown	Transfers	0.0.0
Public University Total	7,841	902	4,682		13,425	128,655
Community College Total	4,280	774	3,450		8,504	114,173
Public Higher Education Total	12,121	1,676	8,132		21,929	242,828
TICUA Total	2,324	302	2,288	1,157	6,071	-
Grand Total	14,445	1,978	10,420	1,157	28,000	-

Appendix A and **Appendix B** contain detailed tables of AY 2016-17 enrollment and transfer activity by sector and institution.

Out-of-state Student Transfer Activity

The following caveats should be considered when interpreting the data on out-of-state transfers. First, for different graphs on public institutions, this report relies on either the resident status of transfer students or the state in which the previous institution is located. Due to the data structure at TICUA, the report uses only the state of the prior institution when examining the private sector. Second, transfers from out-of-state are not homogeneous. They comprise two large groups: residents of other states and Tennessee residents transferring from out-of-state colleges and universities to institutions in Tennessee. These two groups of transfer students, out-of-state residents and returning Tennessee residents, are reported separately (**Figure 3**).

As **Figure 3** shows, Tennessee residents transferring within the state's public and private institutions accounted for 58.7 percent of all AY 2016-17 transfers into Tennessee higher education. The general group of out-of-state students accounted for 37.2 percent of all transfers and included the following categories: transfers into TICUA institutions (8.2 percent), transfers by residents of other states (10.6 percent), and transfers of Tennessee residents returning to their home state (18.5 percent).

For public transfers, the group of returning Tennessee residents is 1.8 times larger than the group of "true" out-of-state students and constitutes 49.7 percent of all out-of-state transfers. From a policy perspective, this observation is critical because it allows us to better understand the reasons why a student might transfer. One may suppose that Tennessee students return due to a combination of financial, academic, and personal considerations. The substantial number of returning residents suggests that, in the long run, Tennessee may be losing fewer students to other states than traditional data on the out-migration of high school graduates suggest. Availability of lottery scholarships could be a factor in a student's decision to transfer to a home state's public institution. ¹⁰

⁹ Count is duplicated if students enrolled at more than one institution during the academic year.

¹⁰ Tennessee residents who were eligible for a Tennessee Education Lottery Scholarship (TELS) upon completion of high school requirements, but who enrolled in a regionally accredited out-of-state postsecondary institution after high school graduation, may transfer to an eligible Tennessee postsecondary institution and receive a TELS award.

Figure 3. Transfers by Originating Location, In-State vs. Out-of-State, AY 2016-17

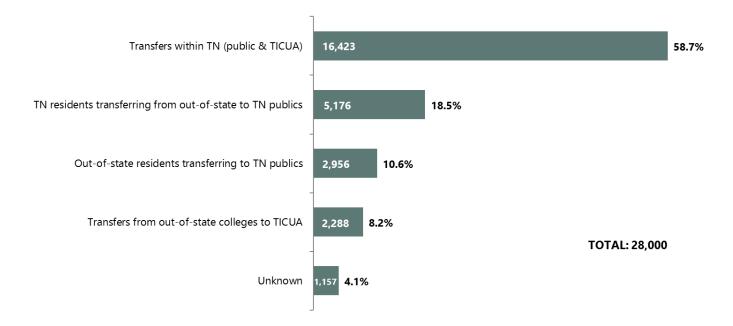


Figure 4 shows the state of origin for transfer students based on the location of their sending institution. To provide a holistic picture of out-of-state transfers, this report examines transfers into the public sector and TICUA institutions together. As the figure shows, most out-of-state transfer students come from the Southeast region. In AY 2016-17, ten states accounted for 52.7 percent of all out-of-state transfers. These states included six neighboring states: Mississippi (8.7 percent), Georgia (6.3 percent), Virginia (6.0 percent), Alabama (6.0 percent), Kentucky (5.7 percent), and North Carolina (3.9 percent). This group also included three traditionally large providers of transfer students: Florida (5.3 percent), California (3.7 percent), and Texas (3.7 percent). This year, Illinois also contributed 3.5 percent of out-of-state transfers. **Table 2** presents this information by state, semester, and sector.

Figure 4. Out-of-State Transfers into Tennessee Institutions by State of Origin, AY 2016-17

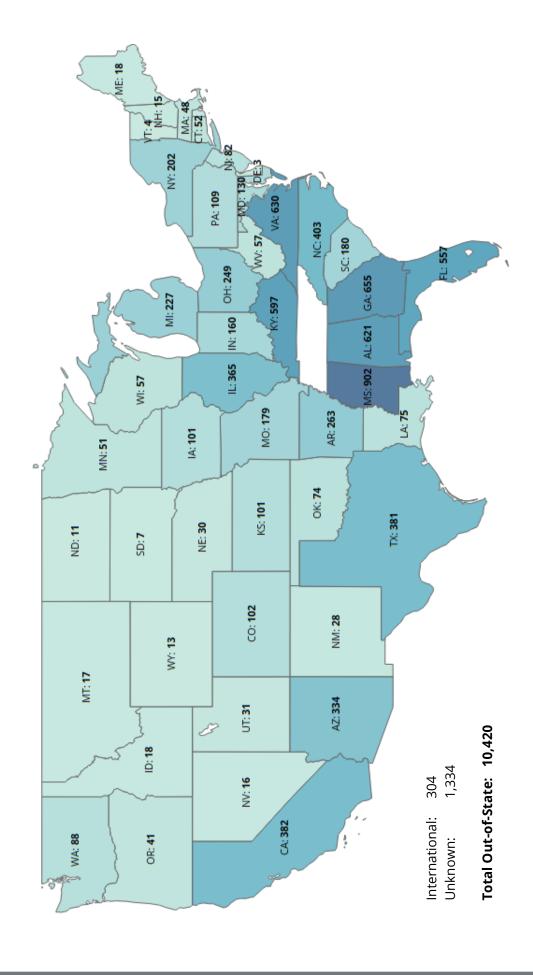


Table 2. Transfers by Sending State, Semester, and Receiving Sector, AY 2016-17*

	Summer 2	016	Fall 201	6	Spring 20)17	Total
	Public sector	TICUA	Public sector	TICUA	Public sector	TICUA	Total
Alabama	63	14	275	84	156	29	621
Alaska	2	1	5	2	2	2	14
Arizona	34	12	124	68	68	28	334
Arkansas	28	3	105	37	78	12	263
California	31	10	173	81	66	21	382
Colorado	7		47	15	29	4	102
Connecticut	3	3	20	14	6	6	52
Delaware			2	1			3
District of Columbia	5	6	22	11	13	7	64
Florida	56	18	232	94	136	21	557
Georgia	68	9	312	78	160	28	655
Hawaii	3		11	3	8	1	26
Idaho	3		10	1	3	1	18
Illinois	29	5	167	76	64	24	365
Indiana	18	10	63	26	34	9	160
Iowa	6	6	44	21	16	8	101
Kansas	8	2	43	19	25	4	101
Kentucky	45	10	294	75	145	28	597
Louisiana	13	2	33	10	14	3	75
Maine			7	2	9		18
Maryland	12	2	63	21	27	5	130
Massachusetts	2	1	15	7	14	9	48
Michigan	17	6	98	53	39	14	227
Minnesota	4	4	13	13	16	1	51
Mississippi	65	13	383	179	206	56	902
Missouri	16	3	82	38	31	9	179
Montana	2	1	8	2	4		17
Nebraska		3	12	9	5	1	30
Nevada			7	2	6	1	16
New Hampshire			12	1	1	1	15
New Jersey	5	2	38	11	20	6	82
New Mexico	2	1	9	7	8	1	28
New York	15	3	89	42	41	12	202
North Carolina	41	7	186	65	86	18	403
North Dakota	2	1	5	3			11
Ohio	25	5	106	45	49	19	249
Oklahoma	3	3	36	17	12	3	74
Oregon	4		13	6	16	2	41
Pennsylvania	11	2	50	21	19	6	109
Rhode Island	1		3	4	4		12
South Carolina	16	3	88	28	34	11	180

Table 2. Transfers by Sending State, Semester, and Receiving Sector (continued)

	Summer 2016		Fall 2016		Spring 2017		Total	
	Public sector	TICUA	Public sector	TICUA	Public sector	TICUA	TOLAT	
South Dakota	1		3		3		7	
Texas	43	11	163	54	93	17	381	
Utah	1	2	18	2	8		31	
Vermont			3	1			4	
Virginia	40	46	229	157	98	60	630	
Washington	9	2	40	16	15	6	88	
West Virginia	6	1	23	14	8	5	57	
Wisconsin	8	3	28	5	9	4	57	
Wyoming			7	2	3	1	13	
International	31		179	5	89		304	
Unknown	234		725		375		1,334	
Total	1,038	236	4,723	1,548	2,371	504	10,420	

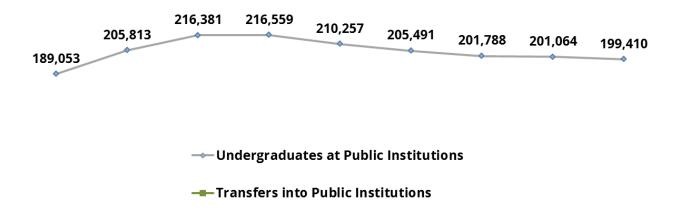
^{*}In this case, cells with five or fewer observations are not suppressed because students are not segregated by characteristic or institution. Therefore, student identities are protected.

Transfer Activity in Public Higher Education

Trends in Public Transfer Enrollment

For consistency with past reports, **Figure 5** examines public transfer trends in the fall semester. In Fall 2016, new transfer students constituted 6.9 percent of the undergraduate enrollment in Tennessee public higher education. This figure is consistent with transfer enrollment in previous years. While undergraduate enrollment has increased by 5.5 percent since Fall 2008, the Fall 2016 semester experienced a decrease in enrollment of 1,654 students relative to the previous year and 17,149 students compared to Fall 2011 (the largest fall enrollment since 2008). Since 2008, the proportion of transfer enrollment has remained generally stable, decreasing by 0.4 percentage points over eight years. In absolute figures, this change from 2008 translates to a decline of 126 transfer students in the fall semester.

Figure 5. Total Public Undergraduate and New Transfer Headcount, Fall 2008-Fall 2016





Public Transfer Student Demographics and Enrollment Status

Transfer students are very similar to native students (i.e., individuals who never transferred in their prior academic history) in terms of their demographic and academic characteristics. As shown in **Figure 6**, the only noticeable difference between these groups is age. More native students are undergraduates of traditional age, and more transfer students are adult students. In this report, adult students are defined as 25 years of age or older at the time the count was taken. The comparison of transfer and native students by gender and race does not indicate any substantial differences between these groups.

Figure 6. Demographic Characteristics of Transfer and Native Students, AY 2016-17

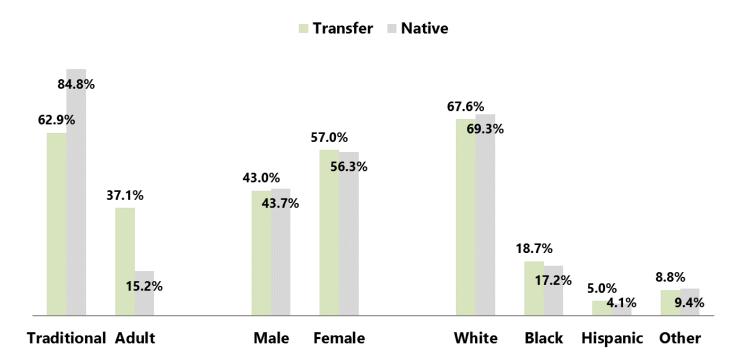


Figure 7 compares full-time and part-time enrollment of transfer and non-transfer students by semester. As defined in the **Background** section, *non-transfer students* include individuals who did not transfer in the term of interest; however, they include students who transferred in their prior academic history. In each semester, transfer and non-transfer students enrolled full-time and part-time at similar rates, indicating that transfer students were working toward a degree at the same level of intensity as non-transfer students. The largest difference between full-time and part-time enrollment was in Spring 2017 when 67.9 percent of non-transfer students—versus 60.6 percent of transfers—enrolled full-time. This drop in full-time enrollment in spring semester is likely related to the general reasons for transfer, such as inadequate academic performance at the prior institution in fall and family/ work obligations.

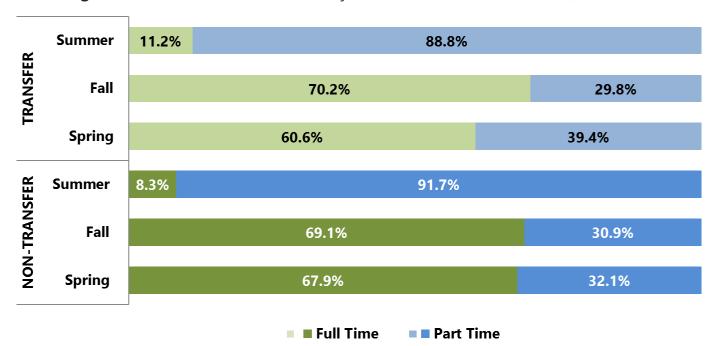


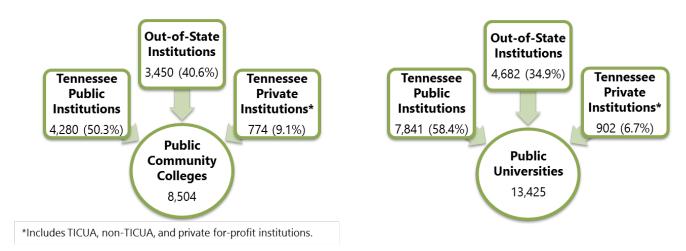
Figure 7. Transfers and Non-transfers by Enrollment Status and Semester, AY 2016-17

Public Transfer Activity

Public higher education institutions in Tennessee receive transfer students from three main sources: other public colleges and universities in the state, private non-profit institutions in Tennessee, and out-of-state institutions. Based on the definition of transfer students in the **Background** section, this section omits students migrating from TCATs and for-profit institutions. TCAT transfers are examined in **Section V** of this report.

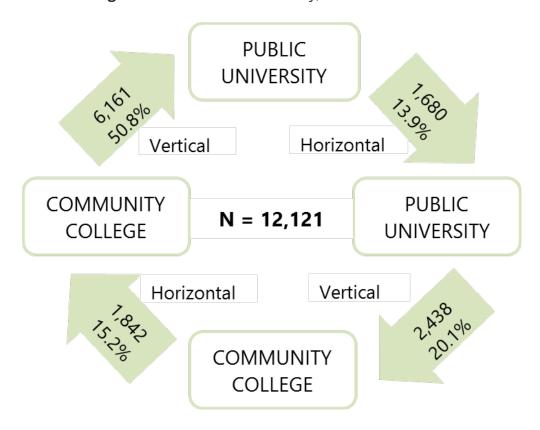
For the purpose of this analysis, transfers into the public sector have two destinations: community colleges and universities (**Figure 8**). The comparative analysis shows that the relative size of each source of transfer students for these two sectors is different. Most of the students transferring into community colleges come from other in-state public institutions (50.3 percent) and out-of-state institutions (40.6 percent); the independent sector provides only 9.1 percent of all transfers into community colleges. Relative to community colleges, public universities rely more heavily on other in-state public institutions for their transfer students (58.4 percent of transfers into universities) and slightly less heavily on out-of-state institutions (34.9 percent) and private institutions (6.7 percent).

Figure 8. Transfers into Public Institutions, AY 2016-17



Transfer activity within the public sector is multidirectional (**Figure 9**). In AY 2016-17, 55.3 percent (12,121 students) of all transfers into the public sector took place among public institutions. Most transfer activity is vertical: 50.8 percent of students moved from community colleges into public universities, and 20.1 percent transferred from universities to community colleges. Horizontal transfer activity is less prevalent but is still sizeable: 13.9 percent of students moved among public universities, and 15.2 percent transferred from one community college to another.

Figure 9. Public Transfer Activity, AY 2016-17



When restricted to the fall semester, the observed patterns of within-public-sector transfers are consistent with the data from previous reports (**Table 3**). One may conclude that transfers among Tennessee public institutions have maintained the same relative size and direction for the past several years. Even with a decline in the headcount for students transferring within the public sector over time, the transfer rates among different types of institutions remained relatively stable.

The share of transfers from universities into community colleges has seen a slight decline over time. In Fall 2015, it fell below 19 percent of all fall public transfers for the first time in six years, and it fell even lower in Fall 2016 (16.3 percent). This is likely related to the implementation of Tennessee Promise in Fall 2015. The share of university-to-community college transfers is higher for the entire academic year (20.1 percent), as shown in **Figure 9**.

Table 3. Fall Transfer Activity within Tennessee Public Sector, Fall 2010-Fall 2016

	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Vertical Transfers							
from community colleges to universities	50.3%	49.9%	48.9%	50.6%	52.1%	55.2%	55.7%
from universities to community colleges	22.2%	22.9%	24.2%	22.4%	21.9%	18.6%	16.3%
Horizontal Transfers							
among community colleges	12.4%	12.7%	12.3%	12.2%	12.2%	11.3%	14.8%
among universities	15.1%	14.4%	14.6%	14.9%	13.8%	14.9%	13.2%
Public Transfers Total	9,008	9,388	8,873	8,558	8,071	7,729	7,989

Student Transfer Activity by Public Institution

Transfer Students as a Percent of Undergraduate Enrollment

Figure 10 presents incoming transfer students as a percentage of undergraduate enrollment by institution and sector. In AY 2016-17, the total public undergraduate enrollment was 242,495 students. ¹¹ Of that total, 21,929 (9 percent) were new transfer students. Of the 114,173 students enrolled at community colleges, 7.4 percent (8,504 students) were new transfers. In the university sector, 10.5 percent of undergraduate students were new transfers (13,425 students).

Except for Tennessee Technological University, all the Locally Governed Institutions (LGIs) were at or above the average share of transfers relative to total undergraduate enrollment at public universities (10.5 percent). In contrast, all three of the University of Tennessee campuses were below the average share of transfer students at public universities. For community colleges, six of the thirteen institutions enrolled transfer students at a proportion higher than the average for the sector (7.4 percent), while seven colleges were below this sector-wide average. Austin Peay State University and East Tennessee State University had the largest proportions of new transfers: 13.4 percent and 12 percent of their

¹¹ Count is duplicated if students enrolled in more than one institution during the academic year.

undergraduate enrollment, respectively. Walters State Community College and Jackson State Community College enrolled the smallest percentages of transfer students: 4.6 percent and 4.7 percent, respectively.

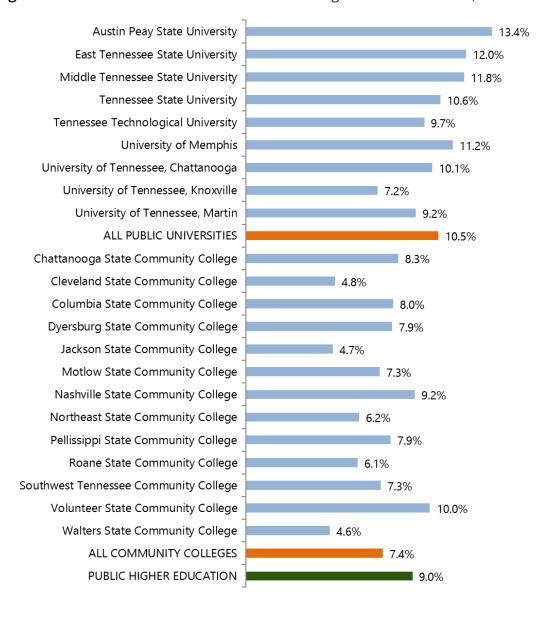


Figure 10. Transfers as a Percent of Public Undergraduate Enrollment, AY 2016-17

The share of transfer students measured as a percent of total undergraduate fall enrollment at public institutions is shown in **Table 4**. Among universities, the trends have been consistent across institutions and systems over time. The LGIs have a greater percentage of new transfers than the UT System, and public universities, on average, enroll a higher share of new transfer students than community colleges. The community college sector has seen a steady decline in the share of transfer students over the last five years, from 6.8 percent to 5.5 percent of undergraduate fall enrollment. Except for Roane State Community College and Volunteer State Community College, each of the thirteen community colleges experienced a decrease in the share of transfer students during this time.

Table 4. Transfers as a Percent of Undergraduate Enrollment, Fall 2012-Fall 2016

Institution	Fall	Fall	Fall	Fall	Fall
	2012	2013	2014	2015	2016
Austin Peay State University	9.1%	9.4%	8.9%	9.4%	9.5%
East Tennessee State University	9.7%	9.6%	9.1%	8.3%	9.3%
Middle Tennessee State University	9.1%	9.0%	8.9%	10.0%	9.5%
Tennessee State University	10.0%	9.7%	8.6%	7.6%	7.5%
Tennessee Technological University	7.5%	6.7%	7.1%	6.8%	7.8%
University of Memphis	8.8%	8.4%	8.5%	8.2%	8.2%
Locally Governed Institutions	9.0%	8.7%	8.6%	8.6%	8.7%
University of Tennessee, Chattanooga	8.2%	7.2%	7.7%	8.3%	8.0%
University of Tennessee, Knoxville	5.0%	6.0%	5.1%	5.5%	5.5%
University of Tennessee, Martin	5.6%	6.1%	6.6%	6.3%	6.6%
UT System	6.0%	6.3%	6.0%	6.4%	6.3%
All Public Universities	8.0%	7.9%	7.7%	7.8%	7.9%
Chattanooga State Community College	7.4%	6.8%	7.3%	6.3%	6.3%
Cleveland State Community College	5.1%	5.2%	5.1%	4.7%	3.8%
Columbia State Community College	9.0%	6.0%	6.9%	6.3%	5.6%
Dyersburg State Community College	5.8%	5.1%	5.9%	6.1%	4.9%
Jackson State Community College	5.1%	5.5%	4.6%	3.7%	3.7%
Motlow State Community College	7.1%	7.1%	6.8%	5.0%	4.5%
Nashville State Community College	9.1%	9.1%	8.3%	6.9%	6.4%
Northeast State Community College	6.4%	5.7%	4.7%	4.7%	4.2%
Pellissippi State Community College	7.2%	6.6%	6.1%	5.9%	6.2%
Roane State Community College	4.3%	5.3%	5.4%	4.4%	4.4%
Southwest Tennessee Comm. College	8.0%	6.3%	5.9%	5.0%	5.8%
Volunteer State Community College	6.5%	6.5%	5.8%	4.8%	8.2%
Walters State Community College	3.6%	2.8%	3.5%	2.9%	3.1%
All Community Colleges	6.8%	6.3%	6.1%	5.3%	5.5%
Public Higher Education	7.5%	7.2%	7.0%	6.7%	6.9%

Figure 11 presents transfer students as a percent of the fall undergraduate enrollment for TICUA member institutions. For TICUA, enrollment information was available only for Fall 2016. The sector-wide percentage of TICUA transfer students (6.6 percent) was slightly lower than that of transfers at public institutions (6.9 percent, **Table 4**). In contrast to public institutions, the differences among TICUA institutions were larger. Baptist College of Health Sciences enrolled the largest percentage of transfer students at 19 percent, while Martin Methodist had the lowest proportion at 0.2 percent. Six TICUA institutions had transfer enrollment of more than 10 percent, while nine institutions had transfer enrollment of less than 5 percent.



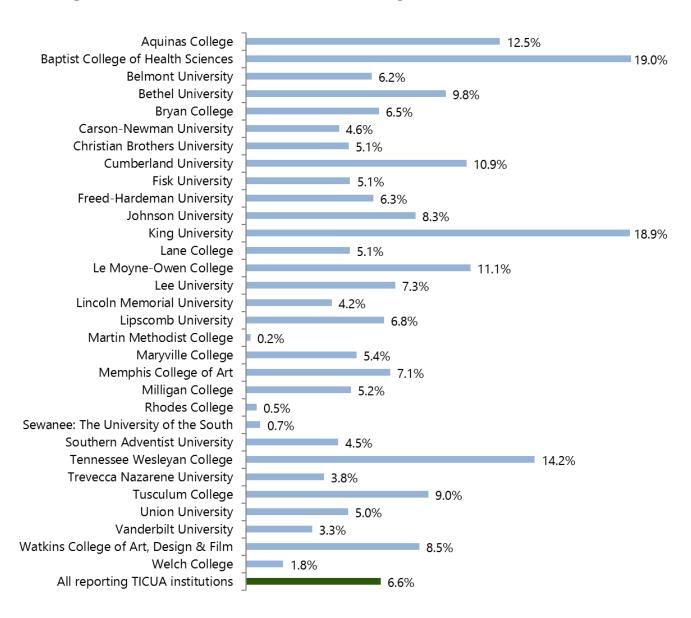


Table 5 presents a summary of transfers as a percent of undergraduate enrollment by sector and semester.

Table 5. Transfers as a Percent of Undergraduate Enrollment by Sector and Semester

Institutional Sector	Summer 2016	Fall 2016	Spring 2017	Total*
Locally Governed Institutions	4.0%	8.7%	3.8%	11.5%
UT Universities	2.2%	6.3%	2.3%	8.2%
TBR Community Colleges	4.7%	5.5%	3.5%	7.4%
Public Sector Total	3.9%	6.9%	3.4%	9.0%
TICUA Institutions**	-	6.6%	-	-
All Tennessee Transfers	-	6.8%	-	-

^{*}Excluding double counting students within the same institution in different semesters.

^{**}For TICUA institutions, enrollment information is available only for Fall 2016.

Top Sending and Receiving Public Institutions

Table 6 presents each institution's share of transfer-in and transfer-out students. Middle Tennessee State University received the largest proportion of transfers (14.2 percent) of all institutions. The other top receiving institutions were the University of Memphis (10 percent), UT Knoxville (8.9 percent), and East Tennessee State University (7.9 percent). Nashville State was the top sending institution (10.4 percent), followed by Pellissippi State (8.5 percent), Southwest Tennessee (7.1 percent), UT Chattanooga (6.7 percent), and Volunteer State (5.7 percent). **Appendix C** and **Appendix D** offer a detailed count of transfer activity among all public institutions, showing the sending and receiving partners for each institution.

Table 6. Each Institution's Share of Total Public Transfer Activity, AY 2016-17

Institution	Sent*	Received*
Austin Peay State University	2.8%	3.7%
East Tennessee State University	3.7%	7.9%
Middle Tennessee State University	5.2%	14.2%
Tennessee State University	2.5%	3.8%
Tennessee Technological University	3.3%	6.7%
University of Memphis	3.3%	10.0%
Locally Governed Institutions	20.6%	46.3%
University of Tennessee, Chattanooga	6.7%	6.3%
University of Tennessee, Knoxville	4.5%	8.9%
University of Tennessee, Martin	2.1%	3.2%
University of Tennessee System	13.3%	18.4%
Chattanooga State Community College	5.0%	3.4%
Cleveland State Community College	2.3%	0.8%
Columbia State Community College	4.1%	2.3%
Dyersburg State Community College	2.1%	1.5%
Jackson State Community College	3.3%	1.3%
Motlow State Community College	5.0%	2.4%
Nashville State Community College	10.4%	3.7%
Northeast State Community College	3.9%	1.9%
Pellissippi State Community College	8.5%	5.0%
Roane State Community College	4.3%	2.2%
Southwest Tennessee Community College	7.1%	3.5%
Volunteer State Community College	5.7%	6.1%
Walters State Community College	4.3%	1.2%
Community Colleges	66.0%	35.3%
Public Higher Education	100%	100%

^{*}Percent of the total transfers by category (Sent or Received)

Academic Characteristics of Transfer Students

Academic Major at Transfer

A few academic program choices were dominant among new transfer students in AY 2016-17. Three broad areas were chosen by over half (54.1 percent) of all transfers into the public sector: (1) Liberal Arts and Sciences; (2) Health Professions and Related Services; and (3) Business Management and Administrative Services. Additionally, 4 percent transferred with an undeclared major, while the remaining 41.9 percent of transfer students selected from 24 other fields of study (**Figure 12**).





^{*}To comply with FERPA requirements, majors with 5 students or fewer are suppressed.

Credit Hours and Degrees at Transfer

Students transfer in the public sector at various points in their academic careers. During AY 2016-17, 15 percent of public students transferred before they earned more than 12 credit hours and 53.3 percent before they earned over 48 credit hours (**Figure 13**).

It is nearly twice as common for students with more than 60 credit hours to transfer without a degree (associate or bachelor's degree) than with a degree: 4,704 transfer students (22.5 percent of students with reported credit hours) had accumulated more than 60 hours without earning a degree. In contrast, only 2,415 students (11.6 percent of students with reported credit hours) transferred with more than 60 hours after obtaining a degree. Only 13.3 percent of all public transfers (2,769 students) arrived at their receiving institution with an associate degree.

Another small group of transfers (496 students) already earned a degree at the baccalaureate level or higher, accounting for 2.4 percent of the AY 2016-17 public transfers. The total number of degree holders (3,265 students) exceeds the number of undergraduates who transfer with more than 60 hours and with a degree (2,415 students). This happens because institutions do not always report all past credit hours and because prior awards include degrees earned over the entire academic career. As a result, 850 students with previously earned degrees are included in various credit categories below 60 credit hours.

Appendix E presents the headcount and percentage of new transfer students by credit hours and degrees brought to receiving institutions. **Appendix F** displays a headcount and percentage of transfer students by credit hours earned at their sending institutions.

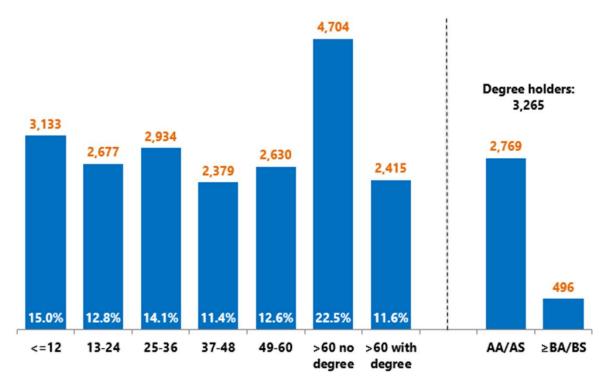
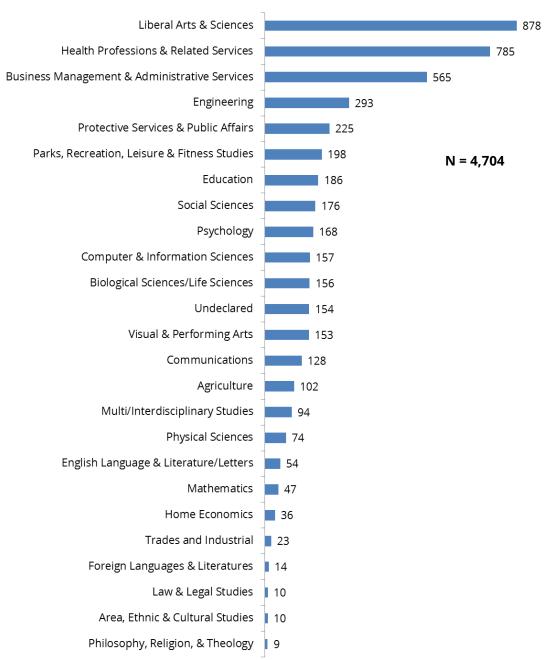


Figure 13. New Transfer Students by Credits and Degrees Transferred In, AY 2016-17

*Graph and percentage exclude 1,057 students with missing data on credits.

Figure 14 presents academic majors selected by students who transferred with more than 60 credit hours but without an associate degree. A comparison of Figures 12 and 14 shows that these students predominantly chose the same broad academic fields as the majority of all transfer students. Liberal Arts and Sciences is the most popular field among all transfer students and among students with many pretransfer credit hours but no prior degree. Health Professions and Related Services occupies the second position for both groups of transfer students, and Business Management and Administrative Services ranks third for both groups.

Figure 14. Academic Major at Transfer, Students with >60 Credits and No Degree, AY 2016-17*



V. Student Mobility from Tennessee Colleges of Applied Technology

This section examines mobility patterns as well as demographic and academic characteristics of students migrating from TCATs. Given the recent emphasis on improving articulation between TCATs and community colleges, student migration among TCATs and Tennessee public colleges and universities warrants special examination.

Students analyzed in this section do not meet the traditional definition of transfer students specified in the **Background**. Most of them originally enroll at a public institution, subsequently take courses at a TCAT, and then return to their originating institution. Thus, they are not considered first-time students when they return to their originating institution. They are classified as *returning students* (individuals who were enrolled at the institution in the preceding semester) or *readmitted students* (individuals returning to that institution after a gap in their attendance). Because of program stipulations and the definition of "contact hours" at TCATs, many former TCAT enrollees do not transfer credits from a TCAT to a public institution, unless they do so as a 30-hour block toward the attainment of an Associate of Applied Science degree.

To differentiate TCAT students from the general transfer population, this report refers to them as **TCAT transfers**. A TCAT transfer is a student who was enrolled at a Tennessee public institution in AY 2016-17 and had taken classes at a TCAT in the previous semester of enrollment; for fall public enrollees, TCAT enrollment may have taken place either in summer or in spring. This definition includes returning and readmitted students as well as students who had been simultaneously enrolled at a TCAT and some other institution. Finally, this definition does not consider whether any credit hours were transferred from the TCAT to the receiving institution.

Institutional Migration Patterns of TCAT Transfers

Since this section examines only student mobility within the public sector, transfer patterns are limited to one type of sending institution—TCATs—and two possible types of receiving institution—community colleges and public universities.

Table 7 presents the institutional migration patterns of TCAT transfers, by sending TCAT and receiving sector. In AY 2016-17, 1,072 students migrated from TCATs into the state's public colleges and universities. Community colleges received 851 students from all 27 sending TCATs, while public universities received 221 students from 23 TCATs.

Nine TCATs (Livingston, Jackson, Knoxville, Pulaski, Chattanooga, Nashville, Murfreesboro, Ripley, and Hartsville) each sent over 40 students to the public sector, accounting for 69.1 percent of all TCAT transfers. In contrast, six TCATs (Jacksboro, Covington, McKenzie, Whiteville, Paris, and Crump) sent fewer than 15 students each for a total of 4.3 percent of all TCAT transfers. The average number of transfers

per TCAT is 39.7, ranging from 1 to 130 students. Because of data suppression to ensure student privacy, not all numbers are directly retrievable from **Table 7**.

Table 7. Outmigration of TCAT Transfers by Sending Institution, AY 2016-17

Sending Institution	Community Colleges	Public Universities
TCAT Athens	28	0
TCAT Chattanooga	61	9
TCAT Covington	*	0
TCAT Crossville	23	7
TCAT Crump	10	*
TCAT Dickson	11	10
TCAT Elizabethton	18	*
TCAT Harriman	28	0
TCAT Hartsville	44	*
TCAT Hohenwald	20	*
TCAT Jacksboro	*	0
TCAT Jackson	92	18
TCAT Knoxville	85	17
TCAT Livingston	91	39
TCAT McKenzie	*	*
TCAT McMinnville	12	7
TCAT Memphis	18	*
TCAT Morristown	23	*
TCAT Murfreesboro	38	20
TCAT Nashville	52	18
TCAT Newbern	13	*
TCAT Oneida	28	6
TCAT Paris	7	6
TCAT Pulaski	80	19
TCAT Ripley	40	16
TCAT Shelbyville	17	*
TCAT Whiteville	7	*
Unsuppressed Total: 1,072 students	851	221

^{*}To comply with FERPA requirements, cells containing 5 observations or fewer are suppressed. Data suppression makes it impossible to directly retrieve data described in the narrative from this table.

Table 8 shows the receiving public institutions that accepted TCAT transfers during AY 2016-17. Tennessee Technological University received 61 TCAT transfer students, the most among public universities. UT Martin followed with 38 TCAT transfers, and Middle Tennessee State University received 37 TCAT transfers. At the other end of the spectrum, East Tennessee State University accepted fewer than 6 TCAT transfers. The average number of TCAT transfers for public universities is 25.

For community colleges, Volunteer State received the highest number of TCAT transfers (126 students), and Columbia State and Jackson State each received 113 TCAT transfers. Most TCAT transfers into Volunteer State (87.3 percent) came from TCAT Livingston (68 students) and TCAT Hartsville (42 students). Columbia State drew 75 students (66.4 percent) from TCAT Pulaski, and Jackson State drew 84 transfers (74.3 percent) from TCAT Jackson. In contrast, Nashville State received 18 TCAT transfers. The average for community colleges was 66 TCAT transfers per receiving institution.

Table 8. Outmigration of TCAT Transfers by Receiving Institution, AY 2016-17

Receiving Institution	TCAT Transfers
Austin Peay State University	20
East Tennessee State University	*
Middle Tennessee State University	37
Tennessee State University	10
Tennessee Technological University	61
University of Memphis	15
The University of Tennessee, Chattanooga	15
The University of Tennessee, Knoxville	22
The University of Tennessee, Martin	38
Chattanooga State Community College	70
Cleveland State Community College	28
Columbia State Community College	113
Dyersburg State Community College	50
Jackson State Community College	113
Motlow State Community College	67
Nashville State Community College	18
Northeast State Community College	49
Pellissippi State Community College	69
Roane State Community College	99
Southwest Tennessee Community College	24
Volunteer State Community College	126
Walters State Community College	25

Demographic and Academic Characteristics of TCAT Transfers

This section compares TCAT transfers to the group of traditional public transfer students; that is, students who satisfy the definition of a transfer student in the **Background** section. **Figure 15** shows that, on average, TCAT transfers differ from traditional transfer students in several respects. The greatest difference exists in the age composition: There are 17.5 percentage points more adult students among regular public transfer students (37.1 percent) than among students transferring from TCATs (19.6 percent). Regarding the racial/ethnic composition, there are more white students (78.3 percent) among TCAT transfers than among traditional transfer students (67.6 percent).

Figure 15. Demographic Characteristics of TCAT and Traditional Transfers, AY 2016-17

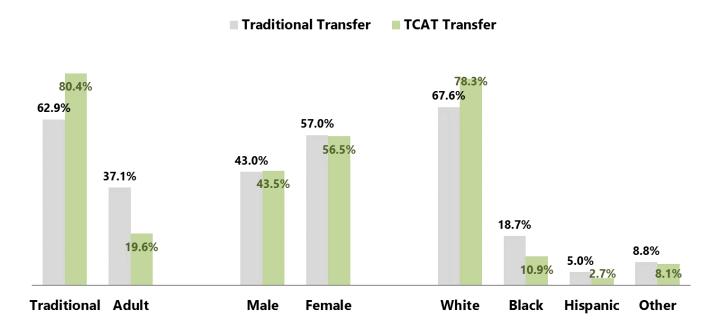


Table 9 clearly shows why TCAT transfers do not fall under the traditional definition of transfer students and, as a rule, are not coded as such by institutions. During AY 2016-17, 309 students (28.8 percent) moving from TCATs into Tennessee public institutions were either *returning students* (individuals who had been already registered at that institution during the preceding term) or *readmitted students* (individuals who had previously attended that institution but had a gap in their attendance). 246 TCAT transfers were pre-college students (high school students taking college courses in advance of high school graduation); those were high school students using the dual enrollment grant to attend TCATs. Out of 517 students who enrolled at the institution for the first time, 377 were first-time college students, and only 100 former TCAT students (9.3 percent) were coded as transfer students by receiving institutions.

Table 9. Student Registration Types of TCAT Transfers, AY 2016-17

Registration Type	First-Time Student at Institution	Pre-College Student	Readmitted Student	Returning Student	Total
First-Time College Student	377				377
Transfer Student	100		1		101
Transient Student	6			1	7
All Others	34	246	151	156	587
Total	517	246	152	157	1,072

Approximately 40.8 percent of TCAT transfers in AY 2016-17 had some prior college experience. ¹² The majority of students migrating from TCATs attended a Tennessee public institution before enrolling at a

 $^{^{12}}$ Estimated from the available data but not presented in tables.

TCAT. Specifically, 361 such students (33.7%) had been enrolled in a Tennessee community college and 76 students (7.1%) had attended a Tennessee public university prior to enrolling at a TCAT.

Regarding academic majors, TCAT transfers predominantly chose the following fields at their TCATs, as shown in **Table 10**: Health Professions and Related Services (434 students or 40.5 percent), Trades and Industrial (340 students or 31.7 percent), and Business Management and Administrative Services (127 students or 11.8 percent). At the new institution, 60.5 percent of all TCAT transfers opted for four major academic fields: Liberal Arts and Sciences (319 students), Health Professions and Related Services (219 students), Engineering (74 students), and Business Management and Administrative Services (36 students). Out of 1,072 TCAT transfers, 866 students (80.8 percent) changed their broad major field after transferring into a public institution from a TCAT.

Table 10. TCAT Transfers by Major and Post-transfer Major Change, AY 2016-17

TCATAAcian	TCA	T Transfers	Changed Major After Transfer			
TCAT Major	Students	Percent of Total	Students	Percent of Total		
Health Professions and Related Services	434	40.5%	262	24.4%		
Trades and Industrial	340	31.7%	333	31.1%		
Business, Management, and Administrative Services	127	11.8%	120	11.2%		
Engineering	61	5.7%	45	4.2%		
Personal and Miscellaneous Services	47	4.4%	46	4.3%		
Personal Improvement and Leisure Programs	17	1.6%	17	1.6%		
Home Economics	10	0.9%	8	0.7%		
Computer and Information Sciences	4	0.4%	4	0.4%		
Visual and Performing Arts	3	0.3%	2	0.2%		
Agriculture	1	0.1%	1	0.1%		
Unknown	28	2.6%	28	2.6%		
Did not change major			206	19.2%		

 $^{^{13}}$ Estimated from the available data but not presented in tables.

VI. Transfer History of 2015-16 Bachelor's Degree Completers

In addition to analyzing student transfer activity in AY 2016-17, this report also examines past transfer history of 2015-16 bachelor's degree completers at Tennessee public universities. The choice of AY 2015-16 is determined by data availability; the graduation data for Spring 2017 will not be available until after the legislative submission date for this report.

The main statistics of interest include the percent of bachelor's degree graduates who ever changed institutions (from outside or within the Tennessee public sector) and the percent of bachelor's degree graduates who ever attended a community college. In AY 2015-16:

- Tennessee public universities awarded 21,714 bachelor's degrees to 21,505 students.
- 9,660 bachelor's graduates (44.9 percent) changed institutions at least once in their prior academic history.
- 7,291 bachelor's graduates (33.9 percent) previously attended a two-year college (including Tennessee, out-of-state, and private colleges).
- 6,312 baccalaureate graduates (29.4 percent) previously attended a Tennessee community college.

¹⁴ The *Tennessee Higher Education Fact Book* reports the number of degrees awarded and not the number of graduates. For AY 2015-16, the number of bachelor's degrees awarded to graduates was reported to be 21,714.

VII. Conclusion

This examination of student transfer activity in AY 2016-17 has identified several implications for articulation and transfer policy implementation.

- 1. Although Tennessee's student population is highly mobile (44.9 percent of bachelor's degree completers transfer at least once in their academic career), new transfer students' share of undergraduate enrollment has remained stable over time.
- 2. A considerable number of "out-of-state" students are actually returning Tennessee residents. Although the exact reasons for their decision to transfer back to their home state remains speculative, Tennessee should continue the current practice of offering lottery scholarship opportunities to its returning students and strive to facilitate the efficient transfer of credits for these students.
- 3. Interestingly, many students transfer from universities to community colleges. During the entire academic year, this transfer direction accounted for 20.1 percent of all transfers among Tennessee public institutions. This trend could mean that some of these students did not find a proper fit at universities. This finding signifies a number of issues ranging from decreased probability of graduation for such students to less efficient use of state and institutional resources. At the same time, it offers an opportunity for creating policies that better direct students toward institutions in which they can succeed.
- 4. A consistent finding from past versions of the Articulation and Transfer Report is that many transfer students arrive at their destination institution with a large number of credits; however, the majority of them do so without having earned an associate degree. Prior studies have shown that transfer students take longer to graduate than native students. These findings confirm the uniqueness of transfer students as a group that requires targeted responses at the state and institutional level. Such policies should aim to optimize time and credits to degree, both prior to and after transferring.

Tennessee is making great strides in developing innovative policy solutions to support the Drive to 55 and the Complete College Tennessee Act of 2010. However, a number of potential impediments may dampen the impact of new policies. One of the biggest issues of the transfer policy is low degree efficiency; on average, transfer students take longer to graduate and accumulate more extra credits by graduation than native (non-transfer) students. In this regard, Tennessee should continue its efforts to develop standards for transferring credit hours for programs and degrees that are not included in the current Tennessee Transfer Pathways and for transferring credits from out-of-state institutions. Also, high school students need better guidance on their college plans, which may require special training of high school counselors. Based on students' personality type, career plans, academic performance, and

aptitude, this training should focus on how to enable students to find institutions in which they can thrive academically and socially.

Due to Tennessee Promise implementation in Fall 2015, it is expected that the number and share of students transferring from community colleges to universities will change. Future iterations of the Articulation and Transfer Report will examine this type of transfer behavior related to Tennessee Promise. Additionally, it is expected that the implementation of the FOCUS Act of 2016 will result in changes to the number and share of transfer students at the institutional level, specifically at the LGIs. Future versions of this report will include longitudinal analyses of transfer patterns at public institutions.

Appendix A. Transfers by Sector of Origin and as a Percent of Undergraduate Enrollment, Public Institutions, AY 2016-17

	Transfe	rs by Sector of O	rigin	Transfer	Transfers as	Total
Receiving Institution	Tennessee Public	Tennessee Independent	Out-of- State	Student Count*	Percent of Undergrad. Enrollment	Undergad. Enrollment**
Austin Peay State University	454	80	986	1,520	13.4%	11,385
East Tennessee State University	953	81	490	1,524	12.0%	12,746
Middle Tennessee State University	1,717	197	840	2,754	11.8%	23,266
Tennessee State University	458	59	315	832	10.6%	7,877
Tennessee Technological University	809	51	157	1,017	9.7%	10,499
University of Memphis	1,217	160	878	2,255	11.2%	20,081
Locally Governed Institutions	5,608	628	3,666	9,902	11.5%	85,854
University of Tennessee, Chattanooga	767	79	294	1,140	10.1%	11,262
University of Tennessee, Knoxville	1,083	108	527	1,718	7.1%	24,326
University of Tennessee, Martin	383	87	195	665	9.2%	7,213
UT System	2,233	274	1,016	3,523	8.2%	42,801
Public University Total	7,841	902	4,682	13,425	10.4%	128,655
Chattanooga State	418	76	440	934	8.3%	11,286
Cleveland State	97	29	81	207	4.8%	4,275
Columbia State	273	61	269	603	8.0%	7,543
Dyersburg State	186	19	77	282	7.9%	3,553
Jackson State	152	40	114	306	4.7%	6,469
Motlow State	290	48	185	523	7.3%	7,205
Nashville State	453	71	677	1,201	9.2%	13,110
Northeast State	231	36	203	470	6.2%	7,640
Pellissippi State	610	110	408	1,128	7.9%	14,364
Roane State	265	47	133	445	6.1%	7,336
Southwest Tennessee	427	95	393	915	7.3%	12,475
Volunteer State	737	85	331	1,153	10.0%	11,542
Walters State	141	57	139	337	4.6%	7,375
Community College Total	4,280	774	3,450	8,504	7.4%	114,173
Public Higher Education Total	12,121	1,676	8,132	21,929	9.0%	242,828

^{*}Transfer students include individuals meeting the definition on page 8.

^{**}Excluding double counting students within the same institution in different semesters.

Appendix B. Transfers by Sector of Origin, TICUA Member Institutions, AY 2016-17

		Transfers	by Sector	of Origin*		Transfer
Receiving Institution	Tennessee Public	TICUA	Non- TICUA	Out-of- state	Unknown	Student Count**
Aquinas College	38	*		30	8	76
Baptist College of Health Sciences	150	14		118	22	304
Belmont University	71	21		286	121	499
Bethel University	365	45	9	202	202	823
Bryan College	52	12	*	50	6	120
Carson-Newman College	27			28	74	129
Christian Brothers University	75	11	*	59	11	156
Cumberland University	168	16		80	6	270
Fisk University	*		*	23	14	37
Freed-Hardeman University	52	*		47	24	123
Johnson University	16	*	*	55	29	100
King College	385	30	*	311	58	784
Lane College	35	*	*	48	24	107
Le Moyne-Owen College	51	14	*	41	7	113
Lee University	131	13	*	273	87	504
Lincoln Memorial University	82	8	*	45	43	178
Lipscomb University	77	20		108	48	253
Martin Methodist College	23	*		11	11	45
Maryville College	47	6		33	6	92
Memphis College of Art	8	17		12	*	37
Milligan College	19	*		15	38	72
Rhodes College				*	6	6
Sewanee: The University of the South	*			16	*	16
Southern Adventist University	35	*		165	27	227
Tennessee Wesleyan College	99	10		57	18	184
Trevecca Nazarene University	35	7		34	*	76
Tusculum College	157	9	*	36	10	212
Union University	114	7		79	12	212
Vanderbilt University***					234	234
Watkins College of Art, Design & Film	6	*		16	*	22
Welch College	*			*	*	0
Suppressed Total*	2,318	260	9	2,278	1,146	6,011
Unsuppressed Total	2,324	276	26	2,288	1,157	6,071

^{*}To comply with FERPA requirements, cells containing 5 observations or fewer are suppressed. Suppressed Total does not include the values of the suppressed cells.

^{**}Includes only values of the unsuppressed cells.

^{***}Vanderbilt University does not report sending institution of transfer students.

Appendix C. Transfers by Sending Institution and Receiving University, AY 2016-17

Caradia a la atituta a	Total			ı	Receivi	ng Inst	itution*			
Sending Institution	Sent**	APSU	ETSU	MTSU	TSU	TTU	UM	UTC	UTK	UTM
Austin Peay State University	146	-	*	40	28	16	20	15	12	15
East Tennessee State University	117	8	-	27	*	13	*	23	46	*
Middle Tennessee State University	240	34	12	-	39	25	53	27	39	11
Tennessee State University	165	16	*	72	-	8	41	18	*	10
Tennessee Technological University	136	12	12	57	6	-	9	17	23	*
University of Memphis	121	8	*	31	10	-	-	12	25	35
University of Tennessee, Chattanooga	244	16	11	75	6	15	56	-	49	16
University of Tennessee, Knoxville	372	17	50	91	8	36	87	57	-	26
University of Tennessee, Martin	101	13	*	16	14	*	51	7	*	-
Chattanooga State	499	8	42	54	11	32	*	333	19	*
Cleveland State	153	*	23	11	-	15	*	77	27	*
Columbia State	396	23	9	231	22	17	*	42	22	30
Dyersburg State	188	10	-	13	-	*	69	-	6	90
Jackson State	293	19	*	31	7	*	135	*	9	92
Motlow State	510	15	7	327	13	107	*	28	13	*
Nashville State	731	127	*	265	167	109	12	17	19	15
Northeast State	420	*	379	8	-	12	*	*	21	-
Pellissippi State	824	28	78	69	*	80	9	36	518	6
Roane State	354	*	58	22	*	184	*	15	75	*
Southwest Tennessee	776	13	*	51	22	*	658	8	11	13
Volunteer State	558	72	11	209	90	113	*	24	39	*
Walters State	388	6	239	17	*	15	*	6	105	*
Suppressed Total**	7,732	445	931	1,717	443	797	1,200	762	1,078	359
Unsuppressed Total	7,841	454	953	1,717	458	809	1,217	767	1,083	383

^{*}To comply with FERPA requirements, cells containing 5 observations or fewer are suppressed.

^{**}Total Sent and Suppressed Total do not include the values of the suppressed cells.

Appendix D. Transfers by Sending Institution and Receiving Community College, AY 2016-17

Sending	Total						Receivi	ng Institut	ion*					
Institution	Sent**	CHSCC	CLSCC	COSCC	DSCC	JSCC	MSCC	NASCC	NESCC	PSCC	RSCC	STCC	VSCC	WSCC
APSU	163	*	*	11	6	9	*	98	*	*	*	12	27	-
ETSU	341	17	*	7	-	*	*	*	195	57	15	*	7	43
MTSU	432	22	*	67	10	7	136	75	*	24	8	25	58	*
TSU	141	6	-	*	*	6	*	65	*	8	*	39	17	*
TTU	288	20	7	15	*	*	17	91	6	21	32	*	79	*
UM	234	*	-	*	31	14	*	6	-	*	*	183	*	-
UTC	385	176	15	32	-	6	21	45	8	33	7	13	29	*
UTK	479	17	6	25	9	*	10	19	17	293	36	11	14	22
UTM	175	*	*	15	56	62	*	17	*	*	*	18	7	*
CHSCC	120	-	65	*	*	*	13	8	*	14	13	*	7	*
CLSCC	107	71	-	-	*	-	*	*	*	22	14	-	*	*
COSCC	85	12	*	-	*	*	14	31	*	6	-	*	22	*
DSCC	46	*	-	*	-	25	*	*	-	*	-	21	-	*
JSCC	73	*	-	*	50	-	*	8	-	6	*	9	*	*
MSCC	116	25	*	34	-	*	-	31	-	*	*	*	26	-
NASCC	188	13	*	40	*	*	24	-	*	14	*	*	97	*
NESCC	14	*	-	*	-	-	-	*	-	*	*	*	-	14
PSCC	192	12	8	*	*	*	*	8	10	-	131	6	*	17
RSCC	124	7	*	*	*	-	*	7	6	97	-	*	*	7
STCC	57	*	*	*	39	8	*	10	*	*	*	-	*	*
VSCC	153	20	*	18	*	*	18	80	*	10	7	*	-	*
WSCC	110	*	*	*	-	*	*	*	30	61	19	-	*	-
Supp. Total**	4,023	418	101	264	201	137	253	599	272	666	282	337	390	103
Unsupp. Total	4,307	443	131	291	215	156	279	613	289	694	298	356	416	126

^{*}To comply with FERPA requirements, cells containing 5 observations or fewer are suppressed.

^{**}Total Sent and Supp. Total do not include the values of the suppressed cells.

Appendix E. Transfers by Credits and Degrees Brought to Receiving Institutions, AY 2016-17

Receiving			Credit	t Hours a	at Trans	fer		Total	Degree a	t Transfer
Institution	<= 12	13-24	25-36	37-48	49-60	> 60 no degree	> 60 with degree	Transfers* *	Associate	Bachelor's or higher
APSU	90	156	159	178	142	533	115	1,373	127	23
ETSU	72	94	121	106	186	431	389	1,399	432	16
MTSU	134	179	321	286	437	789	473	2,619	509	32
TSU	99	85	91	83	77	241	105	781	130	21
TTU	38	59	97	137	230	179	258	998	344	15
UM	113	190	320	281	333	678	217	2,132	284	52
UTC	43	96	126	138	197	271	239	1,110	296	-
UTK	55	132	301	176	327	356	319	1,666	425	27
UTM	58	74	72	81	105	168	91	649	108	*
Unsuppressed University Total	702	1,065	1,608	1,466	2,034	3,646	2,206	12,727	2,655	189
CHSCC	188	184	138	118	83	149	22	882	8	36
CLSCC	52	40	35	28	15	33	*	203	*	*
COSCC	162	128	103	59	41	74	12	579	7	16
DSCC	55	47	46	34	33	37	6	258	10	9
JSCC	119	61	46	28	11	22	11	298	*	16
MSCC	155	83	80	57	40	61	17	493	7	29
NASCC	442	208	159	109	73	136	27	1,154	8	42
NESCC	124	97	75	55	26	66	11	454	*	10
PSCC	363	216	144	109	74	143	39	1,088	26	37
RSCC	124	64	69	47	23	62	23	412	20	25
STCC	299	195	139	94	60	93	15	895	8	36
VSCC	284	237	230	129	82	128	15	1,105	8	38
WSCC	64	52	62	46	35	54	8	321	*	11
Unsuppressed										
Community College Total	2,431	1,612	1,326	913	596	1,058	209	8,145	114	307
Unsuppressed Grand Total	3,133	2,677	2,934	2,379	2,630	4,704	2,415	20,872	2,769	496

^{*}To comply with FERPA requirements, cells containing 5 observations or fewer are suppressed.

^{**}Table excludes 1,057 students with missing data on credits.

Appendix E. Transfers by Credits and Degrees Brought to Receiving Institutions, AY 2016-17 (continued)

Receiving			Credit	: Hours at	Transfer			Total	Degree a	t Transfer
Institution	<= 12	13-24	25-36	37-48	49-60	> 60 no degree	> 60 with degree	Transfers*	Associate	Bachelor's or higher
APSU	6.6%	11.4%	11.6%	13.0%	10.3%	38.8%	8.4%	1,373	9.2%	1.7%
ETSU	5.1%	6.7%	8.6%	7.6%	13.3%	30.8%	27.8%	1,399	30.9%	1.1%
MTSU	5.1%	6.8%	12.3%	10.9%	16.7%	30.1%	18.1%	2,619	19.4%	1.2%
TSU	12.7%	10.9%	11.7%	10.6%	9.9%	30.9%	13.4%	781	16.6%	2.7%
TTU	3.8%	5.9%	9.7%	13.7%	23.0%	17.9%	25.9%	998	34.5%	1.5%
UM	5.3%	8.9%	15.0%	13.2%	15.6%	31.8%	10.2%	2,132	13.3%	2.4%
UTC	3.9%	8.6%	11.4%	12.4%	17.7%	24.4%	21.5%	1,110	26.7%	0.0%
UTK	3.3%	7.9%	18.1%	10.6%	19.6%	21.4%	19.1%	1,666	25.5%	1.6%
UTM	8.9%	11.4%	11.1%	12.5%	16.2%	25.9%	14.0%	649	16.6%	0.5%
University Total	5.5%	8.4%	12.6%	11.5%	16.0%	28.6%	17.3%	12,727	20.9%	1.5%
CHSCC	21.3%	20.9%	15.6%	13.4%	9.4%	16.9%	2.5%	882	0.9%	4.1%
CLSCC	25.2%	19.4%	17.0%	13.6%	7.3%	16.0%	1.5%	206	0.5%	1.0%
COSCC	28.0%	22.1%	17.8%	10.2%	7.1%	12.8%	2.1%	579	1.2%	2.8%
DSCC	21.3%	18.2%	17.8%	13.2%	12.8%	14.3%	2.3%	258	3.9%	3.5%
JSCC	39.9%	20.5%	15.4%	9.4%	3.7%	7.4%	3.7%	298	1.0%	5.4%
MSCC	31.4%	16.8%	16.2%	11.6%	8.1%	12.4%	3.4%	493	1.4%	5.9%
NASCC	38.3%	18.0%	13.8%	9.4%	6.3%	11.8%	2.3%	1,154	0.7%	3.6%
NESCC	27.3%	21.4%	16.5%	12.1%	5.7%	14.5%	2.4%	454	0.7%	2.2%
PSCC	33.4%	19.9%	13.2%	10.0%	6.8%	13.1%	3.6%	1,088	2.4%	3.4%
RSCC	30.1%	15.5%	16.7%	11.4%	5.6%	15.0%	5.6%	412	4.9%	6.1%
STCC	33.4%	21.8%	15.5%	10.5%	6.7%	10.4%	1.7%	895	0.9%	4.0%
VSCC	25.7%	21.4%	20.8%	11.7%	7.4%	11.6%	1.4%	1,105	0.7%	3.4%
WSCC	19.9%	16.2%	19.3%	14.3%	10.9%	16.8%	2.5%	321	1.6%	3.4%
Community College Total	29.8%	19.8%	16.3%	11.2%	7.3%	13.0%	2.6%	8,145	1.4%	3.8%
Grand Total	15.0%	12.8%	14.1%	11.4%	12.6%	22.5%	11.6%	20,872	13.3%	2.4%

^{*}Table excludes 1,057 students with missing data on credits.

Appendix F. Transfers by Credit Hours Earned at Sending Institutions, AY 2016-17

Caradia a la attanti a		Cre	dit Hour	s at Trans	fer*		Total Public
Sending Institution	<12	12-23	24-35	36-47	48-59	>= 60	Transfers**
Austin Peay State University	42	59	59	43	27	89	319
East Tennessee State University	68	72	83	48	39	119	429
Middle Tennessee State University	72	105	101	71	61	198	608
Tennessee State University	28	50	44	38	32	79	271
Tennessee Technological University	51	46	59	53	48	123	380
University of Memphis	35	65	62	64	56	95	377
University of Tennessee, Chattanooga	75	115	100	55	54	135	534
University of Tennessee, Knoxville	113	106	129	100	73	261	782
University of Tennessee, Martin	27	35	43	20	25	93	243
University Total	511	653	680	492	415	1,192	3,943
Chattanooga State	41	44	46	53	39	378	601
Cleveland State	33	30	34	30	30	116	273
Columbia State	38	42	53	35	61	251	480
Dyersburg State	20	30	37	29	28	106	250
Jackson State	28	40	39	55	45	179	386
Motlow State	27	45	69	49	60	354	604
Nashville State	97	163	241	150	147	415	1,213
Northeast State	34	20	30	29	52	299	464
Pellissippi State	57	72	139	78	102	544	992
Roane State	51	46	42	36	47	289	511
Southwest Tennessee	48	81	111	100	116	381	837
Volunteer State	41	54	74	83	97	326	675
Walters State	47	48	46	33	48	291	513
Community College Total	562	715	961	760	872	3,929	7,799
Closed public institutions	2	4	2	4	4	4	20
Grand Total	1,075	1,372	1,643	1,256	1,291	5,125	11,762

^{*}Cumulative credits at a prior institution could have been earned at any time and are not necessarily transferable toward a degree.

^{**}Table excludes 34 students with missing data on credits.

Appendix F. Transfers by Credit Hours Earned at Sending Institutions, AY 2016-17 (continued)

Con die e le stitution		Cre	dit Hours	at Trans	fer*		Total Public
Sending Institution	<12	12-23	24-35	36-47	48-59	>= 60	Transfers**
Austin Peay State University	13.2%	18.5%	18.5%	13.5%	8.5%	27.9%	319
East Tennessee State University	15.9%	16.8%	19.3%	11.2%	9.1%	27.7%	429
Middle Tennessee State University	11.8%	17.3%	16.6%	11.7%	10.0%	32.6%	608
Tennessee State University	10.3%	18.5%	16.2%	14.0%	11.8%	29.2%	271
Tennessee Technological University	13.4%	12.1%	15.5%	13.9%	12.6%	32.4%	380
University of Memphis	9.3%	17.2%	16.4%	17.0%	14.9%	25.2%	377
University of Tennessee, Chattanooga	14.0%	21.5%	18.7%	10.3%	10.1%	25.3%	534
University of Tennessee, Knoxville	14.5%	13.6%	16.5%	12.8%	9.3%	33.4%	782
University of Tennessee, Martin	11.1%	14.4%	17.7%	8.2%	10.3%	38.3%	243
University Total	13.0%	16.6%	17.2%	12.5%	10.5%	30.2%	3,943
Chattanooga State	6.8%	7.3%	7.7%	8.8%	6.5%	62.9%	601
Cleveland State	12.1%	11.0%	12.5%	11.0%	11.0%	42.5%	273
Columbia State	7.9%	8.8%	11.0%	7.3%	12.7%	52.3%	480
Dyersburg State	8.0%	12.0%	14.8%	11.6%	11.2%	42.4%	250
Jackson State	7.3%	10.4%	10.1%	14.2%	11.7%	46.4%	386
Motlow State	4.5%	7.5%	11.4%	8.1%	9.9%	58.6%	604
Nashville State	8.0%	13.4%	19.9%	12.4%	12.1%	34.2%	1,213
Northeast State	7.3%	4.3%	6.5%	6.3%	11.2%	64.4%	464
Pellissippi State	5.7%	7.3%	14.0%	7.9%	10.3%	54.8%	992
Roane State	10.0%	9.0%	8.2%	7.0%	9.2%	56.6%	511
Southwest Tennessee	5.7%	9.7%	13.3%	11.9%	13.9%	45.5%	837
Volunteer State	6.1%	8.0%	11.0%	12.3%	14.4%	48.3%	675
Walters State	9.2%	9.4%	9.0%	6.4%	9.4%	56.7%	513
Community College Total	7.2%	9.2%	12.3%	9.7%	11.2%	50.4%	7,799
Closed public institutions	10.0%	20.0%	10.0%	20.0%	20.0%	20.0%	20
Grand Total	9.1%	11.7%	14.0%	10.7%	11.0%	43.6%	11,762

^{*}Cumulative credits at a prior institution could have been earned at any time and are not necessarily transferable toward a degree.

^{**}Table excludes 34 students with missing data on credits.