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**Mapping the Journey: Tracking Non-traditional Enrollment Patterns Among UT System Undergraduates**

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## EXECUTIVE SUMMARY

This research brief examines enrollment behavior among first-time, full-time, degree-seeking (FTFTDS) undergraduates who entered a University of Texas (UT) System academic institution in the Fall semester of academic years 2017 through 2019. Using National Student Clearinghouse longitudinal data linked to UT System administrative records, each of the 90,577 students in the study was tracked semester by semester across a six-year observation window and classified into two main enrollment patterns: traditional enrollment, defined as continuous enrollment at the entry institution, and non-traditional enrollment, characterized by having at least one disruption event. Disruption events include the following enrollment behavior categories: stopout (temporary departure followed by re-enrollment), swirl (return to the entry institution after attending another institution), double-dip (simultaneous enrollment at multiple institutions), transfer-out (departure to another institution without returning), and dropout (cessation of enrollment without subsequent enrollment elsewhere). This study examines how these enrollment patterns relate to six-year degree completion outcomes and time-to-completion.

### Key Findings

- Nearly half of all students take a non-traditional path, with almost 48 percent (more than 43,000 students) experiencing at least one disruption event within the six-year observation window. The remaining 52 percent follow a fully uninterrupted traditional enrollment path.
- Double-dipping is not a risk indicator. Students with instances of simultaneously enrolled semesters at two institutions complete at an 89.6 percent rate and, on average, add only 2.3 months to their time-to-completion relative to traditional students, suggesting that concurrent enrollment reflects deliberate academic planning rather than enrollment difficulty. This group is disproportionately non-Pell (70.1%) and Asian American (21.7%).
- Students who discontinue enrollment are disproportionately Pell recipients and Hispanic. Among dropouts, 57.2 percent are Pell recipients and 60.4 percent are Hispanic, compared to 40.9 percent and 45.2 percent, respectively, among all students.
- Enrollment disruptions most often occur early. Among students who experience any disruption, 43.6 percent encounter their first event in the second academic year. By the end of Year 3, more than four in five eventual non-traditional students have already experienced a first disruption event.
- Traditional 6-year graduation metrics that only examine if a student graduates from their starting institution undercount completers. Among stopout completers, 19.5 percent earned their degree at a non-UT institution; among transfer-out completers, 59.4 percent did so. Students who appear as non-persisters on entry campus completion metrics include a substantial share of eventual degree earners.

### Implications

Enrollment disruption is widespread and unevenly distributed, with implications for student success and completion outcomes. Among the 90,577 students in this study, five distinct non-traditional enrollment patterns emerge, each associated with different completion rates, demographic characteristics, and time-to-completion. Non-traditional enrollment behaviors should not be treated as a single category. While some pathways, such as concurrent enrollment, are associated with completion outcomes comparable to traditionally enrolled students, others are associated with lower completion rates and greater representation among Pell-eligible and Hispanic students. The results also highlight the importance of examining student outcomes beyond the entry institution. Many students who appear unsuccessful in institution-level metrics ultimately earn degrees elsewhere, indicating that traditional measures may understate

educational attainment. Together, these findings demonstrate that FTFTDS enrollment pathways are more diverse, and their outcomes more differentiated, than traditional retention and graduation frameworks suggest.

## **BACKGROUND**

Students pursue postsecondary education through a wide variety of pathways. While some students enroll continuously at a single institution from entry to graduation, many others take breaks in enrollment, attend multiple institutions at different points in time, or carry coursework at more than one institution simultaneously. Understanding these patterns is important for institutions seeking to support students effectively and for system-level analyses of degree completion and time-to-completion.

Prior research on non-traditional enrollment patterns, while limited in scope, points to meaningful consequences for students. Johnson and Muse (2012) noted that empirical studies of stopout and transfer behavior are relatively rare, and that the existing evidence base relies heavily on single-institution samples that may not generalize broadly. Donhardt (2013) found that the frequency of stopout episodes is negatively associated with the probability of graduation, and that students who stop out after one academic year or less have a substantially reduced probability of returning. For swirl and double-dip students, Johnson and Muse (2012) documented that non-linear enrollment is associated with longer time-to-completion, challenges transferring credits, and higher student debt.

A practical challenge in studying these patterns is that standard institutional retention and graduation metrics are anchored to a single institution. Students who swirl, double-dip, or transfer out may be recorded as non-persisters or non-completers by their entry institution even when they are actively enrolled elsewhere or have earned a degree at another college. Access to longitudinal, multi-institution data is therefore necessary to accurately characterize student trajectories.

## **DATA**

The study primarily uses University of Texas (UT) System administrative records from the Texas Higher Education Coordinating Board, specifically the CBM 0C1 enrollment report and CBM 009 graduation report available in the OIRA data warehouse. These records supply UT System enrollment, graduations, student demographics, and academic characteristics. We also extract Pell recipients from the Financial Aid Database. The study focuses on cohorts of degree-seeking, first-time-in-college (FTFTDS) students who first enrolled in a fall semester between Fall 2016 and Fall 2018. To identify enrollments and completions outside UT System institutions, we use National Student Clearinghouse (NSC) longitudinal files. NSC data cover approximately 97 percent of students enrolled at U.S. postsecondary institutions. The files provide term-by-term enrollment records and degree completion records at any NSC-participating institution, along with institution identifiers enabling classification by control (public or private) and state geography.

## **RESEARCH QUESTIONS**

This study is organized around four research questions:

1. How prevalent are stopout, swirl, double-dip, and traditional enrollment patterns, and do prevalence rates vary by campus and cohort?
2. What student characteristics are associated with each enrollment pattern?
3. When do students first exhibit non-traditional behavior, and how often do multiple behavior types co-occur?
4. What are the six-year outcomes (degree completion, continued enrollment, and non-completion) for each enrollment pattern group, and how does time-to-completion vary?

## METHODS

This study examines FTFTDS entering cohorts for Fall 2016, Fall 2017, and Fall 2018 across all nine UT System academic campuses. A dataset of semester-by-semester status was constructed for each student across 12 term slots (Fall and Spring of each of six academic years).

Examining all 12 enrollment terms, non-exclusive behavioral flags were assigned for stopout, swirl, double-dip, transfer-out, and dropout. Students with no non-traditional flags are classified as traditional. Because all behavioral flags are non-exclusive, a student may appear in more than one category and is counted in each applicable group. For example, a student who enrolled at UT Austin, took one semester off, and then maintained concurrent enrollment at UT Austin and Austin Community College in the following term would be flagged for both stopout and double-dip. Six-year outcomes (completer, non-completer, still enrolled) and time-to-completion were derived from graduation records.

## ENROLLMENT PATTERN DEFINITIONS

Table 1 defines the six enrollment patterns examined in this study.

**Table 1: Enrollment Pattern Definitions**

Pattern	Definition
Traditional	Enrolled continuously at the entry institution from initial enrollment through graduation – or through the full six-year observation period if not yet graduated.
Stopout	Left enrollment for one or more semesters and later re-enrolled, without attending another institution during the break.
Swirl	Re-enrolled at the entry institution after attending another institution, across separate semesters.
Double-Dip	Enrolled concurrently at entry institution and another institution during the same semester.
Transfer Out	Left the entry institution and enrolled at another institution, without returning to the entry campus within the six-year window.
Drop	Exited enrollment with no subsequent enrollment at either the entry institution or any other campus.

## PREVALENCE OF ENROLLMENT PATTERNS

Table 2 shows the share of all 90,577 FTFTDS students who exhibited each enrollment behavior at any point within the six-year window. The traditional category is mutually exclusive with all other flags by construction: a student classified as traditional never triggered a stopout, swirl, double-dip, transfer out, or dropout status in any semester.

**Table 2: Enrollment Behavior Prevalence, Overall (N = 90,577)**

Enrollment Behavior	Count	% of All Students
Traditional	47,438	52.4%
Stopout	20,084	22.2%
Drop	13,596	15.0%
Transfer Out	16,154	17.8%
Double-Dip	7,937	8.8%
Swirl	2,842	3.1%

*Note: Flags are non-exclusive; a student may appear in more than one non-traditional category, hence individual percentages sum to more than 100 percent.*

Just over half of FTFTDS students (52.4%) completed their enrollment history without any recorded disruption. The remaining 47.6 percent, more than 43,000 students, experienced at least one non-traditional enrollment event across the

six-year window. Stopout (22.2%) is the most prevalent non-traditional pattern, affecting more than one in five students. Transfer out (17.8%) and drop (15.0%) follow; double-dip (8.8%) and swirl (3.1%) are less common.

## Pattern Complexity per Student

Table 3 describes how many distinct non-traditional behavior types individual students exhibited. Roughly one in six students (17.2%) accumulated two or more distinct non-traditional flags. A smaller share of students accumulated three non-traditional patterns (5.0%), and 277 students (0.3%) exhibited four or five distinct behavior types, indicating that highly complex enrollment pathways are relatively rare but still present. Among students with two or more non-traditional flags, the most common combination was stopout paired with swirl: 1,518 students (53.4% of all swirlers) exhibited both behaviors. Stopout also frequently co-occurred with double-dip enrollment (1,379 students, or 6.9% of all stopouts).

**Table 3: Distribution of Students by Number of Non-Traditional Patterns Observed (N = 90,577)**

Number of Non-Traditional Patterns	Count	% of Total
None (Fully Traditional)	47,438	52.4%
One non-traditional pattern	27,559	30.4%
Two non-traditional patterns	10,799	11.9%
Three non-traditional patterns	4,504	5.0%
Four or more patterns	277	0.3%

## Prevalence by UT System Campus

Table 4 presents campus-level prevalence rates of each enrollment pattern group. Percentages are within-campus shares.

**Table 4: Non-Traditional Enrollment Patterns by UT System Campus**

Campus	N	Traditional	Swirl	Double Dip	Stopout	Transfer Out	Drop
UTA	9,456	47.1%	3.3%	6.0%	23.0%	24.2%	19.2%
UTAUS	25,620	64.5%	1.5%	17.1%	14.7%	6.2%	3.9%
UTD	9,973	61.7%	2.8%	9.7%	17.7%	14.0%	9.0%
UTEP	8,984	40.8%	5.5%	8.1%	30.3%	18.5%	25.3%
UTPB	1,255	33.4%	5.0%	5.9%	29.6%	30.7%	31.2%
UTRGV	12,046	46.4%	4.1%	2.0%	28.7%	16.6%	23.8%
UTSA	14,135	46.0%	3.8%	3.9%	25.6%	27.8%	17.4%
SFA	6,820	46.7%	2.8%	4.3%	24.1%	30.2%	21.6%
UTT	2,288	41.4%	3.7%	6.3%	24.6%	36.3%	18.2%
<b>System Total</b>	<b>90,577</b>	<b>52.4%</b>	<b>3.1%</b>	<b>8.8%</b>	<b>22.2%</b>	<b>17.8%</b>	<b>15.0%</b>

*Note: Flags are non-exclusive; a student may appear in more than one non-traditional category, hence individual percentages sum to more than 100 percent.*

Campus variation is substantial. UT Austin and UT Dallas report the highest traditional enrollment rates (64.5% and 61.7%), while UT Permian Basin (33.4%), UT El Paso (40.8%), and UT Tyler (41.4%) report the lowest. UT Austin also posts the highest double-dip rate in the system (17.1% vs. an 8.8% system average). UT Permian Basin, UT El Paso, UT Rio Grande Valley, and Stephen F. Austin consistently report elevated stopout, dropout, and transfer-out rates, patterns that may reflect greater challenges to continuous enrollment at these institutions. From institutions other than UT Austin, 6,952 transfer-out students completed a degree within six years, and from these, 1,662 (23.8%) graduated from UT Austin. Although students participating in UT Austin's Coordinated Admission Program (CAP), which provides a pathway for students to transfer to UT Austin after beginning at another UT institution, account for only about 24 percent of all transfer-

out completers, they represent nearly 80 percent of those who transferred to and graduated from UT Austin. These results indicate that a meaningful portion of transfer-out behavior within the UT System reflects planned movement through the CAP pathway rather than attrition from higher education.

Enrollment pattern rates were stable across the three entering cohorts (Fall 2016, Fall 2017, and Fall 2018). Traditional enrollment ranged from 52 to 54 percent, and all other pattern rates varied by no more than two percentage points across cohorts.

## STUDENT CHARACTERISTICS BY ENROLLMENT PATTERN

Tables 5 through 7 describe the demographic composition of each enrollment pattern group. Column percentages sum to 100 within each behavior flag.

### Gender

**Table 5: Non-Traditional Enrollment Behavior by Gender (N = 90,577)**

Gender	All Students	Traditional	Swirl	Double Dip	Stopout	Transfer Out	Drop
Female	53.7%	55.9%	52.6%	59.8%	51.1%	53.5%	43.7%
Male	46.3%	44.1%	47.4%	40.2%	48.9%	46.5%	56.3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Male students are overrepresented in the drop group (56.3% of students who dropped out vs. 46.3% of all students), a gap of 10 percentage points. Female students make up 59.8 percent of double-dippers, slightly above their share of all students at 53.7 percent.

### Race and Ethnicity

**Table 6: Non-Traditional Enrollment Behavior by Race/Ethnicity (N = 90,577)**

Race / Ethnicity	All Students	Traditional	Swirl	Double Dip	Stopout	Transfer Out	Drop
Asian American	14.8%	18.1%	10.1%	21.7%	10.1%	9.3%	4.2%
Black or African American	7.1%	6.3%	7.6%	6.8%	8.1%	10.1%	8.8%
Hispanic	45.2%	40.8%	59.0%	32.6%	54.0%	48.0%	60.4%
International	2.7%	3.4%	0.7%	1.3%	1.8%	0.8%	2.8%
Other	3.2%	3.2%	2.5%	3.4%	2.8%	3.5%	2.6%
White	27.1%	28.2%	20.1%	34.2%	23.2%	28.4%	21.2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Racial and ethnic composition differs considerably across enrollment pattern groups. Hispanic students represent 45.2 percent of all students, but account for 59.0 percent of swirlers and 60.4 percent of the drop group. Asian American students (14.8% of all students) are overrepresented among double-dippers (21.7%) and underrepresented in the drop group (4.2%). Black or African American students (7.1% system-wide) account for 10.1 percent of transfer-out students.

## Pell Grant Status

**Table 7: Non-Traditional Enrollment Behavior by Pell Grant Status (N = 90,577)**

Pell Status	All Students	Traditional	Swirl	Double Dip	Stopout	Transfer Out	Drop
Non-Recipient	59.1%	63.0%	53.5%	70.1%	52.2%	55.8%	42.8%
Pell Recipient	40.9%	37.0%	46.5%	29.9%	47.8%	44.2%	57.2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Pell recipients make up 40.9 percent of all students in the study. That share rises to 47.8 percent among stopouts and 57.2 percent among dropouts, a 16-percentage point gap. Double-dip students show the reverse pattern: only 29.9 percent are Pell recipients.

## TIMING OF NON-TRADITIONAL BEHAVIOR

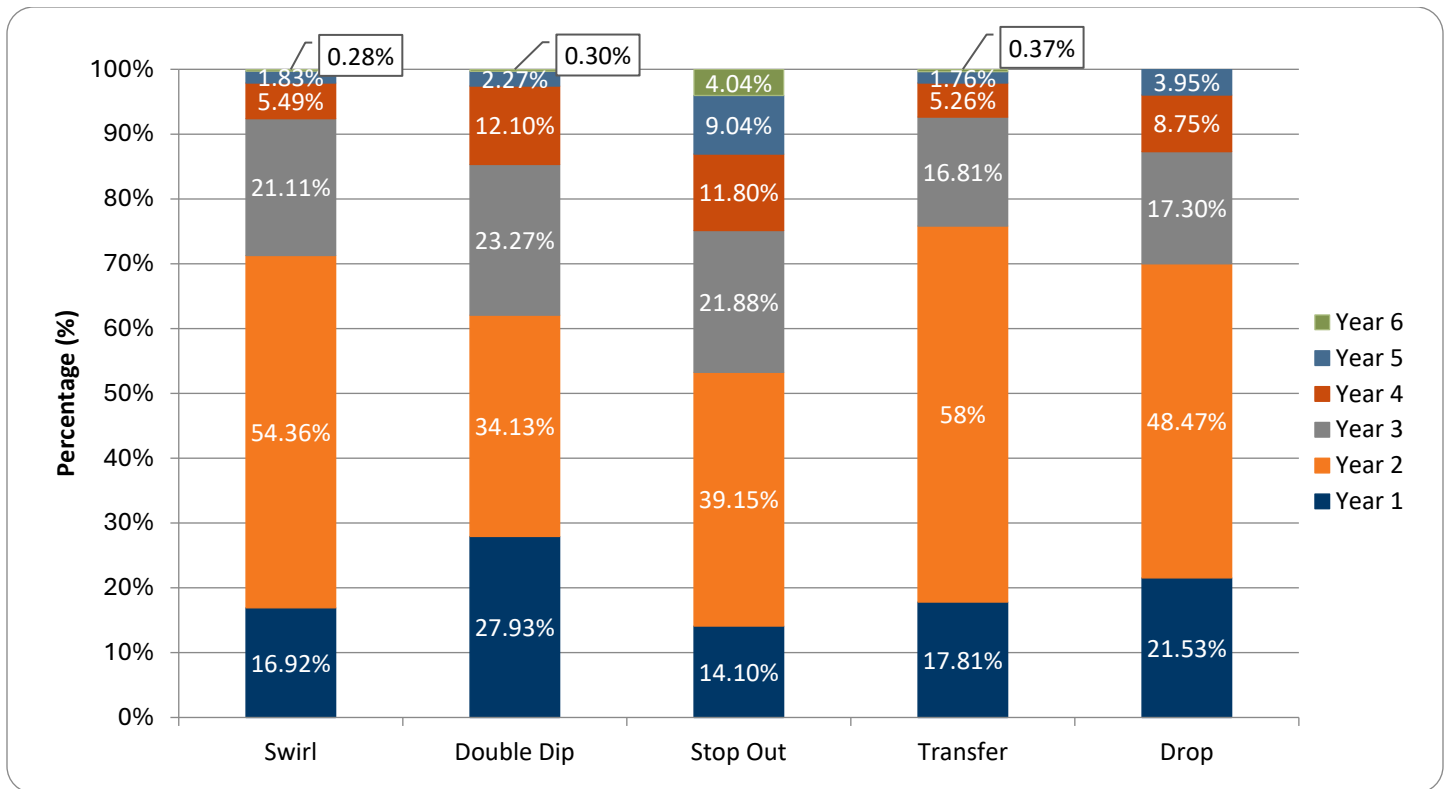
This section examines when students first exhibit non-traditional enrollment behavior. Table 8 shows the academic year in which each non-traditional student first exhibited a non-traditional enrollment event. The analysis is restricted to the 43,139 students who experienced at least one non-traditional event.

**Table 8: Academic Year of First Non-Traditional Enrollment Event (N = 43,139)**

Academic Year of First Event	Count	% of Non-Traditional Students
Year 1	7,225	16.7%
Year 2	18,807	43.6%
Year 3	9,014	20.9%
Year 4	4,617	10.7%
Year 5	2,598	6.0%
Year 6	878	2.0%
<b>Total</b>	<b>43,139</b>	<b>100%</b>

Year 2 is the most common timing for the first non-traditional enrollment, accounting for 43.6 percent of all first events among non-traditional students. An additional 20.9 percent first deviate from a traditional path in Year 3. Together, the second and third academic years account for 64.5 percent of all initial disruption events. By the end of Year 3, just over 81 percent of students who will ever experience a non-traditional enrollment event have already done so for the first time. This pattern is consistent across all non-traditional behavior types, with Year 2 representing the most common timing of the first event in each group, as displayed in Figure 1 below.

**Figure 1: Distribution of First Non-Traditional Event by Year of Occurrence and Behavior**



## SIX-YEAR OUTCOMES

Students are classified into one of three six-year outcome categories: Completers earned a baccalaureate degree at a UT System institution or any other NSC-participating institution within the six-year observation window; Non-Completers did not earn a degree and were not enrolled during the final two academic years examined; and Still Enrolled students did not earn a degree but maintained enrollment through one or more semesters of years five or six.

### Completion Outcomes

**Table 9: Six-Year Completion Outcomes by Enrollment Behavior**

Enrollment Behavior	Count	Completer	Still Enrolled	Non-Completer
Traditional	47,438	99.3%	0.7%	0.0%
Double Dip	7,937	89.6%	6.6%	3.8%
Swirl	2,842	62.0%	28.4%	9.6%
Transfer Out	16,154	49.2%	29.2%	21.5%
Stopout	20,084	45.7%	38.7%	15.6%

*Note: Flags are non-exclusive; students who exhibited multiple behaviors appear in each applicable row. Traditional students, by definition, cannot be non-completers, as continuous enrollment implies either completion or ongoing enrollment.*

The relationship between enrollment patterns and six-year outcomes is stark. Traditional students complete at a 99.3 percent rate. Double-dip students follow at 89.6 percent, suggesting that this group is composed of students who pursue concurrent enrollment as a deliberate academic strategy. Swirl (62.0%) and transfer-out (49.2%) students complete at moderate rates. Stopout students complete at 45.7 percent, though 38.7 percent remain enrolled at the end of the six-year window, suggesting many may still earn a degree beyond that horizon.

## Completion Institution

Table 10 shows, among completers only, where students earned their degree relative to their UT entry campus.

**Table 10: Graduation Institution by Enrollment Behavior (Completers Only)**

Graduation Institution	Completers Count	Double Dip	Swirl	Stopout	Transfer Out
Entry UT Institution	60,518	94.5%	89.2%	73.0%	2.9%
Other UT System Institution	3,160	1.7%	4.5%	7.5%	37.7%
Non-UT Institution	4,844	3.8%	6.3%	19.5%	59.4%
<b>Total</b>	<b>68,522</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Double-dip students overwhelmingly complete at their entry UT institution (94.5%). Swirl completers mostly graduate at their entry institution (89.2 percent) with a small share completing at non-UT institutions (6.3%). Stopout completers are more evenly distributed: 73.0 percent graduate at the entry institution and 19.5 percent at non-UT institutions. 59.4 percent of transfer-out students complete at a non-UT institution and 37.7 percent at another UT System campus. A small share of completers (2.9%) who transferred out ultimately earn a degree at their starting institution, suggesting they may be transferring credits back rather than physically returning.

## Time-to-completion

Table 11 shows average time-to-completion by enrollment behavior, restricted to students who completed within the six-year window.

**Table 11: Time-to-completion (Months) by Enrollment Behavior (Completers Only)**

Enrollment Behavior	Completers Count	Avg. Years to Completion	Avg. Months to Completion	Difference vs. Traditional
Traditional	47,097	3.8 years	45.5 months	Reference
Double Dip	7,110	4.0 years	47.8 months	+2.3 months
Transfer Out	7,953	4.8 years	57.1 months	+11.6 months
Swirl	1,762	5.2 years	62.7 months	+17.2 months
Stopout	9,180	5.3 years	63.1 months	+17.6 months

*Note: Average time-to-completion is calculated from the month of initial UT System enrollment to the month of degree conferral. Restricted to completers within the six-year window. Flags are non-exclusive; students can appear in more than one group, so they may be counted in multiple time-to-completion calculations.*

Time-to-completion varies by enrollment pattern. Traditional students complete in an average of 45.5 months, just under four years. Double-dip students add only 2.3 months on average, suggesting that concurrent enrollment is associated with relatively minimal delay. In contrast, transfer-out completers add 11.6 months, and swirl and stopout completers each add more than 17 months relative to the traditional baseline, indicating that more complex or interrupted enrollment pathways are associated with notably longer times to degree.

## CHARACTERISTICS OF OTHER INSTITUTIONS WHERE STUDENTS EARNED A DEGREE

Table 12 describes the control and location characteristics of the degree-granting institutions where 4,844 completers who began at a UT System campus ultimately earned their bachelor's degree at a non-UTS institution. Nearly 98 percent of these students received their bachelor's degree at a four-year institution, while a small proportion received their bachelor's degrees at two-year institutions.

**Table 12: Non-UTS Degree Institution Characteristics for Non-Traditional Enrollment Completers (N = 4,844)**

Characteristic	Category	Count	% of Completers (within Group)
Control	Public	3,852	79.5%
	Private	992	20.5%
Location	In-State	3,458	71.4%
	Out-of-State	1,386	28.6%

*Note: Restricted to 4,844 completers who completed at a non-UTS institution within 6 years.*

For students who completed outside the UT System, the majority (79.5%) earned their degree at a public institution, while 20.5 percent completed at a private institution. Geographically, roughly seven in ten (71.4%) completed at a Texas institution, while 28.6 percent completed out of state, suggesting that a meaningful share of students who leave the UT System ultimately pursue and complete degrees in other states. 79.4 percent of the 1,386 students who completed out of state are Texas residents, whereas the remaining 20.6 percent are from out of state.

An additional 1,316 students who did not earn a bachelor's degree earned an associate's degree instead; nearly all had experienced at least two non-traditional enrollment events, and about 22 percent received these degrees at a four-year college.

## CONCLUSION

This study examines six-year enrollment trajectories for 90,577 FTFTDS undergraduates entering the UT System in the fall terms of academic years 2017 through 2019. The results show that nearly half of all students experience at least one stopout, swirl, double-dip, transfer-out, or dropout event before the end of the observation window, underscoring how common non-traditional pathways are. The findings carry several implications for institutional and system-level practice. First, the concentration of first disruption events in Year 2 highlights the sophomore year as a particularly high-leverage point for early-alert systems. Second, enrollment disruption falls disproportionately on certain groups: Pell recipients and Hispanic students are substantially overrepresented among stopouts and dropouts. Third, the strong completion outcomes observed among double-dip students caution against treating all forms of multi-institution enrollment as indicators of risk. Finally, traditional single-institution graduation metrics undercount eventual completers, suggesting the need for broader measures that better capture the full range of student pathways.

Several findings from this study also point to areas warranting future investigation. The double-dip enrollment pattern, in particular, merits closer examination. The disproportionately low Pell representation in this group, combined with their strong completion outcomes, raises questions about who pursues concurrent enrollment and why. Future studies could incorporate high school academic preparation indicators and college GPA to better characterize this population and could examine the timing of concurrent enrollment events. The composition differences across non-traditional groups identified in this study, particularly the characteristic contrasts between primary double-dippers and primary swirlers, also merit targeted analysis. Finally, students who remained enrolled at the end of the six-year window, along with those who earned associate's degrees in lieu of a bachelor's degree, represent an important population for extended longitudinal tracking. Follow-up analyses using a longer observation window would better capture eventual degree attainment for these students and provide a more complete picture of educational outcomes across all non-traditional pathways.

## REFERENCES

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