

Staying in the Sunshine

Developing a Talent Stickiness Index for the college graduates of Arizona

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What we'll cover

- 01** Purpose & research questions
- 02** Leveraging PSEO to build the index
- 03** What we found
- 04** Value at the state level
- 05** Data considerations & what's next

THE PURPOSE OF THE WORK

Why graduate retention is a state question

A state's return on its investment in higher education depends not just on how many graduates it produces, but on how many it keeps.

RQ1

How well do AZ public higher education institutions (and the state) retain graduates in the state where they earned their degree — right after graduation and over time? Compared to public universities in other states?

RQ2

Does retention (Talent Stickiness) differ across institutions within a state system?

RQ3

How does retention differ across industries?

THE STAKES IN ARIZONA

+454,167

new jobs projected in Arizona by 2034 —
growth of 1.2% a year, roughly four times the
U.S. rate.

*That growth only pays off if the talent
Arizona educates stays to fill those jobs.*

HOW WE LEVERAGED PSEO

Building the Talent Stickiness Index

$$\text{TSI} = \text{graduates employed in AZ} \div \text{graduates employed in any state}$$

Computed at 1, 5, and 10 years after graduation. Higher means stickier.

The data

U.S. Census Bureau PSEO links graduates to jobs through state unemployment-insurance and federal earnings records — disaggregated by institution, degree field, cohort, employer industry, and geography.

The sample

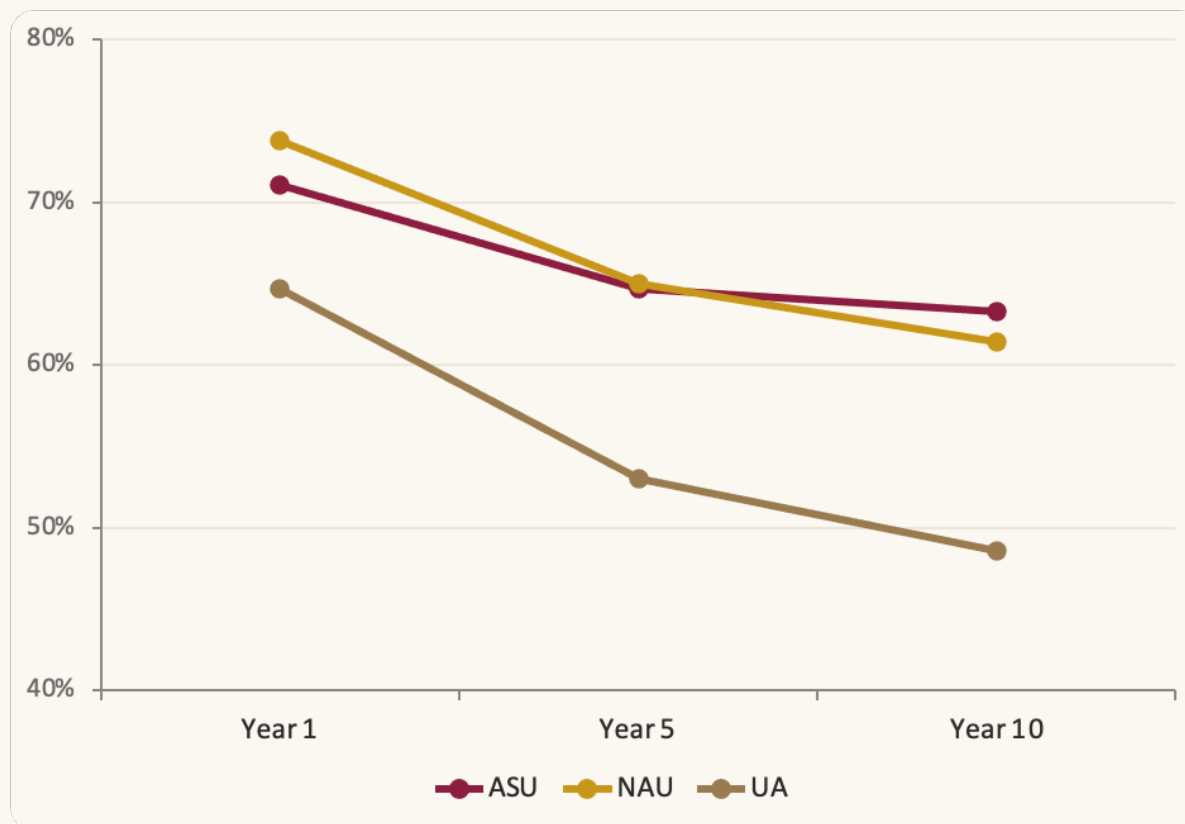
Bachelor's graduates from public universities in Arizona, across six three-year cohorts (2004–2019), tracked at Year 1, Year 5, and Year 10 — with Arizona OEO projections for demand context.

The lens

Five nested levels: statewide, by institution, by industry (2-digit NAICS), by region, and by cohort. Descriptive by design — transparent, replicable, and re-runnable with each PSEO release.

FINDING ONE

The first five years are the critical window



STATEWIDE RETENTION

70% → 61% → 58%

at Year 1, Year 5, and Year 10.

- The Year 1–Year 5 drop is two-to-three times steeper than Year 5–Year 10.
- Graduates who stay through Year 5 tend to stay for the long term.
- NAU is most stable; ASU keeps the most graduates; UA trails at every horizon (–16 pp by Year 10).

FINDING TWO

The retention–demand mismatch

Arizona’s stickiest industries are not the ones it most needs to grow — and the sectors adding the most jobs are losing talent over time.

Sticky — but low growth

High retention, weak projected demand

Utilities (Year 1) **85–88%**

Education (Year 1) **78–85%**

Educational Services growth **+0.3%/yr**

Information (net jobs by 2034) **+18**

In demand — but high-attrition

Strong projected demand, eroding retention

Health Care (Year 1 → Year 10) **77% → 55%**

Health Care jobs by 2034 **+113,466**

Food & Hospitality UA (Y1 → Y10) **65% → 34%**

Hospitality share of workforce **11%**

VALUE AT THE STATE LEVEL

How a state system can put the TSI to work

The TSI turns the question — “are we keeping our talent?” — into a specific, actionable map of where and when graduates leave.

01 Target scarce dollars

Direct retention funding to the Year 1–5 window and the critical sectors, instead of spreading it thin — the data shows exactly where a dollar does the most.

02 Benchmark institutions fairly

Compare ASU, NAU, and UA on the same footing, accounting for nonresident enrollment as an example so conversations rest on evidence, not anecdote.

03 Align higher ed with workforce plans

Set the TSI beside OEO demand projections to see where degree production and labor-market need actually meet — and where they don’t.

04 Compare across states

This method can be replicated across any state, so states can see whether a retention gap is an Arizona problem or a regional one.

READING THE DATA HONESTLY

What PSEO can — and can't — tell us

The index documents where graduates work; it does not explain why they stay or leave.

Keep in mind

- Covered employment only. PSEO omits the self-employed, independent contractors, federal workers, and anyone employed outside the U.S.
- Broad industries. Reported at the 2-digit NAICS level — “Health Care” spans a nurse and a hospital administrator alike.
- Small cells suppressed. Privacy protections hide the smallest programs.
- Year-10 rests on three cohorts. Only 2004, 2007, and 2010 are old enough to observe at ten years.
- Geographic, not occupational. Staying in Arizona is not the same as staying in the field.

Why it still holds up

- Population-scale. PSEO covers the vast majority of graduates — not a survey sample with response bias.
- Actual employment. Built from real UI and earnings records, not self-reported intentions.
- Identical across states. The same definition makes comparisons fair.
- Transparent & re-runnable. Descriptive by design, so it refreshes with each PSEO release.

WHERE WE GO FROM HERE

Next steps for the work

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|-----------|--|---|
| 01 | Target the first five years | Concentrate retention efforts on employer partnerships, loan repayment, structured early-career pathways where the drop-off is steepest. |
| 02 | Ground findings in the literature | Situate results in the research on why graduates stay or leave both industry -specific, institutional context and state context to move from what we see to possible reasons why. |
| 03 | Add PSEO earnings flows | Use PSEO earnings data to compare wages in the stickiest sectors (Education, Utilities) against the most critical ones (Health Care, Food & Hospitality). Does pay play a role in whether graduates stay? |
| 04 | Re-run and expand | Refresh the TSI with each PSEO release to test whether interventions move the needle; deepen to more states. |

LIVE DEMONSTRATION

Explore the Arizona Talent Stickiness Dashboard

Filter the index live by institution, industry, cohort, and time horizon — the same PSEO data, open to every researcher and practitioner here.

talentstickiness.org

Interested in how we can help
your state? Fill out the
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links.asu.edu/tsi-interest