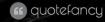
There are intangible realities which float near us, formless and without words; realities which no one has thought out, and which are excluded for lack of interpreters.

Natalie Clifford Barney





ACADEMIC AFFAIRS AND STUDENT SUCCESS
Institutional Effectiveness

# Data as Storytelling: The Evolution of the UT Data Ecosystem

AA&SS Summit — November 11, 2022

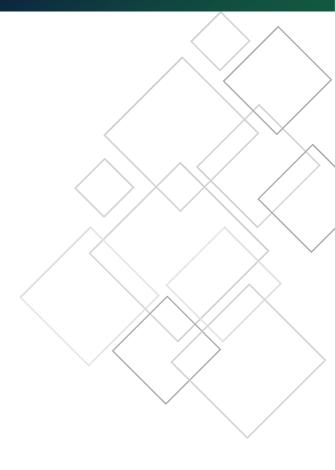
Institutional Effectiveness



ie.tennessee.edu

## Overview

- My story
- The IE team's story
- How we tell stories with data
- A few stories
- Looking forward through the IE lens



## Jorge Antonio Julian de Jesús Pérez y García





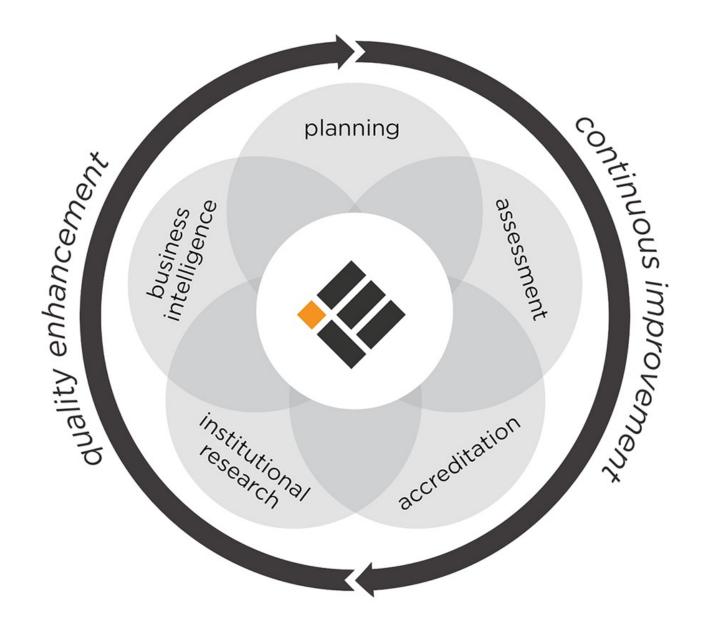






- Formed in January 2020 via merger of IR and BI
- IR + BI ≠ IE





## **Model of IE**

## Mission of the IE Team

The institutional effectiveness team *promotes a culture of continuous improvement and enhances evidence-based decision making* by offering services in planning, assessment, accreditation, institutional research, and business intelligence.

# **Evolution of the UT Data Ecosystem**

Advanced Analytics

Dashboards

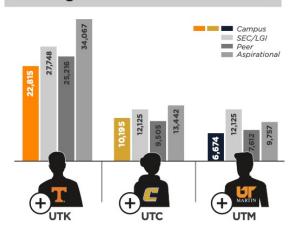
Infographics

Spreadsheets

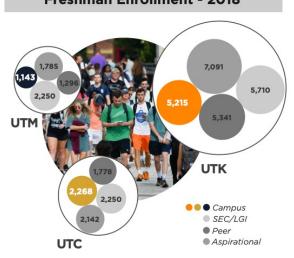
## UT SYSTEM PERFORMANCE COMPARED TO PEERS

Board of Trustees - February 19, 2020

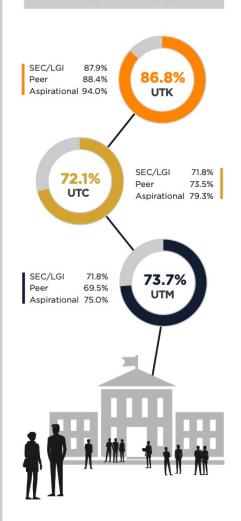
#### **Undergraduate Enrollment - 2018**

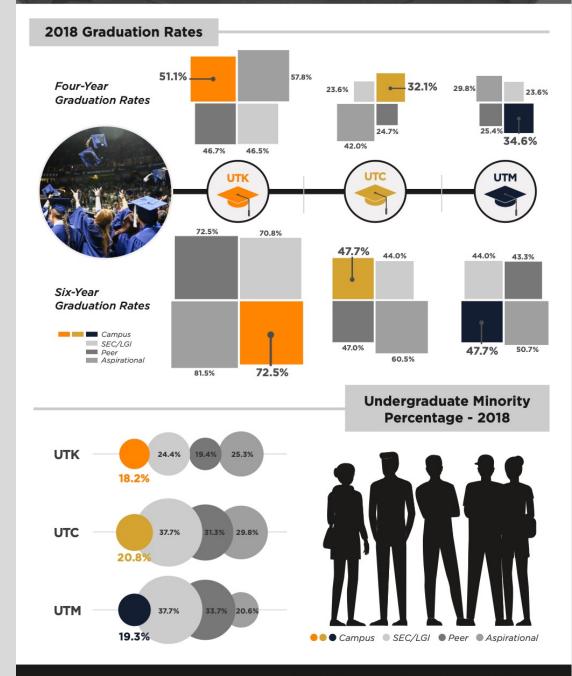


#### Freshman Enrollment - 2018



#### 2018 Freshman Retention





# **Evolution of the UT Data Ecosystem**

Advanced Analytics

Dashboards

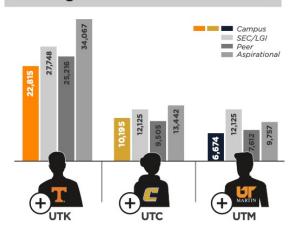
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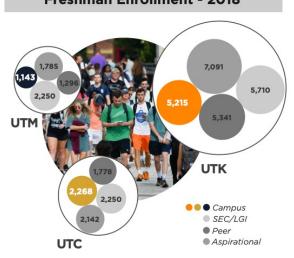
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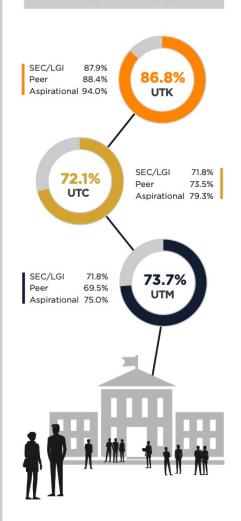
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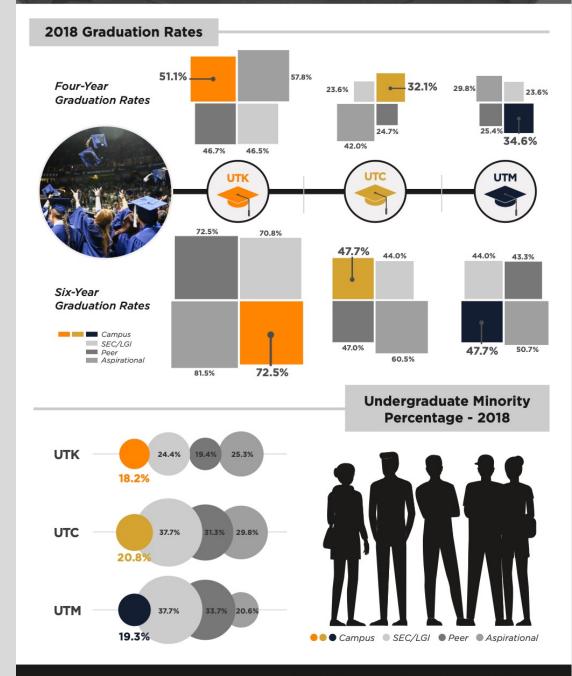


#### Freshman Enrollment - 2018



#### 2018 Freshman Retention









Institutional Effectiveness

## **UT System Student Success Indicators**

Board of Trustees — October 27-28, 2022



ie.tennessee.edu

## table of **contents**

Uı	niversity of Tennessee System	3
	Enrollment	4
	Degrees Awarded, Retention, Graduation Rates	5
	Disaggregated Enrollment Data	6
Uı	niversity of Tennessee, Knoxville	9
	Enrollment	0
	Degrees Awarded, Retention, Graduation Rates	11
	Disaggregated Enrollment Data	12
Uı	niversity of Tennessee at Chattanooga	5
	Enrollment	
	Degrees Awarded, Retention, Graduation Rates	17
	Disaggregated Enrollment Data	8
Uı	niversity of Tennessee Southern	21
	Enrollment	2
	Degrees Awarded, Retention, Graduation Rates	23
	Disaggregated Enrollment Data	4
Uı	niversity of Tennessee at Martin	7
	Enrollment	
	Degrees Awarded, Retention, Graduation Rates	9
	Disaggregated Enrollment Data	0
Uı	niversity of Tennessee Health Science Center 3	3
	Enrollment	4
	Degrees Awarded 3	5
	Disaggregated Enrollment Data	6



56,032 Total Enrollment

44,280 11,752 UNDERGRAD

Total New

Student 16,981 Total Online

TOTAL

8.3% TOTAL

Total Residency

73.8% IN-STATE

26.2% OUT-OF-STATE

Pell Recipient

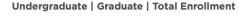
24.5% TOTAL

Total Gender

57.1%

42.9% MALE FEMALE

#### **ENROLLMENT** 2018-2022

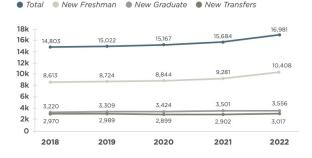




1-Year Change +3.8%

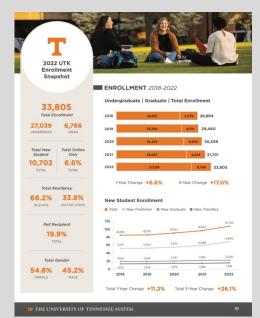
5-Year Change +10.3%

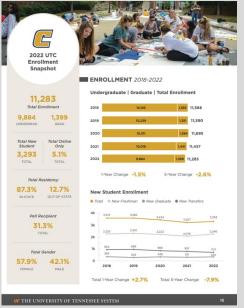
#### **New Student Enrollment**

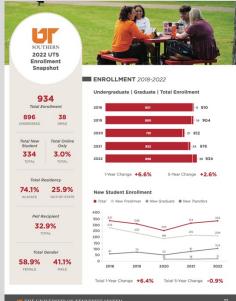


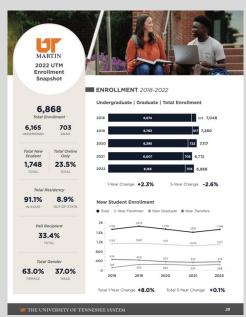
Total 1-Year Change +8.3% Total 5-Year Change +14.7%

Note: UT System numbers in years prior to 2021 do not include UT Southern.











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#### IE Infographics

6-7 / 38

#### Oct 2022 Student Success Indicators Report

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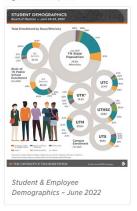
# INSTITUTIONAL EFFECTIVENESS About Services Portfolio Dashboards Infographics Reports Data Requests Contact Us

#### **Infographics**

2022:



Digital Booklet | PDF



Digital Booklet | PDF



#### Digital Booklet | PDF



#### Digital Booklet | PDF

## ie.tennessee.edu/ infographics



## **Evolution of the UT Data Ecosystem**

Advanced Analytics
Dashboards

Infographics

Spreadsheets





**Enrollment** 

Demographics

Race

Gender

1st Gen

Pell Status

Age

Residency

Field of Study

Status

#### Enrollment

Class/Degree Level

Status

Demographics

Race

Gender

~

Age 1st Gen

~ |

Pell Status

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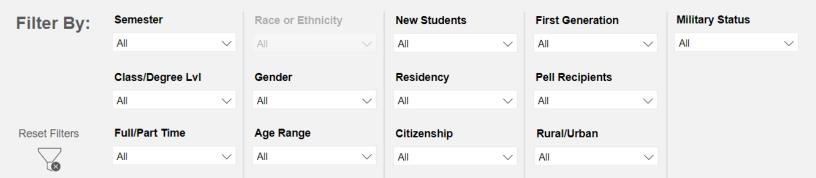
Residency

Field of Study

**Historic Enrollment** 

SYSTEM	UTK	UTC	UTM	UTHS
--------	-----	-----	-----	------

Term	Race	Degree Level	Class	Headcount	% of Total Headcount	Total FTE	Full Time (12/9)	Part Time (12/9)
Fall 2017	White	Undergraduate	Freshman	7,764	15.41%	7.646.33	7,642	122
Fall 2018	White	Undergraduate	Freshman	8,089	15.76%	7,937.73	7,964	125
Fall 2019	White	Undergraduate	Freshman	8,101	15.55%	7.949.20	8,006	95
Fall 2020	White	Undergraduate	Freshman	8,338	15.74%	8,258.27	8,217	121
Fall 2021	White	Undergraduate	Freshman	8,552	15.93%	8,370.07	8,451	101
Fall 2022	White	Undergraduate	Freshman	9,678	17.47%	9,489.47	9,580	98
Fall 2017	White	Undergraduate	Sophomore	6,350	12.60%	6,188.60	6,118	232
Fall 2018	White	Undergraduate	Sophomore	6,334	12.34%	6,156.07	6,085	249
Fall 2019	White	Undergraduate	Sophomore	6,535	12.54%	6,386.53	6,335	200
Fall 2020	White	Undergraduate	Sophomore	6,763	12.77%	6,596.00	6,513	250
Fall 2021	White	Undergraduate	Sophomore	6,650	12.39%	6,482.37	6,457	193
Fall 2022	White	Undergraduate	Sophomore	6,822	12.31%	6,662.93	6,610	212
Fall 2017	White	Undergraduate	Junior	6,868	13.63%	6,545.80	6,384	484
Fall 2018	White	Undergraduate	Junior	6,929	13.50%	6,643.80	6,485	444
Fall 2019	White	Undergraduate	Junior	6,984	13.40%	6,704.60	6,559	425
Fall 2020	White	Undergraduate	Junior	7,115	13.43%	6,875.33	6,685	430
Fall 2021	White	Undergraduate	Junior	7,232	13.47%	6,927.80	6,798	434
Fall 2022	White	Undergraduate	Junior	7,267	13.12%	6,985.53	6,890	377
Fall 2017	White	Undergraduate	Senior	8,586	17.04%	7,638.73	7,121	1,465
Fall 2018	White	Undergraduate	Senior	8,444	16.45%	7,546.13	7,049	1,395
Fall 2019	White	Undergraduate	Senior	8,494	16.30%	7,668.60	7,207	1,287
Fall 2020	White	Undergraduate	Senior	8,601	16.24%	7,745.07	7,342	1,259
Fall 2021	White	Undergraduate	Senior	8,460	15.76%	7,641.33	7,304	1,156
Fall 2022	White	Undergraduate	Senior	8,481	15.31%	7,676.87	7,373	1,108
Fall 2017	White	Undergraduate	5th Year Senior	30	0.06%	25.87	22	3
Fall 2018	White	Undergraduate	5th Year Senior	37	0.07%	31.53	31	6
Total	\A/hita	Undorgraduato	Eth Voor Coniar	313,001	99.08%	294,563.16	265,661	47,340







UTSA UTK UTC UTS UTM UTHSC UTIA **IPS** UTSI **Salaries Employee Name Primary Position Title Primary Job Title** Base Salary Insitution **Primary Job Title Primary Position Title Employee Name** Filter By: ΑII ΑII Reset Filters  $\vee$  $\vee$ 

### **Note from Our Partners**

"I just wanted to send a quick note that I am so thankful for your team's hard work on the UT presence data. I was on a zoom with government relations teams from other universities who were all stressing out about how they were going to pull the data for their district snapshots. It really put in perspective how fortunate we are to have such a great IE team."

## **Evolution of the UT Data Ecosystem**

**Advanced Analytics** Dashboards Infographics

Spreadsheets

Common SIS



Last Updated: 3 min ago







430



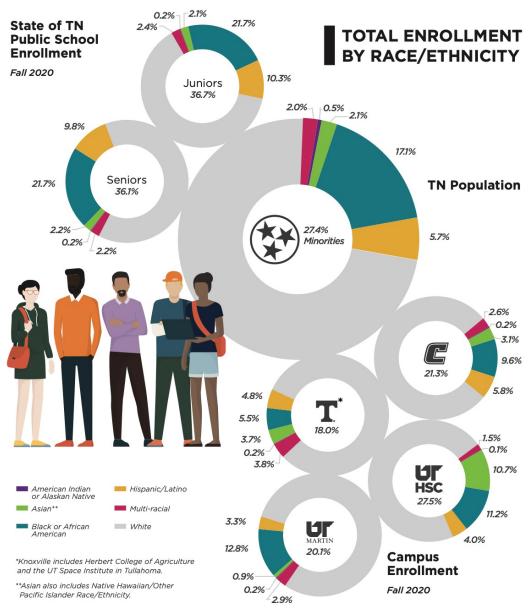
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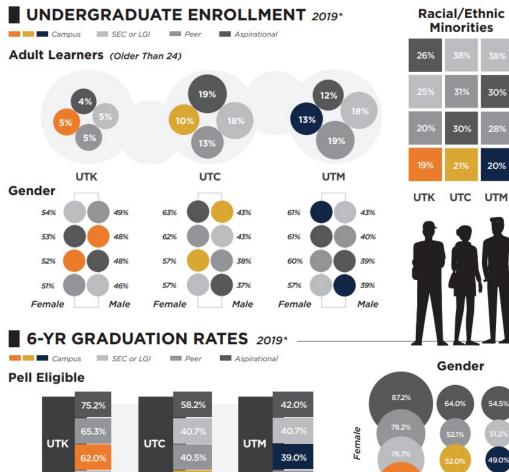
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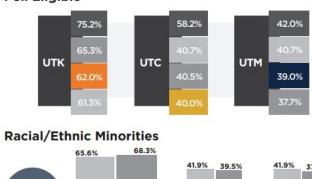
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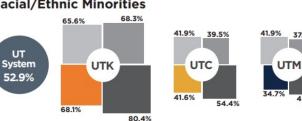
#### STUDENT SUCCESS GAPS AT-A-GLANCE

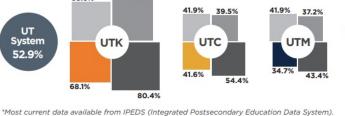
UT System and Peers — March 2021

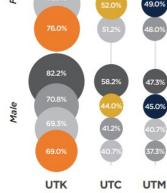














HOME

STRATEGIC PILLARS -

STRATEGIC PLANS +

REPORTING CALENDAR

**ARCHIVES** 



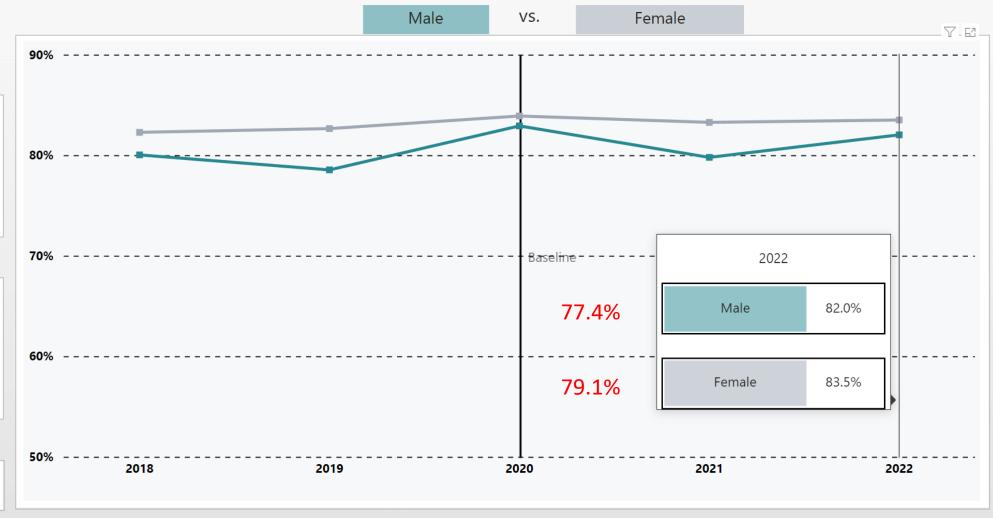
The UT Systemwide strategic plan establishes a vision and direction for success. Clearly defined goals ensure good stewardship and purposeful use of resources. The plan is also used to help identify potential risks and opportunities for UT and where important investments are needed.



#### Filter by Campus UTK UTC UTM Filter by Success Gap Male vs Female Minority vs Non-Minority O Pell vs Non-Pell Rural vs Urban

Clear Filters

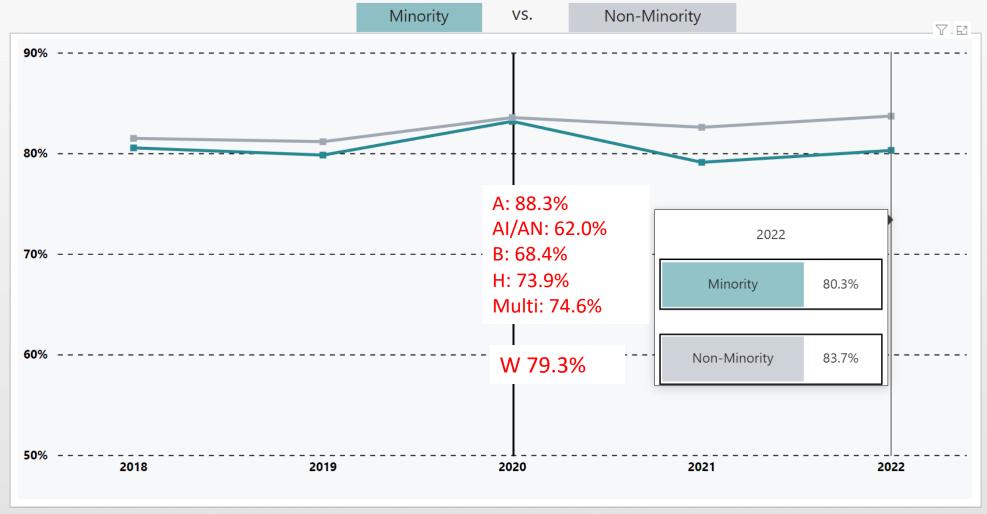
## UT System Student Success Achievement Gaps based on Retention Rates





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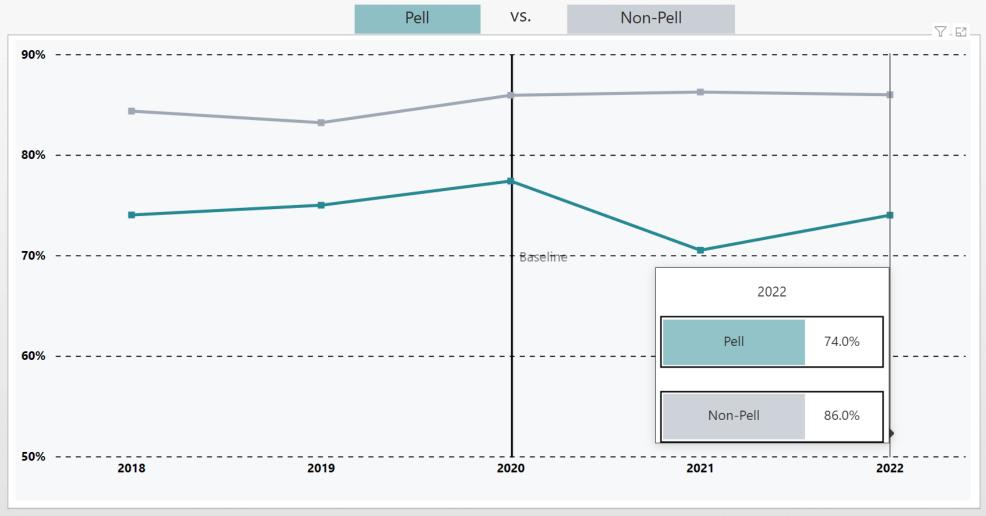
## UT System Student Success Achievement Gaps based on Retention Rates





#### Filter by Campus UTK UTC UTM Filter by Success Gap Male vs Female Minority vs Non-Minority Pell vs Non-Pell Rural vs Urban Clear Filters

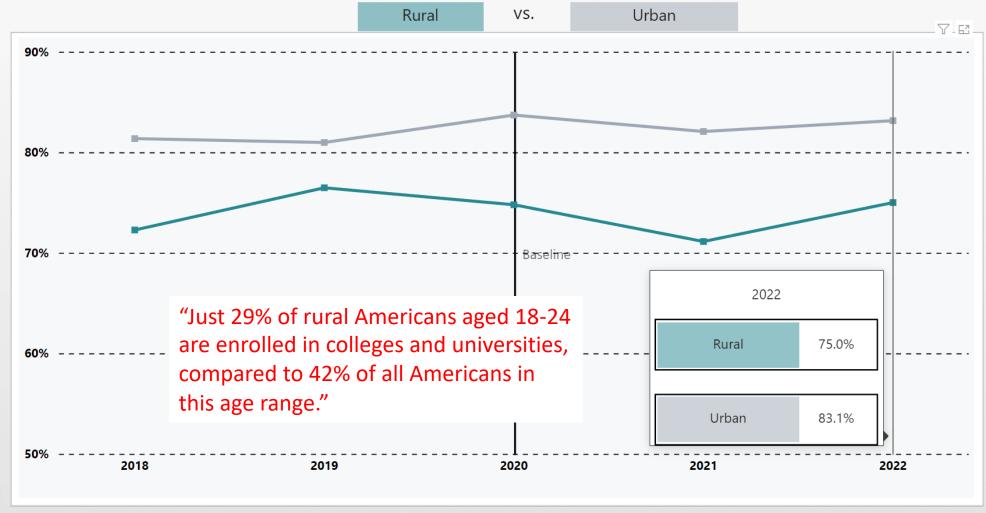
## UT System Student Success Achievement Gaps based on Retention Rates





#### **Filter by Campus** UTK UTC UTM Filter by Success Gap TE Male vs Female Minority vs Non-Minority Pell vs Non-Pell Rural vs Urban Clear Filters

## **UT System Student Success Achievement Gaps based on Retention Rates**





# Filter by Campus UTK UTC UTM Filter by Success Gap Male vs Female Minority vs Non-Minority Pell vs Non-Pell

4-Year Graduation Rates

Clear Filters

## UT System Student Success Achievement Gaps based on 6-Year Graduation Rates



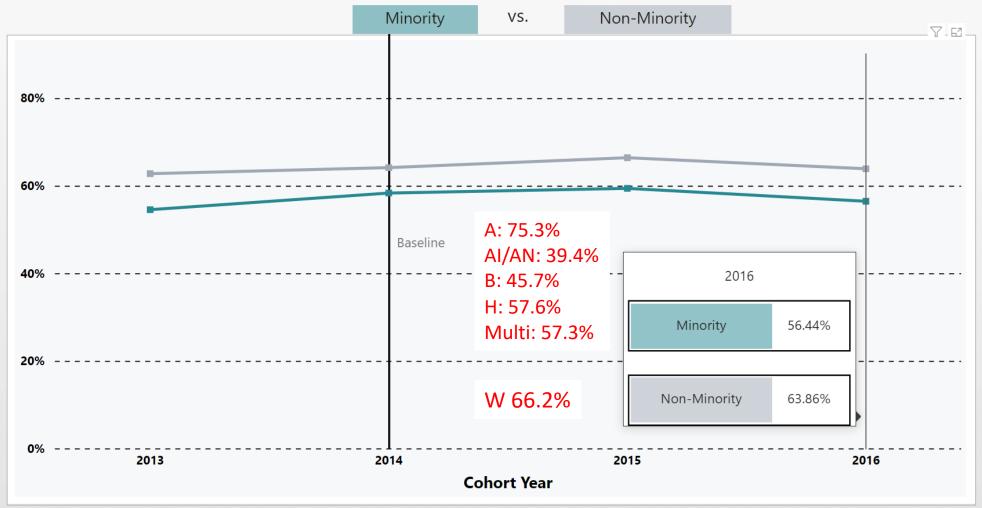
Note: Minority counts reflect those that identify as American Indian or Alaskan Native, Asian, Black, Hispanic, Native Hawaiian or Other Pacific Islander, or Multi-Racial.



#### **Filter by Campus** UTK UTC UTM Filter by Success Gap TE Male vs Female Minority vs Non-Minority O Pell vs Non-Pell **4-Year Graduation Rates**

Clear Filters

## UT System Student Success Achievement Gaps based on 6-Year Graduation Rates

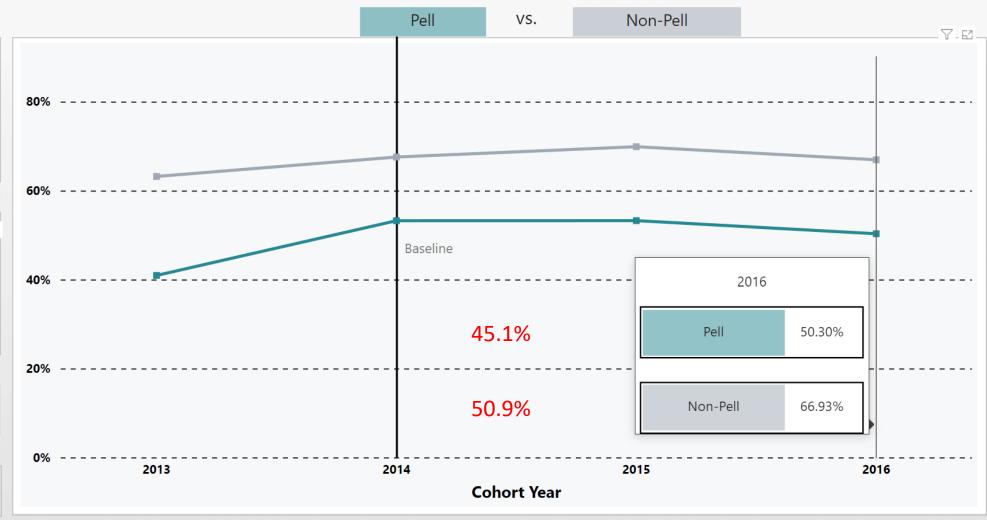


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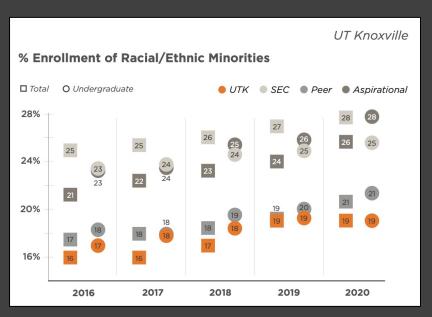


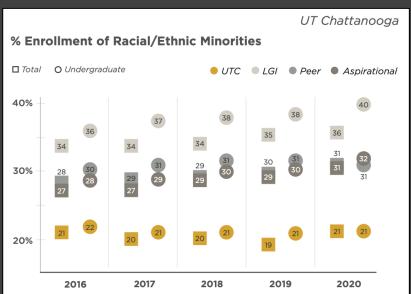
### **Filter by Campus** UTK UTC UTM Filter by Success Gap Male vs Female Minority vs Non-Minority Pell vs Non-Pell **4-Year Graduation Rates** Clear Filters

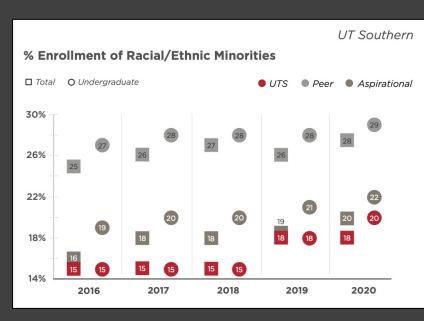
## UT System Student Success Achievement Gaps based on 6-Year Graduation Rates

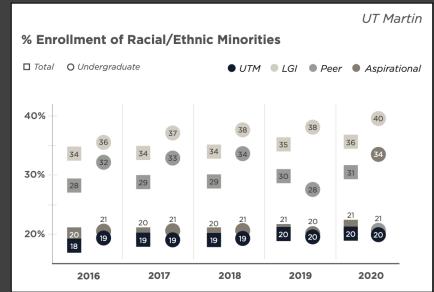


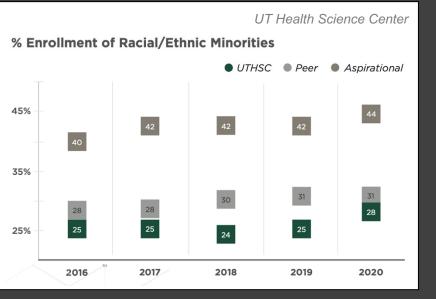
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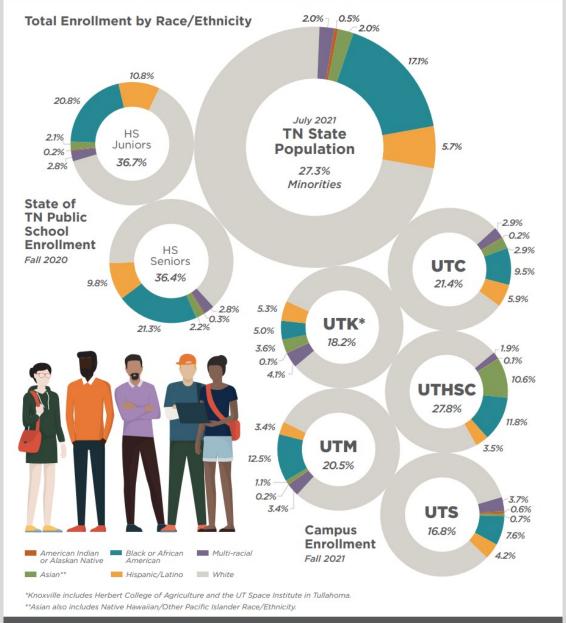






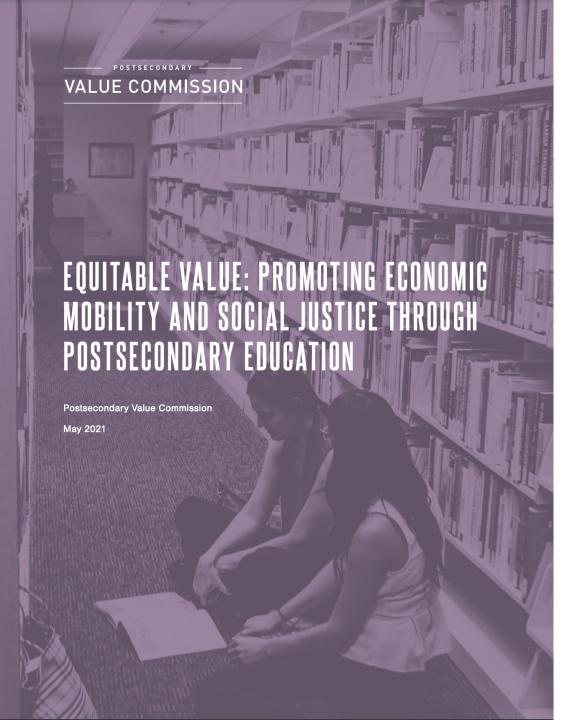
#### STUDENT DEMOGRAPHICS

Board of Trustees — June 23-24, 2022



#### **Racial/Ethnic Minority**

	2018	2019	2020	2021	2022	Total 5-Year Change
American Indian or Alaskan Native	76.0%	76.2%	76.6%	76.2%	75.8%	-0.2%
Asian*						
Black or African American	8.0%	7.9%	7.8%	7.4%	7.1%	-0.9%
Hispanic/Latino						0.070
Multi-racial						
White	4.1%	4.4%	4.8%	5.0%	5.4%	+1.3%
*Asian also includes Native Hawaiian/Other Pacific	3.6%	3.4%	3.5%	3.6%	3.9%	+0.8%
Islander Race/Ethnicity.						
			7 70/			-0.1%
	3.1%	3.1%	3.3%	3.5%	3.5%	-0.1%
	0.2%	0.2%	0.2%	0.2%	0.2%	0.0%



# Improve Data to Expose & Address Inequitable Postsecondary Value

Current information gaps ignore critical outcomes disparities for students of color, students from low-income backgrounds, and women.

https://www.postsecondaryvalue.org/wp-content/uploads/2021/05/PVC-Final-Report-FINAL.pdf

# Data Insights to Data Action

"The focus of data analytics needs to change from an historical approach using data to understand what's happened to a future-oriented approach of using data to project where we're heading."

Susan D'Agostino. "Higher Ed's Top 10 IT Issues," *Inside Higher Ed.* October 28, 2022.

## **2022 EDUCAUSE Horizon Report**® Data and Analytics Edition



EDUCAUSE

#### **Trends**

- Social
- Technological
- Economic
- Environmental
- Political

#### **Implications For**

- CIOs
- IR Leaders
- CAOs
- CDOs
- Enterprise Architects

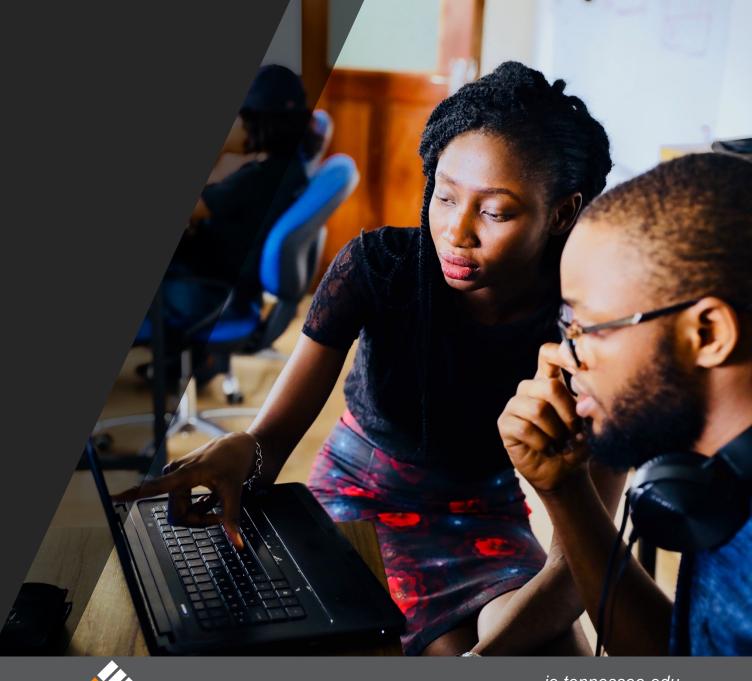
#### **Key Technologies**

- Data Management and Governance
- Unifying Data Sources
- Modern Data Architecture
- Data Literacy Training
- DEI for Data and Analytics
- Assessing and Improving Data and Analytics Capabilities

## **Data Summit**

 Virtual summit hosted by the UT System IE team to foster more systemwide collaboration and sharing of best practices

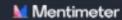
• Spring 2023



What are your biggest obstacles to using data?



## What are your biggest obstacles to using data?







In what areas is better data needed?



## In what areas is better data needed?

**Mentimeter** 

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Application of the control of the co
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## **Biggest Obstacles**

When asked to identify the biggest obstacles to using data, the top three answers were:



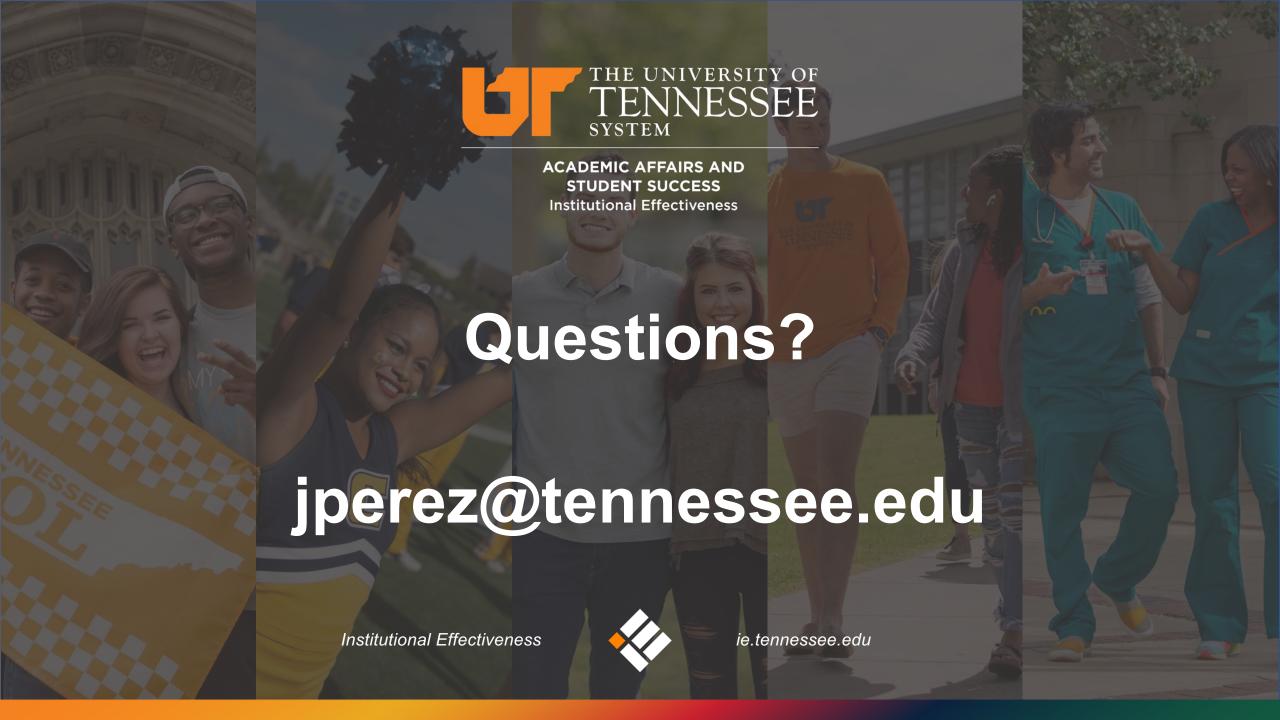
- Trouble turning data into action
  - Decentralized/siloed data collection
    - Budget constraints

### **Areas of Need**

When asked to identify the areas where better data is most needed, the top three answers were:

- Academic advising
  - Admissions and recruitment

Post-graduation attainment







- 1. What data would help you identifying gaps and barriers in student experiences?
- 2. What is the best format for that data (e.g., dashboard, report, infographic)?
- 3. What comparison or contextual data be useful (e.g., state, regional, national)?
- 4. What are other institutions doing in data analytics that you would like to see at UT?
- 5. How could the IE team partner better with you to identify gaps and barriers?