



# Technical College

## System of Georgia

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Using Novel Reports to  
Inform Strategy, Drive  
Enrollment, and Meet  
Workforce Needs

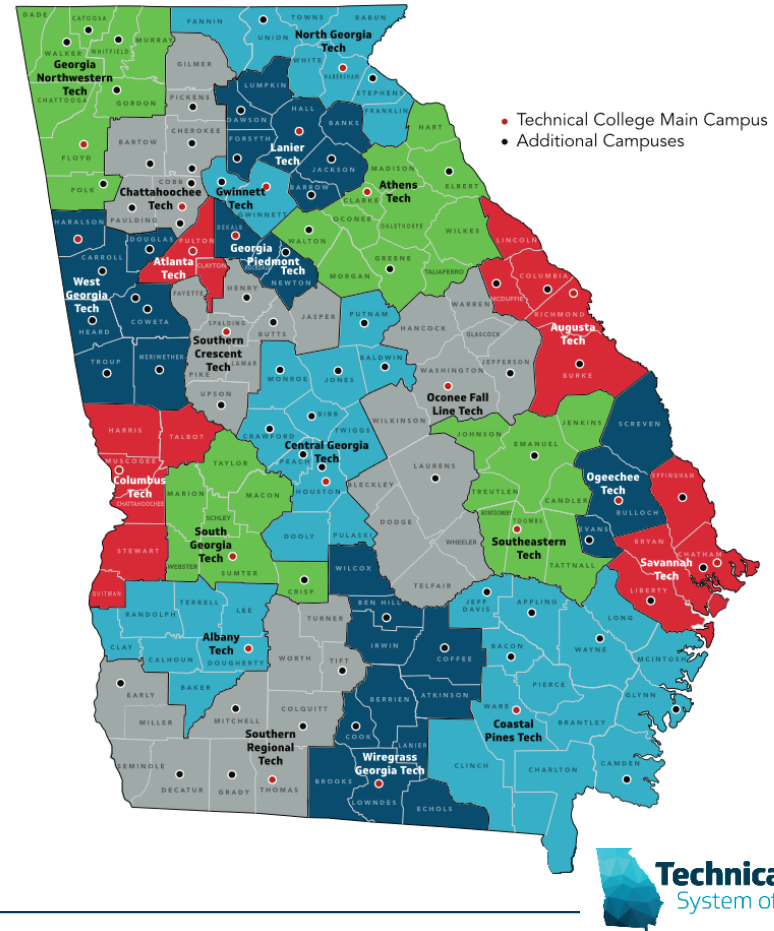
Margo Kenirey  
Report Developer

# Overview

- About TCSG/Programs
- Data Analysis
- Pandemic Impacts
- Mitigate Challenges Using Strategies
  - Drive Student Enrollment
  - Share Students' Progress and Program Needs
  - Focus on Graduation/Program Completion Time
  - Inform Program Review and Workforce Leaders
- Data Techniques for Each Strategy
- Questions

# About TCSG

- Technical College System of Georgia
- 22 Colleges
- 88 Campuses
- 600+ Programs
- Associate, Diploma, and Certificate Level Programs



## About TCSG > Program Offerings

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

## About TCSG > Program Offerings: Business

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

Accounting  
Banking and Finance  
Business and Management  
Business Technology  
Design and Media Technology  
Healthcare Management  
Interior Design  
Marketing  
Paralegal Studies

## About TCSG > Program Offerings: Cyber and Related

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

Computer Support

Cybersecurity

Database

Gaming

Networking

Programming

Web Design and Development

## About TCSG > Program Offerings: Engineering Technology

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

Bioscience

Civil Engineering

Electrical/Computer Engineering

Environmental Engineering

Mechanical Engineering

Nuclear Engineering

## About TCSG > Program Offerings: Film

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

Film (Georgia Film Academy)



## About TCSG > Program Offerings: Healthcare and Nursing

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

Cardiovascular Technology  
Dental Care  
Medical Assisting  
Medical Laboratory  
Nursing  
Ophthalmic Careers  
Paramedicine  
Pharmacy Technology  
Radiology/Ultrasound  
Rehabilitation Services  
Respiratory Therapy Technology  
Surgical Technology  
Veterinary Technology

## About TCSG > Program Offerings: Industrial Technologies

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

Chemical Operations Technology  
Construction  
Construction Mechanical  
Systems  
Drafting/GIS  
Manufacturing and Maintenance  
Welding and Joining Technology

# About TCSG > Program Offerings: Personal Public Service Technologies

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

Agriculture and Horticulture

Barbering

Cosmetology

Culinary Arts

Early Childhood Care and

Education

Fish and Wildlife Management

Forestry Technology

Funeral Services

Hospitality

Photography

Social Work Assistant

## About TCSG > Program Offerings: Public Safety

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

Public Safety

Transportation and Logistics

Basic Law Enforcement  
Criminal Justice  
Crime Scene  
Fire Science Technology  
Forensics  
TSA

## About TCSG > Program Offerings: Transportation and Logistics

Business

Cyber and Related

Engineering Technology

Film

Healthcare and Nursing

Industrial Technologies

Personal and Public Service Technologies

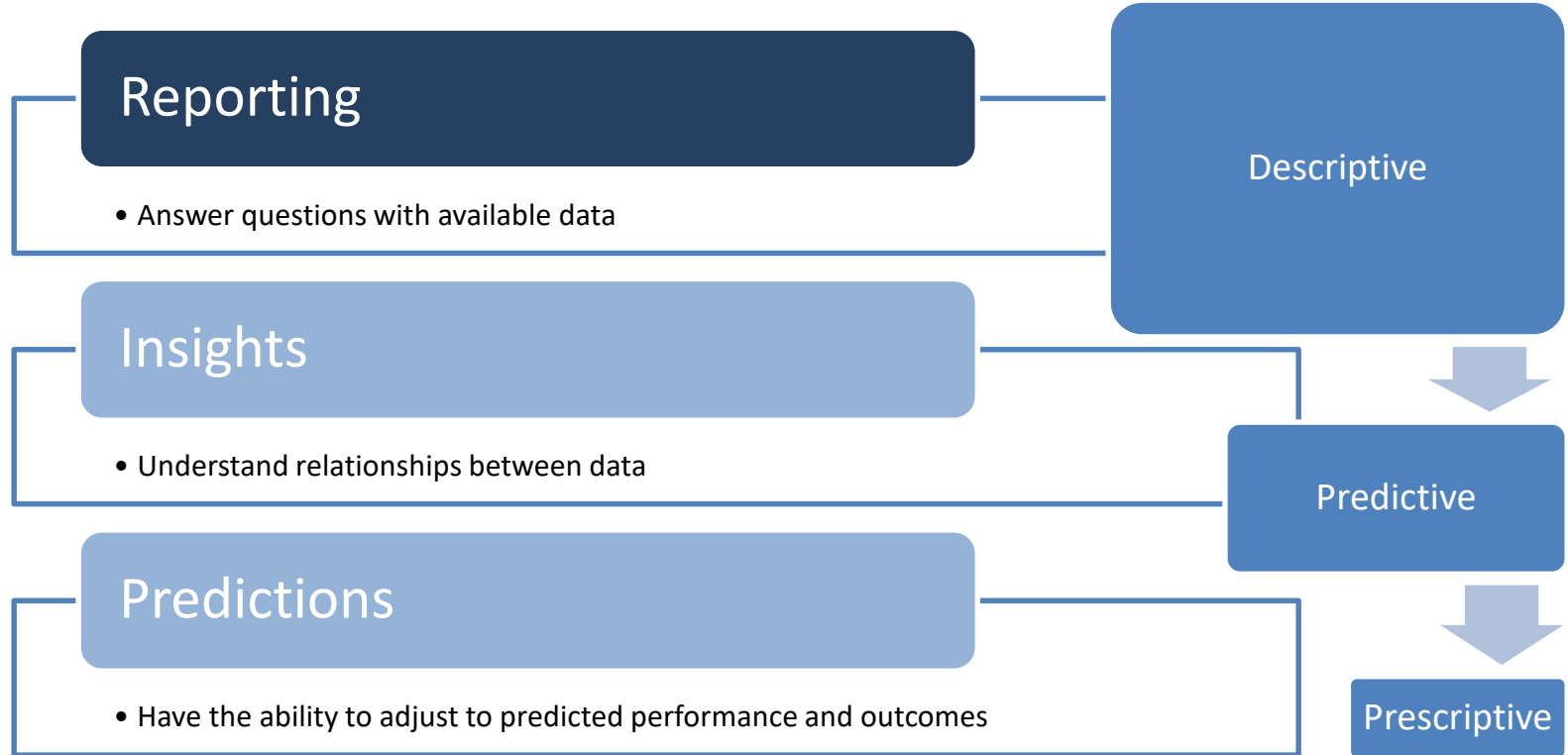
Public Safety

Transportation and Logistics

Continue >

Aircraft Structural Technology  
Auto Collision Repair  
Automotive Service Technology  
Aviation Maintenance  
Technology  
Certified Economic Development  
– Warehousing and Distribution  
Commercial Truck Driving  
Diesel Equipment Technology  
Logistics and Supply Chain  
Management  
Railroad Operations

# Data Analysis: Three Levels



# Data Analysis > Reporting: Traditional

- Static/Low-Interactivity
- Grid/tabular/basic visualizations
- Can we disaggregate?
- Can we drill down to student level?
- Can user change the parameters?
- Does it match need of case?
- **SQL?**

PDF

## Scorecard: Technical Education MES0200

### Technical Education

#### Enrollment: Total Credit Enrollment

	2019	2020	2021
Albany	4,407	4,281	4,172
Athens	6,300	6,271	5,596
Atlanta	5,536	5,804	4,841
Augusta	6,085	5,806	5,388
Central Georgia	12,048	11,459	11,725
Chattahoochee	14,943	14,696	13,450
Coastal Pines	5,352	6,332	5,479
Columbus	4,769	4,899	4,439
Georgia Northwestern	7,730	8,591	8,528
Georgia Piedmont	4,829	4,707	3,819
Gwinnett	12,468	12,721	11,578
Lanier	5,846	6,660	6,915
North Georgia	3,606	3,798	3,463
	2,262	2,591	2,478
	2,919	2,946	3,029
	5,774	5,778	5,547
	3,083	3,079	2,587
	2,571	2,595	2,437
	7,139	7,647	7,627
	6,153	6,564	5,707
	10,112	9,949	8,913
	6,908	6,576	5,426
	140,840	143,750	133,144

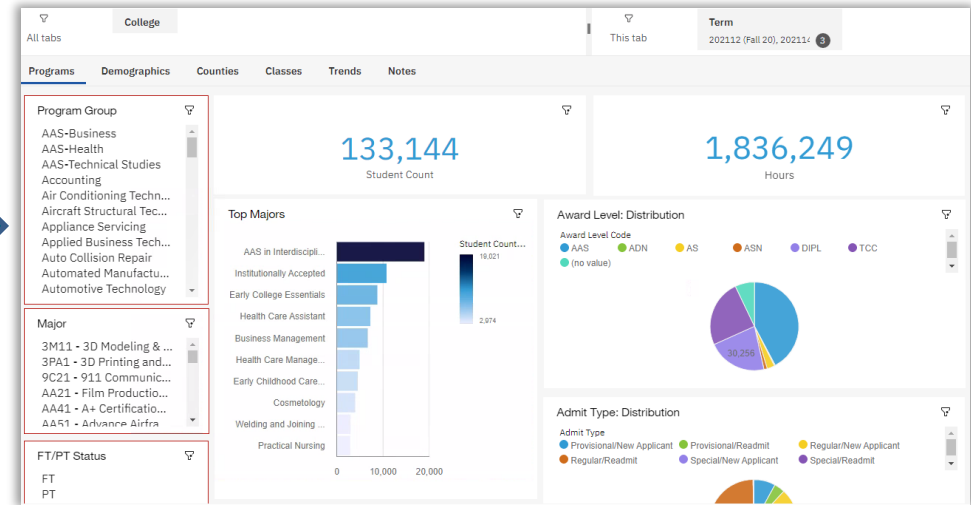
Excel

	A	B	C	D	E	F	G	H	I	J
1	Information Technology and Data Resources, TES2030, Oct 6, 2021									
2	Technical College System of Georgia									
3	Awards									
4	Unique Award Count	AY 2013	AY 2014	AY 2015	AY 2016	AY 2017	AY 2018	AY 2019	AY 2020	AY 2021
5	Albany	2,848	3,144	3,204	2,537	2,581	2,420	2,143	2,052	2,085
6	Athens	2,141	2,207	2,125	2,250	2,381	2,306	2,334	2,341	2,303
7	Atlanta	1,806	2,749	2,875	2,938	3,055	2,347	2,722	3,089	3,115
8	Augusta	1,633	2,020	2,091	2,272	2,274	2,308	2,361	2,112	1,788
9	Central Georgia	n/a	4,935	4,997	5,757	6,012	6,084	6,850	6,213	6,035
10	Chattahoochee	2,629	2,311	4,449	4,817	4,340	4,197	6,413	5,476	5,174
11	Columbus	1,315	1,383	1,189	1,520	1,615	1,662	1,725	2,259	2,736
12	Georgia Northwestern	2,395	2,369	2,615	3,704	4,713	4,243	3,966	4,093	4,517
13	Georgia Piedmont	2,056	2,106	2,383	3,344	2,581	2,180	1,569	1,833	2,387
14	Gwinnett	3,357	3,738	4,114	4,843	3,401	3,656	4,008	4,116	4,145
15	Lanier	1,555	1,561	1,565	2,077	2,333	2,353	2,414	2,428	2,463
16	North Georgia	927	1,009	1,022	1,066	1,037	1,100	1,417	1,242	1,386
17	Oconee Fall Line	816	850	932	784	829	986	1,290	1,255	1,630
18	Ogeechee	1,246	1,400	1,668	1,768	1,827	1,693	1,779	1,631	1,620
19	Savannah	2,653	2,791	2,914	3,135	3,090	3,211	2,990	3,252	2,886
20	South Georgia	1,555	1,678	1,738	1,806	1,849	2,060	2,082	2,049	1,988
21	Southeastern	1,097	1,056	922	1,065	1,076	1,019	876	892	840
22	Southern Crescent	1,569	2,284	2,273	2,444	3,251	3,701	4,245	3,838	4,545
23	Southwest Georgia	674	740	670	n/a	n/a	n/a	n/a	n/a	n/a
24	West Georgia	2,496	2,695	3,031	3,398	3,531	3,033	3,004	2,677	3,002
25	Winthrop Georgia	1,177	1,521	1,938	2,747	2,564	2,660	2,535	2,352	2,572
26	Total	42,775	47,829	52,436	58,877	58,840	57,118	61,180	59,235	61,770

# Data Analysis > Reporting: Dashboards

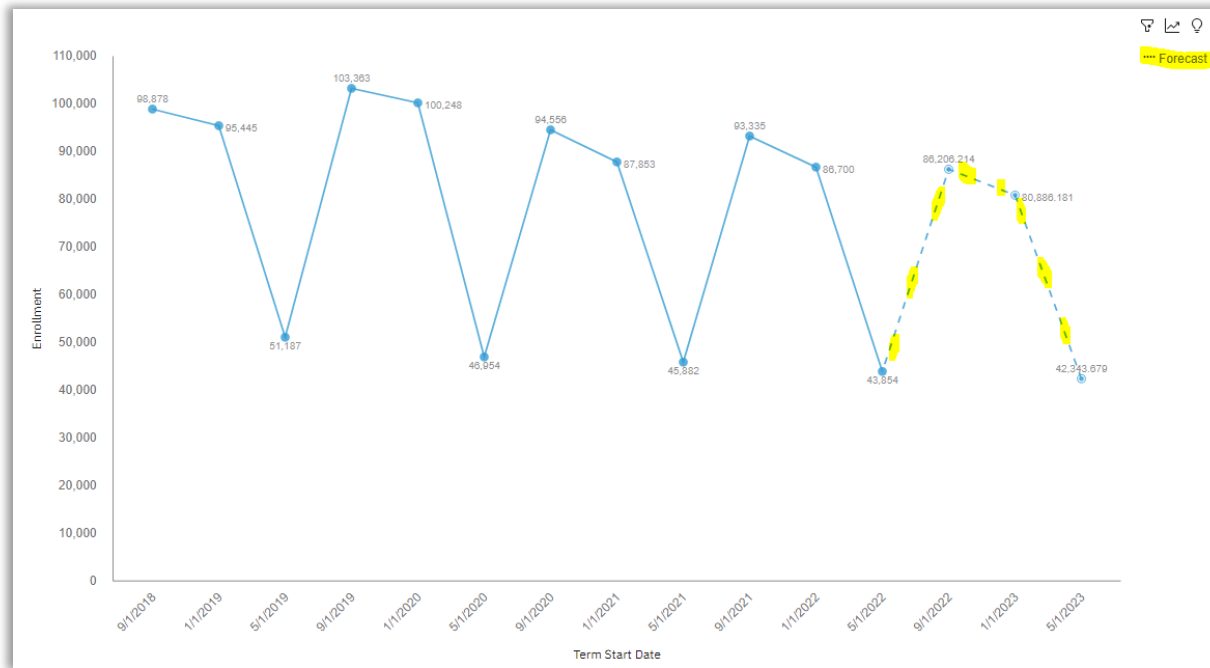
- Aesthetically pleasing
  - Interactive
  - Flexibility
  - Data module
- 
- Is it concise?
  - Is it actionable?
  - Is there ease of use?
  - Is it drag and drop?

Web-based

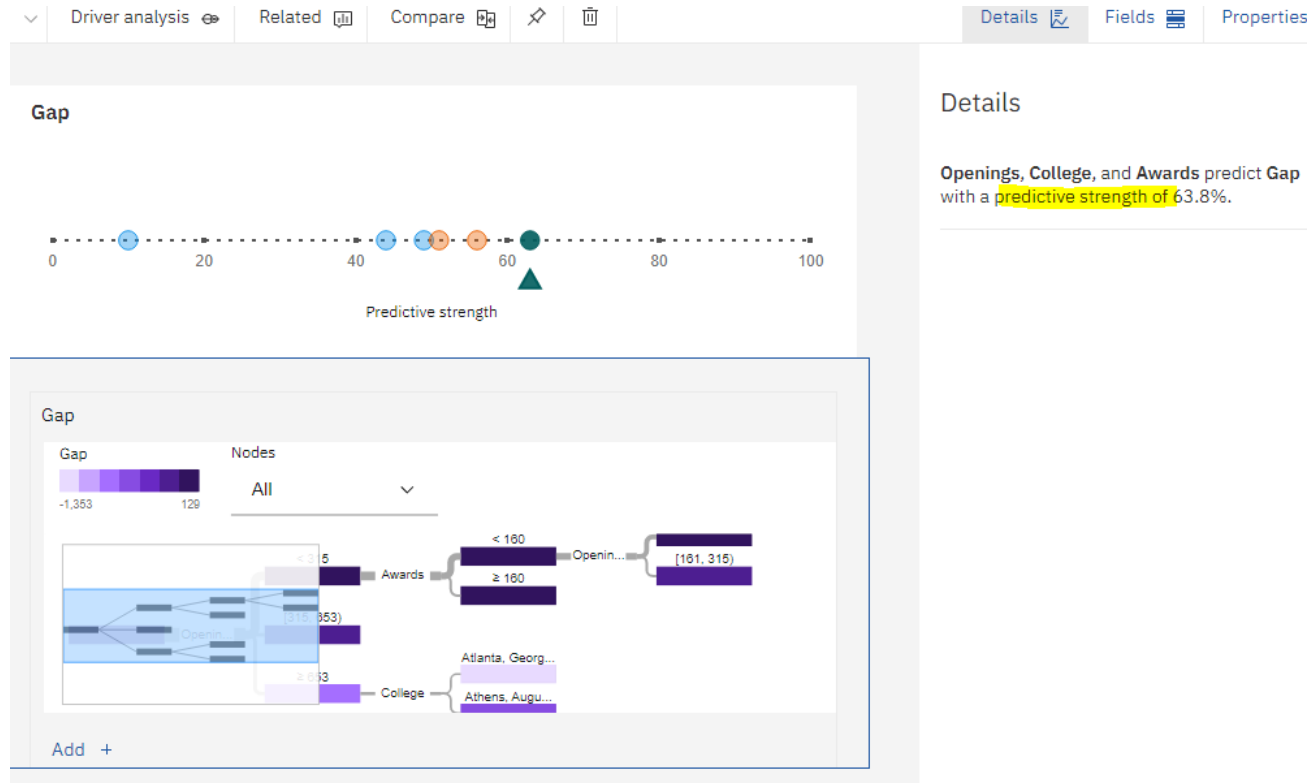




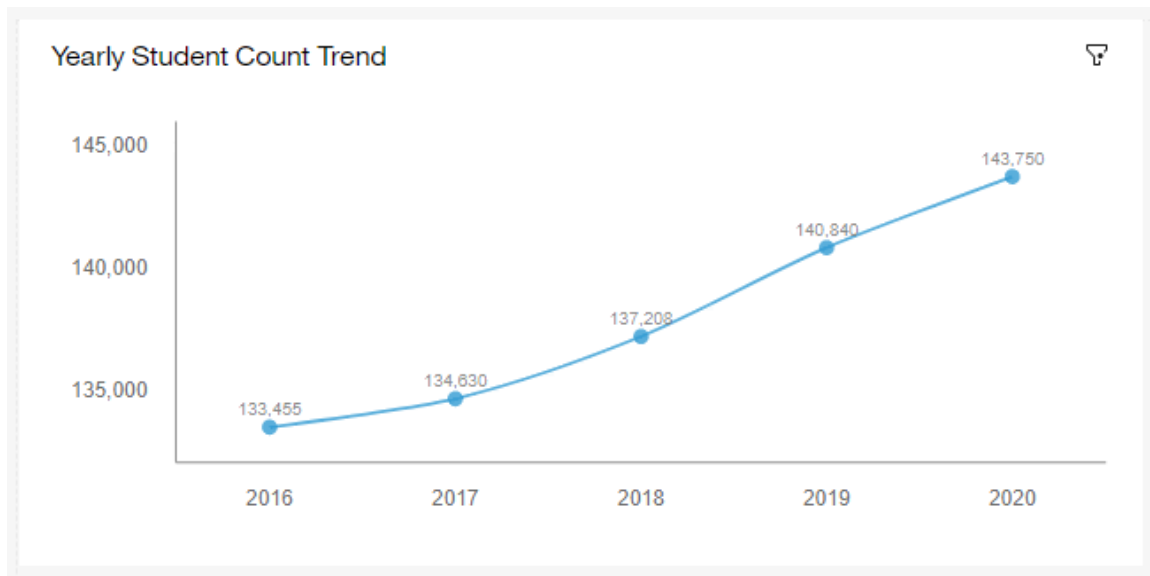
# Data Analysis > Predictive



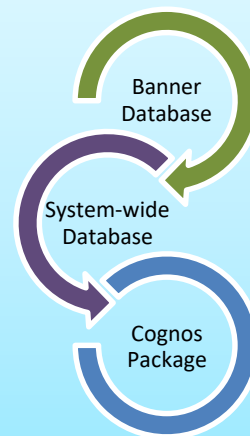
# Data Analysis > Predictive



# Pre-Pandemic: Enrollment



BI Tool: Cognos Analytics 11.2  
Data Source:



- On track to meet Georgia's workforce needs
- Yearly enrollment increased 10,000+ students between AY 2016 and AY 2020
- From 133,455 to 143,750

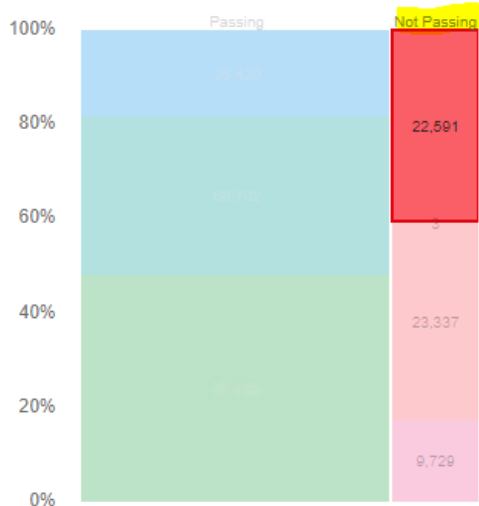
# Pandemic Impacts: Enrollment Withdrawals

Spring 2019 > Spring 2020 Comparison

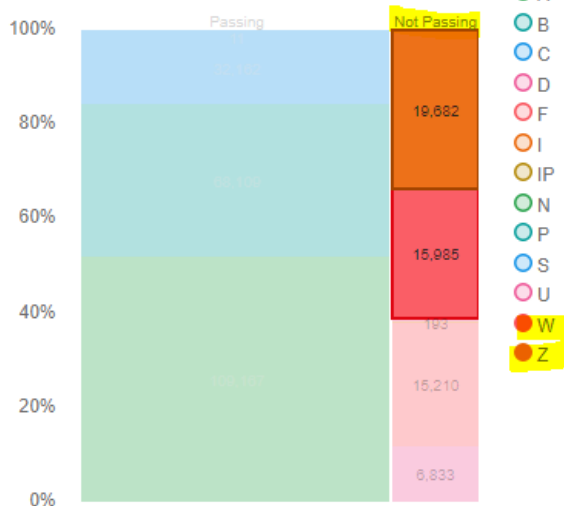
+

Grade Count (W and Z selected)

201914 (Spring 19)



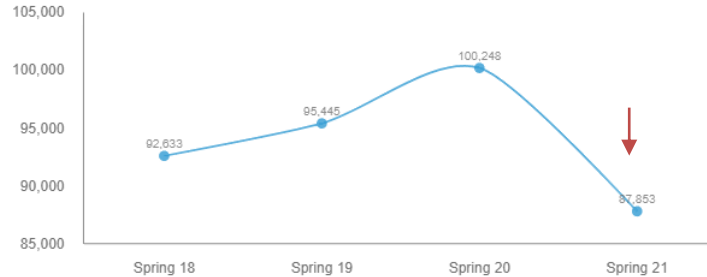
202014 (Spring 20)



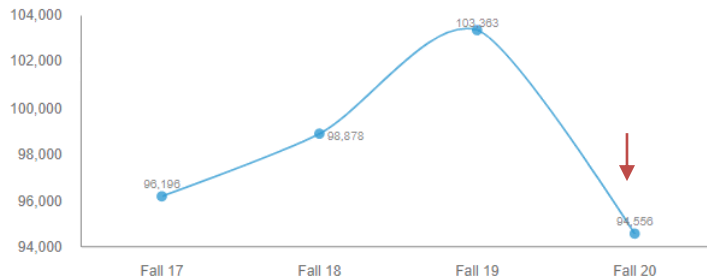
In Spring 2020, students withdrew from nearly 36,000 classes due to COVID-related and other reasons

# Pandemic Impacts: Enrollment Declines

Spring-to-Spring Student Count Trend



Fall-to-Fall Student Count Trend



- Spring-to-Spring and Fall-to-Fall enrollment declined
- Students' lives disrupted (transportation, childcare, employment)
- Industry shut downs
- Access to clinicals and practicums threatened
- Truck driving impacted by social distancing protocols

# Pandemic Impacts: Economic Impact

## REVCYCLE INTELLIGENCE xelligent HEALTHCARE MEDIA

### COVID-19 Pandemic Exacerbated Healthcare Workforce Challenges

The COVID-19 pandemic worsened workforce challenges as organizations faced increased demand for patient care, including testing, immunizations, and treatment for the coronavirus. As many healthcare workers struggled to keep up with this demand, other staff were furloughed or saw their hours reduced due to delays in non-urgent care and procedures... Creating a reliable pipeline for medical supplies, improving training in medical education programs, and optimizing existing workforce development programs will help hospitals and other sectors avoid future workforce shortages, the report concluded.



## The New York Times

### Supply Chain Woes Prompt a New Push to Revive U.S. Factories

COVID-19 pandemic lockdowns slowed or halted manufacturing operations in many countries in Asia, which caused supply chain disruptions that affected US companies and the global economy. The pandemic has accelerated efforts to relocate manufacturing. Companies have begun to or are considering re-shoring portions of their operations back to the US, recognizing that it is "no longer a discussion about cost but about supply-chain resiliency."

- Many key industries, such as healthcare, manufacturing/logistics, and transportation, were experiencing severe workforce shortages
- Supply chain disruptions

# Mitigate Pandemic Impacts > Strategies

- Address challenges
- Provide new insights
- Provide actionable data

Drive Student Enrollment

Share Students' Progress and Program Needs

Focus on Graduation/Program Completion Time

Inform Program Review and Workforce Leaders

# Strategy > Drive Student Enrollment

## “Stop-Out” Report

### Desired Insights and Actionable Data

- Identify students who previously enrolled but had not returned to the college
- Determine which students might be most likely to return
- Used to re-engage students and drive-up enrollment
- Colleges can boost enrollment through targeted campaigns



# Strategy > Drive Student Enrollment

## “Stop-Out” Report

### Questions

- Did student re-enroll?
- Did student pre-register?
- Did student reach intended award level?
- Did student earn any award?
- Is student likely to re-enroll if encouraged?

# Strategy > Drive Student Enrollment

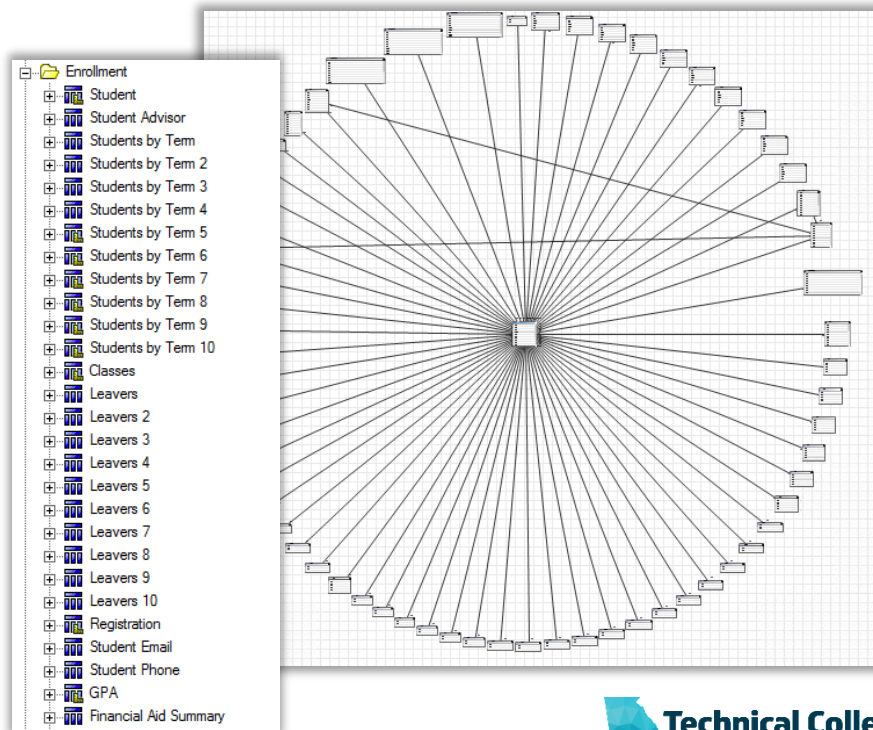
## “Stop-Out” Report

**Technique:** Model Data

**Step:** Build Data Blocks



- Created abstract model that organizes elements of data and how they relate to one another
- Model includes fields such as demographics, registration, advisor, email, phone, GPA, and financial aid



# Strategy > Drive Student Enrollment

## “Stop-Out” Report

**Technique:** Model Data

**Step:** Build Data Filters



- No SQL for end user
- No data extracts for end user
- Limitless combinations within the report

- ✓ Progression
  - > Term Summaries
- ✓ Progression Filters
  - ✓ Enrolled Next Consecutive Term
  - ✓ Enrolled 2 Next Consecutive Terms
  - ✓ Enrolled 3 Next Consecutive Terms
  - ✓ Pre/Enrolled Next Consecutive Term
  - ✓ Pre/Enrolled 2 Next Consecutive Terms
  - ✓ Pre/Enrolled 3 Next Consecutive Terms
  - ✓ Pre/Enrolled at Least 1 of 2 Next Consecutive Terms
  - ✓ Not Pre/Enrolled Next Consecutive Term
  - ✓ Not Pre/Enrolled 2 Next Consecutive Terms
  - ✓ Grad Next Consecutive Term
  - ✓ Grad at Least 1 of 2 Next Consecutive Terms
  - ✓ Not Grad Next Consecutive Term
  - ✓ Not Grad 2 Next Consecutive Terms
  - ✓ Not Grad 3 Next Consecutive Terms
  - ✓ Not Pre/Enrolled/Grad Next Consecutive Term
  - ✓ Not Pre/Enrolled/Grad 2 Next Consecutive Terms
  - ✓ Not Pre/Enrolled/Grad 3 Next Consecutive Terms
  - ✓ Pre/Enrolled or Grad Next Consecutive Term
  - ✓ Pre/Enrolled or Grad at Least 1 of 2 Next Consecutive Terms
  - ✓ Not Grad Goal Next Consecutive Term
  - ✓ Not Grad Goal 2 Next Consecutive Terms
  - ✓ Not Grad Goal 3 Next Consecutive Terms

# Strategy > Drive Student Enrollment

## “Stop-Out” Report

**Technique:** Model Data

**Step:** Build Report



## Data Model

Name:

Not Pre/Enrolled/Grad 3 Next Consecutive Terms

Expression definition:

```
[Advanced].[Pre/Enrolled Term 2].[Next Term] is null
AND
[Advanced].[Pre/Enrolled Term 3].[Next Next Term] is null
AND
[Advanced].[Pre/Enrolled Term 4].[Third Next Term] is null
AND
[Advanced].[Grad Summary Term 1].[Graduate] = 'N'
AND
[Advanced].[Grad Summary Term 2].[Graduate] = 'N'
AND
[Advanced].[Grad Summary Term 3].[Graduate] = 'N'
AND
[Advanced].[Grad Summary Term 4].[Graduate] = 'N'
```



## Report

### Detail Filters

[Enrolled Term] in ?parTerm?

[College Number] in ?parSchool Number?

[Report Advanced].[Not Pre/Enrolled/Grad 3 Next Consecutive Terms]

[Student Type Code] IN ?parStudentType?

# Strategy > Drive Student Enrollment

## “Stop-Out” Report

**Technique:** Model Data

**Step:** Run Detail Reports



### Retention - Progression Report: Non-Graduate, Non-Returning Students (For 3 Terms)

TEC3141

**College:** Athens Technical College  
**Term Enrolled:** Spring Semester 2020 (202014)  
**No Graduate Records:** 202014 through 202114  
**No Enrollment:** 202016 through 202114  
**Total Non-Returning Students:** 681

Home Campus	Banner ID	Last Name	First Name	Major Code	Major	Student Type Code	202014 Attempted Hours	202014 GPA Hours	202014 GPA	Street Address	City/State/Zip	Email	Phone
Main Campus	[REDACTED]	[REDACTED]	[REDACTED]	WT22	NCCER Welding Technology	B	0	0	0	[REDACTED]	Hartwell, GA 30643	[REDACTED]	
Main Campus	[REDACTED]	[REDACTED]	[REDACTED]	CE23	A. S. - Consumer Economics	R	4	4	0.75	[REDACTED]	Athens, GA 30605	[REDACTED]	
Main Campus	[REDACTED]	[REDACTED]	[REDACTED]	CE23	A. S. - Consumer Economics	R	3	0	0	[REDACTED]	Athens, GA 30605	[REDACTED]	[REDACTED]
Main Campus	[REDACTED]	[REDACTED]	[REDACTED]	AF53	AAS in Interdisciplinary Studies	R	13	13	3.46	[REDACTED]	Hartwell, GA 30643	[REDACTED]	
Main Campus	[REDACTED]	[REDACTED]	[REDACTED]	AF53	AAS in Interdisciplinary Studies	B	3	3	4	[REDACTED]	Athens, GA 30606	[REDACTED]	
Main Campus	[REDACTED]	[REDACTED]	[REDACTED]	BI13	Bioscience	R	6	6	3	[REDACTED]	Loganville, GA 30052	[REDACTED]	

# Strategy > Drive Student Enrollment

## “Stop-Out” Report

**Technique:** Model Data

**Step:** Build Aggregate Reports



Term Enrolled: Spring Semester 2020 (2020)									
Total Students: 3076									
Student Count	Graduated 202016		Graduated 202112		Graduated 202114				
	Y	N	Y	N	Y	N			
Under 21	45	1143	163	1025	15				
26 - 30	44	357	69	332					
31 - 35	34	235	38	231					
21 - 25	76	573	114	535					
36 - 40	28	174	32	170					
Over 40	51	316	70	297	47				

Term Enrolled: Spring Semester 2020 (202014)									
Total Students: 237									
Student Count	Graduated 202016		Graduated 202112		Graduated 202114				
	Y	N	Y	N	Y	N			
Accounting	6	48	12	42	10	44			
Cosmetology		88	24	64	9	79			
Cybersecurity	2	35	9	28	7	30			
Nursing		58		58	10	48			

# Strategy > Drive Student Enrollment

## “Stop-Out” Report

**Technique:** Model Data



Consider:

- Is your data correct, consistent and usable?
- Does your data need to be transformed?
- Does your data need to be pivoted?
- What are the relationships made between tables?
- What data can be chunked into reusable blocks?
- Can you define filters in the model?
- Will your model accept parameters (prompts)?

# Strategy > Share Students' Progress & Program Needs

## "Must-Take" Report

### Desired Insights and Actionable Data

- **Currently Enrolled Students:** Helps college administrators identify instructional demand and align course offerings based on the real-time needs
- **Not Actively Enrolled Students:** Allows colleges to identify students with only a few courses remaining, thus creating an opportunity to reconnect with these individuals, so they may come back and complete their program



# Strategy > Share Students' Progress & Program Needs

## "Must-Take" Report

### Questions

- What percentage of their program has the student completed?
- What is students' last terms of enrollment?
- What is students' contact information?
- What are the remaining courses needed to complete their program?

# Strategy > Share Students' Progress & Program Needs

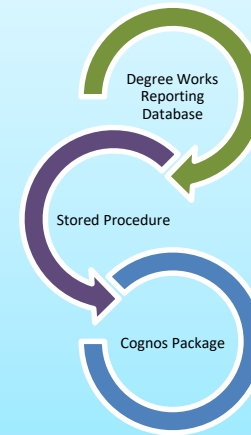
## "Must-Take" Report

**Technique:** Reuse Data Source



- **Sounds like DegreeWorks?**

BI Tool: Cognos Analytics 11.2  
Data Source:



# Strategy > Share Students' Progress & Program Needs

## "Must-Take" Report

**Technique:** Reuse Data Source

**Step:** Ellucian Documentation



### DegreeWorks View Definitions

Views: Academic Audits.....

CPA\_BLOCKCRCLNEEDED.....

CPA\_BLOCKGPA.....

CPA\_BLOCKLABELS.....

CPA\_CLASSAPPLIED.....

CPA\_CLASSNEEDED.....

CPA\_FALLCLASSAPPLIED.....

CPA\_FALLCRCL.....

CPA\_LABEL.....

CPA\_OTLCLASSAPPLIED.....

Views: Financial Aid Audits.....

CPA\_AIDCUMCREDITS.....

CPA\_AIDGRADE.....

CPA\_AIDPROBATION.....

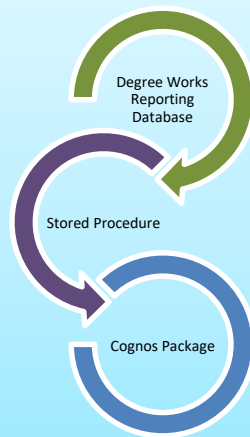
CPA\_AIDTERM.....

CPA\_AIDTERMCREDITS.....

ellucian.

**Degree Works**  
Advanced Reporting with  
CPA and SEP  
Technical Guide

BI Tool: Cognos Analytics 11.2  
Data Source:



# Strategy > Share Students' Progress & Program Needs

## "Must-Take" Report

**Technique:** Reuse Data Source

**Step:** Build Blocks of Code

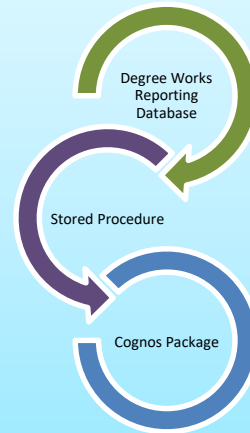


```
<response>
<connectionID value="QFSID_5"/>
<queryFeedbackResult>
  <property
    name="nativeCommandText" queryName="rs"
    value="
      <property name='CognosCommandText' queryName='rs'
        value='
          LW002.'ID Number' as ID
          LW002.Name as Name,
          LW002.'Email Address' as
          LW002.'Advisor Name' as
          LW002.'Major Code' as
          LW002.'Major Description' as
          LW002.'% Complete' as
          LW002.'Active Term' as
          LW002.'School Name' as
          LW002.'Student PIDM' as
          from
          (call 'TCSG MIS DB'..N
          </property name='connections' qualified
          </property>
        '
      </property>
    '
  </property>
</queryFeedbackResult>
</response>
```

### Associated SQL code:

```
SELECT "RAD_PRIMARY_MST"."RAD_ID", "RAD_PRIMARY_MST"."RAD_NAME",
"CPA_BLOCKGPA"."RAD_EMAIL", "CPA_BLOCKGPA"."BLOCK_TYPE",
"RAD_GOAL_DTL"."PCT_COMPLETE_NUM", "RAD_GOAL_DTL"."RAD_STU_LEVEL",
"RAD_GOALDATA_DTL"."RAD_DEGREE_CODE", "RAD_GOALDATA_DTL"."RAD_GOAL_VALUE",
((( "DGWDBA"."CPA_BLOCKGPA"."RAD_GOALDATA_DTL"."RAD_GOAL_SEQ"
LEFT OUTER JOIN "PUBLIC"."RAD_PRIMARY_MST"
ON
"CPA_BLOCKGPA"."STU_ID"="RAD_PRIMARY_MST"."RAD_ID" )
LEFT OUTER JOIN
"PUBLIC"."RAD_STUDENT_MST"
ON
"RAD_PRIMARY_MST"."RAD_ID"="RAD_STUDENT_MST"."RAD_ID" )
LEFT OUTER JOIN
"DGWDBA"."RAD_GOAL_DTL"
ON
("RAD_STUDENT_MST"."RAD_ID"="RAD_GOAL_DTL"."RAD_ID" ) AND
("RAD_STUDENT_MST"."RAD_TERM"="RAD_GOAL_DTL"."RAD_TERM" ) )
LEFT OUTER JOIN
"DGWDBA"."RAD_GOALDATA_DTL"
ON
((( "RAD_GOAL_DTL"."RAD_ID"="RAD_GOALDATA_DTL"."RAD_ID" ) AND
("RAD_GOAL_DTL"."RAD_SCHOOL"="RAD_GOALDATA_DTL"."RAD_SCHOOL" ) ) AND
("RAD_GOAL_DTL"."RAD_DEGREE_CODE"="RAD_GOALDATA_DTL"."RAD_DEGREE_CODE" ) )
WHERE
"CPA_BLOCKGPA"."BLOCK_TYPE"="DEGREE" AND
```

BI Tool: Cognos Analytics 11.2  
Data Source:



# Strategy > Share Students' Progress & Program Needs

## "Must-Take" Report

**Technique:** Reuse Data Sources

**Step:** Run Detail Reports



Student ID	Student Name	Student Type	Student Status	GPA (Unofficial)	Student Email	Alt Email	Student Advisor	Major Code	Major Description	Percent Complete	Active Term	Student PIDM	Cell Phone Number	Must Take
[REDACTED]	[REDACTED]	R	Academic Suspension	2.261	[REDACTED]	[REDACTED]	Wynne, Sonia	HT12	HT12-Hemodialysis Technologist Dip	91.026	202212	[REDACTED]	[REDACTED]	ALHS 1011
[REDACTED]	[REDACTED]	R	Good Standing	2.870	[REDACTED]	[REDACTED]	Wright, Stephen G	MD12	MD12-Business Management Dip	97	202212	[REDACTED]	[REDACTED]	MGMT 2215

# Strategy > Share Students' Progress & Program Needs

## "Must-Take" Report

**Technique:** Reuse Data Sources

**Step:** Run Aggregate Reports



## Question

- How many students need this course?
- How many sections do we need to offer?
- How many students are near completion?

Student Results		Course List
Degree Works – Percent Completed with Courses Remaining		
LW0022		
College: Central Georgia Technical College		
DW Link: CENTRAL_GEORGIA_DW		
Must Take	Count	
COMP 1000	8	
EMPL 1000	7	
ECCE 1121	5	
MGMT 2215	5	
ECCE 2245	4	
ACCT 1100	3	
ALHS 1011	3	
BIOL 2113	3	
BIOL 2113L	3	
BIOL 2114	3	
BIOL 2114L	3	
ECCE 1112	3	
ECCE 1120	3	
ECCE 2203	3	
MGMT 2125	3	
AUTT 2010	2	
AUTT 2030	2	
BAFN 2210	2	

# Strategy > Share Students' Progress & Program Needs

## "Must-Take" Report

**Technique:** Reuse Data Source



Consider:

- Do you have underutilized data sources?
- Does this data source only deliver pre-packaged reports?
- Do you have the ability to combine existing data sources?
- Do those data sources have primary keys for you to match?

# Strategy > Graduates & Program Completion Times

## “Time-to-Completion” Report

- Reviews of TCSG’s Manufacturing/Logistics, Nursing and Commercial Truck Driving programs
- Goal of getting more people with industry-recognized credentials into the workforce faster



# Strategy > Graduates & Program Completion Times

## “Time-to-Completion” Report

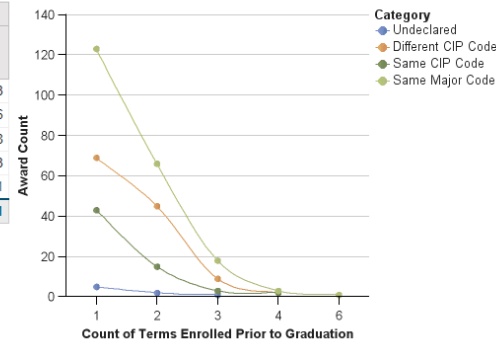
- Reports how many terms it takes for graduates to complete a program or course
- Data are disaggregated by students who stayed in the same major throughout their academic career versus those who changed majors

### Time to Completion: Select Courses TEC0512

By Category  
Graduation Reporting Period: Spring Semester 2020 (202014)  
Graduation Major: HS21 - Health Care Science  
Course List: BIOL-2113

Count of Terms Enrolled Prior to Graduation	Category			
	Undeclared	Different CIP Code	Same CIP Code	Same Major Code
1	5	69	43	12
2	2	45	15	6
3	1	9	3	1
4		2	2	
6				
Category Summary	8	125	63	21

Category	Usage
Pre-Semester	Enrolled prior to quarter to semester conversion
Undeclared	Undeclared major
Different CIP Code	Enrolled in a different major with a different CIP
Same CIP Code	Enrolled in a different major with the same CIP
Same Major Code	Enrolled in this major



# Strategy > Graduates & Program Completion Times

## “Time-to-Completion” Report

- Illustrates how specific courses affect completion time
- Inclusion of awards earned provides context for understanding program completion times
- Insights gained by the Time-to-Completion reports may play an important role in TCSG program reviews
- Helps TCSG streamline career pathways and support strategies for more timely program completion

# Strategy > Graduates & Program Completion Times

## “Time-to-Completion” Report

Consider:

- Are your existing reports overwhelming?
- Can you filter reports?
- Are default parameters available?
- Do you have definitions on the report?
- Can you export in multiple formats? Excel, PDF, HTML

# Strategy > Inform Program Review & Workforce Leaders

Graduate Awards, Job Openings and Gap

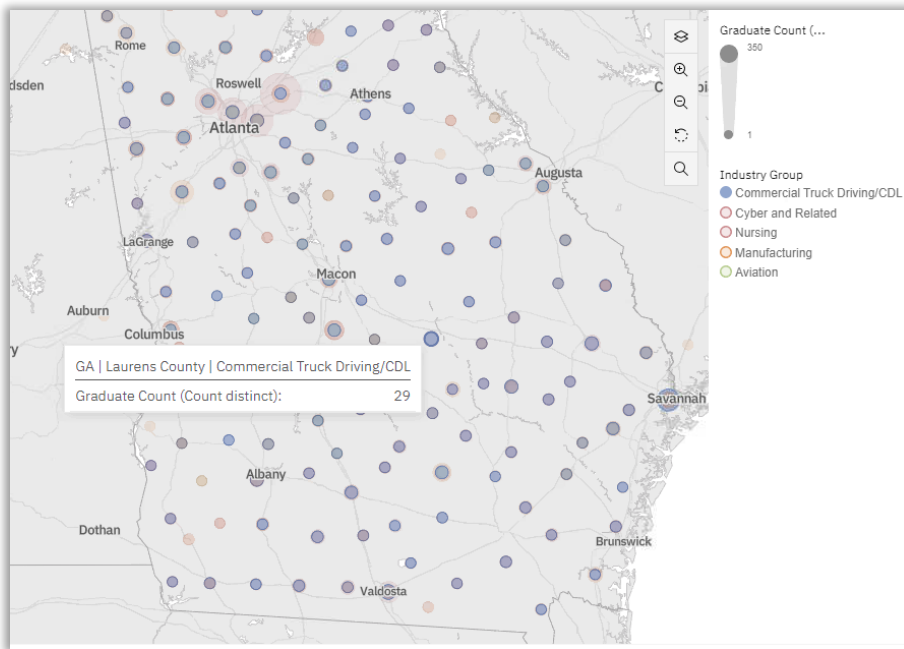
## Desired Insights and Actionable Data

- Understand and respond to regional workforce supply and demand gaps
- Strategically plan instructional offerings to effectively address workforce shortages
- Communicate enrollment and workforce gaps to stakeholders
- Request resources to expand instructional capacity

# Strategy > Inform Program Review & Workforce Leaders

## Graduate Awards, Job Openings and Gap

**Technique:** Visualizations and Maps



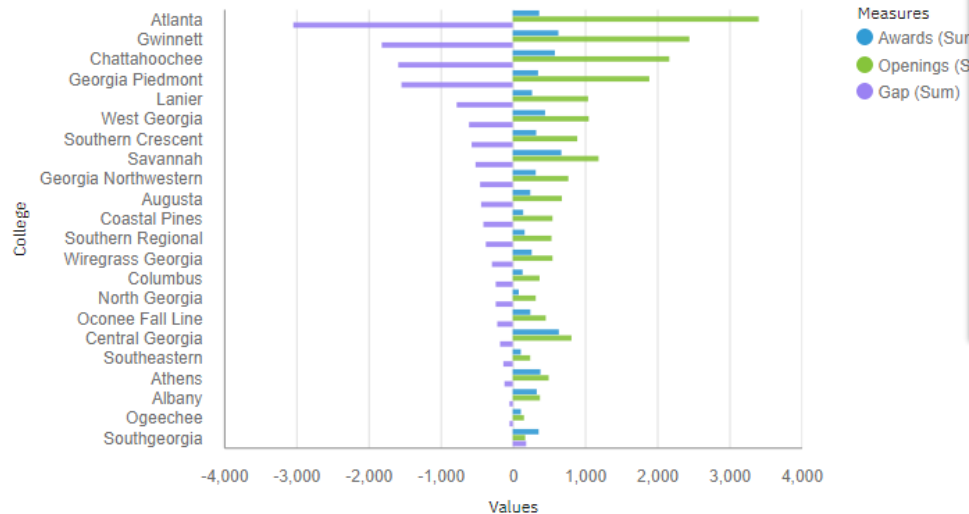
# Strategy > Inform Program Review & Workforce Leaders

## Graduate Awards, Job Openings and Gap

**Technique:** Visualizations and Maps



Transportation & Logistics Awards, Openings and Gap by College



BI Tool: Cognos Analytics 11.2  
Data Source:

Banner  
Database >  
System-  
Wide

Emsi

Lightcast

Cognos  
Analytics

## Graduate Awards, Job Openings and Gap



# Strategy > Inform Program Review & Workforce Leaders

## Graduate Awards, Job Openings and Gap

**Technique:** Visualizations and Maps



Consider:

- For maps, have you chosen the best geographical shape?
- Are data points/axis labeled?
- Did you try new visualizations? Heat Map, River, Sankey, Waterfall – be creative!
- Is your dashboard concise and easy to use?



# Conclusion

- Describe how colleges can use novel reports and dashboard to boost enrollment and streamline academic/technical programs
- Understand how data visualizations and mapping can highlight supply gaps and workforce shortages
- Identify benefits of using data to inform strategic direction for program success
- Extrapolate from Georgia possible reports for other systems of higher education
- Leverage novel reports and data visualizations to request program resources



# Technical College

## System of Georgia

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Questions?