


Leveraging state K-12 data for enrollment planning insights

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Assistant Vice Chancellor
Institutional Planning and Effectiveness

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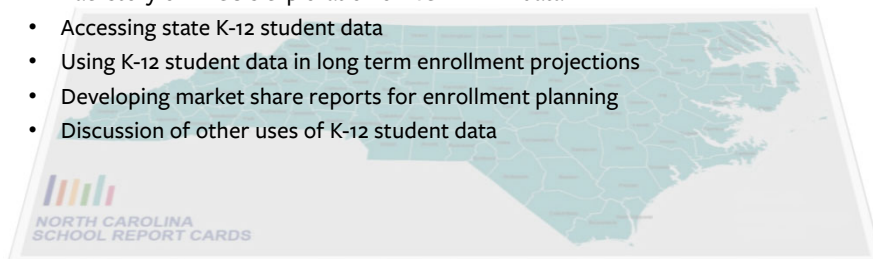


WCU quick facts

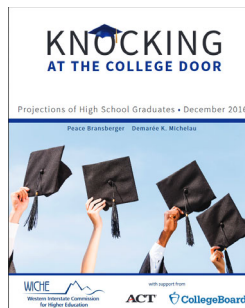
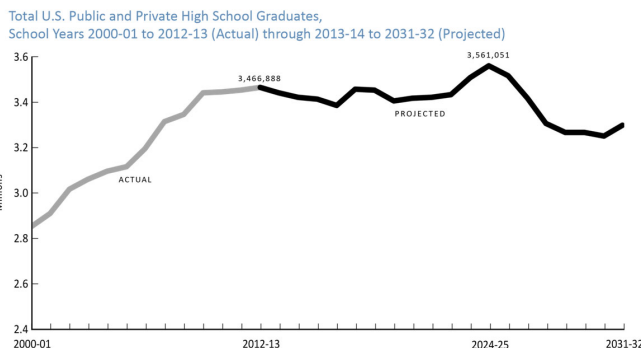
LOCATION	MISSION	STUDENTS
<ul style="list-style-type: none">-Cullowhee, NC (1 hour west of Asheville, NC)-3 hours from Charlotte, Atlanta and Knoxville-Rural, public, regional, comprehensive	Create learning opportunities that incorporate teaching, research, service, and engagement through on campus, off campus, on-line and international experiences. The university focuses its undergraduate, master's and three doctoral programs, educational outreach, research, creative, and cultural activities to sustain and improve individual lives and enhance economic and community development in Western North Carolina and beyond.	<ul style="list-style-type: none">-12,000+ headcount-10,000+ undergraduate-9,500+ residential-9,500+ full-time-87% NC residents

USING STATE K-12 STUDENT DATA

- Backstory on WCU's exploration of NCDPI K-12 data
- Accessing state K-12 student data
- Using K-12 student data in long term enrollment projections
- Developing market share reports for enrollment planning
- Discussion of other uses of K-12 student data

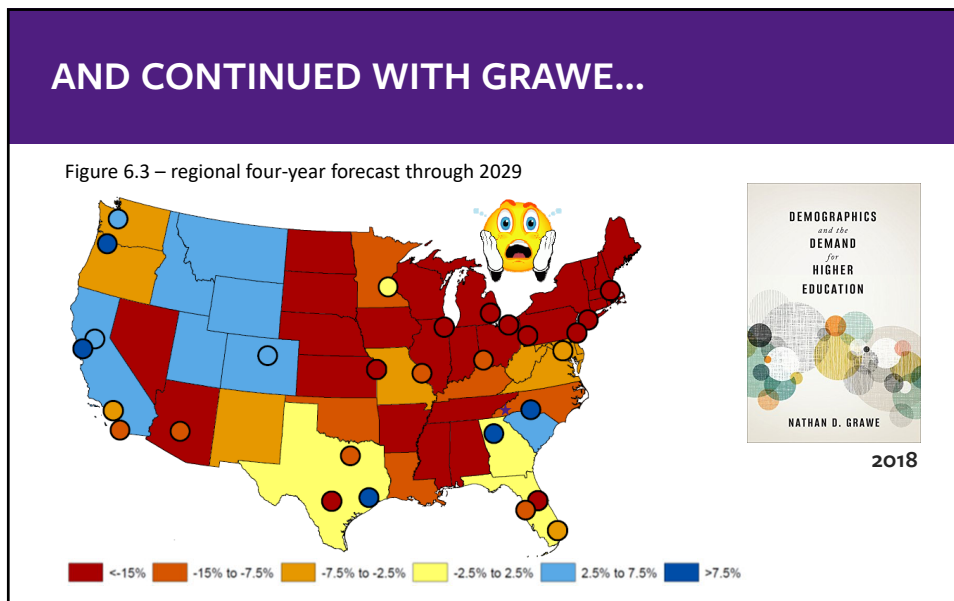
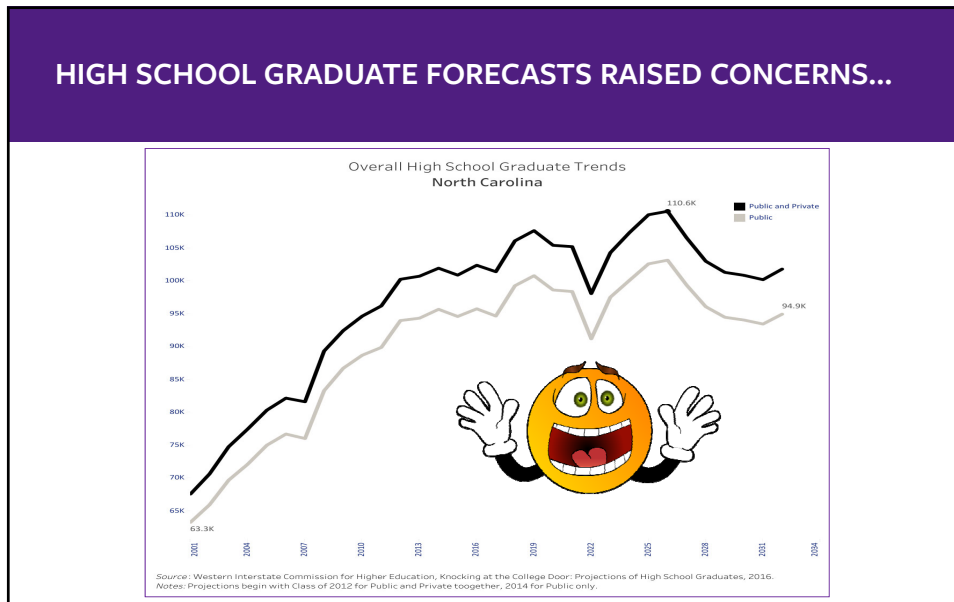


IT ALL BEGAN WITH WICHE...



<https://knocking.wiche.edu/>

The overall number of high school graduates will plateau for most of the next decade with 7 of the 10 years from 2013 to 2023 expected to see fewer or about the same number of graduates compared to 2013, which was the year with highest recorded number of U.S. graduates yet. While the country is projected to see three years of growth between 2024 and 2026, this will be a short-term increase as the average size of graduating classes between 2027 and 2032 is expected to be smaller than those in 2013.



HOW WILL THE *WICHE* AND *GRAWE* FORECASTS IMPACT WCU BUSINESS?



Customer questions:

- Who are our future customers?
- Where are our future customers?
- How many potential customers are there?

Information resource questions:

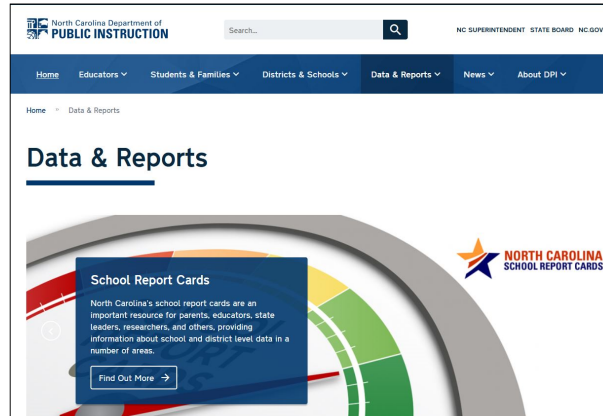
- What are our best demographic information sources?
- How do we best access labor market information?
- What can we know about the K-12 student pipeline?



LONG RANGE ENROLLMENT FORECASTS @ WCU

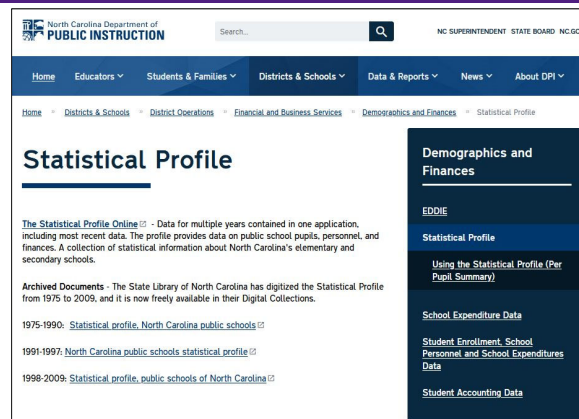
- Are *WICHE* forecasts of high school graduates accurate?
 - Can we estimate future high school graduates in NC?
- Are *Grawe's* forecasts for regional comprehensive universities accurate for WCU?
 - Can we know how many future NC high graduates might enroll @ WCU?

CAN WE PREDICT FUTURE HIGH SCHOOL GRADUATES IN NC?



<https://www.dpi.nc.gov/data-reports>

NCDPI STATISTICAL PROFILE



<https://www.dpi.nc.gov/districts-schools/district-operations/financial-and-business-services/demographics-and-finances/statistical-profile>

PUPIL COUNTS BY YEAR AND GRADE

STATISTICAL PROFILE Public Schools of North Carolina
State Board of Education | Department of Public Instruction

Home | Part I. State Summary | Part II. Local Education Agencies | Part III. Charter/Regional Schools | Part IV. Monthly Student Accounting Reports

Part II. Local Education Agencies

Pupil Accounting

- Local Education Agency List
- Local Education Agency Map
- Table A1 - (at LEA Level) Final Pupils by Year and Grade
- Table A2 - (at LEA Level) Expenses by the Agency Level
- Table A3 - (at LEA Level) Current Expense Expenditures

Table A1 - (at LEA Level) Final Pupils by Year and Grade

Foreword

The North Carolina Public Schools Statistical Profile is a collection of statistical information about North Carolina's elementary and secondary schools. It was initiated in 1975.

The purpose of this profile is to provide general statistical data to the public, professional educators, and the General Assembly. This profile includes information on public school pupils, personnel, and finances. Tables with statewide data are presented in Part I. Part II contains data on pupil accounting, high school graduate intentions, public school personnel, and current expense expenditures for each local school system. Part III provides pupil accounting and financial data for the charter schools.

This publication would not be possible without the full support and dedicated efforts of public school administrators, principals, and teachers. Their efforts in making this information available are gratefully acknowledged.

Mark Johnson
State Superintendent

William W. Cobery Jr.
Chairman

Pupil counts available for private schools:
<https://ncadmin.nc.gov/public/private-school-information/state-north-carolina-private-grade-k-12-school-statistics>

FINAL PUPIL COUNTY BY GRADE AVAILABLE BY LEA OR CHARTER SCHOOL, BY YEAR (.CSV FILES)

STATISTICAL PROFILE Public Schools of North Carolina
State Board of Education | Department of Public Instruction

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Part II. Local Education Agencies

Click Map to View LEA's Data: Or Select LEA: [010 Alamance-Burlington Schools]

Alamance-Burlington Schools 1712 Vaughn Road, Burlington, NC 27217

Select School Year: [School Year 2019-20]

Table A1 - (at LEA Level) FINAL PUPILS BY GRADE

Final Pupils by Grade
Alamance-Burlington Schools School Year 2019-20

More Information about the Table

Year	LEA	LEA Name	Month	Type	K/0	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	Total
2020	010	Alamance-Burlington Schools	Month Final	Enrollment	1,795	1,820	1,754	1,731	1,774	1,828	1,907	1,874	1,904	2,008	1,713	1,819	1,615	0	23,492
2020	010	Alamance-Burlington Schools	Month Final	ADM	1,727	1,776	1,716	1,703	1,741	1,789	1,824	1,824	1,760	1,839	1,642	1,729	1,557	0	22,827
2020	010	Alamance-Burlington Schools	Month Final	ADA	1,653	1,707	1,651	1,644	1,678	1,725	1,650	1,746	1,677	1,825	1,553	1,618	1,472	0	21,799
2020	010	Alamance-Burlington Schools	Month Final	M/D	1,737	1,779	1,716	1,703	1,741	1,789	1,824	1,824	1,760	1,929	1,642	1,729	1,557	0	22,827
2020	010	Alamance-Burlington Schools	Month Final	Promotion	1,762	1,760	1,704	1,684	1,738	1,788	1,824	1,824	1,760	1,703	1,554	1,500	1,551	0	22,312
2020	010	Alamance-Burlington Schools	Month Final	Non-Promotion	35	16	12	5	3	1	0	0	0	226	78	129	6	0	515

Export to Excel

ESTIMATING HS GRADUATES IN THE PIPELINE

Alamance-Burlington Schools 1712 Vaughn Road, Burlington, NC 27217
 Select School Year: School Year 2019-20

Table A1 - (at LEA Level) FINAL PUPILS BY GRADE

Final Pupils by Grade
 Alamance-Burlington Schools School Year 2019-20

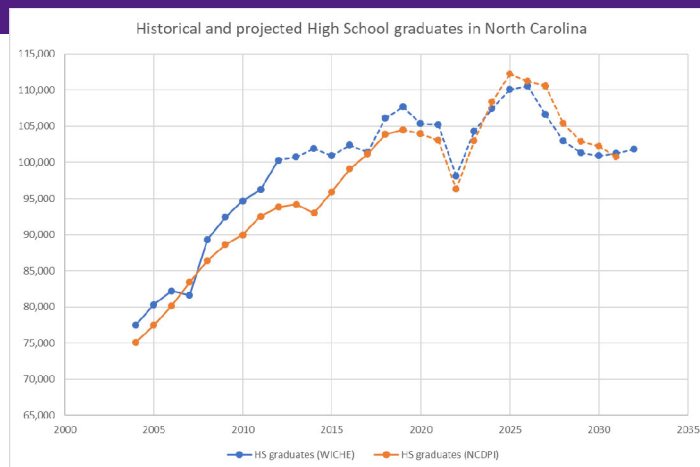
More Information about the Type

Year	LEA	LEA Name	Month	Type	KIND	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	Total
2020	010	Alamance-Burlington Schools	Month Final	Enrollment	1,785	1,820	1,754	1,731	1,774	1,828	1,907	1,874	1,804	2,008	1,713	1,818	1,616	0	23,492
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2020	010	Alamance-Burlington Schools	Month Final	Promotion	1,702	1,760	1,704	1,694	1,738	1,788	1,824	1,824	1,760	1,703	1,564	1,600	1,551	0	22,312
2020	010	Alamance-Burlington Schools	Month Final	Non-Promotion	35	16	12	9	3	1	0	0	0	226	78	129	6	0	515

Export to Excel

How many 2019-20 1st graders will graduate from high school in May 2031?
 What variables impact pupil enrollment year-to-year?

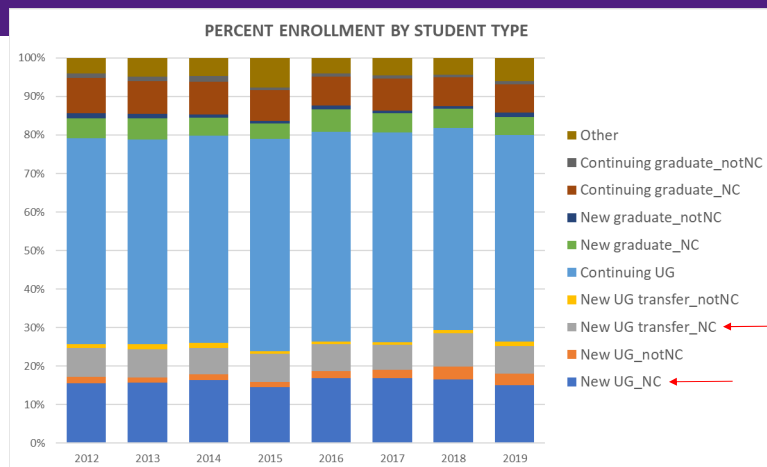
COMPARING WICHE PROJECTIONS WITH NCDPI DATA AND WCU ESTIMATES



OBSERVATIONS FROM NCDPI PUPIL ENROLLMENT DATA

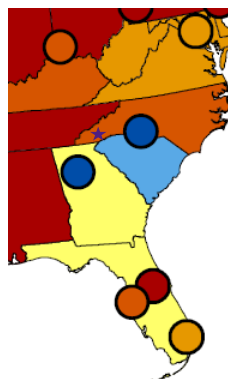
- WICHE HS graduate projections are fairly accurate
- Trend in NC towards private school enrollment
- Stable patterns of pupil progression provide opportunity to generate future HS graduate estimates

THE IMPORTANCE OF UNDERGRADUATE ENROLLMENT AT WCU



WHERE ARE WCU STUDENTS COMING FROM?

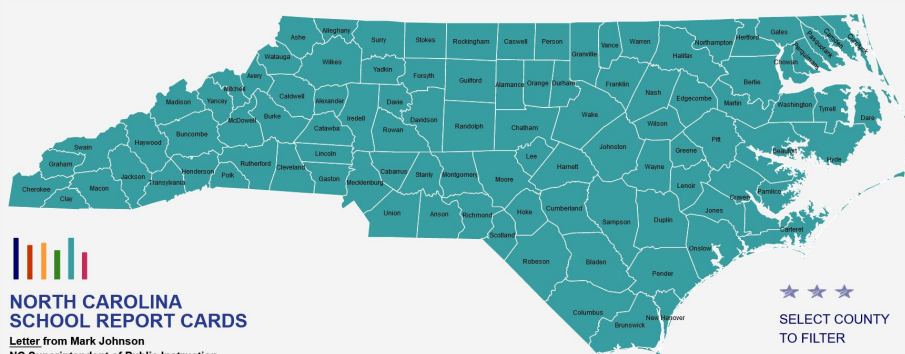
- Grawe forecasts indicate both concern and opportunity
- *What is WCU's market share of North Carolina high school students?*



NORTH CAROLINA SCHOOL REPORT CARDS



English Español



NORTH CAROLINA SCHOOL REPORT CARDS
Letter from Mark Johnson
NC Superintendent of Public Instruction

<https://ncreportcards.ondemand.sas.com/src>

SRC DATA FILES ARE PUBLICLY AVAILABLE!



North Carolina Department of PUBLIC INSTRUCTION

Home Educators Students & Families Districts & Schools Data & Reports News About DPI

School Report Cards

North Carolina's school report cards are an important resource for parents, educators, state leaders, researchers, and others, providing information about school- and district-level data in a number of areas. These include student performance and academic growth, school and student characteristics, and many other details.

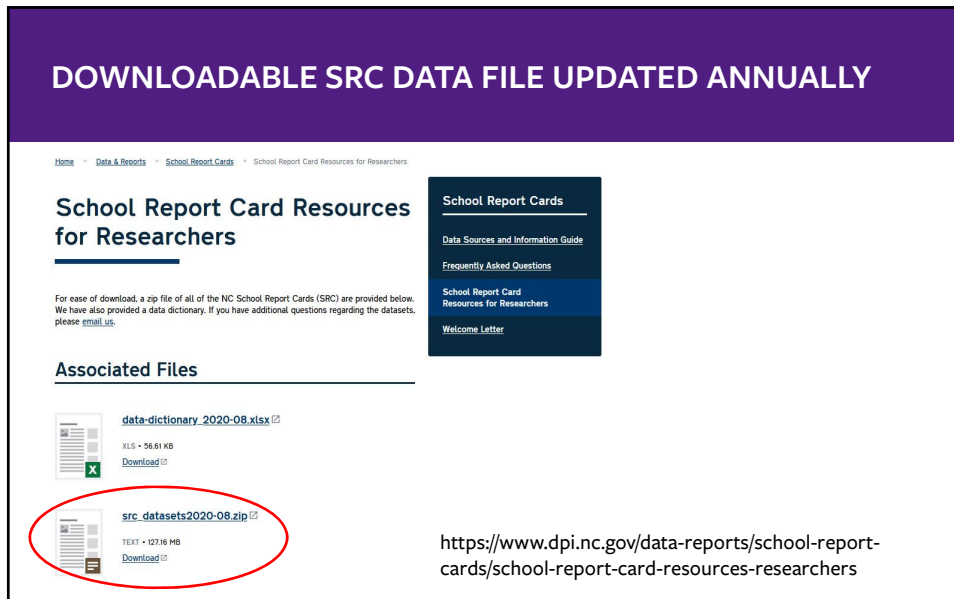
Report cards are provided for all North Carolina public schools, including charter and alternative schools. North Carolina's School Report Cards are presented two different ways, designed to meet the needs of all users. An interactive, easy-to-navigate section is available [here](#). This user-friendly website addresses the need for quick reference on topics that are most important to parents and educators. An analytic section is also available for a more detailed view of the data. The two areas are both designed and hosted by SAS Institute.

The 2018-19 School Report Card includes the following:

- School Performance Grades by subgroup
- Subgroup reporting changes for several academic indicators
- English Learner progress indicator

<https://www.dpi.nc.gov/data-reports/school-report-cards>

DOWNLOADABLE SRC DATA FILE UPDATED ANNUALLY





Home Data & Reports School Report Cards School Report Card Resources for Researchers

School Report Card Resources for Researchers

For ease of download, a zip file of all of the NC School Report Cards (SRC) are provided below. We have also provided a data dictionary. If you have additional questions regarding the datasets, please [email us](mailto:us).

Associated Files

	data-dictionary_2020-08.xlsx
	XLS • 56.61 KB
	Download
	src_datasets2020-08.zip
	TEXT • 127.16 MB
	Download

<https://www.dpi.nc.gov/data-reports/school-report-cards/school-report-card-resources-researchers>


RCD_COLLEGE FILE INDICATES COLLEGE ENROLLMENT

> src_datasets2020-08

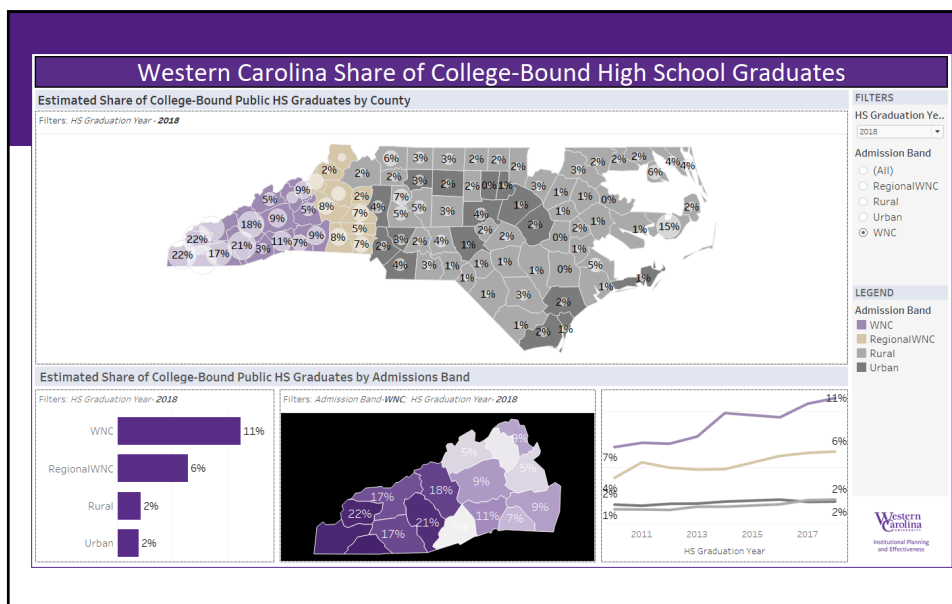
x rcd_welcome	x rcd_sat	x rcd_sar
x rcd_readiness	x rcd_prin_demo	x rcd_pk_enroll
x rcd_nbpts	x rcd_naep	x rcd_location
x rcd_licenses	x rcd_jnc2	x rcd_jnc1
x rcd_improvement2	x rcd_improvement	x rcd_ib
x rcd_hqt	x rcd_funds2	x rcd_funds
x rcd_experience	x rcd_esea_att	x rcd_eq
x rcd_effectiveness3	x rcd_effectiveness	x rcd_dlmi
x rcd_cte_enrollment_cluster	x rcd_cte_enrollment	x rcd_cte_endorsement
x rcd_cte_credentials	x rcd_cte_concentrators	x rcd_courses2
x rcd_courses1	x rcd_course2	x rcd_college
x rcd_code_desc	x rcd_chronic_absent	x rcd_charter
x rcd_att	x rcd_arts	x rcd_ap_crs_list
x rcd_ap	x rcd_adm	x rcd_acc_wk
x rcd_acc_spg2	x rcd_acc_spg1	x rcd_acc_rta
rcd_acc_pc	x rcd_acc_part_detail	x rcd_acc_part
x rcd_acc_mcr	x rcd_acc_ltg_detail	x rcd_acc_ltg
x rcd_acc_lowperf	x rcd_acc_irm	x rcd_acc_gp
x rcd_acc_essa_desig	x rcd_acc_elp	x rcd_acc_eg
x rcd_acc_edes	x rcd_acc_cgr	x rcd_acc_awa
x rcd_acc_act	x rcd_acc_aapart	x rcd_161

COLLEGE ENROLLMENT REPORTED FOR LEAS BY YEAR

	year	graduation_year	agency_code	Status	count	pct_enrolled
15	2019	2018	010LEA	ENROLL	913	0.563232573
16	2019	2018	020LEA	ENROLL	210	0.6
17	2019	2018	030LEA	ENROLL	47	0.510869565
18	2019	2018	040LEA	ENROLL	115	0.452755906
19	2019	2018	050LEA	ENROLL	128	0.630541872
20	2019	2018	060LEA	ENROLL	86	0.55483871
21	2019	2018	070LEA	ENROLL	271	0.516190476
22	2019	2018	080LEA	ENROLL	80	0.449438202
23	2019	2018	090LEA	ENROLL	191	0.535014006
24	2019	2018	100LEA	ENROLL	542	0.57537155
25	2019	2018	110LEA	ENROLL	1012	0.562534742

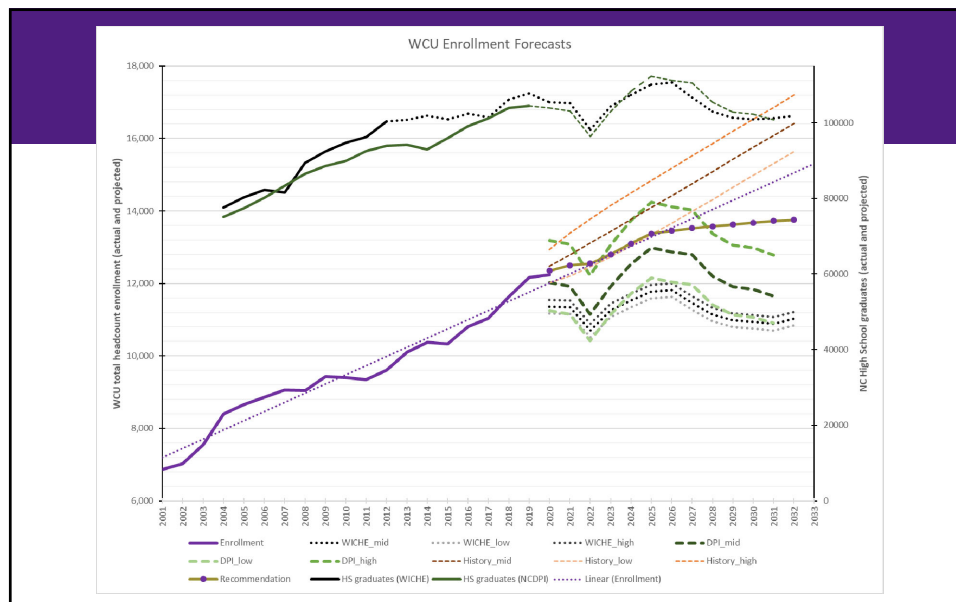


- Enrollment market share per LEA = WCU enrollment per LEA / Total college enrollment per LEA



CAN WE ESTIMATE FUTURE ENROLLMENT?

- WICHE utilized K-12 enrollment data
- Grawe applied a statistical model to parse HS graduates by future higher ed sector enrollment
- WCU employed a combination of K-12 pipeline estimates combined with HS graduate market share estimates, holding other variables constant
 - Use enrollment estimate models to plan future enrollment



DISCUSSION

- How are you using K-12 data @ your college/university?
- What other types of K-12 data uses might be helpful to our institutions?

ACKNOWLEDGEMENTS

- Dylan Pachorek, *Data Assistant*
- Dwayne Tutt, *Associate Director of Institutional Research & Analytics*
- Greg Higgins, *Business & Technology Applications Analyst (2017-2019)*

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