

# THE STATE OF THE STATE

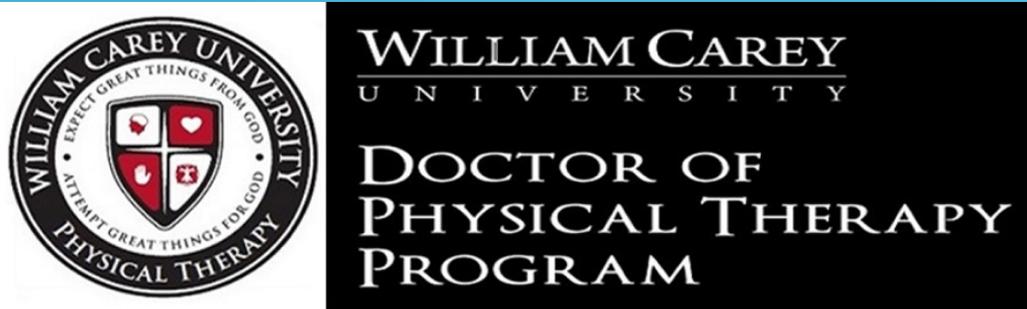
## ANALYSIS OF MISSISSIPPI'S PHYSICAL THERAPY WORKFORCE 2016-2019 AND PROJECTIONS THROUGH 2030

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SPECIAL THANKS

# OBJECTIVES-

AT THE CONCLUSION OF THIS  
PRESENTATION, THE PARTICIPANT WILL:

- ▶ Identify the distribution of physical therapists and physical therapist assistants across the state
- ▶ Outline key variables in workforce planning and research
- ▶ Develop future workforce needs for the state
- ▶ Determine strategies to impact the need for physical therapist professionals in the state.

- ▶ Bureau of Labor and Statistics projects 18% growth in the physical therapy profession by 2029
- ▶ Increase in elderly population – by 2030 all baby boomers will be over age 65
- ▶ Proliferation of Schools/Increased Class Sizes – 4%/year increase in educational seats

## BACKGROUND

- ▶ Physical Therapy workforce research and planning is in its infancy
- ▶ Consistent data are not readily available – varies between states
- ▶ Modeling is inconsistent and estimates prevail
- ▶ Access to physical therapy is directly affected by access to practitioners
- ▶ Workforce planning is essential to ensure that supply meets demand for the citizens of Mississippi

## THE PROBLEMS

- ▶ Deidentified Data from the Mississippi State Board of Physical Therapy Database (2016-2019)
- ▶ Data cleaned of expired, suspended, retired, inactive license data
- ▶ Distributions of physical therapy practitioners were calculated by county and region
- ▶ Demographic Data Analyzed
- ▶ Supply and demand ratios determined according to national model
- ▶ Projections for the future workforce were explored
- ▶ Approved by WCU Institutional Review Board

## THE STUDY

# DISTRIBUTION AND DEMOGRAPHICS



- ▶ PT

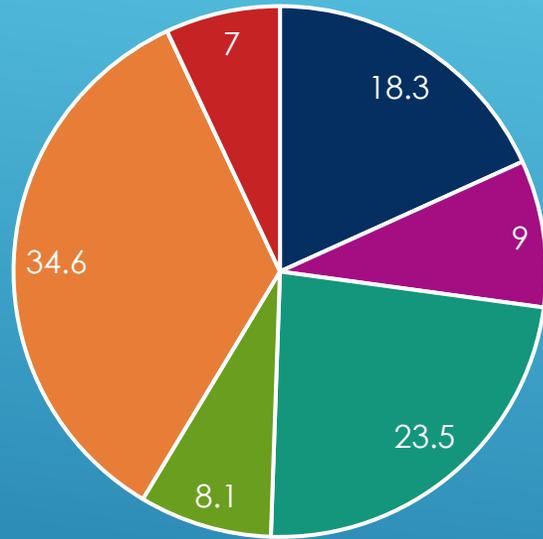
- ▶ 1767 Active Licenses
- ▶ 63% Female/ 37% Male
- ▶ 8.3% Black/3.6% Other/88.1% White
- ▶ 6.2% Formal Specialization

- ▶ PTA

- ▶ 1135 Active Licenses
- ▶ 70.6% Female/29.4% Male
- ▶ 10% Black/1.9% Other/88.1% White
- ▶ 9 Total Certifications

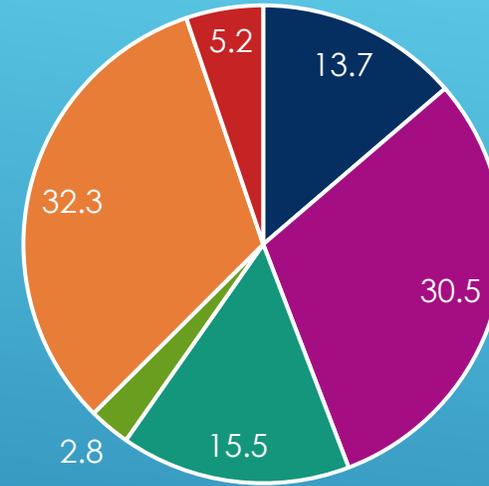
# OVERVIEW -2018

### Physical Therapist



- Hospital
- Nursing Home
- Home Health
- Private Practice
- Outpatient
- Other

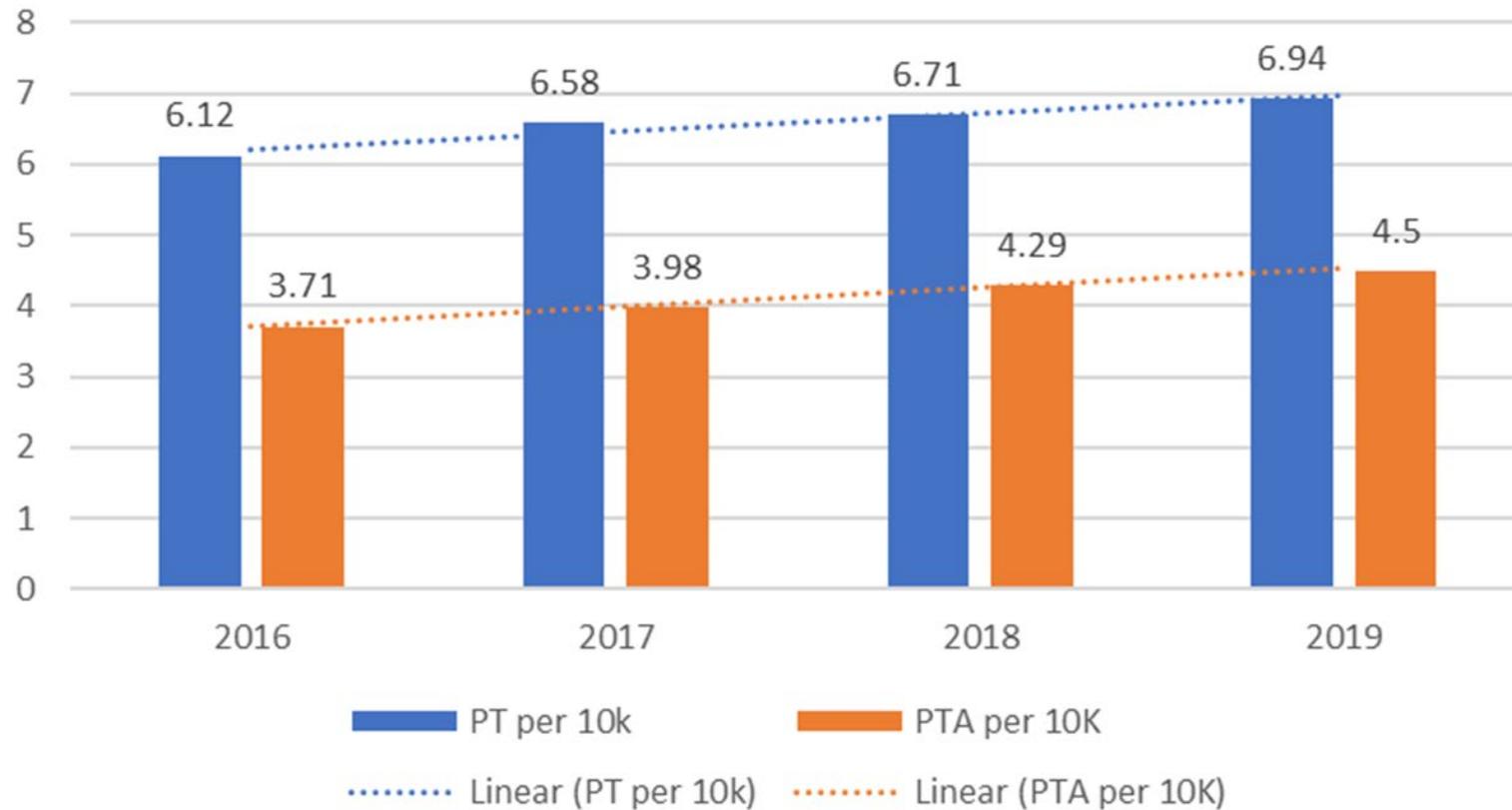
### Physical Therapist Assistant



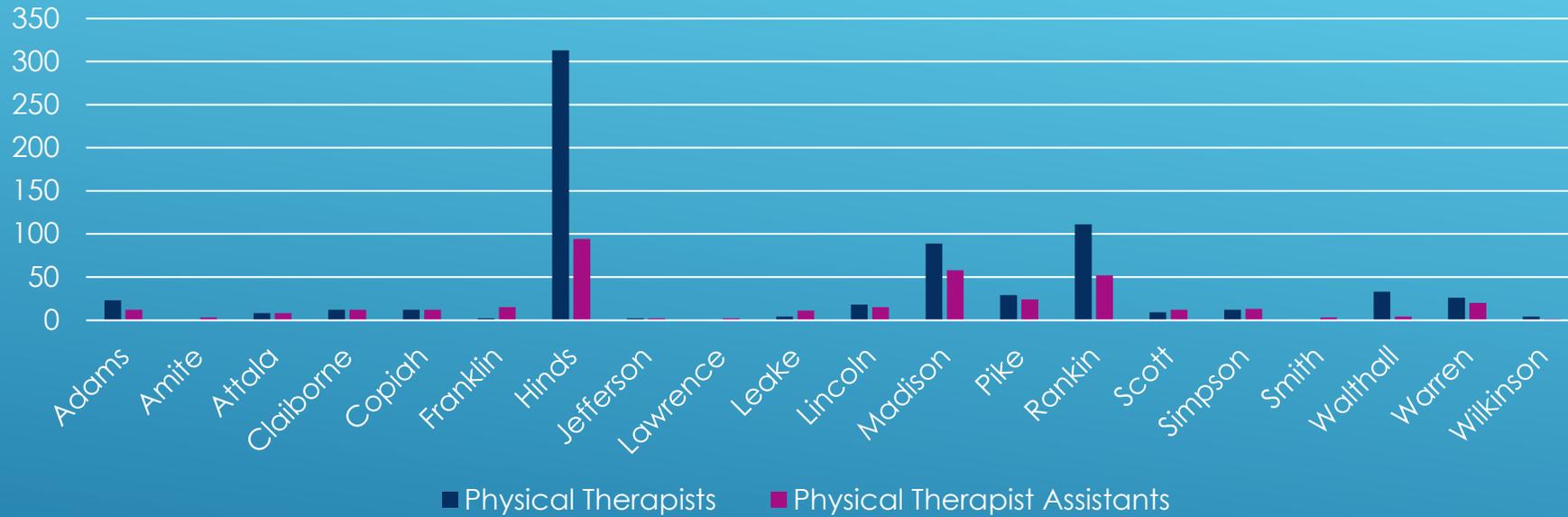
- Hospital
- Nursing Home
- Home Health
- Private Practice
- Outpatient
- Other

# PRACTICE SETTING

### Physical therapist and Physical Therapy Assistants per 10,000 population, Ms 2016-2019

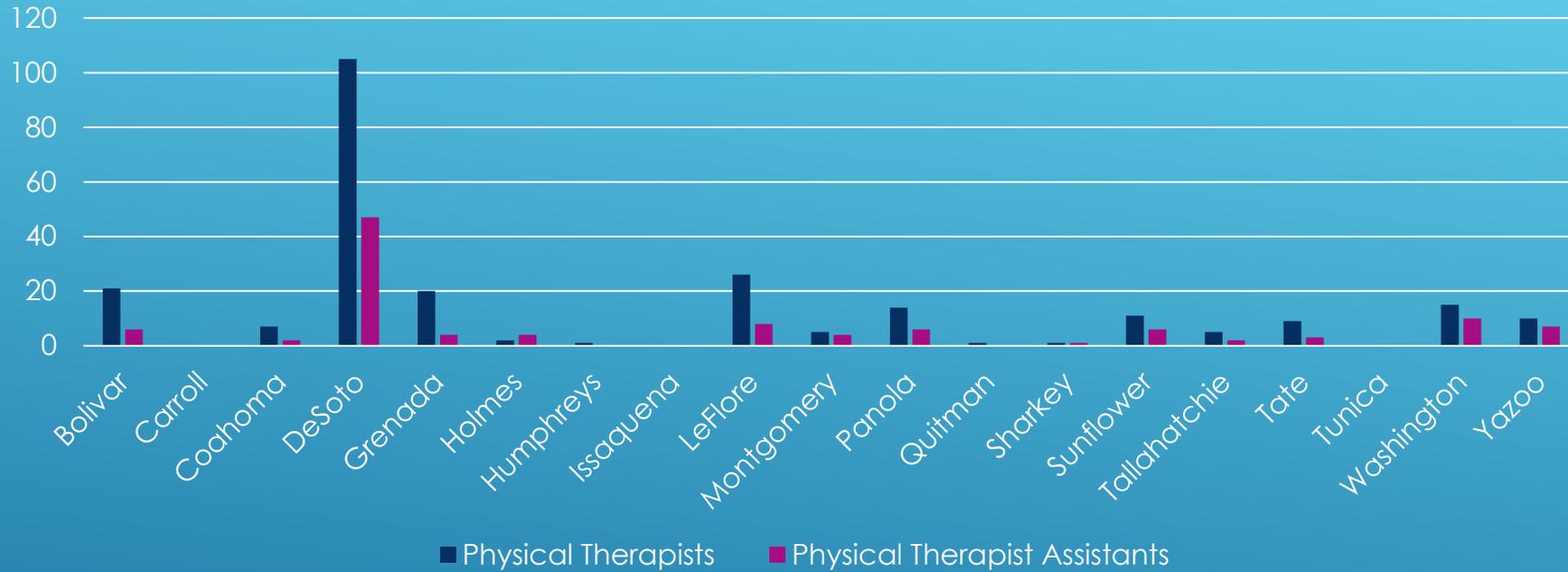


2018



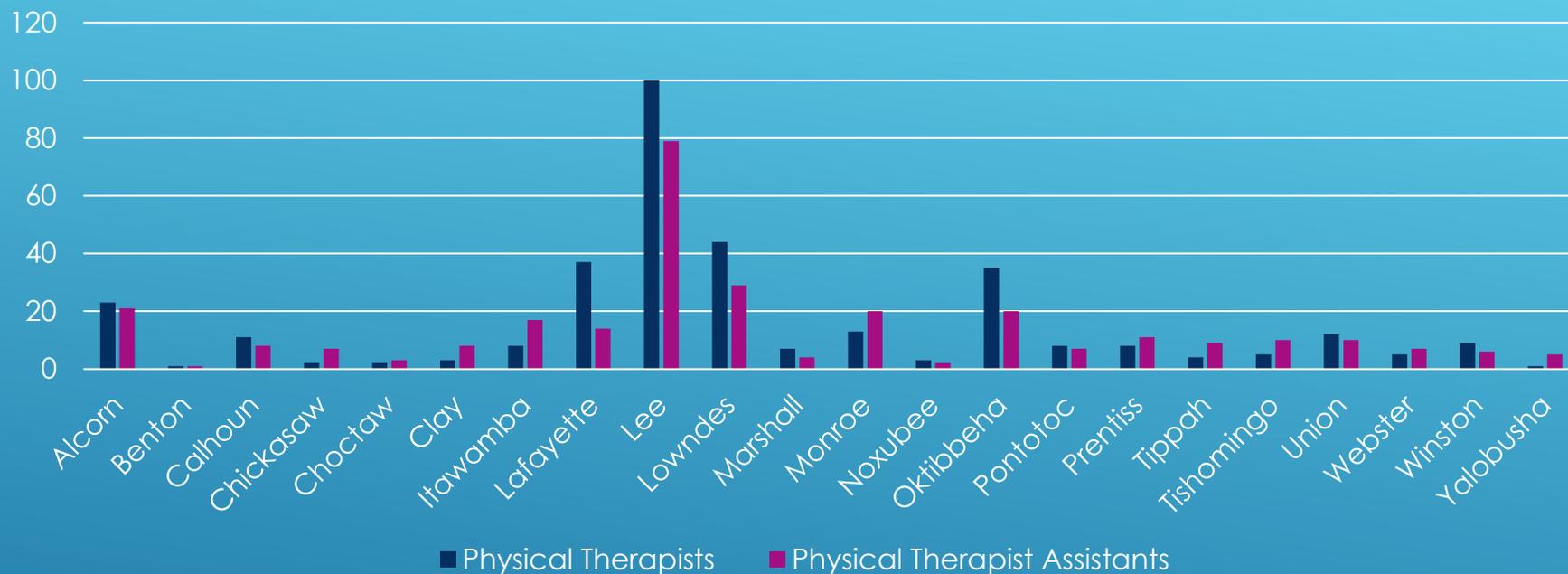
# CENTRAL REGION PROFESSIONALS BY COUNTY

2018



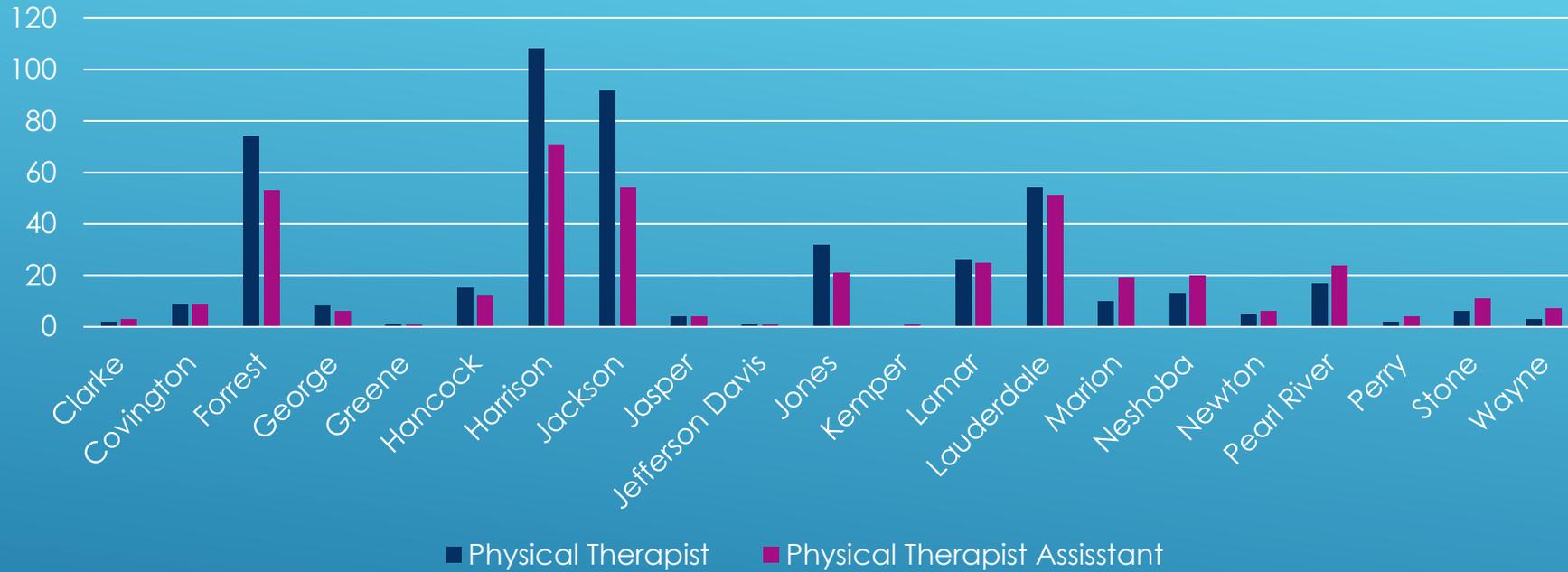
# DELTA REGION PROFESSIONALS BY COUNTY

2018



# NORTHEAST REGION PROFESSIONALS BY COUNTY

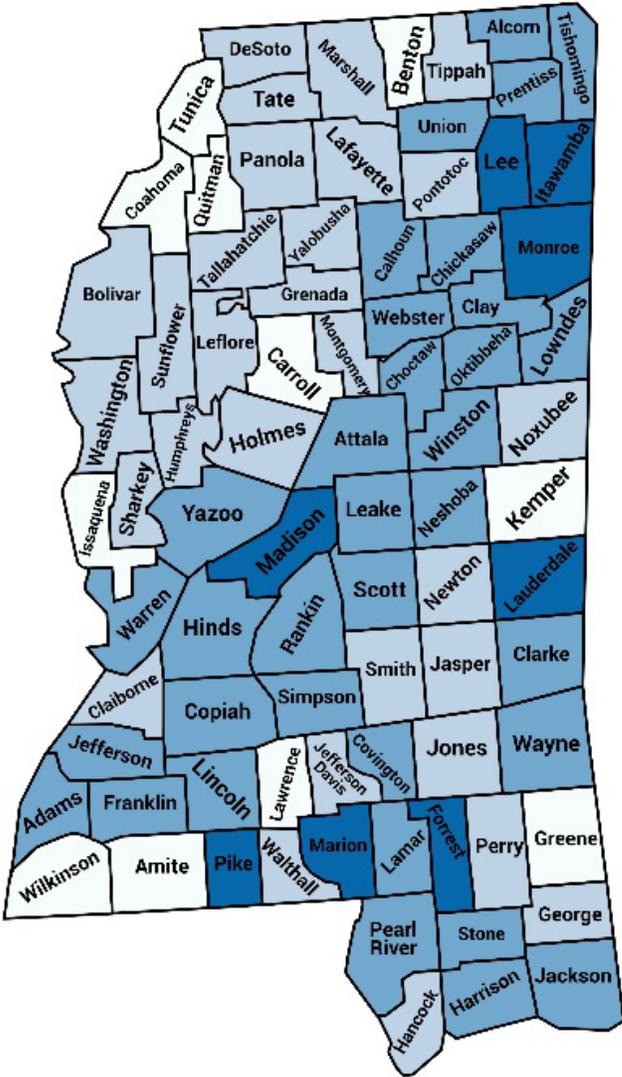
2018



# COAST REGION PROFESSIONALS BY COUNTY

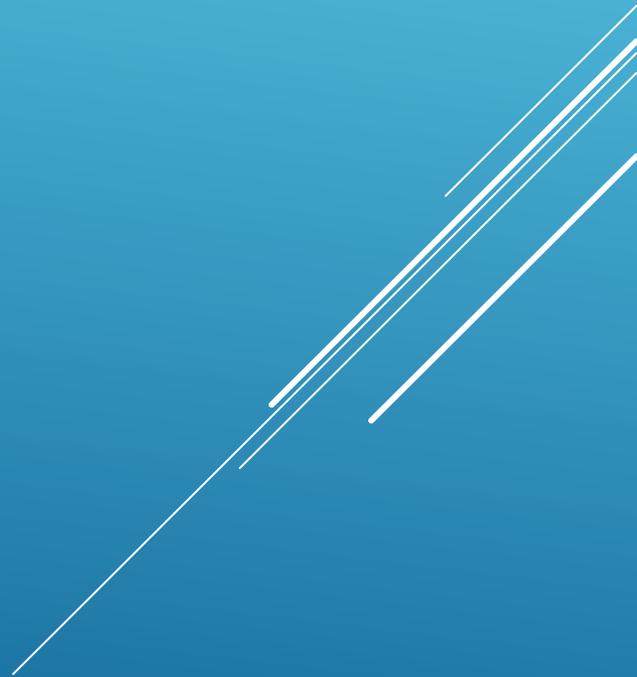


# PTA PER COUNTY POPULATION/10,000



- Darkest to lightest
  - 7-9
  - 4-6
  - 1-3
  - 0

# SUPPLY VS DEMAND



- ▶ Increasing numbers of people insured
- ▶ Increasing numbers of people with chronic conditions
- ▶ Increasing population of elderly
- ▶ Expanding scope of practice
- ▶ Employment vacancy rates

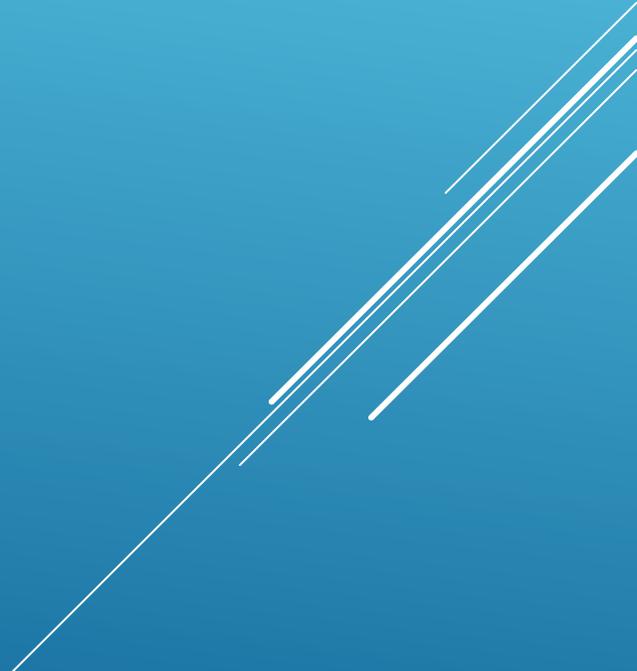
## DEMAND ISSUES

- ▶ Numbers of educational programs
- ▶ Attrition rates
- ▶ Foreign trained professionals
- ▶ Part time/full time status

## SUPPLY ISSUES

- ▶ Workforce Projections 2010-2020 – Annual Supply and Demand Forecasting Models for Physical Therapists Across the United States
- ▶ Landry MD, Hack LM, Coulson E, et al
- ▶ Physical Therapy 2016, Volume 96, pages 71-80

NATIONAL MODEL

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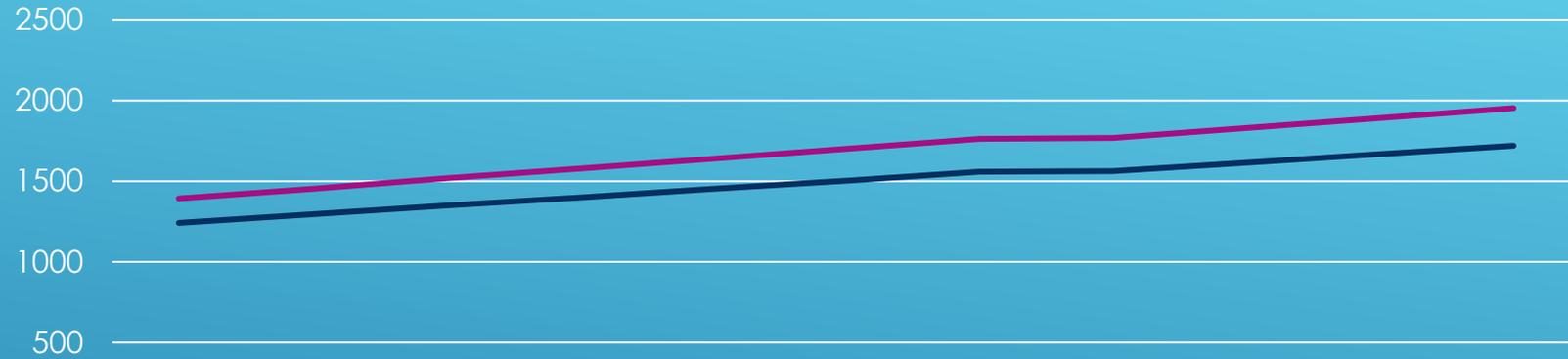
- ▶ Physical Therapy Practitioners – MSBPT Data
- ▶ Physical Therapist Graduates – CAPTE DATA
- ▶ Graduation Rate/Failure – CAPTE DATA
- ▶ Attrition Rate – 5.2% - MSBPT Data
- ▶ Supply of FTE (constant) - .69 of PT work full time per APTA membership data
- ▶ Next years supply = FTE constant X (Licensed PT's + (PT Grads – Grads never passing exam) + International PT – Attrition)

## SUPPLY VARIABLES

- ▶ Population – US Census Bureau
- ▶ Population with Health Care Insurance –US Census Bureau (88%)
- ▶ Projected Vacancy Rate – APTA – (11%)
- ▶ Demand Projection = (MS Population x Population Insured) x  
(Demand in 2015/2015 insured population)

## DEMAND VARIABLES

## Supply and Demand Projections



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
— Suply	1241	1295	1348	1399	1452	1503	1558	1562	1614	1667	1719
— Demand	1393	1453	1517	1578	1639	1700	1761	1768	1830	1891	1952

— Suply — Demand

# SUPPLY AND DEMAND PT



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Supply	918	986	1081	1176	1272	1367	1462	1557	1652	1748	1843
Demand	944	1019	1094	1200	1306	1412	1517	1623	1729	1834	1944

— Supply — Demand

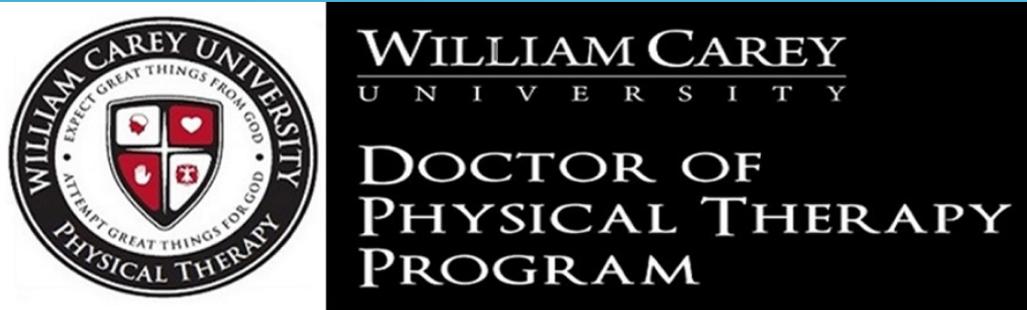
# SUPPLY AND DEMAND PTA

- ▶ Attrition rate in MS directly affects supply and demand
- ▶ Population slowly declining in MS – 1%/year
- ▶ Demand model is near constant – state numbers are too low to affect demand ratios as compared to national model
- ▶ No “magic” number of therapists per capita – only comparisons to nationwide benchmarks
  - ▶ 9.3/10,000 – PT
  - ▶ 3.9/10,000 -PT
- ▶ No industry impacts known
- ▶ Self-report data
- ▶ Vacancy rate variable outdated/unknown

## DISCUSSION

- ▶ Physical therapist density in MS is significantly lower than national average
  - ▶ MS 6.94/10,000
  - ▶ US 9.3/10,000
- ▶ Physical therapist assistant density in MS is slightly higher than national average
  - ▶ MS 4.5/10,000
  - ▶ US 3.9/10,000
- ▶ Distribution/density of physical therapists and assistants is highly variable
- ▶ Demand continues to outgrow the supply for the next decade
  - ▶ PT Schools may want to increase class sizes/add cohorts
  - ▶ PTA Schools may want to hold steady

# CONCLUSION



QUESTIONS?