



Stony Brook University

# Observations on Developing a Postsecondary Institution Rating System (PIRS)

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## CONTEXT (1)

### Current role:

Asst. VP for Institutional Research, Planning & Effectiveness at Stony Brook University (NY)

IPEDS National Trainer, Advisory Board Member

### Former role:

Director of Policy & Research,  
Connecticut Board of Regents for Higher Ed



## CONTEXT (2)

- Connecticut changed its approach to higher education accountability in 2011
  - Broad stakeholder involvement
  - 5 goals with 23 indicators, disaggregated
  - Used data publicly available through IPEDS
  - Institutional performance measured over time compared to similar institutions
  - Accountability more than consumer information
  - Work in progress



## CHALLENGES

Comparison Groups

Graduation Rates

Learning Outcomes

Affordability

Employment Outcomes



## COMPARISON GROUPS

- Exclusively mathematical approach to identify institutions for comparison groups was elusive
- A balance of data, statistics, and judgment was needed
  - Data from IPEDS based on about 10 institutional characteristics generated lists of 20-50 institutions in most cases
  - Outliers remained a problem, likely due to data quality / unique state practices
  - Campuses asked to add or remove institutions from the comparison group based on judgment to arrive at 10-15 comparison institutions

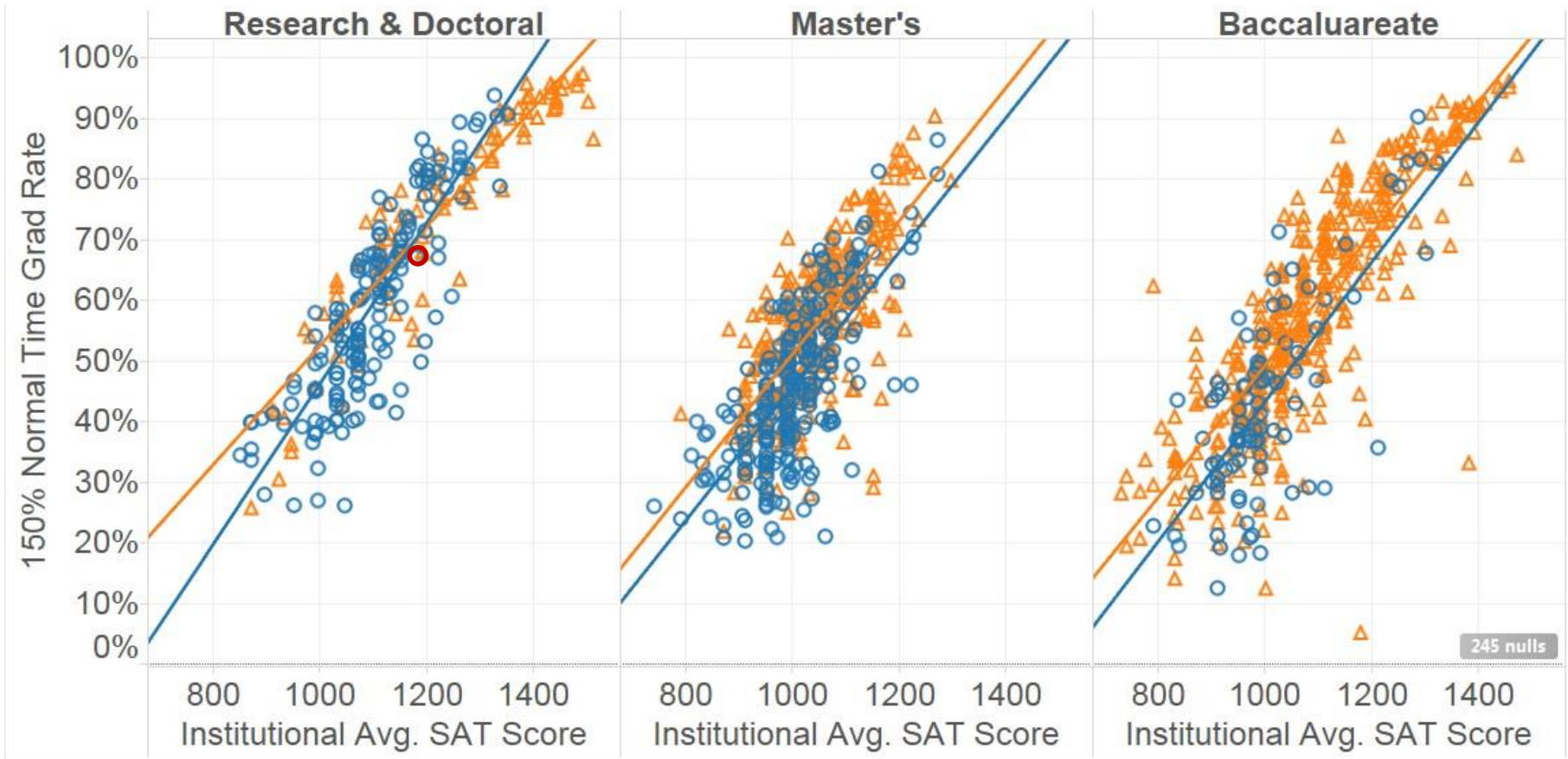


## GRADUATION RATES

- Controls for student inputs are essential to the interpretation of graduation rates; individual factors matter much more than institutional factors
- Data from HERI illustrate this relationship, independent of institutional effects

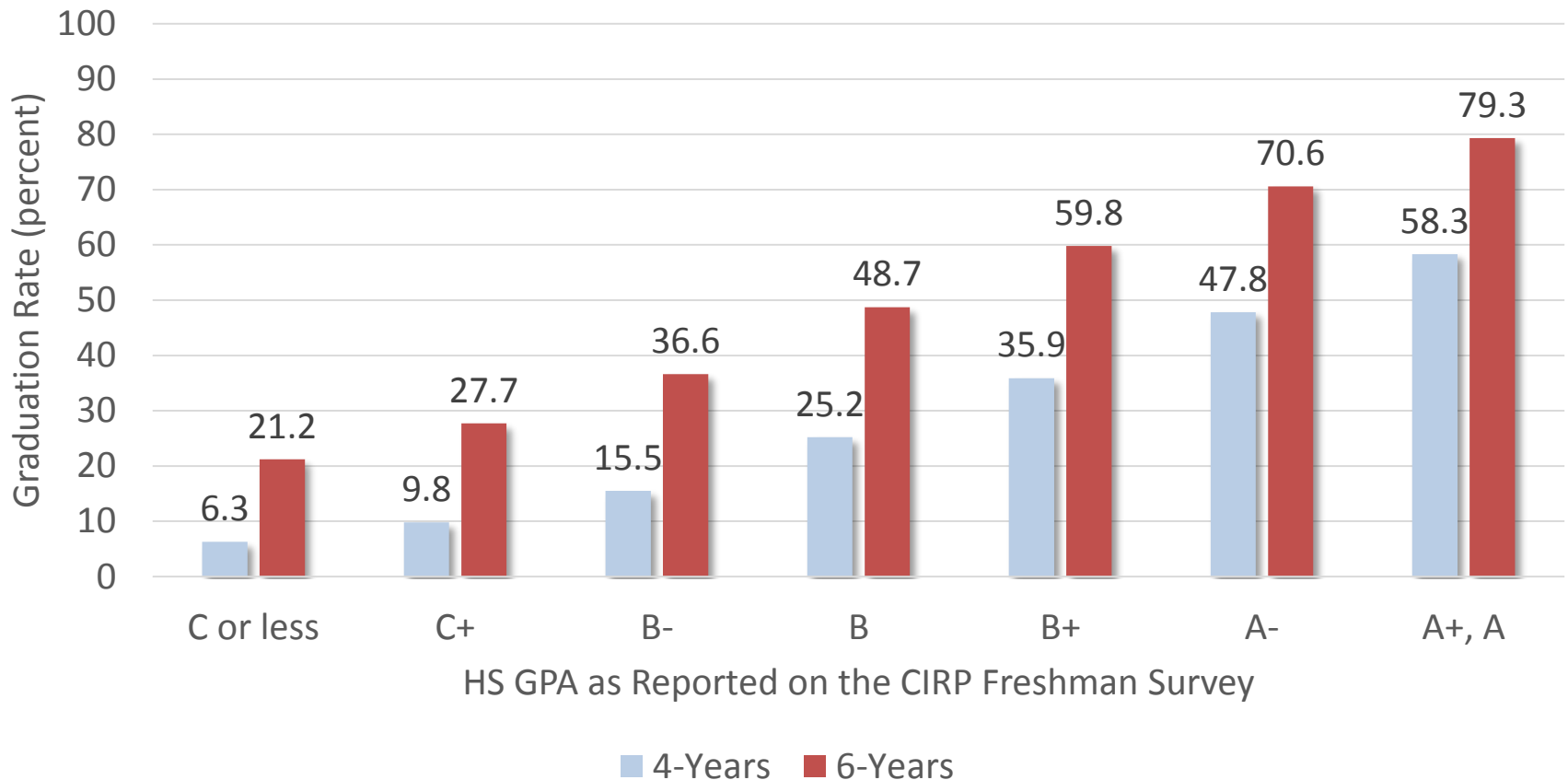


# INSTITUTION-BASED 6-YEAR GRAD RATES BY SAT COMPOSITE SCORE





# INDIVIDUAL-BASED GRADUATION RATES BY HIGH SCHOOL GPA

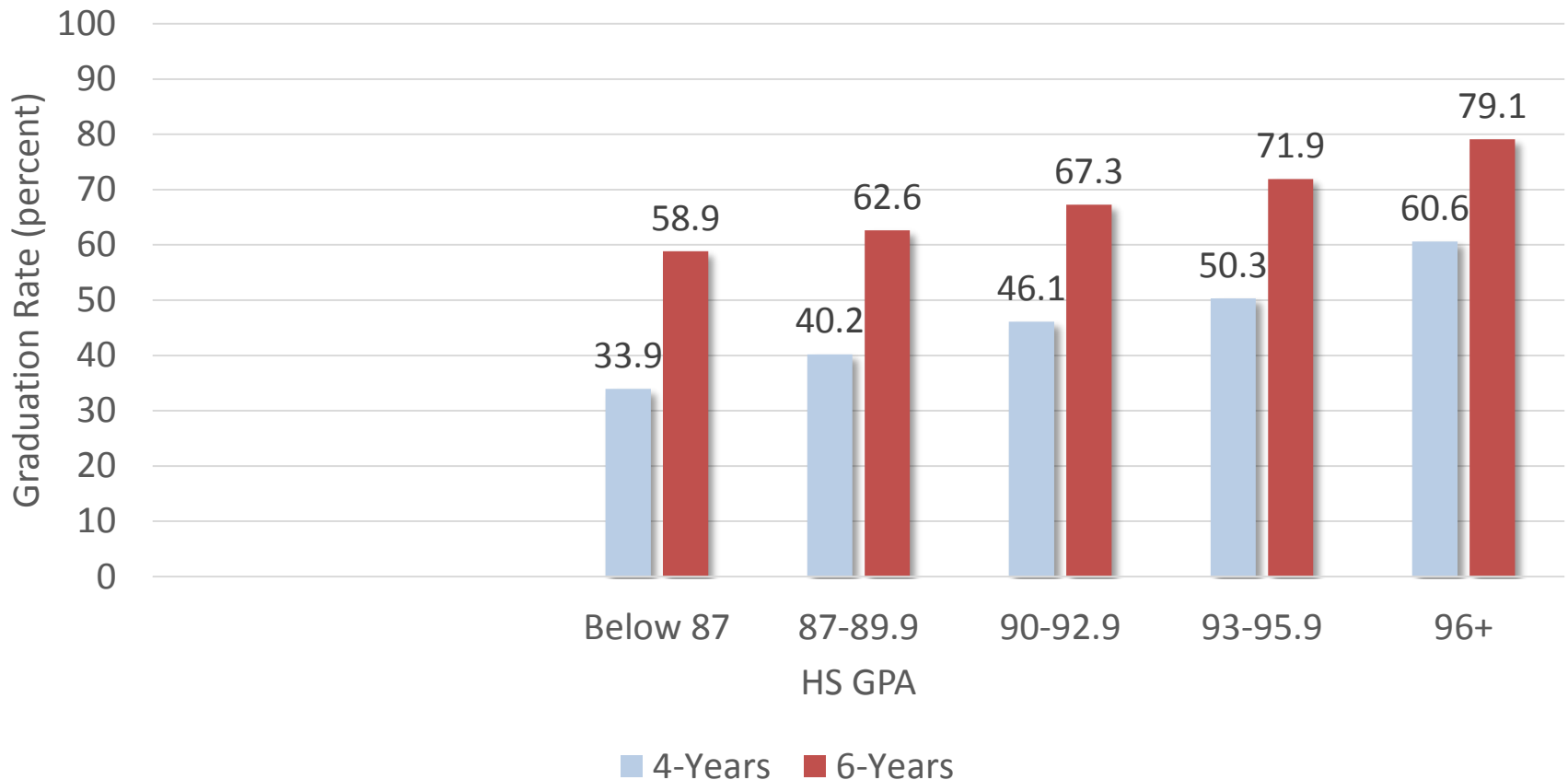


Source: Higher Education Research Institute (UCLA)





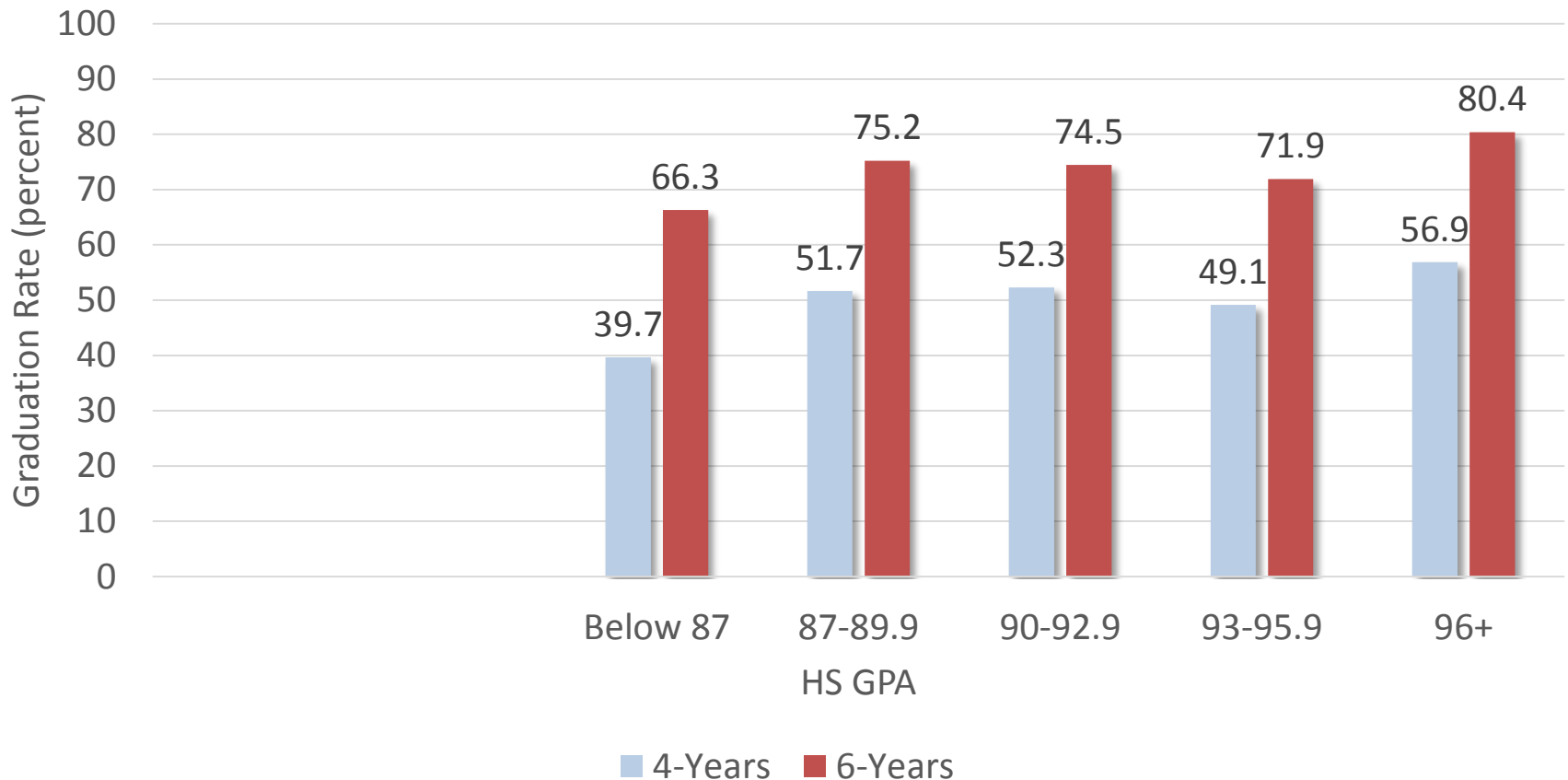
# STONY BROOK UNIV. GRADUATION RATES BY HIGH SCHOOL GPA



Source: SBU Office of Institutional Research, Planning & Effectiveness



# STONY BROOK UNIV. GRADUATION RATES BY HIGH SCHOOL GPA – AFRICAN AMERICAN ONLY



Source: SBU Office of Institutional Research, Planning & Effectiveness



# COMPLETIONS PER 100 FTE ENROLLMENT

Connecticut adopted a completions per FTE metric intended to supplant graduation rate

- Statistical adjustments were necessary
  - Lag enrollment by 2 years
  - Weight certificates by 1/3
  - Degree-seeking UG enrollment only
- Data adjustments were necessary
- Results not comparable across sectors
- Cannot be interpreted without reference groups



## LEARNING OUTCOMES

Deemed very important for quality assurance but measurement deferred pending further research

Research had demonstrated

- Testing is sensitive to recruitment practices and testing conditions
- Student motivation affected institutional results

State pursuing external validation of learning using “authentic assessment” through a nine state multi-state collaborative



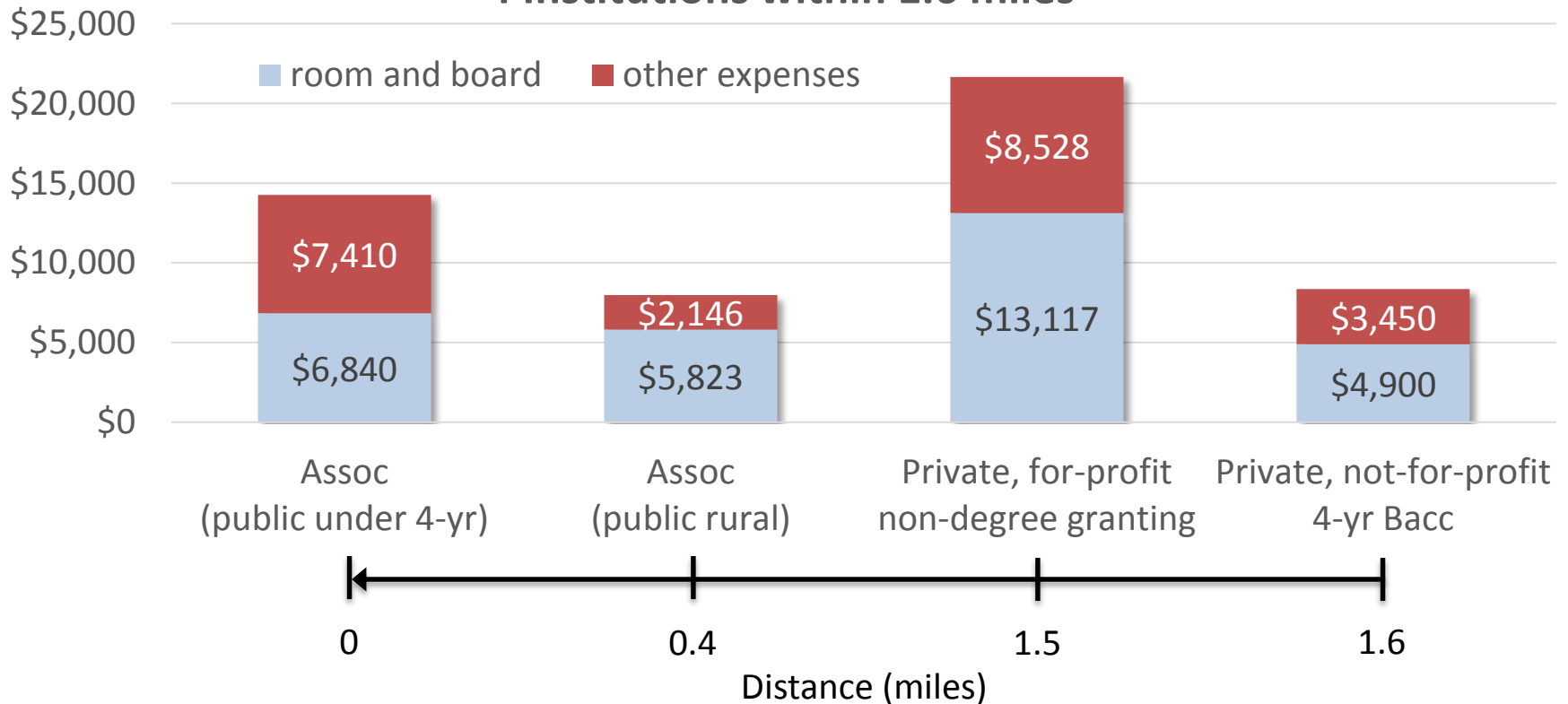
## AFFORDABILITY AND NET PRICE

- Net price involves reasonable components, but wide variation exists in how institutions determine costs associated with room & board and other expenses for students living off-campus.
- Regulatory or legislative action needed to define calculation method



# EXAMPLE NET PRICE ANOMALIES

Expenses Living Off-Campus, Not with Family:  
4 Institutions within 1.6 miles





## EMPLOYMENT OUTCOMES

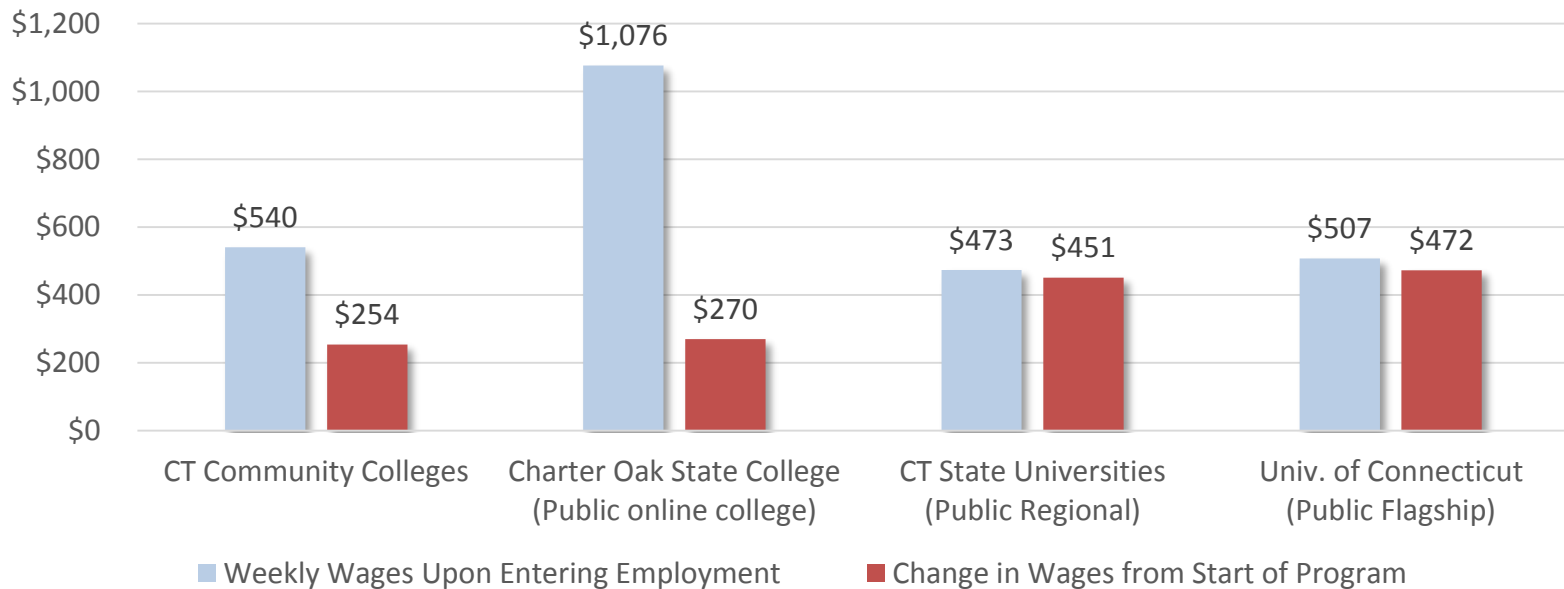
Available employment data have severe limitations

- Alumni survey response rates for public institutions typically range 20-30%, with likely high levels of non-respondent bias
- State unemployment insurance (UI) data do not cross state lines or identify full-time/part-time employment or partial/full quarter earnings
- IRS data are problematic for joint returns
- Age and prior employment confound central tendencies – more research is needed



# EXAMPLE WAGE DATA ANOMALIES

Avg. Weekly Wages & Change in Weekly Wages for Undergraduate Completers



Data gathered from unemployment insurance records through CT Dept. of Labor





## RECOMMENDATIONS

- Consider institutional input for comparison groups
- Adopt individualized graduation rate calculator
- Define cost of attendance methodology for off-campus arrangements
- Defer inclusion of and support research on:
  - Learning outcomes
  - Employment outcomes



## REFERENCES

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