Predicting Graduation for First-Time Full-Time Freshmen at CSUCI

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INSTITUTIONAL RESEARCH, PLANNING & EFFECTIVENESS
CHANNEL ISLANDS

California State University

Research Brief & Presentation

- **https://tinyurl.com/ydxxjsjk**

Institutional Research, Planning and Effectiveness

Welcome to the Institutional Research, Planning and Effectiveness Office (IRPE) at California State University Channel Islands (CI). This website provides demographic and statistical information about university students and faculty/staff, research reports, and related links. For specific questions not addressed on this site, contact this office directly.

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Graduation Initiative 2025 Goals

Metric	Starting Rates	Current Rates	2025 Goals
Freshman 4-Year Graduation	25%	22%	40%
Freshman 6-Year Graduation	57%	59%	67%
Transfer 2-Year Graduation	42%	42%	54%
Transfer 4-Year Graduation	68%	79%	78%
URM Gap	7%	5%	0%
Pell Recipient Gap	2%	4%	0%
First Generation Gap	11%	7%	-

Graduation Rate Forecasts

- Characteristics at admission predict graduation
  - High school GPA & other preparedness measures
  - High school curriculum
  - Race/ethnicity, income, and parents' education

Graduation Rate Forecasts

- Use information at admissions to:
  1. *Explain past* graduation rates
  2. *Forecast future* graduation rates

Our Goals

- Examine predictors of student success

- Decompose achievement gaps into explained and unexplained factors

But What is the Achievement Gap?

- Achievement gap characteristics (URM, Pell-recipient, and first-gen) are *positively correlated*

- Achievement gap characteristics are correlated with other known (positive) predictors of graduation

Correlates of Success: An Example

- SAT scores are negatively correlated with URM status

- SATs are a positive predictor of academic performance & graduation

- Failure to account for SAT scores *overstates* URM gap

Figure 2. Average SAT Score by URM Status, 2006-2017

SAT (Math + Verbal)

■ Non-URM   ● URM
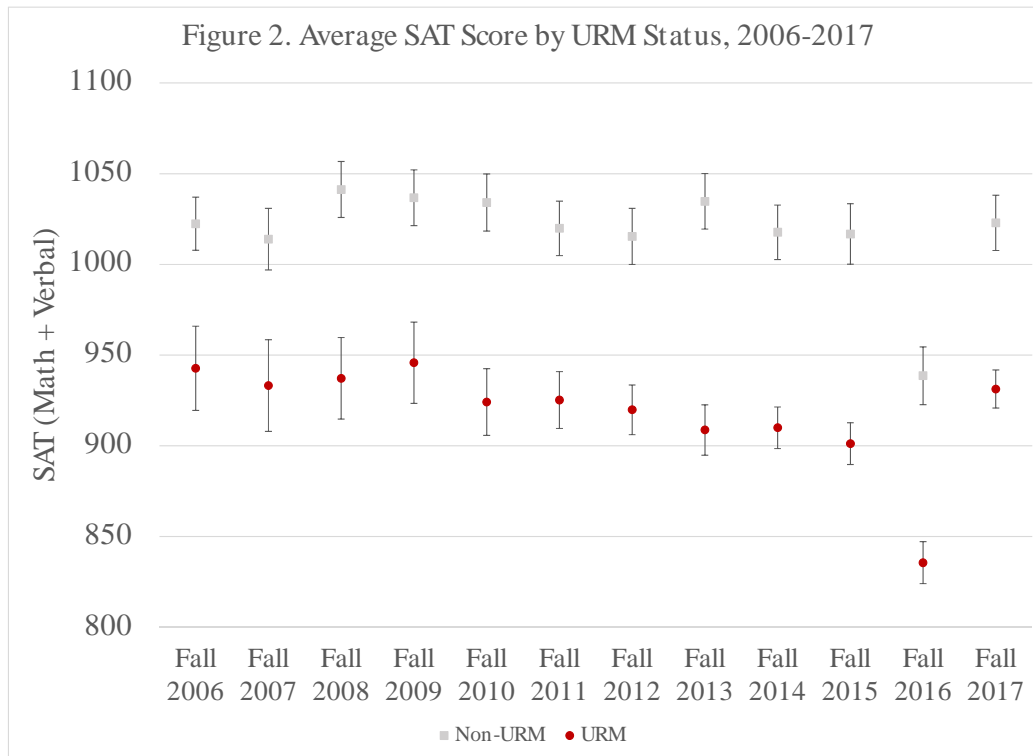
Methodology

- Logistic regression models of graduation in 4, 5, and 6 years for FTFT freshmen
- As a function of:
  - Gap characteristics (URM, Pell–recipient, and first–gen)
  - Preparedness measures
  - Other characteristics (controls)

Logistic Regression Models

Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
URM, Pell, OR First-Gen	URM, Pell, AND First-Gen	URM, Pell, AND First-Gen	URM, Pell, AND First-Gen	URM, Pell, AND First-Gen	URM, Pell, AND First-Gen	URM, Pell, AND First-Gen	URM, Pell, AND First-Gen
		High School GPA		High School GPA	High School GPA		High School GPA
		SAT Score		SAT Score	SAT Score		SAT Score
			Math Proficiency	Math Proficiency		Math Proficiency	Math Proficiency
			English Proficiency	English Proficiency		English Proficiency	English Proficiency
			Proficiency in Both	Proficiency in Both		Proficiency in Both	Proficiency in Both
					Control Variables	Control Variables	Control Variables

Controls: sex, veteran status, county of origin, nativity, citizenship, college prep courses, EOP status, undeclared major
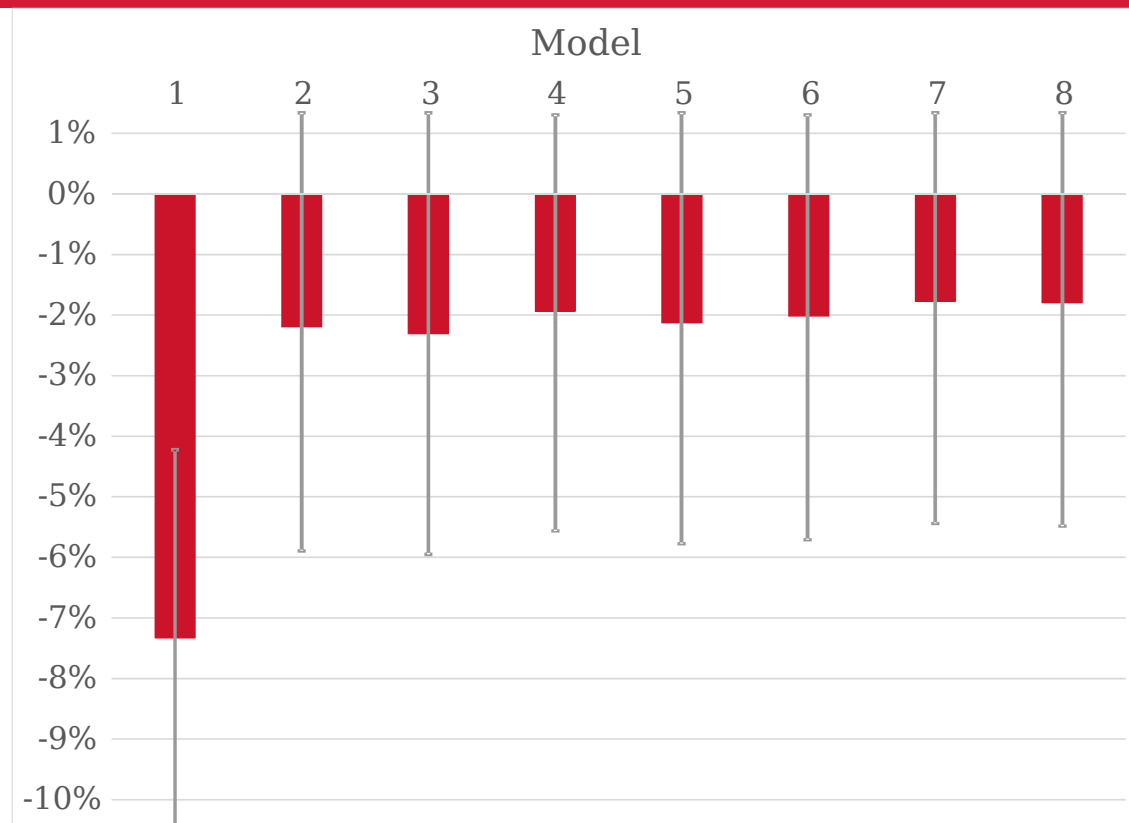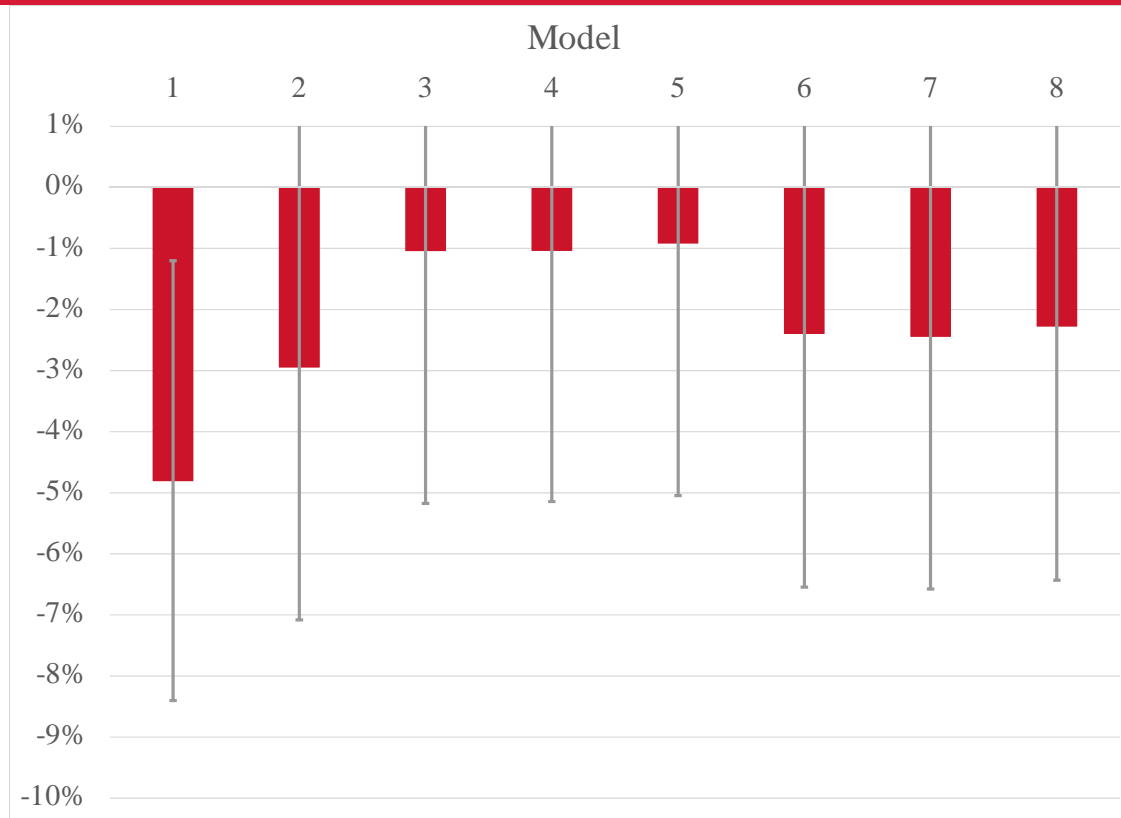
4-year URM Achievement Gaps
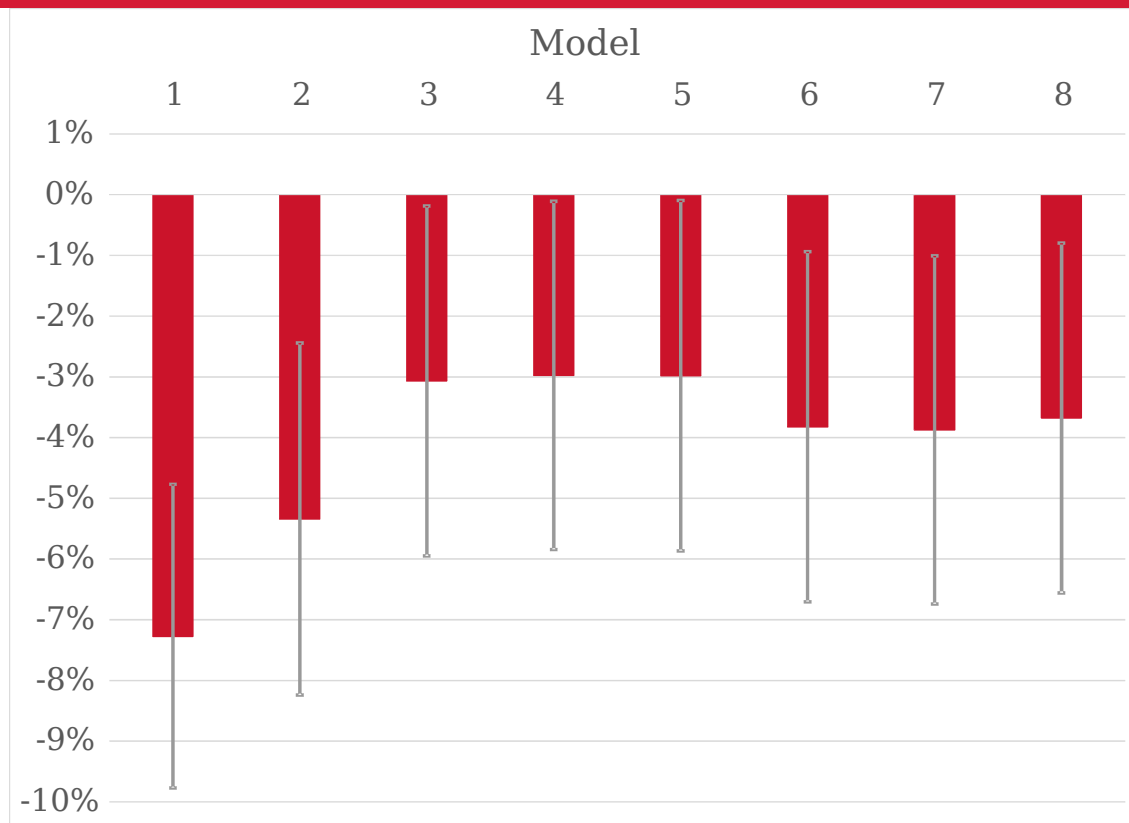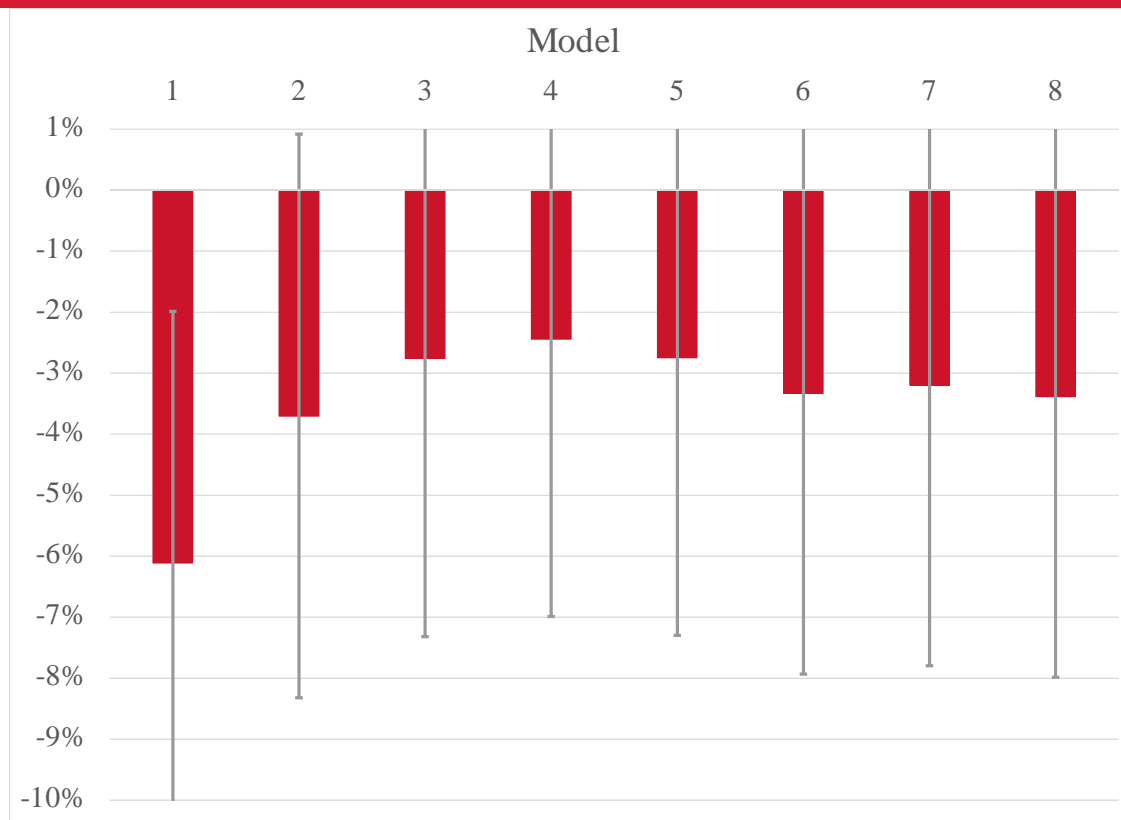
4-year Pell-Recipient Achievement Gaps
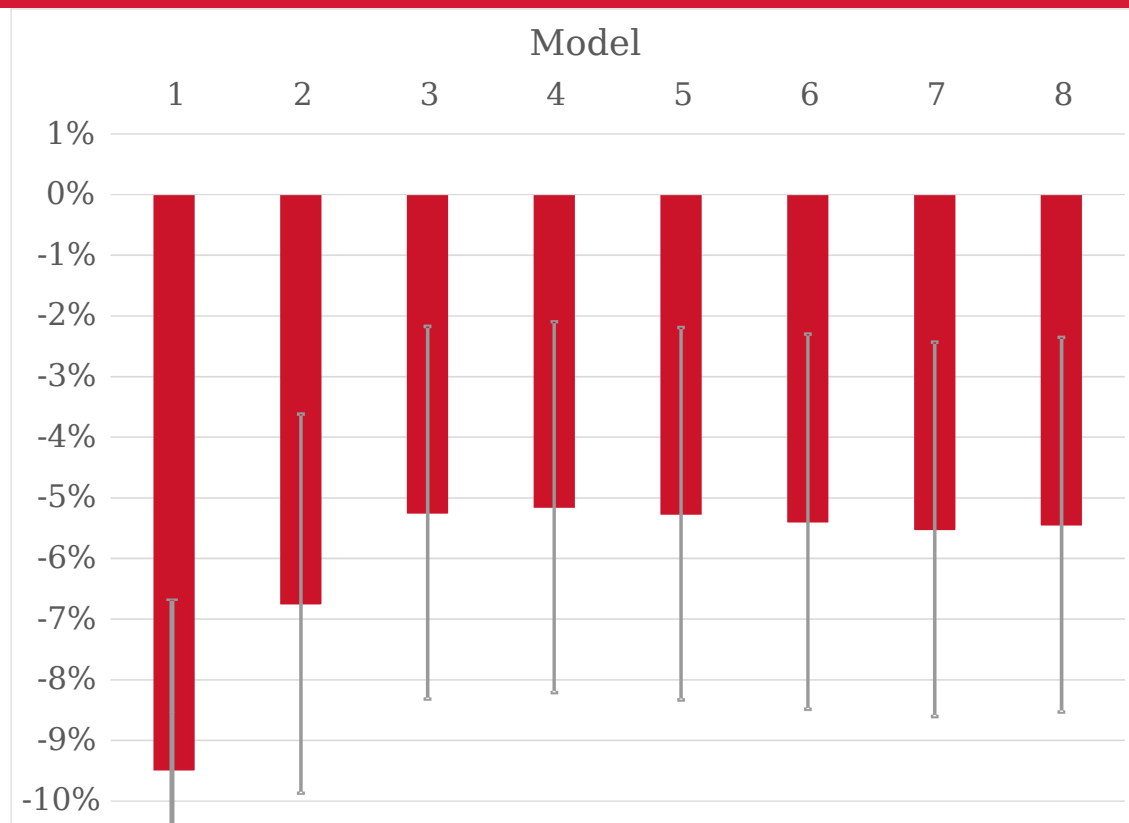
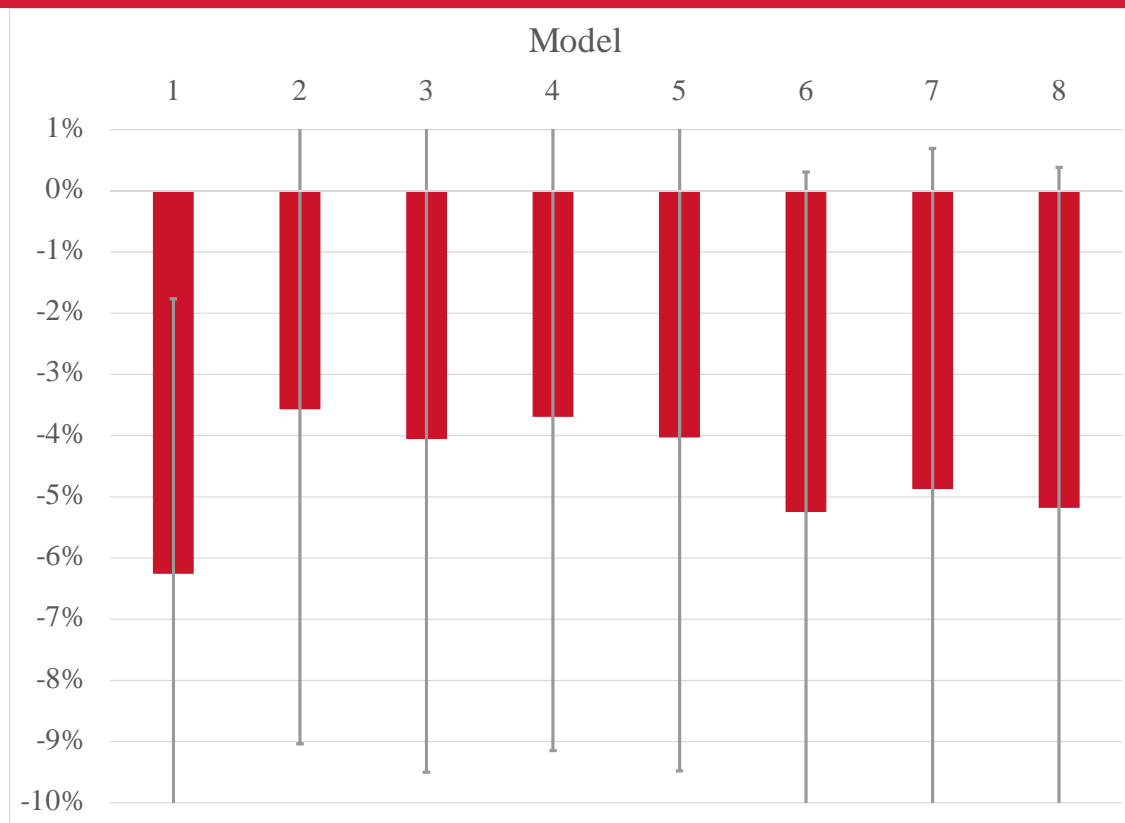# 4-year First-Generation Achievement Gaps

6-year URM Achievement Gaps

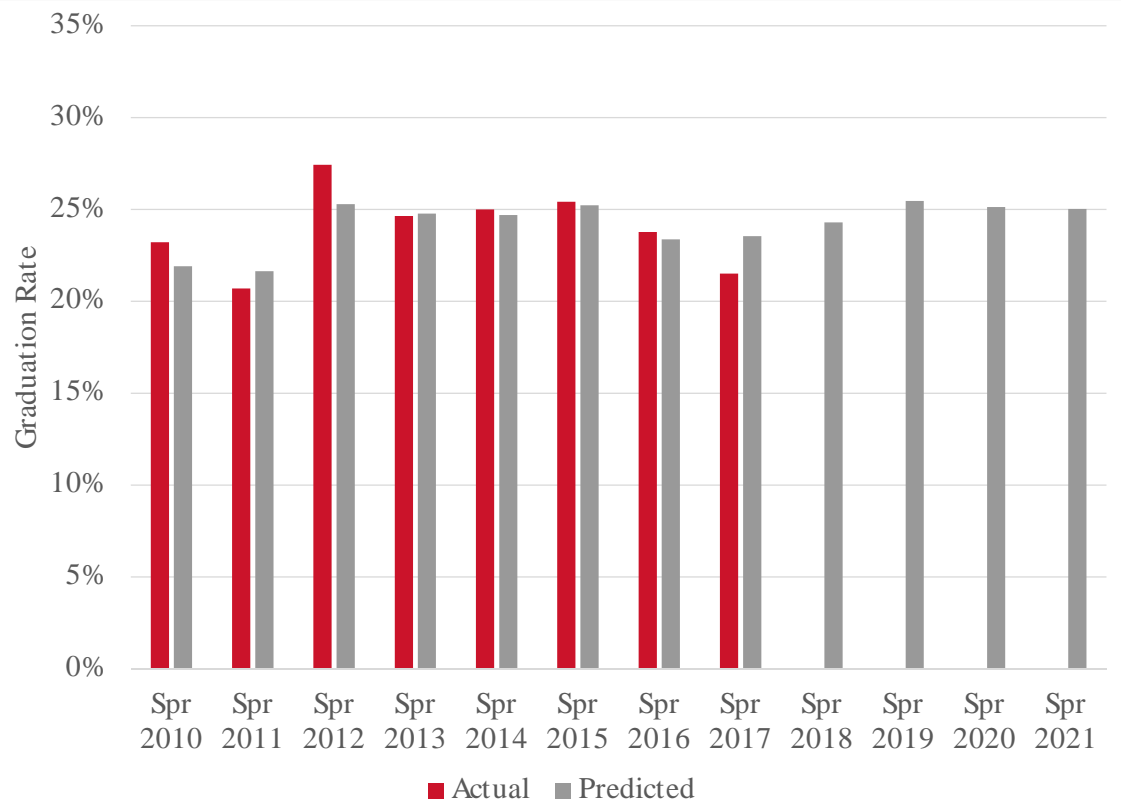# 6-year Pell-Recipient Achievement Gaps
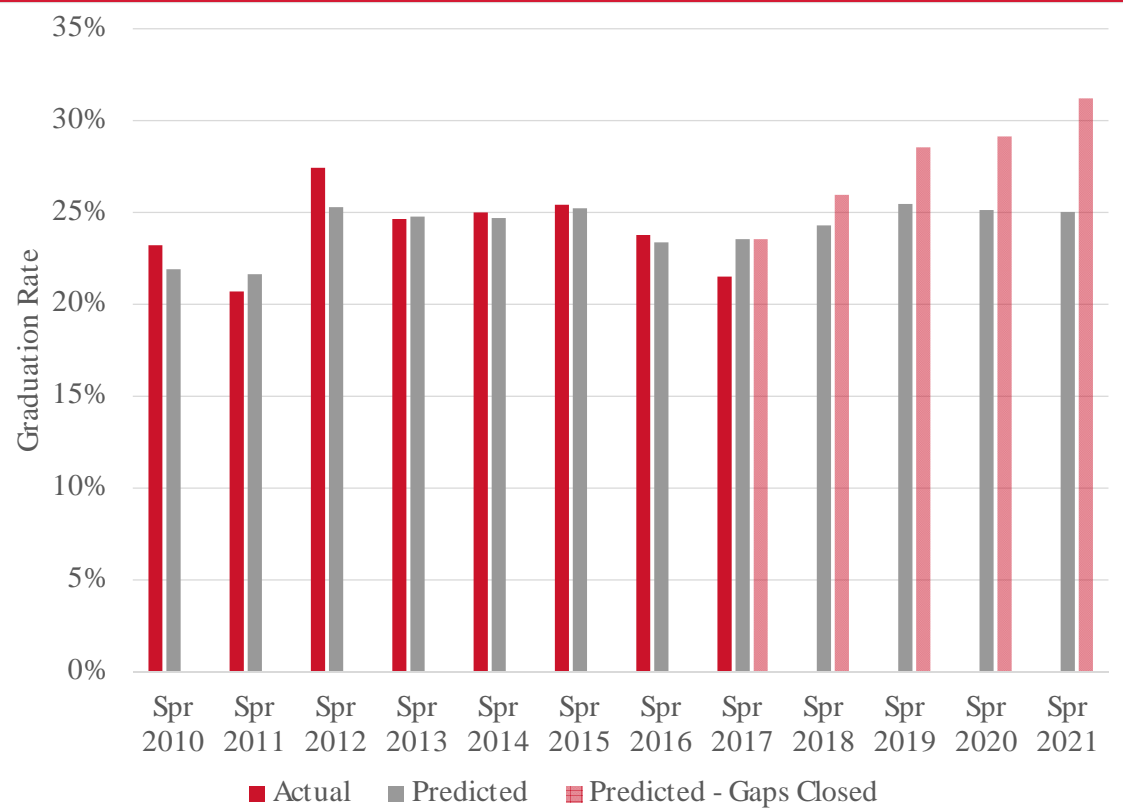
6-year First-Generation Achievement Gaps
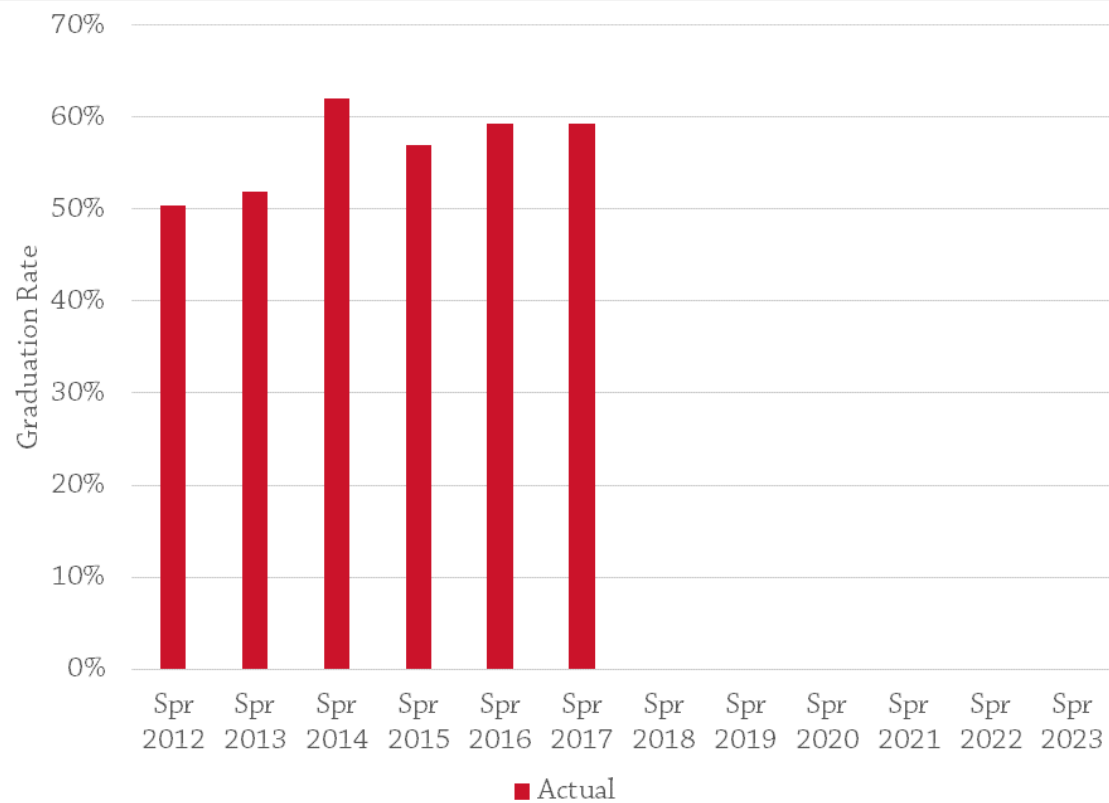
4-year Graduation Rate
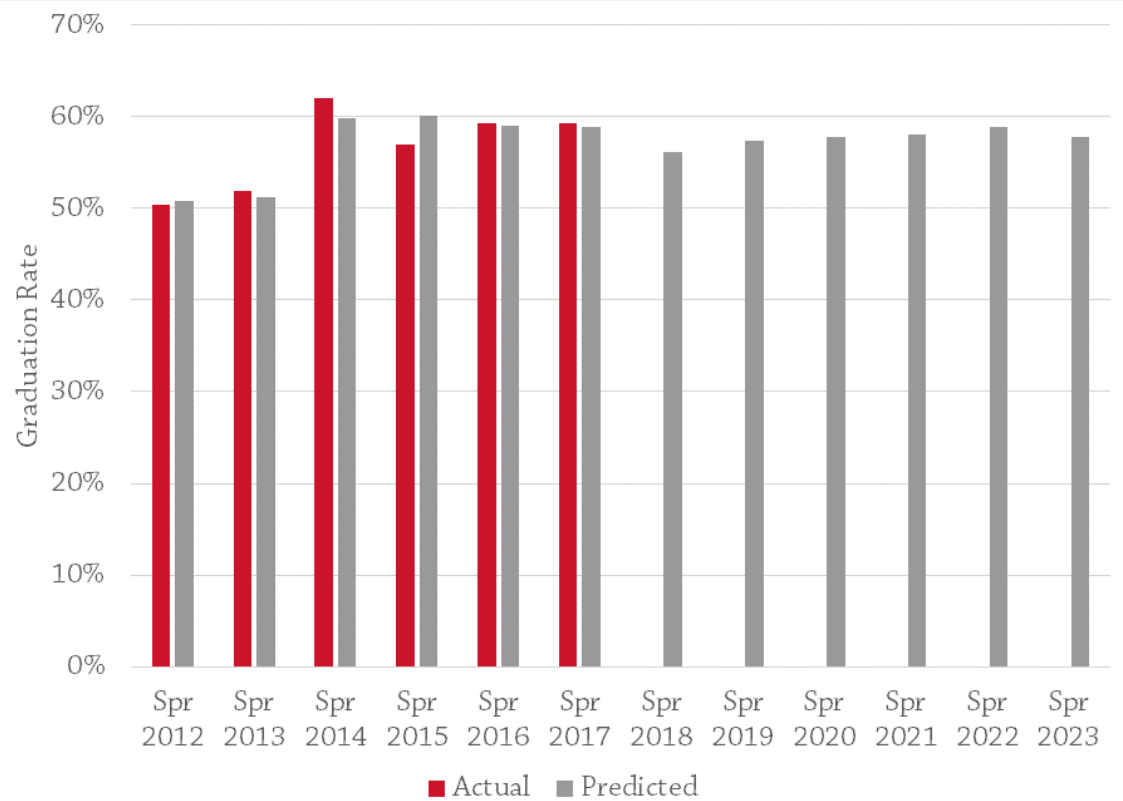
4-year Graduation Rate Forecast

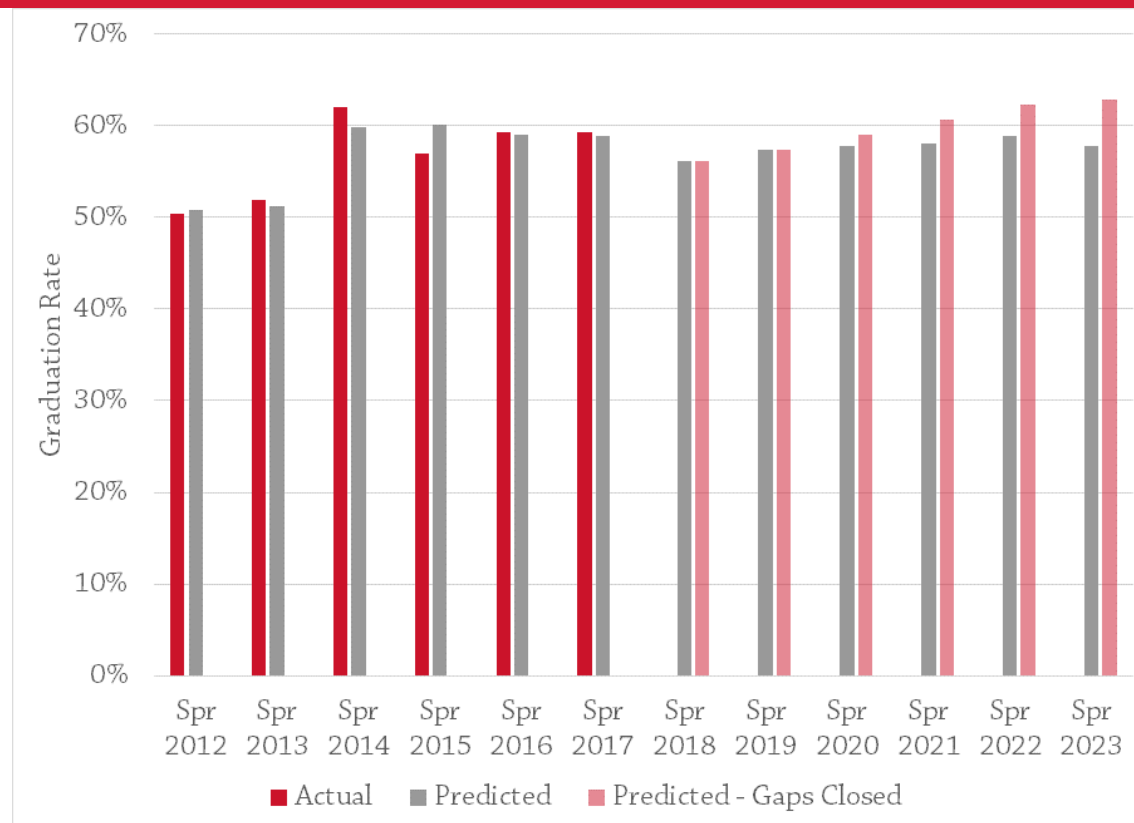# 4-year Graduation Rate Forecast- No Gaps

6-year Graduation Rate

6-year Graduation Rate Forecast

6-year Graduation Rate Forecast-No Gaps

Conclusions

- Gap characteristics are correlated
  - positively with each other
  - negatively with positive predictors of graduation

- Pell gap is largest & most persistent

- First-gen gap smallest & least persistent

Conclusions

- CI will get to roughly half of the 2025 graduation rate goals for FTFT if it closes 100% of the (unexplained) URM, Pell, and first-gen gaps

Next Steps

- Replicate w/ transfer students

- Assess interventions' success in closing the gaps

- Further study to understand *unexplained* gaps

Questions?
Thanks!