

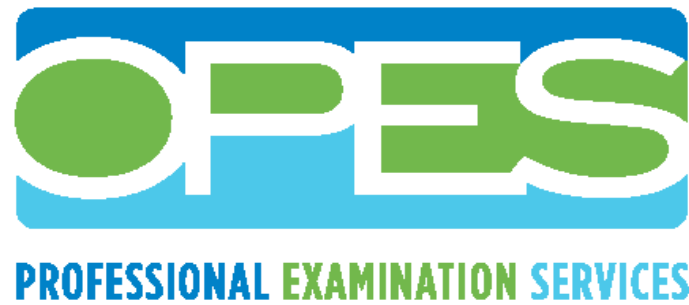
# What factors can influence the performance of California candidates on the ARE and CSE?



California Architects Board Meeting  
December 14, 2018  
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This is what we do:

Provide professional psychometric expertise in examination development and validation services to DCA's boards, bureaus, and committees.



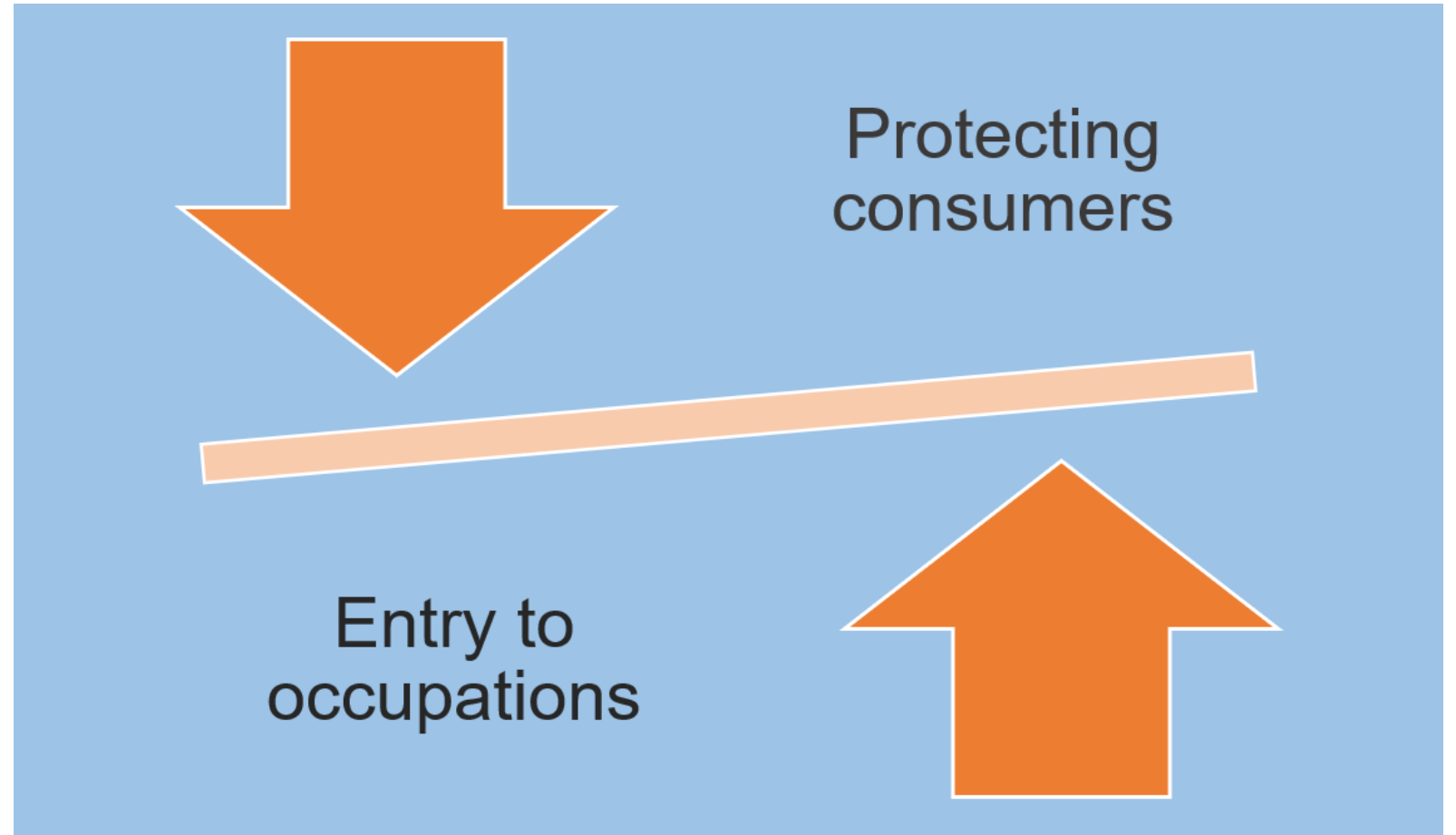
These are the Regulations, Standards, and Guidelines we follow:

- **Business and Professions Code section 139**
- **Principles for the Validation and Use of Personnel Selection Procedures** (Society for Industrial and Organizational Psychology)
- **Standards for Educational and Psychological Testing** (American Educational Research Association, American Psychological Association, National Council on Measurement in Education)

# California Licensed Architects *National and State Examinations*



Finding a  
balance  
through  
valid  
examinations



# Some insights into the ARE pass rates



- Pass rate is higher (overall and for all divisions) for candidates who graduated from programs accredited by the National Architectural Accrediting Board (NAAB)
- Pass rate is higher for ARE 4.0, lower for ARE 5.0
- Pass rate varies by state

# Examination Pass Rate Drop



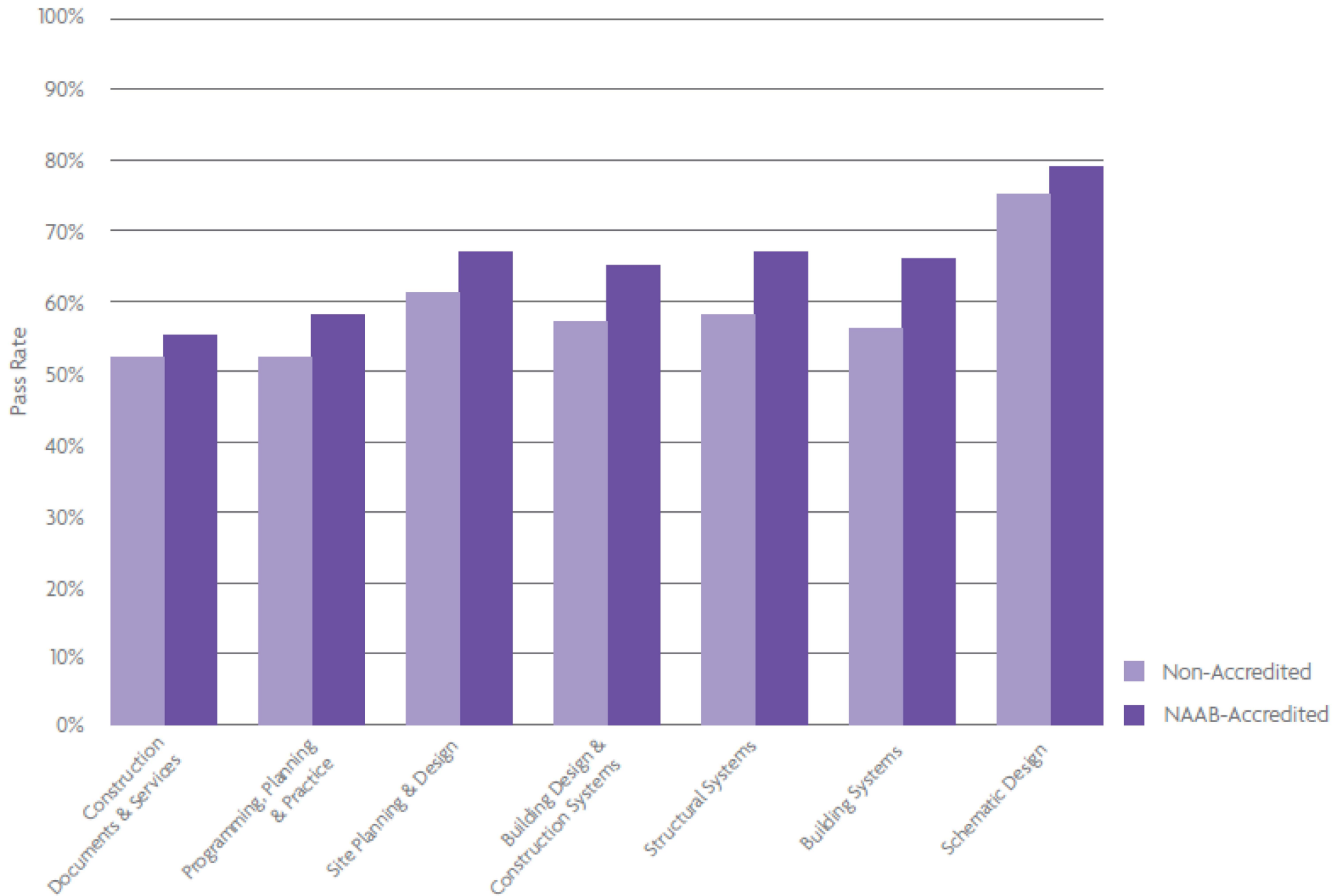
On average,  
graduates from  
accredited  
programs:



finished the ARE  
**5**  
months sooner

achieved higher  
ARE pass rates







# 2017 ARE 4.0 Pass Rates for California candidates in percentages by quarter

A – Accredited

NA – Non-Accredited

	QUARTER 1		QUARTER 2		QUARTER 3		QUARTER 4	
	A	NA	A	NA	A	NA	A	NA
Building Design & Construction Systems	62	59	59	56	55	47	64	67
Building Systems	63	64	58	63	66	45	57	31
Construction Documents & Services	50	48	47	49	46	32	47	42
Programming, Planning & Practice	51	43	47	39	51	54	51	36
Schematic Design	84	70	80	88	85	60	87	78
Site Planning & Design	65	56	67	55	63	70	54	41
Structural Systems	49	58	75	61	69	63	57	39

# California

5,071

Eligible Testers

8,815

Divisions Taken

595

Completions

National Average:  
62%

57%  
Success Rate

## LICENSURE

19%  
Reciprocal  
Licenses

81%  
Resident  
Licenses

21,347  
Total Licenses

National Averages:  
Reciprocal | Resident  
54% | 46%

# HOW DOES CALIFORNIA COMPARE?

# Massachusetts

69% (238)

# Illinois

66% (242)

# New York

61% (786)

# Texas

59% (349)

# California

57% (595)

A professional degree from a NAAB-accredited program is required.

Additional experience can be accepted as an alternative to the education requirement.

An architectural degree from a Canadian university certified by the CACB is accepted.

An EESA Evaluation of foreign education is accepted.

Completion of the AXP/IDP is required.

	Pass Rate (candidate count)	Accredited program required	Work experience accepted as alternative for education
Massachusetts	69% (238)	Yes	No
Illinois	66% (242)	Yes	No
New York	61% (786)	No	Yes
Texas	59% (349)	Yes	No
California	57% (595)	No	Yes

ARE 4.0

	2017	2018
Building Design & Const Syst	32%	34%
Building Systems	37%	42%
Construction Documents & Serv	32%	38%
Programming, Planning & <u>Prac</u>	33%	37%
Schematic Design	36%	34%
Site Planning & Design	32%	40%
Structural Systems	36%	38%

ARE 5.0

Construction & Evaluation	39%	27%
Practice Management	37%	35%
Programming & Analysis	31%	40%
Project Dev & Documentation	25%	30%
Project Management	36%	35%
Project Planning & Design	26%	29%

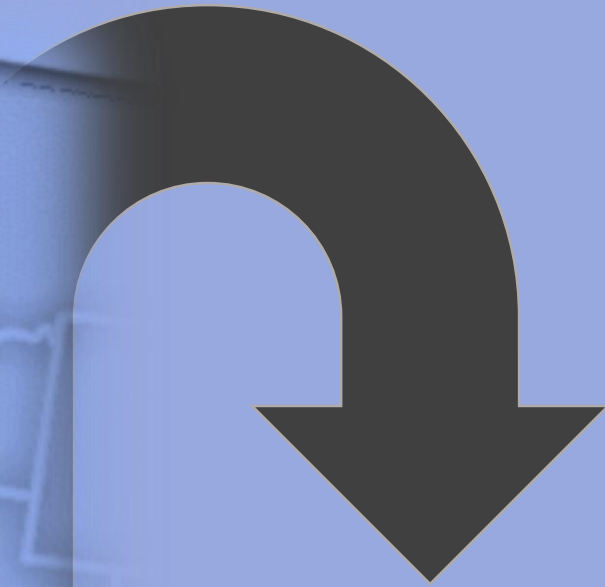
California candidates **NOT** holding degrees from NAAB-accredited program

# California Supplemental Examination Pass Rates

CAB•CSE



<b>Fall 2014</b>	<b>58%</b>
<b>Spring 2015</b>	<b>62%</b>
<b>Fall 2015</b>	<b>69%</b>
<b>Spring 2016</b>	<b>70%</b>
<b>Fall 2016</b>	<b>63%</b>
<b>Spring 2017</b>	<b>66%</b>
<b>Fall 2017</b>	<b>51%</b>
<b>Spring 2018</b>	<b>60%</b>
<b>Fall 2018*</b>	<b>58%</b>



**What factors can influence the performance of California candidates on the ARE and CSE?**

Types of factors that affect performance in examinations

INTERNAL

Factors within the candidate that affect the outcome

EXTERNAL

Factors in the environment that affect the outcome

STABLE

Factors that will cause the outcome to repeat

UNSTABLE

Factors that can change the outcome

CONTROLLABLE

Factors that can be manipulated to alter the outcome

UNCONTROLLABLE

Factors that cannot be altered

# Research points to these specific factors:

- ✓ College GPA
- ✓ Pre-licensing practice test
- ✓ Study habits
- ✓ College admission and retention policies
- ✓ Advanced degrees
- ✓ High school class size
- ✓ High school class rank
- ✓ SAT score
- ✓ Focus and determination





# WHAT CAN OPES DO?

1. Develop examinations that are fair, valid, and legally defensible
2. Use input from recently licensed architects in all phases of examination development
3. Continue preventing artificial barriers to licensing during examination development and administration
4. Make public a sample of items that would be retired from the examination
5. Review and revise the study material, as needed, to be more focused
6. Ensure the passing score targets the candidate whose competence is minimally acceptable for entry level

*Thank you!*

Questions?

