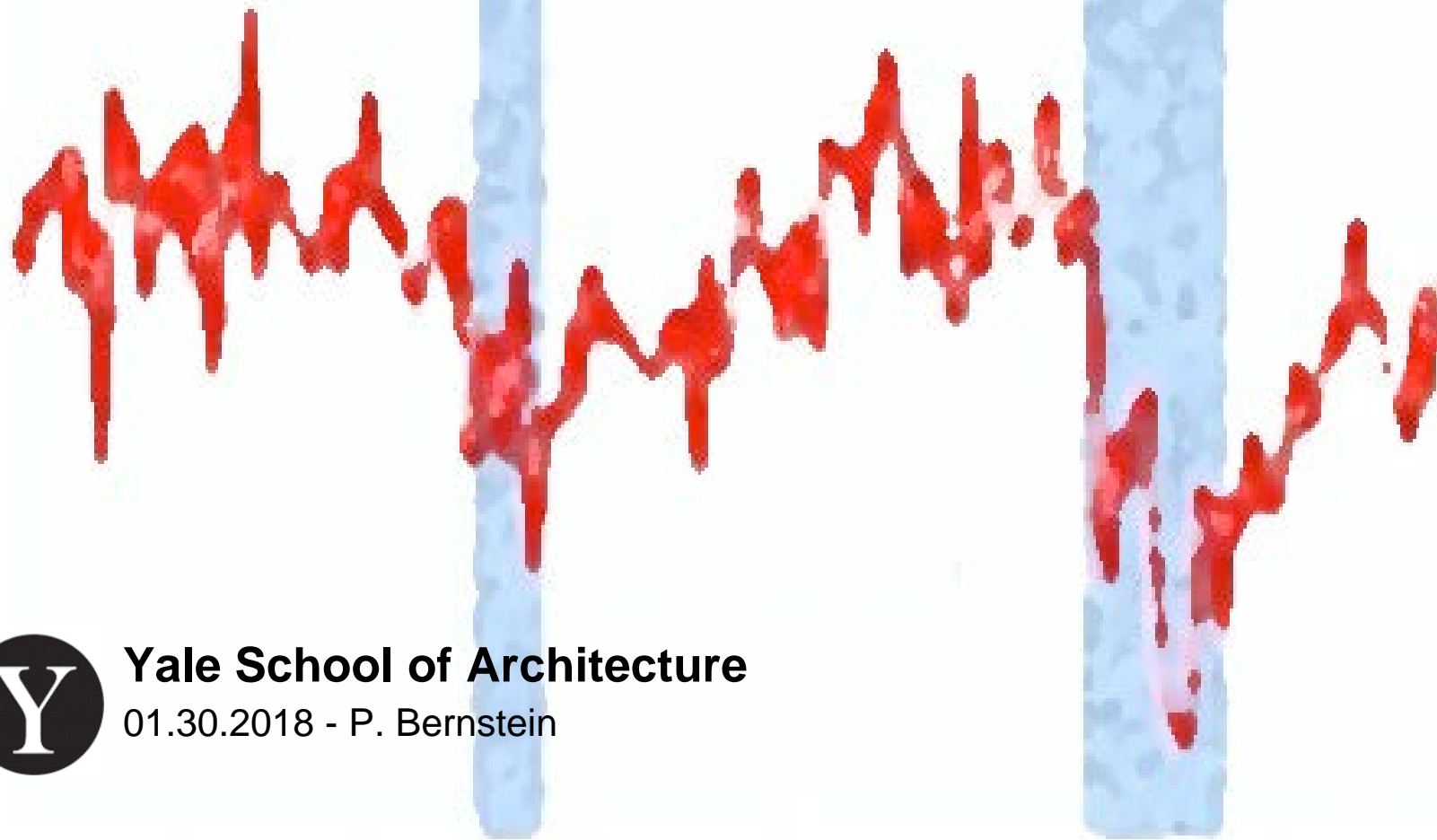


Career Strategies in A Tight Market



Yale School of Architecture

01.30.2018 - P. Bernstein

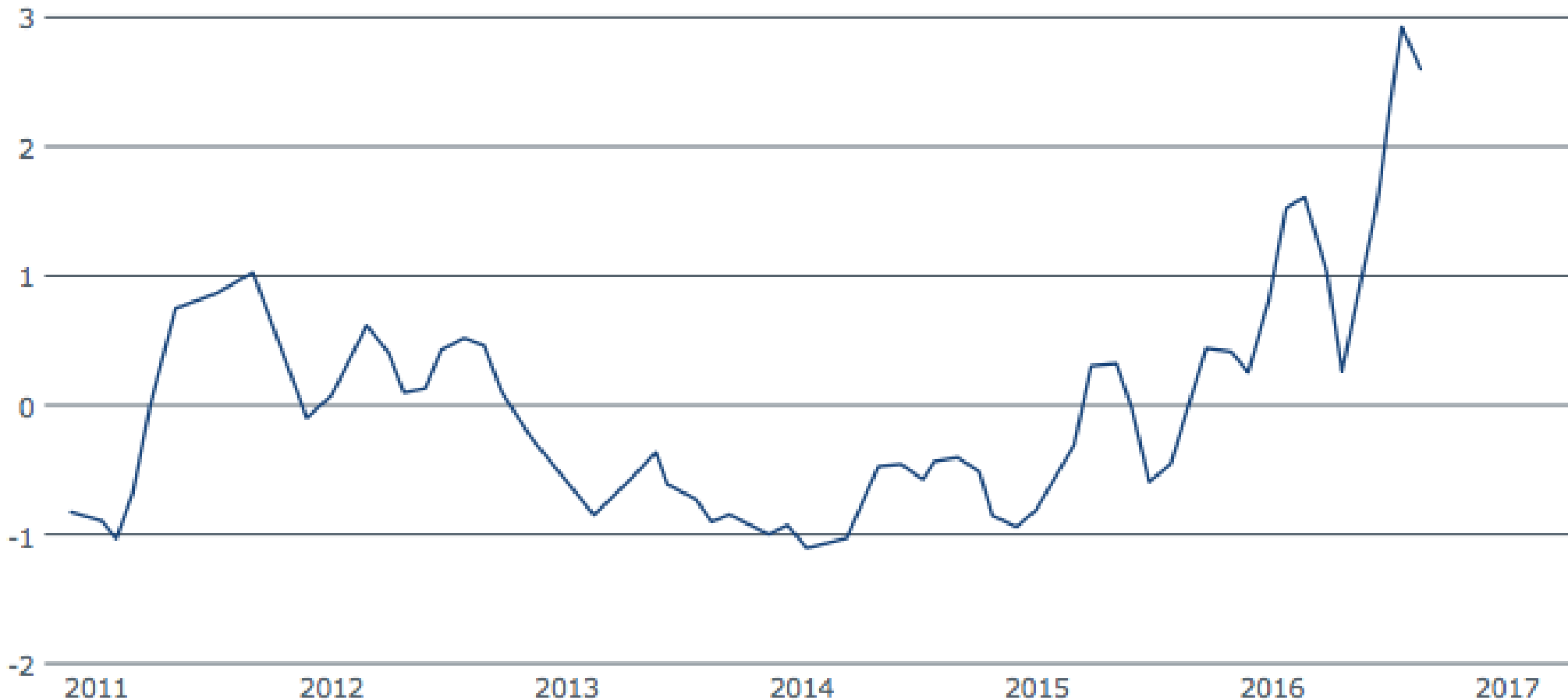
Overview

1. **Global Economics:** Where is there building?
2. **Professional Economics:** How does the economy affect jobs?
3. **Profession:** What sort of jobs are out there?
4. **Career:** If you get a job, how much might you get paid?
5. **Strategies:** Choices, negotiation, and tools

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Global economic policy uncertainty: 3-month moving average, index normalised for 2011–2017



△ Warmer
— No change
▽ Cooler

Global growth

Global growth driven on by China's contribution to a more

Growth in next two years previous forecast by the IMF

Future market outlook
△
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A rise in global economic policy uncertainty may damage confidence and reduce appetite for making long-term investments.

Source: PolicyUncertainty.com and OECD calculations.

The IMF predicts a reinvigorated USA will drive increased growth in the global economy through to 2018, despite slower growth coming from China.
Source: The IMF.

Source: ICMS, 2017.

Construction

Annual percentage changes

	2011-2015	2016	2017	2018	2019	2020	2021	2022-2026
United States	2.6	3.3	0.2	2.8	3.3	2.7	2.6	-0.5
Eurozone	-2.5	1.4	3.3	2.7	2.2	2.0	1.9	-0.4
United Kingdom	1.9	3.8	3.6	-0.3	1.1	2.0	2.3	-0.5
Japan	3.3	1.8	2.3	2.7	1.9	0.9	0.7	-0.1
Developed Countries	1.0	1.9	2.0	2.3	2.2	1.7	1.8	-0.4
Eastern Europe	0.9	-5.9	5.9	4.1	3.0	2.9	2.9	-0.6
Brazil	1.3	-5.2	-5.4	0.8	2.8	3.2	3.4	-0.7
Russia	0.5	-4.4	-0.7	2.5	1.6	1.6	1.7	-0.3
India	2.2	4.2	0.9	7.4	6.9	7.1	7.1	-1.4
China	9.0	6.7	4.6	4.2	5.1	5.1	5.0	-1.0
Emerging markets	4.9	3.1	2.8	4.0	4.5	4.6	4.5	-0.9
World	2.8	2.5	2.4	3.2	3.3	3.1	3.2	-0.6

US: Capital markets continue going well, but labor shortages will raise prices. Policy uncertainties under Trump (infrastructure, immigration, trade) create instability.

UK: High degree of uncertainty around Brexit continues, construction work down. Growth slowing considerably.

Europe: Mostly strong (Germany) with moderate growth predicted. But as migrant flows slow construction to taper off in the long term.

Russia: Energy prices driving economy to greater growth.

China: Slowing but brisk growth but international work continues and Western firms continue to establish there. Switch to consumer.

Japan: Mini-boom around Tokyo Olympics ending; slow investment and pop growth means less building.

Middle East: Oil prices rise, production cut, backlog of construction means activity in Saudi and UAE (World Cup, etc.)

Latin America: Good recovery across LA, even Brazil (oil). Mexico slows.

Africa: Investment in cities means growth. Continued China investment.

India: Continued investment in cities and infrastructure means long term growth.



CONSENSUS CONSTRUCTION FORECAST, JUNE 2017

Click on each name to see their forecast

Consensus		Actual \$ 2016	Forecast % Change	
			2017	2018
Dodge Data & Analytics	Nonresidential Total	—	3.8	3.6
IHS Economics	Commercial Total	—	8.8	4.0
	Office	—	8.9	4.0
Moody's Economy.com	Retail & Other Commercial	—	10.0	4.6
	Hotel	—	6.1	2.4
FMI	Industrial Total	—	-6.6	1.1
ConstructConnect	Institutional Total	—	3.5	4.1
	Health	—	0.9	3.5
Associated Builders and Contractors	Education	—	4.9	4.8
	Religious	—	-9.2	-1.0
Wells Fargo Securities, LLC	Public Safety	—	1.4	3.7
	Amusement & Recreation	—	7.1	3.0

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1.6%

Real GDP growth Q4-17
down from 1.9% in 2016

4.1%

Unemployment in Oct 2017
down from 4.9% in 2016

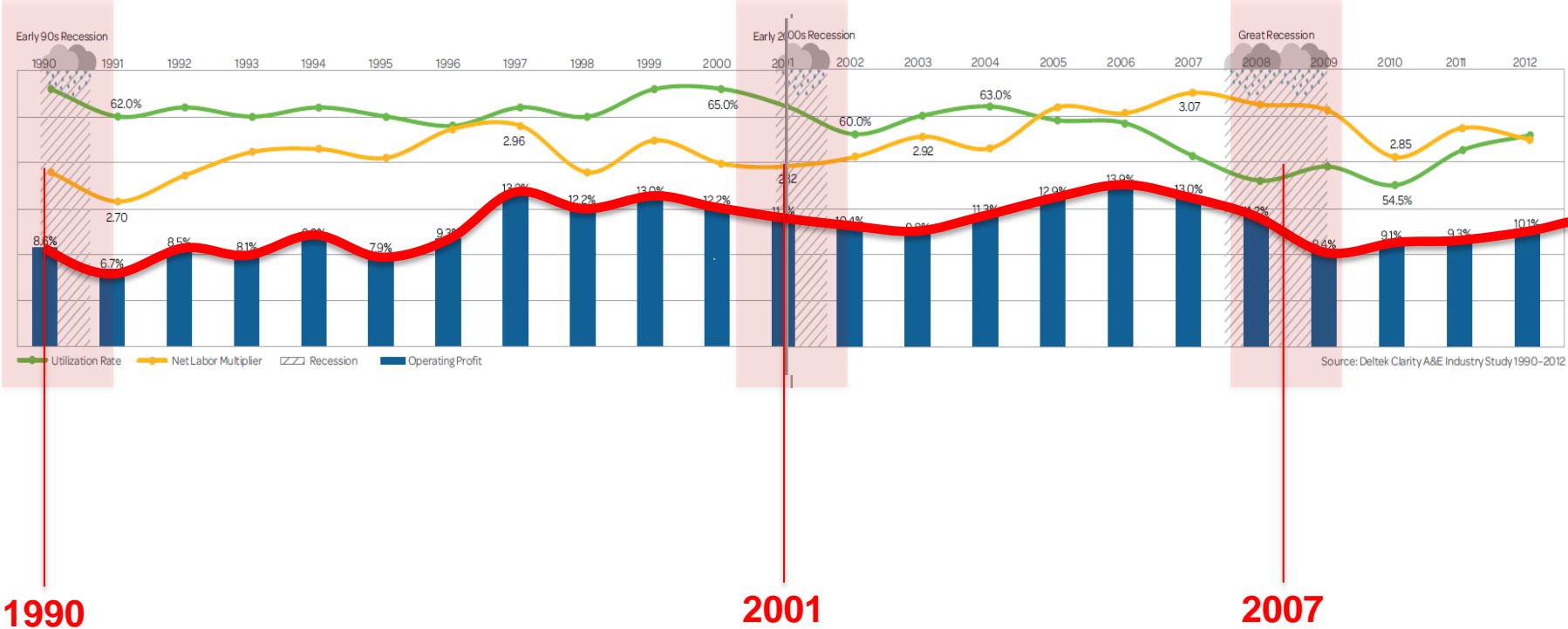
2.1%

Inflation 2017, stable

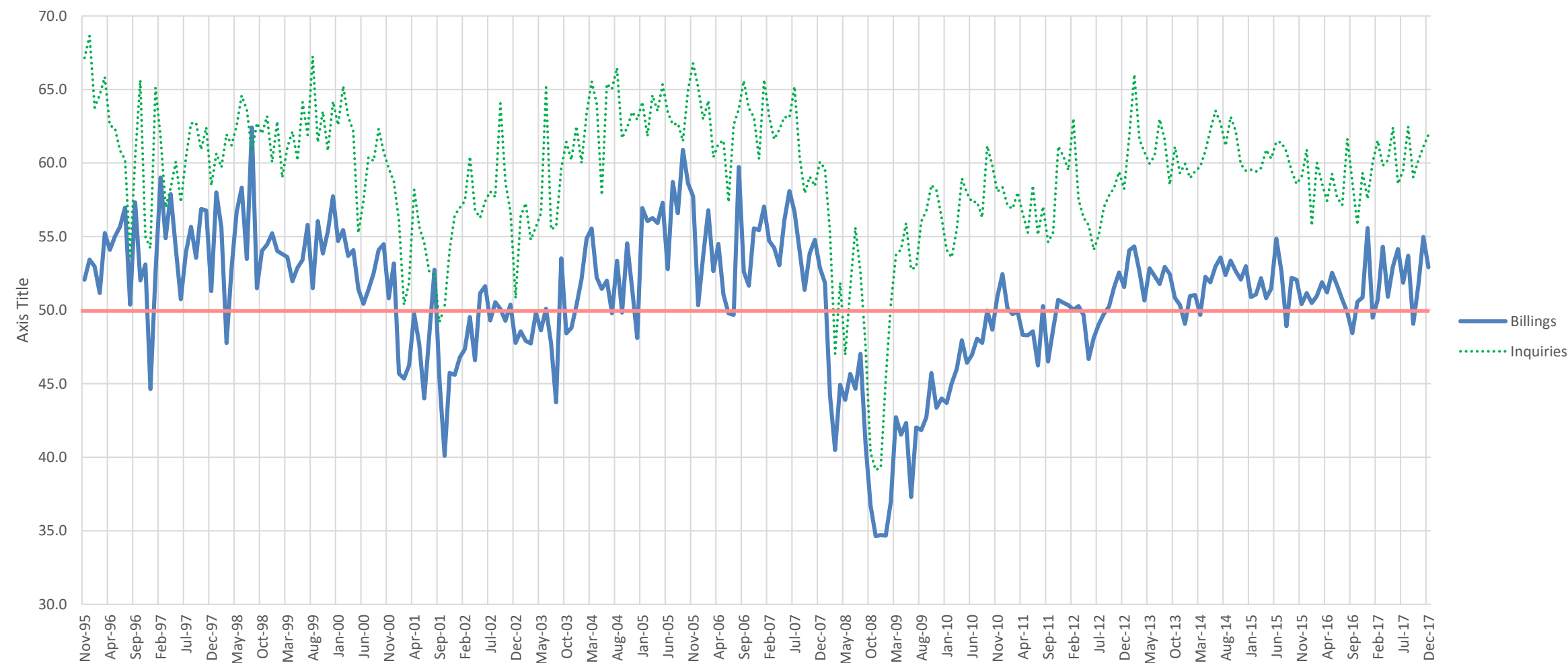
0.2%

US construction growth in 2017,
down from 3.3% in 2016

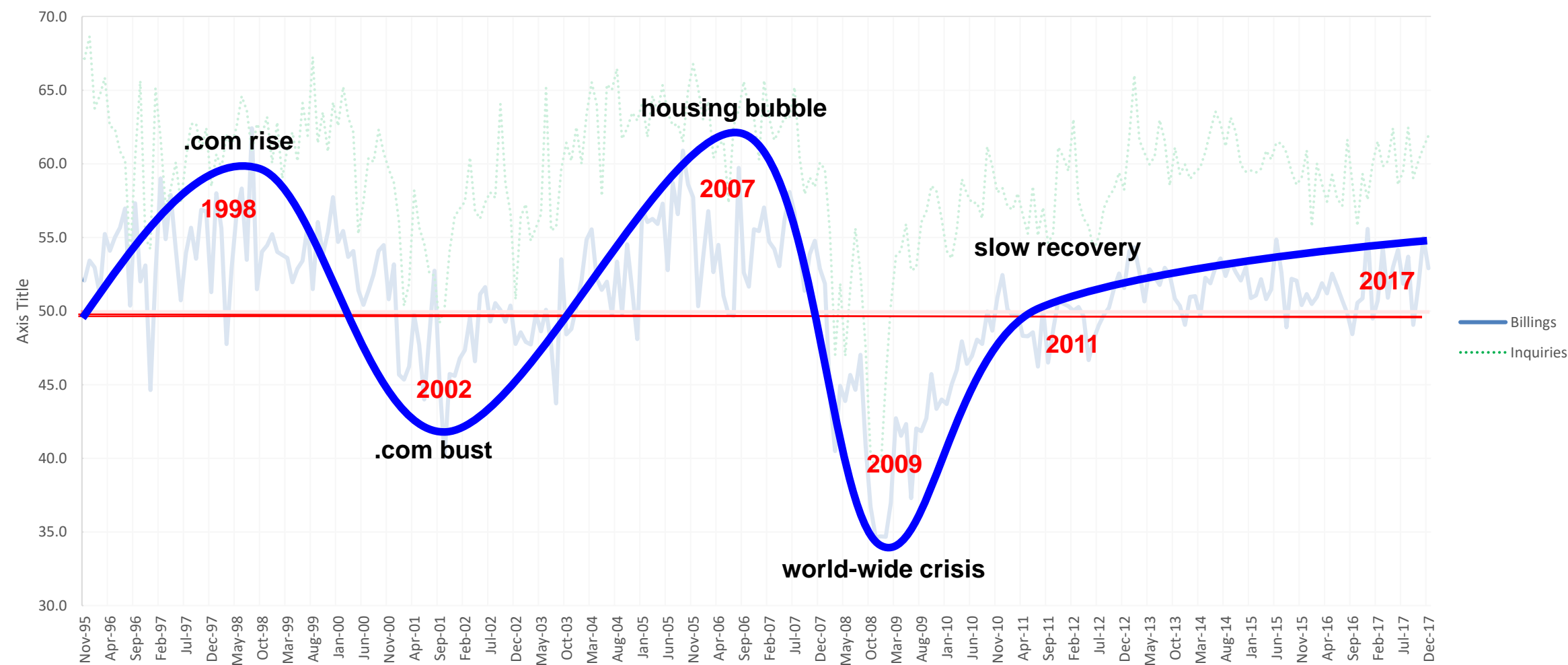
US Construction Economy Rhythm (Deltek)



Architecture Billings Index 1996 – 2017

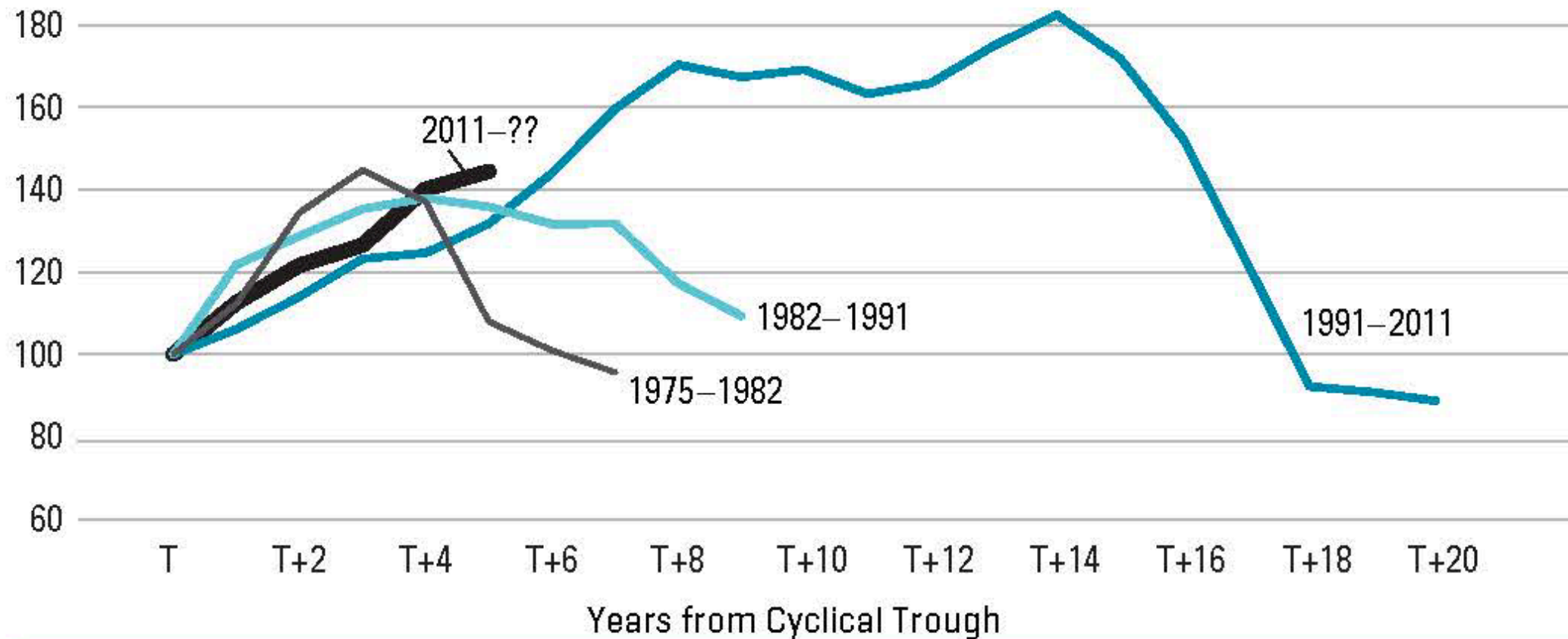


Architecture Billings Index 1996 – 2017



TOTAL CONSTRUCTION ACTIVITY BY CYCLE

Cyclical Trough [T] = 100, Based on Constant Dollars



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Where do we go? Yale Grads 1986 - 2012

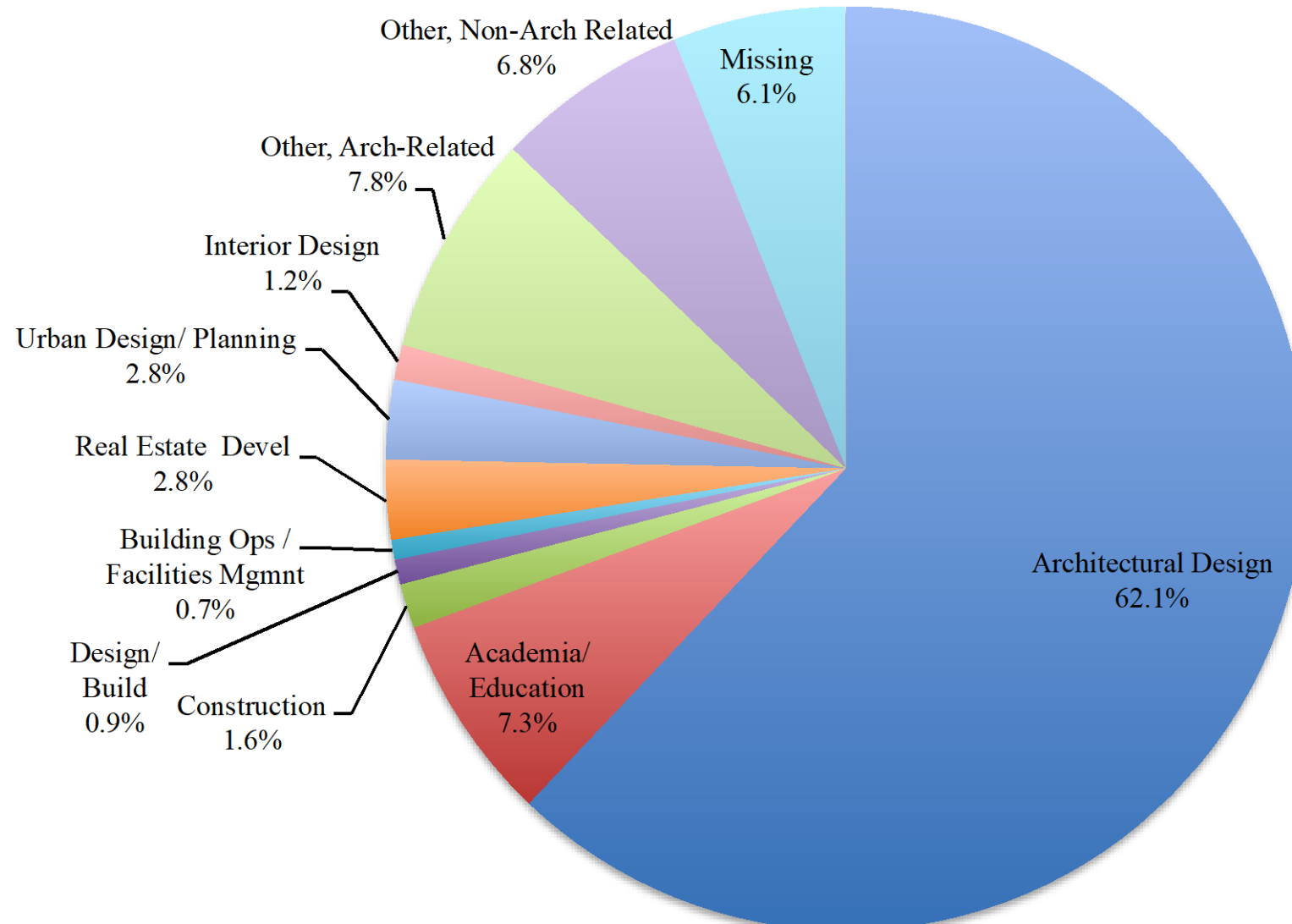


FIGURE 02:

Profession continues to see increased concentration in revenue at larger firms, but still not back to pre-downturn levels

% of all firms, staff, and gross billings by firm size for 2015, with 2013 and 2005 comparisons

Number of employees	Share of firms	Share of staff	Share of billings	2013 Share of billings	2005 Share of btillings
1 to 9	77.3%	20.7%	15.4%	17.3%	16.5%
10 to 49	17.6%	32.3%	33.3%	37.8%	31.7%
50 or more	5.1%	47.0%	51.3%	44.9%	51.9%

	Number of employees			
	All firms	1-9	10-49	50+
Pre-1990	34%	25%	52%	86%
1990-1999	22%	22%	26%	5%
2000-2004	12%	13%	11%	2%
2005-2009	14%	16%	7%	6%
2010-2016	19%	23%	5%	0%



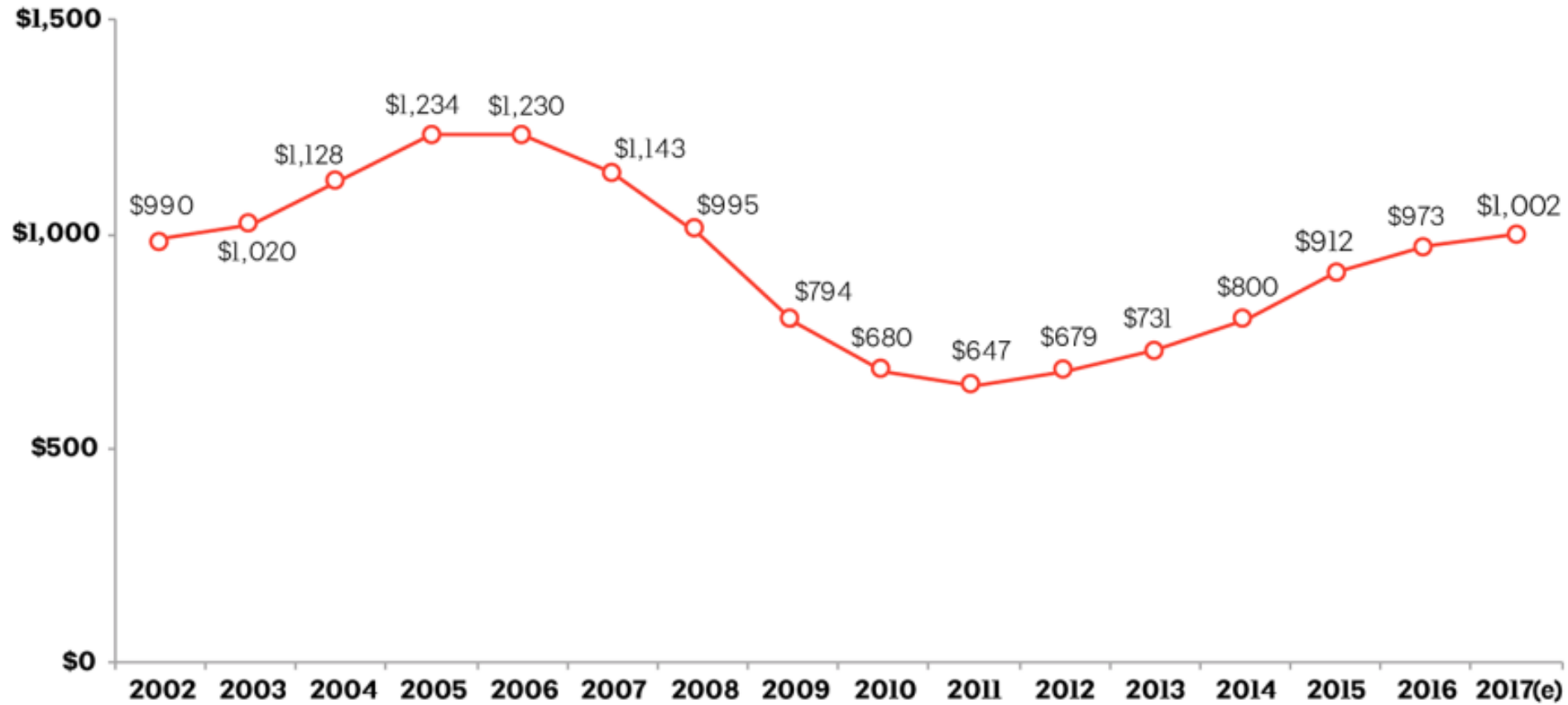
AIA FEATURE

How Many Architects Does Our Economy Need?

A special report on workforce pressures for firm leaders.

By KERMIT BAKER, HON. AIA

Figure 1: Architects work in a very volatile sector of the economy. Annual spending on residential and nonresidential facilities, in billions of 2017 dollars.





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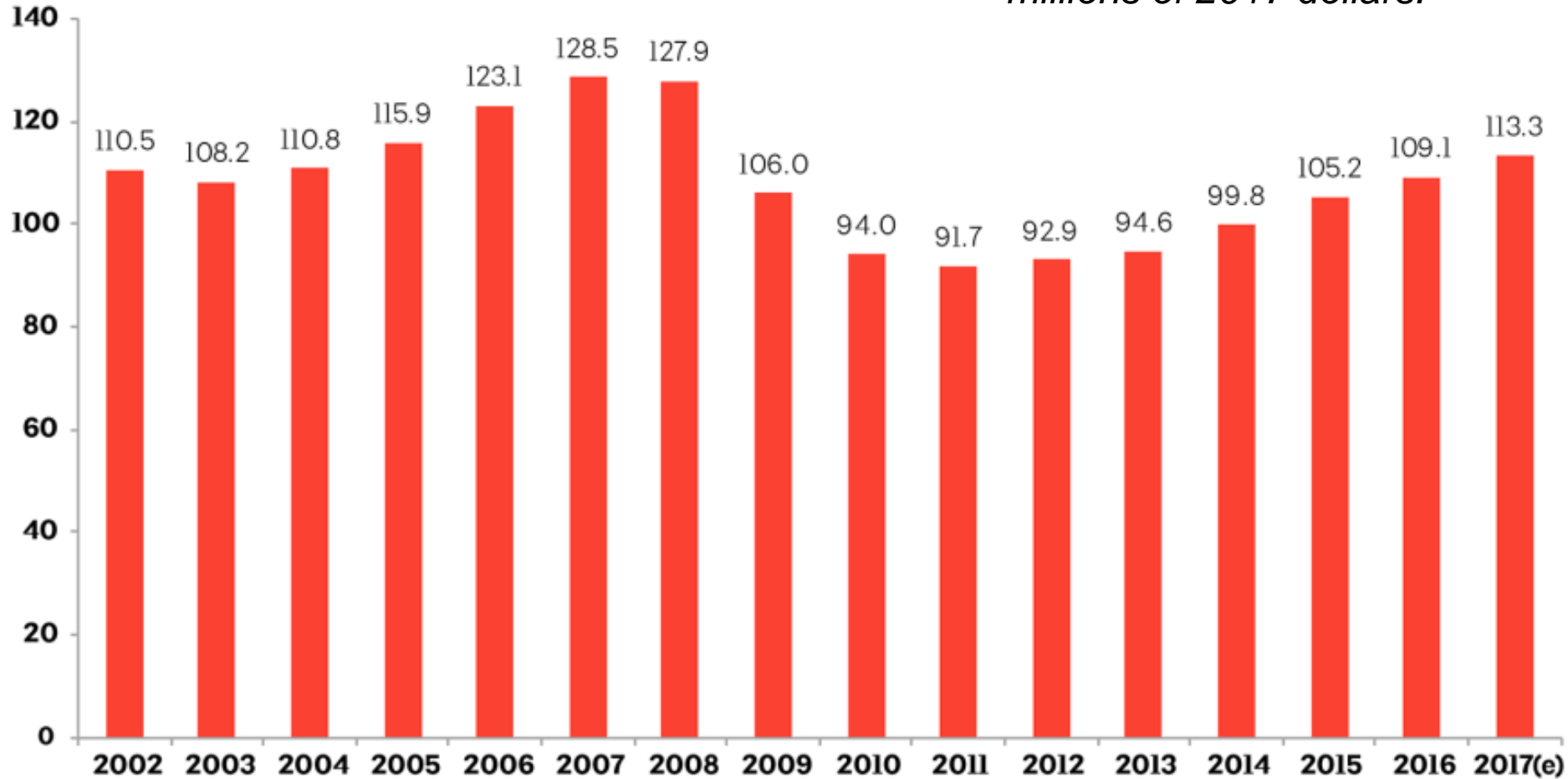


Figure 3: Architectural staffing positions don't adjust as quickly as construction activity, causing average output to fluctuate. Estimate of construction activity per architectural position, in millions of 2017 dollars.



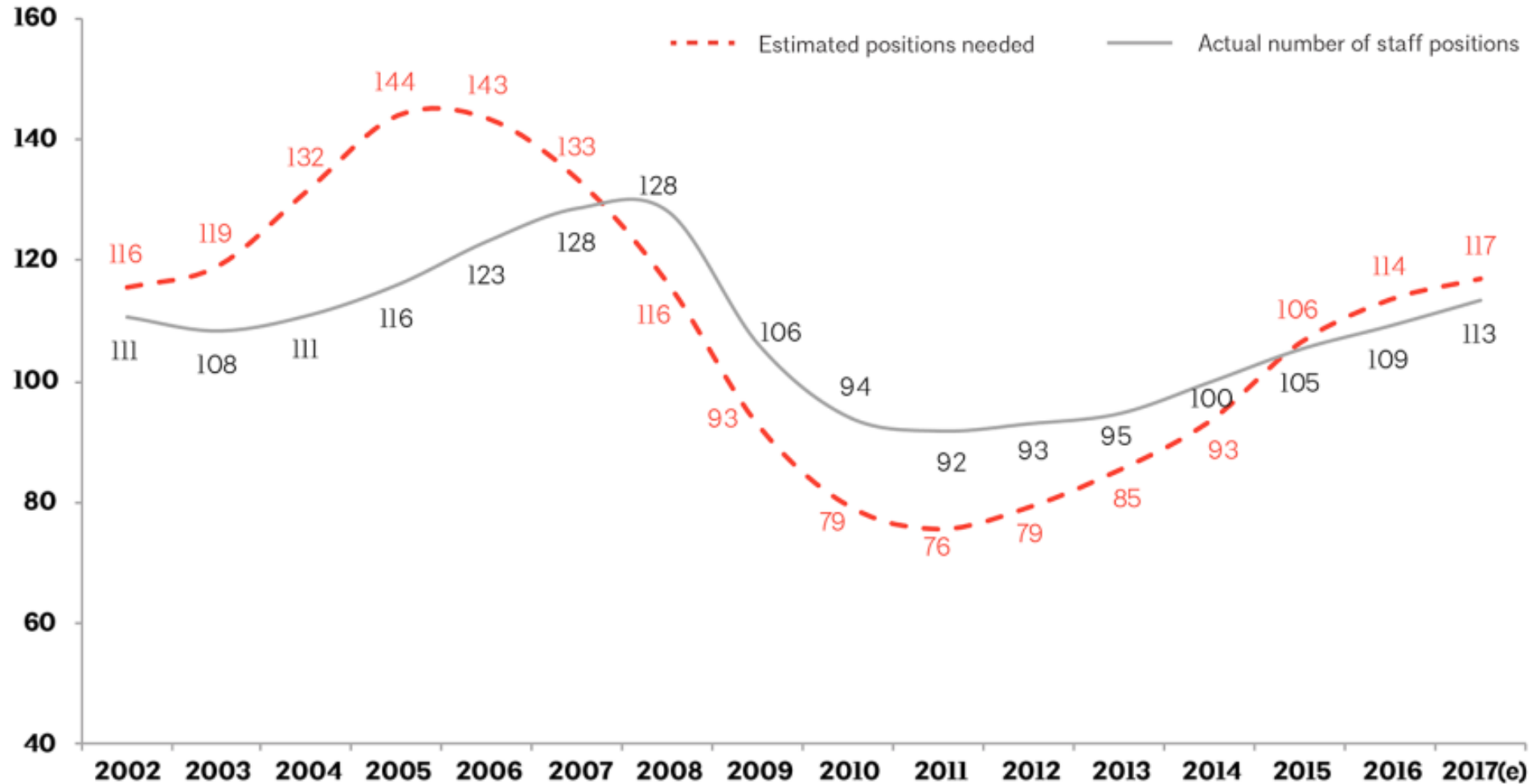
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Figure 4: While understaffed during boom and overstaffed during bust, labor needs are more in balance at present. Annual estimated architectural positions needed vs. actual number of positions, in thousands.





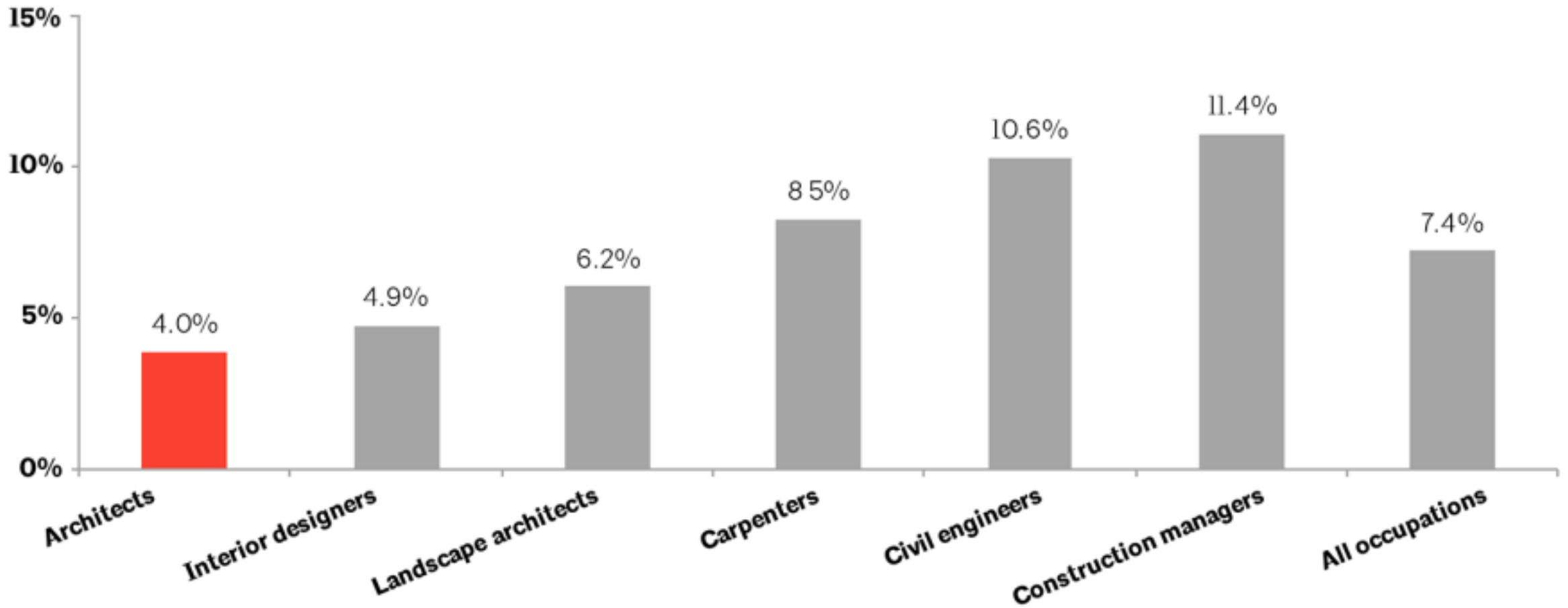
AIA FEATURE

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Figure 5: Architecture positions are projected to increase by 4 percent this coming decade, a slower pace than in related occupations. Projected change in employment, by percent, 2016–26





AIA FEATURE

How Many Architects Does Our Economy Need?

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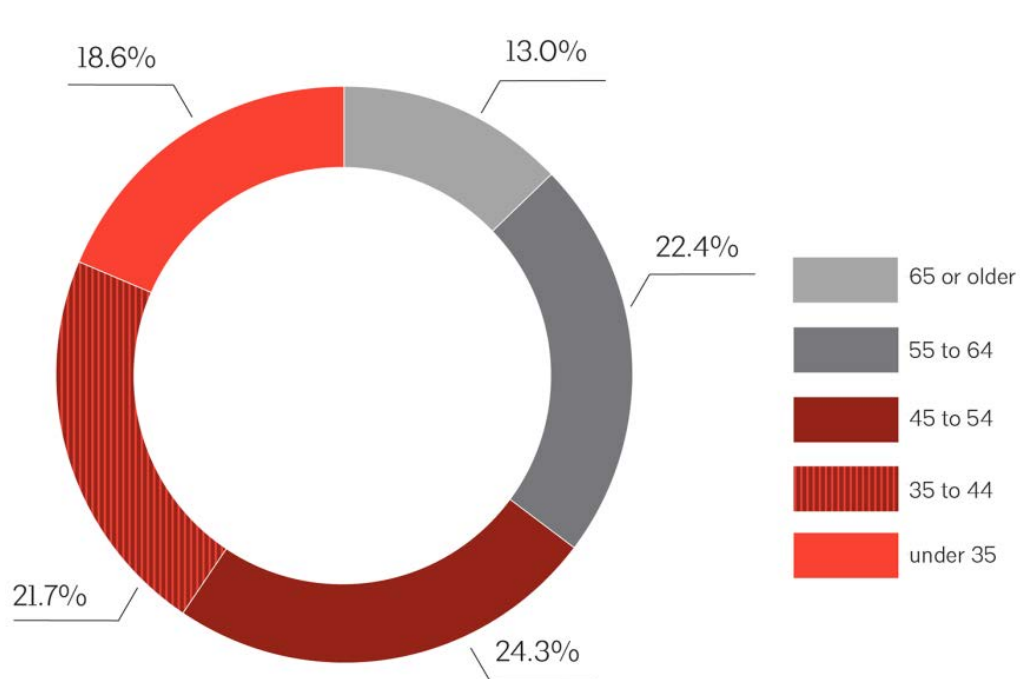


Figure 6: Like our overall population, the architect profession is aging. Age of AIA architect and associate members, 2015.

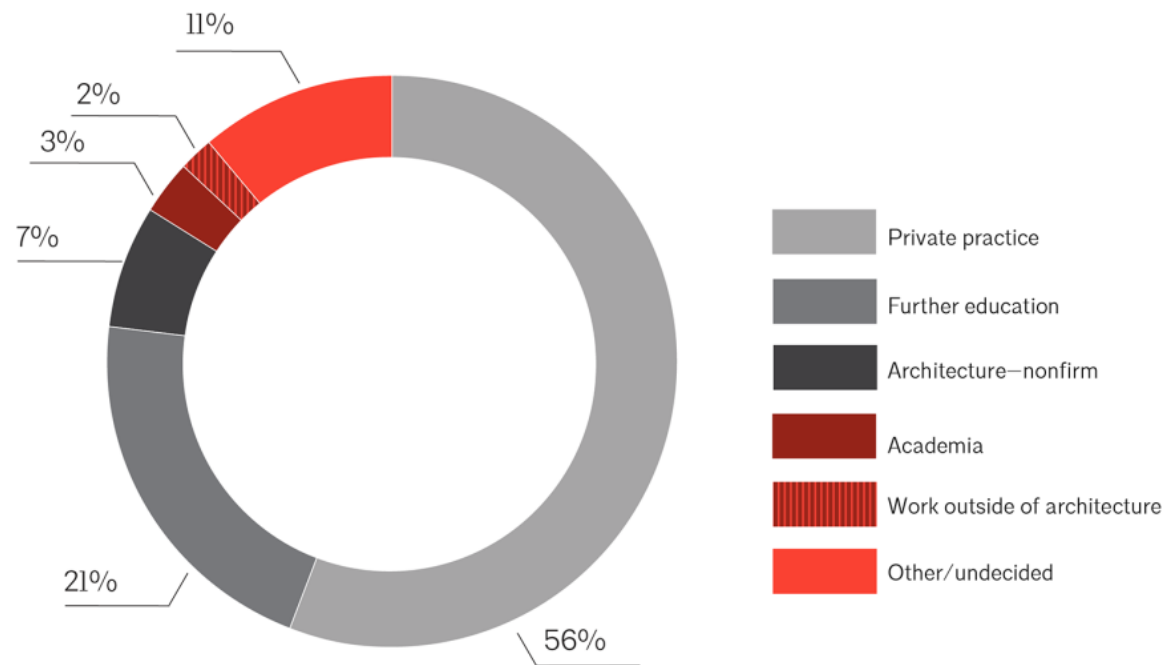


Figure 7: Most architecture students plan to continue in the profession and work in private practice. Architecture student plans after graduation, by percent.

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Elements of Compensation Packages

TOTAL COMPENSATION

Signing bonus

Base compensation (salary or hourly rate, overtime)

Overtime

Incentive payments (performance, licensure bonus)

[Vacation, sick, personal time]

BENEFITS

Health insurance (medical, dental, vision)

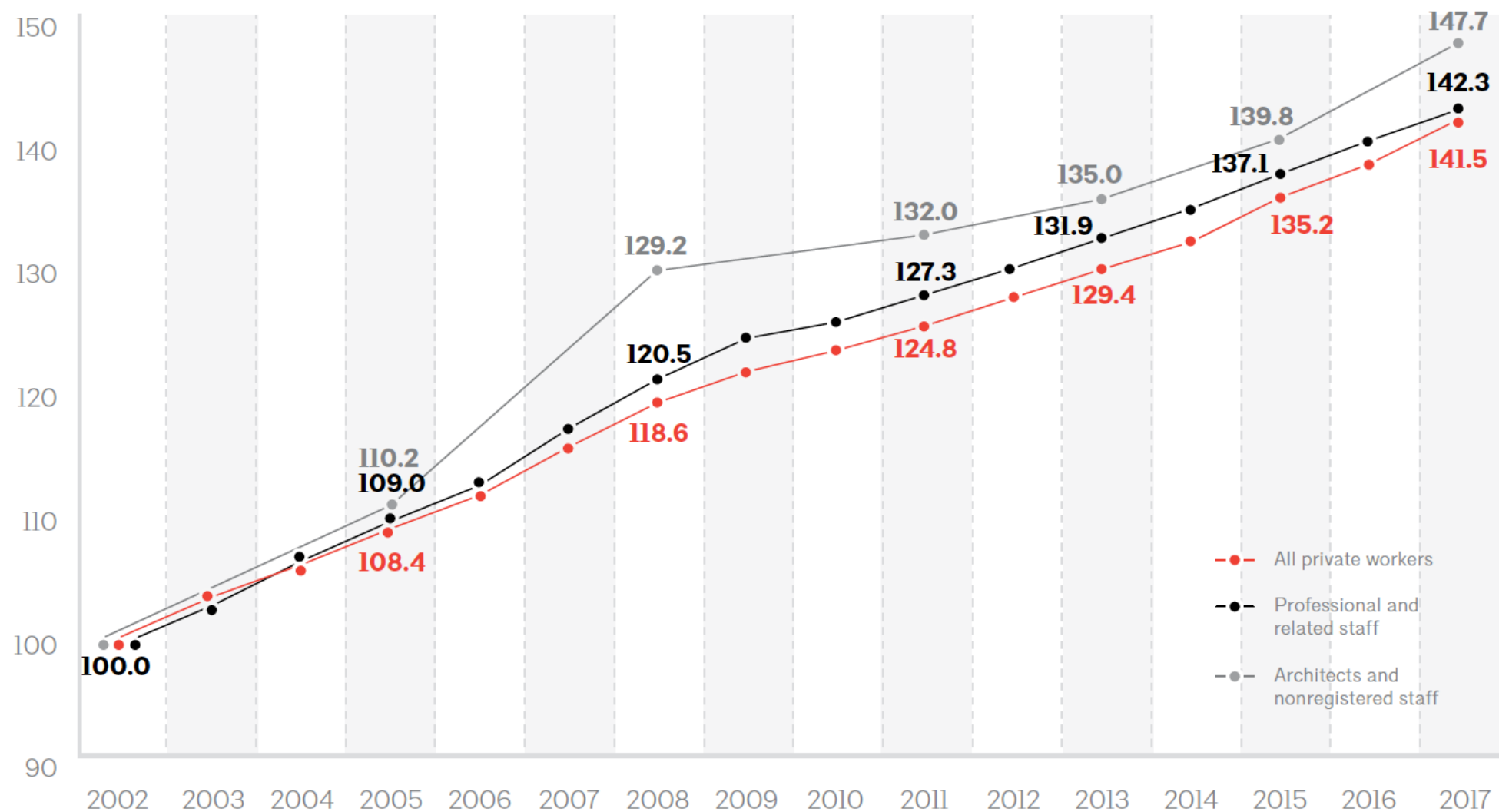
Retirement (401K, pension, profit sharing)

Other fringes (FSP, wellness)

Training, ARE

Architecture staff compensation gains currently outpacing growth in broader economy

Index: Q1 2002=100; all figures for first quarter of year

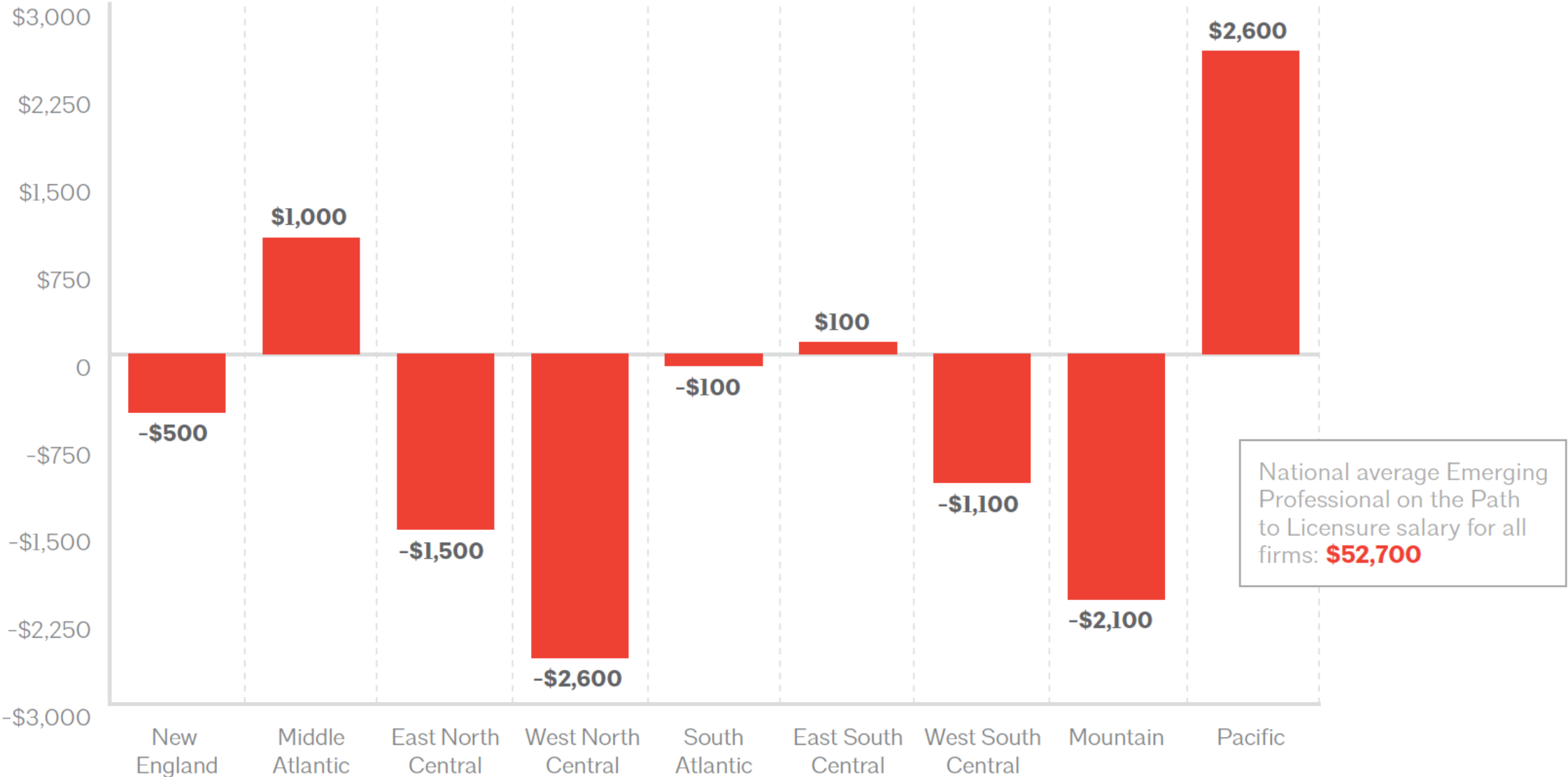


NOTE Compensation for all private workers and professional and related staff includes wages and salaries and incentive pay, but not overtime and bonuses.

SOURCE U.S. Department of Labor Employment Cost Index; AIA

Emerging Professional on the Path to Licensure salaries are highest on the West Coast

Average compensation across all three Emerging Professional on the Path to Licensure positions including overtime pay, bonuses, profit sharing, and other cash compensation by Census region, as compared to the national average, as of January 1, 2017



	National average	% change from 2015	Fewer than 10 employees	10–19 employees	20–49 employees	50–99 employees	100 or more employees
CEO/President	\$219,280	14%	\$133,575	\$207,540	\$315,000	\$338,940	\$381,420
Managing Principal	\$196,030	4%	\$132,415	\$182,380	\$200,640	\$229,620	\$238,770
Chief Operating Officer	\$233,530	29%	\$135,560	\$177,310	\$233,530	\$280,030	\$315,495
Director of Operations	\$152,260	10%	\$93,680	\$111,180	\$167,470	\$184,940	\$211,400
Director of Design	\$174,590	6%	\$124,390	\$138,740	\$160,440	\$197,580	\$241,820
Senior Project Designer	\$114,450	13%	\$89,355	\$103,940	\$107,580	\$123,310	\$130,050
Project Designer	\$86,260	13%	\$78,440	\$74,190	\$79,620	\$83,800	\$97,255
Senior Project Manager	\$119,110	7%	\$93,080	\$107,010	\$114,150	\$126,130	\$136,680
Project Manager	\$92,630	7%	\$79,475	\$83,250	\$91,090	\$103,560	\$101,245
Architect 3	\$108,420	11%	\$84,435	\$95,340	\$101,010	\$114,290	\$118,825
Unlicensed Architecture/ Design Staff 3	\$81,600	5%	\$66,235	\$75,560	\$77,100	\$87,090	\$101,485
Architect 2	\$86,070	8%	\$80,400	\$77,140	\$81,330	\$86,580	\$92,275
Unlicensed Architecture/ Design Staff 2	\$72,090	5%	\$64,700	\$66,380	\$68,720	\$77,260	\$77,860
Architect 1	\$71,550	6%	\$65,400	\$65,070	\$69,840	\$72,630	\$74,315
Unlicensed Architecture/ Design Staff 1	\$62,990	4%	\$55,640	\$58,290	\$61,650	\$67,040	\$66,835
Emerging Professional on Path to Licensure 3 (formerly Intern 3)	\$57,700	6%	\$52,985	\$54,840	\$57,730	\$59,550	\$58,500
Emerging Professional on Path to Licensure 2 (formerly Intern 2)	\$53,260	9%	\$49,040	\$50,240	\$52,250	\$55,740	\$54,930
Emerging Professional on Path to Licensure 1 (formerly Intern 1)	\$47,130	10%	\$41,115	\$44,690	\$46,240	\$49,940	\$48,700

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Selection Strategies

- Location, design culture
- Work environment and community, mentorship model
- Project mix
- Practice size, structure
- Roles, responsibilities
- Salary, compensation
- Growth opportunities
- Mentorship

Networking Opportunities

www.alumniconnections.com/olc/membersonly/YALE/networking

www.linkedin.com

www.facebook.com

www.yale.edu/aya

www.architecture.yale.edu/drupal/index.php?q=Career_Services



Summary

- 1. World economics are in slow growth mode.**
- 2. US market is slowing but firms are hiring.**
- 3. Post-recession labor contraction continues as the “gap” moves along the timeline.**
- 4. US construction labor shortage/material costs will drive prices up, but what about longer?**
- 5. Trump is a wild-card: taxes, infrastructure, immigration.**
- 6. Economic periodicity suggests a downturn in the next few years.**
- 7. Leverage your skills and brand for position and salary.**
- 8. Use the Yale network.**

