

American Insurance & Investment Design Conference PSMJ Mini-Bootcamp

March 10, 2022

Salt Lake City, Utah

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Who is **PSMJ** | Resources, Inc.®

- **Content Providers of Management Information**
- **Exclusive to A/E/C Industry**
- **Over 40 Years**

Subject	Newsletters	Surveys & Manuals	Seminars & Conferences	Consulting
Strategy	✓	✓	✓	✓
Marketing	✓	✓	✓	✓
Project Delivery	✓	✓	✓	✓
Finance	✓	✓	✓	✓
Information Tech.	✓	✓	✓	✓
Human Resources	✓	✓	✓	✓
Transition	✓	✓	✓	✓

Your Presenter – Jared Jamison, PE

- Senior Consultant, PSMJ
- BS, MS in Civil Engineering, Virginia Tech
- MBA, Virginia Commonwealth University
- 15 years with Hankins and Anderson/Mason and Hanger
 - Structural Engineer
 - Chief Engineer
 - Department Head
 - Director of Operations
 - Board of Directors
 - Treasurer
- Adjunct professor of business planning, at VCU



Today's Agenda

8:00am	Introduction
8:15am	Compensating your staff without breaking the bank
9:15am	Break
9:30am	Developing your next generation of leaders
10:30am	13 ways to improve project performance
11:00pm	Break
11:10am	Steering in Today's Storms – How to Not End Up on the Rocks
12:10pm	Luncheon presentation: How does the future look for the A/E industry?
1:15pm	Adjourn

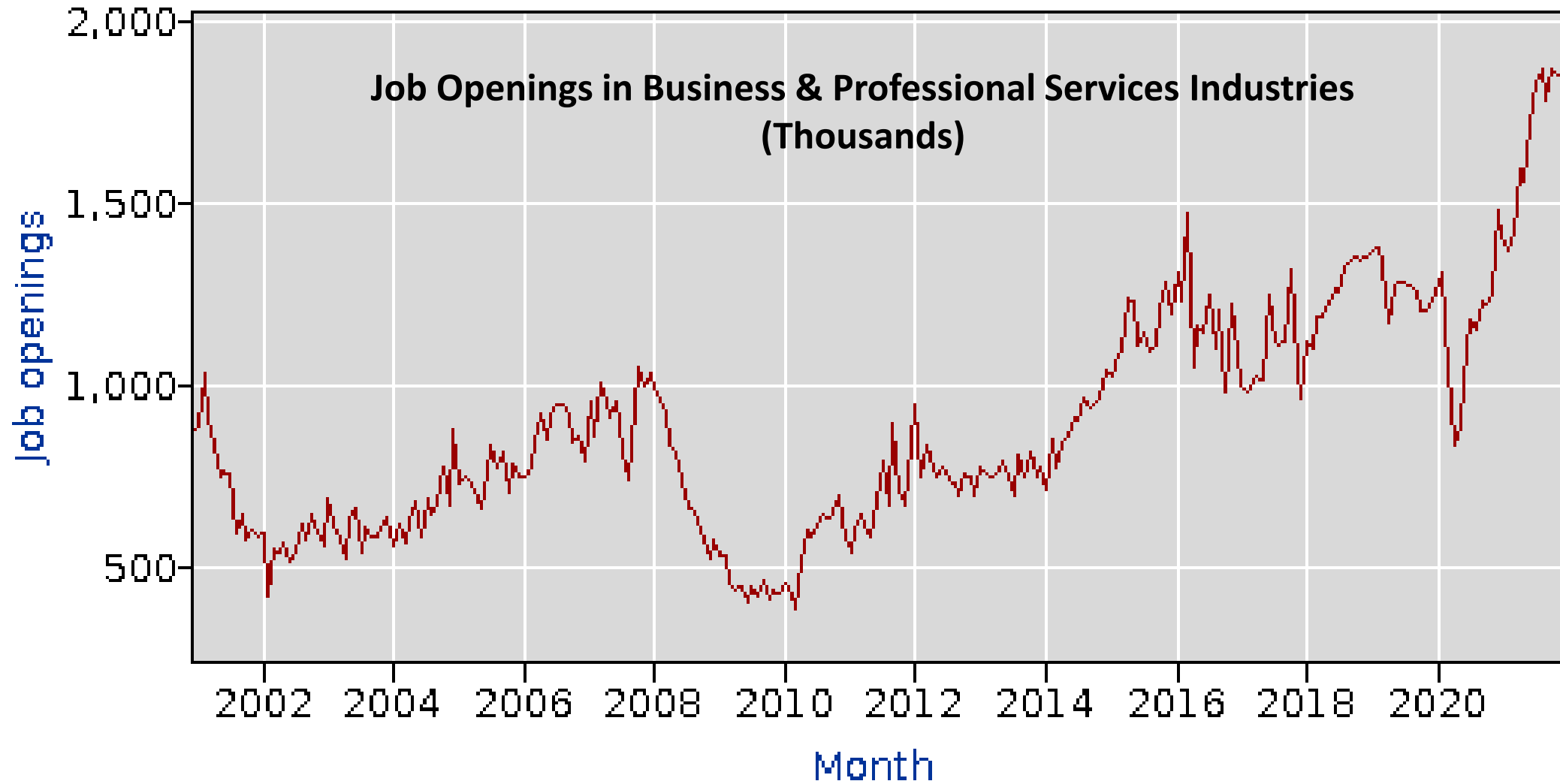
Your Personal Seminar Implementation Plan

Idea to Implement	Slide No.	Implement By	Discuss With

Compensating Your Staff (Without Breakiing the Bank)



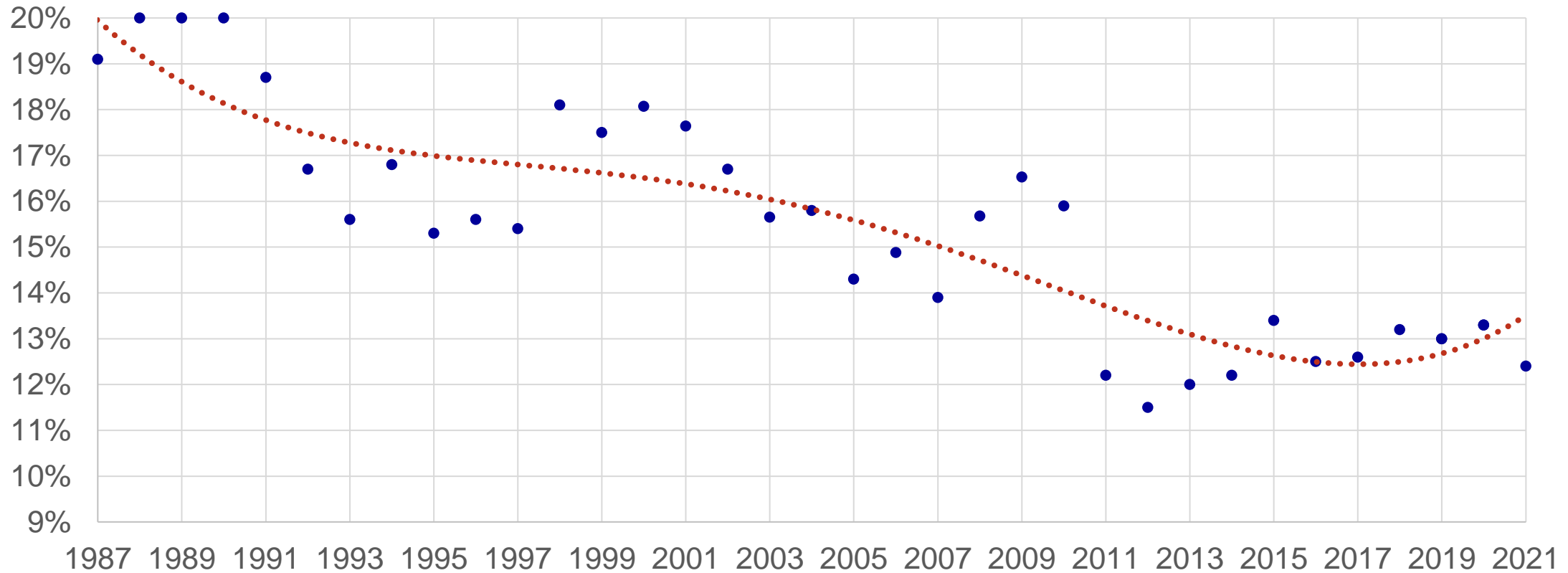
There is a Severe Labor Shortage



Source: U.S. Bureau of Labor Statistics thru December (P) 2021

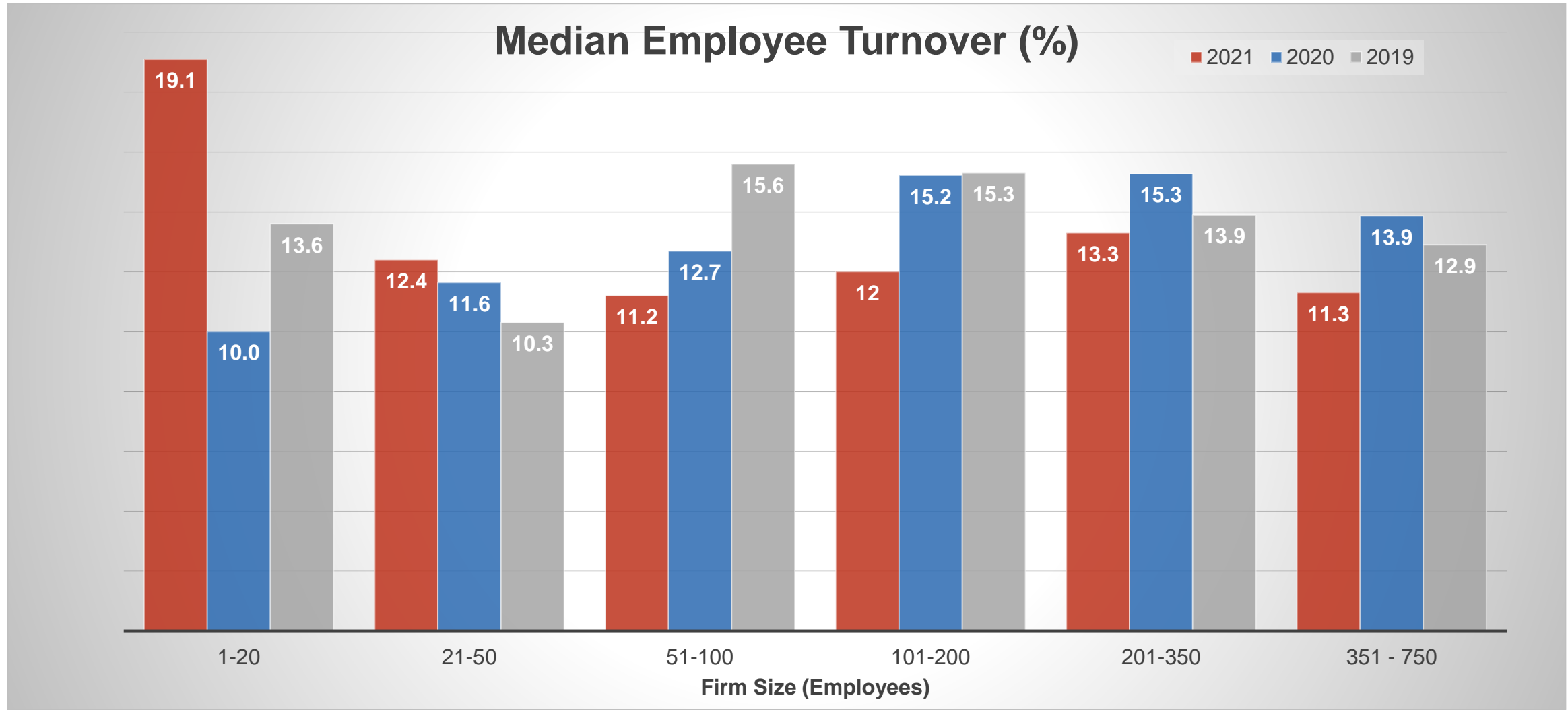
A/E turnover may have started increasing

Median Turnover



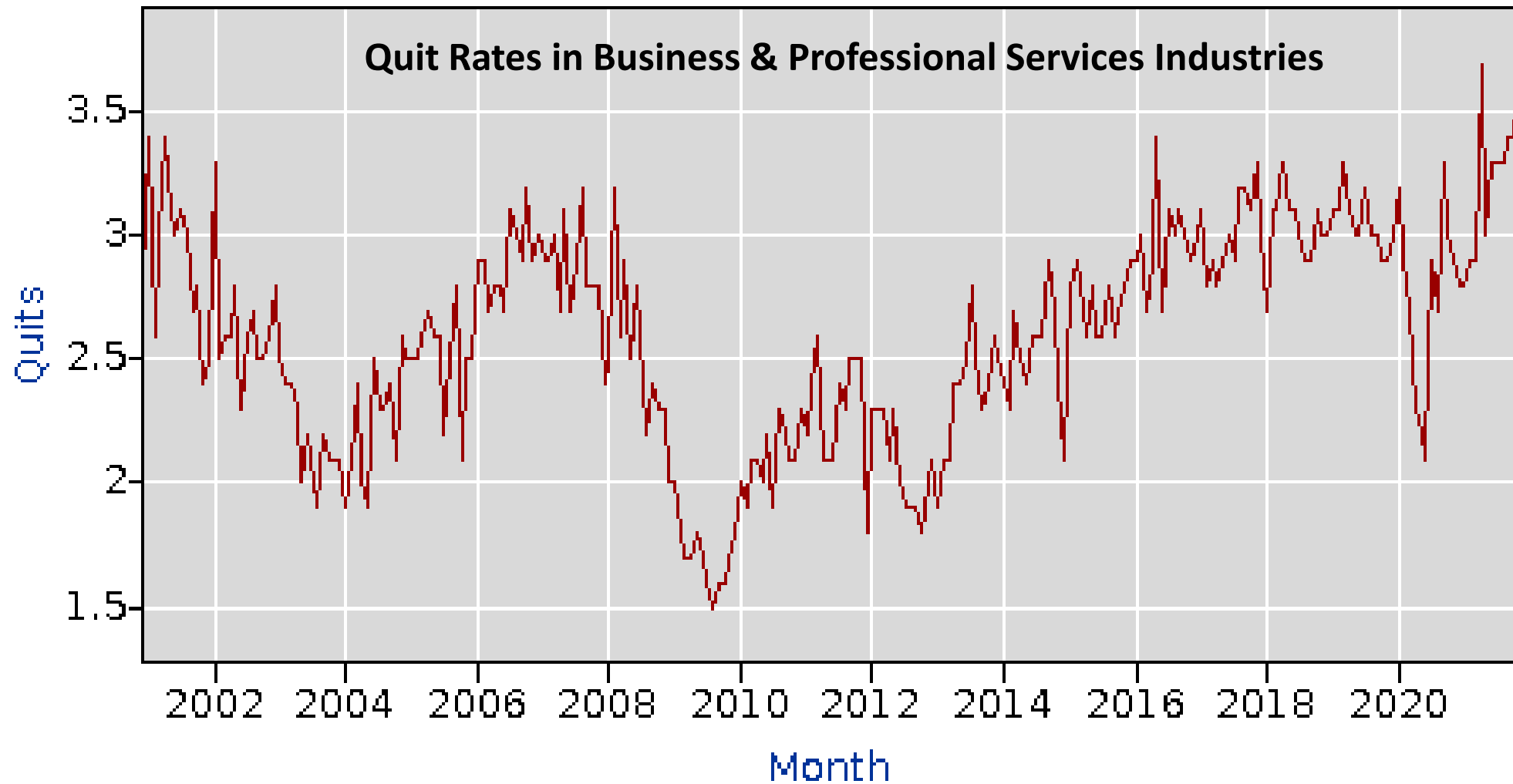
Source: PSMJ 2021 Financial Performance Survey

Large firms had been doing a good job reducing their turnover



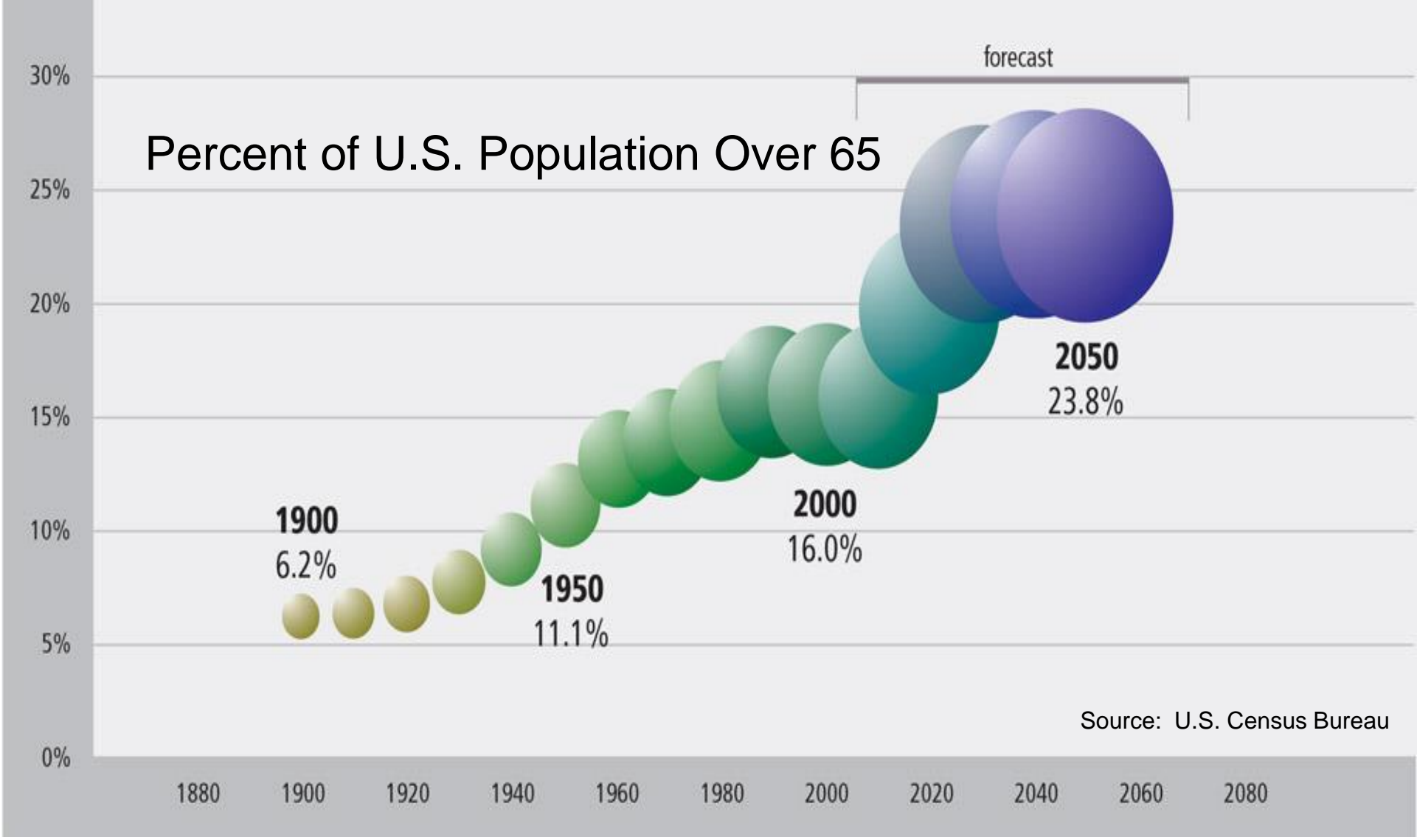
Source: PSMJ 2021 Bonus & Benefit Plans Survey

The Great Resignation?



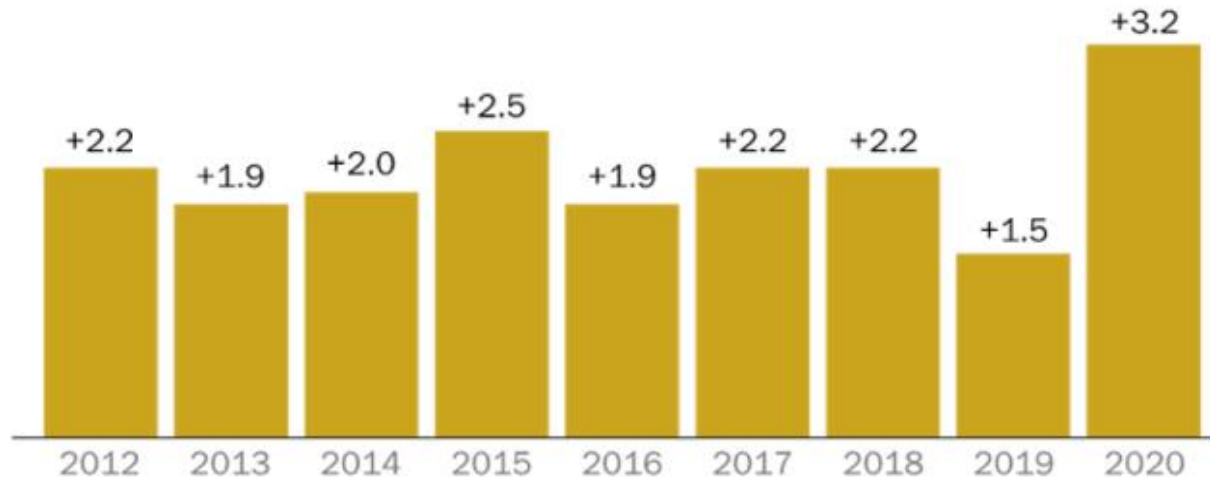
Source: U.S. Bureau of Labor Statistics thru December (P) 2021

The Retirement Wave is Well Underway!



The number of retired Baby Boomers rose more from 2019 to 2020 than in prior years

Annual increase in the retired U.S. Baby Boomer population (in millions)



Note: "Retired" refers to those not in the labor force due to retirement. Baby Boomers are those born between 1946 and 1964. Each year's retired Boomer population is based on the average of the July, August and September estimate.

Source: Pew Research Center analysis of July, August and September Current Population Survey monthly files (IPUMS)

PEW RESEARCH CENTER

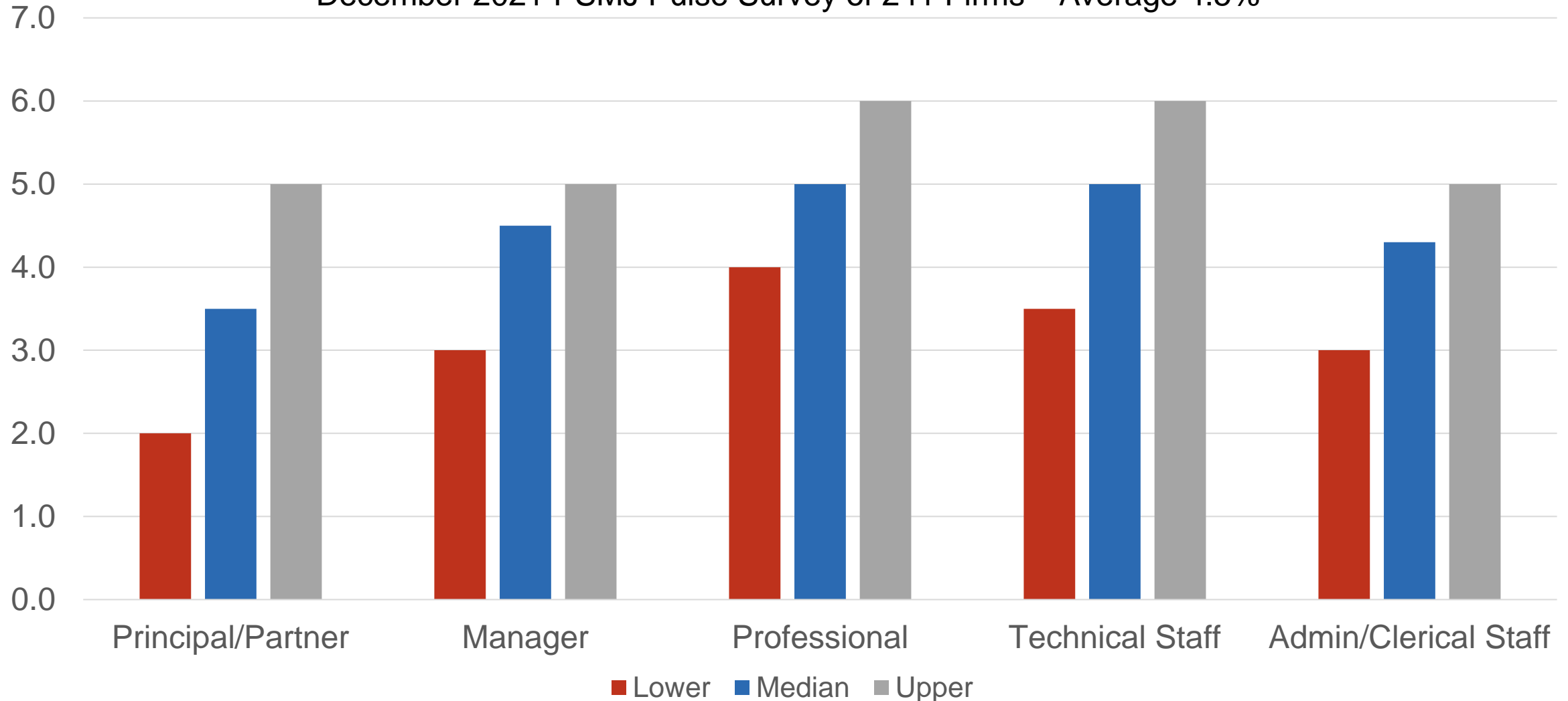
Baby Boomers retired in even greater numbers during COVID

Polling Question:
What's happened
to voluntary
turnover at your
firm in the past 6
months?

- A. Increased
- B. Decreased
- C. Stayed about the same

Average Projected Salary Increase

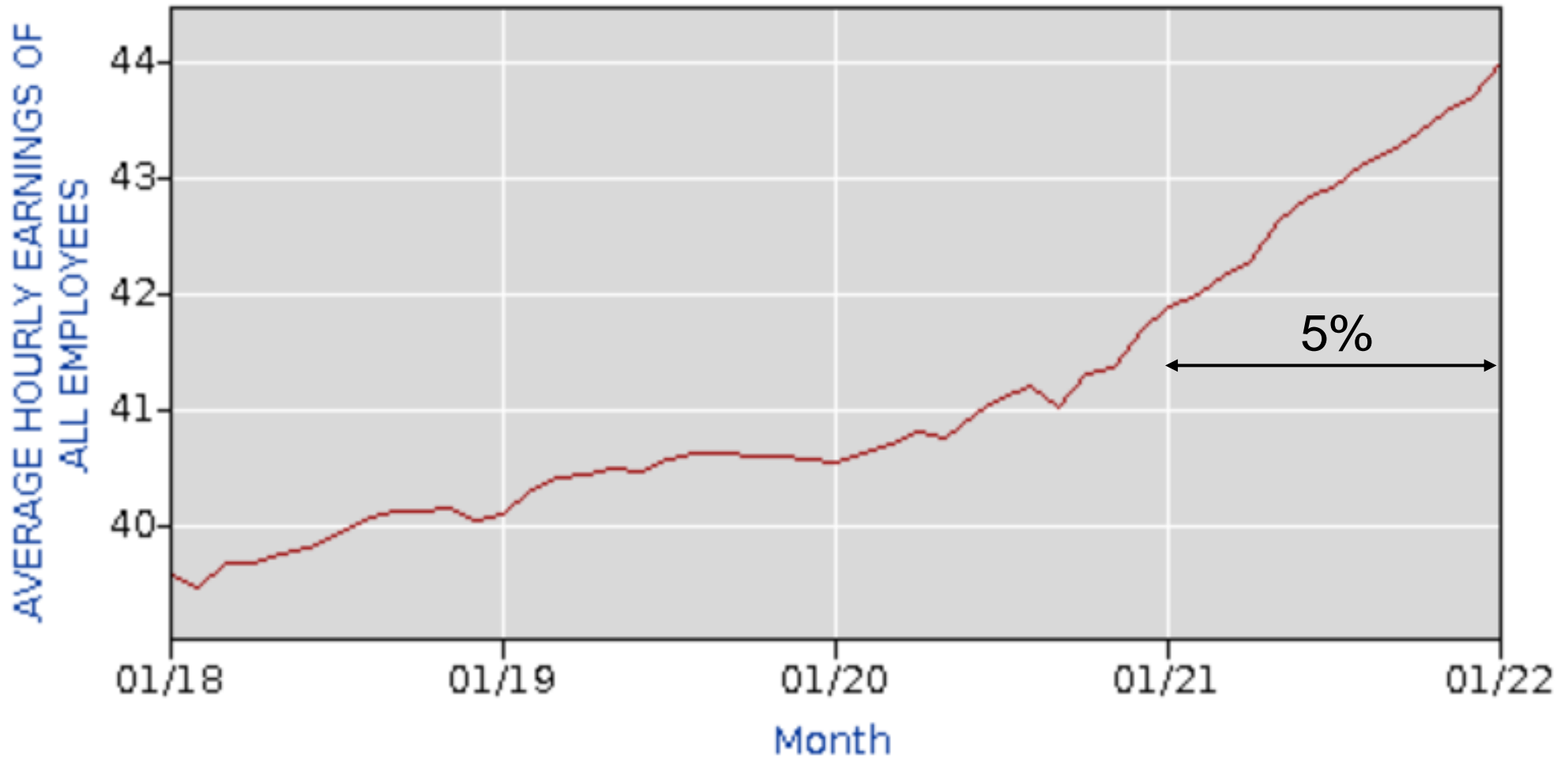
December 2021 PSMJ Pulse Survey of 241 Firms – Average 4.5%



Polling Question:
Based on what
your firm is seeing,
these average
salary increases
appear:

- A. Too low
- B. Too high
- C. About right

Wage Growth Has Accelerated



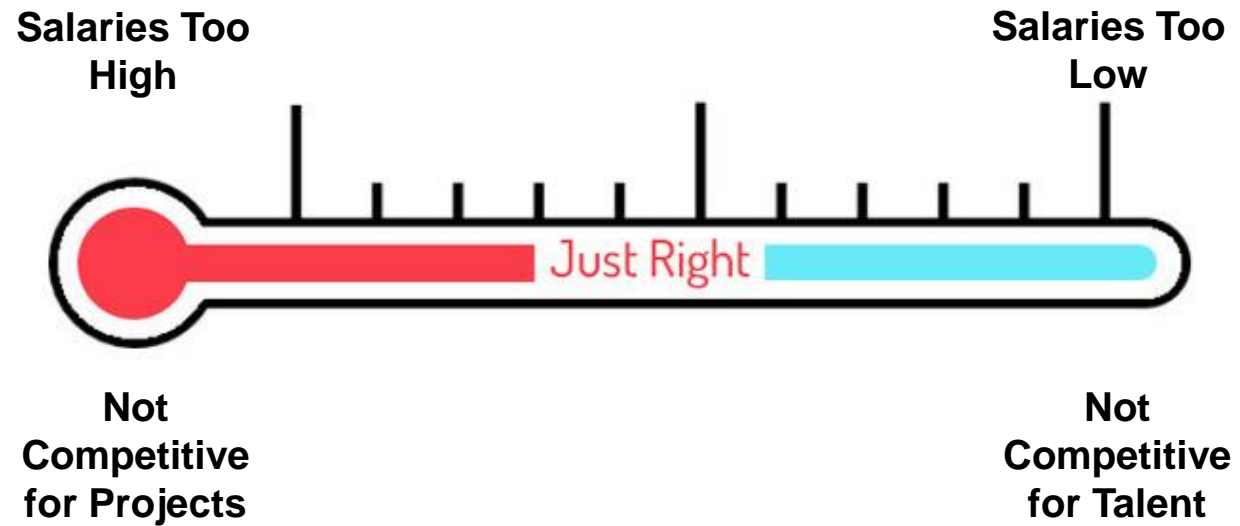
Source: U.S. Bureau of Labor Statistics thru January, 2022 (P)

Polling Question: I feel like this ...

- A. all the time
- B. most of the time
- C. some of the time
- D. rarely if ever



So, Your Compensation Structure Must Be Just Right!



Compensation Categories

Today we'll just discuss this one

Employee Category	Cash Compensation		Long-term Incentives	Employee Benefits
	Base Salary/ Hourly Rate	Bonus/ Short-term Incentive		
Non-exempt Administrative/Technical staff	✓	?	?	✓
Exempt Professional/Technical staff	✓	✓	?	✓
First-level and Middle Managers	✓	✓	✓	✓
Senior Managers (non-owners)	✓	✓	✓	✓
Partners/Owners	✓	✓	✓	✓

For a more comprehensive presentation, check out PSMJ's "Winning A/E/C Compensation Strategies" -- <https://www.psmj.com/winningcomphome>

Some Common Errors

- Using position descriptions to set salaries
- Using regional survey data to adjust for different locations
- Using CPI data to adjust for different locations
- Failing to adequately compensate for different performance levels
- Failing to consider the financial impacts of salary increases



How would you classify John Smith?

You have been asked to review the classification of John Smith, one of your mid-level engineers. Here are your firm's classification criteria for the positions you are considering (taken from an actual firm):

Engineer 4	Engineer 5	Engineer 6
Prepares and monitors project budgets for smaller, less complex projects.	Prepares and monitors project budgets. Has overall responsibility for the profitability of his/her projects.	Prepares and monitors project budgets. Has overall responsibility for the profitability of projects.
Responsible for project schedules and timely completion of smaller, less complex projects.	Responsible for project schedules and timely completion of projects.	Responsible for project schedules and timely completion of projects.
Serves as a project manager or project engineer and as a designated client contact.	Serves as a senior project manager or senior project engineer and as a designated client contact.	Serves as a senior project manager or senior project engineer on complex projects and as a designated client contact.

John's current projects:

- 1. City of Springfield Tennis Court Expansion Plan.** John is the lead engineer and project manager on this \$30,000 fee project. He spends about 30% of his time on this project.
- 2. Palm Gardens Development Site Plan.** John is the lead engineer and project manager on this \$200,000 fee assignment. He spends about 20% of his time on this project.
- 3. Elmwood Park Water Treatment Plant Expansion.** John is the lead engineer (but not the project manager) on this \$2 million fee project. He spends about 50% of his time on this project.

How would you classify John?

Based on PSMJ's Research, Professional Staff Salaries are a Function of 4 Factors

TYPE OF DEGREE



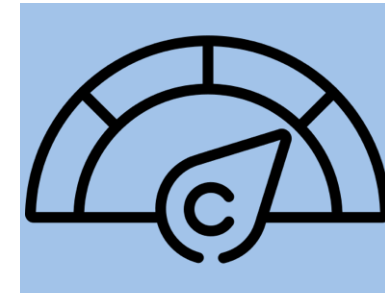
**RELEVANT
EXPERIENCE**



OFFICE LOCATION

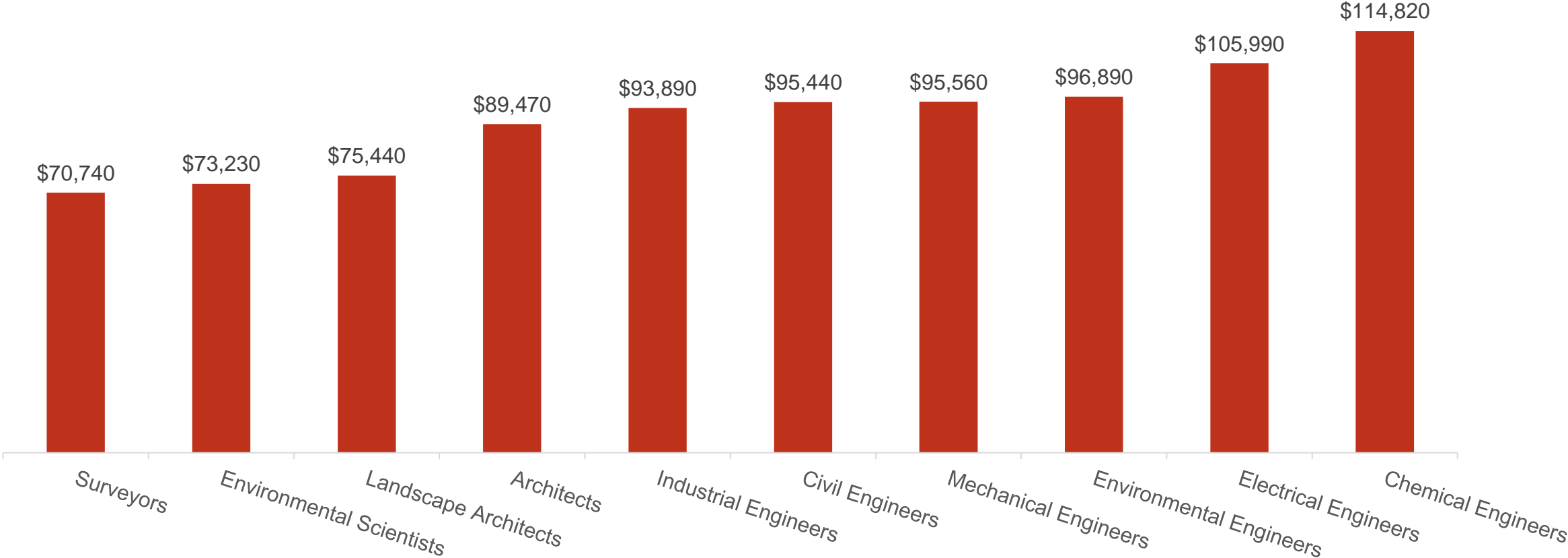


PERFORMANCE



Factor Number 1: Type of Degree

Mean United States Wages

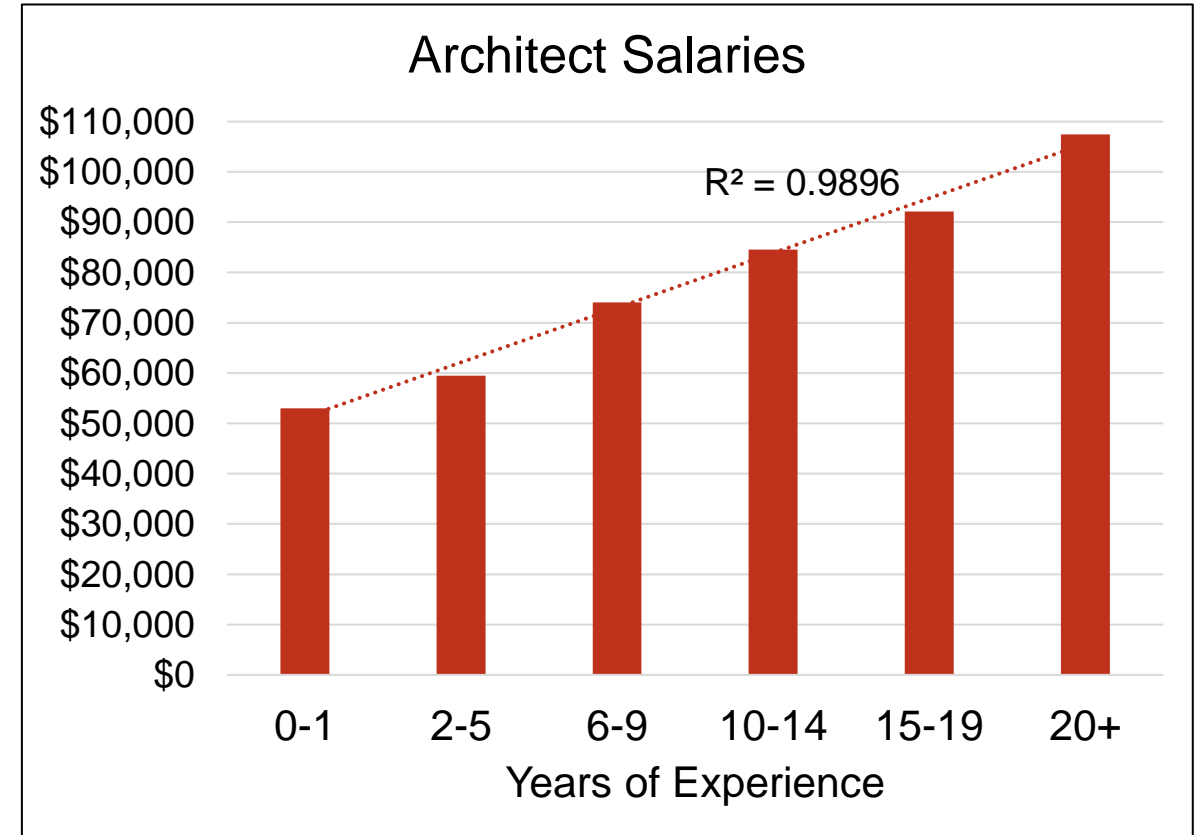


Source: United States Bureau of Labor Statistics, as of May 2020

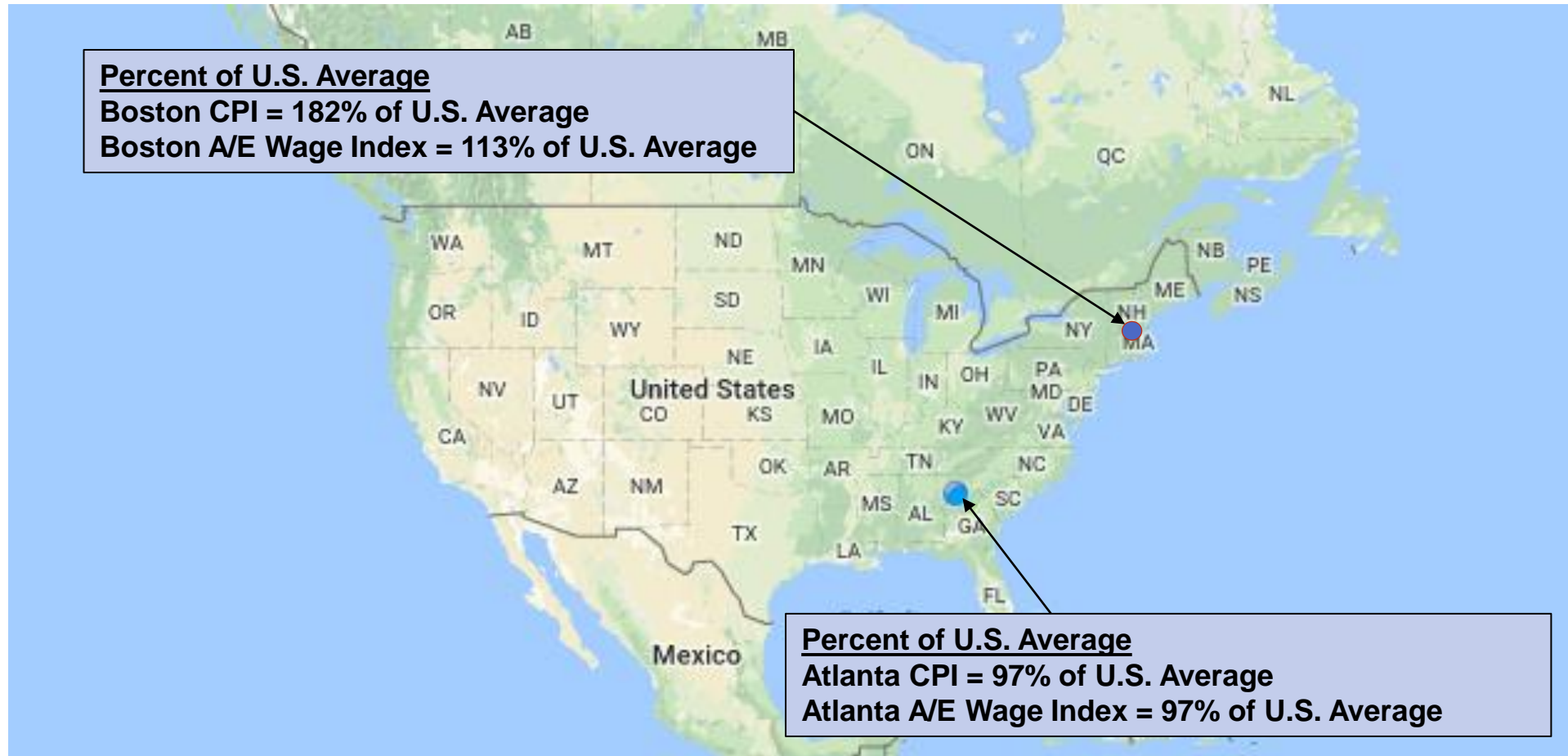
Factor Number 2: Experience

Relevant experience is what matters

- Date of first applicable B.S. degree is usually the baseline.
- Time in graduate school counts one for one vs. relevant experience.
- Relevant experience prior to B.S. degree also counts.



Factor Number 3: Location (The Cost-of-living Index Can be Misleading)



Source: U.S. Bureau of Labor Statistics

How to Factor Location in Your Salaries

Get U.S. Median BLS wage:

<https://www.bls.gov/oes/current/oes170000.htm> = \$39.98

Median BLS wage for Utah = \$34.84

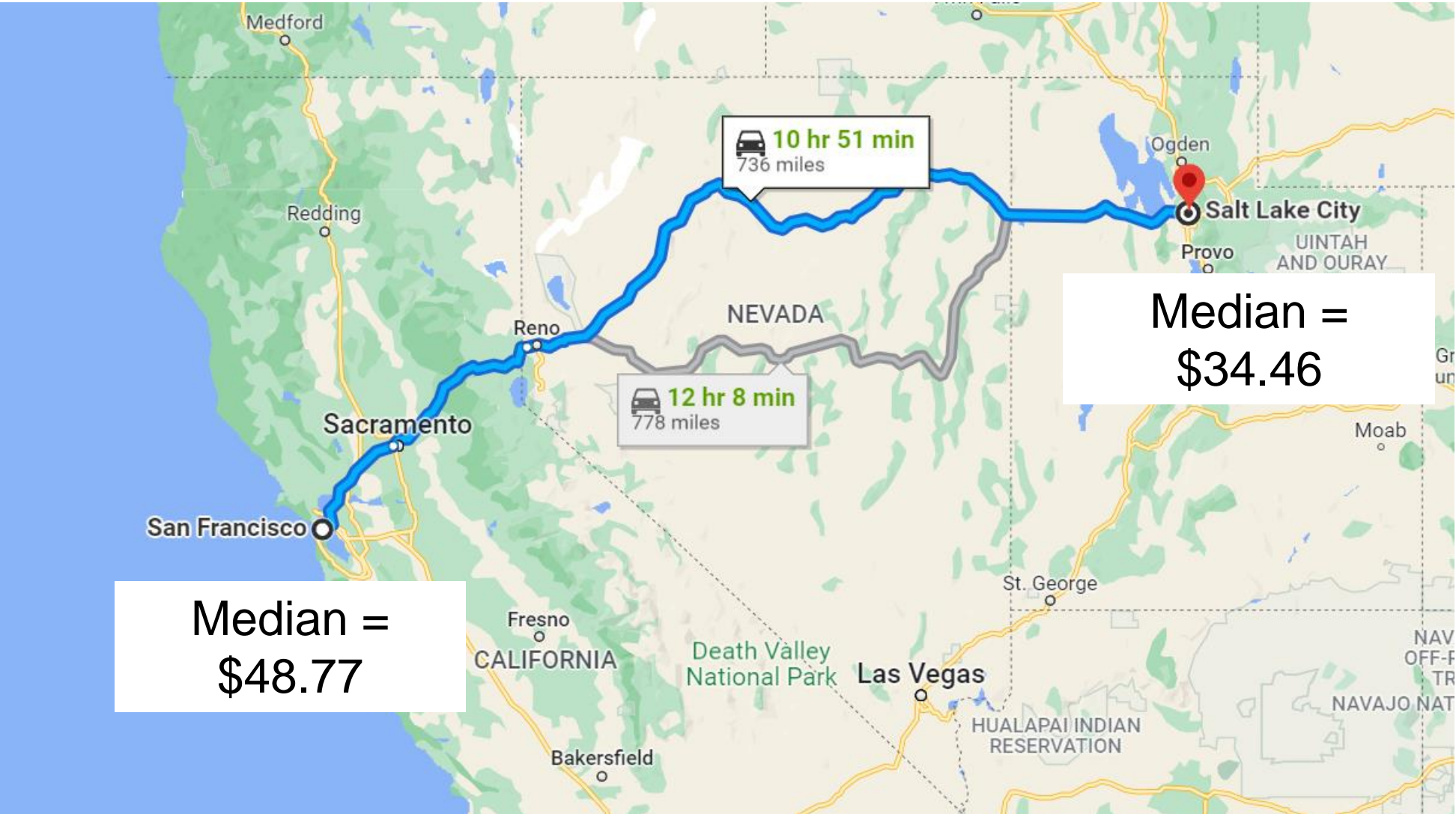
Median BLS wage for Salt Lake City = \$34.46

Compute the Wage Adjustment Factor for this position by dividing the national median wage by the local median wage:

Utah = $\$34.84 \div 39.98 = 0.871$

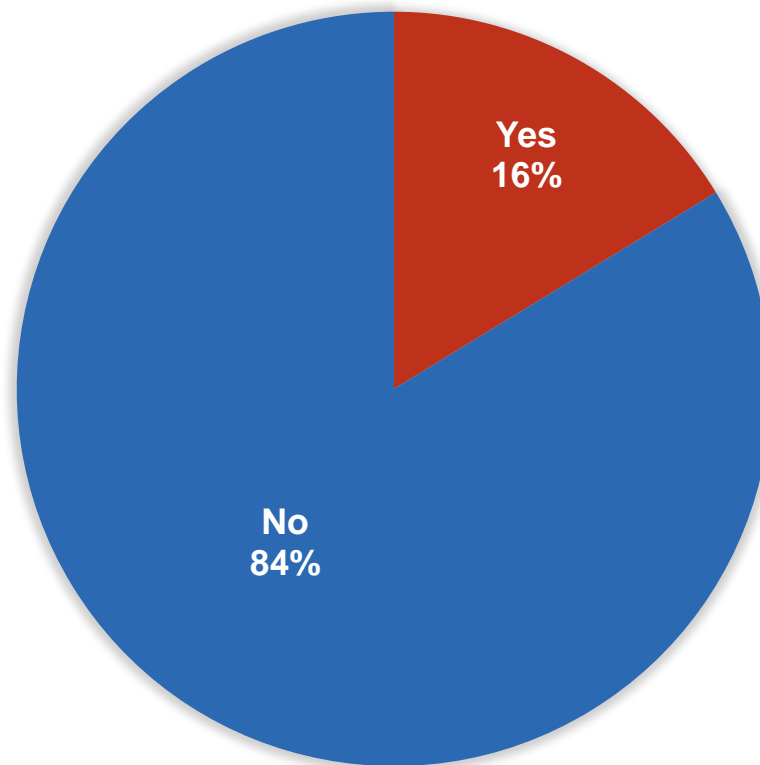
SLC = $\$34.46 \div \$39.98 = 0.862$

What About Remote Workers?



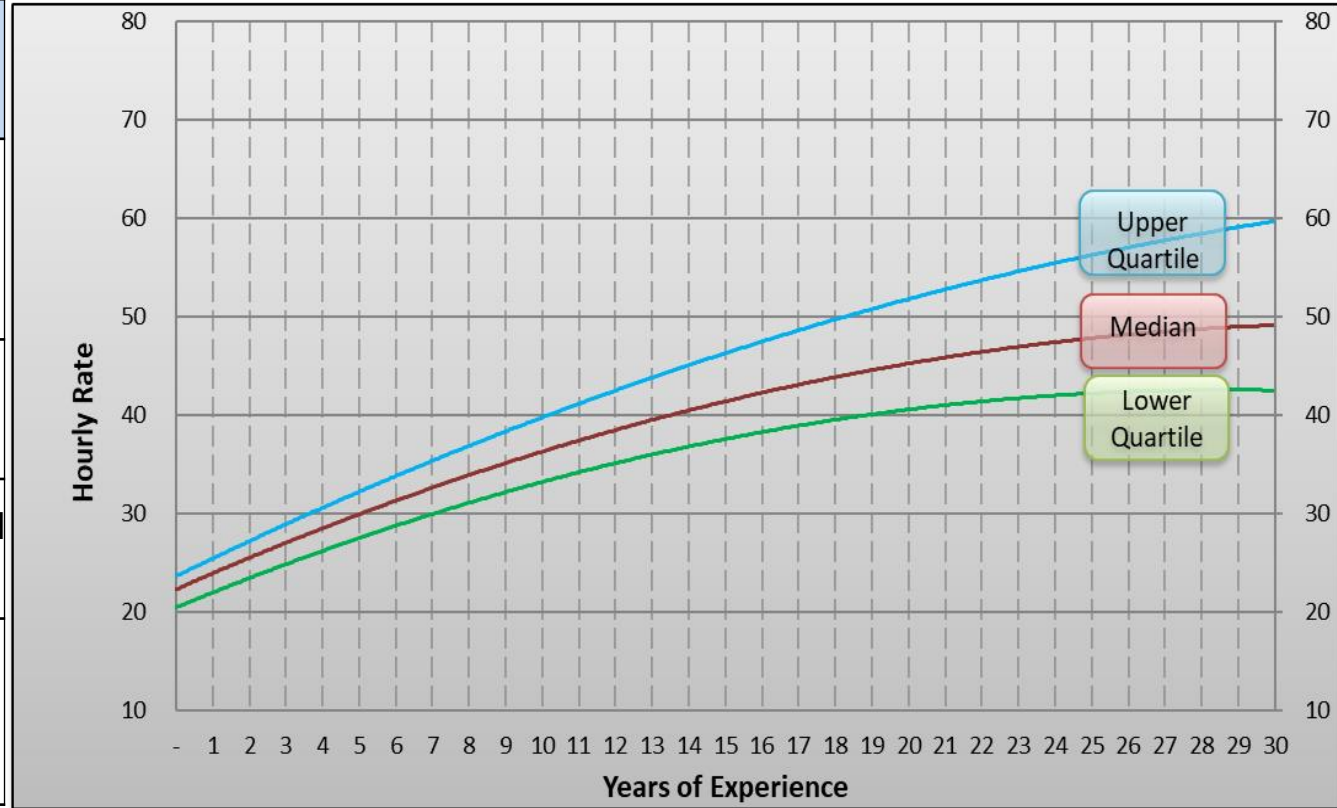
When We Asked This Question of 43 A/E Firms...

DID YOU ADJUST PAY FOR EMPLOYEES MOVING >60 MILES FROM YOUR OFFICE?



Factor Number 4: Performance

Rating Criteria	Much Above Average	Above Average	Average	Below Average
Performance vs. goals	Exceeds all goals	Achieves all goals; exceeds some	Accomplishes majority of goals	Does not accomplish majority of goals
Service to clients	Excellent	Excellent	Acceptable	Doesn't work well with clients
Requested by PMs	Heavily requested	Often requested	Neutral	Not requested by PMs
Readiness to move to the next level	Ready	Ready	Not ready	Fails to meet standards of current position

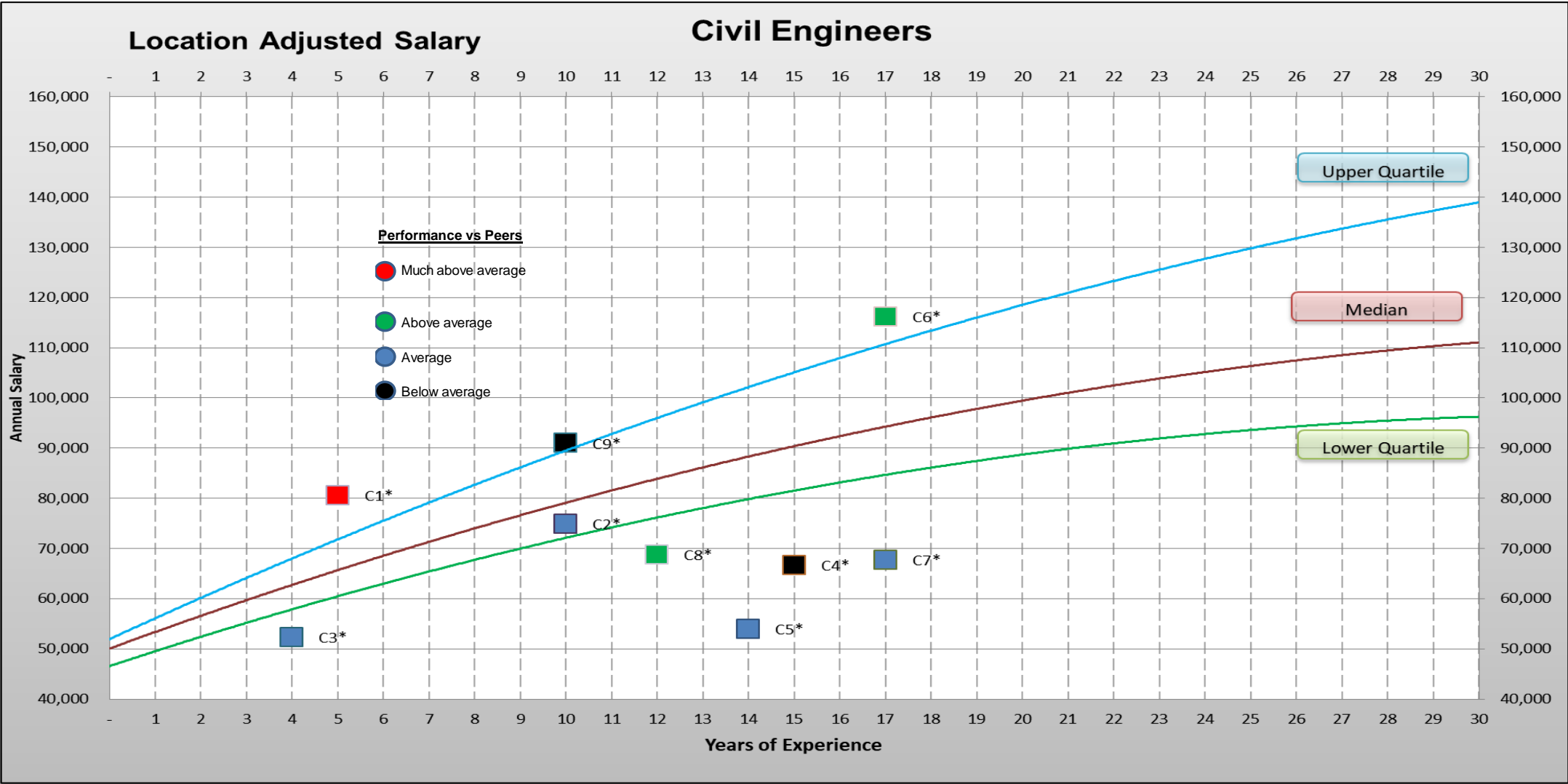


Source: PSMJ 2020 Staff Compensation Survey

Start With A Spreadsheet Like This For Each Discipline:

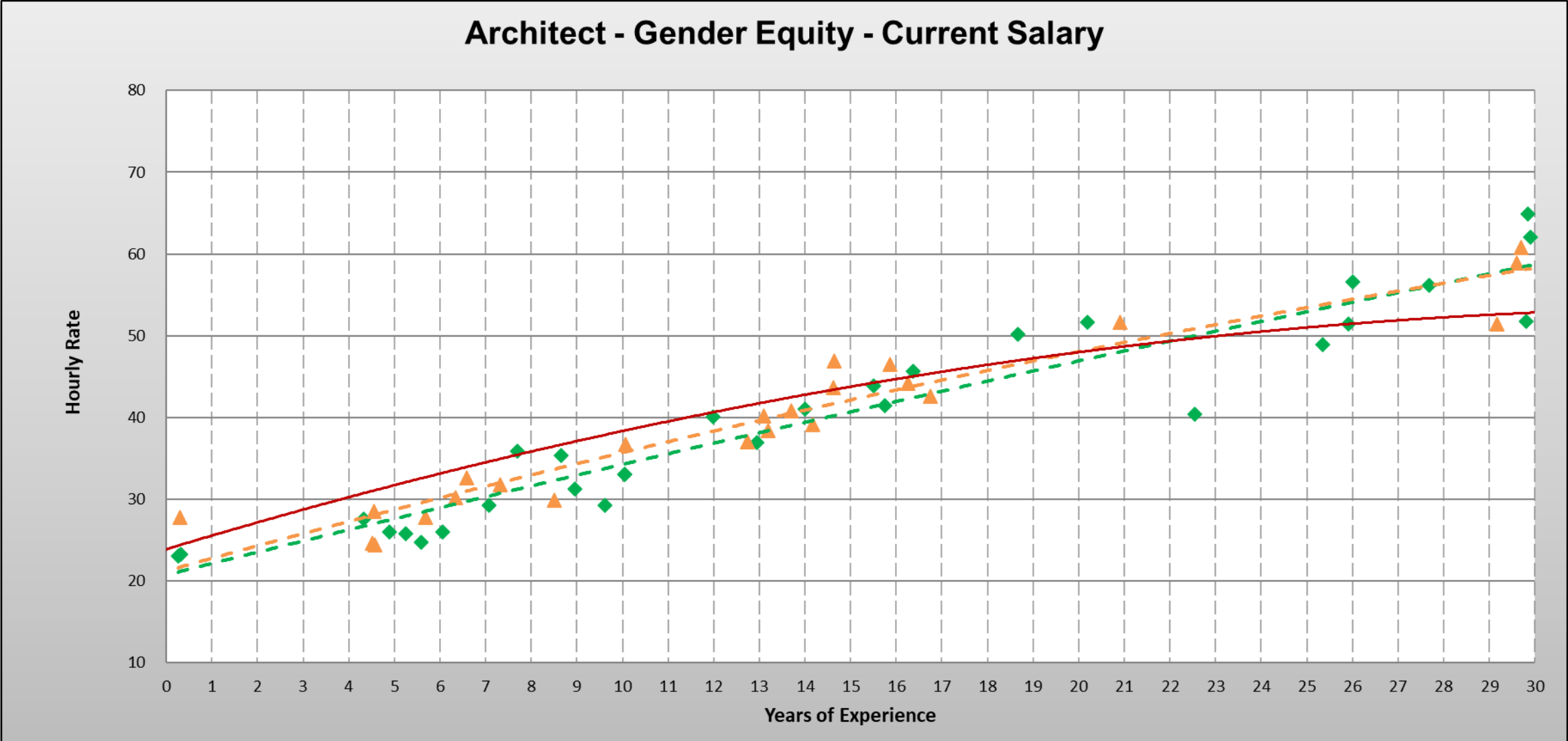
Employee Name	Employee Location (BLS Metro Areas)	Years Experience	Annual Salary	Date of Last Increase	Performance vs. Peers
Civil1	Detroit-Dearborn-Livonia, MI Metropolitan Division	5	70,013	1/1/2020	Much above average
Civil2	Detroit-Dearborn-Livonia, MI Metropolitan Division	10	65,000	1/1/2020	Average
Civil3	Los Angeles-Long Beach-Glendale, CA Metropolitan Division	4	66,000	1/1/2020	Average
Civil4	Los Angeles-Long Beach-Glendale, CA Metropolitan Division	15	84,000	1/1/2020	Below average
Civil5	Los Angeles-Long Beach-Glendale, CA Metropolitan Division	14	68,000	1/1/2020	Average
Civil6	Macon, GA	17	120,000	1/1/2020	Above average
Civil7	Macon, GA	17	70,000	1/1/2020	Average
Civil8	Macon, GA	12	71,000	1/1/2020	Above average
Civil9	Macon, GA	10	94,000	1/1/2020	Below average

Graphing Location and Date Adjusted Salaries Will Tip You Off to Inequities

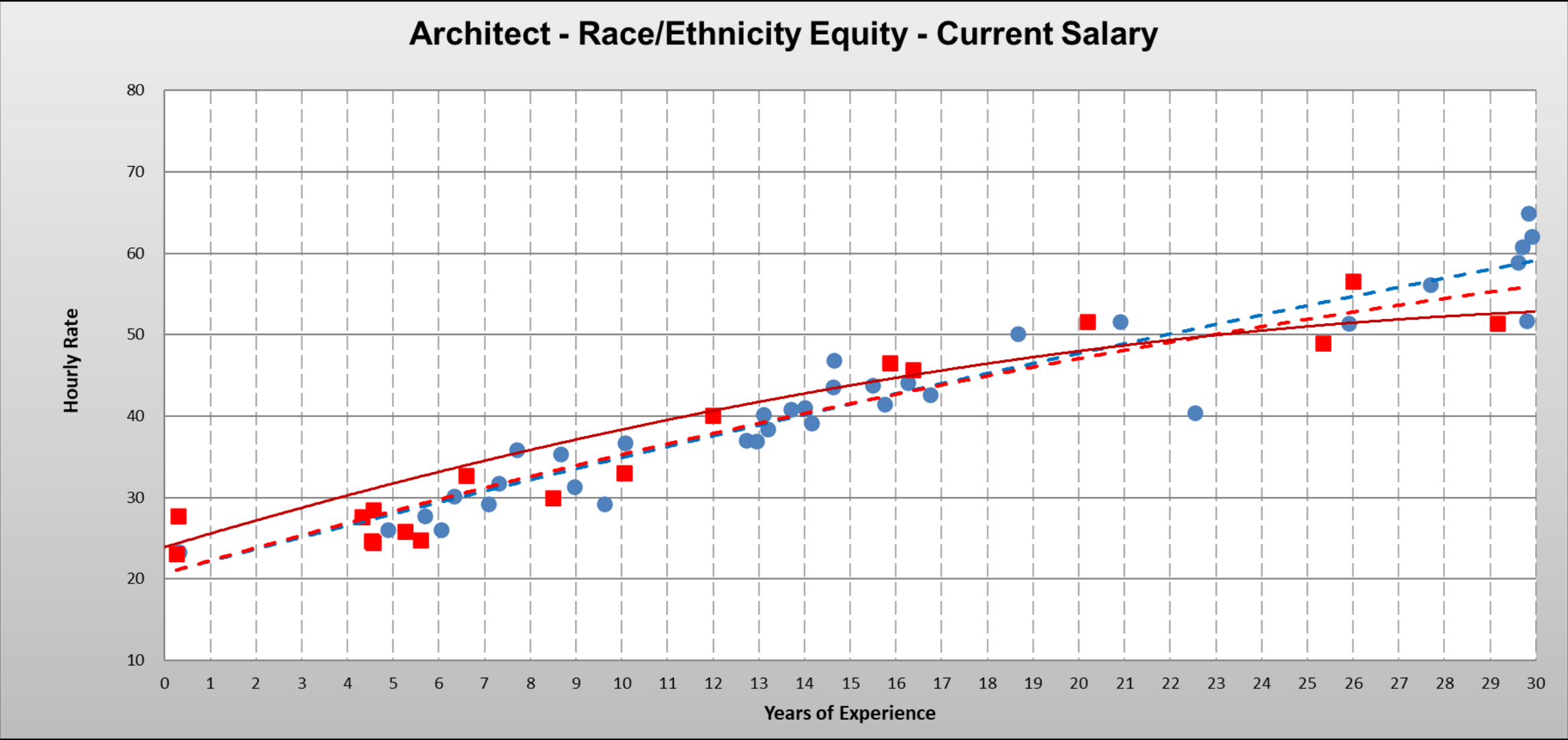


Also Consider Gender Equity

Architect - Gender Equity - Current Salary



Also Consider Race/Ethnicity Equity



Be Sure to Tie Compensation to Financial Performance

CAPACITY BUDGET WORKSHOP

Staff Member Name	Direct Labor Rate (\$/hr)	Available Hours per Year	Current Utilization Rate	Benchmark Utilization Rate	Target Utilization Rate	Current Billing Rates	Benchmark Billing Rates	Target Billing Rates	Total Labor Cost (\$/yr)	Current Billable Hours per Year	Current Direct Labor (\$/yr)	Target Annual Net Revenue	Direct Labor Multiplier	Revenue Factor
John Van Horn, Principal	\$89.00	2,080	5%	42%	5%	\$250.00	\$229.00	\$250.00	\$185,120	104	\$9,256	\$26,000	2.81	0.14
Susan Smith, Principal	\$81.00	2,080	65%	48%	65%	\$250.00	\$229.00	\$250.00	\$168,480	1,352	\$109,512	\$338,000	3.09	2.01
Peter Smith, Project Mgr.	\$57.30	2,080	70%	76%	70%	\$175.00	\$184.00	\$175.00	\$119,184	1,456	\$83,429	\$254,800	3.05	2.14
Alfred O'Connell, Engineer	\$51.00	2,080	85%	76%	85%	\$125.00	\$122.00	\$125.00	\$106,080	1,768	\$90,168	\$221,000	2.45	2.08
Philip Smart, Engineer	\$39.00	2,080	85%	82%	85%	\$110.00	\$133.00	\$110.00	\$81,120	1,768	\$68,952	\$194,480	2.82	2.40
Virginia Nehart, Architect	\$31.00	2,080	80%	84%	80%	\$95.00	\$94.00	\$95.00	\$64,480	1,664	\$51,584	\$158,080	3.06	2.45
Thomas Stewart, Architect	\$38.00	2,080	90%	82%	90%	\$95.00	\$94.00	\$95.00	\$79,040	1,872	\$71,136	\$177,840	2.50	2.25
Ian Rockwell, CADD	\$28.60	1,040	85%	83%	85%	\$60.00	\$82.00	\$60.00	\$29,744	884	\$25,282	\$53,040	2.10	1.78
Joseph Dilorio, CADD	\$28.60	800	85%	83%	85%	\$60.00	\$82.00	\$60.00	\$22,880	680	\$19,448	\$40,800	2.10	1.78
Ann Roberts, Admin	\$29.00	800	5%	8%	5%	\$75.00	\$70.00	\$75.00	\$23,200	40	\$1,160	\$3,000	2.59	0.13
Sally Winfield, Accounting	\$42.50	2,080	25%	5%	25%	\$125.00	\$124.00	\$125.00	\$88,400	520	\$22,100	\$65,000	2.94	0.74
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Totals and Averages	\$28.63	19,280	57%	61%	63%		\$131.18	\$129.09	\$967,728	12,108	\$552,027	\$1,532,040	2.78	1.58
Indirect Labor =									\$415,701					
Non-Labor Overhead (Rent, Utilities, Vehicles, Liability Insurance, Etc.) =									\$560,000					
Reserve for Bad Debts =									\$50,000					
Write-offs of Unbillable Time =									\$20,000					
Subcontracts, reimbursables and other non-labor direct costs =									\$1,800,000					
Mark-up on non-labor direct costs =									5.0%					
NET PROFIT BEFORE TAXES =									\$24,312					
Profit as % of net revenue									1.6%					

Profitability is a Function of Three KPIs

Labor
Utilization

Percent of Time on Projects:
Utilization = $\frac{\text{Direct Labor}}{\text{Total Labor}}$

Direct Labor
Multiplier

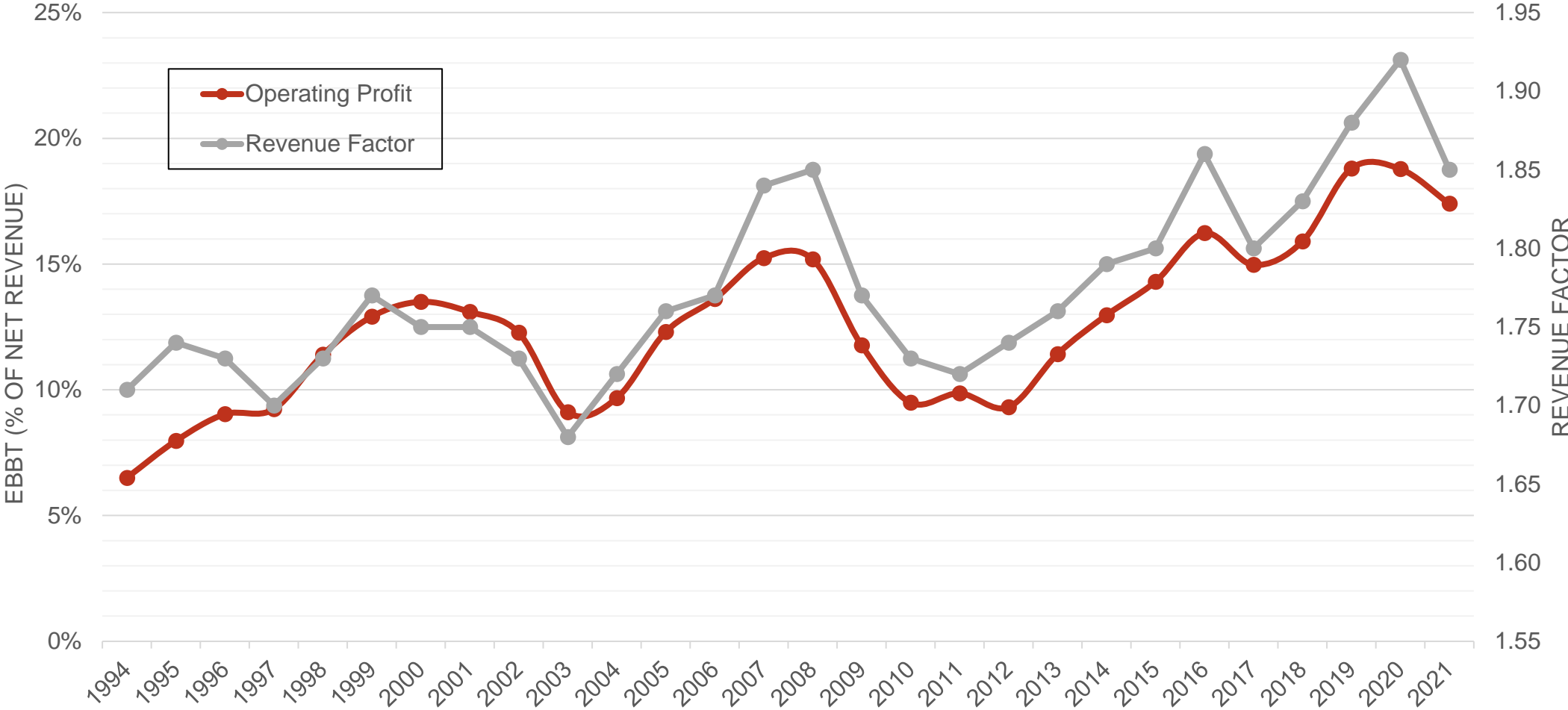
Fees Earned for work effort:
= Net Service Revenue / Direct Labor

Non-labor
Overhead

= All Indirect Costs Other Than Labor

Revenue Factor Correlates Highly with Profitability

Revenue Factor = Labor Utilization x Direct Labor Multiplier



Source: PSMJ's 2021 A/E Financial Performance Benchmark Survey

Profitability is a Function of Three KPIs

Labor
Utilization

Percent of Time on Projects:
Utilization = $\frac{\$ \text{ Charged to Jobs}}{\text{Total Labor \$}}$

Direct Labor
Multiplier

Fees Earned for work effort:
= Billing Rate / Hourly Wage

Non-labor
Overhead

= All Indirect Costs Other Than Labor

Polling Question:
Has your firm
raised its rates in
the past year?

A. Yes

B. No

Polling Question: If you answered “Yes” to the previous question, do you regret that decision?

- A. Yes
- B. No

PSMJ's Staff and Management Comp Surveys Have Lots More Information

	Architect	Civil Engineer	Mechanical Engineer	Electrical Engineer	Structural Engineer	Environmental Engineer	Landscape Architect	CAD Tech	Marketing Coordinator	Proposal Coordinator
Salary Data	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bonus Data	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Total Direct Compensation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hourly Billing Rates	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Salary Increases in Prior Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Time Charged to Projects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Time Charged to Marketing and BD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Overtime Hours	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Paid Time Off	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Vacation Days	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sick Days	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Retirement Contribution	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Professional Licensure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

For more info, go to <https://go.psmj.com/2022-mgmt-staff-bundle>

Please Join PSMJ's Survey Participants Club

CONFIDENTIALITY

- Each firm is assigned a “firm number” to ensure confidentiality.
- Survey information is used ONLY to provide benchmarking results.
- If you prefer, send us your data via your CPA.

Go to <https://www.psmj.com/survey-participation> to sign up for this year's surveys.

PSMJ's Benchmarking Tools
preloaded with your data when you
complete each survey

Drawings for \$300 Amazon.com
gift certificates

40% discounts off regular survey prices + much more!

For more info contact:

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Questions or Comments???

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