#### **PSMJ** Resources, Inc. •

### **IMPACT 2030** The Future of Al and How It Will Affect Design Firms Worldwide

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50 Years of Improving the Business Performance of Architecture, Engineering, and Construction Organizations Worldwide



#### So WHAT did I predict in my 2019 book....??





### 4 Major AEC Predictions Made in 2019

Major Economic Disruption



Roaring 20's



Huge Shortage of Talent



Massive Transition of AEC Ownership

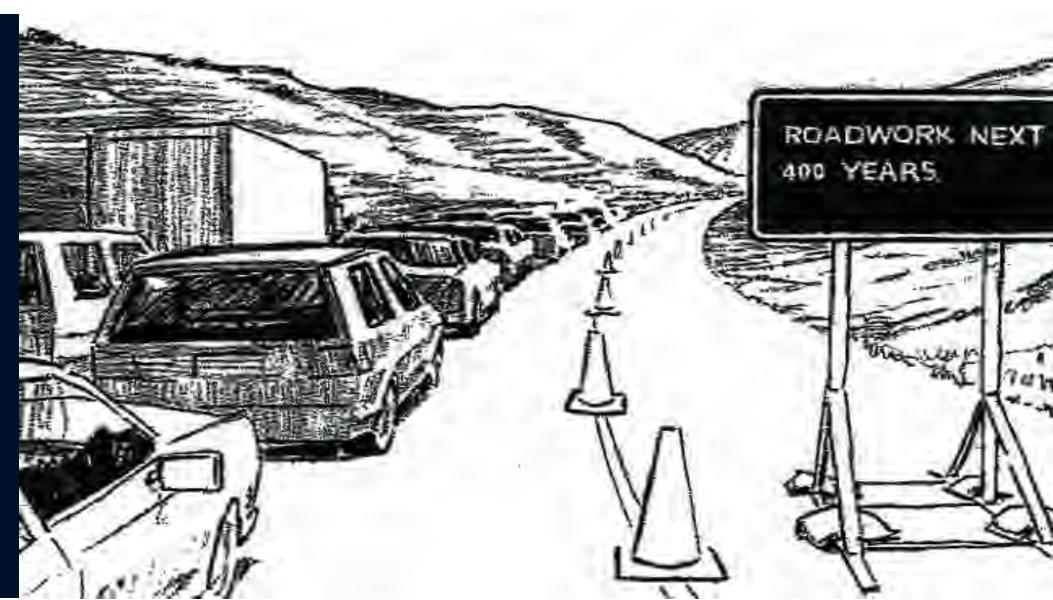


## **So**..... Where dre we in 2025?

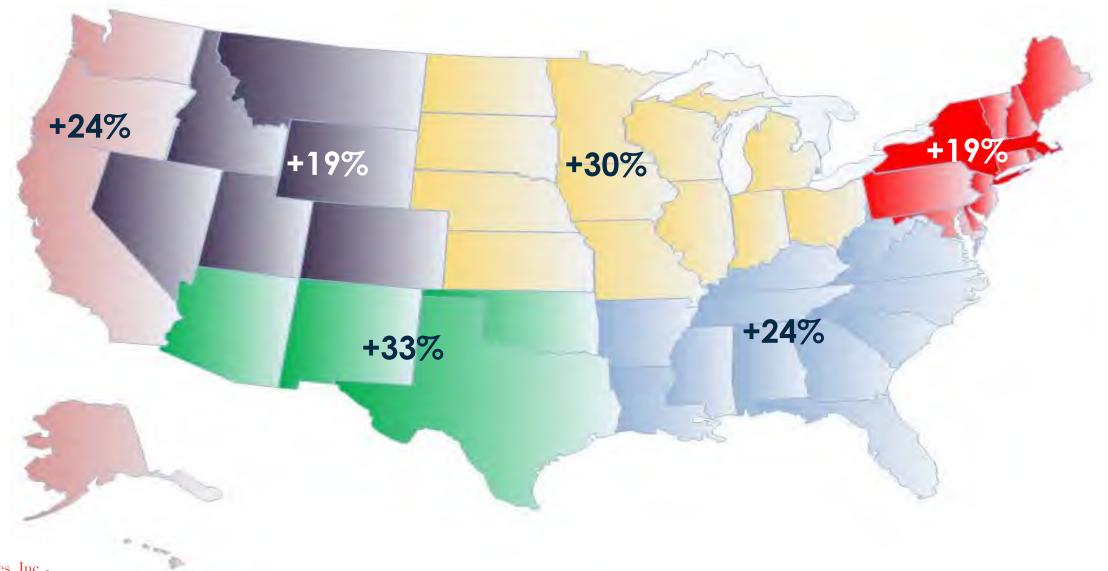
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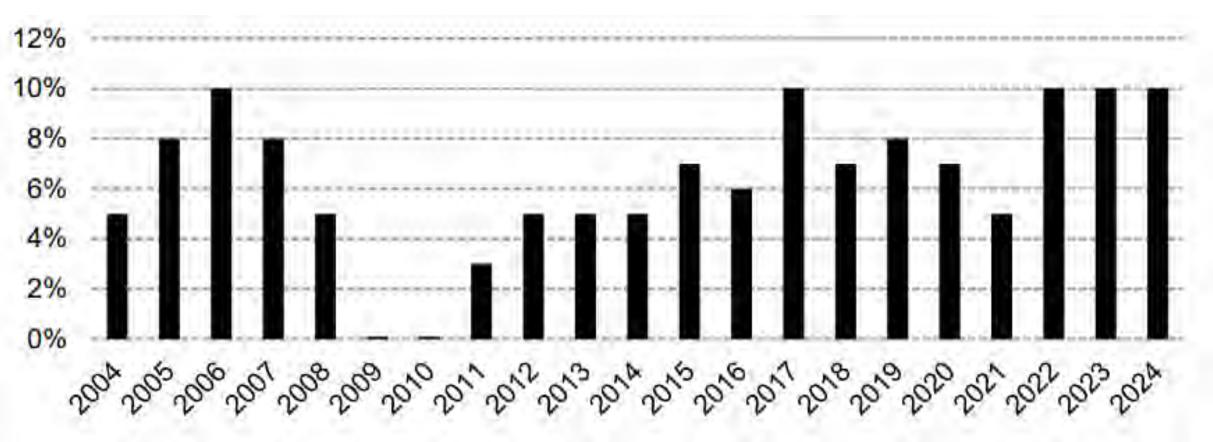


#### Proposal Growth Continues Strong in All USA Regions



### Rapid Staff Growth is **Expected** to Continue

#### Staff Growth Continues in 2024

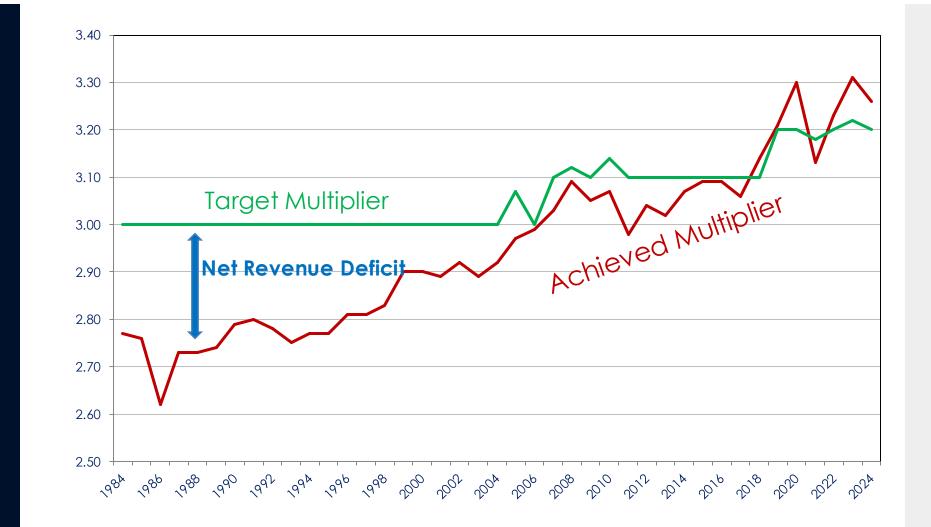


### ...For Virtually All Firm Categories

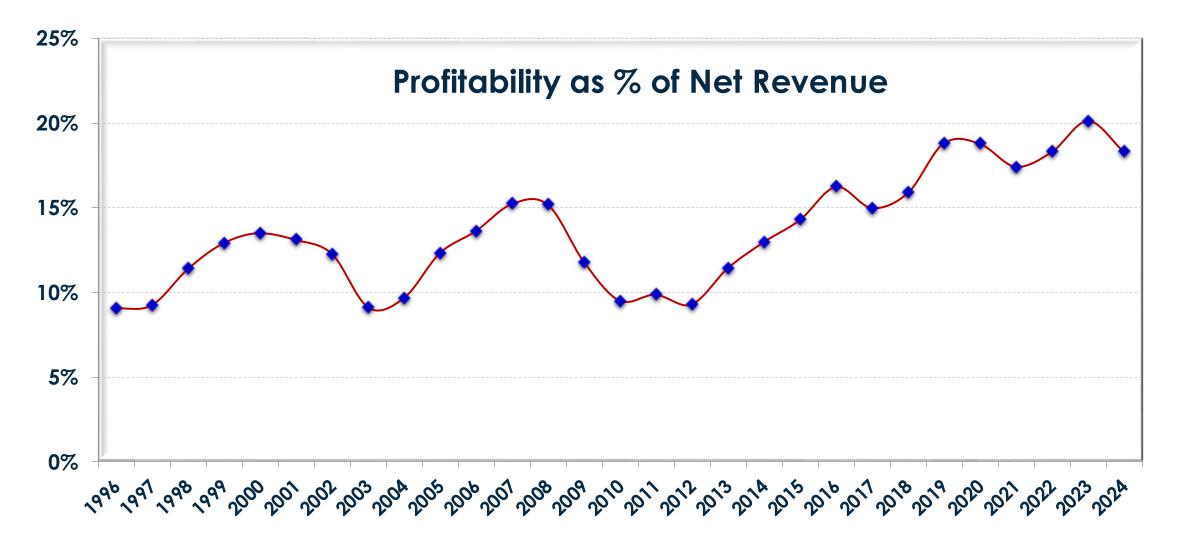
#### 2024 Staff Size Changes

	25th Percentile	Median	75th Percentile
Overall	5%	10%	12%
Staff Size 1 to 20	0	10	15
Staff Size 21 to 50	4	8	12
Staff Size 51 to 100	5	10	10
Staff Size 101 to 250	5	10	13
Staff Size 251 to 500	8	10	10
Staff Size over 500	5	10	14
Architectural	0	8	10
Architectural/Interiors	0	7	10
Engineering Prime	6	10	17
Engineering Subconsultant	5	10	12
Engineering/Surveying	.5	8	10
A/E	9	10	15
A/E/P/I	9	10	12
Environmental	5	10	10
Private	.5	10	10
Government	6	10	15
Mixed	5	10	10

Pricing and Project Management Have Really Improved in **Nearly ALL** FIRMS

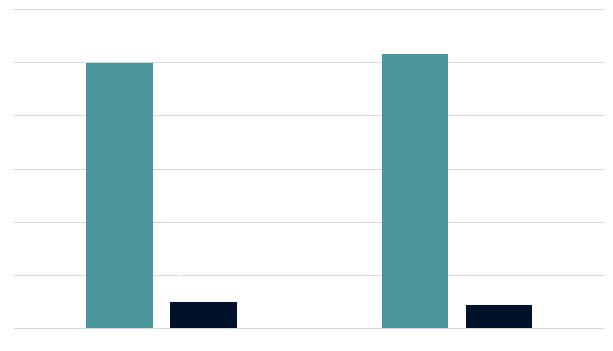


### Profitability is Near an All-Time High



#### Technology is Raising Design Productivity. Not So Much for Construction.

#### What This Means to Your Firm:

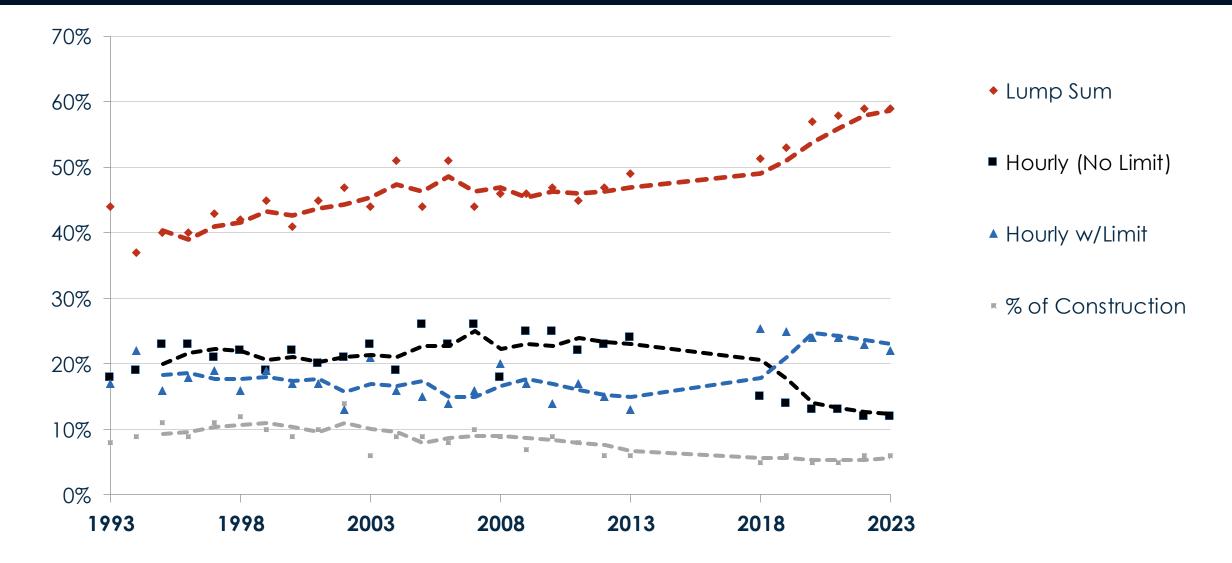


#### **Cost of Design and Construction**

■ Cost of Construction ■ Cost of Design

- If your designs cost you 10% of construction costs in 2011, your costs today would be 8.9% of construction cost.
- If your pricing didn't change (as a % of construction cost), your profit in 2021 would be double what it was in 2011.
- This should accelerate as we adopt AI and other new tech if...

### ... We Stop Charging by the Hour



#### NOW....Let's Examine Al Usage TODAY.....

- Only 29% of all firms are "officially investigating" potential use of AI
- 17% see <u>NO USEFUL</u> Applications at all today
- Only 5% of all firms have firm WRITTEN POLICIES about AI
- 100% of All Firms are Spending 5X -10X more on Technology than 5 years ago
- 90% of all firms expect an **INCREASE** in usage over the next 3 years
- 95% of all EMPLOYEES report using AI on some type of project work
- #1 concern of all CEO's about AI is the SECURITY RISK of sharing a firm's CLIENT CONTACTS and PROJECT DATA publicly.

#### A Few of Facts about Al Software Development.....

- Only a Small LIST of tested AEC VENDORS and REAL
  APPLICATIONS today----note our own PSMJ AEC INNOVATE
  VENDORS
- 90% of all AEC APPS currently in use are for MARKETING/ PROPOSALS use only..but take a look at <a href="https://www.outlineai.com/">https://www.outlineai.com/</a>
- A couple of more names ----STABLE DIFFUSION---MidJourney
- No one is certifying the SECURITY or ACCURACY of DATA in Al Reports.....Can you TRUST Al output???
- Using AI Requires sophisticated training on how to ASK QUESTIONS CORRECTLY to obtain the most accurate results.

### 4 POINTS of REAL Advice for you.....

- **Point #1:** Technology must be part of a significant part of a firm's STRATEGIC PLANNING alongside things like BD, Project Delivery, Financial Performance, etc.; it can't be relegated to the second tier.
- **Point #2:** Since it's the business of an A/E firm to deliver projects, the best place to evaluate technology strategies, especially AI, is on the OPERATIONAL PROJECT DELIVERY SIDE.
- **Point #3:** Given the incredible advancements with AI now underway, every firm should have a specific AI strategy, which includes a policy for how a firm expects to manage its AI usage.
- **Points #4:** A/E firms must structure a way to evaluate and discuss technology issues; PSMJ suggests strongly that a firm establish a TECHNOLGY COUNCIL, made up of the best tech minds in the firm ESPECIALLY YOUNG PEOPLE, to establish the direction taken.

### **5 Critical Changes RIGHT NOW**

Artificial Intelligence

(2)

Quantum Computing



**Robots Working for You** 



Massive Demographic Shifts



# 2035 at Lightning Speed

#### Imagine a Bold New 2035 AEC Practice



Driven by Quantum Computing





No more time cards



Consulting at high prices NOT Producing at hourly rates



Delivering 400 Times Faster than 2025

## What's Your Vision for YOUR FIRM in 2035???









#### Are you EMBRACING RAPID Change?









How much risk can you handle?





#### What's Your End Game?

#### Impact of Technology on Your BUSINESS Practices



Value Contracting NOT Cost Contracting



A Shift in Who You Hire going Forward



Heavy Annual Investment in TECHNOLOGY



C-Suite TECHNOLOGY Partners and Principals



Delivering "ADVICE" 400 Times Faster than 2025

#### So now let's debate what I've said.....

## Questions anyone?

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#### 2025 Al in AEC Benchmark Survey Report

Current opportunities, challenges, applications, and use-cases of artificial intelligence in the architecture and engineering industry Participate in PSMJ's Al in AEC Benchmark Survey to get a FREE copy of the Survey Report

\*Compare your Al adoption and spend to peers \*Learn implementation best practices \*Set strategic Al priorities for 2025-2026 \*Compare your Al adoption and spend to peers \*Learn implementation best practices \*Manage risks and avoid missteps



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### **THANKS!**

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