

2022 ENGINEER SUMMER

Business Development to Improve Your Firm's Performance



Presentation by: David Burstein, PE dburstein@psmj.com (770) 335-2541

Your Facilitator – Dave Burstein

B.S., M.S. Civil Engineering 26 years with Parsons Corp. (environmental subsidiary)

- Project manager
- Dept. manager
- Office manager
- Regional manager
- U.S. Operations manager
- President of Parsons Engineering Science, Inc.
- President of Harland Bartholomew Associates

Affiliated with PSMJ since 1979

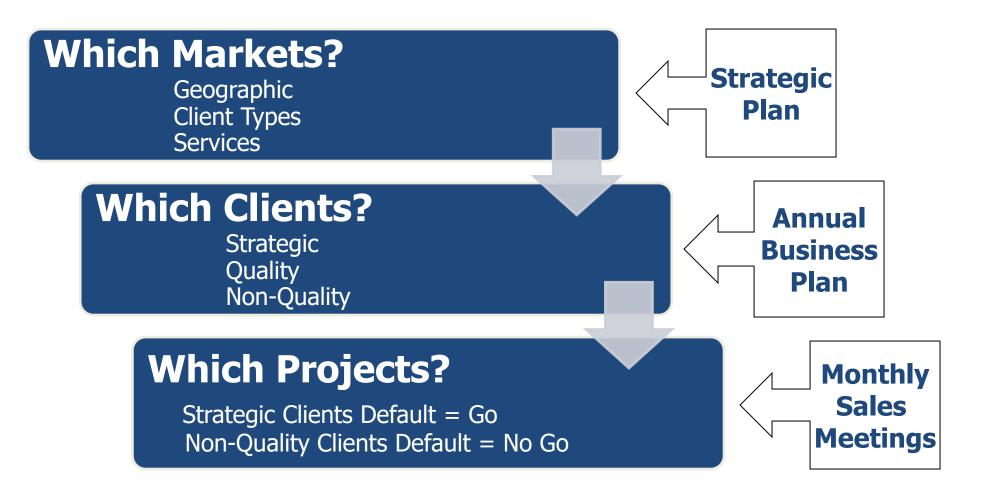
- Part time from 1979 1997
- Full time since 1997





BD Strategy Consists of 3 Levels







Which Markets Should We Pursue?

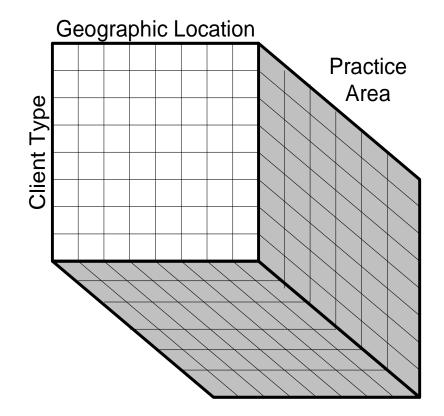






What are our "Markets"?





Geographic Location

- Chicago
- Georgia
- Latin America

Client Type

- Health Care
- Municipal
- Developers

Practice Area

- Civil Engineering
- Land Use Planning
- Architectural Design





January	February	March
		PSMJ
		Survey
April	May	June
		PSMJ
		Survey
July	August	September
July	August	September PSMJ
July	August	
July October	August November	PSMJ
		PSMJ Survey

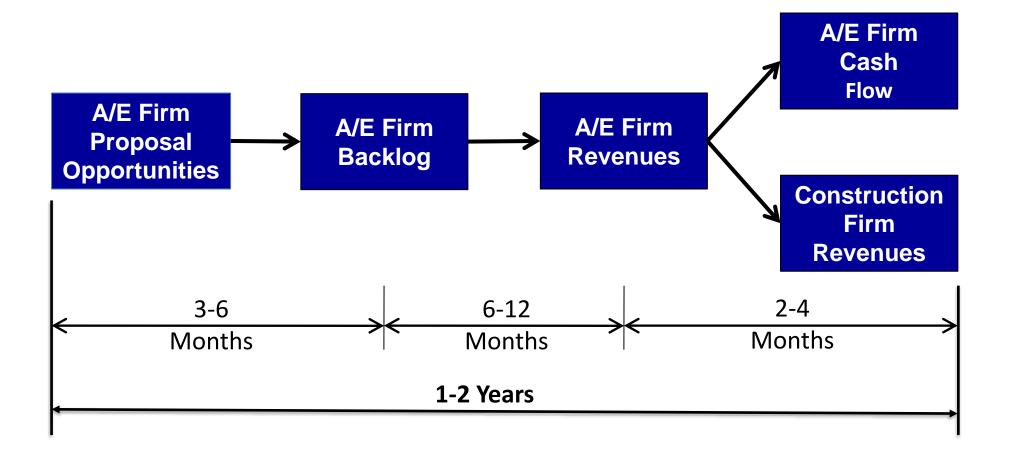
PSMJ's Quarterly Market Surveys

- PSMJ conducts quarterly market surveys as a free service to the industry.
- Input is restricted to A/E firms.
- 200-500 people respond to these surveys.
- We use this data to chart trends using a "Plus/Minus Index".



A/E Proposal Opportunities Are the Most Leading Indicator







How We Compute our "Plus/Minus Index"



Sample Question: Are proposal opportunities in the transportation sector increasing or decreasing compared to last quarter?

Sample Calculation:

Total firms reporting = 185

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Firms reporting an increase = 60 firms x 1 points = +60

Firms reporting no change = 80 firms x 0 points = 0

Firms reporting a decrease = 45 firms x -1 points = -45

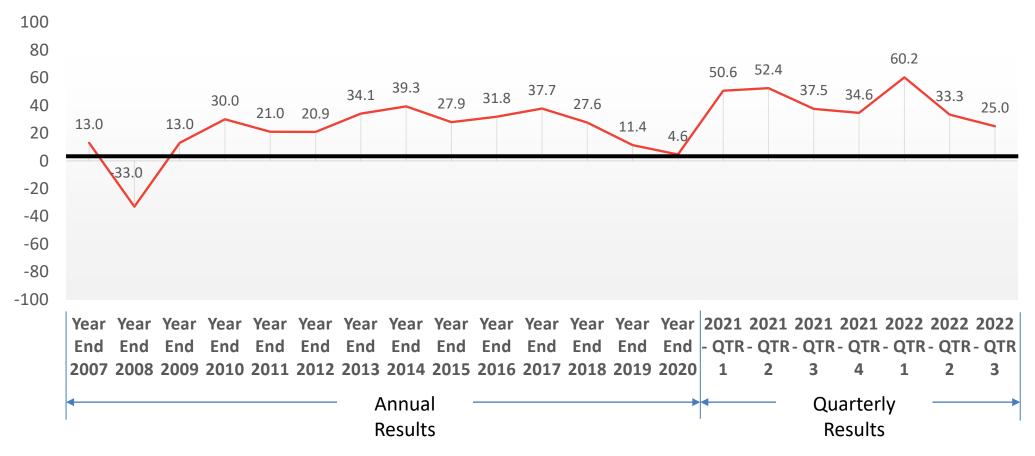
Total "points" = +15
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Index = 15 ÷ 185 = +8%



A/E Proposal Opportunities Have Been Positive Since Covid Shutdown

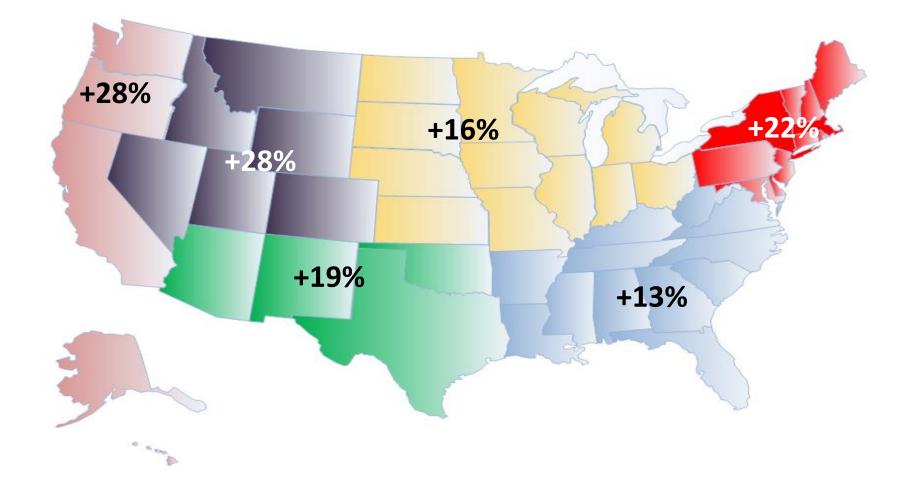






All Regions Are Still Positive

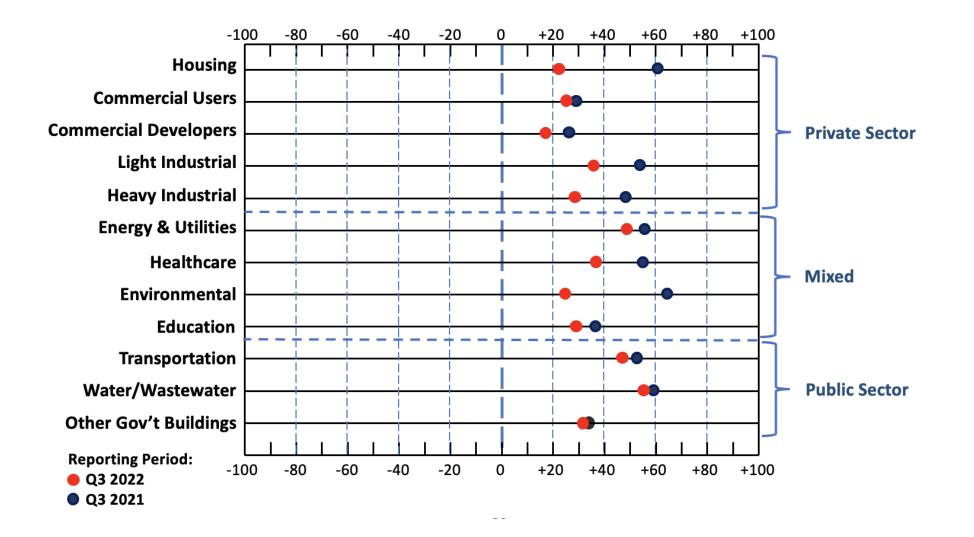






All Major Markets Are Still Positive, But...







We Also Look at These A/E Submarkets



Housing

- Condominiums
- Multifamily housing
- Single family development (subdivisions)
- Single family property (individual houses)
- Senior & assisted living (independent living)

Commercial (Developers and Users)

- Office buildings
- Retail buildings
- Warehouse distribution
- Call centers & data facilities
- Hotels/motels
- Restaurants

Industry (Light and Heavy)

- Component assembly facilities
- Repair facilities
- Warehouse distribution facilities
- Oil drilling and mining
- Petroleum facilities
- Chemical plants
- Primary metals manufacturing
- Product manufacturing
- Pharmaceutical manufacturing

Energy and Utilities

- Renewable energy
- Power plants
- Utility distribution
- Telecom/cable
- Pipelines

Transportation

- Roads
- Bridges
- Rail
- Airports
- Transportation planning
- Traffic

Education

- K-12 schools
- Higher education facilities
- Laboratories
- Support facilities (gyms, dorms, libraries, etc.)

Other Government Buildings

- Justice facilities
- Public safety facilities (fire stations, police, etc.)
- Public recreation
- Sports facilities

Water and Wastewater

- Water supply
- Water distribution
- Wastewater collection
- Wastewater treatment
- Wastewater reuse
- Water treatment

Environmental

- Solid waste disposal
- Waste cleanup
- Site characterization
- Resource management
- Wetlands delineation
- Environmental permitting
- Air pollution

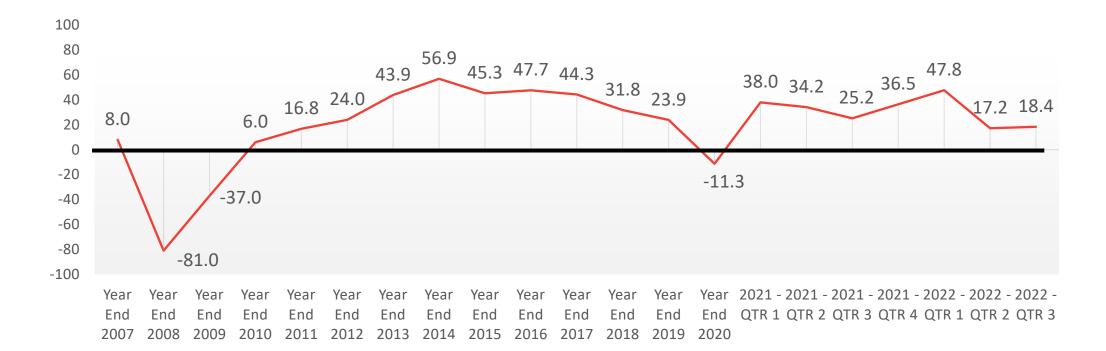
Health Care

- Hospitals
- Continuing care facilities
- Medical offices
- Medical laboratories



Most Commercial Developer Markets Are Soft



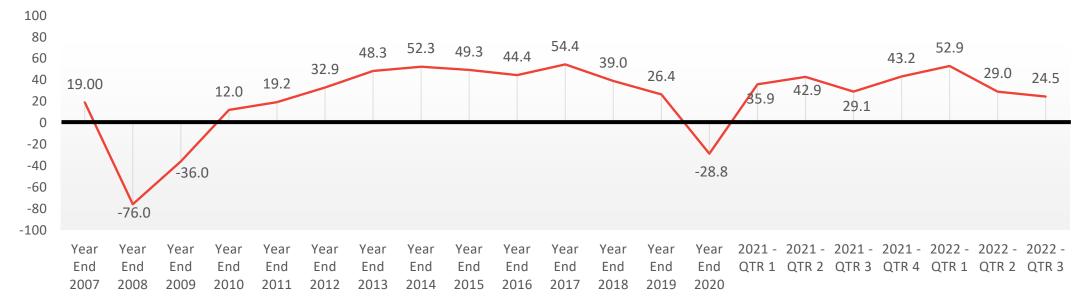


Submarket	Q3 2022	Q3 2021
Office buildings	3	•
Retail buildings	8	•
Warehouse distribution	8	8



Commercial Users Markets Have Softened



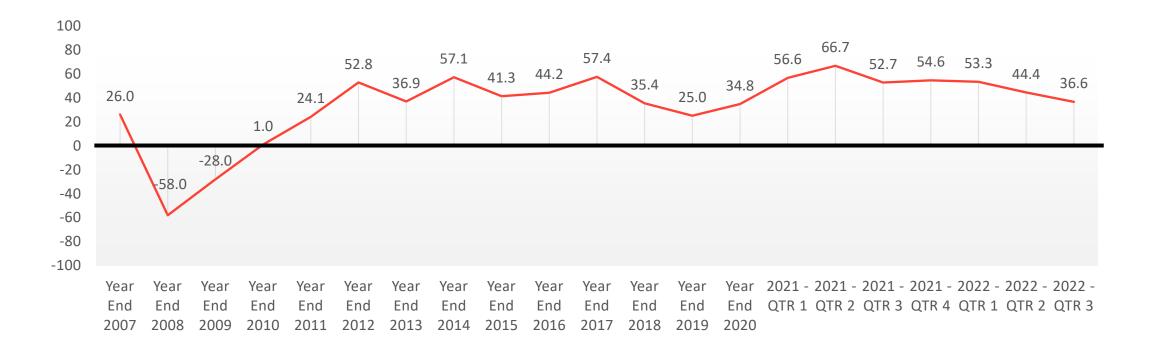


Submarket	Q3 2022	Q3 2021
Office buildings	8	
Warehouse distribution	•	•
Call centers & data facilities		•
Hotels/motels	•••	
Restaurants		



The Light Industrial Markets Remain Solid



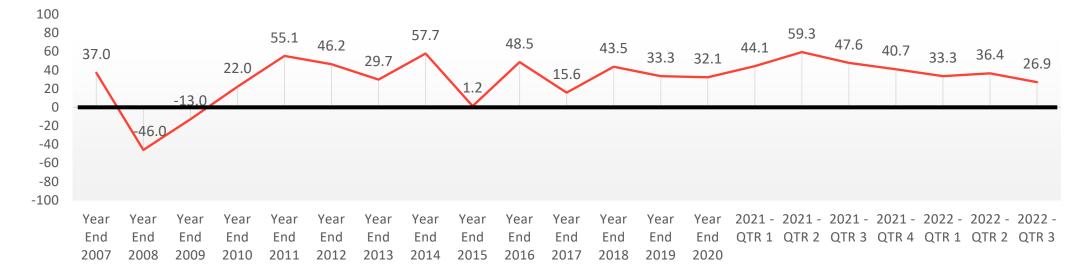


Submarket	Q3 2022	Q3 2021
Component Assembly	€	
Repair Facilities	€	
Warehouse Distribution	•	•



Most Heavy Industrial Markets Remain Solid





Submarket	Q3 2022	Q3 2021
Mining & resource extraction	•	
Petroleum facilities		
Chemical plants	•	
Primary metals manufacturing	•	•
Product manufacturing	•	•
Pharmaceutical manufacturing	•	•



Energy/Utility Markets Are Strongly Positive





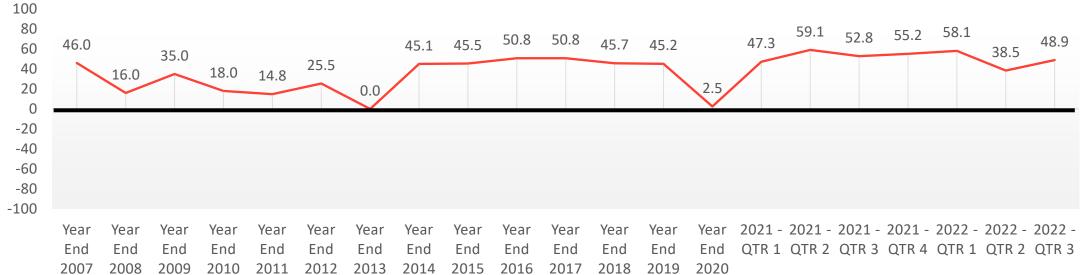
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Submarket	Q3 2022	Q3 2021
Renewable energy	•	•
Power plants		•
Utility distribution	•	•
Telecom/cable	•	•
Pipelines	•	•



Transportation Markets Remain Strongly Positive



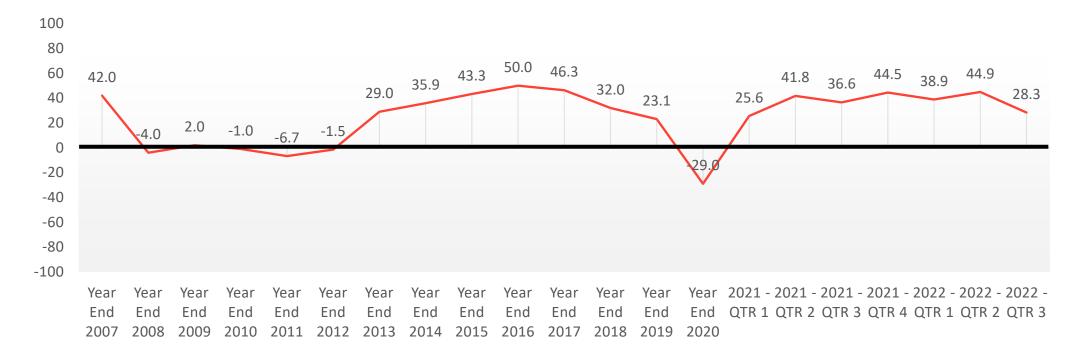


Submarket	Q3 2022	Q3 2021
Roads	0	•
Bridges	Θ	θ
Rail	•	•
Airports	•	•
Transportation Planning	Θ	•
Traffic	Θ	•



All Education Markets Remain Positive



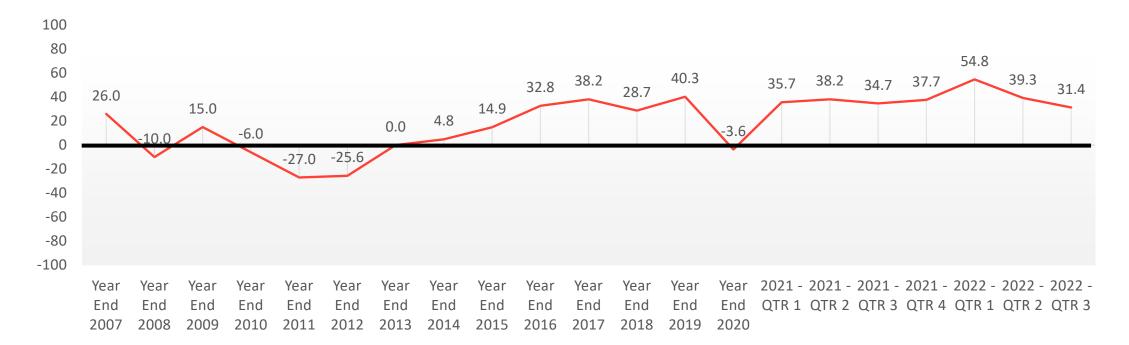


Submarket	Q3 2022	Q3 2021
K-12 schools	•	•
Higher education facilities	•	•
Laboratories	•	•
Support facilities (gyms, dorms, libraries, etc.)	•	•



Other Government Buildings Are All Positive





Submarket	Q3 2022	Q3 2021
Justice facilities	•	•
Public safety facilities (fire stations, police, etc.)	•	•
Public recreation	•	•
Sports facilities	8	



Water/Wastewater Markets Never Cooled Off



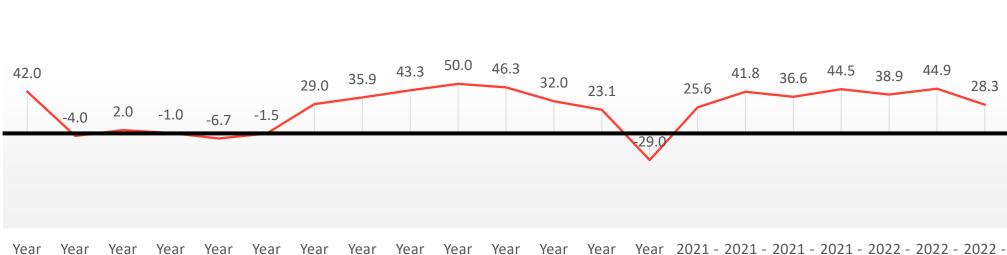


End End End QTR 1 QTR 2 QTR 3 QTR 4 QTR 1 QTR 2 QTR 3 End 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Submarket	Q3 2022	Q3 2021
Water supply	$ \mathbf{ :} $	•
Water distribution	•	•
Wastewater collection	•	•
Wastewater treatment	•	•
Wastewater reuse	•	•
Water treatment	•	•



Environmental Markets Are All Strongly Positive



QTR 1 QTR 2 QTR 3 QTR 4 QTR 1 QTR 2 QTR 3 End 2012 2013 2015 2016 2017 2018 2019 2020 2008 2009 2010 2011 2014 2007

Submarket	Q3 2022	Q3 2021
Solid waste disposal	•	•
Site cleanup	•	•
Site characterization	•	•
Resource management	•	•
Wetlands delineation	•	٢
Environmental permitting	•	•
Air pollution	٢	٢



100 80

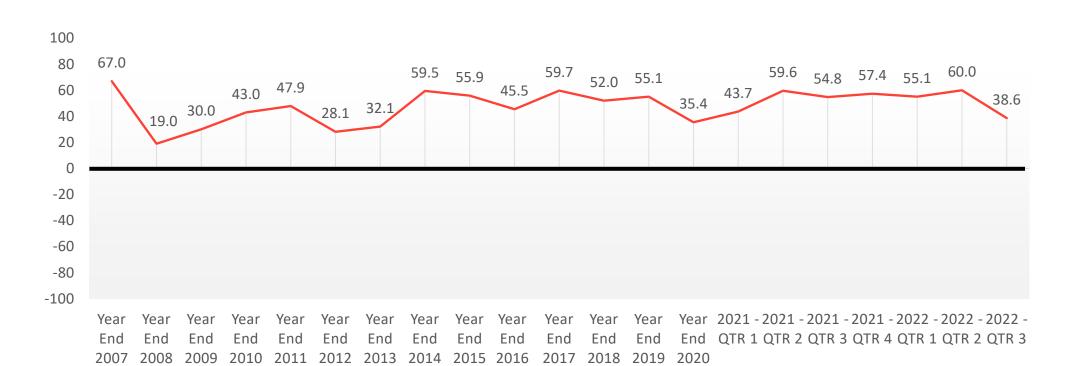
60

40 20

0

-20 -40 -60 -80 -100 TRANE

The Health Care Market Never Saw a Dip

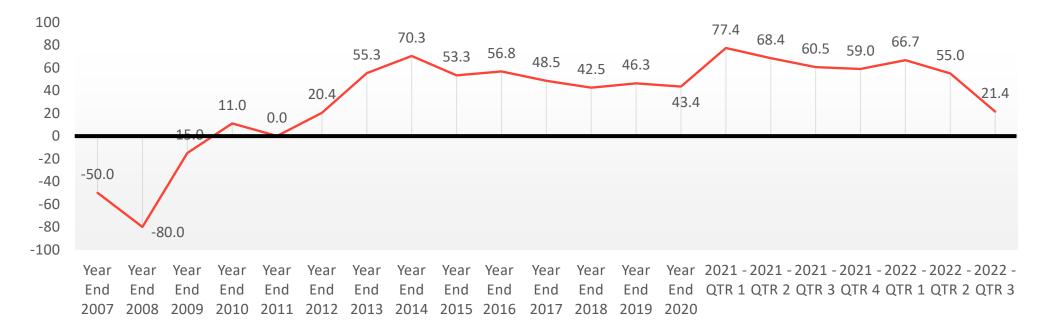


Submarket	Q3 2022	Q3 2021
Hospitals	€	•
Continuing care facilities	θ	•
Medical offices	θ	•
Medical laboratories	•	•



Some Housing Markets Are Softening





Submarket	Q3 2022	Q3 2021
Condominiums	•	•
Multi-family housing	•	•
Single family development	3	•
Single family homes	•	•
Senior/assisted living	•	•



To Get PSMJ's Quarterly Market Reports for Free... 🌍



Participate in the Survey: https://go.psmj.com/qmtoptin Become a PSMJ Pro Member: https://www.psmj.com/StartMembership



Some Sectors Are More Profitable Than Others



Market Sector	Profitability vs. A/E Industry Median											
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Transportation	-4.8%	-1.4%	+0.7%	-0.9%	-3.2%	-1.4%	-2.2%	-3.9%	-1.5%	-0.8%	-1.3%	-2.8%
Government Buildings	N/A	+6.5%	-4.5%	-3.3%	+6.3%	+12.5%	+6.5%	+2.3%	+2.3%	-2.2%	+0.1%	+2.6%
Water/Wastewater	+5.7%	+5.5%	+3.0%	-0.3%	+1.0	+0.8%	-2.3%	+0.1%	-1.6%	+4.8%	+1.9%	+4.6%
Industrial	+11.4%	+0.4%	+4.4%	+11.3%	-3.5%	-0.6%	+4.9%	+4.3%	+0.6%	+1.5%	+14.0%	+5.1%
Energy-Utilities	-1.2%	+0.7%	-6.2%	-4.9%	-1.2%	-0.6%	-2.5%	-2.4%	+3.7%	+5.3%	+10.5%	-1.4%
Commercial	-0.9%	-3.6%	+3.6%	+2.8%	+0.6	+4.1%	+8.0%	+7.5%	+6.5%	-2.9%	+4.7%	-0.6%
Housing	+9.8%	+9.9%	+12.8%	+0.2%	+0.6	+8.4%	+12.6%	-1.5%	+6.2%	+11.3%	-3.7%	-10.1%
Healthcare	-7.6%	+2.9%	+1.0%	+2.9%	+4.5%	-1.4%	-4.2%	-4.1%	-4.5%	+2.3%	+3.0%	0%
Environmental	-6.4%	-1.4%	N/A	-4.1%	-2.0%	-0.7%	-4.0%	+1.2%	+0.3%	+1.8%		
Education	-0.2%	+4.4%	+6.9%	+7.0%	+6.9%							
No Specialty	+0.2%	-1.3%	-1.0%	-0.5%	-0.6%	-1.1%	-1.3%	0%	-0.5%	-0.9%	-0.6%	-1.1%



PSMJ's Current Outlook



Markets	Short-Term Prospects (-2 to +2)	Long-Term Prospects (-2 to +2)	Likely Profitability (-2 to +2)	Total Points (-6 to +6)
Water/Wastewater	+1.5	+1.5	+1.0	+4.0
Industrial	1.0	+1.5	+1.5	+4.0
Transportation	+2.0	+1.5	-1.0	+2.5
Energy/Utilities	+1.5	+1.5	-0.5	+2.5
Health Care	+1.0	+1.5	-1.0	+1.5
Commercial	+0.5	+1.0	-	+1.5
Govt. Buildings	+0.5	+1.0	-	+1.5
Education	+1.0	+1.0	+1.0	+1.0
Environmental	+0.5	+1.0	-1.0	+0.5
Housing	-2.0	+1.0	+0.5	-0.5



Homework: Plan Your Market Priorities for Next Year



			Short-	Long-	Exposted	0	Strategic Goals	
Client			term Market	term Market	Expected Profit-	Our Market	(Enter, Expand, Hold, Reduce,	
Sectors	Locations	Practice Areas	Strength			Position	Exit)	Comments
Developers	Phoenix	Interior design	Average	Strong	Average	Average	Hold	
	Office	Architecture	Strong	Strong	Average	None	Enter	Transfer Alicia from SLC
		Master planning	Average	Average	Low	Strong	Hold	
		Structural engineering	Strong	Strong	Average	Weak	Expand	Hire Structural Leader in Phoenix
	Salt Lake	Interior design	Strong	Strong	High	Strong	Expand	Increase BD activity and budget
	City Office	Architecture	Weak	Weak	Average	Average	Reduce	Be more selective when pursuing projects
		Master planning	Average	Average	Low	Average	Hold	
		Structural engineering	Average	Strong	Average	Average	Expand	Hire more junior-level structural engineers
	Dallas Office	Interior design	Average	Weak	Low	Weak	Exit	Working for developers is perceived as a
								conflict of interest by our municipal clients
		Architecture	Strong	Strong	Average	None	Enter	Hire a market leader
		Master planning	Average	Average	Average	Average	Hold	
		Structural engineering	Strong	Strong	High	Strong	Expand	Hire more structural engineers
	El Paso	Interior design	Average	Average	Low	Average	Hold	
	Office	Architecture	Weak	Weak	Average	Average	Hold	
		Master planning	Strong	Strong	Average	Weak	Expand	Transfer Kim from Phoenix
		Structural engineering	Weak	Weak	Low	Weak	Exit	Do structural design in Dallas
Municipal	Phoenix	Interior design						
	Office	Architecture						
		Master planning						
		Structural engineering						

Which Clients Should We Pursue?







Do You Really Want to Work for Clients Like These?





Our Quality Client Criteria (from a 100-person A/E Firm)



Criteria	Absolute Requirements	Quality Client Requirements	Strategic Client Requirements
Financially stable	\checkmark	\checkmark	\checkmark
Considerate of our professional integrity and responsibility	\checkmark	\checkmark	\checkmark
Realistic about project schedules and our fees		\checkmark	\checkmark
Appreciate the value of our services		\checkmark	\checkmark
Loyal to us		\checkmark	\checkmark
Pay on time		\checkmark	\checkmark
Currently or potentially provide significant revenues and profits			\checkmark



Our Quality Client Criteria (from an MEP Firm)



Criteria	Owners	Architects
1. Pay bills on time	\checkmark	\checkmark
2. Fair and loyal	\checkmark	\checkmark
3. Willing to pay a full (fair) fee	\checkmark	\checkmark
4. Potential for repeat business	\checkmark	\checkmark
5. Consider us part of their team and respect our opinions		\checkmark
6. Minimal unpaid redesign		\checkmark



Workshop: Develop Quality Client Criteria for Your Firm(s)







Homework: Assure That Strategic Clients Are "Raving Fans"



	Percent of		Net Prom	oter Scores (0	-10 Scale)
Client Organization	Revenue	Reviewers	Promoters	Passives	Detractors
Lincoln County	28%	Brittany Bulfinch Shabana Rashid Jeff Holland Dean Miller Charles Crowell Mark Lawrence Tony Harris Michael Williamson	9 10 9	8	5 3 6
Alaska DOT	18%	William Eastin Kenneth Franks		7 8	
MAB American Management	14%	John Argo		7	
City of Sandy Plains	11%	Allen Johnson Christine Schultz		8	6



Homework: Plan Your Client Priorities Based on Quality



Strategic Client	Strategic Clients		its	Base Clie	ents	Unacceptable	Clients
Client	Last Year Revenue	Client	Last Year Revenue	Client	Last Year Revenue		Last Year Revenue
Gannett Fleming	\$438,000	Modjeski & Masters	\$37,349	STV	\$376,345	Acme Industries	\$321,678
Pennoni	\$865,874	Borton-Lawson	\$469,845	CDM Smith	\$78,345	ABC Architects	\$45,214
Urban	\$457,347	HDR	\$346,349	WRA	\$6,792		
AECOM	\$1,023,456	McCormick Taylor	\$28,034	SAI	\$903,568		
WSP (Parsons Brinkerhoff)	\$349,765	Stantec	\$123,765	GAI	\$239,845		
HNTB	\$389,357	Dewberry	\$1,299,043	SSE	\$45,984		
JMT	\$34,578	RK&K	\$67,354	CS Davidson	\$39,034		
Michael Baker	\$409,467	Louis Berger	\$56,903	Reilly	\$416,793		
PCS	\$34,288	District 8	\$345,094				
Ferguson Township	\$398,564	District 12	\$126,093				
Totals	\$4,400,696		\$2,899,829		\$2,106,706		\$366,892
Percent of Total Revenue	45%		31%		22%		4%
5-Year Vision	55%		35%		10%		0%



Homework: Develop an Action Plan for Non-quality Clients



1.Pays their bills.

2.Is ethical.

3.Compensates for all work we do. 4.Negotiates terms and fees fairly.

5.Does not play invoicing games.

6.Has achievable expectations.

ACTIONS TO BE TAKEN:

- 1. Stop spending sales/marketing money on them.
- 2. Change conditions of engagement (e.g., contract terms, etc.).
- 3. Stop working for them.

	Criteria		
CLIENT	NOT MET	ACTIONS	COMMENTS
City of Springfield	3, 6	1	Take sole-service work only
Norton County	4	2	Require 25% advance payment
Acme Industries	2	2	Require 50% advance payment
Dogwood	2, 4	3	Refer them to a competitor
Developers			
Norton Hospital	6	1	Take sole-source work only
Springfield Transit	6	1	Take sole-source work only



Which Projects Should We Pursue?

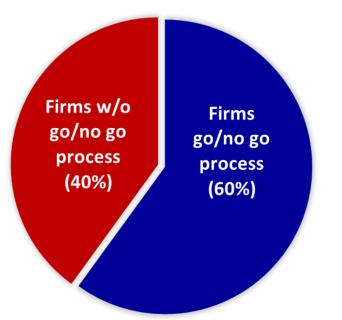






Most A/E firms have a formal Go/No Go process.





BUT HOW EFFECTIVE ARE THEY? WHY AREN'T THESE PROCESSES MORE EFFECTIVE?

		Firms w/o Formal Go/No Go Process
Overall proposal hit rate	48%	47%
Average 2015 profitability (% of net revenue)	13.3%	14.0%
Average revenue growth in past 3 years	19.1%	18.3%

Source: Recent PSMJ survey of 100 A/E firms



Let's Try PSMJ's Free Go/No Go App On One of Your Prospects



To Download a Free Copy of This App:

- 1. Go to app.psmj.com
- 2. Select "sign up" at the top of the page in the red heading.
- **3**. Fill out the information and click "Sign up".
- 4. Once you sign up, it will ask you to log in.
- 5. This will bring you to your project dashboard page.

To Try Out This App:

- 1. Select a project you are thinking about pursuing.
- 2. First do the essential elements evaluation. How does this opportunity look so far?
- 3. Now complete the remaining analysis. Are you going to pursue it?
- 4. If so, what do you need to do to maximize your chances of winning?
- 5. Now distribute the results to your proposal team.



Thanks for Attending This Program!



- > Any final questions or comments?
- If you have questions or comments after you get home... David Burstein
 - 770-335-2541
 - dburstein@psmj.com
- Please fill out this evaluation form



