

DATA MANAGEMENT & PRECONTECH ROLE





Sr. Director Estimating





Join at slido.com #RYANDATA



ALE MACIAS

Sr. Preconstruction Specialist



Preconstruction Tech Team



Software Support and Training

(PEOPLE)

Can our team efficiently find solutions to their challenges?

- Hosting training sessions and providing instructional materials
- Support desk for Preconstruction Software and managing updates
- Creating company estimating and cost management templates
- Evaluating potential new tools

Estimating and Precon

(PROCESS)

Are the current tech and tools the best solutions for our preconstruction process?

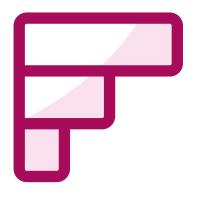
- Best Practices, Policies and Procedures
- Streamline time-consuming processes
- Standardizing Preconstruction Deliverables

Historical Data

What is the most important information to track?

- Estimate Archiving Process/Quality Control
- Yearly database update
- Obtaining true unit cost from trade partners (real market value)

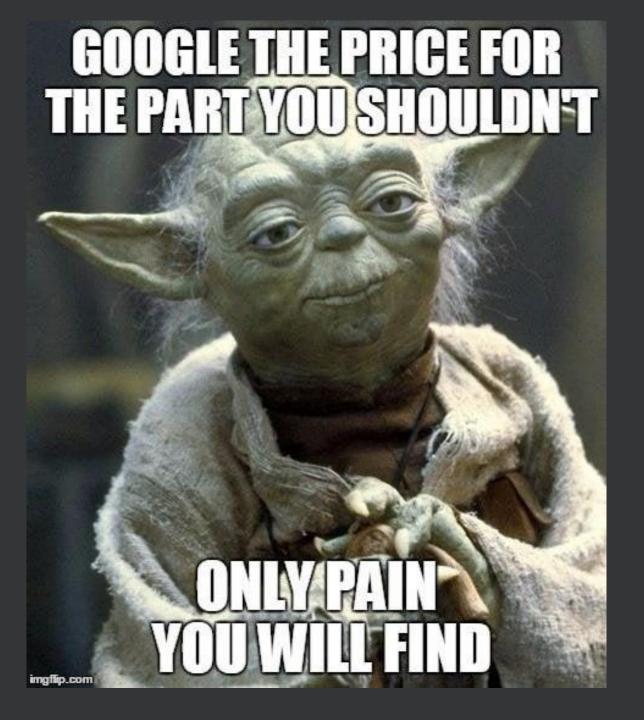




Would you value having a Precon Tech Role in your company?



DATA COLLECTION





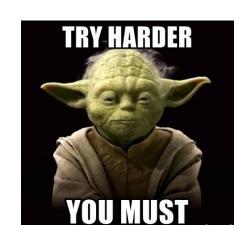


Are you collecting/using past project cost data to help estimate new projects?

Historical Data



- Cost Intelligence supplements market feedback
- Data collection based on our Business Model
- Modelogix ("manual") to Power BI ("automated")
- Auditing



Successes

- Group Effort
- Metrics Flexibility
- Optimizing Data Input (not manual)

Challenges

- Structure vs Flexibility
- Specific Client Requests
- Timely Feedback

Please download and install the Slido app on all computers you use





What are the most important metrics your company collects for historical data?

Join at slido.com #RYANDATA

Historical Data



Metrics and Categorization

- Product Type
- Region/Sector
- Building Components
- Structure Types
- MEP Systems
- Exterior Skin Ratios

- Dock Positions (Distribution)
- Unit Counts (Multifamily Sector)
- Bed Counts (Healthcare Sector)
- Parking Spaces/Stalls
- Building GSF vs Site GSF
- Estimate Version (Design Phase)



Estimate Search

How to Use this Dashboard:

- 1. Use Project Filters to search for comparable projects
- 2. Select estimate name(s) and version(s)
- 3. Click "Estimate Comparison" to see side by side comparison

Clear All Filters

ARCHIVE/BUILT

Estimate Comparison

260,369

897,067

67,186

58,790

Source Constr. Start GSF

10/5/2022

1/1/2022

DESTINI 8/3/2023

DESTINI 11/2/2022

DESTINI

DESTINI

ESTIMATE FILTERS								
Major Classification	Active/Archive/Built Multiple selections							
Industrial - Advanced Technology Industrial - Food & Beverage Industrial Speculative-General Mission Critical-Data Center Multi-Family Housing Office Parking Structures R&D	Total Floors All Region/Sector All State All V							
GSF 0 7,548,500	Super Structure All							
Gross Site 0.00 27,785,856.00	Construction Type All							
	Building Component All							

∠ Search
Select all
000 - 1100 Locust Precast Repair
□ 000 - DIRTT / Sage Capital
☐ 001624038 - JRS MCCIII Expansion
003612030 - Grand Living The Grove
004777000 - Fourth & Park
005330001 - Hatcher Logistics TI Estimate
005341000 - HB L2B3 The Lumin
□ 005391000 - T-3856 - Target Riverside TI
005485000 - Lakewood Ranch Multifamily FL
☐ 005547000 - US Bank Final Rooftop Changes
☐ 005569000 - Vyne on Haven

Estimate information

005241000 - Clarendale West End: ARCHIVE

005341000 - HB L2B3 The Lumin: ARCHIVE

005330001 - Hatcher Logistics TI Estimate: ARCHIVE

005340001 - HB BLK1 - Restoring Waters: ARCHIVE

Estimate and Version

000 - 1100 Locust Precast Repair: Built	,	DESTINI	1/1/2023	0
000 - DIRTT / Sage Capital: Built	Omaha, NE	DESTINI	1/1/2023	0
001167005 - Mercy Marion ED: ARCHIVE	Marion, IA	DESTINI	12/1/2023	21,322
001624038 - JRS MCCIII Expansion: ARCHIVE	Cedar Rapids, IA	DESTINI	9/3/2022	12,656
003612030 - Grand Living The Grove: ARCHIVE	Austin, TX	DESTINI	11/3/2022	421,672
004777000 - Fourth & Park: ARCHIVE	Minneapolis, MN	DESTINI	2/9/2022	378,112

City, ST

Nashville, TN

Glendale, AZ

Minneapolis, MN

Saint Paul, MN



Estimate Comparison

Data is current as of 1 a.m. CST



WBS Property

Escalate to Point in Time

Additional Escalation

Uniformat Level 2

All

*Escalation is generated using RLB index - Greenway Link



PRECONSTRUCTION

PROJECT META DATA

Estimate Information

Project Properties

Metrics/Ratios

TABLE/VISUAL

Table Comparison

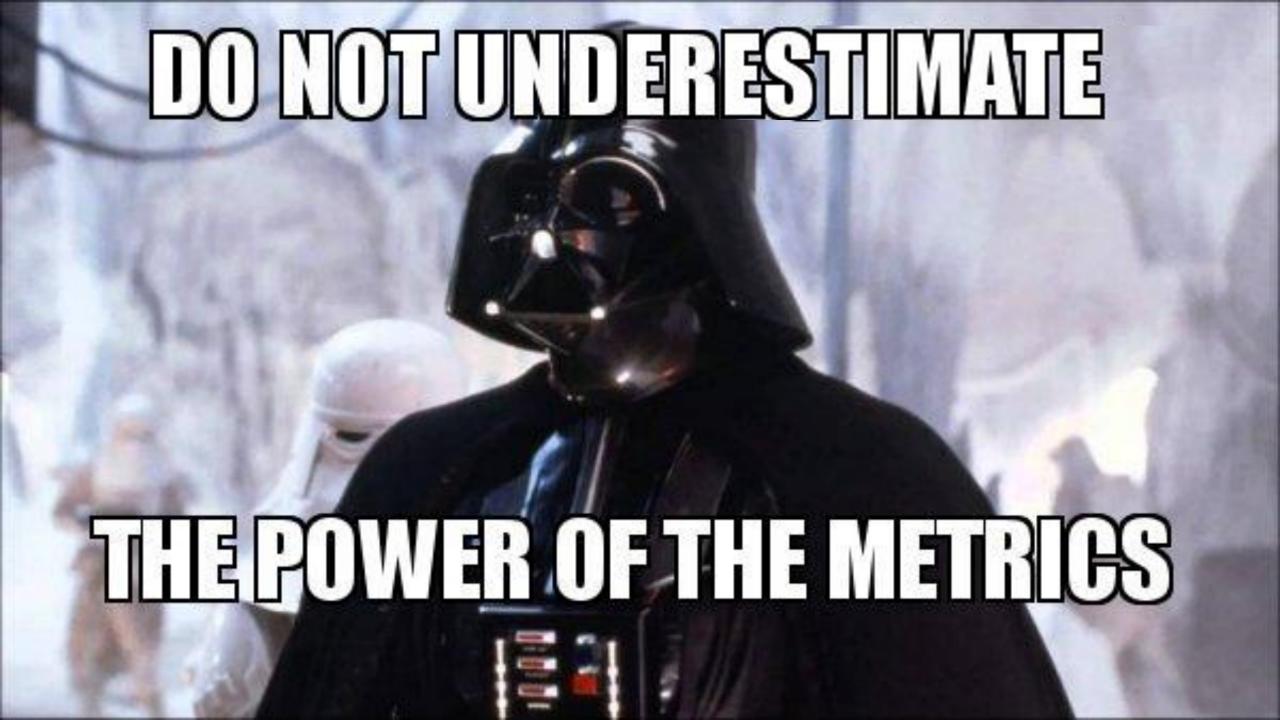
Visual Comparison

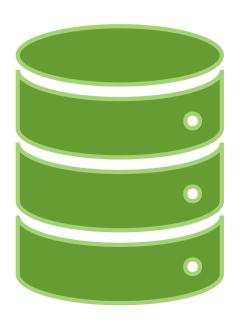
Project Meta data

lt	001167005 - Mercy Marion ED: ARCHIVE	001624038 - JRS MCCIII Expansion: ARCHIVE	003612030 - Grand Living The Grove: ARCHIVE	004777000 - Fourth & Park: A
	21322.0	12656.0	421672.0	378112.0
	0.0	0.0	151396.0	16383.0
	21322.0	9376.0	59346.0	14000.0
	0.0	3280.0	210930.0	345355.0
	0.0	0.0	0.0	2374.0
	21322.0		165516.0	265487.0
	lt	21322.0 0.0 21322.0 0.0 0.0	21322.0 12656.0 0.0 0.0 21322.0 9376.0 0.0 3280.0 0.0 0.0	0.0 0.0 151396.0 21322.0 9376.0 59346.0 0.0 3280.0 210930.0 0.0 0.0 0.0

Grouped Property	MN: MDX	5167-003_ChapmanBusinessPark-Ankeny IA: MDX	5230-000_FlamingBird-KGR(FC09)-Phoenix AZ: MDX	5300-000_HighlandBridgeBlock1Lot1MC
175 Construction Type		New Building	New Building	New Building
176 Building Component				
180 Exterior Shell System		Precast Concrete	Metal Panel - Insulated (sandwich)	Brick w/metal stud back-up
185 Roofing System				
190 HVAC System 1		Constant Volume RTU (Gas or Elec Heat)	Cold Storage - Amonia Refrigeration System w/Penthouse Evaporators	Constant Volume RTU (Gas or Elec Heat)
300 Major Classification 1		Industrial	Industrial	Healthcare

Line Item Comparison	**	Modelogix Projec	_							Hover top rig				
Estimate and Version	0011670	05 - Mercy Mario	1 00162403	8 - JRS MCC	III Expansion:	ARCHIVE	003612030) - Grand Liv	ing The Grove: ARCHI	/E 00477700	0 - Fourth &	Park: ARCHIVE	00524100) - Clarendale
MonthYear		12/1/2023		9/3	/2022			11/3	3/2022		2/9/202	2		10/5/2
Location		Marion, IA		Cedar Rapids, IA				Aust	tin, TX		Minneapolis	, MN		Nashville
GSF		21,322		12,656		421,672			378,112			260,3		
	Unit Cost	Total	Quantity	Unit Cost	Total		Quantity	Unit Cost	Total	Quantity	Unit Cost	Total	Quantity	Unit Cost
A10 Foundations - Ground Floor	\$36.59	\$780,163	9,376	\$41.09	\$385,287		59,346	\$57.96	\$3,439,741	14,000	\$8.36	\$116,970	44,332	\$67.92
A20 Basement Construction - Basement							151,396	\$1.69	\$255,447				22,898	\$118.66
B10 Superstructure - Gross Sq Ft	\$30.43	\$648,903	12,656	\$61.77	\$781,787		421,672	\$24.38	\$10,282,400	378,112	\$53.07	\$20,066,450	260,369	\$27.13 S
B20 Enclosure - Exterior Skin	\$141.74	\$2,163,708	16,863	\$49.29	\$831,141		103,000	\$70.92	\$7,305,204	164,086	\$75.96	\$12,463,634	63,933	\$47.89
B30 Roofing - Roof Surface	\$29.10	\$712,853	9,376	\$17.56	\$164,679		56,195	\$33.21	\$1,866,249	342,564	\$7.09	\$2,427,517	46,534	\$25.75
C10 Interior Construction - Finished Interior Area	\$63.70	\$1,358,278	12,656	\$5.79	\$73,241		270,276	\$40.14	\$10,848,593	378,112	\$35.33	\$13,360,282	202,216	\$26.06
C20 Stairs - # of Stairs (Risers)							380	\$384.02	\$145,928				20	\$6,687.90
C30 Interior Finishes - Finished Interior Area	\$29.61	\$631,273	12,656	\$0.37	\$4,700		270,276	\$17.26	\$4,664,627	378,112	\$12.36	\$4,674,704	202,216	\$12.56

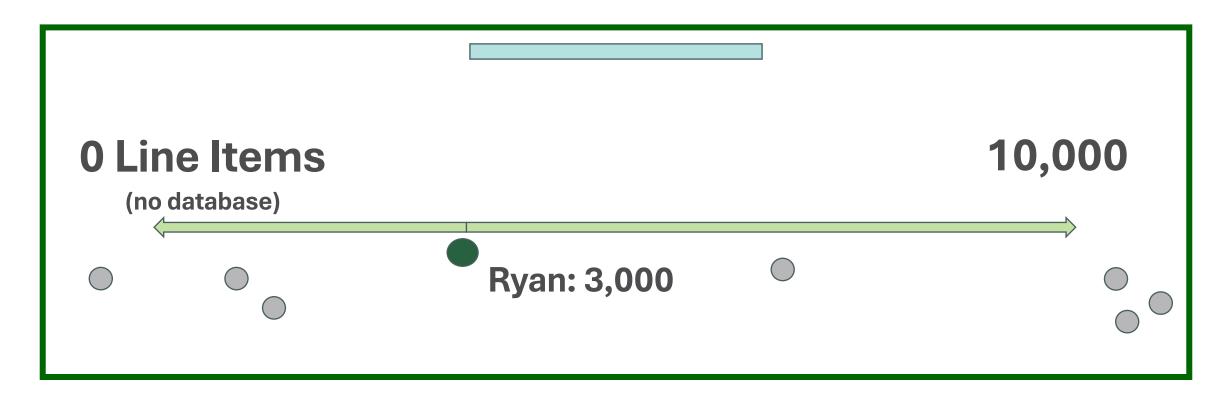




COST DATABASE

COST DATABASE SIZE





- What is one thing that works well for your Company's Database?
- What is one thing you would like to improve?

Cost Database



Managing Multiple Regional Databases

Pros:

- Annual average per line item by region
- Local input/more relevant unit price

Cons:

- Updating process is repetitive due to multiple databases
- Requires a Data Analyst to average cost per region based on estimate location

Cost Database

Facilitating subcontractor unit cost input through our bid solicitation (bid forms)

Bid Form Templates that match database breakouts as much as possible to easily update cost in estimate line items

Steel Fabrication

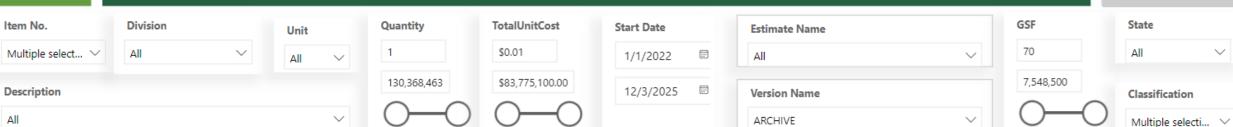
Bid Form Overview Scope-Specific Bid Form Line Items Description Floor Construction: *Structural Steel Frame - Cols, Beams, Bracing [B1010.450] /ton *Structural Steel Fabrication - Mezzanines [B1010.455] /ton *Misc. Struct. - Edge Angle, Frames, Supports [B1010.460] /ton *Misc. Struct. - Exterior Skin Supports [B1010.470] /ton *Misc. Steel - Safety Cable Rails [B1010.475] /linear foot *Misc. Steel - Specialty Bracing [B1010.477] *Struct. Floor Joists - [specify size] [B1010.480] /ton *Metal Floor Deck - [specify size] [B1010.500] /square foot Roof Construction: *Structural Steel Frame - Cols, Beams, Bracing [B1020.450] /ton *Structural Steel Fabrication - Roof [B1020.455] /ton



Unit Cost Look Up

- Estimate Search filters do not impact the Unit Cost
- Accuracy of line items should be validated by user. This table represents all line items from Destini estimates





stimate Info	rmation					1			1	1			C
ltem No.	Division	Description	Extended Description	Unit	Quantity	Unit Cost	Start Date	Esc. Today	Esc. Unit Cost	Estimate and Version	GSF	State	Classifica
32010.150.00100	03 Concrete	Structural Precast Panel		sf	49,990	\$22.99	4/6/2022	13.49%	\$26.09		462,840	MI	Industria
32010.150.00100	03 Concrete	Structural Precast Panel - Dock		sf	82,660	\$22.99	4/6/2022	13.49%	\$26.09		462,840	MI	Industria
B2010.150.00100	03 Concrete	Structural Precast Panel - w/ insul	M+E	sf	13,400	\$35.77	10/17/2022	8.95%	\$38.97		145,659	IA	Industria
B2010.150.00100	03 Concrete	Structural Precast Panel - w/ insul	M+E	sf	54,679	\$35.77	10/17/2022	8.95%	\$38.97		145,659	IΑ	Industria
B2010.150.00100	03 Concrete	Structural Precast Panel - w/ insul	Precast Panels	sf	77,083	\$25.97	10/3/2022	8.95%	\$28.30		141,372	MN	Industria
32010.150.00100	03 Concrete	Structural Precast Panel - w/ insul	Includes Erection, smooth	sf	95,920	\$26.06	5/3/2024	1.14%	\$26.36		207,200	MN	Industria
B2010.140.00100	03 Concrete	Structural Precast Panel		sf	161,651	\$34.58	12/14/2022	8.13%	\$37.39		525,200	CT	Industria
B2010.150.00100	03 Concrete	Structural Precast Panel - w/ insul	Precast Panels - Rev 1, Increase R Value	sf	33,200	\$1.00	1/27/2024	2.64%	\$1.03		55,800	MN	Industria
B2010.150.00100	03 Concrete	Structural Precast Panel - w/ insul		sf	40,153	\$36.02	7/3/2023	4.23%	\$37.54		139,459	IΑ	Industria
B2010.150.00100	03 Concrete	Structural Precast Panel - w/ insul	Precast Panels Sandblast & White Cement	sf	26,301	\$47.05	12/29/2023	2.87%	\$48.40		42,000	MI	Industria
B2010.150.00100	03 Concrete	10" Precast Panel - w/ insul - 38'-10" height		sf	113,908	\$24.79	9/7/2022	9.85%	\$27.23		305,330	MD	Industria Advance Technolo
B2010.150.00100	03 Concrete	Structural Precast Panel - w/ insul	Includes Erection - 32' clear	sf	71,172	\$28.07	4/21/2023	5.85%	\$29.71		324,299	MN	Industria Speculat General
32010.150.00100	03 Concrete	Structural Precast Panel - w/ insul	Includes Erection - 32'	sf	73.557	\$27.97	4/21/2023	5.05%	\$20.50		324 299	MN	Industria

Page Description

This pages provides summary pursuit status information by combing data from CRM, Procore, Bridgit, Destini Estimator and Timecards.

Many pursuits have multiple Job Numbers, ex: Pursuit - DESIGN & Pursuit - CNST, or Pursuit TI & Pursuit SHELL. Multi-select related jobs if you'd like to see aggregated information.

Pursuit Number & Name

0073240007324000 - Minne... >

Region

All

Sector

All

PURSUIT DETAILS: Project # Project Name Opp Owner % **Cnst Start Hours** Total Revenue Net Spend Time (\$) Dev Net Approved EAC Current Sector Spend Spend Spend Phase - Minneapolis MN - TI Industrial 007324000 West 30% 1/1/25 659



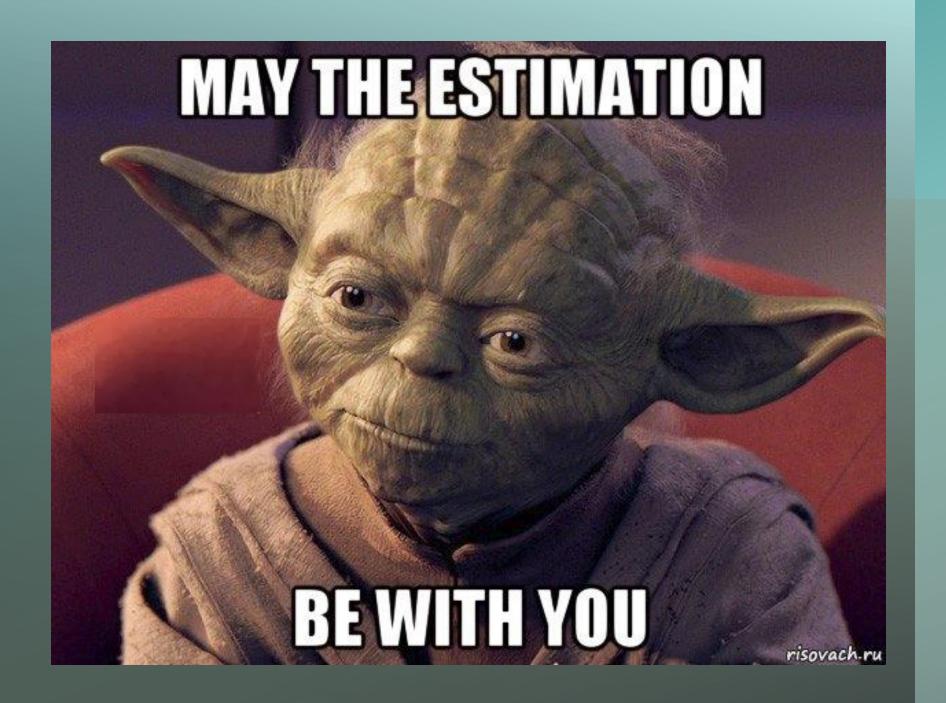
Cost Type	Projected Final Budget	Direct Costs	Sub Pay App	Current Commitments	Pending Commitments	EAC
51-512018-M - Meals	\$0		\$0	\$0	0.	
60-603010-M - Project Related Software	\$0		\$0	\$0	0.	
□ R - Reimbursables	\$0		\$0	\$0		
50-504015-R - Liability Ins	\$0		\$0	\$0		
53-531000-R - Project Manager I- wk	\$0	\$0	\$0	\$0	0.00	\$0
53-531006-R - Project Executive	\$0		\$0	\$0	0.0	
53-531020-R - Director, Construction	\$0	*	\$0	\$0	0.0	
55-551035-R - Sr Precon Manager	\$0		\$0	\$0	0.00	دودردو
55-551060-R - Estimator I	\$0		\$0	\$0	0.0	
 Ryan Labor / Personnel (internal consultant) 	\$0		\$0	\$0	(
01-011060-L - Field Coordinator-hr	\$0		\$0	\$0	0.	
Total	\$0		\$0	\$0	0.00	



ESTIMATE HISTORY	# OF ESTIMA	# OF ESTIMATES TO DATE(Blank)				
Estimate & Version	Estimate	Last Update	Last Updated By			









THANK YOU!