

# Wayfinders:

Charting Your Course Through  
Project Budget Development  
From Programming, Through Closeout







# Captain and His Adventurers

Captain Easy “**Frank Wolf**” Foster

Casey “**Dr. Lily Houghton**” Annunzio

Julie “**MacGregor Houghton**” Williams







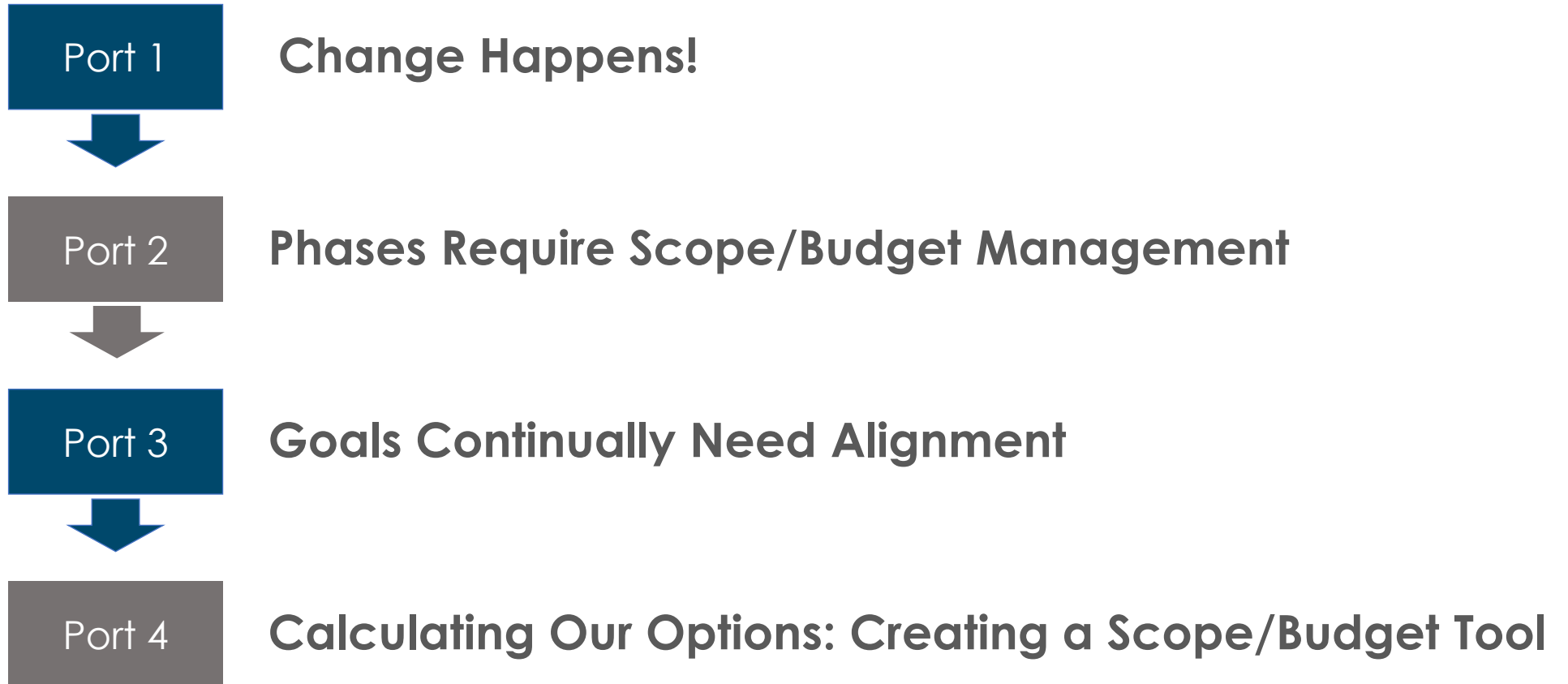
# ALL ABOARD!

An adventure of a lifetime awaits...

Welcome to the  
**JUNGLE**  
of Scope to Budget  
Development



# Navigation Ports of Call





# Why Develop a Scope to Budget Template?

## Change Happens

- Projects are Process Oriented
- Phases Presented New Challenges
- Uncontrollable Variables
- May Have Long Timelines
- Many Participants and Many Voices







# Verify the Goals





# Aspects of Project Verification





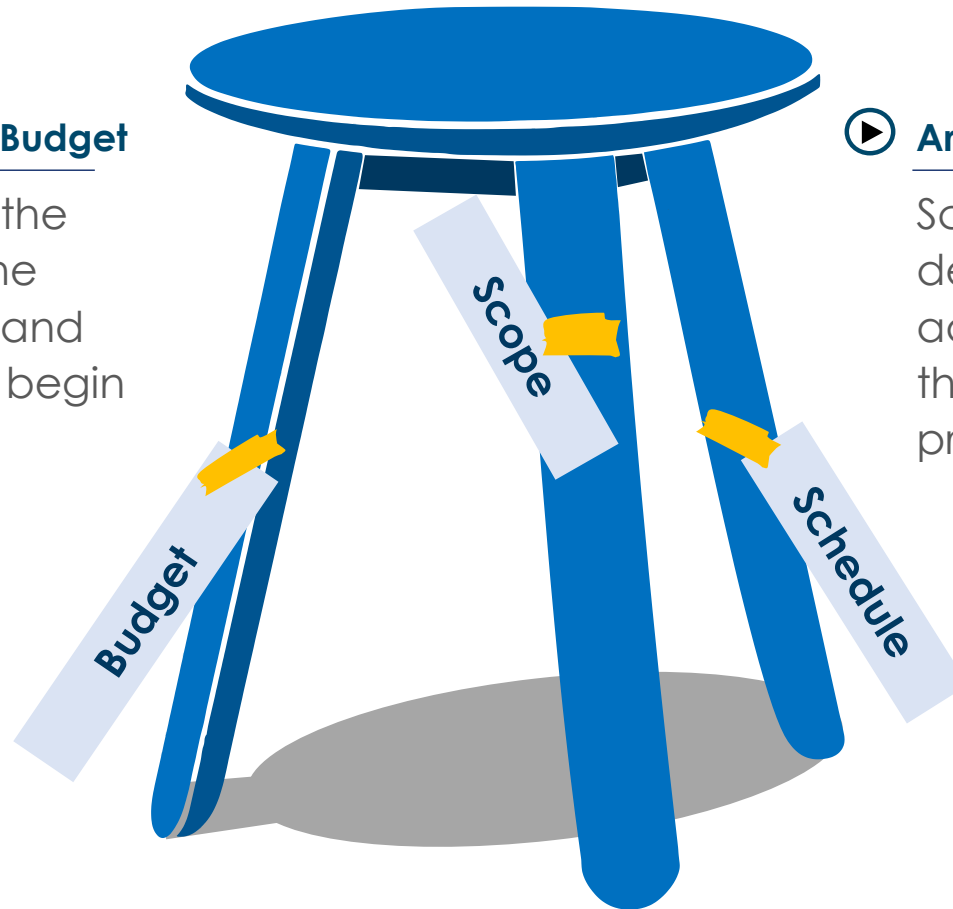
# 3-Legged Stool: Balancing Act Throughout the Project

## ▶ District Establishes Budget

District provides the parameters of the project: Budget and the Schedule to begin and end

## ▶ Architect Aligns Scope

Scope must be developed, examined, adjusted, and executed throughout course of project







# **Establish Confidence Moving Forward**



# Does everything fit in your Bag?

- Soft Costs
  - ✓ Land Purchase and Utilities
  - ✓ Permits, Studies, Platting, & Compliance
  - ✓ Architectural, Engineering and PM Fees
  - ✓ Testing, Inspections, Geotech, & Surveys
  - ✓ FFE Purchases (What's Not Bolted Down)
  - ✓ Technology
- Construction Costs (or Cost of Work)
  - ✓ Contractor's General Conditions, OH & P
  - ✓ Allowances & Contingencies
  - ✓ Materials Costs & Labor (The Building)
  - ✓ Start Date and Escalation Considerations



**TOTAL PROJECT COSTS**





C.O.W.

SOFT COSTS.....

New Elementary School	Percentage	\$ 39,415,000	\$ 37,108,402	\$ 42,045,083
Construction Guaranteed Maximum Price	126,000	\$ 31,544,100.00	\$ 35,443,652.00	\$ 35,443,652.00
CM Pre-Construction Services (Is it Greenfield or Renovation?)	0.08%	\$ 25,235.28	\$ 18,500.00	\$ -
Architect Fee	6.00%	\$ 1,892,646.00	\$ 1,500,000.00	\$ 1,500,000.00
Architect Reimbursibles	3.50%	\$ 66,242.61	\$ 52,500.00	\$ 52,500.00
Multivista - Photo Documentation	0.25%	\$ 78,860.25	\$ 75,000.00	\$ 75,000.00
3rd Party Code Review - When not in a municipality	0.10%	\$ 31,544.10	\$ 18,750.00	\$ 20,000.00
Building Commissioning	0.25%	\$ 78,860.25		\$ 78,860.25
Wetlands Studies - When not in land purchase	0.10%	\$ 31,544.10		\$ -
Surveyor - for construction	0.10%	\$ 31,544.10		\$ 31,544.10
Geotechnical Engineering - for Construction	0.05%	\$ 15,772.05		\$ 20,000.00
Materials Testing	0.50%	\$ 157,720.50		\$ 157,720.50
Traffic Engineering	0.20%	\$ 63,088.20		\$ 20,000.00
ACM Assessment and Abatement - Existing Facilities	varies	\$ -		\$ -
Testing & Balancing HVAC	0.30%	\$ 94,632.30		\$ 94,632.30
AHERA Initial Survey - All New Buildings	0.05%	\$ 15,772.05		\$ 15,772.05
E-Rate (Building IT Infrastructure- When available in GMP when Not	1.60%	\$ 504,705.60		\$ 504,705.60
Portables	varies	\$ -		\$ -
Furniture Fixtures & Equipment	3.30%	\$ 1,040,955.30		\$ 1,040,955.30
Classroom & Office Technology Equipment	3.50%	\$ 1,104,043.50		\$ 1,104,043.50
Learning Materials - Instructional Supplies	1.50%	\$ 473,161.50		\$ 473,161.50
Library Books	1.40%	\$ 441,617.40		\$ 441,617.40
Fine Arts Supplies and Equipment (K-6, JHS, HS)	1.50%	\$ 473,161.50		\$ 473,161.50
CTE Supplies and Equipment (JHS & HS)	2.10%	\$ -		\$ -
Maintenance, Custodial & Food Service Equipment	0.30%	\$ 94,632.30		\$ 94,632.30
Food Service Cleaning Equipment	0.10%	\$ 31,544.10		\$ 31,544.10
Custodial Equipment & Supplies (OFCI Items)	0.10%	\$ 31,544.10		\$ 31,544.10
Internet Utility (ICTX, AT&T, Consolidated)	0.30%	\$ 94,632.30		\$ 94,632.30
MUD FEES	varies	\$ 135,000.00		\$ 135,000.00
Electric Utility (Centerpoint, Entergy, Mid South)	0.30%	\$ 94,632.30		\$ 94,632.30
Gas Utility (Centerpoint)	0.05%	\$ 15,772.05		\$ 15,772.05
Internal Project Contingency	varies	\$ 752,036.26		\$ -



# Scope to Budget Analysis Benefits

- Tests predetermined constraints
- Confirms Project Priorities
- Charts the Course
- Assists with Design Direction
- Helps with Team Alignment
- Communicates Cause & Effect
- Mitigates Stop & Start Risks





# Where Do We Begin?

- Establish the TEAM and a collective commitment to work together
- Kick-off Meeting for Clarifications
- Recognize the unknowns and develop a plan as soon as possible to mitigate the risks
- Make the plan early and revisit it often to maintain the budget and scope alignment
- Understand the project's unique aspects and current construction market



State Known  
Challenges



Confirm Variables:  
Budget, Program,  
Site, etc.



Stakeholder  
Expectations



# Calculate the Options: Creating a Template





- Use a tool that demonstrates unknown variables and feasible scenarios for further evaluation & test fits
- Real-time adjustments and outcomes
- Evolves to a cost model for design



## Program Opinion of Probable Cost + Scope to Budget Analysis

Prepared by Huckabee

Project Name:

District Project Manager:

Architect:

Program Area	Program SF (Net)	Program SF (Gross)	Parametric Cost Model (\$/SF)	Program Component Cost	Notes
Classroom	50,000	70,000	\$ 250.00	\$ 17,500,000	
Library	5,000	7,000	\$ 200.00	\$ 1,400,000	
Fine Arts (Music & Art)	2,500	3,500	\$ 300.00	\$ 1,050,000	
Physical Education	5,000	7,000	\$ 150.00	\$ 1,050,000	
Child Nutrition (Dining)	5,200	7,280	\$ 250.00	\$ 1,820,000	
Child Nutrition (Kitchen)	2,800	3,920	\$ 500.00	\$ 1,960,000	
Administration	6,500	9,100	\$ 250.00	\$ 2,275,000	
Community	2,000	2,800	\$ 225.00	\$ 630,000	
Building Support	2,000	2,800	\$ 225.00	\$ 630,000	
Plant Services	2,500	3,500	\$ 500.00	\$ 1,750,000	
Un-renovated to Remain	-	-			

Subtotal 83,500 116,900 \$ 257.19 \$ 30,065,000.00

Grossing Factor 40%

Renovation Scope 10,000 \$ 100.00 \$ 1,000,000.00

Demolition Scope 5,000 \$ 10.00 \$ 50,000.00

Un-escalated Opinion of Project Cost \$ 245.19 \$ 31,115,000.00

Bid Date 8/25/22

Analysis Date 2/1/22

Escalation Rate (2021) 0.5% per month \$ (213,554.57) 101%

Escalation Duration (2021) 12/31/21 -1.38 months

Escalation Rate (2022) 0.8% per month \$ 1,857,238.02 100.8%

Escalation Duration (2022) 1/1/22 7.76 months

Total Escalated Opinion of Project Cost \$ 258.15 \$ 32,758,683.45

Owner Budget \$ 25,000,000.00

Over/ Under Budget \$ 7,758,683.45

Approx. New Square Footage (Gross) Over/Under Budget (@ Avg. \$/SF) 30,168

Approx. New Square Footage (Net) Over/Under Budget (@ Avg. \$/SF) 18,101

**Huckabee**  
MORE THAN ARCHITECTS

v3.0



## Program Opinion of Probable Cost + Scope to Budget Analysis

Prepared by Huckabee

Program Area	Program SF (Net)	Program SF (Gross)	Parametric Cost Model (\$/SF)	Program Component Cost
Classroom	50,000	70,000	\$ 250.00	\$ 17,500,000
Library	5,000	7,000	\$ 200.00	\$ 1,400,000
Fine Arts (Music & Art)	2,500	3,500	\$ 300.00	\$ 1,050,000
Physical Education	5,000	7,000	\$ 150.00	\$ 1,050,000
Child Nutrition (Dining)	5,200	7,280	\$ 250.00	\$ 1,820,000
Child Nutrition (Kitchen)	2,800	3,920	\$ 500.00	\$ 1,960,000
Administration	6,500	9,100	\$ 250.00	\$ 2,275,000
Community	2,000	2,800	\$ 225.00	\$ 630,000
Building Support	2,000	2,800	\$ 225.00	\$ 630,000
Plant Services	2,500	3,500	\$ 500.00	\$ 1,750,000
Un-renovated to Remain	-	-		
<b>Subtotal</b>	<b>83,500</b>	<b>116,900</b>	<b>\$ 257.19</b>	<b>\$ 30,065,000.00</b>



## Program Opinion of Probable Cost + Scope to Budget Analysis

Prepared by Huckabee

Grossing Factor



Renovation Scope

Demolition Scope

Un-escalated Opinion of Project Cost

Bid Date

Analysis Date

Escalation Rate (2021)

Escalation Duration (2021)

Escalation Rate (2022)

Escalation Duration (2022)

**Total Escalated Opinion of Project Cost**

Owner Budget

Over/ Under Budget

Approx. New Square Footage (Gross) Over/Under Budget (@ Avg. \$/SF)

Approx. New Square Footage (Net) Over/Under Budget (@ Avg. \$/SF)

40%

10,000

\$

100.00

\$

1,000,000.00

5,000

\$

10.00

\$

50,000.00

\$

245.19

\$

**31,115,000.00**

8/25/22

2/11/22

0.5%

per month

\$

(213,554.57)

101%

-1.38

months

12/31/21

0.8%

per month

\$

1,857,238.02

100.8%

7.76

months

1/1/22

\$

258.15

\$

**32,758,683.45**

\$

25,000,000.00

\$

7,758,683.45

30,168

18,101

## Program Opinion of Probable Cost + Scope to Budget Analysis

Prepared by Huckabee

Grossing Factor		40%			
Renovation Scope		10,000	\$ 100.00	\$ 1,000,000.00	
Demolition Scope		5,000	\$ 10.00	\$ 50,000.00	
Un-escalated Opinion of Project Cost			\$ 245.19	\$ 31,115,000.00	
Bid Date		8/25/22			
Analysis Date		2/11/22			
Escalation Rate (2021)		0.5%	per month	\$ (213,554.57)	101%
Escalation Duration (2021)	12/31/21	-1.38	months		
Escalation Rate (2022)		0.8%	per month	\$ 1,857,238.02	100.8%
Escalation Duration (2022)	1/1/22	7.76	months		
<b>Total Escalated Opinion of Project Cost</b>			\$ 258.15	<b>\$ 32,758,683.45</b>	
Owner Budget				\$ 25,000,000.00	
Over/ Under Budget				\$ 7,758,683.45	
Approx. New Square Footage (Gross) Over/Under Budget (@ Avg. \$/SF)				30,168	
Approx. New Square Footage (Net) Over/Under Budget (@ Avg. \$/SF)				18,101	



## Program Opinion of Probable Cost + Scope to Budget Analysis

Prepared by Huckabee

Grossing Factor		40%			
Renovation Scope		10,000	\$ 100.00	\$ 1,000,000.00	
Demolition Scope		5,000	\$ 10.00	\$ 50,000.00	
Un-escalated Opinion of Project Cost			\$ 245.19	\$ 31,115,000.00	
Bid Date		8/25/22			
Analysis Date		2/11/22			
Escalation Rate (2021)		0.5%	per month	\$ (213,554.57)	101%
Escalation Duration (2021)	12/31/21	-1.38	months		
Escalation Rate (2022)		0.8%	per month	\$ 1,857,238.02	100.8%
Escalation Duration (2022)	1/1/22	7.76	months		
<b>Total Escalated Opinion of Project Cost</b>			\$ 258.15	\$ 32,758,683.45	
Owner Budget				\$ 25,000,000.00	
Over/ Under Budget				\$ 7,758,683.45	
Approx. New Square Footage (Gross) Over/Under Budget (@ Avg. \$/SF)				30,168	
Approx. New Square Footage (Net) Over/Under Budget (@ Avg. \$/SF)				18,101	

## Program Opinion of Probable Cost + Scope to Budget Analysis

Prepared by Huckabee

Grossing Factor	40%			
Renovation Scope	10,000	\$ 100.00	\$ 1,000,000.00	
Demolition Scope	5,000	\$ 10.00	\$ 50,000.00	
Un-escalated Opinion of Project Cost		\$ 245.19	\$ 31,115,000.00	
Bid Date	8/25/22			
Analysis Date	2/11/22			
Escalation Rate (2021)	0.5%	per month	\$ (213,554.57)	101%
Escalation Duration (2021)	12/31/21 -1.38	months		
Escalation Rate (2022)	0.8%	per month	\$ 1,857,238.02	100.8%
Escalation Duration (2022)	1/1/22 7.76	months		
<b>Total Escalated Opinion of Project Cost</b>		\$ 258.15	\$ 32,758,683.45	
Owner Budget			\$ 25,000,000.00	
Over/ Under Budget			\$ 7,758,683.45	
Approx. New Square Footage (Gross) Over/Under Budget (@ Avg. \$/SF)			30,168	
Approx. New Square Footage (Net) Over/Under Budget (@ Avg. \$/SF)			18,101	



## Program Opinion of Probable Cost + Scope to Budget Analysis

Prepared by Huckabee

Grossing Factor	40%			
Renovation Scope	10,000	\$ 100.00	\$ 1,000,000.00	
Demolition Scope	5,000	\$ 10.00	\$ 50,000.00	
Un-escalated Opinion of Project Cost		\$ 245.19	\$ 31,115,000.00	
Bid Date	8/25/22			
Analysis Date	2/11/22			
Escalation Rate (2021)	0.5%	per month	\$ (213,554.57)	101%
Escalation Duration (2021)	12/31/21 -1.38	months		
Escalation Rate (2022)	0.8%	per month	\$ 1,857,238.02	100.8%
Escalation Duration (2022)	1/1/22 7.76	months		
<b>Total Escalated Opinion of Project Cost</b>		\$ 258.15	<b>\$ 32,758,683.45</b>	
Owner Budget			\$ 25,000,000.00	
Over/ Under Budget			\$ 7,758,683.45	
Approx. New Square Footage (Gross) Over/Under Budget (@ Avg. \$/SF)			30,168	
Approx. New Square Footage (Net) Over/Under Budget (@ Avg. \$/SF)			18,101	

## APPLYING THE TEMPLATE...











# Questions?

