

LCA Project Prioritization

Consultants: Colin Gavigan, Mickey
Schindler, Matt Musilli



Who We Are

- Muhlenberg Senior College Students
- Business Course:
 - Bus 475: Business and Policy
 - Taught by Professor Roland Kushner
- Working with Liesel Gross and Phil DePoe throughout the semester
 - February – April 2018



What is the best way to prioritize LCA projects in an effective and efficient manner?

Our Process

1. Met with LCA to learn about the company and the industry
2. Talked through what would help LCA the best
 - Prioritize projects
3. Learn and understand the water market
4. Understand the locations that LCA serves, the current projects, and the costs of the projects
5. Understand important and unique inputs go into specific projects
6. Achieve proper ranking system for importance of specific issues
7. Create prioritization tool that is comprehensible and easy to use



Our Task

- Create easy to use prioritization tool based on LCA staff judgment
- Our methodology: Create a spreadsheet tool that can prioritize a multitude of projects
 - The tool is adaptable and can be changed for different scenarios
 - Tool is easy to learn and can be used at LCA's discretion when prioritizing potential projects



Example of Tool

Project Name:	Park Pump Station Upgrade			
Date:	4/22/18			
PM:	CEV			
Issue				
	Subsets	% of Subset	Monetary Value	Weight
Problem/Reason				
	Imminent Failure	20	\$0.00	
	Performance Requirements	10	\$0.00	
	Regulatory Requirements	15	\$0.00	
Total		45	\$0.00	45
Cost of Project				
	Staff	5	\$100,000	
	Engineering	5	\$630,423	
	Construction Contract	20	\$3,834,721	
	Contingency	2	\$200,000	
Total		32	(\$4,765,144)	32
Cost Reduction From Project				
	Labor Reduction	10	\$0.00	
	Maintenance Reduction	10	\$0.00	
	Other	2	\$0.00	
Total		22	\$0.00	22
Return on Investment				
	Developer Contributions	0	\$0.00	
	Recovery Charges	0	\$0.00	
	Other	1	\$0.00	
Total		1	\$0.00	1
Total Project Cost			\$ (4,765,144.00)	
Total Project Score				100

Project Name:	Heidelberg Heights Sanitary Sewer Rehabilitation			
Date:	4/22/18			
PM:	CEV			
Issue				
	Subsets	% of Subset	Monetary Value	Weight
Problem/Reason				
	Imminent Failure	35	\$0.00	
	Performance Requirements	1	\$0.00	
	Regulatory Requirements	2	\$0.00	
Total		38	\$0.00	38
Cost of Project				
	Staff	1	\$10,000	
	Engineering	2	\$0	
	Construction Contract	25	\$296,500	
	Contingency	1	\$20,000	
Total		29	(\$326,500)	29
Cost Reduction From Project				
	Labor Reduction	15	\$0.00	
	Maintenance Reduction	15	\$0.00	
	Other	2	\$0.00	
Total		32	\$0.00	32
Return on Investment				
	Developer Contributions	0	\$0.00	
	Recovery Charges	0	\$0.00	
	Other	1	\$0.00	
Total		1	\$0.00	1
Total Project Cost			\$ (326,500.00)	
Total Project Score				100



Our Findings

- LCA staff can use this tool to internally rank projects
- Tool allows for projects (both in the long term and short term) to be prioritized
- Can be used in both the Allentown and Suburban Division
- Provides a more focused picture look (i.e. “short term look”)



Conclusion

- Importance of different issues will be case by case
- Relevant monetary values will be visible and impact decision making process
- Tool can adjusted to suit different variables
- Our tool could be used more in short term decision making (specifically annual projects), while other tools that have been developed are focusing on a broader/long term picture of prioritization



Questions?

