

Economics of the New Harbor

Presentation to

Valdez City Council

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Agenda

- **Life Cycle Cost Analysis**
- **Assumptions**
- **Findings**
- **Next Steps**

Life Cycle Cost Analysis: Approach

- **Look at all cash costs incurred over time**
 - Planning, construction, operations and maintenance, repair and major maintenance, and replacement
- **“Discount” the costs to today’s dollars**
- **Find the total discounted cost today**
- **Find the equivalent uniform annualized cost**
 - Costs that need to be covered each year, in today’s dollars

Life Cycle Cost Analysis: Caveats

■ Life Cycle Costing

- ... takes a long-term view rather than focus on immediate needs.
- ... is not a cash flow analysis and does not account for cash reserves and needs.
- ... assumes future increases in excess of inflation to cover debt payment requirements.

Assumptions: Capital Costs

- **The analysis only includes improvements in and adjacent to the new harbor:**
 - Float system
 - Fuel & sewer pump out float
 - Uplands improvements (parking, office, etc.)
 - Landing craft ramp
 - Crane dock
 - Drive down / work float
 - East breakwater fill area improvements
 - Boat launch ramp

Assumptions: Operations and Maintenance

■ Moorage revenues are estimated using:

- Permanent and transient moorage space, for each design alternative
- Permanent moorage uses the rate of \$26.62 per foot, adjusted for increases taking effect in 2013 and 2014
- Transient moorage uses the monthly pre-paid rate of \$8.75 per foot

■ Non-moorage revenues and costs are estimated using:

- Amounts relative to moorage revenues
- Assumptions about how they will change:
 - ◆ Proportionally with changes in moorage
 - ◆ Disproportionally with changes in moorage
 - ◆ Unchanged

■ Periodic maintenance is estimated to cost:

- 2.2% of capital cost every 5 years
- 1.5% of capital cost every 15 years

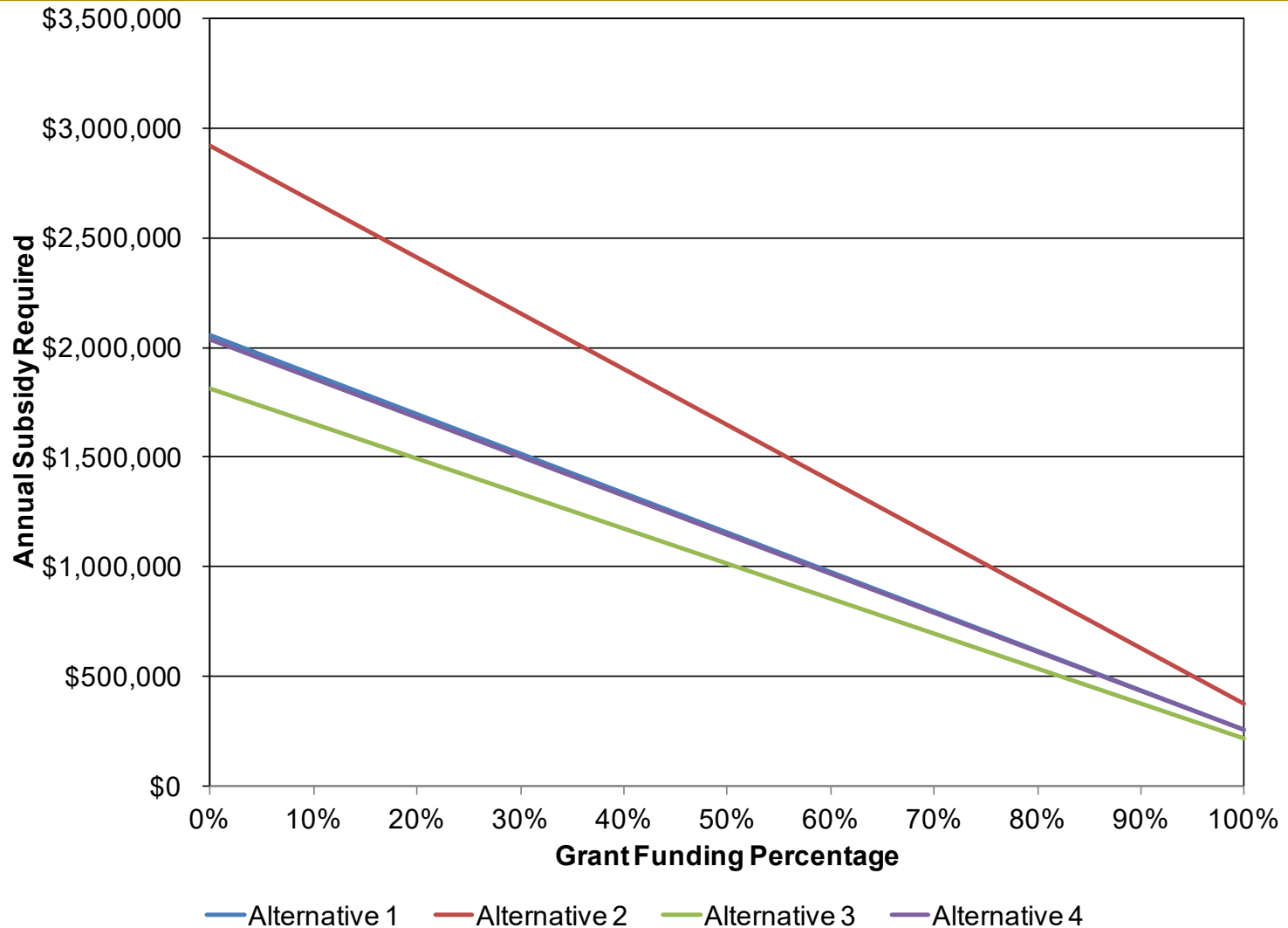
Findings: Base Subsidy Amounts

Cost Category	Annualized (\$)			
	Alt 1	Alt 2	Alt 3	Alt 4
Capital Costs, New Harbor	1,799,315	2,543,122	1,590,426	1,775,437
M&MR, New Harbor	216,156	305,512	191,062	213,288
O&M, New Harbor	294,454	280,321	305,318	294,454
Total Costs	2,309,926	3,128,954	2,086,806	2,283,179

Revenue Category	Annual (\$)			
	Alt 1	Alt 2	Alt 3	Alt 4
Moorage, New Harbor	205,776	174,988	229,441	205,776
Non-moorage, New Harbor	47,038	36,347	47,658	42,742
Total Revenue	252,814	211,335	277,099	248,518

Subsidy Required	2,057,112	2,917,619	1,809,707	2,034,661
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Findings: Effect of Capital Grants



Next Steps

■ Revisions to assumptions and analysis process

- Transient use assumptions and revenues
- Non-moorage revenues

■ Expansion to a whole-system view

- Evaluate improvements to existing harbor
- Evaluate other uplands improvements
- Consider replacement schedule and cost for existing harbor
- Consider revenues in both existing and new harbors

■ Reporting