
Capital Reserve Modeling

Commission Retreat

March 2025



Capital Reserve Model

What is it?

A spreadsheet tool which allows the Port to forecast required cash reserves for longrange (20 year) capital improvement planning.



Capital Reserve Model

Utility

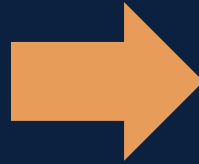
- Long range capital improvement planning (beyond 5 year CIP)
- Asset management
- Provide basis for necessary rate adjustments
- Public outreach / communication tool



How It Works

Inputs (Assumptions)

- Project array
 - Project cost (today \$)
 - Year planned
 - Funding sources & amounts (e.g., *NOI*, *IDD*, *Grants*)
- Rate of inflation (3%)
- Interest earned (1%)



Output

Annual capital reserve
balances required to fund long
term project array



Cost Centers

Boat Haven Moorage

Boat Haven Yard

Point Hudson

Herb Beck Marina

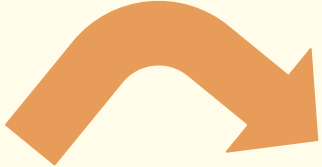
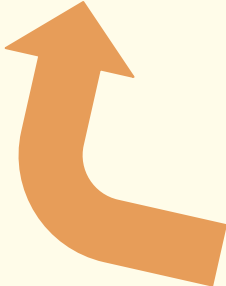
JCIA

Short's Farm

Water Access

- City Dock
- Gardiner
- Hadlock
- Mats Mats
- Union Wharf

Revenue
Generated



Cash
Reserved

Cost
Center



Cash
Invested

Money generated by a facility is reinvested into that facility



Boat Haven Moorage Example Project Array

Project	Useful Life (Yrs)	Yr Scheduled	Est. Cost
Marina Dredge	20	2027	\$700,000
Breakwater Restoration & Repair	25	2050	\$1,500,000
Boat Launch Restoration & Repair	40	2045	\$1,200,000
A / B - Dock & Pile Replacement	35	2050	\$8,786,000
C - Dock & Pile Replacement	35	2040	\$5,856,000
D - Dock & Pile Replacement	35	2040	\$5,893,000
Linear - East/West Dock & Pile Replacement	35	2035	\$3,452,000
Linear - North/South Dock & Pile Replacement	65	2065	\$2,485,000
Commercial Basin - Dock & Pile Reconfiguration (Ph. 1)	45	2040	\$10,000,000
Commercial Basin - Dock & Pile Reconfiguration (Ph. 2)	N/A	2050	\$12,000,000
Bulkhead Replacement	75	2045	\$4,320,000
300 Ton Lift Pier Replacement	75	2070	\$9,174,000
75 Ton Lift Pier Replacement	75	2070	\$3,833,000



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Total Project Array Cost
\$69,199,000



Boat Haven Moorage Example Project Array

For future discussion:

- Accuracy of forecasted inflation & interest
- Project schedule & timing
- Updated design & cost estimates (e.g., Commercial Basin)
- Prioritization of expansion projects vs. maintaining existing infrastructure
- Replacement vs. restoration
- Updated conditions assessments

Changes are expected and will result in updated model output



Funding Scenarios

current

Scenario 1

NOI Only

Project array **fully funded by revenue generated** by Boat Haven Moorage.

Scenario 2

Grant Realistic

Ambitious but realistic **grant contributions applied** with remainder of costs covered by **NOI**

Scenario 3

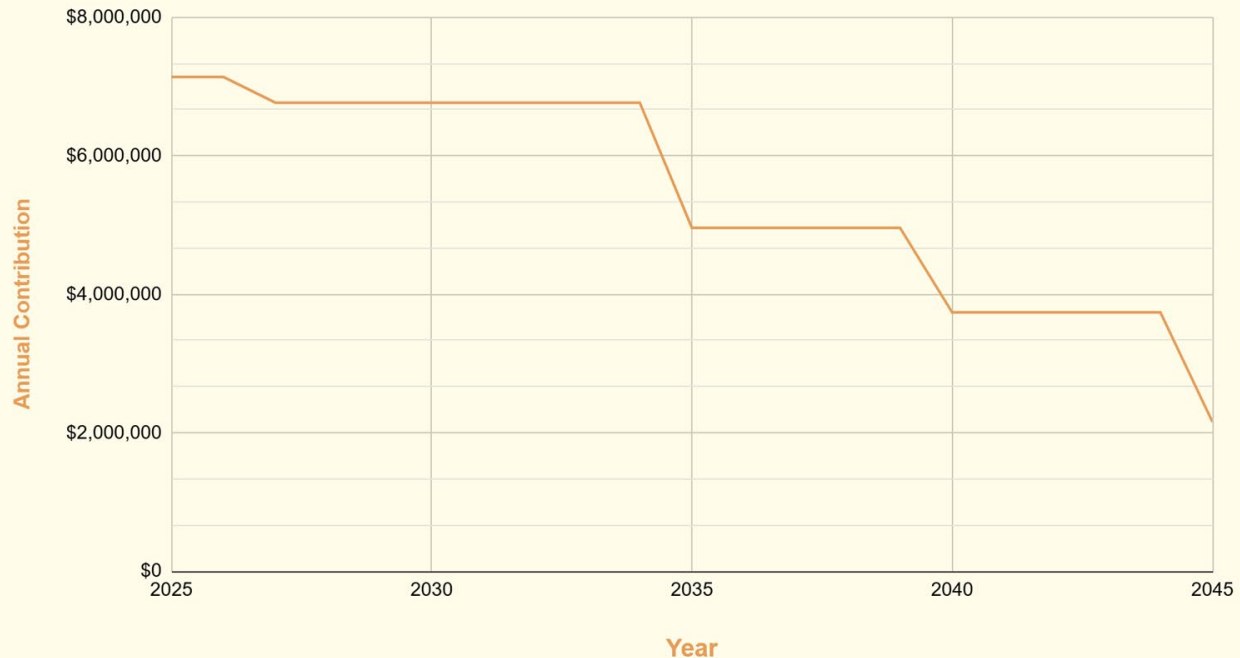
IDD Flush!

Ambitious but realistic **grant contributions applied** with remainder of costs split between **NOI** and **IDD**.

Scenario #1 - NOI Only

20 Yr Contribution: **\$114,069,136**
Average Annual Contribution: **\$5,431,864**

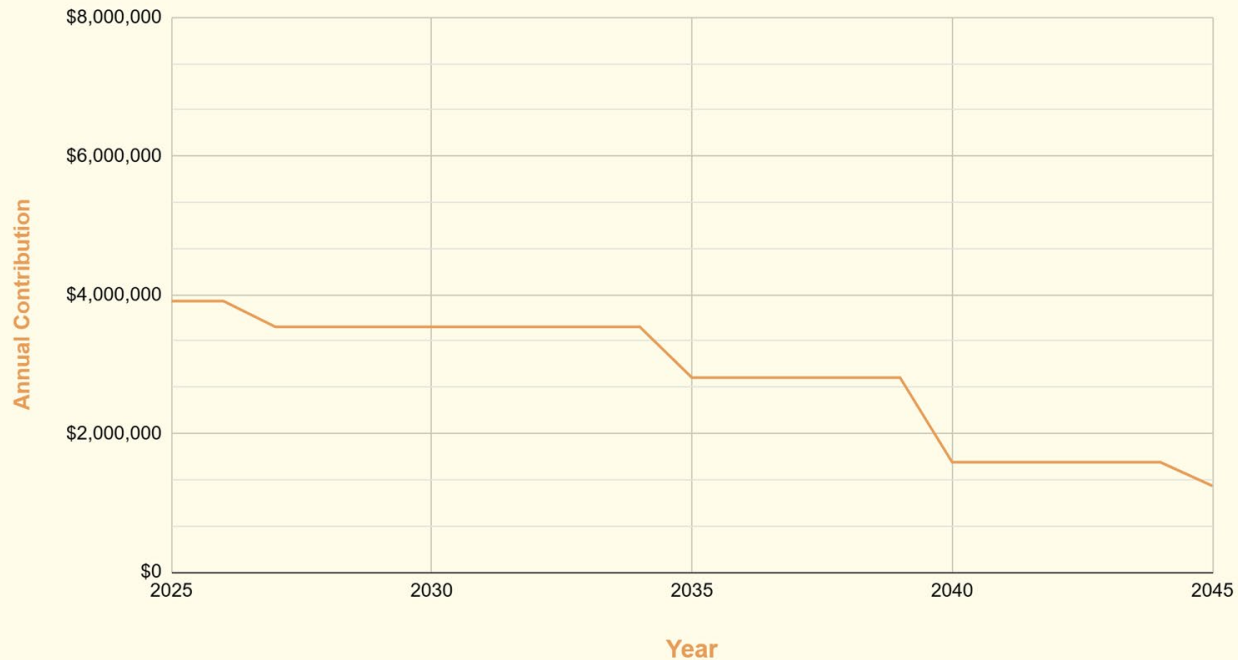
Annual Reserve Contributions (BH Moorage)



Scenario #2 - Grants & NOI

20 Yr Contribution: **\$59,307,690**
Average Annual Contribution: **\$2,824,176**

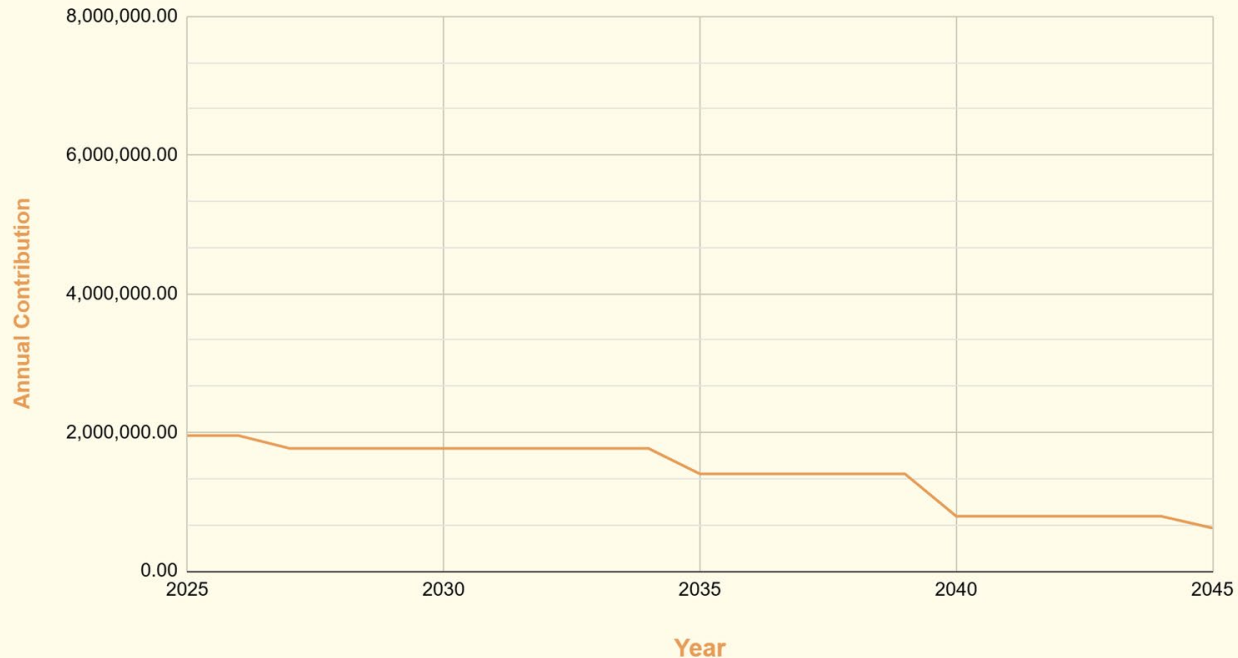
Annual Reserve Contributions (BH Moorage)



Scenario #3 - IDD, Grants, NOI

20 Yr Contribution: **\$29,653,845**
Average Annual Contribution: **\$1,412,088**

Annual Reserve Contributions (BH Moorage)



Scenario Comparison

Scenario 1

NOI Only

Funding Ratio

NOI:IDD:Grant

1:0:0

20 Yr Contribution

\$114,069,136

Average Annual

\$5,431,864

Scenario 2

Grant Realistic

Funding Ratio

NOI:IDD:Grant

1:0:1

20 Yr Contribution

\$59,307,690

Average Annual

\$2,824,176

Scenario 3

IDD Flush!

Funding Ratio

NOI:IDD:Grant

1:1:2

20 Yr Contribution

\$29,653,845

Average Annual

\$1,412,088

Takeaways

1. The Capital Reserve Model is a useful tool for the Port's long-range capital project planning.
2. This exercise has revealed some important and challenging decisions that the Port has in its future.
3. This tool can play a critical role in informing the path forward.

