University-National Oceanographic Laboratory System

UNOLS Report
RVTEC Annual Meeting

~ Year in Review and 2009 Plans~
Highlights, Activities, Highlights

October 28-30, 2008

UNOLS Report

- 2008 Highlights
- 2008 Activities
- UNOLS Policy on Committee Recommendations
- Fleet Improvement Plan – Findings and Recommendations
- UNOLS Ship Scheduling and Operation Issues
- UNOLS Goals for 2009

2008: Highlights

- R/V Marcus G. Langseth begins science operations as a UNOLS Vessel - February 2008
- First UNOLS 3-D seismic cruise – Summer 2008

2008: Activities

- Ad-Hoc Committee continues work to establish best practices in Data Management
- SMR Project – FIC is establishing target and threshold values for Science Mission Requirements. Community Ocean Class SMR survey was conducted.
- Fleet Improvement Plan drafted – slides to follow.
- TWIC - UNOLS posted information about TWIC for the UNOLS Community: http://www.unols.org/info/UNOLS_TWIC_INFO_051408.pdf
- Fleet Renewal - UNOLS continues to stay abreast of on-going Fleet Renewal activities (Regional Class, Ocean Class, Alaska Region Research Vessel)

UNOLS Policy on Committee Recommendations:

- Although the Charter states that committee recommendations to funding agencies shall be delivered through the UNOLS Council, UNOLS has lacked a consistent process to route those recommendations through Council.
- *Therefore, UNOLS Council is implementing a process whereby all significant recommendations from UNOLS Standing and Ad-hoc committees be reviewed, approved and endorsed by the UNOLS Council before being transmitted to the Federal Agencies and facility operating institutions.*
- *Significant = $1M*

UNOLS Fleet Improvement Plan

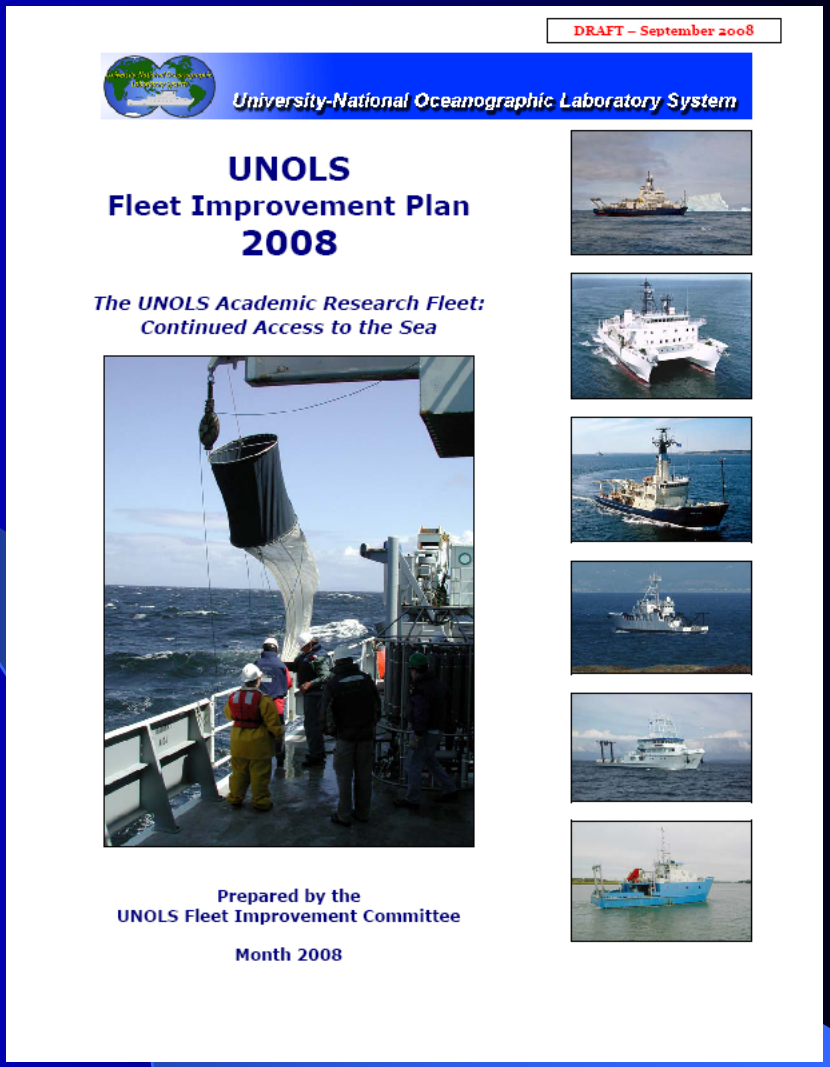
Status

All chapters are drafted.

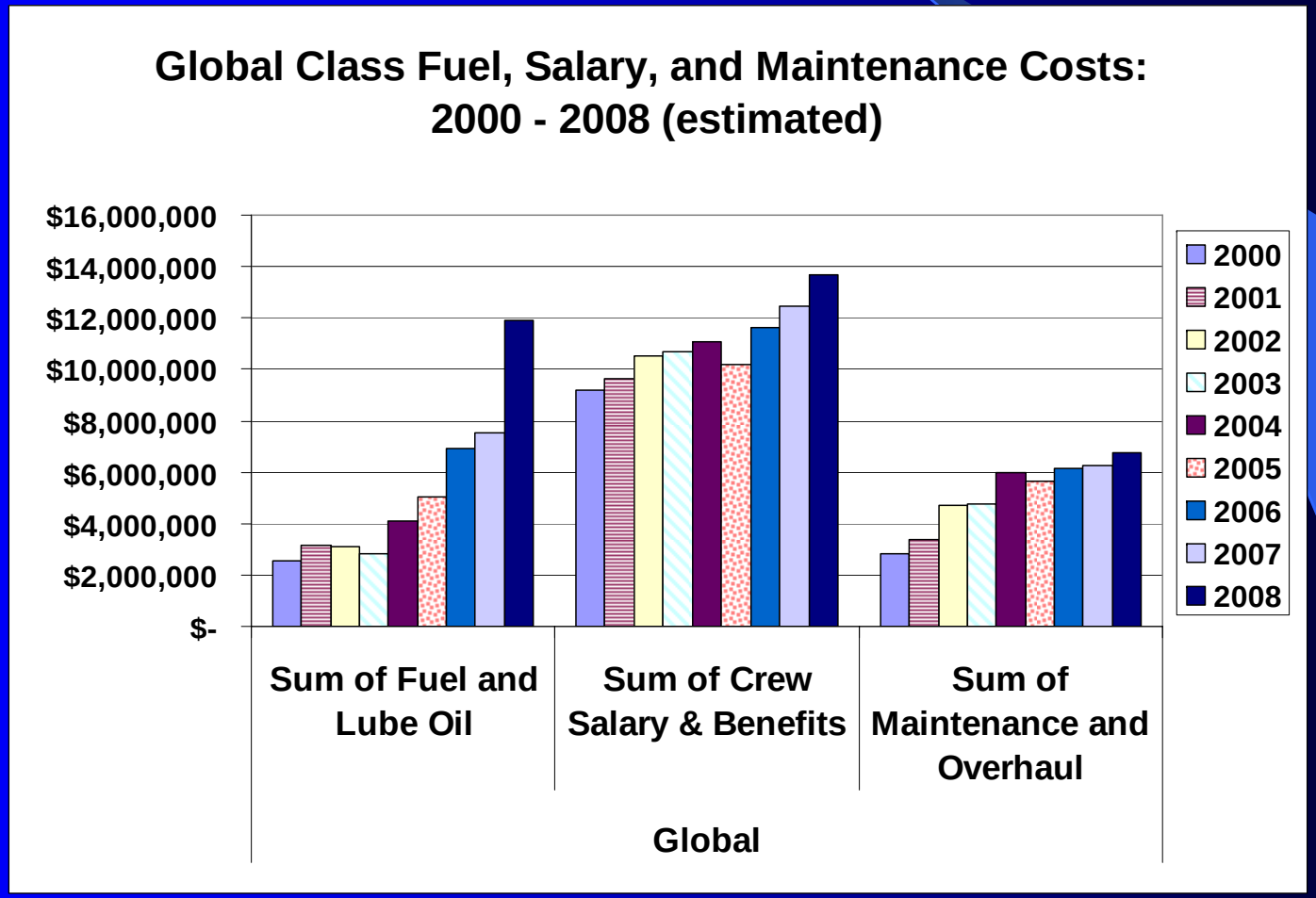
Feedback from fall meetings will be incorporated and Executive Summary will be drafted.

Submitted to Council by year's end.

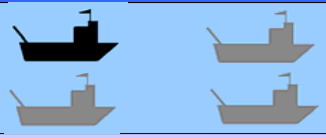
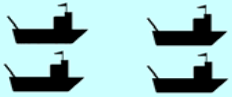
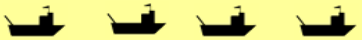
A summary of some of the Findings and Recommendations are provided in following slides. →



Finding: Fleet is aging and facing severe budget constraints and escalating costs



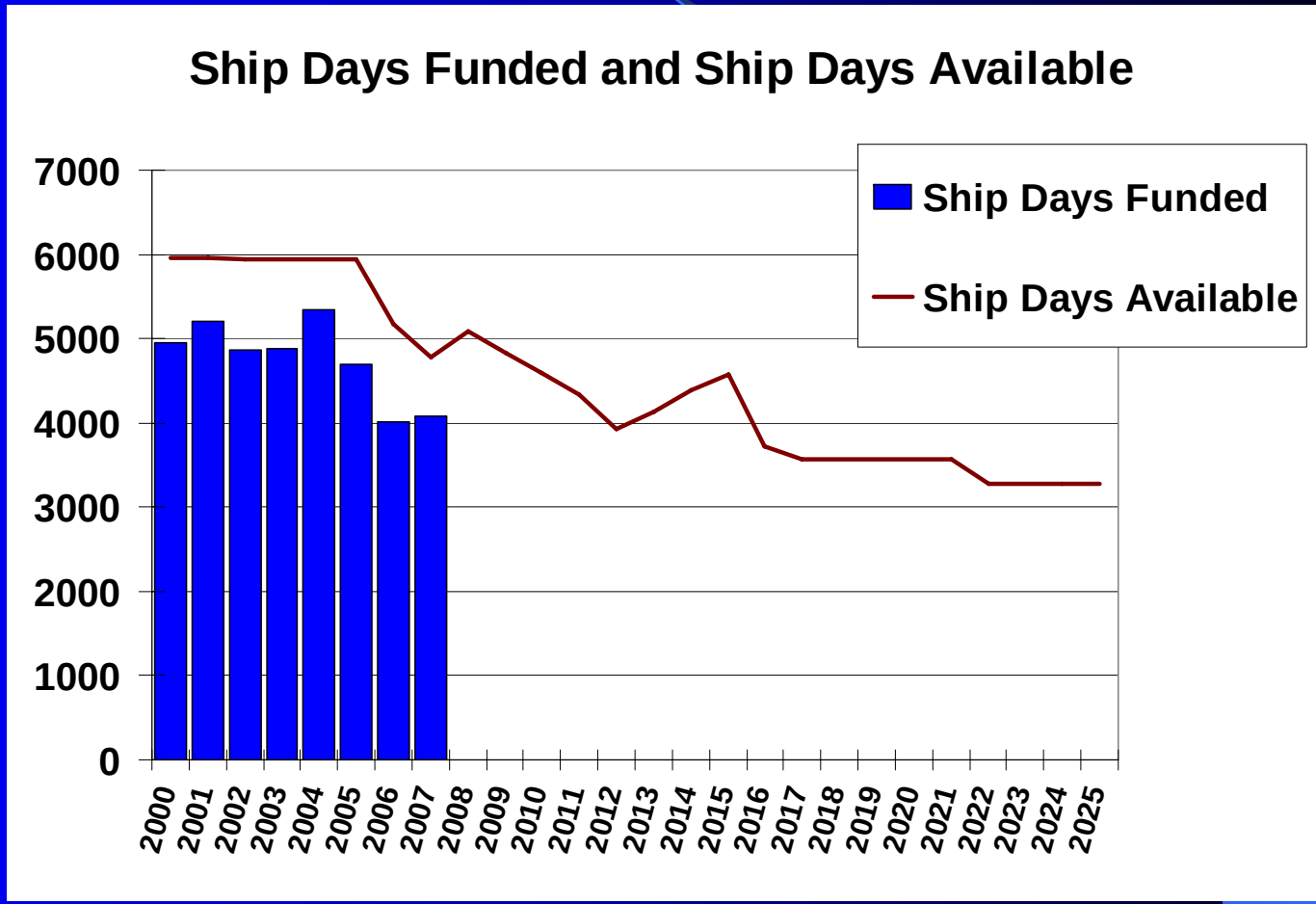
Finding: By 2025 there will be fewer ships in the UNOLS Fleet

	2008	2025
Global Class		
Ocean Class		
Intermediate Class		
Regional Class		
Regional/ Coastal Class		
Local Class		
Total Ships	23	14
Total Berths	492	331
Available Capacity	5085	3270

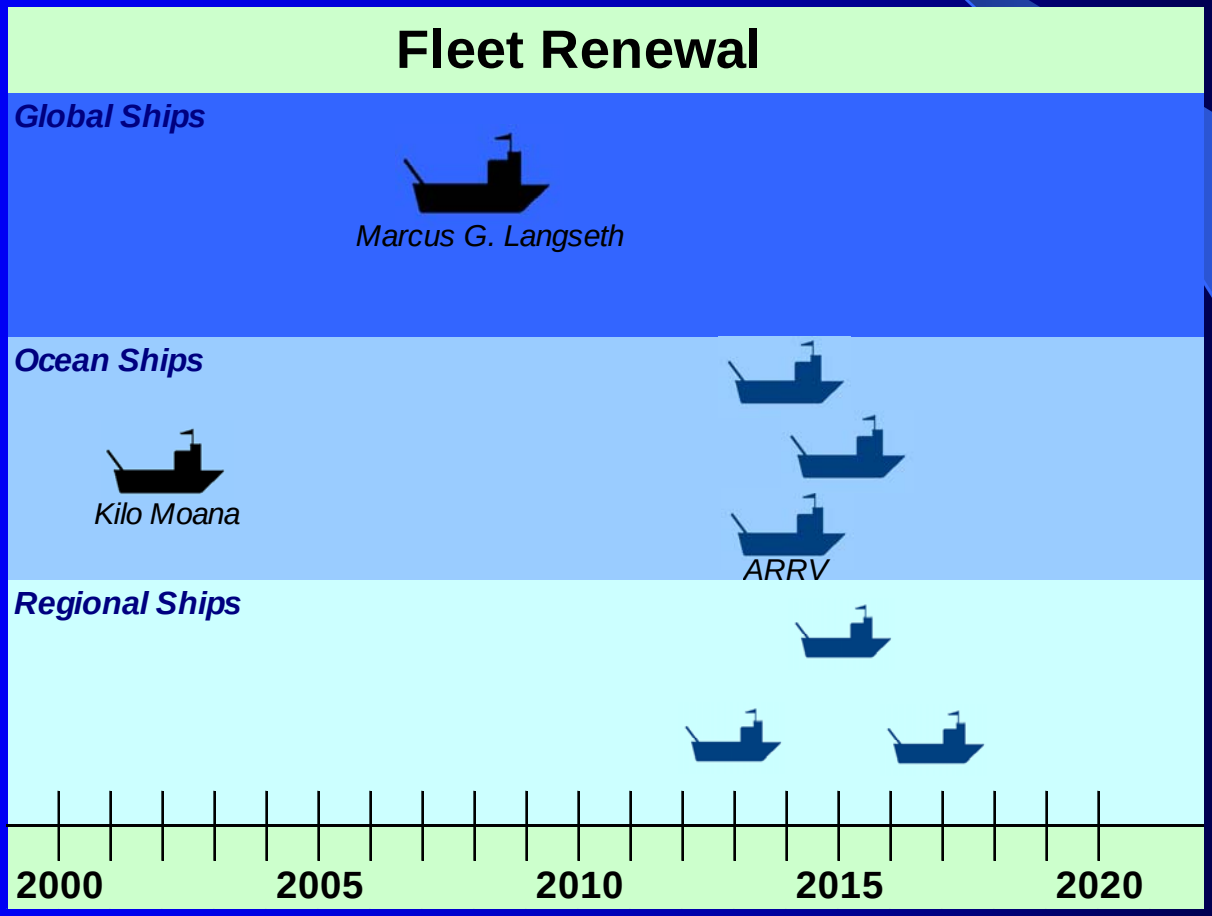
- 23 ships in 2008 → 14 ships in 2025
- From 5085 ship days → 3270 in 2025
- By 2017, all Intermediate size ships and all but one Local Class ships will be retired.
- By 2025, there will be only three Global class ships to support seismic, submersible operations, and general-purpose ops.

Finding: Ship day capacity will shrink below current demand

By 2016 the fleet's ship day capacity will fall below the 2007 day usage.



FIP Recommendation: Strongly recommend that the Federal agencies implement the fleet renewal activities that are currently underway.

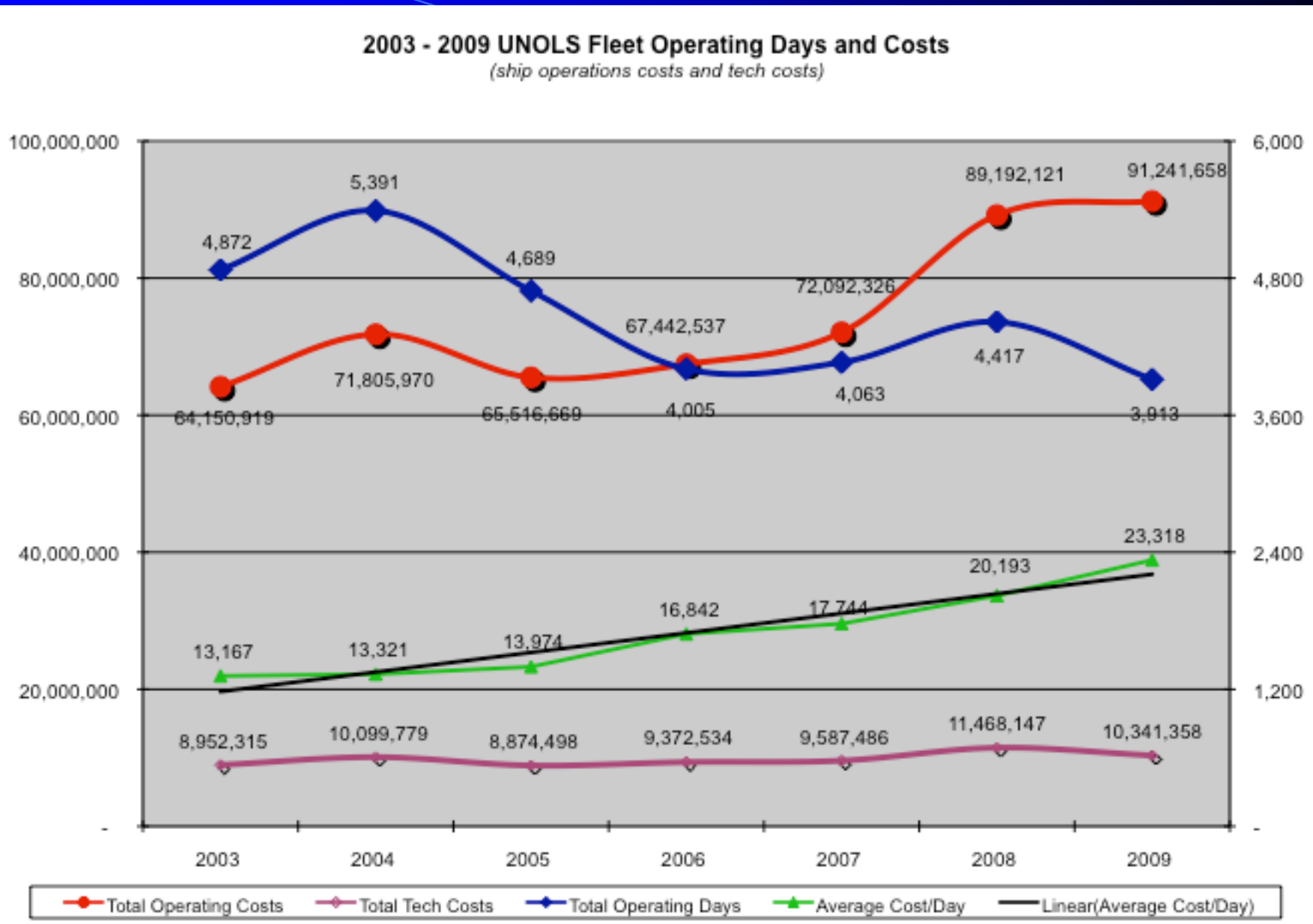


Additional Recommendations

- Begin the acquisition process now for a minimum of 1, preferable 2 new general-purpose Global Class ships
- Encourage the replacement of Local and Coastal/ Regional vessels
- Some ships nearing retirement should have their service life extended.
- If budget projections remain at low level, consider retirement of the least capable ships.
- Increased funding for support of ocean science, as wells as increased funding for facility construction, maintenance, and operation is required.
- **New ships with technically sophisticated equipment will require more highly-trained and specialized personnel to provide technical support. Personnel strategies are needed to improve the staffing and retention of experienced personnel.**

UNOLS Ship Scheduling and Operation Issues:

- **Fleet Operations in 2009** –The cost of 2009 ship operations for NSF and ONR are circa $13M and $6M over budgeted funds for a total projected shortfall of about $19M.
- **Escalating Ship Operation Costs** - The estimated total fleet ship operating costs are almost $1M more than they were in 2008 (1% increase) but the number of days supported is reduced by just over 13% dropping from around 4,400 operating days to just over 3,800.

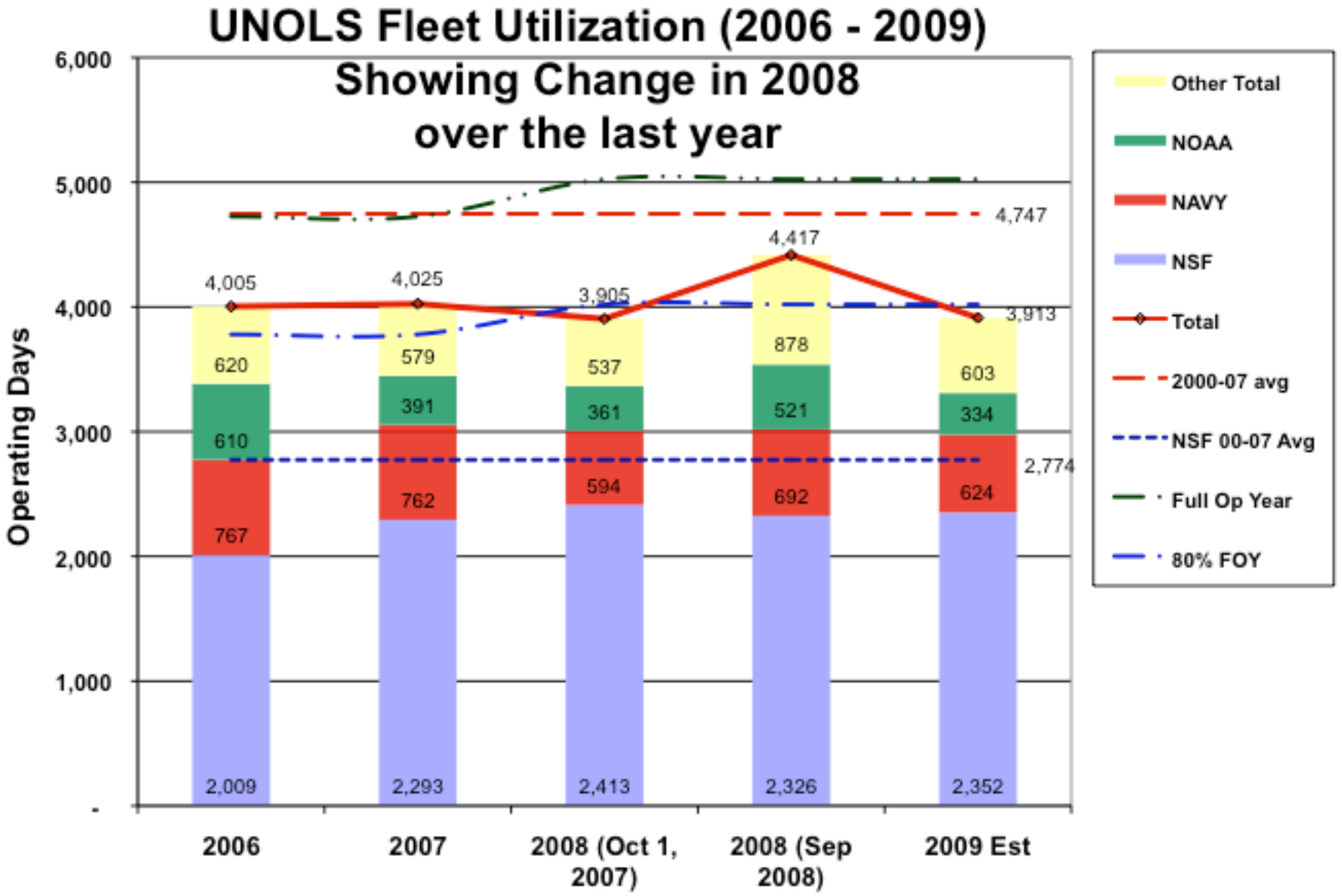

2003 - 2009 UNOLS Fleet Operating Days and Costs
(ship operations costs and tech costs)
100,000,000
80,000,000
60,000,000
40,000,000
20,000,000
-
6,000
4,800
3,600
2,400
1,200
-
5,391
4,872
4,689
89,192,121
91,241,658
72,092,326
67,442,537
71,805,970
64,150,919
65,516,669
4,005
4,063
4,417
3,913
23,318
20,193
16,842
17,744
13,167
13,321
13,974
8,952,315
10,099,779
8,874,498
9,372,534
9,587,486
11,468,147
10,341,358
2003
2004
2005
2006
2007
2008
2009
Total Operating Costs
Total Tech Costs
Total Operating Days
Average Cost/Day
Linear(Average Cost/Day)

Why the Big Change in Cost? And the Reduction in Days?

- Lack of work from "Other" and NOAA in 2009 compared to 2008, creates higher day rates for other NSF and Navy and the potential need to lay up ships.
- Higher percentage of 2009 cruises on Large vessels compared to 2008 increases the average cost per day of the fleet.
- Higher fuel costs, which impact large vessels more (50¢/gal change = $1,250 per day change in day rate for Global Ships)
- Other inflationary costs for personnel, maintenance, regulatory compliance, etc.

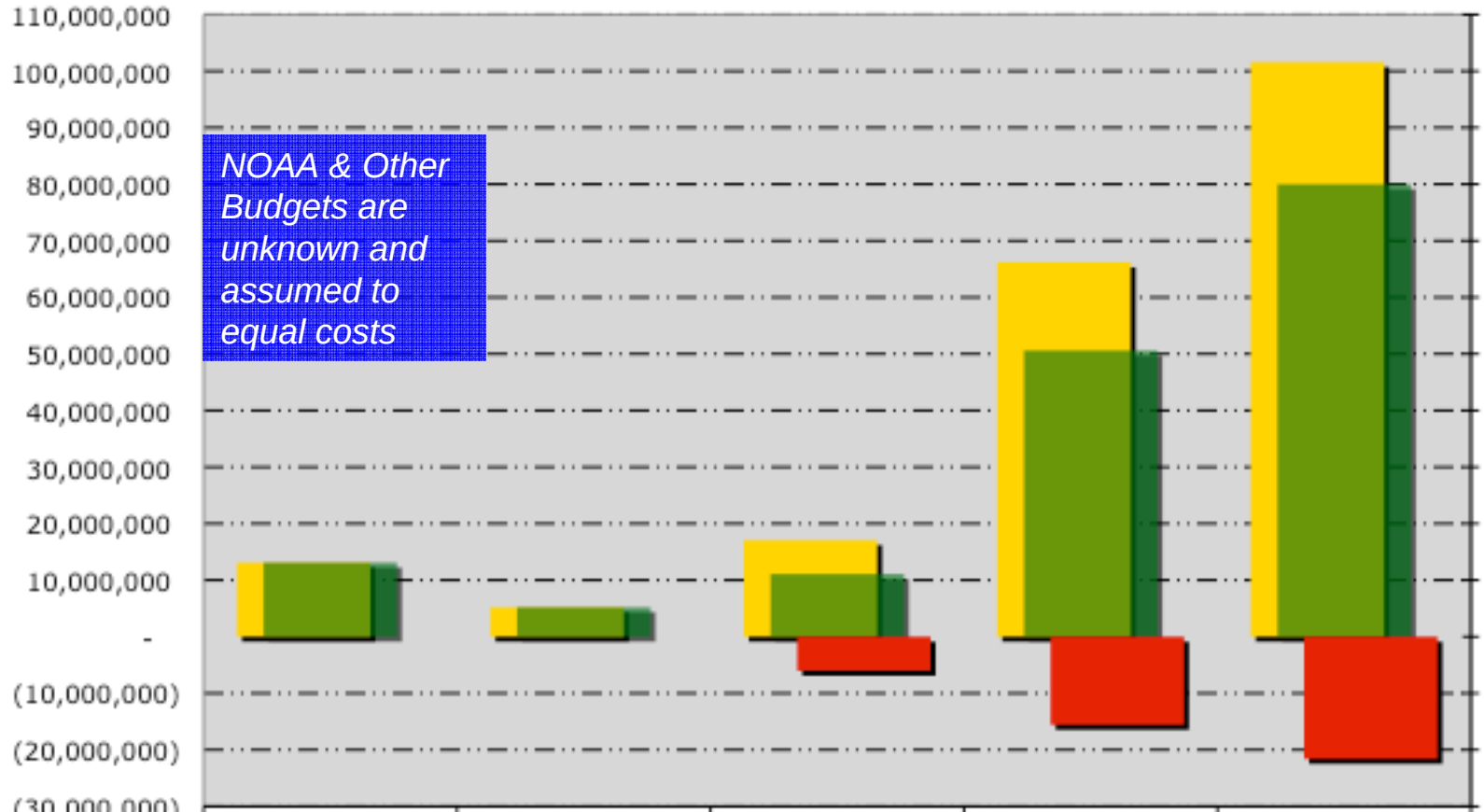
Will things get better like they did last year?

- Next chart shows 2008 days and costs as of Oct. 1, 2007 compared to those days and costs for 2008 now and for 2009.
- Between then and now a significant amount of Private and Institutional work was added to the 2008 schedules along with some additional Navy work.
- Only such work on the horizon for 2009 at the moment is the Walton Smith survey work, other survey work on Kilo Moana and perhaps some additional wind farm work.

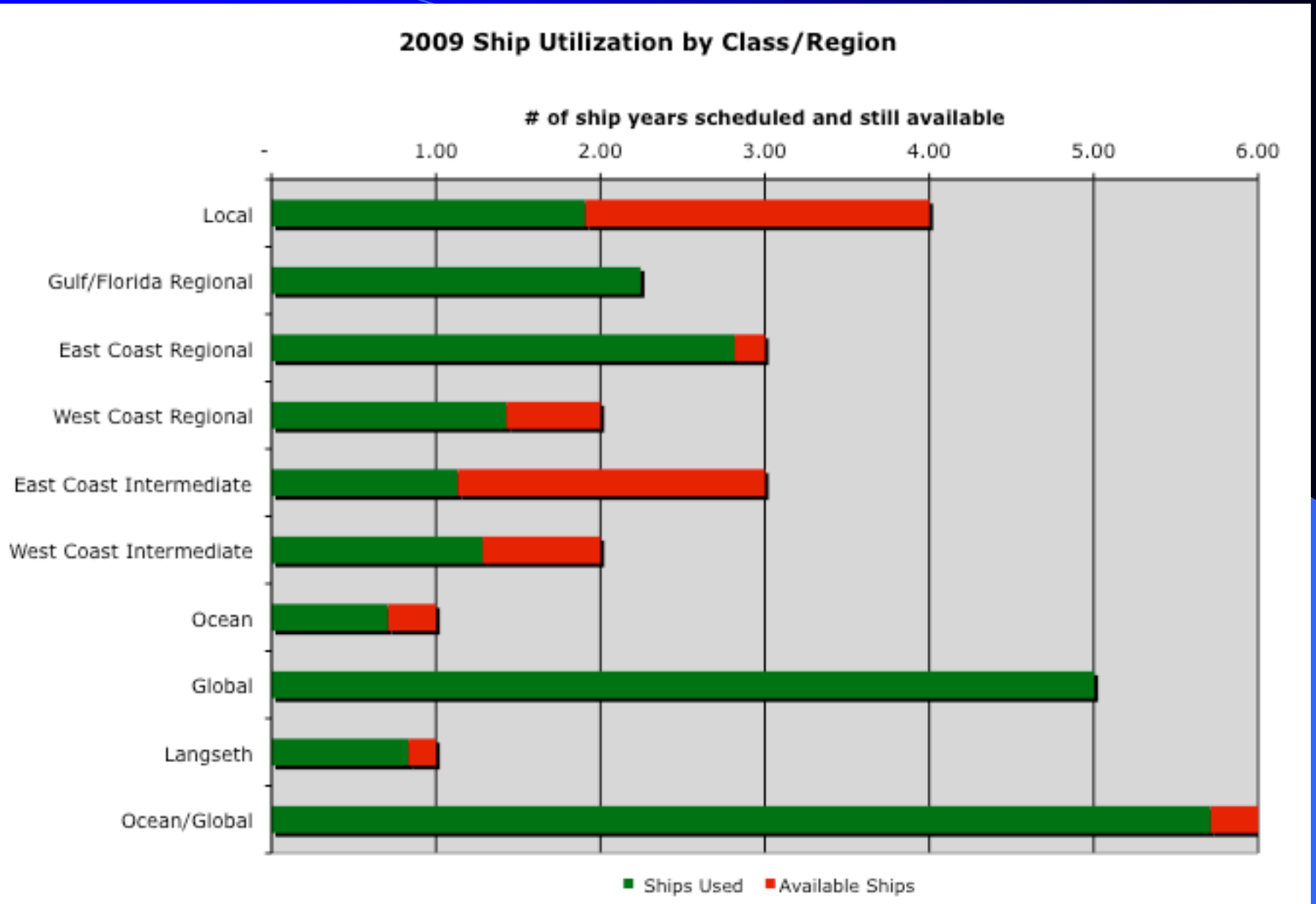

UNOLS Fleet Utilization (2006 - 2009)
Showing Change in 2008
over the last year
Operating Days
6,000
5,000
4,000
3,000
2,000
1,000
-
4,005
4,025
3,905
4,417
3,913
4,747
2,774
620
610
767
2,009
579
391
762
2,293
537
361
594
2,413
878
521
692
2,326
603
334
624
2,352
2006
2007
2008 (Oct 1, 2007)
2008 (Sep 2008)
2009 Est
Other Total
NOAA
NAVY
NSF
Total
2000-07 avg
NSF 00-07 Avg
Full Op Year
80% FOY

2009 Projections of Costs & Budgets

(Ship Operations and Technican Costs)



	Other including Inst/State	NOAA	Navy	NSF	Total Fleet
2009 Ship and Tech Costs	13,105,976	5,208,307	17,085,960	66,182,773	101,583,016
Estimated Budget	13,105,976	5,208,307	11,078,432	50,591,929	79,984,644
Budget Differential	-	-	(6,007,528)	(15,590,844)	(21,598,372)


2009 Ship Utilization by Class/Region
# of ship years scheduled and still available
-
1.00
2.00
3.00
4.00
5.00
6.00
Local
Gulf/Florida Regional
East Coast Regional
West Coast Regional
East Coast Intermediate
West Coast Intermediate
Ocean
Global
Langseth
Ocean/Global
Ships Used
Available Ships

Agency recommendations regarding 2009 Fleet Operations:

- Lay up one NSF Intermediate Class ship on the east coast and fund only a partial schedule for Seward Johnson.
- Determination of whether to lay up *Endeavor* or *Oceanus*.
- Plan partial lay up for the *New Horizon*.
- NSF ship operations would fund approximately $6M of 2009 operations from FY2010 funds.
- NSF would attempt to find an additional $6M to $7M.
- ONR would attempt to find an additional $6M.
- Ship Operators would continue to find ways to reduce costs.
- Operators of Global and Ocean class vessels would work to effectively schedule and support work from other funding sources.
- Intermediate, Regional and Local vessels operators would seek appropriate opportunities to support research and education programs supported by other funding sources.

UNOLS Response to Agency Recommendations

- Formed Ad hoc committee to review agency recommendations: Mary Jane Perry (Chair), Vernon Asper, and John Morrison
- Circulated agency recommendations and invited member feedback
- Ad hoc committee is conducting review in accordance with "Criteria and Process for Recommending Non-Operational Periods of Ships in the UNOLS Fleet http://www.unols.org/publications/reports/budget_impacts/NonOp_Process_Recmd.pdf

UNOLS Goals for 2009

1. Investigate the feasibility of a more flexible UNOLS to meet the needs of additional users.
2. Work with Ocean Leadership, the NRC, and the federal agencies to ensure that the fleet is right sized and has the right capabilities for ocean sciences in the coming decades.
3. **Implement strategies to attract and retain the best maritime personnel in support of the UNOLS mission.**
4. Continue to lower barriers to effective use of UNOLS ships caused by disabilities, gender, or other special situations.

Issue: Maritime Personnel

- Crew and marine technician retention has always been a challenge for UNOLS vessels
- The issue is now reaching crisis proportions with the boom in the offshore industry which makes it very difficult for academic salaries to compete
- So much specialized training is invested into each shipboard crewmember to meet the regulations that turnover is a huge financial loss
- RVOC/RVTEC are proposing strategies for addressing this issue

Thank you.