

Current FIC Goals



- **Continue to move forward with Fleet Renewal Implementation in concert with NSF and the Navy.**
- **Provide suitable material (SMRs, white papers) to NSF, Navy, NOPP, other agencies and the community.**
- **Continue to urge agencies to develop capitalization plans.**
- **Keep the community involved via letters to EOS etc.**
- **Recommend NSF/ONR support proposals to evaluate ship motion on SWATH and mono-hull vessels.**



FIC

The Current Status

- **SMR Workshops for the Ocean and Regional Class vessels have been held and draft SMRs are available.**
- **Navy Scalable, Common Hull Study in progress**
- **NSF developing capitalization plans**
- **Fleet Renewal Efforts in Progress**
 - **KILO MOANA**
 - **ARRV**
 - **CAPE HENLOPEN**
 - **EWING Midlife Refit Workshop**



New Classes

- **Global Class:** high-endurance vessels, operating worldwide.
- **Ocean Class:** Replacement for the “Intermediate” ships with vessels of increased endurance, technological capability, and number of science berths. These will be ocean-going vessels, though not globally ranging.
- **Regional Class:** ships will work in and near the continental margins and coastal zone, but with improved technology and more science berths than in current, comparably sized vessels.
- **Local Class** ships will fulfill near-shore needs that do not require larger or higher-endurance ships.



The Cost for Renewal

Ship Class (Est. \$/ship)	FOFC # of Vessels	FOFC Cost Estimate	UNOLS # of Vessels	UNOLS Cost Estimate
Global (\$70M)	1	\$70M	3	\$210M
Ocean (\$50M)	5 **	\$250M	5 **	\$250M
Regional (\$25M)	3	\$75M	4	\$100
Total Over Next 20 Years	9	\$395M	12	\$560M
** Total does not include KILO MOANA				



Ocean Class Research Vessel PROGRAM COST DISTRIBUTION

	"Low Risk Model"	
Design, Incl. Model Tests & support during const	10%	\$ 5,000,000
Management: Program, contracting & on site	5%	\$ 2,500,000
Initial Outfit - ship's gear & spares	4%	\$ 2,000,000
Science outfit	5%	\$ 2,500,000
Construction	63%	\$ 31,500,000
Reserve, Change Orders, etc.	8%	\$ 4,000,000
Mission Trials 60 day operations with science	2%	\$ 1,000,000
Post Shakedown Availability	3%	\$ 1,500,000
Total Program	100%	\$ 50,000,000

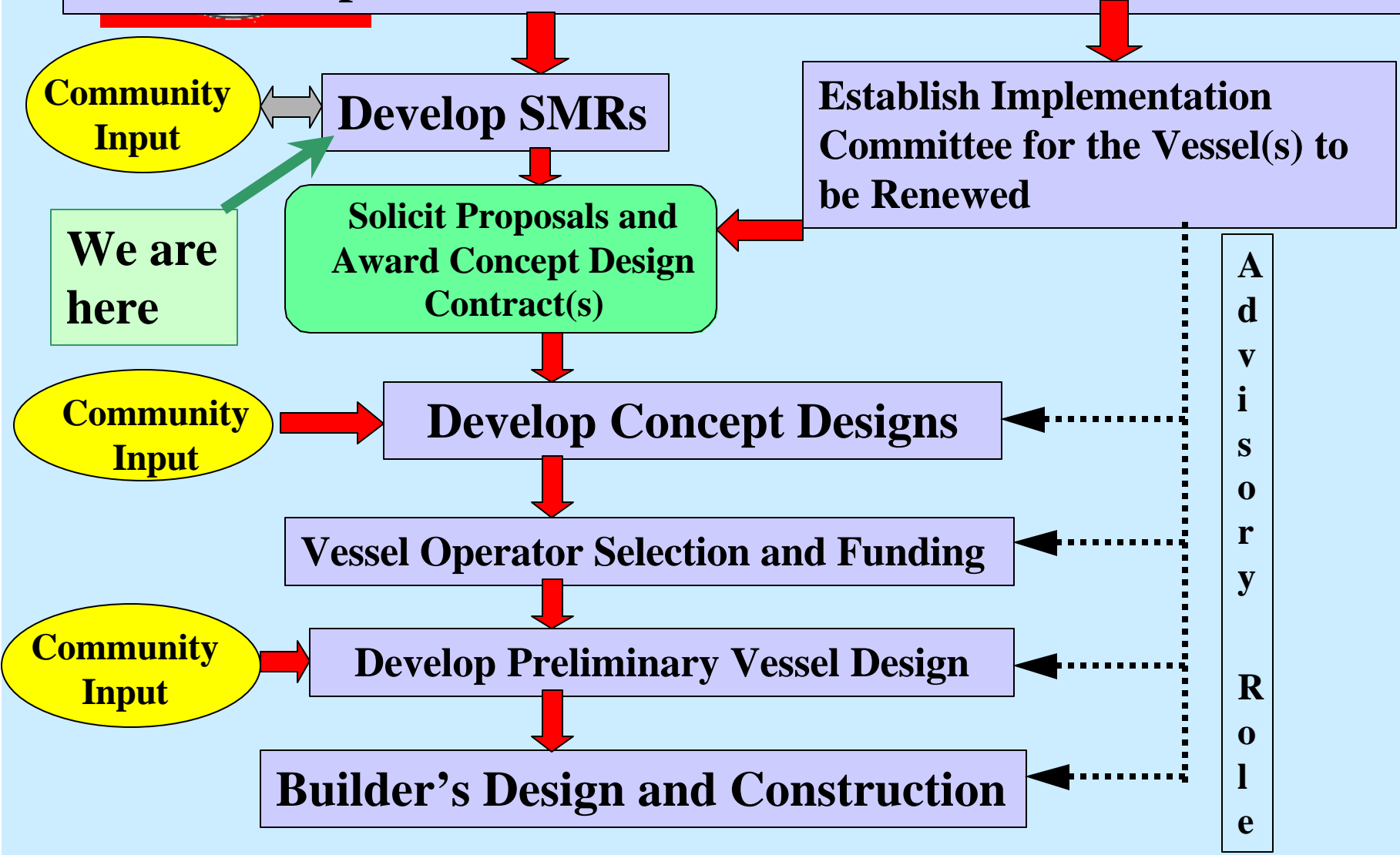


Regional Class Research Vessel PROGRAM COST DISTRIBUTION

	"Low Risk Model"	
Design, Incl. Model Tests & support during const	10%	\$ 2,500,000
Management: Program, contracting & on site	5%	\$ 1,250,000
Initial Outfit - ship's gear & spares	4%	\$ 1,000,000
Science outfit	5%	\$ 1,250,000
Construction	63%	\$ 15,750,000
Reserve, Change Orders, etc.	8%	\$ 2,000,000
Mission Trials 60 day operations with science	2%	\$ 500,000
Post Shakedown Availability	3%	\$ 750,000
Total Program	100%	\$ 25,000,000

FIC Roadmap

UNOLS Ship Renewal Process – Introduction and FIC’s Role





Science Mission Requirements

Mission statement, size and general requirements

Accommodations and habitability

Accommodations – crew & non-crew;
Habitability

Operational characteristics

Endurance; Range; Speed; Sea keeping;
Station keeping; Track line following;
Ship control; Ice strengthening

Over-the-side and weight handling

Over the side handling; Winches; Wires;
Cranes; Towing

Science working spaces

Working deck area

Laboratories: Type & number; Layout &
construction; Services

Vans; Storage; Science load; Work boats;

Masts; On deck incubations

Marine mammal/bird observations

Science and shipboard systems

Navigation; Data network and onboard
computing; Real time data acquisition system;

Communications - internal;

Communications – external;

U/W data collection & sampling;

Acoustic systems; Visiting system installation
and power; Discharges

RVOC role: Construction, operation & maintenance

Maintainability; Operability; Life cycle costs;
Regulatory issues



Navy Scalable, Common Hull Study

To reduce the Navy's acquisition cost for new oceanographic ships by investigating the feasibility of using a common hull platform for future T-AGS(X) and UNOLS Ocean Class ships.

- All but completed – Conclusion was that a common hull was not feasible for these disparate missions.**
- The studies did produce a useful body of work which will be available soon.**



FIC

Membership

UNOLS Operator Reps:

Dave Hebert, URI - Physical O. (9/99 – 9/02)

->Bill Smethie, LDEO – Marine Geochemistry (10/96 – 10/02)

Terry Whitley, U.Alaska – Arctic Research/Bio O. (7/00-9/04)

Non-Operator Reps:

Larry Atkinson, ODU - Coastal/Physical O. (7/95-10/03)

->Mark Brzezinski, UCSB - Biological O. (9/99-9/02)

Any UNOLS Inst:

Chris Measures, U.Hawaii - Chemical O. (9/98 – 9/04)

Niall Slowey, TAMU – Geology (2/02 – 2/05)

Ex-Officio: Joe Coburn, WHOI