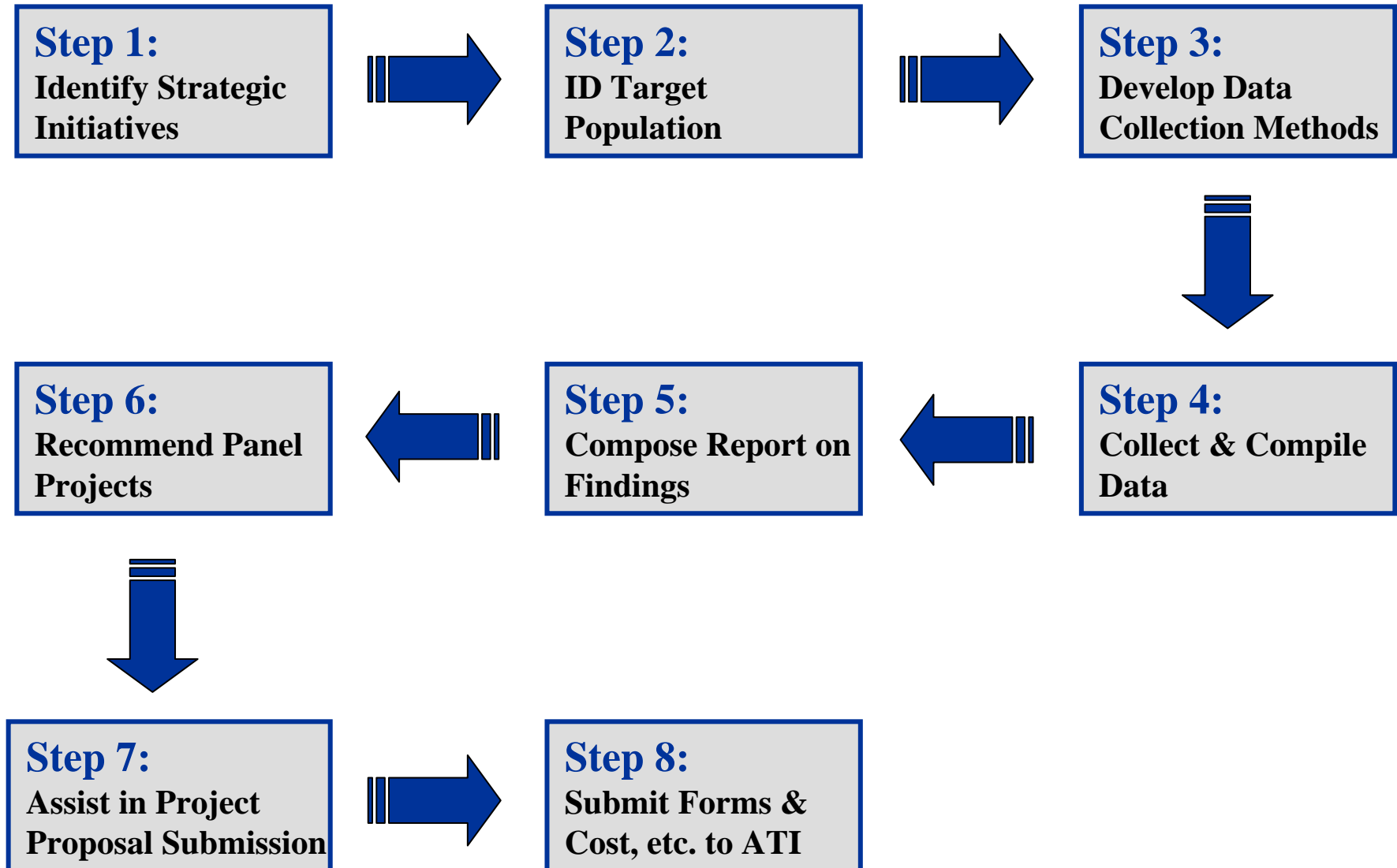
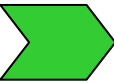


Needs Assessment

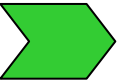
February 26, 2008

Dr. Richard Boutwell
Manager, Training Services
Northrop Grumman Shipbuilding

Steps of Needs Assessment



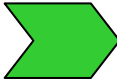
Step 1: Identify Strategic Initiatives



“If you do not aim at anything, you will most certainly hit your target”

Step 1:
Identify Strategic
Initiatives

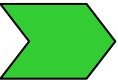
- Provide Direction & Focus
- Review & revise vision statement



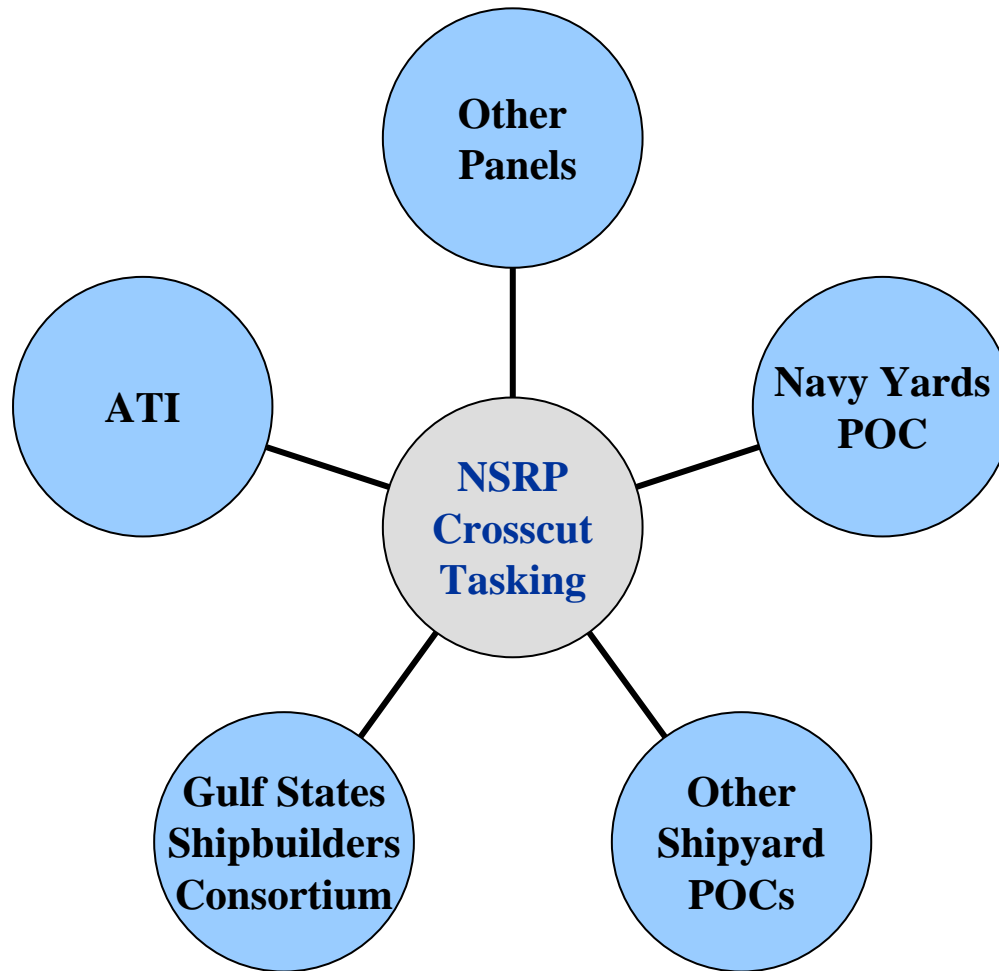
Step 1: Identify Strategic Initiatives

<i>Key Issues</i>	<i>Sub Issues</i>	<i>Potential Solutions</i>
Organizational and Cultural Change	Commercial vs. naval design culture	Expose industry professionals to “best commercial practices” from other industries
Human Resources	Lack of personnel with world-class commercial ship design experience Workforce retention	<ul style="list-style-type: none"> • Effective training program • Strategic alliances with world-class shipyards & design firms • Career path programs; skills upgrade; personnel mobility
Education & Training	Retraining of shipyard engineering and professional staff Training of new shipyard engineering and professional staff	<ul style="list-style-type: none"> • Include universities and shipyard training staff in technology projects • Develop extensive courses for mid career retraining • Upgrade university programs to cover modern ship design and manufacturing processes • Provide teacher internships
Technology Transfer	Need for technology evaluation Need for pilot implementations Need for Benchmarking & Metrics	<ul style="list-style-type: none"> ▪ Adopt “best practices” from other industries ▪ Conduct pilot implementations of new processes and technologies in participating shipyards ▪ Periodic shipyard technology surveys
Workforce Development and Retention	Need for youth interest Need for more realization of issues within the shipyards	<ul style="list-style-type: none"> ▪ Identification of problem/solutions in academia ▪ More emphasis on apprentice and continuing education programs

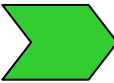
Step 2: Identify Target Population



**Step 2:
ID Target
Population**

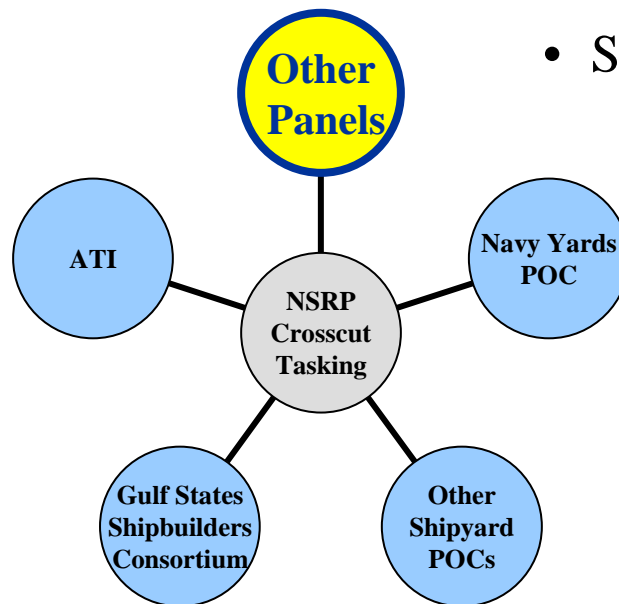


Other NSRP Panels:

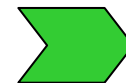


Step 2:
ID Target
Population

- Business Process Technologies
 - Product Design and Material Technologies
 - Shipyard Production Process Technologies
 - Facilities, Tooling and Risk Management
 - Surface Preparation and Coatings
 - Environmental Technology
 - Systems Technologies
 - Welding Technology

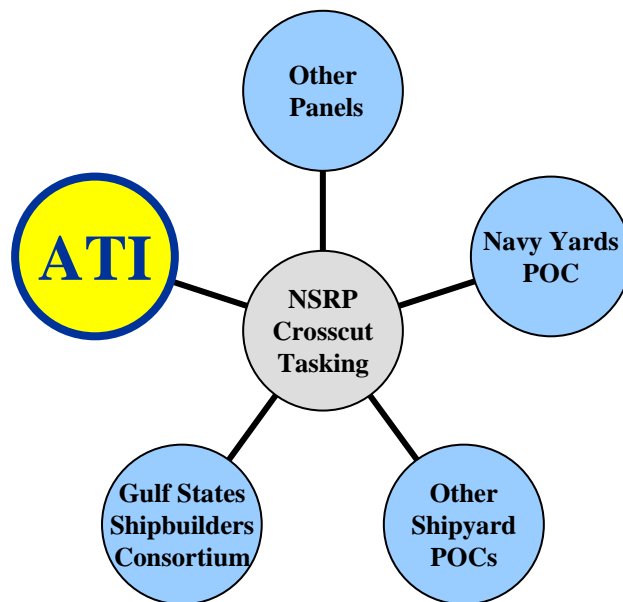


Advanced Technology Institute (ATI):

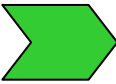


Step 2:
ID Target
Population

- NSRP/Executive Control Board (ECB) Needs
- Navy Needs

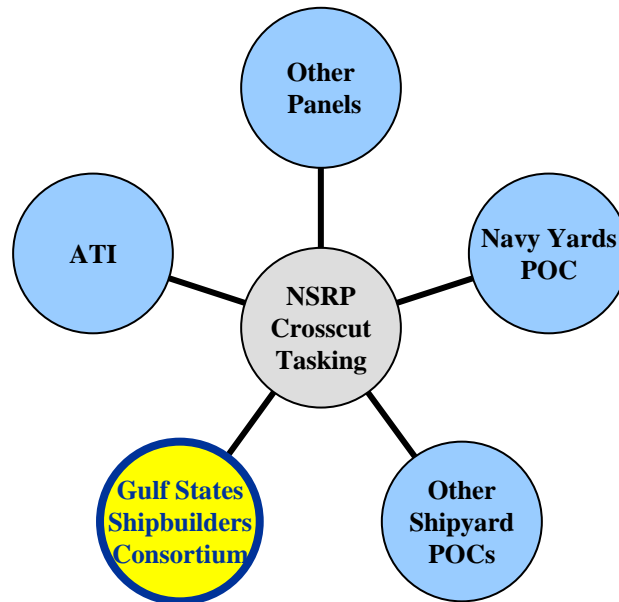


Gulf States Shipbuilders Consortium:

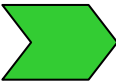


- Expand number of technically skilled workers
- To share best practices among its members
- Provide information on issues & trends impacting shipbuilding industry

Step 2:
ID Target
Population



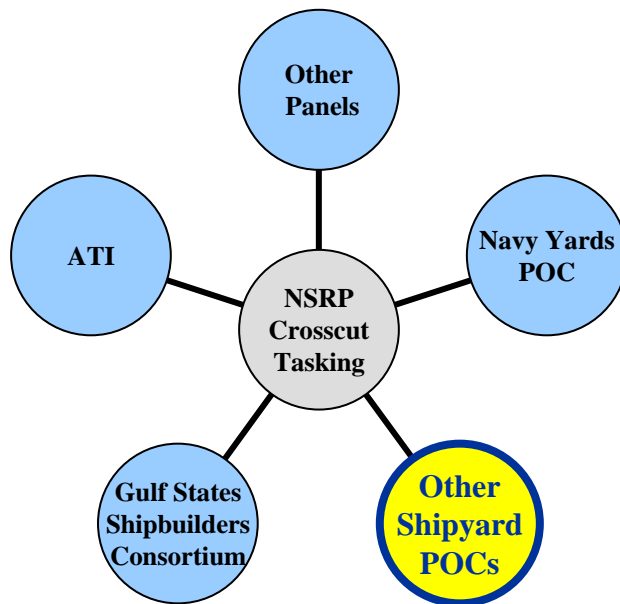
Other Shipyard POCs:



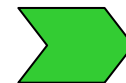
- POCs should be interested in workforce development

Step 2:
ID Target
Population

- Representative Examples:
 - *Training Manager*
 - *HR Directors & Managers*
 - *Operations Manager*
 - *Naval Shipyard Training Director*
 - *Naval Shipyard Training Deputy*

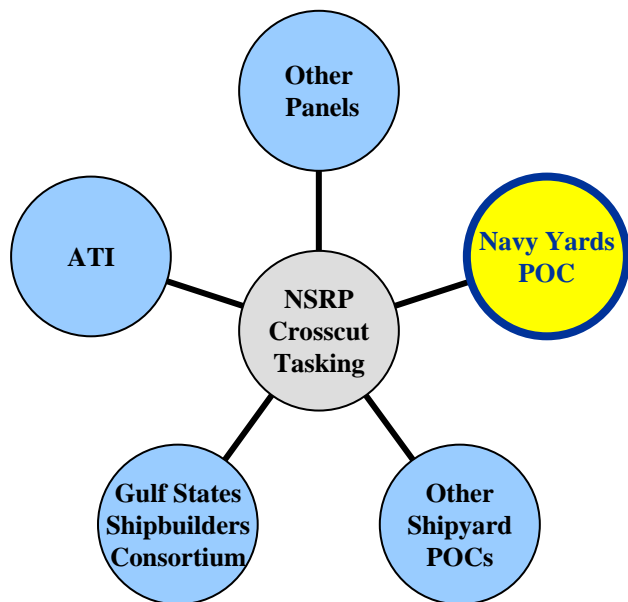


Navy Yards POC:



Names of Navy Organizations of interest that would be compatible with project offerings

Step 2:
ID Target
Population



Puget Sound Shipyard



Norfolk Naval Shipyard

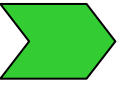


Portsmouth Naval Shipyard



Pearl Harbor Naval Shipyard

Step 3: Develop Data Collection Methods

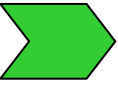


- Direct observation
- Questionnaires
- Consultation with persons in key positions
- Review of literature
- Focus groups
- Conduct interviews
- Administer tests
- Analyze records & reports
- Sample of work

Step 3:
Develop Data
Collection Methods



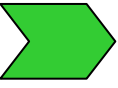
Step 4: Collect and Compile Data



Step 4:
Collect & Compile
Data



Step 5: Compose Report on Findings

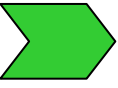


Step 5:
Compose Report on Findings



- **Identify Training Gap**
- **Prioritize by Impact**
- **Synthesize**
- **Follow-up**
- **Validate**

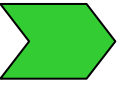
Step 6: Recommend Panel Projects



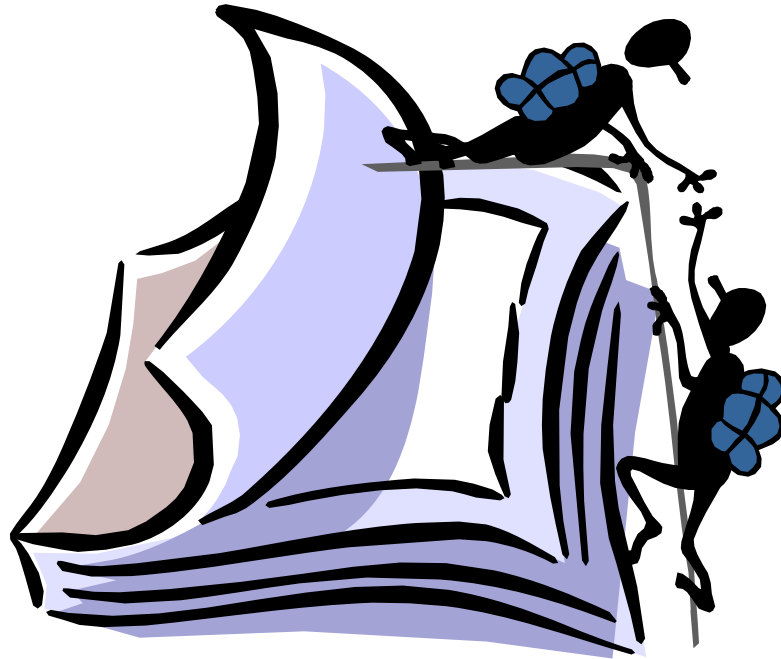
**Step 6:
Recommend Panel
Projects**



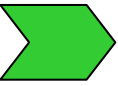
Step 7: Assist in Project Proposal Submission



Step 7:
**Assist in Project
Proposal Submission**



Step 8: Submit Forms & Cost, etc. to ATI



Step 8:
Submit Forms &
Cost, etc. to ATI

