Honolulu Community College’s Small Vessel Fabrication and Repair (VESL) program is an extremely unique, highly technical course of study. Being one of less than a half dozen programs within the United States offering training in state of the art small vessel fabrication and repair, its uniqueness is a challenge when attempting to quantitatively review the strengths and weaknesses of the program. Because the VESL curriculum encompasses a wide range of subjects (woodworking, electrical, plumbing, composites, lofting, to name a few), few if any other programs need or attempt to cover such diversity of subject matter. Students leave the program with a variety of sellable skills, allowing most all to find employment in many different arenas.

Please note that during this assessment time frame, the name of the program was changed from Marine Maintenance and Repair (MARR) to the current Small Vessel Fabrication and Repair (VESL), to better reflect the type and areas of technical training potential students can expect to receive. This document uses both the MARR and VESL acronyms.

College Mission
Honolulu Community College’s mission is to:
• Serve the community as an affordable, flexible, learning-centered, open-door comprehensive community college that meets the post-secondary educational needs of individuals, businesses, and the community, and,
• Serve the Pacific Region as the primary technical training center in areas such as transportation, information technology, education, communications, construction, and public and personal services.

Program Mission
The Small Vessel Fabrication & Repair program’s mission is to serve the community as a learning-centered, open door program providing technical training to meet the demands of companies within the small vessel fabrication and repair industry as well as the needs of the individual. An open-exit option allows students to identify their career objectives and participate in program exploration.

Part I: Quantitative Indicators for Program Review

External Demand
Labor Market & Student Applications
Available data show that the current annual jobs and projected 2005-2012 job outlook for the general occupational cluster maintenance and repair workers,
general, are 4,918 and 5,361 with 9% growth respectively in Honolulu County…and 7,382 and 8,253 with 11.7% growth within the State of Hawaii.

There were 21 applicants to the MARR program in Fall 2004, and no applicants to the program for the Spring 2005 Semester, as no intake is done in the spring semesters. Overall, among those Fall applicants, 17 appear to have been accepted by the college and admitted to the program, while 4 appear to have cancelled applications, or been redirected etc. Among those accepted and admitted, available data show that 16 actually enrolled in the semester initially applied for.

- Overall, our sense of the labor market and its relationship with the number and enrollment yield of applicants to our program, as it relates to the small vessel market is that the Small Vessel Marine market will see a growth trend in Hawaii corresponding with the upward economic indices. It should be noted that the VESL program also attracts students from outside the State of Hawaii. In fact, the program was designed and implemented with the idea of attracting out-of-state students to the program. This assessment year, more than 20% of the students were out-of-state.

**Internal Demand**

Registration headcount of actively enrolled students in Fall 2004 and Spring 2005 show that the MARR Program Major carried 28 for the AAS degree.

Available data show that of 28 students in the major for Fall 2004 and Spring 2005, 25 were enrolled in Department classes in Fall—and the same enrolled in Department classes in Spring.

VESL major’s enrollment in department classes generated 282 student semester hours in Fall 2004 for an average of 11.28 semester hours, with the same number and average of student semester hours in Spring 2005. The resulting credit hours generated equate with 18.8 respective Fall 2004 and Spring 2005 Full Time Equivalent (FTE) enrollments.

Overall, students under our program major enrolled for totals of 332 semester hours in Fall 2004, and 276 in Spring 2005. As mentioned above, they generated 282 and 276 in Fall 2004 and Spring 2005 respectively within the department.

Then, augmenting coursework within the department, 13 Program Majors were enrolled in a total of 50 student semester hours of coursework in other departments in the Fall 2004, while 24 enrolled for 276 student semester hours outside the department in the Spring 2005 semester.
We see from additional data that program majors’ coursework outside the department was primarily in the subject areas of Math and English with 15 of our program majors enrolling for 50 student semester hours respectively in Fall 2004.

In Spring 2005, major’s coursework outside the department was again primarily in the Math and English subject areas, with 17 students enrolled for 56 student semester hours respectively.

- Our sense from comparing major’s average credit hours within department classes (11.28) and outside the department (3.8) is that most all our majors are working toward the completion of their 2-year AAS degree. This is assumed by the fact that most all of the coursework outside the major that are being taken by our majors are required courses in order to graduate with a degree.

Internal Efficiencies
Scheduling and Instructional Faculty
With 1.87 Full Time Equivalent (FTE) faculty in Fall 2004, and the same in Spring 2005—the department offered 9 active class sections in Fall and 10 in Spring.

Average Class Size in Fall 2004 was 12.9 and the Class Fill Rate was 64.4. For Spring 2005, Average Class Size was 9.1 with a Class Fill Rate of 45.6.

The department utilized 1.1 an .7 Full Time Equivalent (FTE) BOR approved faculty in Fall 2004 and Spring 2005 respectively. There were an additional .8 Full Time Equivalent (FTE) Part Time Lecturers teaching in Fall 2004, and 1.2 for Spring 2005.

Overall In Fall 2004, Full Time BOR approved faculty delivered 5 sections, taught 50% of course credit hours, and were associated with generating 43.3 of student credit hours within the department. In Fall 2004, Part Time Instructors delivered 5 sections, taught 50% of course credit hours, and were responsible for 56.9 generated student credit hours within the department.

In Spring 2005, Full Time BOR approved faculty delivered 4 sections, taught 40% of course credit hours, and were associated with generating 36.4% student credit hours within the department. Part Time Instructors in Spring 2005 delivered 6 sections, taught 60% of course credit hours, and were responsible for 63.6% of the generated student credit hours within the department.

Based respectively on student credit hours generated and course credit hours taught, the ratio of full time student equivalents (FTSE) to full time faculty equivalents (FTFE) was 10.93 in Fall 2004, and 7.86 in Spring 2005. The ratio of program majors to FTE faculty was 14.7 and 12.6 respectively in Fall 2004 and Spring 2005.
• Our sense of departmental operating efficiencies from considering these data is that the department is at maximum in terms of worker output. Additional manpower would aid in increasing efficiencies that will aid in quality of student’s education. With only one tenured faculty position the remainder of instruction accomplished through Lecturers.

**Instructional Outcomes**

As reflected in available data for the 04/05 academic year, the department awarded 1 degree.

Available data on student grade distribution within the department subject code indicate that of all grades awarded in Fall 2004, 32.8%A, 31.0%B, 21.6%C, and 5.2%D. In Spring 2005, 39%A, 37.8%B, 22%C.

Student Persistence within the subject code MARR from Fall 2004 to Spring 2005 was 74.1% persistence of majors in the same period (whether enrolled in department courses or not) was 75%.

Review of department major’s performance on the Perkins Core Indicators indicates the program has improved Academic Achievement drastically. (50 Actual performance in 03/04 against a 81.56 standard for the same time as compared to 85.71 Actual against a 81.81 standard) Our vocational skills actual are above the standard. Our certificates and degree standard is low due to the fact that many of our students have chosen to take their non-VESL courses during a third year of education following the two-year course of study in the core courses.

**MARR Perkins Core Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1P1</th>
<th>1P2</th>
<th>2P1</th>
<th>3P1</th>
<th>3P2</th>
<th>4P1</th>
<th>4P2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2004 Core Standard</td>
<td>81.56%</td>
<td>91.53%</td>
<td>35.7%</td>
<td>70.52%</td>
<td>90.13%</td>
<td>15.94%</td>
<td>14.34%</td>
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<tr>
<td>MARR Actual Performance 03/04</td>
<td>50%</td>
<td>100%</td>
<td>0%</td>
<td>50%</td>
<td>100%</td>
<td>6.67%</td>
<td>N/A</td>
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<tr>
<td>2004-2005 Core Standard</td>
<td>81.81%</td>
<td>90.00%</td>
<td>36.00%</td>
<td>71.00%</td>
<td>90.00%</td>
<td>14.18%</td>
<td>12.86%</td>
</tr>
<tr>
<td>MARR Actual Performance 04/05</td>
<td>85.71%</td>
<td>90.91%</td>
<td>27.27%</td>
<td>N/A</td>
<td>N/A</td>
<td>3.85%</td>
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**VESL Perkins Core Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1P1</th>
<th>1P2</th>
<th>2P1</th>
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<td>90.00%</td>
<td>14.18%</td>
<td>12.86%</td>
</tr>
<tr>
<td>VESL Actual Performance 04/05</td>
<td>66.67%</td>
<td>100%</td>
<td>25.00%</td>
<td>N/A</td>
<td>N/A</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

• Given consideration of these data, our sense of instructional outcomes is that the VESL program is meeting and in many cases exceeding program and student outcomes. Note also that small vessel companies from as far
away as New Zealand and the East Coast of North America have shown interest in hiring our graduates.

**OVERALL**

Department demand for the 04/05 academic year was calculated at 1.4, which translates to an unhealthy (below minimum) demand status.

Department efficiency for the 04/05 academic year was calculated at 55, which translates to an unhealthy (below minimum) efficiency status.

Department Outcome for the 04/05 academic year was calculated at 5%, which translates to an unhealthy (below minimum) outcome status.

- Given consideration of these demand, efficiency, and outcomes indicator data together, our sense of overall program health is that we are unhealthy.

**Part II: Assessment Results for Program SLOs**

To be completed by the end of the Spring 2006 Semester.

**Part III: Curriculum Revision**

To be completed by the end of the Spring 2006 Semester.

**Part IV: Analysis of Data**

One of the primary needs of our program is to increase enrollment. The entire marine program was predicated on the assumption that out-of-state students would make up 50% of the population of the program. Up until recently, no effort was made to entice students to this program from outside Hawaii. Now that advertising has started both nationally and internationally, the program is beginning to see non-Hawaii student ratio growth. It is predicted that in the years to come, the trend will continue, which will increase the student population of the program.

Though outcomes show a minimum status, our data show that over 72% (average) have secured employment within the marine industry over the past 9 years. Additionally, many students have secured non-marine related jobs based on the training learned through the MARR/VESL program. The employers, whom we have talked to, expressed a very positive attitude toward their employees who were trained through this program.

Finally, as stated earlier, many students chose to take an additional year to complete the degree requirements. Students in the MARR/VESL program attend classes/labs for 6-hours a day. Many need to work and find that additional class
time is just not economically feasible. Instead, they choose to attend a third year to complete the required additional courses (Physics, ICS, Psychology, English) in order to receive their AAS degree. The program, at this time does not offer certificates.

Additionally, in order to better fulfill its mission as a learner-centered open door program for the community, the VESL program through its facility, the Marine Education & Training Center, has entered into a partnership with the Polynesian Voyaging Society to help, through the curriculum, in maintaining and assisting with new builds of traditional voyaging canoes, a most important aspect of the cultural Hawaiian community. It is one of the first community-based partnering that Honolulu Community College has undertaken and one that has thus far yielded positive results from our students and the community alike.

**Part V: Action Plan**

To be completed by the end of the Spring 2006 Semester.

**Part VI: Budget Implications**

To be completed by the end of the Spring 2006 Semester.