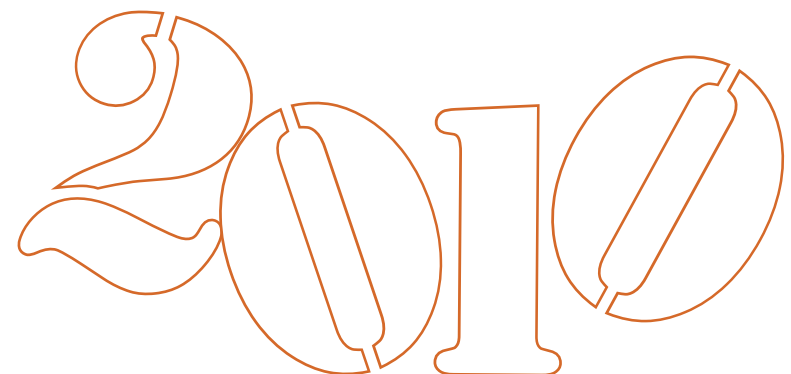
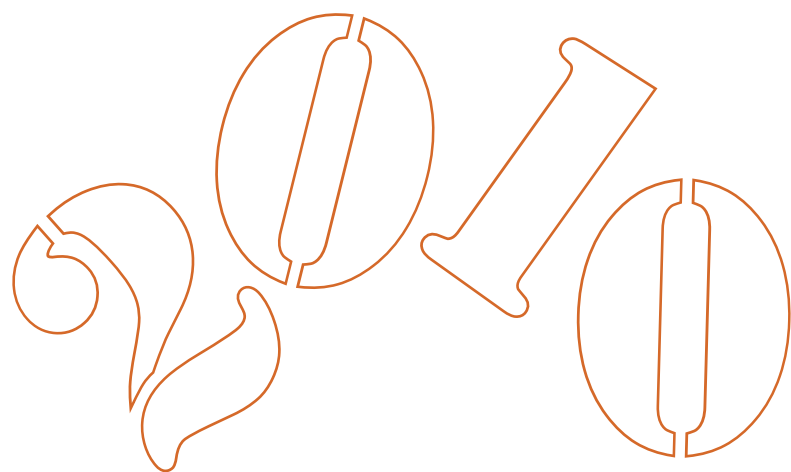


2008 GCC-GCA GUAM EMPLOYERS SURVEY

Report Date
JANUARY 2009



This report was done in collaboration with the Guam Community College (GCC) and the Guam Contractors' Association (GCA) Trades Academy. GCA Trades Academy administered the employer online survey described in this report and Dr. Virginia C. Tudela, Assistant Director of GCC's Office of Assessment and Institutional Effectiveness (AIE) prepared the report.

GUAM COMMUNITY COLLEGE

Created by the Community College Act of 1977, the College offers associate degrees, certificates, and industry certification of course series completion in more than 50 fields of study. GCC also offers Adult Basic Education, an Adult High School Diploma program, GED testing and preparation and English-as-a-Second Language courses and apprenticeship support courses.

Location

Mangilao, Guam

Mailing Address

P.O. Box 23069 GMF
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Admission and Registration

Tel: (671) 735-5531-4
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Scholarships & Financial Aid

(671) 735-5544

Accreditation

Accrediting Commission for
Community and Junior Colleges
Western Association of Schools
and Colleges

Degrees Offered

Associate of Science
Associate of Arts
Certificate
Diploma

Website

www.guamcc.edu



www.guamcc.edu

2008 GCC-GCA GUAM EMPLOYER SURVEY

In collaboration with the Guam Community College (GCC), the Guam Contractors' Association (GCA) Trades Academy administered an employer online survey to its 752 active members from October 22, 2008 to November 23, 2008. The survey consisted of 15 questions¹ (see Attachment A) developed jointly by the two institutions. Of the 752 prospective respondents included in the GCA database, 82 members completed and returned the survey, thus resulting in a 10.9% response rate.

The fifteen survey questions are divided into the following four categories: (a) Respondent Profile, (b) Company Profile, (c) Employee Training, and (d) Employee Profile.

Respondent Profile

As shown in Table 1, of the eighty-two survey respondents, 67.0% are *Male* (n=55) and 31.7% are *Female* (n=26). One respondent did not disclose his or her gender (1.2%).

Table 1. Gender

	Number of Response(s)	Response Ratio
No Responses	1	1.2%
Female	26	31.7%
Male	55	67.0%
Total	82	100.0%

In terms of the education level of respondents, Table 2 below reveals that nearly 30% have a *Bachelors Degree* (29.2%, n=24) followed by those who have *Some College* experience (25.6%, n=21), those who have a *Graduate or Professional Degree* (20.7%, n=17), those who have an *Associate Degree* (10.9%, n=9), and those who have a *High School Diploma or*

¹ Survey questions 3 and 4 are the same.

Equivalent (9.7%, n=8). Of the remaining three respondents, two *Preferred Not to Answer* (2.4%) and one did not provide a response (1.2%). Based on the reported levels of education, respondents had at least a high school diploma or equivalent.

Table 2. Education Level

	Number of Response(s)	Response Ratio
Less than 9th grade education	0	0.0%
Some high school education	0	0.0%
No Responses	1	1.2%
I prefer not to answer	2	2.4%
High school graduate or equivalent	8	9.7%
Associate degree	9	10.9%
Graduate or professional degree	17	20.7%
Some college	21	25.6%
Bachelors degree	24	29.2%
Total	82	100.0%

As for the primary functional work area of respondents, Table 3 shows that 30.4% are *Executive Management* (n=25) followed by *Administrative* (15.80%, n=13), and *Engineering* (9.7%, n=8). An equal number of respondents reported that their primary functional work area is *Human Resources* and *Business Development* (7.3%, n=6) followed by *Customer Service Support* (4.8%, n=4), and *Consulting* (3.6%, n=3). The same number of respondents identified their primary functional work area to be *Account Management* and *Education* (2.4%, n=2). The remaining four reported primary functional work areas are *Advertising* (1.2%), *Merchandising* (1.2%), *Operations* (1.2%), and *Purchasing* (1.2%). Eight respondents reported that they had *Other* primary functional work areas (9.7%) and one respondent did not identify a primary functional work area (1.2%).

Table 3. Primary Functional Work Area

	Number of Response(s)	Response Ratio
Administering health & mental services	0	0.0%
Clerical, processing	0	0.0%
Creative, design	0	0.0%
Distribution	0	0.0%
Finance	0	0.0%
Information system, information technology	0	0.0%
Legal	0	0.0%
Advertising	1	1.2%
Merchandising, sales	1	1.2%
No Responses	1	1.2%
Operations, production	1	1.2%
Purchasing	1	1.2%
Account management	2	2.4%
Education	2	2.4%
Consulting	3	3.6%
Customer service, support	4	4.8%
Business development	6	7.3%
Human resources	6	7.3%
Engineering	8	9.7%
Other	8	9.7%
Administrative	13	15.8%
Executive management	25	30.4%
Total	82	100.0%

According to Table 4, in terms of occupational title, more than a quarter of respondents are the *CEOs/Owners/Presidents/GMs/Partners* (26.8%, n=22) of their companies followed by *Managers/Asst Managers* (20.7%, n=17), *Directors/Asst Directors/Department Heads* (13.4%, n=11), and *Staff* (8.5%, n=7). An equal number of respondents are *Vice Presidents/Asst Vice Presidents* (6.0%, n=5) and *Clerical/ Administrative Support Personnel* followed by *Supervisors* (3.60%, n=3), and *Small Business Owners* (2.4%, n=2). The remaining three are *Educators* (1.2%), *Developers/Programmers* (1.2%), and *CFOs/Treasurers/Controllers* (1.2%). Six respondents reported that they had *Other* titles (7.3%) and one respondent did not report an occupational title (1.2%). There were no *Doctors/Physicians* or *Lawyers*.

Table 4. Occupational Title

	Number of Response(s)	Response Ratio
Doctor / Physician	0	0.00%
Lawyer	0	0.00%
CFO / Treasurer / Controller	1	1.20%
Developer / Programmer	1	1.20%
Educator	1	1.20%
No Responses	1	1.20%
Small Business Owner	2	2.40%
Supervisor	3	3.60%
Clerical / Administrative Support	5	6.00%
Vice President / Asst Vice President	5	6.00%
Other	6	7.30%
Staff	7	8.50%
Director / Asst Director / Department Head	11	13.40%
Manager / Asst Manager	17	20.70%
CEO / Owner / President / GM / Partner	22	26.80%
Total	82	100%

Company Profile

What is the size of the company in terms of the number of its employees? As shown in Table 5, of the 82 survey respondents, nearly 80% reported that their companies have *Less than 100 Employees* (79.2%, n=65) followed by those who have *250 or More Employees* (10.9%, n=9), and those who have *Between 100 and 249 employees* (8.5%, n=7). One respondent (1.2%) did not report the number of employees in his company.

Table 5. Number of Employees

	Number of Response(s)	Response Ratio
No Responses	1	1.2%
100 - 249 employees	7	8.5%
250 or more employees	9	10.9%
Less than 100 employees	65	79.2%
Total	82	100.0%

As for annual company revenue, Table 6 reveals that of the 82 survey respondents, twelve reported their annual company revenue to be *Between \$1,000,000 and \$9,999,999* (14.6%) followed by eleven respondents who reported their annual revenue to be *Between \$100,000 and \$499,999* (13.4%). The same number of respondents reported an annual revenue *Between \$500,000 and \$999,999* and *Between \$10,000 and \$49,000* (9.7%, n=8). Seven respondents reported their annual revenue to be *Over \$50,000,000* (8.5%), five respondents reported an annual revenue *Between \$50,000 and \$99,999* (6.0%), four respondents reported an annual revenue *Between \$10,000,000 and \$49,999,999* (4.8%) and one respondent reported an annual revenue *Under \$10,000* (1.2%). Sixteen respondents *Preferred Not to Answer* (19.5%), nine respondents *Do Not Know Their Company's Annual Revenue* (10.9%), and one respondent did not report an annual revenue (1.2%).

Table 6. Annual Revenues

	Number of Response(s)	Response Ratio
No Responses	1	1.2%
Under \$10,000	1	1.2%
\$10,000,000 to \$49,999,999	4	4.8%
\$50,000 to \$99,999	5	6.0%
over \$50,000,000	7	8.5%
\$10,000 to \$49,999	8	9.7%
\$500,000 to \$999,999	8	9.7%
I don't know	9	10.9%
\$100,000 to \$499,999	11	13.4%
\$1,000,000 to \$9,999,999	12	14.6%
I prefer not to answer	16	19.5%
Total	82	100.0%

When asked to select a career cluster which best matches their business, 35.3% of respondents selected *Architecture & Construction* (n=29) followed by *Marketing, Sales, and Service* (18.2%, n=15), *Education & Training* (9.7%, n=8), *Government & Public Administration* (7.3%, n=6), and *Science, Technology, Engineering & Mathematics* (4.8%, n=4) (Table 7). There were an equal number of respondents who selected *Transportation*,

Distribution, & Logistics; Manufacturing; Informational Technology; and Human Services (3.6%, n=3) followed by the same number of respondents who selected *Arts, A/V Technology, & Communications; Business, Management, & Administration; and Hospitality & Tourism* (2.4%, n=2). One respondent selected *Agriculture, Food and Natural Resources* (1.2%) and another respondent did not identify a career cluster (1.2%). No one selected *Finance; Health Science; or Law, Public Safety, Corrections, & Security* as a career cluster.

Table 7. Career Cluster

	Number of Response(s)	Response Ratio
Finance	0	0.0%
Health science	0	0.0%
Law, public safety, corrections, & security	0	0.0%
Agriculture, food and natural resources	1	1.2%
No Responses	1	1.2%
Arts, A/V technology & communications	2	2.4%
Business, management, & administration	2	2.4%
Hospitality & tourism	2	2.4%
Human services	3	3.6%
Informational technology	3	3.6%
Manufacturing	3	3.6%
Transportation,distribution, & logistics	3	3.6%
Science, technology, engineering & mathematics	4	4.8%
Government & public administration	6	7.3%
Education & training	8	9.7%
Marketing, sales, & service	15	18.2%
Architecture & construction	29	35.3%
Total	82	100.0%

According to Table 8 there were a total of 510 responses to the question “What occupations do you currently have in your company?” The greatest percentage of reported occupations is *Office Manager/Administrative Services* (11.8%, n=60) followed by *Electrician* (7.5%, n=38), *Welder* (5.1%, n=26), and *Carpenter* (4.9%, n=25). The same number of respondents reported having *Truck drivers (Heavy)* and *Maintenance Mechanics* (4.7%, n=24) followed by *Diesel Mechanics* (4.3%, n=22), *Plumbers* (4.1%, n=21), and *Operating Engineers*

(3.9%, n=20). There was also a similar number of respondents who reported having *Maintenance Building Repairers* and *Construction Equipment Mechanics* (3.7%, n=19) followed by *Electronic Technicians* (3.3%, n=17) and *Air Conditioning & Refrigeration Mechanics* (3.1%, n=16). A similar number of responses was also reported for *Pipefitters* and *Auto Mechanics* (2.9%, n=15) followed by *Sheet Metal Workers* (2.2%, n=11). The same number of responses was also reported for *Instrument Technicians* and *Building Inspectors* (2.0%, n=10). The remaining 14.4% of reported occupations were *Riggers* (1.8%, n=9), *Machinists* (1.8%, n=9), *Wastewater Treatment Plant Operators* (1.2%, n=6), *Pump Servicers* (1.2%, n=6), *Cooks* (1.2%, n=6), *Auto Body Repairers* (1.2%, n=6), *Substation Electricians* (1.0%, n=5), *Electrician Meter Repairers* (1.0%, n=5), *Relay Technicians* (0.8%, n=4), *Power Plant Operators* (0.8%, n=4), *Marine Machinery Mechanics* (0.8%, n=4), *Linemen* (0.8%, n=4), *Early Childhood Associates* (0.6%, n=3), and *Shipfitters* (0.2%, n=1). There were 46 respondents who selected *None of the Above* (9.0%).

Table 8. Occupations

Occupations	Number of Response(s)	Response Ratio
Shipfitter	1	0.2%
Early childhood associate	3	0.6%
Lineman	4	0.8%
Marine machinery mechanic	4	0.8%
Power plant operator	4	0.8%
Relay technician	4	0.8%
Electrician meter repairer	5	1.0%
Electrician, substation	5	1.0%
Auto body repairer	6	1.2%
Cook	6	1.2%
Pump servicer	6	1.2%
Wastewater treatment plant operator	6	1.2%
Machinist	9	1.8%
Rigger	9	1.8%
Inspector, building	10	2.0%
Instrument technician	10	2.0%
Sheet metal worker	11	2.2%
Auto mechanic	15	2.9%

Pipefitter	15	2.9%
Air conditioning & refrigeration mechanic	16	3.1%
Electronic technician	17	3.3%
Construction equipment mechanic	19	3.7%
Maintenance building repairer	19	3.7%
Operating engineer	20	3.9%
Plumber	21	4.1%
Diesel mechanic	22	4.3%
Maintenance mechanic	24	4.7%
Truck driver, heavy	24	4.7%
Carpenter	25	4.9%
Welder	26	5.1%
Electrician	38	7.5%
None of the above	46	9.0%
Office manager / administrative services	60	11.8%
Total	510	100.0%

Employee Training

Two survey questions focused on employee training. One question relates to how employees are currently trained. Of the total reported forms of training listed in Table 9, the most frequently reported is *On-the-Job Hands-On Training* (29.2%, n=65) followed by *In-House Workshops* (17.5%, n=39), *Self-Learning or Study* (12.6%, n=28), *GCA Trades Academy or Other Contracted Vendor Services* (12.1%, n=27), *Web-Assisted Training* (9.9%, n=22), *Community/Technical College Classes* (8.5%, n=19), and *University Classes* (4.0%, n=9). There were nine responses for the category of *Other* (4.0%) and four responses for *No Training* (1.8%).

Table 9. Employee Training

Responses	Number of Response(s)	Response Ratio
No training	4	1.8%
Other	9	4.0%
University classes	9	4.0%
Community/technical college classes	19	8.5%
Web-assisted training	22	9.9%
The GCA Trades Academy or other contracted vendor services	27	12.1%
Self-learning or study	28	12.6%
In-house workshops	39	17.5%
On-the-job hands-on training	65	29.2%
Total	222	100.0%

The other question related to employee training is “What most concerns you regarding the need for employee training in your company? Respondents were asked to rank the concerns listed in Table 10 from 1 to 4, with 1 being the most important. The Ranking Score is the weighted average calculated by dividing the sum of all weighted rankings by the number of total responses. Table 10 reveals that *Cost, Employee Time Away From Work, Compliance With Standards, and Safety Considerations* are all important concerns. However, of the 70 responses received, the greatest concern was *Cost* (2.3 ranked score) followed by *Compliance with Standards* (2.4 ranked score), *Safety Considerations* (2.6 ranked score), and *Employee Time Away From Work* (2.7 ranked score).

Table 10. Concerns Regarding Employee Training

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Most important				Number of Responses	Ranking Score
	1	2	3	4		
Cost	23 33%	18 26%	16 23%	13 19%	70	2.3
Employee time away from work	11 16%	20 29%	15 21%	24 34%	70	2.7
Compliance with standards	16 23%	19 27%	27 39%	8 11%	70	2.4
Safety considerations	20 29%	13 19%	12 17%	25 36%	70	2.6

Employee Profile

When asked to select the MINIMUM requirement for an entry level position in the company, the most frequently identified requirement was a *High School Diploma or GED* (53.6%, n=44) followed by *Industry Certification* (10.9%, n=9) (Table 11). There was an equal number of respondents who indicated that the minimum requirement for an entry level position in their company was an *Associates Degree and Certificate* (2.4%, n=2). Nine respondents indicated that there were *Other* minimum requirements for an entry level position in their company (10.9%). Fifteen respondents reported that *Education Level is Not Important* (18.2%) and one respondent did not identify a minimum requirement for an entry level position in his company (1.2%).

Table 11. Minimum Requirement for Entry Level Positions

	Number of Response(s)	Response Ratio
No Responses	1	1.2%
Associate's degree	2	2.4%
Certificate	2	2.4%
Industry certification	9	10.9%
Other	9	10.9%
Educational level not important	15	18.2%
High school diploma or GED	44	53.6%
Total	82	100.0%

According to Table 12, the most frequent response to the question “What would be the PREFERRED educational level for an entry level position in your company? is a *High School Diploma or GED* (34.1%, n=28) followed by *Industry Certification* (18.2%, n=15) and *Bachelors Degree* (12.1%, n=10). The same number of respondents indicated a preference for an *Associates Degree and Certificate* (10.9%, n=9). There were six respondents who reported that *Education Level is Not Important* (7.3%), three respondents who indicated that they had *Other* education level preferences (3.6%) and two respondents who did not report a preference (2.4%).

Table 12. Preferred Educational Level for Entry Level Positions

	Number of Response(s)	Response Ratio
No Responses	2	2.4%
Other	3	3.6%
Education level not important	6	7.3%
Associates degree	9	10.9%
Certificate	9	10.9%
Bachelors degree	10	12.1%
Industry certification	15	18.2%
High school diploma or GED	28	34.1%
Total	82	100.0%

In terms of job experience for entry level positions, the most frequently reported requirement is *One to Two Years* (35.3%, n=29) followed by *At Least Two Years* (28.0%, n=23) and *Less than One Year* (13.4%, n=11) (Table 13). There were 13 respondents who reported that *Experience is Not Important* (15.8%), four respondents who reported that they had *Other* job experience requirements for entry level positions (4.8%), and two respondents who did not answer the question (2.4%).

Table 13. Job Experience for Entry Level Positions

	Number of Response(s)	Response Ratio
No Responses	2	2.4%
Other	4	4.8%
Less than one year	11	13.4%
Experience is not important	13	15.8%
At least two years	23	28.0%
<i>One to two years</i>	29	35.3%
Total	82	100.0%

There were 65 respondents who ranked the knowledge and skills expected of employees in their organization. The Ranking Score is the weighted average calculated by dividing the sum of all weighted rankings by the number of total responses. Table 14 below reveals that the most important knowledge and skill is *Teamwork* (4.0 ranked score) followed by *People Skills* (4.5 ranked score), *Use of Technology* (4.6 ranked score), *Verbal Skills* (4.8 ranked score), *Writing*

Ability and Creative Thinking (5.5 ranked score), *Motor Skills* (6.0 ranked score), *Leadership* (6.2 ranked score), *Locating Information* (6.9 ranked score), and *Cultural Sensitivity* (7.0 ranked score).

Table 14. Desirable Employee Skills

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Very important										Number of Responses	Ranking Score
	1	2	3	4	5	6	7	8	9	10		
Use of technology	12 18%	7 11%	7 11%	7 11%	6 9%	7 11%	8 12%	6 9%	2 3%	3 5%	65	4.6
Cultural sensitivity	3 5%	3 5%	5 8%	3 5%	5 8%	4 6%	8 12%	7 11%	9 14%	18 28%	65	7.0
Verbal skills	7 11%	10 15%	6 9%	6 9%	11 17%	5 8%	7 11%	7 11%	6 9%	0 0%	65	4.8
Writing ability	2 3%	8 12%	7 11%	9 14%	7 11%	10 15%	3 5%	7 11%	9 14%	3 5%	65	5.5
Motor skills	4 6%	4 6%	8 12%	6 9%	8 12%	7 11%	4 6%	6 9%	7 11%	11 17%	65	6.0
People skills	9 14%	9 14%	8 12%	8 12%	7 11%	9 14%	7 11%	4 6%	2 3%	2 3%	65	4.5
Teamwork	16 25%	6 9%	7 11%	11 17%	6 9%	8 12%	5 8%	3 5%	1 2%	2 3%	65	4.0
Leadership	4 6%	6 9%	5 8%	4 6%	2 3%	7 11%	13 20%	8 12%	11 17%	5 8%	65	6.2
Creative thinking	3 5%	11 17%	8 12%	7 11%	5 8%	3 5%	3 5%	14 22%	7 11%	4 6%	65	5.5
Locating information	5 8%	1 2%	4 6%	4 6%	8 12%	5 8%	7 11%	3 5%	11 17%	17 26%	65	6.9

When asked about the skill level of their employees, nearly fifty percent of respondents described their employees as *Skilled* (47.5%, n=39) followed by *Highly Skilled* (25.6%, n=21), *Moderately Skilled* (23.1%, n=19), and *Inadequately Skilled* (2.4%, n=2) (Table 15). One respondent did not answer the question (1.2%).

Table 15. Skill Level of Employees

	Number of Response(s)	Response Ratio
No Responses	1	1.2%
Inadequately skilled	2	2.4%
Moderately skilled	19	23.1%
Highly skilled	21	25.6%
Skilled	39	47.5%
Total	82	100.0%

Results and Discussion

Nearly 80% of survey respondents come from companies with less than 100 employees and over 50% of survey respondents come from companies who are in the *Architecture & Construction* business and *Marketing, Sales, & Service*. A majority come from the *Architecture & Construction business*.

More than half of the respondents reported that the minimum education requirement for an entry level position in their company is a *High School Diploma or GED* and 18.2% reported that *Education Level is Not Important*. As for job experience for entry level positions, 63.3% reported a minimum of two years.

Nearly 50% of respondents described their employees as *Skilled* (47.5%) followed by *Highly Skilled* (25.6%), *Moderately Skilled* (23.1%), and *Inadequately Skilled* (2.4%). Because of the minimum requirements for entry level positions and the reported skill levels of employees, it is assumed that these employees have developed their skills over time while working in their respective fields.

The most frequently reported training provided to employees is *On-the-Job Hands-On Training and In-House Workshops*. In terms of concerns regarding the need for employee training, factors such as *Cost, Employee Time Away From Work, Compliance with Standards*,

and *Safety Considerations* are all important concerns. Based on ranking by respondents, however, the greatest concern is *Cost*. This is possibly the reason for more in-house training.

When asked to rank the knowledge and skills expected of employees, the most important is *Teamwork* followed by *People Skills*, *Use of Technology*, *Verbal Skills*, *Writing Ability* and *Creative Thinking*, *Motor Skills*, *Leadership*, *Locating Information*, and *Cultural Sensitivity*.

Recommendations

The following recommendations are given in relation to the above findings:

- Since GCA members come from a variety of career clusters, GCC should focus its training efforts on the clusters where the greatest numbers of members come from. Based on survey results, GCC should work with members of the *Architecture & Construction* industry to find out what their specific training needs are. This is especially important with the impending military buildup. GCC should also incorporate the concept of *teamwork* into the training.
- Because of concerns with the cost associated with employee training and the choice of on-island training providers as well as web-based training providers, GCC should offer competitive pricing for training.
- GCC should explore all possible funding sources (i.e. grants, financial aid, MDF) for courses.
- Because of concerns with employee time away from work, GCC should look at providing training times that will not interfere with employees' work schedules. For employee convenience, the college should conduct training on-site at the different business locations immediately after working hours.

- GCC should work collaboratively with GCA to look at ways to increase the response rate of future surveys. The response rate of 10.9% for this survey needs improvement.
- Expand the sample population of future surveys to include other industry practitioners affiliated with the Guam Chamber of Commerce.
- Utilize the survey findings to develop training courses or programs that GCC should work out collaboratively with Guam employers.
- GCC should continue to cultivate and sustain partnership opportunities with GCA and the GCA Trades Academy to advance construction-related training and workforce development issues.
