Recommendation 6: As recommended by the 2004 evaluation team, the team recommends that the college move quickly to implement long range planning in Information and Technology Services that is linked to budget allocation. (Standard IIIC)

Resolution: Through the efforts of the Institutional Planning Coordination Committee and in alignment with the college effort to improve institutional effectiveness, an Integrated Planning, Program Review, and Resource Allocation process (see attachment) has been defined and being implemented. Under Track A, the Associate Vice President of Information and Technology Services (ITS) in collaboration with the Campuswide Computer Coordination Committee (CCCC) will prioritize and submit resource needs identified in the technology plan. This activity occurs in October of the calendar year. In parallel under Track B, the Information and Technology Services department under the leadership of the Associate Vice President will conduct an annual program review to identify, prioritize, and submit resource needs of the department in meeting stated educational master plan goals and plans for improvement of services provided to faculty, staff and students. The Executive Vice President of Administrative Services has earmarked an ongoing allocation from the capital outlay fees for technology resource needs.

Analysis: The Integrated Planning, Program Review, and Resource Allocation process will ensure that long range planning in Information and Technology Services is linked to budget allocation.

Additional Plans: The technology plan will be reviewed annually to assess what has been done and to ensure continuous improvement. In parallel, the ITS department will conduct program review annually to ensure continuous program improvement by using qualitative and quantitative data.

The ITS program review uses four (4) program learning outcomes to review and analyze its program effectiveness (see spring 2009 program review). These outcomes are being assessed qualitatively via surveys. These surveys are incorporated into the Student Views Survey conducted by the Research and Planning Office. In summer 2010, the college went live with PeopleSoft Campus Solutions to improve the student information system. In line with PeopleSoft, MyGCC has now become the student portal to PeopleSoft for attaining information needed for academic progress. ITS is now collecting data on how many students use the portal, the time of day, what links are used, etc… This assessment method will provide quantitative results to program learning outcome # 2 (Students will access the GCC web sites, instructional courseware, and student management systems to successfully attain information needed for academic progress. In October 2010, the ITS department will conduct another program review and use qualitative data from the Student Views 2010 Survey as well as the quantitative data on the MyGCC student portal.

Evidence:

1. Technology Master Plan 2007-2012 and Resource Requests

2. ITS Program Review 2010 and Resource Requests

3. Student Views 2010 Survey and MyGCC Statistics

4. Capital Outlay Budget

Recommendation 8: The team recommends that the college take the necessary steps to ensure the safety of the servers so that the system does not shut down due to overheating. (Standard IIIB.2.a)

Resolution: The extra unit on the roof and the daily use unit both run to meet the cooling requirements of the server room. In order to do this, Facilities have to keep Central Plant II running 24/7. The daily use unit also needed major repairs. These repairs were completed in November 2009. Since that time, the daily use unit has been running normally. The college also contracted with ACCO Engineered Systems for the monitoring of the daily use unit 24/7. When the system malfunctions, ACCO is alerted and will dispatch a technician immediately when needed.

Analysis: Liebert Corporation, an Emerson Network Power company and a premier in the cooling and environmental control industry conducted an evaluation of the two (2) A/C units and the server room. The following findings and recommendations were given by Liebert.

1. The ITS department needs two new computer room air conditioning systems (both are 14 years old) at an approximate cost of $250K–300K. The present A/C units failed prematurely, but were not of high quality.

2. The server racks were not installed properly (originally). The hot air coming out of one is going into the cool side of the other computers. The server room is presently getting only 30% benefit from the A/C system.

3. The server room should be one open area to have free fall of air in that whole area. Primarily, the racks need to be re-arranged to do something to create a hot air area and a cool area. The flooring needs to be redone so that the cooling blows through the fronts of the units and the ceiling. Return air vents will be added above the hot zones so that the servers are operating at the correct temperature.

4. There are cords all over the floor due to poor cable planning and management.

5. Racks need to be anchored to the floor per earthquake requirements (presently they are not).

6. There are multiple small UPS systems that can be combined into one or two units. This would reduce the amount of heat generated.

7. The addition of a smaller "pony" chiller that can operate from 17 tons up to 125 tons in the Central Plant II along with automatic isolation valves is recommended in order to accommodate 24/7 operation at the low loads needed to keep the server room at a stable temperature. The existing 500 ton chillers are only able to run down to 125 ton loads and the server room only needs 17 tons. This will be more efficient and stable.

Additional Plans: A mitigation plan will be executed as follows. In addition, the mitigation plan has been budgeted and will be the responsibility of the Facilities department to coordinate. The cost of the project will be financed over several years.

1. Phase I: Provide power receptacles for each rack, centralized UPS with 1 hour capability, and install a natural gas backup generator for prolonged outages.

2. Phase II: Rearrange racks to improve air flow and consolidate servers (virtualized if possible); cabling work will be required

3. Phase III: Replace existing two units with 1 unit that functions like 2 units and install a pony chiller

Evidence:

1. Liebert Corporation Report

2. Project Proposals

3. Financing Option Proposal