A look at significant aspects of the campus planning process suggests the nature and direction of such efforts at 12 of Florida's 13 existing community-junior colleges. Initial planning activities and months required to accomplish them are summarized, along with the various methods by which new institutions acquired facilities to begin instruction. In addition, a sequence of typical campus planning activities was developed which schematically indicates these events from their initiation to the "working drawings" stage. Major areas of planning are reviewed, including academic, fiscal, and physical. Site selection studies involved local boards operating in accordance with state department of education criteria. Sites were obtained as grants or gifts from individuals or government agencies. Long range space needs were established through the use of facilities surveys, and--in some cases--through the development of educational specifications dealing with the purposes, teaching methods, building requirements, and equipment needs of each curriculum area. Campus development plans were discussed and classified according to three general typologies: "lineal," "collegial," and "compact." In concluding this study, several key factors in good campus planning were identified, including interagency coordination, adequate sites and funding, the use of one architectural firm throughout, good enrollment projections, and comprehensive educational specifications.
THE PROCESS OF CAMPUS PLANNING IN FLORIDA'S COMMUNITY JUNIOR COLLEGES
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IN
FLORIDA'S COMMUNITY JUNIOR COLLEGES

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Bureau of Planning
Florida Department of Administration

September, 1969
ACKNOWLEDGMENTS

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INTRODUCTION

In 1957, legislation was enacted establishing the present community junior college system in the State of Florida. Following the plan developed by the Community College Council, a long-range program for expansion of the state system of junior colleges from the four institutions which existed in 1957 has been virtually completed. Twenty-four new areas have been approved for surveys since 1957 and all but one of these districts now have institutions in operation. Designation of additional junior college areas in Florida is not anticipated in the near future.

Certain questions now arise: During the twelve years since 1957, how well has Florida planned the campus of these public junior colleges? What has been the development of the planning process; what are the trends; and how can this planning activity be improved?

The American Association of Junior Colleges expresses its concern for this general problem in the following manner:

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1See Community College Council, The Community Junior College in Florida's Future (Tallahassee: Florida State Department of Education, 1957.)
But what kind of facilities are being developed? How do these advance the philosophy and the mission of the institutions they will house? Physical facilities and their relationships are an integral part of the college environment. Their effect can be and ought to be as significant in the learning process as the social environment provided by teachers, administrators, and students.¹

While the above reference deals chiefly with individual college buildings, the same queries may be raised in the broader scope of the total environmental plan. A logical point for analysis has been reached in the maturity of Florida's system. It is time to see if answers exist to the questions posed above.

A review of related research failed to reveal any studies analyzing the process of community college planning after it had occurred, but did offer insights into the need for such work. Therefore, this analysis was undertaken to determine strengths, weaknesses, common patterns and emerging trends in Florida junior college campus planning.

More than fifty individuals related to fourteen of the fifteen campuses established in this first decade participated in the current work. These persons included college administrators, architects, faculty members, State Department of Education personnel, and various other interested observers. The colleges were (in chronological

order) Gulf Coast, Central Florida, Daytona Beach, Manatee, North Florida, St. John's River, Brevard, Broward, Indian River, Miami-Dade North, Edison, Lake City, St. Petersburg-Clearwater, and Miami-Dade South. During visits to each campus, the individuals referred to above were interviewed to gather data on the nature of planning activities, who performed them, when they occurred, how long they required, and how much they cost. Information was also sought on related problems. After these conferences, the campus was inspected, available planning-related materials were gathered, and appropriate files and records in the Division of Community Colleges were reviewed.

The analysis of these data began with a study of the history and legal bases which structured the planning sequence. This procedure enabled the investigator to determine in what ways these institutions had deviated from the "normal" process. Each set of data was then subjected to "network analysis." In this operation, a graphic representation of the actual sequence of events and activities was derived, along with the time required for their completion. This analysis permitted easy comparison of all processes. It also established the "typical" network for all activities. Each part of the process was then examined to discover key factors in planning.
THE PLANNING PROCESS

The original intention was to gather basic information on all planning activities at each college. However, information on costs was generally incomplete or unavailable. Thus information of total expenditures could not be obtained.

Twenty-one activities were identified as having been used by the institutions in their initial planning process. Twelve of these took place on at least one-half of the 14 campuses in the study. These were socio-economic surveys, population studies, educational needs surveys, program determinations, administrative organization, academic organization, student services organization, financial studies, long-range space projections and campus development plans. Table 1 shows the six distinct patterns of operation whereby these activities took place.

In most colleges, the total planning time was calculated from the beginning of the initial survey which preceded establishment of the institution to the beginning of working drawings. Table 2 shows the number of months required to accomplish each of the planning activities in the junior colleges. It should be noted that the total times do not equal the sum of the individual times due to overlapping activities.

An examination of this table reveals that the average time required to complete the total planning process
<table>
<thead>
<tr>
<th>Planning Activity</th>
<th>Level of Authority</th>
<th>Leading Persons And/Or Groups</th>
<th>Method of Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-Economic Surveys</td>
<td>District&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Citizen's Group</td>
<td>Committees Decision</td>
</tr>
<tr>
<td>Population Studies</td>
<td>District&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Citizen's Group</td>
<td>Survey</td>
</tr>
<tr>
<td>Financial Studies</td>
<td>Distric&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Citizen's Group</td>
<td>Survey</td>
</tr>
<tr>
<td>Administrative Organization</td>
<td>College</td>
<td>President and/or Administrators</td>
<td>Independent Decisio</td>
</tr>
<tr>
<td>Academic Organization</td>
<td>College</td>
<td>President and/or Administrators</td>
<td>Independent Decisio</td>
</tr>
<tr>
<td>Student Services Organization</td>
<td>College</td>
<td>President and/or Administrators</td>
<td>Independent Decisio</td>
</tr>
<tr>
<td>Enrollment Projections</td>
<td>State</td>
<td>Survey Team</td>
<td>Committee</td>
</tr>
<tr>
<td>Long-range Space Projections</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Selection</td>
<td>District&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Selection Team</td>
<td>Committee Decision</td>
</tr>
<tr>
<td>Campus Development Plans</td>
<td>Outside&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Architect or Consultants</td>
<td>Independent Decision</td>
</tr>
</tbody>
</table>

<sup>a</sup>Required State Approval
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gulf Coast</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>12</td>
<td>2</td>
<td>-</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Central Florida</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Daytona Beach</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Manatee</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>11</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>North Florida</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>St. Johns River</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Brevard</td>
<td>4</td>
<td>12</td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>-</td>
<td>11</td>
<td>40</td>
</tr>
<tr>
<td>Broward</td>
<td>5</td>
<td>13</td>
<td>4</td>
<td>6</td>
<td>29</td>
<td>2</td>
<td>-</td>
<td>7</td>
<td>54</td>
</tr>
<tr>
<td>Indian River</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>43</td>
</tr>
<tr>
<td>Miami-Dade No.</td>
<td>4</td>
<td>11</td>
<td>6</td>
<td>7</td>
<td>10</td>
<td>1</td>
<td>-</td>
<td>11</td>
<td>44</td>
</tr>
<tr>
<td>Edison</td>
<td>8</td>
<td>13</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>48</td>
</tr>
<tr>
<td>Lake City</td>
<td>4</td>
<td>12</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>Clearwater</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>21</td>
<td>-</td>
<td>7</td>
<td>6</td>
<td>36</td>
</tr>
<tr>
<td>Miami-Dade So.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>8</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>3.8</strong></td>
<td><strong>9.1</strong></td>
<td><strong>3.0</strong></td>
<td><strong>7.7</strong></td>
<td><strong>7.9</strong></td>
<td><strong>2.2</strong></td>
<td><strong>6.8</strong></td>
<td><strong>6.0</strong></td>
<td><strong>31.9</strong></td>
</tr>
</tbody>
</table>

*aDoes not equal sum of individual times because of overlapping activities.

*bActivity occurred twice; both are included here.
was 32 months, with a minimum of 16 and a maximum of 54. Further study shows that the earlier campuses were planned in approximately 20 months.

In order to get some idea of how Florida compares with the rest of the nation in this respect, a direct comparison was made with a recent study by the American Association of Junior Colleges (AAJC). In this report, the average planning time in 91 junior colleges across the nation was classified according to the methods used by new institutions to begin their programs. The results of this comparison are seen in Table 3. It will be noted that the national survey takes into account only the time from the appointment of a president to the opening of classes. Therefore, comparable figures are drawn from the present study, even though considerable planning may have taken place prior to this time in Florida's community colleges. Because of the variety of resources and facilities used in Florida colleges, it is also difficult to place discreetly each institution in the categories used in the AAJC report. However, these data make possible certain comparisons.

It can be seen from Table 3 that Florida is similar to the other colleges in the time required to get classes started through the leasing of temporary facilities and the erection of prefabricated structures. The principal divergence in planning time between Florida and institutions

---

TABLE 3

METHODS USED BY NEW INSTITUTIONS TO BEGIN THEIR PROGRAMS AND TIME REQUIRED FOR PLANNING

<table>
<thead>
<tr>
<th>METHOD</th>
<th>AAJC STUDY(^a)</th>
<th>FLOIDA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Institutions</td>
<td>Avg. Time Required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For Planning (In Months)</td>
</tr>
<tr>
<td>Evening Program in Shared Time Facilities</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Leased Temporary Facilities</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Previously Used for Instructional Purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leased Temporary Facilities</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Previously Used for Non-Instructional Purposes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased and Renovated Pre-Existing Facilities</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Erected New Facilities Through Short-term or Prefabricated Construction</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Erected New Facilities Through Standard Construction</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>TOTALS</td>
<td>91</td>
<td>15.3 (^c)</td>
</tr>
</tbody>
</table>


\(^b\)Lake-Sumter included because it appeared in AAJC study and data were available.

\(^c\)Estimated.
included in the AAJC study was planning construction where Florida colleges required an average of 15 months more than non-Florida institutions to get into their facilities. The lack of a larger Florida sample must be kept in mind as well as the fact that two campuses were second centers. This meant that they were not as rushed to begin operations. One conclusion that can be reached is that, overall, Florida was able to initiate classes somewhat faster than the national average based on the criteria used in the AAJC report.

The data gathered in this study were tabulated in such a manner as to show the sequence of events and activities that took place in each college. The initial outcome of this effort, called a network diagram, symbolizes a series of events and activities flowing in a direction and requiring a lapse of time for completion. To facilitate the interpretation of Figure I, the following definitions of terms are provided:

1. An EVENT or accomplishment is a point in time indicated by an identifying letter within a circle.

2. An ACTIVITY is work done to achieve an event, and is shown by an arrow pointing in the direction of the work flow.

3. A DUMMY ACTIVITY requires no time lapse and is represented by a dotted line.

4. A CRITICAL PATH is the longest time sequence through a series of activities and is shown as a double line.

5. The TIME LAPSE (in months) for an activity is represented by three numbers underneath the
FIGURE 1
NETWORK DIAGRAM OF THE ACTUAL TYPICAL SEQUENCE OF CAMPUS PLANNING ACTIVITIES IN FLORIDA'S COMMUNITY JUNIOR COLLEGES

A - INITIATION
B - SOCIO-ECON ED. NEEDS SURVEY
C - SURVEY
D - PROGRAM DETERMINATION
E - STATE APPROVAL
F - PRESIDENT APPOINTED
G -

1-1-2
0.5-1-2
1-2-4
1-9-13
2-3-6

H - ADMIN. ORGANIZATION
I - ACADEMIC ORGANIZATION
J - OPENING
K - SPACE NEEDS
L - ENR. PROJ.
M - CAMPUS DEVMT PLAN
N - WKG. DNGS.

0.5-3-5
0-2-5
1-4-9
1-2-3
2-6-11

1-8-29
2-3-4

FINANCIAL STUDIES
POPULATION STUDIES
ST. SERVICES
STATE PRESIDENT
activity, indicating minimum, average, and maximum times, respectively.

Note that each activity is a dependent one; that is, a preceding activity is completed before the succeeding one is started. The sum of the total average time (in months) required for the critical path is shown in the box at the end of the network.

Since the emphasis of this report is on the total planning process, the typical procedure was calculated by aggregating the fourteen diagrams of the colleges into the composite network illustrated in Figure 1. Those activities which occur in a majority of campuses are included, along with their location in the total process and the time spans required for the accomplishment. This network represents the "average" process in actual practice, and, as might be expected, closely approximates the way it was envisioned by the early planners of the junior college system.

It is significant to note that, using network calculations, the typical institution would require 34 months to achieve all twelve activities (and time for approvals) rather than the 32 months shown as an average in Table 2. This is due to the omission of some item in the process by virtually every college. It should further be observed that, if everything went well, an institution could theoretically reach the working drawing stage in ten months; if there were many unforeseen delays, it might take over five years to reach this point.
THE PLANNING ACTIVITIES

This section contains a review of the major areas of academic planning, fiscal planning, and physical planning as determined through an analysis of the interview responses and other available materials. Key factors in the planning effort are identified.

Academic Planning

Academic planning is envisioned as the process of determining and implementing the initiation of an institution's educational program. Activities in this area occurred at two points in the total procedure. Socio-economic surveys, population studies, educational needs surveys and program determinations were included in the initial survey. Administrative organization, academic organization, faculty employment needs, student services organization and student body characteristics were determined from the time of State approval to the opening of classes.

All of the initial survey reports were written at the county or district level by groups of interested citizens under the guidance of school board coordinators. Each citizen group made extensive use of the survey method in gathering data to be presented in the documents. Two of their reports reflect a greater extent of community involvement than the other ten. This is evidenced by the inclusion within these publications of such items as large
and specific community sub-committees, unusual local sources of data, and local consultant help. The educational needs of the communities and the programs of the colleges were determined through the use of three primary surveys: a questionnaire administered to high school students, a questionnaire of high school graduates, and a survey of local business and industry.

The procedure whereby the foregoing activities were carried out in the two second-center campuses is also worthy of mention. In these instances specific planning documents were written to detail the needs of the new center. While the format was essentially that of the survey briefs, these publications were more extensive and often dealt with the organizational activities. They are significant because of their introduction of a new approach to planning preparation. The materials included were well executed and drew upon a broad range of sources. The socio-economic surveys, population studies, educational needs surveys and program determinations involved both faculty and staff members and, according to interviewees, the results were most helpful in further planning. In general, the time required for preparation was equivalent to that of the initial survey documents but the cost was somewhat higher.
Fiscal Planning

State regulations require that each junior college service area show evidence of its ability to support financially a new institution. This assurance was provided by the local school board in the initial survey reports. Five single-campus institutions attempted further study of the financing problem. In second-center campuses, a more thorough fiscal analysis was conducted after other factors such as site, enrollment, organization and curriculum were determined.

The size of state appropriations for facilities construction increased over the eight years covered by the study. The average initial capital outlay disbursement available to the first six colleges was $305,000; to the next six, $938,500; and to the second-centers, $4,246,900. This step-up in funds probably reflects the changing character of later campuses, the changing philosophy within the legislature, and the changing economic conditions.

Respondents generally concur that no significant financial planning took place in any colleges because of the static nature of state and local funding procedures. Lack of local funds and bonding authority were continuing concerns. This is understandable when the smallness of these allocations is realized. In seven campuses, the local pledge was a commitment for the minimum five percent of six
mills over and above Minimum Foundation Program funds allocated to the public schools. In one district with multiple counties, this provided only $1,800 from one county, and others were not much higher. No apparent effort was made to determine what it would cost to operate such an institution and then develop a financial program to provide the needed funds.

Physical Planning

Physical planning in the context of this study includes site selection studies, enrollment projections, long-range space needs, educational specifications, equipment needs and campus development plans. Table 4 displays pertinent data for each campus.

An inspection of this table shows that a wide spectrum of buildings were used for temporary quarters by the Florida junior colleges. Six institutions were housed in facilities previously used for instructional purposes, five were in non-instructional buildings, two initially constructed entire new plants and one purchased and renovated an existing forest ranger school. It should be noted that both second-campuses were begun in new facilities, although one had offered evening courses in the community for five years. Had there not been delays in construction, the other college would not have been forced to use a temporary location.
### TABLE 4

**SUMMARY OF PERTINENT INFORMATION ON INITIAL FACILITIES FOR FLORIDA'S COMMUNITY JUNIOR COLLEGES**

<table>
<thead>
<tr>
<th>Institutions in Chronological Order by Date of Opening</th>
<th>Temporary Quarters</th>
<th>Estimated FTE Enrollment Potential</th>
<th>Initial Size (Acres)</th>
<th>Initial State Capital Outlay Disbursement</th>
<th>Initial Facility Size in Gross Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gulf Coast</td>
<td>Wainwright Shipyards</td>
<td>750</td>
<td>80</td>
<td>$35,108(^b)</td>
<td>34,410</td>
</tr>
<tr>
<td>Central Fla.</td>
<td>Marion Co. Vocational School</td>
<td>750</td>
<td>60</td>
<td>295,200</td>
<td>33,600</td>
</tr>
<tr>
<td>Daytona Beach</td>
<td>Princess Issena Hotel</td>
<td>800</td>
<td>45</td>
<td>327,600</td>
<td>48,588</td>
</tr>
<tr>
<td>Manatee</td>
<td>Abandoned Jr. High</td>
<td>1,000</td>
<td>100</td>
<td>424,800</td>
<td>52,086</td>
</tr>
<tr>
<td>North Florida</td>
<td>2 Churches, Apt. House, REA Building</td>
<td>550</td>
<td>42</td>
<td>253,100</td>
<td>18,720</td>
</tr>
<tr>
<td>St. Johns River</td>
<td>Church, House, Renovated Factory</td>
<td>700</td>
<td>80(^a)</td>
<td>238,500</td>
<td>22,086</td>
</tr>
<tr>
<td>Brevard</td>
<td>Abandoned Jr. High</td>
<td>3,000</td>
<td>69</td>
<td>610,142</td>
<td>97,219</td>
</tr>
<tr>
<td>Broward</td>
<td>Naval Air Station</td>
<td>5,000</td>
<td>152</td>
<td>728,786</td>
<td>127,094</td>
</tr>
<tr>
<td>Indian River</td>
<td>Portables &amp; Shared Time In Elem. &amp; High School</td>
<td>1,150</td>
<td>65(^a)</td>
<td>415,243</td>
<td>79,812</td>
</tr>
<tr>
<td>Miami-Dade, No.</td>
<td>Portables &amp; Shared Time In High School</td>
<td>6,000</td>
<td>245</td>
<td>1,427,979</td>
<td>321,063</td>
</tr>
<tr>
<td>Edison</td>
<td>Andrew D. Gwynne Inst.</td>
<td>2,500</td>
<td>80</td>
<td>1,226,031</td>
<td>73,873</td>
</tr>
<tr>
<td>Lake City</td>
<td>Forest Ranger School</td>
<td>500</td>
<td>130</td>
<td>1,220,139</td>
<td>81,542</td>
</tr>
<tr>
<td>Clearwater</td>
<td>Evening Courses</td>
<td>4,200</td>
<td>77</td>
<td>4,328,078</td>
<td>140,188</td>
</tr>
<tr>
<td>Miami-Dade, So.</td>
<td>Portables &amp; Shared Time In High School</td>
<td>6,000</td>
<td>185</td>
<td>$4,159,754</td>
<td>251,009</td>
</tr>
</tbody>
</table>

\(^a\)Later increased to approximately 100 acres.

\(^b\)$291,300 available.

*Source: Records of the Community Junior College Division.*
Site Selection Studies

The selection of sites for Florida junior colleges was conducted at the local level with approval by the State Department of Education. When a local situation made it difficult to choose a location, state recommendations were generally relied upon. Otherwise, the decision was reached by the local board with the advice of the President, where he had been employed.

The State Department of Education established a set of criteria to guide site selection.¹ These standards were met through the use of time and distance studies, transportation studies, population density maps, and pupil location maps. However, this does not mean that all criteria were always achieved. At least six of the sites violate State Department recommendations on size, drainage, extent of site preparation, zoning or shape. In four cases the sites were considered to be too small. In addition, three were judged to be poorly located. One college changed its original location after a fortuitous reconsideration of future needs. Eight sites appear to have been carefully selected and are very adequate for the immediate needs.

All of these sites were obtained by gifts and/or grants from individuals and governmental agencies. They formerly served such diverse purposes as trash dumps, air

¹Division of Community Junior Colleges, "Criteria for Selection and Approval of Community Junior College Sites in Florida" (Tallahassee: 1963), mimeographed.
bases, and as sites for educational institutions. They are predominantly rural or suburban with none in areas of high population density. Urban colleges are just beginning to seek sites in the inner city.

Finally, Table 4 reveals that the average size of sites increased after 1960, but this is more a function of anticipated large enrollments than an increased awareness of needs. Overall, the sites average 105 acres. Based on state criteria, five campuses are over or approaching their maximum capacities. This points up the fact that several colleges should reconsider their site needs and seek additional land.

**Enrollment Projections**

Enrollment projections were considered by respondents to be one of the four most valuable activities on which to base planning. The relation of initial maximum enrollment estimates to 1967-68 average daily attendances is shown in Table 5. In order to have a consistent base for comparison, initial estimates were taken from the original state facilities surveys prepared for each college. It is readily evident from these data that growth in the earliest colleges was underestimated by over 100 percent in the aggregate. Of the other eight, only one institution has not exceeded by at least 75 percent its potential enrollment. From this contrast, it appears that growth of the system has exceeded
<table>
<thead>
<tr>
<th>Institution</th>
<th>Survey-Potential Enrollment Estimate</th>
<th>1967-68 Average Daily Attendance</th>
<th>% of Estimate Related to 1967-68 ADA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gulf Coast</td>
<td>750</td>
<td>1,431</td>
<td>191</td>
</tr>
<tr>
<td>Central Florida</td>
<td>750</td>
<td>1,372</td>
<td>183</td>
</tr>
<tr>
<td>Daytona Beach</td>
<td>800</td>
<td>4,012</td>
<td>502</td>
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<tr>
<td>Manatee</td>
<td>1,000</td>
<td>2,321</td>
<td>232</td>
</tr>
<tr>
<td>North Florida</td>
<td>550</td>
<td>1,203</td>
<td>219</td>
</tr>
<tr>
<td>St. Johns River</td>
<td>700</td>
<td>1,324</td>
<td>189</td>
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<tr>
<td>Brevard</td>
<td>3,000</td>
<td>3,643</td>
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<td>Broward</td>
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<td>4,046a</td>
<td>81</td>
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<tr>
<td>Indian River</td>
<td>1,150a</td>
<td>901b</td>
<td>77</td>
</tr>
<tr>
<td>Miami-Dade North</td>
<td>6,000</td>
<td>14,036b</td>
<td>234</td>
</tr>
<tr>
<td>Edison</td>
<td>2,500c</td>
<td>1,114c</td>
<td>45</td>
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<tr>
<td>Lake City</td>
<td>500c</td>
<td>1,231c</td>
<td>246</td>
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<td>Clearwater</td>
<td>4,200</td>
<td>3,200b</td>
<td>76</td>
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<tr>
<td>Miami-Dade South</td>
<td>6,000</td>
<td>5,958b</td>
<td>99</td>
</tr>
</tbody>
</table>

a Since estimate was made for 1965-66, ADA is for corresponding year.

b Estimate of two-center college.

Since estimate was made for 1966-67, ADA is for corresponding year.

Source: Original Facilities Surveys and "Florida Public Junior Colleges Enrollment and Attendance" Report for various years, Division of Community Junior Colleges, State Department of Education.
all expectations and future planners must raise their sights in projecting enrollments.

Long-Range Space Needs

For ten of the fourteen campuses, the primary method of determining long-range space needs was the facilities survey prepared by a state-selected team. These teams consisted of state personnel and educators from higher education institutions other than the one under review.

Table 4 showed that there was a marked increase in both amounts of space recommended and amounts constructed over the years. However, in the first twelve campuses, actual construction was only 73% of the area recommended by the state. A major complaint was the fact that the initial buildings were too small and unsuited to efficient expansion. Nine respondents (31%) mentioned this shortcoming and felt that the problem would have been alleviated by the initial construction of one or two buildings for ultimate student capacities. These structures could have been designed for several needed services at that point and then renovated as other complete facilities were built.

Educational Specifications

The last four campuses developed used educational specifications concurrently with the facilities surveys. In fact, in the two second-center campuses, the educational specifications were adopted as the official state survey. The two colleges opening in 1962 developed their "edspecs"
after the survey team identified long-range facility needs. In all four instances these documents were prepared by faculty committees appointed to establish the purposes, teaching methods, building requirements and equipment needs of each curriculum area. In three colleges these reports were commended by the architects as being extremely valuable, and four administrators cited their importance. The average time span for preparation of edspecs was six and one-half months. Costs of their preparation were concealed in the budgeted salaries since this was a part of the instructional load.

Campus Development Plans

The Division of Community Junior Colleges in the State Department of Education requires each college to have a plan for a logical and orderly pattern of growth on file with the Division prior to construction on any campus. The term "campus development plan" is used to identify this document.

In developing overall plans, six colleges chose outside consultants and eight used the local architects who later designed individual buildings. At least four of the consultants had previous college design experience. Of the local architects, four also had previously done college work, but in each case it was another junior college in the State. Of these four, three did two colleges each in
the present study. All of the design work was done in the architect's offices with assistance from the college as the architect deemed necessary.

Three problems consistently mentioned by respondents in discussing physical planning deserve careful consideration. Eighteen individuals (75%) made varying observations that there was not enough money allocated to cover planning, parking, landscaping and utilities in addition to construction. A second recurring comment alluded to by twelve interviewees (50%) was the use of school construction regulations with little applicability to the junior college. The third restricting influence, mentioned by nine respondents (38%), was the "cumbersome chain-of-command" required for approval of plans. It was indicated that more coordination was needed for planning. Of the fourteen campuses studied, only three had initially an administrator of planning and construction with commensurate authority to make decisions.

The fourteen campus plans lend themselves to three general typologies: five are "lineal" developments along a major axis; six are "collegial" with buildings spread over the entire site; and three are "compact" with a few large buildings concentrated in one area. Several campuses have a definite high school "flavor" in their early buildings, but most have sought to impart a distinct impression that this is a different type of educational institution.
Since the present study is not intended as an architectural critique, it was determined that one index of the quality of work would be the degree of publication in professional journals and the design awards given to the work by the architecture and education professions. An examination of three national and one state architectural journal and three national educational publications reveals that seven Florida junior campuses have received specific architectural mention in eleven issues of five magazines since 1957. Corollary to these publications, eight architectural design awards have been received by six of the colleges; but three were presented for individual buildings at three locations. The other five awards have gone to three campuses that also received twelve journal citations. From these professional judgments, it can be determined that three of the Florida junior colleges have done an exceptional job in campus planning. The question immediately arises, "What factors have made them so much better than the other eleven?"

From a review of available data, it would appear that the key factors in good campus planning are: documentation, coordination with other agencies, adequate sites, good enrollment projections, educational specifications, the use of one architectural firm throughout, compact plans, and adequate funds. Further study led this writer to submit that the intangible factor involved in all three
award winners was the combination of aesthetically appreciative leaders with sound professional designers. 

**SUMMARY**

The following have been determined to be the major findings of this study.

1. Twenty-one (21) activities were identified as a part of the total initial planning process. Of these, 12 took place on at least one-half of the 14 campuses in the study.

2. The average length of time required for this initial planning process was 32 months with a range from 16 to 54.

3. Florida junior colleges were able to initiate classes three months faster than the national average based on the criteria used in a report by the American Association of Junior Colleges.

4. The planning process for the first ten institutions begun under the State plan for junior colleges deviated very little from the established procedures. However, the later four campuses in this study began to introduce planning innovations which went beyond the minimum requirements of the State.

5. Since 1957, three of the fourteen campuses have received substantial citations and awards for excellence in architectural design.

6. According to 23 interviewees, the four activities which were most valuable in making planning decisions were faculty involvement (48%), enrollment projections (30%), educational specifications (30%), and educational programs (26%).

7. According to 24 respondents, the four most restrictive actions on planning were the lack of funds for auxiliary needs in construction (75%), the construction funding process (58%), the orientation of school plant regulations (50%), and the coordination of the planning/construction process (38%).

8. A majority of the respondents concurred that no comprehensive, long-range financial planning had taken place
in most junior colleges, and cited this as the most critical need of the state system.

9. The sites selected for these 14 college campuses are predominantly rural or suburban with no centers in "inner city" areas of high population density.

10. Enrollment growth in the earlier colleges was consistently underestimated by over 100 percent in the aggregate.

11. In the first 12 campuses of this study, the amount of space constructed was only 73 percent of the amount recommended in State facility surveys.

12. This writer submits that the key factor in achieving architectural excellence in junior colleges was aesthetically appreciative leadership combined with sound professional design. This finding was borne out by the statements of at least six persons interviewed (21%).

This study found that the planning of Florida junior colleges from 1957 to 1966 was generally acceptable in light of the many circumstances involved. A program originally estimated to require twenty to twenty-five years was almost completed in approximately one-half that time. This achievement should not be dismissed lightly. However, the time has now arrived to determine directions for the years ahead. The key factors in future campus planning should be enrollment projections, program determinations, educational specifications, financial planning and knowledgeable administrators. If these elements are given due consideration, the future can hold bright promise for better junior college campuses.
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**Articles**


**Unpublished Materials**