1.0 INTRODUCTION
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In January 1999, the Austin Community College Board of Trustees appointed a Citizens’ Advisory Committee to review the capacity of Austin Community College in meeting the education and workforce needs of the central Texas region for the 21st Century. To accomplish this objective and to recommend strategies for meeting the needs, the Citizens’ Advisory Committee was asked to review the draft ACC Strategic Plan and assess whether ACC required additional funding. If the determination was made that additional funding was required, then the Citizens’ Advisory Committee was asked to recommend the amount of additional funds required to meet the community’s needs.

Subsequently, Austin Community College contracted with MGT of America, Inc. to develop peer and benchmark/best practices analyses. The analyses were designed to provide information to assist the Austin Community College Citizens’ Advisory Committee in its consideration and review of the draft ACC Strategic Plan. In Spring 2002, ACC again contracted with MGT of America, Inc. to update the benchmark/best practices analyses.

This report presents the findings of the update to the peer and benchmark analyses. Chapter 1 of the report provides an overview of Austin Community College, descriptions of peer and benchmark analysis, and an explanation of the methodology used in the study. Chapter 2 reports the findings of the study and is organized into sections about students, faculty, revenues and expenditures, tax base and service area, library or learning center resources, facilities, and staffing and compensation. A list of the peer or benchmark institutions is included as Appendix A. Definitions of terms used in the report can be found in Appendix B, and a copy of a survey instrument employed to collect information from the peer or benchmark colleges is attached as Appendix C.
1.1 **AN OVERVIEW OF AUSTIN COMMUNITY COLLEGE**

Austin Community College was established in 1972 to meet the needs of Travis County and those counties contiguous to Travis. ACC registered 2,363 students in its first semester of operation in the fall of 1973, and has grown to about 27,000 students in the fall of 2001.

Austin Community College operates on the belief that open access to quality post-secondary education is vital in a rapidly changing democratic society. Consequently, ACC exists to provide educational opportunities to all the people in its service area. ACC maintains an open door admission policy and offers a comprehensive variety of post-secondary educational programs.

ACC is charged by the Texas Legislature with providing technical programs up to two years in length that lead to associate degrees; vocational programs that lead directly to employment in semi-skilled and skilled occupations; lower division courses in arts and sciences; continuing adult education; compensatory education programs; guidance and counseling programs; and such other purposes as may be in the best interest of Texas.

The profile of the student body has changed over the last 25 years. In 1974 the median age of ACC students was 25.2 years, and it was 23.3 years in 2001. About one-third of the students are minority and over half are female. Enrollment in academic courses has increased from 55 percent of the total in 1974 to over 75 percent in 2002.

ACC offers courses in approximately 80 different disciplines, with enrollments in Mathematics, Computer Science, English, and History comprising over one-third of all enrollments in Fall 2001. Enrollment in developmental classes and programs increased significantly after the State of Texas mandated the Texas Academic Skills Program.

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1 Material in this section developed by ACC staff.
(TASP), and the number of students enrolling in developmental classes continues to increase.

ACC acquired its first real estate in 1984 by taking over the former Austin Country Club. In 1987 facilities were added in Leander and in northeast Austin. In the years since, ACC has acquired other facilities and currently operates six campuses.

In 1986, voters approved a property tax levy not to exceed five cents per $100 of assessed valuation and the district has not increased the levy since that time. ACC's tax rate of $0.05 is the lowest tax rate among all the Texas Community Colleges. In FY 2001, almost 40 percent of ACC’s budget came from state appropriations, over 30 percent from student tuition and fees, and about 16 percent came from property taxes.

1.2 AN OVERVIEW OF PEER OR BENCHMARK ANALYSIS

1.2.1 PEER ANALYSIS

A “peer” is a college that is “most like” another college based on similarities on a group of variables like mission, size, organization, control, location, and mix of programs. Colleges and universities use groups of peers to compare their performance or characteristics and/or to request additional funding to support initiatives.

Colleges, state systems, and legislative analysts have used peers to set tuition, recommend faculty salaries, compare expenditures per full-time equivalent student, compare legislative appropriations, and adjust student/faculty ratios. In 1996, a majority of states were using peers in their funding formulas; 26 states used peer data for salary purposes; 17 for tuition and fee setting; 10 for determining overall funding levels; and six for determining funding for libraries\(^2\). Additionally, some states use peers to determine funding for physical plant operations and for faculty credit hour or productivity comparisons.
Peers may be determined for one institution based on sets of characteristics that indicated “alikeness” or “similarity” or peers may be determined for a set of institutions. An individual institution may use peers for internal comparison purposes. For example, peers can be established for each academic department, or for each business office in the college. Generally, peers are determined for “general” purposes, and the same set of peers are used for all comparisons that a college or university may make. However, some colleges have one set of peers for determining tuition, another set of peers for comparisons of faculty and staff salaries and compensation, and a third set for funding comparisons.

A set of peers typically includes at least ten colleges or universities because not all will elect to participate in data collection exercises. A size smaller that ten may not provide sufficient data to yield valid or reliable information. To determine a set of peers, colleges or governing boards may use several methods: geographic location, membership in an organization or externally determined group, or statistical analysis.

**Geographic Proximity**

All of the colleges in the contiguous states may be used as peers; or other colleges in the same state that have been assigned the same Carnegie Classification. (Carnegie Classifications are categorizations of colleges and universities using a method designed by the Carnegie Commission for the Advancement of Teaching. Colleges are classified as Research I, Research II, Doctoral I, Doctoral II, Comprehensive I, Comprehensive II, Liberal Arts I, Liberal Arts II, Two Year, Vocational-Technical, or Specialized.) Geographic proximity is used because it is thought that the nearby colleges are those with which the college competes for students and staff. The Southern

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Regional Education Board and the Western Interstate Commission for Higher Education maintain detailed data bases on the colleges and universities in their regions. These data form the basis for geographic peer comparisons.

Geographic peer selection is used most often for comparisons of tuition and fees.

**Membership in Athletic Conferences, Organizations, or in the same Carnegie Classification**

Some colleges and universities use membership in an organization or athletic conference as the only criterion for determining peers. For example, members of the Big Ten Athletic Conference compare data on physical plant, libraries, planning, enrollment trends, etc. The universities that are members of the Association of American Universities (AAU) have detailed data that are shared among member institutions. Data include items such as rank of faculty and class size. Some colleges or universities include as peers all other colleges or universities that are in the same Carnegie Classification.

Membership in a “class” is used most often for peer selection for plant, library, and faculty comparisons.

**Statistical Analysis**

To determine peers, some colleges or governing/coordinating boards use statistical analysis. The analysis may be simple or quite complex. A simple analysis might use only one variable to select peers. For example, all colleges of a certain size, no matter what the location, organization, or control might be selected. Or, all colleges which are classified as Research I universities become the peer set.

More complex statistical methodologies involve up to 150 variables in determining the set of peer institutions. Variables include size, location, organization, control, mix of
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academic programs, types of students served, graduation rates, or any of a number of other variables.

Typically, the peer selection will start with one variable that is used as the major criterion to eliminate most of the 6,000 colleges and universities in the United States. For example, only public colleges may be included in the selection group. Then, the group may be further winnowed by elimination of all colleges above or below a certain enrollment.

The most complex method for selecting peers involved completing factor analyses and cluster analyses to determine which colleges have the most alike factor scores, or which cluster together based on the variables used. A set of “difference scores” may be computed, which are used to determine how alike two colleges are on a variable or factor such as size. The difference scores are summed across all variables or factors, and those colleges with the smallest total distance score become the set of peers.

This type of analysis is used most often to determine peers for funding comparisons. This method was used to determine the statistical peers for Austin Community College during the original benchmarking study in 1999.

1.2.2 Benchmarking

“Benchmarking” is a term that refers to an analysis technique the uses a reference point against which measurements of certain conditions can be taken and evaluated. Benchmarking has become one of the buzzwords of our time, and is used often in total quality management or continuous quality improvement programs.

“Benchmarking” is used for the purposes of this study as a systematic approach for conducting comparative statistical analyses of Austin Community College relative to other peer or comparison colleges, or for comparing ACC to benchmarks defined by outside professional organizations. Benchmarking is valuable for providing objective
information, based on facts, to be used in prioritization and decision-making. A benchmark or “best practice” college is one whose method of operation or whose process in a particular area has been designated as one of the best in the nation or state. Institutions use benchmarking to identify who is doing something best and how their own practices compare; benchmarking then permits a college to plan to close the gap between itself and the best.

Benchmarks or standards have been established for colleges and universities by several professional associations. In this report, benchmarks established by the Association of College and Research Libraries (which is a division of the American Library Association), the Association of Physical Plant Administrators (an association of higher education facilities officers), and the Council of Educational Facilities Planners International are used to evaluate ACC.

The Association of College and Research Libraries sets minimal benchmarks for eleven factors or components of collegiate libraries and learning resource centers. ACRL also sets best practice or exemplary benchmarks in six areas. The minimum and exemplary benchmarks are listed below in Tables 1-1 and 1-2.

**Table 1-1**

ACRL Benchmark Expenditures Per Student for Learning Resource Center Materials

<table>
<thead>
<tr>
<th>LEARNING RESOURCE CENTER MATERIALS</th>
<th>MINIMUM LEVEL OF EXPENDITURE PER FULL-TIME EQUIVALENT STUDENT</th>
<th>EXCELLENT LEVEL OF EXPENDITURE PER FULL-TIME EQUIVALENT STUDENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>$23.39</td>
<td>$59.67</td>
</tr>
<tr>
<td>Electronic Media</td>
<td>$4.79</td>
<td>$19.48</td>
</tr>
<tr>
<td>Audio Visual Materials</td>
<td>$3.12</td>
<td>$10.04</td>
</tr>
<tr>
<td>Total</td>
<td>$31.30</td>
<td>$89.19</td>
</tr>
</tbody>
</table>
TABLE 1-2
ASSOCIATION OF COLLEGE AND RESEARCH LIBRARY BENCHMARKS

<table>
<thead>
<tr>
<th>BENCHMARK</th>
<th>ACRL MINIMUM BENCHMARK</th>
<th>ACRL EXEMPLARY BENCHMARK</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC expenditures as a % of total E&amp;G expenditures</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Minimal LRC budget</td>
<td>$148.76 per FTES</td>
<td>$363.03 per FTES</td>
</tr>
<tr>
<td>Hours Open</td>
<td>80</td>
<td>NA</td>
</tr>
<tr>
<td>BVEs in collection</td>
<td>332,220</td>
<td>NA</td>
</tr>
<tr>
<td>Expenditures for Books</td>
<td>$23.39 per FTES</td>
<td>$59.67 per FTES</td>
</tr>
<tr>
<td>Expenditures for Electronic Media</td>
<td>$4.79 per FTES</td>
<td>$19.48 per FTES</td>
</tr>
<tr>
<td>Expenditures for Audiovisual Materials</td>
<td>$3.12 per FTES</td>
<td>$10.04 per FTES</td>
</tr>
<tr>
<td>Total Media Expenditures</td>
<td>$31.30 per FTES</td>
<td>$89.19 per FTES</td>
</tr>
<tr>
<td>Number of student seats</td>
<td>10% of FTES</td>
<td>NA</td>
</tr>
<tr>
<td>Total LRC Square feet of space</td>
<td>114,380 sq. ft.</td>
<td>NA</td>
</tr>
</tbody>
</table>

The ALA standard for an adequate number of books or bound volume equivalents (BVEs) to be held by a collegiate library is related to the size of the student body, the number of faculty members, the level of enrollment (i.e., freshman and sophomore, junior and senior, masters, or doctoral), and the mix of academic programs.³

ACRL sets standards for library expenditures that are related to the percent of total Educational and General Expenditures spent on the library. For a community college library, a minimal budget for libraries or learning resource centers is set at 6 percent of E & G expenditures, while an excellent budget is set at 9 percent of E & G expenditures.⁴

The ACRL standard for a minimal library budget per FTE student is set at $148.76 while the standard for an excellent budget is $363.03 per FTE student. Another standard set by the ALA is that learning resources centers should be open enough hours

to enhance the learning environment. Although many librarians recommend that learning centers be open 12 hours a day Monday through Saturday and 8 hours on Sunday, few community college centers are open 80 hours per week.

ACRL also sets benchmarks for expenditures per full-time equivalent student for books, electronic media, and audiovisual materials. Table 1-1 above delineates the ACRL benchmarks, in 1992 dollars, for books and other media at the minimum acceptable level and at the excellent or exemplary level. At the minimum level, community colleges should be expending a total of $31.30 per full-time equivalent student for books and other media; at the excellent level, the benchmark is set at $89.19 per FTES. It should be emphasized that these dollar amounts are expressed in 1992 dollars, and should be adjusted for inflation, although ACRL has not adjusted the amounts since 1992.

ACRL also sets facilities benchmarks or standards for learning resource centers or libraries. The ACRL benchmark for student seating is that a minimum of 10 percent of the FTES enrollment should be accommodated by seating. The ACRL benchmark for total space in learning resource centers is based on the number of full-time equivalent students enrolled, the public services provided by the college, the size and type of LRC collections, and the number of staff members and their needs.

The Association of Physical Plant Administrators (APPA) and the Council of Educational Facilities Planners International (CEFPI) are two higher education trade associations that provide standards or benchmarks for higher education facilities. APPA began developing a “Strategic Assessment Model” or SAM in 1995 that included 15 benchmarks against which a college could assess its facilities, the use of facilities, and physical plant processes. Use of SAM was beyond the scope of this report; however, Austin Community College may find APPA’s Strategic Assessment Model useful to assess internally its facilities and plant operations departments.
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Three types of facilities standards or benchmarks are being used by public higher education systems: space planning benchmarks; space utilization standards; and space programming or design standards. Space planning benchmarks are guidelines for assessing or projecting current and future space needs based on assumptions about program mix, enrollment, and/or staff. The benchmark is used to evaluate current space inventories and determine whether additional space must be obtained. The Texas Higher Education Coordinating Board Space Projection Model is a tool or benchmark against which to measure space utilized for the educational and general functions of colleges and universities in Texas.

Space utilization standards or benchmarks measure the number of hours per week a room is in use and the average percentage of seats occupied during any given hour. These standards are used as productivity standards to suggest to a college or university better utilization of available space. Space programming or design standards, on the other hand, are specific formulas by which buildings and rooms are designed in educational facilities.

Using the space planning benchmarks suggested by the Association of Physical Plant Administrators, community colleges should have between 14 and 22 assignable square feet of classroom space per full-time equivalent student. The Council of Educational Facilities Planners, International suggests classroom utilization rates of about 60 percent of hours available, Monday through Friday, from 7 a.m. to 10 p.m.

1.3 **DATA COLLECTION**

A survey was sent to each of the peer or benchmark colleges to collect information on their programs, students, space, facilities, library holdings, staffing,
revenues, expenditures, and operations. A copy of the data collection instrument is attached as Appendix C.

In addition to the survey of peer or benchmark institutions, MGT collected information from the National Center for Education Statistics Integrated Postsecondary Education Data Survey (IPEDS), the League for Innovation, the National Association of College and University Business Officers, the College Board, the Association of College and Research Libraries, the Association of Physical Plant Administrators, the Council for Educational Facilities Planners International, and the Texas Higher Education Coordinating Board.

1.4 OVERVIEW OF THE REPORT

The purpose of this report is to provide an update to the 1999 benchmarking/peer data analyses. Chapter 2 of the report is organized into the following sections:

- Students
- Faculty
- Revenues and Expenditures
- Tax Base, Tax Collections, and Service Area
- Learning Resources
- Facilities, and
- Staffing and Compensation

MGT sought to obtain the most recent data available and to keep the timeframes consistent throughout this report. However, there is some variance depending on the availability of data. For example, the most recent revenue and expenditure data available on a national basis are those for FY 2000, while tuition and fee information is available for Academic Year 2001-02.