

## Chapter 7: Physical Resources

### *Criterion 2*

*The institution has effectively organized the **physical** resources necessary to accomplish its purposes.*

### **Introduction**

The Cedarville College campus has mushroomed, especially in the last twenty years. Allocation and use of College facilities is perhaps one of the greatest challenges facing the institution. This chapter provides an overview and evaluation of the physical resources of the College.

### **Campus Overview**

#### **Location**

Cedarville College is located on approximately 300-acres at the north edge of the village of Cedarville, Ohio, a quiet town with a population of approximately 3,000. Cedarville is situated in the midst of a triangle formed by the three major cities in southern Ohio; Dayton (30 miles), Cincinnati (75 miles), and Columbus (60 miles). Although the area is heavily agricultural, these three metropolitan areas are within easy access from the campus.

#### **Grounds**

The campus of Cedarville College is divided into two sections by Route 72 which runs north and south through the village of Cedarville. The western portion of the campus includes approximately 210 acres. This acreage houses the majority of the campus' administrative, teaching, and student housing facilities with about 25% yet to be developed. The eastern portion of the campus is approximately 90 acres. The vast majority of this acreage is undeveloped although part of this land is used for intramural activity fields. There are currently no campus structures on this acreage.

## Campus Facilities

### Survey of Facilities

A total of 48 buildings comprises the campus. This is a dramatic increase from the 22 buildings that were in use in 1987 and a far cry from the two buildings on the original campus. The following sections are a survey of the primary campus buildings.

#### *Dixon Ministry Center*

The “crown jewel” of the campus is the Dixon Ministry Center, completed in 1996. The largest portion of this 120,000 square foot facility is devoted to the 3,400 seat James and Ruby Jeremiah Chapel. Daily chapel services are vital to the mission of Cedarville College and students are required to attend. As the student population has expanded, so has the need for larger chapel facilities. The new chapel is equipped with the latest in audio and video technology and is the primary large performance venue on the campus. In the future, seating in the chapel is expandable to 4,000 by renovating three general education classrooms located in the back of the chapel.

Along with the Chapel, the Dixon Ministry Center also houses the Bolthouse Center for Music. The music facilities include 14 instructional studios, 20 practice rooms, four rehearsal halls, a piano pedagogy suite, a piano laboratory, a computer laboratory, three specialized classrooms, a large conference room, and a beautiful 250-seat recital hall. The move of the Department of Music into this new facility is especially significant in light of the recommendations of the 1987 site team regarding the Music Department. Refer to Chapter 2 for complete details.

The Reese Center for Christian Ministries shares space in the Ministry Center with the Chapel and the Music Department. The Christian Ministries portion includes 14 offices and four special areas for ministry team rehearsals.

#### *Centennial Library*

The 66,000 square foot, two-floor Centennial Library provides general study and specialized seating for over 800 students, and the necessary information storage and retrieval support functions for continued quality academic program development. Designed to house a collection of up to a quarter of a million volumes, the library also contains a faculty development center, the archives of the College, a variety of seminar and group study rooms, and the Media Resource Center which includes a media production center, public access computers, a video studio, a SONY language/learning laboratory, media-supported classrooms, library computer classroom, and the Curriculum Materials Center. The Centennial Library presently houses almost 150,000 volumes with almost 4900 volumes added in 1995-96. The Library provides almost 2,000 current periodical

subscriptions in traditional print and full-text computer formats. These numbers do not take into account the ever-expanding electronic offerings which the library accesses through the Internet.

The Library's integrated on-line computer system includes in one system the library catalog with computerized access to all library holdings, circulation control for all materials, acquisitions and budget management, and periodical holdings and management. The system, including the library catalog, is accessed through 18 system terminals in the building and through CedarNet, the campus computer network. The library catalog can also be accessed on CedarNet, the campus computer network.

In addition, a variety of computerized library resources, including indexing services, databases, and reference works, are available on-line. In 1996, Cedarville College became one of the first private institutions to receive an invitation to join OhioLINK, a cooperative of over 50 institutional libraries that share materials through a direct borrowing and delivery system. Through OhioLINK, students may request materials from a cooperating institution and have them delivered to the library within three days. Through an on-line computer network, OCLC, Inc., the library has access to over 32 million additional books and other library materials in over 19,000 libraries in all fifty states, Canada, and several foreign countries.

#### *College Center*

The College Center provides space for dining facilities, classrooms, offices, and the Computer Center. Dining facilities include the cafeteria and the President's Dining Room. Offices for Academic Records, Admissions, and Financial Aid are also located in this building.

### *Communications Building*

The Communications Building houses the Post Office and CDR Radio Network, the College's radio ministry. CDR Radio Network serves a portion of Ohio, Indiana, and Kentucky with 24-hour programming. The five station network includes WCDR broadcasting in the Dayton/Springfield area, WOHC in Chillicothe, and WOHP in Portsmouth, Ohio as well as FM translators in the Columbus, Ohio and Richmond, Indiana areas.

### *Founders Hall*

“Old Main” has served as the focal point of campus for over 100 years. This historic facility was renamed “Founders Hall” on the Centennial Charter Day, January 26, 1987, to recognize the five men who pooled their vision, energy, and wealth to give birth to Cedarville College. Founders Hall serves as Cedarville's administrative and academic headquarters with offices for the President and three of the six vice presidents. The building also houses a number of support services including the copy center, personnel and payroll offices, student accounts office, and the annual giving office. Part of the building is given over to faculty offices.

### *Williams Hall*

Williams Hall serves as the home of the academic departments of Education and Psychology as well as the location of the alumni, planned giving, public relations, and student services offices. The building includes both classroom and office space.

### *Collins Hall*

Collins Hall houses the Counseling Center, the Communication Arts Department, and the Social Science and History Department. This building, which was renovated in 1987, is one of two original campus structures.

### *Athletic Center*

Constructed in 1981, the Athletic Center provides year-round recreation and training and features five full-length basketball courts, a one-tenth mile indoor track, three volleyball courts, two tennis courts, badminton courts, a batting cage, three racquetball courts, a weight room, and a training room. The gymnasium accommodates approximately 3,500 fans for basketball games and is large enough for indoor track meets complete with running, long jump, high jump, pole vault, and shot put events. Outdoor recreational facilities include a track and field complex, a soccer and baseball fields, tennis courts, and large intramural sports fields.

The Student Center, located on the second floor of the Athletic Center, provides a comfortable atmosphere in which students may relax, socialize, and be entertained. A large-screen television, pool tables, table-tennis tables, group

meeting areas, and the Gavelyte Deli provide resources for student gatherings. The second floor of the Athletic Center also serves as the home of the Campus Activities Office. This department oversees student organizations and coordinates the concerts and activities on campus.

#### *Patterson Clinic*

Patterson Clinic provides total health care with a staff that consists of physicians and college health certified registered nurses. The nurses and physicians at Patterson Clinic work closely with area hospitals and specialists to provide comprehensive health care for students.

#### *Business Administration Building*

The George Milner Business Administration Building, a renovation of the previous library, was opened in 1987 and contains general classrooms, the Career Services office, a microcomputer center, plus offices and classrooms for the Department of Business Administration. The corporate-center look of this facility and the integration of instructional technology are designed to prepare students for competent service in the world of business.

#### *ENS Building*

The Engineering, Nursing, Science Center demonstrates the College's firm commitment to providing top-quality Christian education in the sciences. In addition to offices for engineering, nursing, and science faculty, this 95,000 square foot facility includes almost 20 classrooms, a 200-seat auditorium, 10 independent study laboratories, 5 conference rooms, and 36 discipline-specific laboratories. The building also contains a 34-station microcomputer laboratory and features video and data connectivity in all offices, classrooms and laboratories. Special features include a 25-station computer-aided design laboratory, an audio-visual learning laboratory, a simulated hospital ward, an engine test cell, a wind tunnel, and one of the largest reflecting telescopes in the state of Ohio.

#### *Fine Arts Building*

Located two blocks south of the main campus, the Fine Arts Building was retrofitted in 1996 after it was vacated by the Music Department. The building now provides space for new course offerings in art as well as offices for photography studios and several campus publications.

#### *Alford Auditorium*

Alford Auditorium, located one block south of the main campus, provides a large classroom space and a performing venue for drama productions. The Alford Annex was added in 1991 to accommodate the space needs of the Music Department. These spaces were given over for use by the drama faculty when

they were vacated by the Music Department. The Annex has both offices and classroom areas.

### *Service Center*

The Service Center complex houses the Maintenance/Physical Plant offices and serves as the primary receiving area. The complex also includes facilities for the Campus Public Safety department.

### *Residence Halls*

Residence halls are sprinkled throughout the campus. The primary housing area is located on the north side of campus which is the location for the seven largest dormitories.

## **Major Capital Improvements**

The continued growth in enrollment has required the construction of several new buildings and renovations to existing buildings. A complete list of projects completed in the last ten years is available in the Consultant-Evaluator Resource Room. A description of some of the major capital improvements is included in Chapter 2 of this document.

## **Deferred Maintenance**

Cedarville College has expended considerable effort and capital over the last ten years in an effort to maintain the facilities of the College, thus reducing deferred maintenance. The ability to maintain a low level of deferred maintenance is the result of continuing budget surpluses and the way these are disbursed. Refer to Chapter 3 for an account of annual budget surpluses. Current lists of deferred maintenance items are available in the Consultant-Evaluator Resource Room.

## **Condition of Structures**

Periodic evaluation of campus structures is completed by the Physical Plant Department. These evaluations provide data for planning of upgrades and renovations. The most recent document of structural condition is available in the Consultant-Evaluator Resource Room.

## **Instructional Facilities**

### **Classroom Quality**

Providing adequate classroom and other instructional facilities is one of the primary challenges of the institution. To meet this challenge, the institution is constantly enhancing and increasing the available classroom spaces. As of the Fall of 1996, there are 42 classrooms in use on the campus. All the classrooms are equipped with adequate lighting, seating, and teaching necessities including blackboards or whiteboards, overhead projectors, projection screens, etc.

Integrating computer and media technology into the classrooms of Cedarville College has been a top priority, especially in 1996 when \$180,000 was earmarked for technological upgrades of existing classrooms. The funds were used to assemble media workstations for use in campus classrooms. The workstations include an ELMO visualizer, laserdisc, CD, and video players, a projection unit, and a computer connected to the campus network. Instructors can design course presentation materials in their offices and then access the files from the classroom computers. As of this writing, 17 classrooms have permanently installed media workstations and projectors. The remaining classrooms are served by portable workstations on carts that can be moved from room to room.

Of special significance are the four LINK labs located in various locations across campus. These classrooms are equipped with LINK technology that allows the instructor to control and interact with all the other computers in the classroom. One of these classrooms is dedicated to computer-aided design (CAD) in the Engineering Department.

## Computer Technology

The integration of instructional technology at Cedarville College is driven in large measure by the development of the campus computer network named CedarNet. CedarNet was implemented as the result of an intensive strategic planning effort. A task team with representatives from various academic and non-academic departments met over a 15-month period to identify information requirements on campus and to outline a vision for how those requirements could be met. The College's emphasis on a defined mission and a history of strategic planning helped provide an essential basis for the task team's work. The task team's report recommended a campuswide network to be funded by a student fee. This recommendation was validated through a survey of the student body, an in-depth study project with the faculty, and through external consultants.

Phase I of the CedarNet project was completed during the summer of 1992 through a business partnership with IBM, and included all twelve academic buildings and two residence halls—a total of 850 network connections. The residence hall installation included placing an IBM computer and printer in each of 296 student rooms. Phase II was completed during 1993, including the installation of computers in an additional 380 residence hall rooms. Phase III, which included 170 additional residence hall rooms, was completed in September of 1994. With the addition of two new residence halls built and connected to the network in 1995 and the addition of some smaller buildings in 1996, 100% of the residence hall rooms have a computer, printer, and network connection.

The networking project has been more successful than what the task team envisioned. Over 95% of the faculty and 80% of the student body use the network daily. The network is handling over 25,000 electronic mail messages daily. E-mail traffic includes several hundred messages daily from other Internet sites around the world. Students and faculty have access to over 150 software packages on CedarNet, ranging from general packages like WordPerfect to specific applications like human anatomy in the nursing department. Use of the network at Cedarville has become as essential as using the telephone or post office.

One of the most popular areas of CedarNet is the library resources section. Students can access the library's on-line catalog from their dorm rooms 24 hours a day. Access is also provided to a variety of CD-ROM and Internet based databases, periodical and reference indices, reference works, and full-text periodicals and newspapers. Since CedarNet is based on a microcomputer architecture, these CD-ROM applications function with the same full graphics as computers in the library itself.

Another frequent use of CedarNet is access to the Internet. Many students exchange electronic mail with parents and friends over the Internet. Students can also browse library catalogs around the world, check on weather forecasts, gather discipline-specific information, read electronic journals, and enter international discussions. Several faculty members have integrated Internet resources into their

required coursework. Most of the CedarNet resources can be accessed from Cedarville's "home page" on the World Wide Web.

Cedarville College received one of seven networking awards presented in 1993 by the Association for the Management of Information Technology in Higher Education. Maricopa Community College won the overall award while honorable mention winners were Brown University, Gettysburg College, MIT, Pennsylvania State, Stevens Institute of Technology, and Cedarville College. Cedarville received this recognition because of the pervasiveness of the network and its overall impact on the teaching and learning process. Cedarville was cited as a model for small colleges starting from scratch to build a campuswide network.

### **Classroom Use**

An analysis of classroom use is completed regularly to learn whether classroom facilities are adequate for the size of the student body enrollment. Table 7.1 provides a comparison of various academic quarters for the years of 1985, 1990, 1995 and 1996. As the table shows, student enrollment increased 38% from 1985 to 1996, while the number of general classrooms increased 56%. This increase in classroom space has relieved some of the pressure created by growing enrollments and expanding academic programs. The completion of the Ministry Center in 1996 is the primary reason for the drop in usage percentage in 1996. The Ministry Center facility provided three general classrooms and the move by the Music Department into the new facility opened some other classroom areas. The daytime usage is also lowered by the increase in evening class offerings.

**Table 7.1  
Comparison of General Enrollment and Classroom Usage**

<b>Years</b>	<b>Enrollments</b>	<b>General Classrooms</b>	<b>% Usage from 8 to 5</b>	<b>Number of Evening Classes</b>
1985	1817	27	73	9
1990	1923	30	76	11
1995	2454	39	89	16
1996	2509	42	64	18
% Change	38%	56%	-12%	100%

The numbers, however, are somewhat misleading. Although the data indicate that classroom usage is under 90%, it does not take into account whether a room can be used during the times it is not scheduled. For example, a four hour class might meet at 11:00 Monday through Thursday. The classroom is available at 11:00 on Friday, but it is not usable since there are no classes that need a one hour time slot. When these limitations are factored in, essentially all campus classrooms are scheduled at 100% capacity throughout the day.

Table 7.2 provides a more focused look at the way the College's classrooms are used throughout the day. As the table indicates, the addition of more classrooms has not alleviated the pressure throughout most of the day. It is now necessary to schedule the 3:00 PM to 5:00 PM or evening time slots more heavily.

**Table 7.2  
Comparison of Classroom Usage by Hour of Day**

<b>Years</b>	<b>8-9</b>	<b>9-10</b>	<b>10-11</b>	<b>11-12</b>	<b>12-1</b>	<b>1-2</b>	<b>2-3</b>	<b>3-4</b>	<b>4-5</b>
1985	83	86	chapel	79	74	90	81	64	31
1990	93	93	chapel	90	83	83	73	60	11
1995	97	97	chapel	100	95	97	92	72	43
1996	81	87	chapel	87	86	77	72	40	27

The high level of classroom usage is also quite constant throughout the week. The data in Table 7.3 outlines the daily usage patterns.

**Table 7.3**  
**Comparison of Classroom Usage by Day**

<b>Years</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
1985	82	73	82	72	58
1990	98	99	98	98	70
1995	83	99	96	78	74
1996	78	74	72	74	56

Institutional space needs analysis occurs approximately every two years. The division of Enrollment Management is currently completing the most recent study and analysis. This report is scheduled for completion in early spring and will be available in the Consultant-Evaluator Resource Room.

## **Strengths and Challenges**

The physical plant resources of Cedarville College provide tremendous benefit to current students and great potential for future students. These benefits and potentials provide both strengths and challenges as the College seeks to position itself for the 21st century.

### **Strengths**

#### *Strategic Planning Process and Long-Range Vision*

The College continues to plan aggressively for the future in the area of physical plant. Administrative decisions are based on a view toward future effects, not just immediate needs. Architects are currently working on new master plans for future use of land and buildings. Master plan updates became necessary with the recent acquisition of new property.

#### *Land Acquisitions*

Land acquisitions in 1996 alone totaled 115 acres. These purchases position the College very well for institutional expansion for the next 25-50 years.

#### *Minimal Deferred Maintenance*

Current budgeting strategies allow for completion of deferred maintenance items in a timely manner rather than holding off required repairs and upkeep.

### *Young Age of Campus Facilities*

The campus of Cedarville College is, for the most part, a relatively new campus with modern facilities that support key programs. The majority of the primary academic facilities were built or totally renovated within the last 10 years.

## **Challenges**

### *Keeping Up With Enrollment Pressures*

Although the College has been quite successful at limiting enrollment growth, there are constant pressures that increasing student populations place on the institutional physical plant. These pressures include student housing, food service, and classroom and lab spaces. Remedies for all these pressures are under consideration in current expansion discussions.

### *Funding for Equipment Replacement*

The heavy emphasis which the College has placed on technology creates the challenge of continual equipment replacement, and since much of the equipment on campus is computer technology, it requires more frequent upgrades and replacement. Discussions are continuing in an effort to determine the best way to handle scheduled replacement.

### *Best Uses for Vacated Spaces*

Several campus facilities were vacated in the last year when the Chapel, Music Department, and Christian Ministries division moved into the new Dixon Ministry Center. Choosing the best plan for utilizing these spaces is very challenging. For instance, the old Chapel, now called Cedar Hall, is a pre-engineered structure designed for only one function—serving as a chapel. Now that its primary function is no longer required, the design of the building limits minimal-expense renovation. In fact, some estimates indicate that renovation would cost as much or more than new construction.

### *Funding for Several Pressing Space Needs*

The College is funneling significant amounts into academic facilities. Since all the projects cannot be done simultaneously, the challenge comes in determining which items to fund and in which order. Current concerns include:

- Building a new student union
- Retrofitting Cedar Hall
- Expanding food service areas
- Expanding recreational and fitness facilities
- Providing space for dramatic arts
- Increasing the number of classrooms and offices

Each of these items is currently under discussion in administrative and strategic planning meetings.

*Potential Limits on Land Acquisition*

It is yet unclear whether the College will be able to acquire all the desirable land that surrounds the campus. If the acquisition of prime land is thwarted, the institution will need to develop new planning strategies to work within the available spaces.

**Summary**

Cedarville College has developed and is maintaining a physical plant that supports and enhances the mission of the institution. While continuing growth increases the demands on the physical plant, strategic planning structures, both long- and short-range, are well developed and are addressing these demands. These patterns of evidence demonstrate that Cedarville College has met the requirements of the NCA's Criterion Two.