



CARROLL COMMUNITY COLLEGE FACILITY MASTER PLAN

**2015 – 2025
REVISED March 2015**

Prepared by

Carroll Community College

Westminster, Maryland

Approved by the Carroll Community College

Board of Trustees on March 18, 2015

Updates 2010 -2020 Master Plan

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Prepared

In Association with

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EXECUTIVE SUMMARY

- Background
- Vision & Values
- Mission
- Purpose
- Short Term Development Plan
- Long Term Development Plans
- Planning & Design Objectives

BACKGROUND

Carroll Community College has been providing educational services in the County since 1976 when it opened with 750 students as a branch campus of Catonsville Community College. Carroll became independent in 1993 and accredited in 1996. It is governed by a seven-member Board of Trustees, appointed by the Governor of Maryland. Dr. Joseph F. Shields was the founding president. Dr. Faye Pappalardo assumed the presidency in 1999 and retired in 2014. The current president is Dr. James D. Ball. The college currently serves over 13,000 students annually.

In 1983 the Board of Carroll County Commissioners approved the development of the college's first Facilities Master Plan, to guide the physical development of the facilities required to support a comprehensive community college for the citizens of Carroll County. This original Master Plan was approved in 1984, updated in 1994, and revised in 1997. A new Facilities Master Plan for 2002-2012 was approved in 2002. This Facilities Master Plan was updated in February 2010 for the period of 2010-2010. This Facilities Master Plan in revised from that approved in 2010 and becomes Carroll's 2015–2025 Master Plan.

After existing in a number of different locations in Carroll County, in August 1990 the college celebrated the opening of its current campus on Washington Road, with two buildings—the Great Hall and Classroom Building C. A multi-purpose building M opened in the fall of 1993, followed by the Random House Learning Resources Center in 1997. The Rotary Amphitheater was added in 1998. In October 2002, the Robert Annis and Phyllis Barrett Scott Center for the Fine and Performing Arts, the Dwight and Linda Hikel Business Training Center, and the Life Fitness Building opened. The Nursing and Allied Health Building opened in fall 2004. Classroom Building 4, with English and mathematics classrooms, a full-service cafeteria, conferencing and student activity space, and offices opened in winter 2010.

VISION AND VALUES

Vision - Carroll Community College is Carroll County's premier learning community for convenient and affordable postsecondary training, baccalaureate preparation, and lifelong education. As a learning-centered college, Carroll embraces student learning as its primary and defining mission; encourages students to be full and active partners in learning; creates an environment supporting student and organizational learning; assesses learning outcomes and uses the results to improve learning; and evaluates all areas of the college by how well they foster learning.

Values - Carroll Community College is an organization that values, recognizes, and rewards just, humane, honest, and respectful human interaction; ethical and truthful representation of the College to students and the community; positive and collaborative problem-solving; and solutions-oriented action.



Washington Road Campus opened with the Great Hall and Classroom Building C in 1990.



The Great Hall and Classroom Building C in 1990.



Multipurpose Building M, funded entirely by Carroll County, opened in 1993.



The Random House Learning Resources Center opened in 1997.



The Rotary Amphitheater opened in 1998.



The Scott Center for the Fine and Performing Arts, the Hikel Business Training Center, and the Life Fitness Building opened in 2002.



The Dr. Faye Pappalardo Nursing and Health Care Education Center opened in 2004.



Classroom Bldg. 4 opened in winter 2010.

MISSION

Carroll Community College is a public, open admissions, associate-degree-granting college serving Carroll County, Maryland with baccalaureate preparation programs, career education, workforce and business development, and personal and cultural enrichment opportunities. As a vibrant, learner-centered community, the college engages students as active learners, prepares them for an increasingly diverse and changing world, and encourages their lifelong learning.

PURPOSE

The Facilities Master Plan provides a framework and planning direction for the future development of the campus capital projects. The purpose of the master plan is to forecast future student growth that is likely to occur, to identify changes that will likely take place in pedagogy, offered courses, campus technology and to identify physical plant improvements needed to meet these changes. This master plan addresses Carroll Community College's 10-year growth, through the year 2025.

The master plan assesses the existing buildings on campus and analyzes current programs and strategic initiatives. The report includes an inventory and analysis of building conditions. The master plan focuses on an assessment of facility needs and the identification of projected capital projects. Illustrative site plan, together with a series of diagrams emphasizing circulation, parking, phasing and utilities, describe the projected growth and improvements for the foreseeable future.

Updating infrastructure is the College's highest priority. This project includes systemic improvements and renovations to facilities including heating, ventilation, and air conditioning systems. Included are Honeywell Control systems upgrades, fire alarm system upgrades, boiler replacements and chiller replacements.

With the completion of Classroom Building 4 and the added instructional capacity supported by this facility, the second most immediate unaddressed need is for additional parking spaces on campus.

SHORT TERM DEVELOPMENT PLAN

Included in this Facility Master Plan is detail on necessary systemic improvements and renovations to facilities. Also included in the Facility Master Plan, is the identification for the location for a parking structure to respond to the short term parking problems as well as supporting future college parking needs based on expected continued growth of Carroll Community College. The Short Term Development Plan also identifies two future classroom building platforms located immediately adjacent to the existing campus structure and a location for a general storage facility. The proposed short term classroom buildings represent 80,000 SF of additional floor area.

The shortage of parking, exacerbated by the completion of Classroom Building 4, is the highest development priority. Acquisition of adjacent land is not feasible in the foreseeable future. Parking Garage 1, represented on the Short Term Illustrative Master Plan, represents the construction of 700 additional parking spaces, raising the campus parking capacity to 2,263 spaces.

LONG TERM DEVELOPMENT PLAN

The Facilities Master Plan includes two long term Building Site Options. Both options are considered to be reasonable land use plans. The ultimate selection of one over the other will be influenced in the future by such factors as the availability of additional land in near proximity to the campus and the demand for athletic field space as a priority as the college continues to grow. This Facility Master Plan proposes both options with a final selection to be made as implementation of the plan requires. In the near future, 5 to 10 years it is anticipated that the Short Term Development Plan will guide construction growth on campus.

Both long term master plan options provide a viable development strategy to expand the college on the current 80 acre property. Under either planning scenario, the current open space on campus will be significantly impacted. Minimally, a portion of the athletic fields will be utilized as parking and academic building sites. Each long term option depicts approximately 300,000 SF future academic and support space allocated within two and three story buildings configured in a collegiate quadrangle setting.

PLANNING AND DESIGN OBJECTIVES

Throughout the development of the short-term and long- term master plans, several important planning and design objectives emerged:

- Expand the campus within the fundamental design framework and contextual image of the current Carroll Community College campus;
- Explore the means to double the size of the current academic and support facilities over the next 20 to 25 years;
- Maintain the views from Washington Road, protecting the axial approach of the central vehicular entrance to the College's entrance courtyard;
- Explore the best options to solve the short-term and long-term parking requirements, remaining sensitive to the architectural scale and rural character of the campus;
- Respect area stakeholders, Westminster and Carroll County as important partners of the College;

- Establish short-term and long-term planning solutions, emphasizing flexibility and orderly growth.
- Be aware of and prepared to adhere to the goals of PlanMaryland. The significance of PlanMaryland in keeping the College and its role within Carroll County is of utmost importance.



COLLEGE OVERVIEW 1

- Early History
- Accreditation & Governance
- Mission and Goals
- Current Strategic Priorities
- Annually-Updated Strategic Initiatives
- Student Enrollment Trends
- Student Characteristics
- Continuing Education Student Characteristics
- Weekly Student Contact Hours
- Enrollment Forecasts
- Faculty & Staff
- Programs Of Study
- Unique Institutional Characteristics
- New Initiatives and Facility Implications
- New or Expanded Programs & Facility Requirements

EARLY HISTORY

The idea for the institution began in January 1974, when the Commissioners of Carroll County appointed a citizens' committee to recommend higher educational alternatives for the County. In November 1974, the committee recommended that a branch campus of an existing community college be established to serve the County.

An Advisory Committee was appointed by the County Commissioners in June 1975. Specifications for the community college bidding process were drafted. Catonsville Community College was willing to provide a full spectrum of community college services and was selected by the committee to open a branch campus.

The Advisory Committee was given broader responsibilities by the County Commissioners in 1976 and renamed the Advisory Board to the Carroll County Branch of Catonsville Community College. The Advisory Board, composed of citizen advocates, acted as a liaison between the college and the community.

On September 22, 1976, the Carroll County Branch of Catonsville Community College ushered in a new era of higher education within Carroll County by offering its first classes in the vacated Robert Moton Elementary School at 300 South Center Street in Westminster. A total of 750 students enrolled.

Growth of the student body and program demands resulted in numerous facility changes. During 1978, building sites in Carroll County were evaluated with thoughts of future expansion. That same year, the County, following the recommendation of the Advisory Board, purchased an 80-acre site on Route 32 on Washington Road in Westminster for a future campus.

In the spring of 1979, the East End Elementary School was made available for additional classroom space. In January 1982, this building was vacated when the County made available the North Center Street Building, formerly the Carroll County Center for Exceptional Children. Agreements with the Carroll County Board of Education allowed extensive use of the public school facilities for evening classes.

In April 1983, the State passed legislation permitting Carroll County to request State capital funds under the provisions applying to all community colleges. This resulted in planning for the creation of permanent facilities. A planning committee, charged with interviewing architectural firms, was formed in 1983. This group recommended that Probst-Mason, Inc., Architects of Baltimore be selected to prepare the Master Plan for the new campus. The County Commissioners and the State Board for Community Colleges approved the Master Plan in 1984.

A groundbreaking ceremony at the College's present Washington Road location took place in October of 1985. The contract for site construction was awarded to C. J. Miller, Inc., of Hampstead, Maryland, and the construction contract to Lake Falls Construction, Inc., of Baltimore. The construction manager was Heery Program Management, Inc.

In the first building phase, the Master Plan called for an Academic/Administration Building and an attached classroom building to be built. It also included plans for an additional academic building and a Library/Learning Resources Center in the second phase. The third phase included plans for a performing arts center, a physical education facility, and a business training building.

The state funding formula for community colleges changed in 1988, prompting the Catonsville administration and the County Commissioners to evaluate the issue of independence. In 1989 the County Commissioners appointed a fifteen-member "Future of Carroll Community College Task Force" composed of business people, educators and citizens. After much study, the task force recommended that Carroll County move toward the development of its own comprehensive community college.

In August 1990, the Washington Road campus opened with the Great Hall and Classroom Building C. The college celebrated the official dedication of the campus on October 21, 1990 with Governor William Donald Schafer presiding. Carroll Community College remained a branch campus of Catonsville Community College. In February 1992, a transition team was appointed to implement a plan to seek independent status.

In September 1992, the Maryland Higher Education Commission (MHEC) passed a resolution directing the Secretary of Higher Education to begin the process for Carroll Community College to achieve degree-granting status as a two-year community college. In late 1992, the leadership of the college met with staff from the Middle States Association of Colleges and Schools to initiate the process of applying for candidate status for accreditation. After visits by evaluating teams representing MHEC and Middle States, degree-granting status was granted by MHEC in July of 1993. Candidacy status with Middle States was awarded in August of 1993.

On July 1, 1993, Carroll Community College became Maryland's 18th community college with the then Governor William Donald Schaefer appointing a seven-member governing Board of Trustees. The first graduating class from the newly independent Carroll Community College was in May 1994. The Commission on Higher Education of the Middle States Association of Colleges and Schools granted accreditation to Carroll Community College in February of 1996.

ACCREDITATION AND GOVERNANCE

The college is governed by a seven-member Board of Trustees, appointed by the Governor of Maryland. Dr. James D. Ball is the president. Carroll is a state-approved two-year college. It is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation.

MISSION AND GOALS

The college's mission statement, approved by the Board on February 15, 2012, follows:

Carroll Community College is a public, open admissions, associate-degree-granting college serving Carroll County, Maryland with baccalaureate preparation programs, career education, workforce and business development, and personal and cultural enrichment opportunities. As a vibrant, learner-centered community, the college engages students as active learners, prepares them for an increasingly diverse and changing world, and encourages their lifelong learning.

The college's mission is expressed in the following goals:

1. Provide an affordable center of learning with supportive and caring faculty and staff, appropriate admissions practices, effective learner support services, relevant programs, and a variety of teaching and learning strategies.
2. Provide opportunities for all learners to develop competencies in communications skills, critical thinking, quantitative and scientific reasoning, information and technological literacy, creativity, global awareness, and personal development.
3. Prepare students for completion of the baccalaureate degree through rigorous transfer programs, appropriate advising and support services, and effective articulation agreements.
4. Provide career preparation, job skill enhancement, continuing professional education, and career development services through credit and noncredit programs.
5. Ensure learning through ongoing assessment of student progress and achievement, and evaluation of the effectiveness of instructional programs and support services.
6. Support county business growth by providing training and services directly to businesses, and by partnering with industry, community organizations, Carroll County schools, higher education institutions, and government entities to advance economic and community development.
7. Embrace an increasingly diverse and changing world by encouraging students, faculty, and staff to value diversity, cultivate global awareness, and practice responsible citizenship.
8. Provide cultural and community enrichment through lifelong learning opportunities, creative arts activities, and special events that educate and entertain.
9. Nurture a learning-centered, inclusive, and collaborative organizational culture that fosters personal and professional growth, leadership skills, and the development and implementation of best practices.

10. Employ the college's financial, physical, and technological resources effectively and efficiently to fulfill the college's mission.

CURRENT STRATEGIC PRIORITIES

In September 2005, the college adopted *Compass: Charting the Course to 2010*, its strategic plan for FY2006-FY2010. At its annual retreat in 2009, the Executive Team decided to extend *Compass* through FY2012 so the new multi-year strategic plan could incorporate suggestions from the college's Self Study and Middle States team report. *Compass 2012* contained six strategic priorities: student achievement, instructional programs, technology, assessment and improvement, facilities enhancement, and Foundation and institutional development. The current multi-year strategic plan, *Compass 2015*, was adopted June 7, 2012 and runs through the end of fiscal year 2015. *Compass 2015* has five priorities:

- I. **STUDENT ACHIEVEMENT.** Continuously enhance instructional program quality and effectiveness to increase student achievement, retention, and program completion.
- II. **ENROLLMENT DEVELOPMENT.** Respond to community and student needs through innovation and resourcefulness in instruction, programs, and services.
- III. **PARTNERSHIPS.** Collaborate through partnerships with local businesses, nonprofit organizations, Carroll County schools, other institutions of higher education, and internally to advance the college's mission.
- IV. **CONTINUOUS IMPROVEMENT.** Invest in the college's employees, technology, and decision support systems in continuous improvement efforts to further the college's excellence.
- V. **RESOURCE MANAGEMENT.** Develop resource management strategies to respond to anticipated levels of governmental and student revenues.

ANNUALLY-UPDATED STRATEGIC INITIATIVES

The college employs a rolling, annually-updated strategic planning process to accomplish the goals in *Compass*. The president announces the college's Strategic Initiatives in late May, following endorsement by the Board of Trustees. The initiatives guide area and office planning for the coming year and specify the tasks necessary to make progress toward the accomplishment of the priorities in the college's multi-year plan. The president may also include additional initiatives for emphasis. The annually-updated initiatives document is titled the college's Strategic Plan because it is tied to *Compass* and to reflect the college's view that planning is dynamic, resource-dependent, and subject to revision as circumstances change.

STUDENT ENROLLMENT TRENDS

A total of 12,064 individuals took at least one class at Carroll Community College during the fiscal year ending June 30, 2014.

Unduplicated Headcount Enrollment, Fiscal Years 2005-2014										
	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
Credit	4,392	4,478	4,662	4,825	4,908	5,442	5,600	5,473	5,476	5,186
Noncredit	8,230	9,271	8,273	9,221	9,266	9,110	8,969	8,949	8,266	7,368
Total	12,307	13,425	12,606	13,658	13,533	13,987	13,949	13,881	13,191	12,064

NOTE: Total does not equal sum of credit and noncredit headcounts since approximately three percent of students each year enroll in both credit and noncredit classes. Total unduplicated headcount declined in FY2009 even though unduplicated headcounts of both credit and noncredit students increased because the number of students who enrolled in both credit and noncredit courses during the year increased.

The college generated a total of 2,920 full-time-equivalent (FTE) enrollments in fiscal year 2014. FTE enrollment has fallen back to FY2009 levels, reflecting changes in the age composition of the county's population.

State-funded Full-time-equivalent (FTE) Enrollment, Fiscal Years 2005-2014										
	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
Credit	1,934	1,934	2,053	2,224	2,265	2,519	2,660	2,626	2,618	2,410
Noncredit	559	602	464	643	656	620	687	547	549	510
Total FTEs	2,493	2,536	2,517	2,867	2,921	3,138	3,347	3,173	3,167	2,920

NOTE: Data are for state-funded enrollments only. FTE figures have been rounded.

Approximately half of the Carroll County residents who start college in Maryland as full-time students in the fall enroll at Carroll Community College. The college's market share of part-time undergraduates has been two-thirds or higher since 2000.

Market Shares of Carroll County Undergraduates, Fall Semesters, 2005-2013									
	2005	2006	2007	2008	2009	2010	2011	2012	2013
First-time FT	47.5	47.4	50.0	50.8	54.6	51.1	47.0	49.0	46.4
Part-time	69.2	67.1	69.5	69.0	71.6	73.3	72.9	73.4	71.5

NOTE: Data are percent of Carroll County residents attending a Maryland college or university as an undergraduate who attended Carroll Community College. Top row is market share of first-time, full-time freshmen; second row is market share of part-time undergraduates.

Recent high school graduates are a primary market served by the college. Twenty-two percent of the 2,180 graduates of Carroll County public high schools in spring 2014 enrolled at Carroll Community College in fall 2014.

Enrollment Rate of Carroll County High School Graduates, Fall 2005-Fall 2014										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CCPS grads	2,159	2,320	2,347	2,380	2,425	2,313	2,296	2,332	2,177	2,180
Enrolled CCC	467	551	600	569	656	637	544	604	518	483
Enroll Rate	21.6	23.8	25.6	23.9	27.1	27.5	23.7	25.9	23.8	22.2

NOTE: Rate is percent of Carroll County public high school graduates enrolling at Carroll Community College the fall following their high school graduation. It is an enrollment rate, not a market share.

Registrations in continuing education courses, including contract training, open enrollment workforce development courses, and personal enrichment courses, totaled 12,933 in FY2014.

Continuing Education Registrations, by Course Type, Fiscal Years 2005-2014										
	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
Contract	4,783	6,326	4,333	5,085	5,227	4,698	5,489	4,588	4,345	3,744
Workforce	2,984	3,123	3,131	3,521	3,681	3,997	3,932	4,215	3,876	3,903
Enrichment	5,009	5,170	5,695	5,774	5,468	5,721	5,424	5,563	5,930	5,286
Total	12,776	14,619	13,159	15,239	15,344	14,416	14,845	14,366	14,151	12,933

NOTE: Data are course registrations, not headcounts. A student may account for multiple registrations.

STUDENT CHARACTERISTICS

Course load - Full-time students accounted for 37 percent of the college's credit students in fall 2014. In fall 2008, full-timers accounted for 47 percent.

Course load of Fall Credit Students, Fall Semesters, 2005-2014										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Full-time	1,327	1,441	1,620	1,631	1,730	1,793	1,647	1,614	1,437	1,352
Part-time	1,788	1,775	1,821	1,829	2,183	2,315	2,394	2,489	2,357	2,309
Total students	3,115	3,216	3,441	3,460	3,913	4,108	4,041	4,103	3,794	3,661
Mean load	9.05	9.25	9.46	9.51	9.37	9.42	9.49	9.40	9.35	9.32

NOTE: Full-time students carry 12 or more billable hours; hours in developmental courses are counted.

Credit Programs of Study - General Studies has been the most popular program of study at Carroll. Three other transfer programs, Arts and Sciences, Teacher Education (including the Associate of Arts in Teaching degree), and Business Administration have been the next three

most-popular programs of study. Seventy-seven percent of the college’s credit students identified a transfer program as their major in fall 2014. Since introduction of the Registered Nursing Associate’s Degree program in 2004, Nursing has been the college’s most popular career program.

Declared Majors of Credit Students, Fall Semesters, 2005-2014										
Program	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
General Studies	1,180	1,193	1,325	1,412	1,732	1,905	1,893	1,974	1,825	1,618
Arts and Sciences	864	908	923	853	971	968	884	877	747	674
Teacher Education	260	268	284	286	350	304	268	255	229	220
Business Admin.	297	309	347	324	285	255	265	250	247	240
Engineering	NA	NA	NA	NA	NA	NA	22	34	54	54
Music	NA	NA	NA	NA	NA	NA	NA	NA	8	15
<i>Total transfer</i>	<i>2,601</i>	<i>2,678</i>	<i>2,879</i>	<i>2,875</i>	<i>3,338</i>	<i>3,432</i>	<i>3,332</i>	<i>3,390</i>	<i>3,110</i>	<i>2,821</i>
Nursing	103	115	122	137	132	173	209	226	206	221
Computer Info. Sys.	57	61	70	78	87	92	84	96	95	90
Computer Graphics	79	94	95	98	93	84	87	82	67	72
Accounting	63	67	69	89	85	83	94	66	68	64
Health Info. Tech.	11	7	16	29	34	49	50	59	61	58
Early Childhood Ed.	51	42	33	30	28	46	50	52	54	42
Physical Ther. Asst.	36	46	53	48	22	46	49	51	54	57
Comp-aided Design	32	38	42	34	41	29	24	19	22	21
Law Enforcement	18	8	21	11	26	29	15	15	11	11
Emer. Medical Serv.	NA	NA	NA	NA	NA	NA	2	15	12	23
Office Technology	14	26	8	10	10	10	11	6	8	4
Visual Arts	NA	NA	NA	NA	NA	2	1	3	2	2
Other career prog.	1	2	2	1	2	1	2	2	3	1
<i>Total career</i>	<i>465</i>	<i>506</i>	<i>531</i>	<i>565</i>	<i>560</i>	<i>644</i>	<i>678</i>	<i>692</i>	<i>663</i>	<i>666</i>
Undecided/Non-d.	49	32	31	20	15	32	31	21	21	174
Total headcount	3,115	3,216	3,441	3,460	3,913	4,108	4,041	4,103	3,794	3,661

NOTE: In addition to the Early Childhood Education Associate of Applied Sciences (A.A.S.) career program, shown above, students may pursue an Associate of Arts in Teaching (A.A.T.) degree in Early Childhood Education. Students majoring in the Early Childhood Education A.A.T. program are included in the Teacher Education transfer programs total in the above table. The Arts and Sciences program includes numerous transfer curricular options. Among these are Associate of Arts (A.A.) degrees in Criminal Justice and Nursing. The Law Enforcement and Nursing totals shown above are for Associate of Applied Science (A.A.S.) and Associate of Science (A.S.) career programs. The 2014 data reflect a new category of “non-degree-seeking” as an option to declaring a program major. Previously, non-degree-seeking students were assigned a program, typically General Studies.

Credit Student Age Profile – College attendance and course loads are highly correlated with age. In fall 2005, 42.3 percent of the college’s credit students were under age 20; by 2014 this decreased to 39.7 percent.

Age Profile of Fall Credit Students, Fall Semesters, 2005-2014										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Under 18	312	367	397	310	386	332	313	307	313	275
18 – 19	1,007	1,057	1,240	1,207	1,334	1,391	1,296	1,312	1,195	1,179
20 – 24	884	897	918	971	1,093	1,172	1,259	1,291	1,199	1,155
25 – 29	224	234	240	274	348	388	373	426	358	383
30 – 39	341	316	297	285	303	364	335	328	313	312
40— 49	260	255	254	275	294	297	295	277	241	194
50 – 59	65	69	76	112	115	123	133	120	120	113
60 and older	20	20	15	26	39	41	37	42	55	50
Unknown age	2	1	4	0	1	0	0	0	0	0
Total students	3,115	3,216	3,441	3,460	3,913	4,108	4,041	4,103	3,794	3,661

Credit Student Residence - Eighty-nine percent of the college’s credit students in fall 2014 were residents of Carroll County. Westminster provided the most students, 1,227 or a third of all credit students. The number of students from Pennsylvania has increased slowly over time, from nine in 2000 to 79 in 2014.

Residence of Fall Credit Students, Fall Semesters, 2005-2014										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Westminster	1,076	1,064	1,122	1,122	1,274	1,357	1,348	1,390	1,270	1,227
Sykesville	536	587	686	663	746	773	789	774	672	632
Hampstead	268	236	290	294	328	340	335	342	316	293
Mount Airy	185	195	217	197	248	258	250	234	238	214
Manchester	202	211	196	206	243	262	254	262	241	240
Finksburg	189	182	198	196	227	233	213	214	212	211
Taneytown	127	140	155	152	170	187	186	188	193	186
New Windsor	106	122	120	111	142	124	125	121	97	85
Union Bridge	40	51	39	46	55	58	61	70	60	57
Other Carroll	164	144	121	148	124	157	108	112	111	114
Total Carroll	2,893	2,932	3,144	3,135	3,557	3,749	3,669	3,707	3,410	3,259
Balt. County	121	150	149	168	187	190	186	198	181	200
Other MD	58	79	82	92	86	107	123	128	137	121
Pennsylvania	43	52	61	62	79	58	58	63	61	79
Other states	0	3	5	3	4	4	5	7	5	2
Total students	3,115	3,216	3,441	3,460	3,913	4,108	4,041	4,103	3,794	3,661

NOTE: Data were sorted by zip code; Carroll County town names are used to identify areas of the county only. Other Carroll includes Keymar, Marriotsville, Reisterstown, Upperco, and Woodbine.

CONTINUING EDUCATION STUDENT CHARACTERISTICS

Two-thirds (65 percent) of the college’s Continuing Education and Training students in FY2014 were age 30 or older. In contrast, only 18 percent of the college’s credit students were age 30 or older. Most of the college’s “adult learners” are served by Continuing Education and Training courses. At the same time, Continuing Education served over a thousand students under 18 years of age, driven largely by the Summer Kids@Carroll program.

In contrast to credit students, 89 percent of whom live in Carroll County, 73 percent of the college’s noncredit students were County residents. The larger proportion of out-of-county students reflects students in contract training courses, working for Carroll County employers, who reside outside the County.

Age and Residence of Continuing Education Students, Fiscal Years 2005-2014										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Under 18	486	853	946	1,076	1,045	1,114	1,086	1,064	1,235	1,065
18 – 19	195	199	209	286	403	349	367	303	254	247
20 – 24	651	746	599	729	891	778	860	796	814	699
25 – 29	665	631	514	658	698	690	607	626	594	538
30 – 39	1,468	1,483	1,227	1,327	1,251	1,191	1,174	1,085	927	839
40— 49	1,895	2,063	1,807	1,868	1,707	1,673	1,618	1,516	1,289	1,177
50 – 59	1,529	1,621	1,435	1,528	1,502	1,530	1,605	1,619	1,390	1,271
60 and older	1,184	1,363	1,379	1,537	1,530	1,524	1,531	1,572	1,614	1,474
Unknown age	157	312	157	212	239	261	121	368	149	56
Carroll resident	5,503	6,291	5,983	6,791	6,786	6,779	6,632	6,360	6,159	5,408
Baltimore County	799	838	710	695	742	713	682	677	593	515
Frederick County	424	445	346	419	424	382	328	386	327	270
Howard County	254	274	198	226	188	179	154	178	169	206
Other Maryland	608	854	549	581	486	569	735	826	551	531
Pennsylvania	461	456	415	441	417	386	382	412	404	349
Other states	49	98	72	62	62	72	56	107	59	87
Unknown	132	15	0	6	161	30	0	3	4	0
Total students	8,230	9,271	8,273	9,221	9,266	9,110	8,969	8,949	8,266	7,366

NOTE: Profile includes all CET students; demographic data are not always collected in contracted courses and Kids@Carroll summer program, accounting for the large number of not provided/unknown.

WEEKLY STUDENT CONTACT HOURS

In fall 2014, weekly student contact hours (WSCH) in degree-credit courses totaled 33,572. Eighty-five percent occurred before 5:00 p.m.

Weekly Student Contact Hours, Fall Semesters, 2005-2014										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
DEGREE-CREDIT COURSES										
On campus										
Before 5:00 p.m.	23,946	23,472	25,172	25,949	28,900	30,782	29,994	30,308	28,865	28,450
5:00 p.m. or after	7,198	7,222	7,768	7,235	8,033	8,251	7,496	7,161	5,698	4,725
Off-campus										
Before 5:00 p.m.	236	328	0	0	0	0	2	334	676	238
5:00 p.m. or after	211	217	150	52	14	7	16	144	244	162
Distance ed.	172	NA	NA	NA	NA	NA	NA	NA	NA	NA
<i>Total credit WSCH</i>	<i>31,764</i>	<i>31,239</i>	<i>33,090</i>	<i>33,236</i>	<i>36,946</i>	<i>39,040</i>	<i>37,509</i>	<i>37,946</i>	<i>35,483</i>	<i>33,572</i>
CONTINUING EDUCATION AND TRAINING										
On campus										
Before 5:00 p.m.	3,692	4,139	2,606	3,461	7,666	6,587	5,859	4,279	5,433	3,162
5:00 p.m. or after	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Off-campus										
Before 5:00 p.m.	5,825	7,533	3,756	8,196	6,966	5,324	5,273	3,904	4,398	5,048
5:00 p.m. or after	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Distance ed.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<i>Total CET WSCH</i>	<i>9,517</i>	<i>11,672</i>	<i>6,362</i>	<i>11,657</i>	<i>14,632</i>	<i>11,911</i>	<i>11,132</i>	<i>8,183</i>	<i>9,831</i>	<i>8,210</i>

NOTE: Source is MHEC S-6 report. Contact hours for Continuing Education include eligible courses only, averaged for August, September, and October of previous fiscal year. Totals only reflect data requested by MHEC. Hours have been rounded.

ENROLLMENT FORECASTS

Enrollment forecasts are necessary for capital planning purposes. Facilities planners must have some idea of the number of students likely to be attending in the future to justify and design new buildings. Yet producing accurate long-term forecasts is difficult. Studies of community college enrollment forecasting models used in Maryland have revealed reasonable forecasting accuracy in the short term (two to three year time horizon) but larger errors in the long term. Given the modest long-term forecasting record, planners are well advised to recognize that forecasts are not predictions. They are reasonable sets of planning data based on historical enrollment patterns and the county's demographic outlook, that are modified as new information becomes available. Many factors impact enrollment that are not incorporated into the models used to generate the forecasts used here. Caution in application of these forecasts is recommended.

The Maryland Higher Education Commission staff publishes ten-year enrollment projections for each public higher education institution each year. The MHEC forecasts include full- and part-time credit headcount, total credit and noncredit FTEs, and for the last year, full-time-day-equivalents (FTDEs) for credit enrollment. The most recent MHEC projections were published in June 2014. Actual credit headcount in fall 2014 was 3,661; MHEC staff forecast this will increase to 4,523 by fall 2023 (FY2024). This would be a 24 percent increase.

Fall Credit Headcount Projections, Fiscal Years 2015-2024 Maryland Higher Education Commission, June 2014										
	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Full-time	1,352	1,548	1,616	1,668	1,702	1,743	1,773	1,788	1,852	1,907
Part-time	2,309	2,389	2,419	2,439	2,468	2,513	2,530	2,575	2,605	2,616
Total	3,661	3,937	4,035	4,107	4,170	4,256	4,303	4,363	4,457	4,523

NOTE: Forecasts are for fall semester headcounts; e.g., FY16 (Fiscal Year 2016) forecast is for fall 2015. FY15 (fall 2014) is actual.

The MHEC staff also produces forecasts for full-time-equivalent (FTE) enrollment, for both credit and noncredit students. In fiscal year 2014, the college generated 2,410 credit FTEs and 510 noncredit FTEs, or a total of 2,920. This is forecasted by MHEC to increase to 3,768 by FY2023—a 29 percent increase.

FTE Projections, Fiscal Years 2015-2024 Maryland Higher Education Commission, June 2014										
	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Credit FTE	2,645	2,713	2,803	2,871	2,921	2,986	3,028	3,062	3,148	3,216
Noncredit FTE	563	570	577	584	591	598	605	612	620	NA
Total FTE	3,208	3,283	3,380	3,455	3,512	3,584	3,633	3,674	3,768	NA

NOTE: Forecasts are for state-eligible FTEs only. MHEC has forecasted noncredit FTEs through FY2023.

FACULTY AND STAFF

Following government reporting guidelines, the college employed 677 individuals in fall 2014, 270 full-time and 407 part-time.

The number of full-time employees increased steadily from 2000 to 2012, increasing by 71 employees or 35.5 percent over this seven-year period. Full-time employment has been stable since 2012.

Carroll Community College Employees, Fall 2005-2014										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Credit faculty	210	208	223	258	288	277	275	293	271	265
<i>Full-time</i>	60	62	61	68	69	73	75	77	78	77
<i>Part-time</i>	150	146	162	190	219	204	200	216	193	188
Faculty librarians	3	3	3	3	3	4	4	4	4	4
<i>Full-time</i>	3	3	3	3	3	4	4	4	4	4
Professional staff	43	45	49	56	65	69	71	77	77	117
<i>Full-time</i>	40	44	48	55	58	61	64	70	68	69
<i>Part-time</i>	3	1	1	1	7	8	7	7	9	48
Technical/Paraprof.	23	24	28	36	45	55	69	63	65	44
<i>Full-time</i>	13	14	13	13	15	18	18	16	17	18
<i>Part-time</i>	10	10	15	23	30	37	51	47	48	26
Clerical/Secretarial	74	70	82	74	66	79	77	73	74	73
<i>Full-time</i>	46	50	54	57	55	57	56	58	58	56
<i>Part-time</i>	28	20	28	17	11	22	21	15	16	17
Service/Maintenance	25	29	22	24	26	31	32	33	34	35
<i>Full-time</i>	19	21	19	20	21	24	23	24	25	25
<i>Part-time</i>	6	8	3	4	5	7	9	9	9	10
Administrative	19	19	22	23	23	22	21	22	20	21
<i>Full-time</i>	19	19	22	23	23	22	21	22	20	21
CET faculty	211	246	259	253	234	150	168	151	141	118
<i>Part-time</i>	211	246	259	253	234	150	168	151	141	118
Total employees	608	644	688	727	750	687	717	716	686	677
<i>Full-time</i>	200	213	220	239	244	259	261	271	270	270
<i>Part-time</i>	408	431	468	488	506	428	456	445	416	407

SOURCE: Employee Data System. Beginning in 2010, per statewide agreement, date parameters for counting Continuing Education adjunct faculty narrowed, resulting in lower counts. Beginning in 2014, part-time tutors were reclassified from technical-paraprofessionals to professional staff.

PROGRAMS OF STUDY

Lifelong learning is an integral part of the institution’s philosophy resulting in the continued growth of both credit and noncredit program options. This commitment to serving the learner places Carroll Community College as the leading provider of postsecondary education for Carroll County. In responding to the needs of its varied constituents, the College assumes multiple roles within the community. The continuum of educational delivery spans the needs of County youth in summer programs, high school graduates, young adults and employees in the workforce, professionals, business owners and individuals with the desire to learn for personal enrichment.

Complementing the full degree options is a selection of certificate programs that focus on the technical aspects of the degree demonstrated by the successful completion of approximately 30 credits. Letters of Recognition are available in selected disciplines and generally require the completion of three courses. Students interested in computer-related technology, accounting,

education, office technology, criminal justice or music can advance their skills by selecting one of these non-degree academic program options.

DEGREE-CREDIT PROGRAM OFFERINGS
ACADEMIC YEAR 2014 – 2015

CODE	Program	AA/AAT	AAS/AS/ASE	CERTIF	LOR
4910 01	Arts and Sciences	19		0	2
491007	Music	1			
494002	Computer Engineering (ASE)		1		
494003	Electrical Engineering (ASE)		1		
4950 01	General Studies	1		0	0
4960 01	Teacher Education	1		0	0
4960 09	Early Childhood Ed. A.A.T.	1		0	0
4960 11	Elementary Ed. A.A.T.	1		0	0
4960 30	Secondary Ed-Chemistry A.A.T.	1		0	0
4960 31	Secondary Ed-Math A.A.T.	1		0	0
4960 33	Secondary Ed-Spanish A.A.T.	1		0	0
4960 34	Secondary Ed-English A.A.T.	1			
4970 01	Business Administration	3		0	0
5002 01	Accounting		1	1	0
5002 02	Certified Bookkeeping			1	
5005 01	Office Technology		0	1	4
5009 00	Technical & Professional Studies		1		
5012 06	Computer Graphics		3	3	3
5101 01	Computer Info. Systems		1	1	1
5208 01	Nursing		1	1	0
5209 01	Licensed Practical Nursing			1	
5213 01	Health Information Tech.		0	1	1
5219 01	Physical Therapist Asst.		1	0	0
5299 00	Emergency Medical Services-Paramedic		1		
5304 01	Computer-aided Design		1	1	1
5503 01	Early Childhood Ed.		1	0	1
5505 01	Law Enforcement		1	0	0

NOTE: The above program offerings are approved by the Maryland Higher Education Commission. Within a given program, the college may offer multiple curricular options or transfer patterns.

Carroll Community College is committed to the development of a highly qualified local, state, and regional workforce. In addition to its degree-credit programs, the College supports economic development by offering non-credit occupational training programs including State and industry certification training; continuing education for the professions; exam preparation, and contractual, on-demand, specialty and technical courses for local businesses. The College now

offers 45 competency-based Continuing Education Training Certificate programs ranging from 75- 400+ hours of instruction. The Miller Center for Small Business Development is a key partner in the Carroll County Business Path initiative and provides access to technology, networking opportunities, and courses and seminars to promote entrepreneurship and support business start-ups in the County. The Hikel Business Training Center houses classrooms, labs and other resources to support workforce training and organizational development services to local employers.

Continuing Education and Training offers adult education programs that help to improve the basic skills needed to earn a high school diploma. Classes prepare students to take the GED exam and earn a high school diploma. Adults who are seeking a high school diploma and have mastered basic skills through life experience are eligible for the External Diploma Program of independent study and portfolio development. English classes for foreign-born students are offered through the ESOL program.

Continuing education provides non-credit personal enrichment educational activities for adults that stimulate creativity, broaden knowledge, expand perspectives and support healthy living. A broad selection of courses and activities are designed to accommodate changing lifestyles and balancing work, home and self. The College's Kids and Teens@Carroll programs also provide summer enrichment programs for youth ages 6 – 15 years of age and volunteer and paid camp counselor opportunities

SELECTING A PROGRAM STUDY

Most full-time students and a large percentage of part-time students plan to transfer to a four-year institution after leaving Carroll Community College. From the time students select their first courses, they are making decisions that greatly affect their transfer plans. The Admissions Office, Advising and Transfer Center as well as the Career Center have personnel and resources devoted to assist students with effective academic, transfer and career planning and decision making.

Full and Part-time advising staff work with students upon entry and thereafter to assist with academic planning and program/course selection. The college uses Datatel's Colleague academic planning and degree audit system as tools to assist students in monitoring degree progress. Every new student participates in "First Advising," a program designed to orient them to the process of academic Program/Course selection and transfer processes. Students are given opportunities to declare majors and/or learn about ongoing events within our "Areas of Study" structure. Seven individual areas of study are run by the faculty who conduct associated learning opportunities relating to their community both in-side and out-side of class. Areas of study are designed to demystify the college major and the world of work by exposing students to learning activities and opportunities to engage in exploration of career pursuits related to a given area of study. Students participating in areas of study events connect classroom learning with related learning opportunities including service learning, field trips, films, seminars, debates, lectures and many other activities.

The Advising and Transfer Center contains a library of in-state and many out-of-state college catalogs as well as computer access to the Articulation System of Maryland (ARYTSYS) and online access to college webpage's. Applications for area colleges are available, as well as comparative information for making college selection decisions. An active Transfer Services webpage is also maintained on the College's webpage containing useful information regarding the transfer process and links to area universities

<http://www.carrollcc.edu/services/advising/articulation/default.asp>

Students can use the online "Discover System" to conduct a national search for colleges that meet their special requirements. Discover is also used as a career development tool whereby students can research various career possibilities as well as take online assessments to assist in pointing direction for career decision making. Carroll Community College sponsors two Transfer Advising Days each year. Representatives from transfer institutions are available to talk to prospective students in the Great Hall.

A variety of degrees, courses and curricula are offered by the College for students seeking to supplement their education or to work toward a career or a transfer degree. To ease transfer, the College has developed agreements on the acceptance of credits with the University System of Maryland and select Maryland private institutions. These agreements can be accessed via the articulation program for the University System of Maryland (ARTSYS) at <http://artweb.usmd.edu>.

In addition, agreements with several out-of-state colleges exist. Advisers will assist students in selecting transferable courses.

Students may complete an Associate of Arts degree (A.A.) in the following programs:

- Arts and Sciences
- Arts and Sciences - Criminal Justice
- Arts and Sciences - Forensics
- Arts and Sciences - Legal Studies
- Arts and Sciences - Music
- Arts and Sciences – Nursing
- Arts and Sciences - Psychology
- Business Administration - General Business
- Business Administration- International Business
- Business Administration - Management Information Studies
- General Studies
- Health and Exercise Science
- Legal Studies
- Nursing - ADN
- Paralegal Studies
- Teacher Education
- Associate of Fine Arts
- Associate of Arts in teaching (AAT) - Early Childhood
- Associate of Arts in Teaching (AAT) – Elementary Education

Associate of Arts in Teaching (AAT) - Secondary Education, Concentrations in Mathematics, Spanish, English, Physical Education and Chemistry
Associate of Applied Sciences
Associate of Science in Engineering
Associate of Science in Computer and Electrical Engineering

Students who plan to transfer can use the programs listed above to create a curriculum consisting of the College's general education requirements and the undergraduate courses required by transfer institutions. The possibilities are endless but include such majors as:

American Studies
Anthropology
Art, Fine and Applied
Biology
Biotechnology
Chemistry
Communications
Economics
Environmental Science
Geography
Geology
Health Sciences
Pre-Law
Mathematics
Pre-Medicine
Meteorology
Music
Nursing
Political Science
Psychology
Science Technology
Sociology
Social Work
Speech/Communication
Theatre

CAREER PROGRAMS

Through Carroll Community College, students may complete an Associate of Applied Science degree (A.A.S.) in the following programs:

Accounting
Administrative Assistant
Computer-Aided Design
Computer Graphics – Graphic Design

Computer Graphics - Multimedia Design
Computer Graphics Web Design
Computer Information Systems
Computer Information Systems – User Support Technology
Computer Information Systems - Microcomputer Services
Computer Information Systems - Application Software Support
Computer Information Systems - Local Area Network (LAN)
Early Childhood Education
Health Information Technology
Law Enforcement
Physical Therapist Assistant (selective admissions)
Technical and Professional Studies

CERTIFICATES

Students who would like to focus on the technical aspect of the degree may consider the following Certificates:

Accounting - CPA Exam Qualification
Accounting - Tax
Accounting - Management
Computer-Aided Design
Computer Graphics - Design
Computer Graphics - Multimedia Design
Computer Information Systems - Programming Language, Visual Basic
Computer Information Systems - Programming Language, C/C++
Computer Information Systems - Microcomputer Services
Computer Information Systems - Application Software Support
Computer Information Systems - Local Area Network (LAN)
Early Childhood Education
Practical Nursing
Office Technology

LETTERS OF RECOGNITION

Students who would like to take courses in selected disciplines that can be completed within a short time frame may consider the following Letters of Recognition:

Art History
Computer-Aided Design
Computer Graphics
Computer Graphics - Web Page Publishing
Computer Information Systems - Programming Language, Visual Basic
Computer Information Systems - Programming Language, C/C++
Computer Information Systems - Microcomputer Services

Computer Information Systems - Application Software Support
Computer Information Systems - Local Area Network (LAN)
Criminal Justice
Early Childhood Education
Music
Office Technology - Administrative Assistant
Office Technology - Legal Secretary
Office Technology - Medical Transcription

Concurrent Enrollment - To enhance learning, students may be simultaneously enrolled in both high school and a post-secondary institution. With approval, selected students can earn credit at Carroll Community College by taking classes that support their overall educational plan and career interests and are a logical extension of their planned sequence of study. This Concurrent Enrollment program allows high school students to take Carroll courses while still in high school and get a head start on college.

Distance Learning – Distance Learning is the general term for learning opportunities accessed via remote electronic access (not in the traditional classroom). Distance Learning is provided at Carroll Community College for credit and credit-free courses, as well as for businesses and professionals. Several delivery modes are available at Carroll, including on-line (Internet), and satellite teleconferencing and hybrid courses which deploy a face-to-face and online learning component in a given course.

The Internet provides an enhanced mechanism for the delivery of credit and credit-free coursework and student/faculty interaction. Internet based instruction provides time and location independent learning opportunities often found to be useful for working adults. The college uses the Blackboard Course Management System as a virtual course presence for 98% of all courses. This enables students to have 24/7 access to all course materials in online and face to face courses.

National and regional teleconferences are down linked via satellite for businesses and professionals. These live teleconferences bring pertinent issues and topics (for example, management, agri-business, and educational trends) of national magnitude and nationally renowned presenters to the College.

Maryland Online - In addition to the many distance learning courses that originate at Carroll, credit seeking students can take advantage of Carroll's membership in the Maryland Online and get on-line and live interactive video courses from selected other community colleges. Students register and pay Carroll tuition even though the course may originate from another college.

Continuing Education and Training offers a diverse array of affordable and accessible lifelong learning opportunities for Carroll County residents. Courses and training programs assist individuals and groups to prepare for and keep pace in career, occupational, professional, personal, and cultural growth areas. Noncredit courses are delivered in formats that are convenient

and flexible for learners of all ages and abilities, including online courses, self-directed learning, small group seminars, traditional classroom, field study, clinical practicum, and conferences. Working closely with local businesses, government, and non-profit agencies, Continuing Education and Training provides customized training that meets specific workplace needs.

Career Training, Technical Skill Development and Continuing Professional Education -

Continuing Education and Training offers courses and training programs to prepare individuals to enter the workforce, upgrade current job skills and advance in their careers. State and industry certifications and pre-licensing qualifications are offered in some areas. Following are current non-credit offerings by major content areas; new training programs are developed and offered each year.

Nursing and Health Care - Training programs and continuing professional development in the nursing and health care occupations are available for individuals currently working in the healthcare and for those who are considering a career in the field.

Entry level training includes:

- Medical Assistant
- Nursing Assistant (Geriatric option)
- Pharmacy Technician
- Medicine Aide
- EKG Technician
- Medical Billing and Coding
- Home Healthcare Aide
- Dental Assistant
- Ophthalmic Assistant
- Assisted Living Manager
- Phlebotomy Technician
- Physical Therapy Aide
- Occupational Therapy Aide
- Patient Care Technician
- Sleep Technician

Continuing Professional Education courses are also offered for nurses and health care professionals (physical therapists, EMTs, massage therapists and others) in a variety of topics throughout the year. CEUs are offered by the College in conjunction with professional organizations.

Information Technology - Courses are available for IT professionals seeking to update computer skills, individuals seeking industry certifications, and for those who have minimal computer experience. Courses are offered in topics related to all major computer software suites; internet use; desktop publishing; computer graphics and web design; architectural and engineering software, and cyber security.

IT Certifications: the college offers coursework to prepare for industry exams in IT careers including A+, Net+, Security+, CCNA, MSDBA, Linux, and Healthcare IT. Classroom and on-line options are offered.

Office Technology and Administration: Courses in general office technology are offered throughout the year in self-paced formats. Topics include keyboarding, word processing, machine transcription, terminology, and office practices. Classroom and lab based training programs for specific office settings such as dental office and medical office administration are also offered

Continuing Education Certificate programs offered in the Information Technology area include: Computer Graphics, Computer Support Specialist, Web Site Design, Business Technology, and Office Administration.

Child Care - Childcare courses are approved by the Maryland State Department of Education Office on Child Care. Pre-certification courses provide the classroom requirements for individuals seeking teacher and director positions in child care settings. These courses are available in credit and non-credit options. Additionally, a variety of continuing education courses are to assist childcare professionals in meeting their license renewal requirements.

Other Occupational Training Programs - A broad array of courses to prepare students to work in, or advance in, a variety of occupations are offered. Some College offerings in the trades are held at the Carroll County Career and Technology Center. Some offerings are held in partnership with local community colleges. Some of the following training programs are also designated as Continuing Education Certificate Programs.

- Electrical Apprenticeship
- HVAC Technician
- HVAC Apprenticeship
- Home Inspection
- Home Improvement
- Swimming Pool Operator
- Food Service and Alcohol Management
- Management Development
- Real Estate Sales
- Real Estate Appraising
- Mortgage Loan Officer
- Travel Agent
- Machine trade technology
- Welding
- Industrial maintenance technology
- Veterinary Assistant
- Animal Control Officer
- Canine Management
- Public Purchasing

- Commercial Vehicle Driver—CDL A/ B

Business Training and Services - A well trained staff is an organization's most valuable asset and essential to helping it meet its strategic goals. Training provided by Carroll Community College can help build employees' skills, increasing both productivity and profitability. The College provides quality, cost effective, and flexible learning opportunities for career, professional, and personal growth. Classes can be designed to meet specific organizational needs, and is delivered to employees at times and locations most convenient for the employer.

Carroll Community College partners with several national and international training organizations bringing world renowned training to local employers. Alliances with DDI®, Achieve Global®, and other globally recognized curriculum providers enable us to deliver widely acclaimed programs in leadership, management and customer service. A partnership with Global Corporate College enables the College to serve the training needs of companies that have regional, national and international operations by assisting in delivering quality, consistent training to employees - no matter where in the world they work.

Programs and Services include:

- Customized training, tailored to meet specific business needs in convenient and flexible formats.
- Industry-specific technical skills to prepare employees for technological changes within the company.
- IT software training and certification programs in high-end training facilities.
- Mobile laptop computer lab to take training directly to a business.
- Licensure and pre-certification programs designed to meet state, national, and professional association requirements in a broad range of industries.
- Consortium training designed to help small businesses pool resources to address common training needs.
- Communication skills, including English for speakers of other languages (ESOL) and Spanish for the workplace.
- Consulting services, including language translation, strategic planning facilitation, technical writing, employee skill assessment, technology planning, and other topics related to organizational development
- Adult Basic Education, diploma programs including GED and External Diploma, and English for Speakers of Other Languages (ESOL)
- Conferencing services that meet the continuing education needs of the agencies, businesses and the professions.
- Partnerships with state and national associations that bring pre-licensing and continuing education courses (CEUs) to professionals in the region.

To further the mission of providing services to the business community, the College has established partnerships with the Maryland Department of Business and Economic Development, Carroll County Office of Economic Development, Small Business Development Center, Business and Employment Resource Center, Carroll Technology Council, Carroll County Chamber of

Commerce, Carroll County Public Schools, Public Libraries, and numerous other business associations in the County.

Partnerships with several national and international training organizations bring renowned training services to local employers. Alliances with DDI© International enable staff to deliver widely acclaimed programs in leadership, management and customer service. A partnership with NxLevel provides a nationally recognized, comprehensive and intensive business development program for entrepreneurs and a specialized track for agribusiness.

For businesses interested in maximizing the health of their employees while minimizing health care costs, corporate wellness programs can be designed for specific employers and employee needs. CPR, first aid, and other safety programs are offered that help keep employees safe and ensure company compliance with OSHA/MOSHA regulations. Carroll Community College is an approved training center for the American Heart Association and the National Safety Council.

Start-Up Business Development and Entrepreneurship - The Miller Center for Small Business offers courses, seminars, technical assistance, business resources and referrals for entrepreneurs and those seeking to start a new business. The College is a founding partner in a unique small business development initiative, the Carroll Business Path. Partners include Carroll County Economic Development, the Small Business Development Center (SBDC) and several other key business organizations. The Miller Center plays a role in the County's goal of increasing business revenues through new business starts and growth.

Professional Development, Licensure, and Certification - Through ongoing interaction with state licensing divisions, professional associations and other colleges, courses are developed to meet educational needs in the professions of real estate, insurance, child care, health care, accounting, counseling, environmental services, alcohol and food management, human resources management, construction and building maintenance, volunteer management, and other professions in the health and human services fields. Courses are held in a variety of formats including on-line, interactive video, and traditional classroom settings. New courses are developed each year to keep professionals current in their field.

Life Long Learning and Community Development - Personal enrichment courses are designed for lifelong learning in many diverse subject areas. These courses contribute to county residents' quality of life through educational activities that broaden knowledge, stimulate creativity, expand perspectives and support healthy living. Courses about timely local, state, national and global issues and concerns are offered to keep the community abreast of events affecting our lives and community. New courses and subject areas are continually added in the personal enrichment and community development areas.

Children and Youth - Kids@Carroll and Teens@Carroll are enrichment programs designed for children and youth ages 6 – 15 and are offered throughout the summer. These half and full-day programs emphasize creativity, world culture, technology, and hands-on learning in a camp-like environment. Over one hundred and fifty unique camps are offered in age differentiated

categories. This is the fastest growing lifelong learning program reaching nearly 2000 enrollments in 2014.

Older Adults and Retirees - Learning is for a lifetime! Special programming is designed for senior adults. Senior adults may engage in learning experiences designed with their interests and needs in mind. Courses are offered at community senior centers and area retirement communities and on the College campus. Courses are offered in art, computer applications, humanities and health and health and wellness. New courses are regularly developed and offered based on participant interest.

Arts, Humanities and Personal Development - A variety of courses are scheduled that are intended to enrich and expand the creative world through the visual, musical and written arts. Classes in painting, drawing, photography, craft and writing for pleasure and profit are offered. Additional courses in history, culture and foreign language are offered, as well as classes intended to enhance the activities of daily life. Special programs for homeowners focus on home and garden themes, including sustainable living practices and the culinary arts. Motorcycle safety training provides instruction for State licensure and safe driving methods.

Adult Education & English for Speakers of Other Languages (ESOL) - GED preparation courses are designed to assist adults who are seeking a high school diploma through the GED test. These basic education classes are offered at varying levels and provide educational support to adults needing additional skills prior to taking the GED test.

The External Diploma Program (EDP) provides an alternative for adults who are seeking a high school diploma. Students work independently to demonstrate academic skills. Assessors test and document the progress of the students until all skills have been achieved. One-on-one tutoring is also available for EDP participants.

English classes for foreign-born persons who want to learn or improve their English are offered. Classes are small to meet the needs of the students and intensive instruction is given in listening, speaking, reading and writing. Students also learn about the American culture and democracy.

The Adult education and ESOL programs also provide guidance to students who wish to continue their education through post-secondary academic or training programs. Students who are job ready are also referred to appropriate job assistance agencies.

All adult education and ESOL programs are open to adults over 16 years and most are free. They are supported in part by a grant through the Maryland State Department of Labor and Licensing.

UNIQUE INSTITUTIONAL CHARACTERISTICS

Carroll Community College is the most popular provider of undergraduate and continuing education for Carroll County residents. The college supports economic development of the county

and region and works with organizations such as the Chambers of Commerce, the county's Economic Development Commission, the Carroll Technology Council and numerous business organizations. The College has partnered with area businesses to provide customized training and workforce development programs. It serves as a key resource for the County with the capability of providing support as requested for welfare-to-work reform initiatives, school-to-work programs, advanced technology training, and continuing adult education.

Carroll Community College has fully embraced the tenets of the learning college. The college operates under the belief that credibility in learning outcomes assessment and institutional effectiveness is a hallmark of leading institutions in the 21st century. As such, the college has developed an extensive continuum of institutional plans and monitoring systems that allows it to continuously improve its ability to fulfill its mission, vision and strategic initiatives.

The contemporary design of the college's architecture creates an impressive learning environment and a unique identity within the county. Each of the current buildings is attached to the Great Hall, an open and airy space that creates a sense of "community" within the institution. Highlights of the facilities include "smart" classroom technology in all instructional spaces, wireless capability throughout the campus, a fully equipped and modern academic center and a multi-level learning resource center. Carroll Community College has been a leader in developing technology-enhanced learning programs and was a founding member of both the Maryland Community College Teleconsortium and Maryland Online. The college has won several national awards for its extensive and effective implementation of technological recourses.

Characteristic of Carroll is an understanding that as a small college, partnerships are essential to extending reach and access to a greater diversity of programs. As such, the college has developed a number of cooperative arrangements such as the Mid-Maryland Allied Health Program Consortium with Frederick and Howard Community Colleges.

The college is a hub of cultural activity and has steadily expanded its cultural programming for the public, including art exhibitions and music and theater performances. The college houses a substantial collection of art works of the world class abstract expressionist, Hiram Williams. In conjunction with Random House Publishers and local businesses, Carroll hosts an annual Book Fair, a weeklong event featuring national and local authors, workshops and competition for writers. The college also partners with the Carroll County Historical Society to conduct an annual Civil War symposium featuring presentations by scholars, tours, displays, and reenactments.

The credit instructional program provides high quality learning experiences for traditional and nontraditional students, offering one of the lowest student-to-teacher ratios in Maryland. Central to the credit curriculum is the incorporation of core higher-order knowledge application competencies into the general education curriculum. Carroll's General Education Learning Goals are achieved through completion of the general education core course requirements combined with further coursework in programs and majors and in concert with engaging and innovative academic and co-curricular experiences. General Education goals and competencies are as follows:

1. Communication

Students will communicate effectively in writing and in speech, and interpret the written and oral expression of others. Toward attaining this goal, students will:

- Assess and address a specific audience to accomplish a goal
- Craft an arguable thesis statement and support it with evidence
- Explore and respond to differing perspectives
- Use standard English in academic and professional settings

2. Critical Thinking

Students will practice analytical and evaluative thinking with a view toward continuous improvement. Toward attaining this goal, students will:

- Independently identify problems and pose questions
- Gather, read, evaluate, and integrate relevant information
- Explore alternative perspectives and their implications
- Draw well-reasoned conclusions

3. Quantitative and Scientific Reasoning

Students will apply mathematical and scientific concepts and theories to identify and analyze problem solving situations. Toward attaining this goal, students will:

- Apply models and methods to define, represent, and solve mathematical and scientific problems
- Make observations, identify problems, formulate questions and hypotheses
- Collect and interpret data in order to draw valid conclusions and identify logical relationships
- Distinguish scientific arguments from non-scientific arguments

4. Information & Technology Literacy

Students will research, create, and communicate information through appropriate technology or media. Toward attaining this goal, students will:

- Select appropriate search methods for gathering information
- Evaluate the authority, reliability, accuracy, and currency of information sources
- Demonstrate an awareness of the ethical, legal, and cultural issues and responsibilities in the uses of information and technology
- Design, develop, and produce media that effectively communicate information and ideas

5. Creativity

Students will explore and appreciate the creative processes that shape the human experience. Toward attaining this goal, students will:

- Appreciate creative expression as a reflection of culture and history

- Identify how creative processes lead to discovery and innovation
- Define and analyze stylistic nuances in artistic forms
- Examine a significant work of art or great idea and its cultural influence

6. Global Awareness

Students will acknowledge and comprehend the beliefs, behaviors, and values of diverse populations within a global environment. Toward attaining this goal, students will:

- Analyze and evaluate the significance of cultures and societies from a variety of perspectives
- Explain the impact of economic, political, and technological changes on diverse cultures
- Examine the interdependence of humanity
- Appreciate the commonalities and the differences among world cultures

7. Personal Development and Social Responsibility

Students will recognize and engage in personal and social behaviors responsible for the wellness of self and community. Toward attaining this goal, students will:

- Develop a framework for ethical decision making and personal responsibility
- Examine how personal behaviors affect self and others
- Collaborate with others to achieve a common goal
- Participate in and reflect on personal learning experiences

Central elements of the noncredit curriculum are a high degree of customization and a high level of responsiveness to clientele. These features have produced healthy and growing FTE and recognition for Continuing Education and Training (CET). Carroll Community College produces noncredit FTE at higher levels than many of the community colleges our size. Eighty or more businesses contract with Continuing Education and Training each year for specialized training and/or services. There are now forty-five competency based Continuing Education Certificate programs preparing students for employment in high demand occupations. CET partners with numerous organizations and agencies to maximize resources to meet workforce and community development needs.

NEW INITIATIVES AND FACILITY IMPLICATIONS

The College's modern and attractive facilities have been a tremendous asset in attracting students and responding to their learning needs. Traditional and non-traditional students alike feel comfortable and at home while on campus. Classroom Building 4, at approximately 80,000 gross square feet, houses additional classrooms for credit English, mathematics, Computer Graphics design and general classroom space. It also houses space for expansion of business development and workforce training and features a sub-dividable conferencing space for 200 participants. The

building also features a new food service and student co-curricular space in the center of the facility.

For the next decade and longer, the need to continue to expand operations and facilities will increase based on projections reported herein by Maryland Higher Education Commission and based on State growth projections for Carroll County. Credit programs will be expanded, especially those in Allied Health, Science Technology Engineering and Mathematics (STEM), and other technical areas projected to be in high demand in Maryland for the foreseeable future. Additional classroom buildings will be needed to house these new specialized programs as well as to meet our needs to expand existing career, transfer and general education offerings.

Of the future initiatives that will have facility implications, program expansion in Allied Health and STEM related programs will have the most significant need for expanded space and for specialized learning environments to be created. Additionally, the college plans to add an athletics program to our offerings and a new gymnasium will be needed.

Anticipated new and expanded programs to be developed over the next ten years include:

Projected New Academic Program Implementation by Academic Year 2015-2025

Program	14	15	16	17	18	19	20	21	22	23	24	25
Cyber Security			X									
Digital Broadcast Communications				X								
Dental Hygiene							X					
Engineering Technologies							X					
Alternative Energy Systems							X					
Power Systems Management							X					
Fiber Optics							X					
Mechanical Systems							X					
Robotics							X					
Information Technology Program Expansions					X							
Medical Laboratory Technology							X					
Public Relations/Professional Communications and Media					X							

STEM and Engineering Technologies, Occupational Training, and Science Laboratory Expansion - The critical shortage of prepared workforce in STEM related areas is well documented in Maryland. Carroll Community College is currently developing the first two engineering program

options available under the new Associate in Engineering Degree Program (ASE). To recruit students into this program the college is currently expanding our partnership with Carroll County Public Schools (CCPS) and working in tandem to expand STEM related enrollments through such programs as “Project Lead the Way” and the “STEM Invitational Competition”, an engineering and science related competition conducted by CCPS and held on Carroll Community College’s campus. In addition, emerging green technologies and alternative energy/power systems and control simulations programs will be needed to prepare the future regional workforce. Current science related facilities do not exist to support such program. A major component of campus expansion will be devoted to providing adequate space for credit and non-credit programs related to these emerging technologies.

Teacher Education - The critical statewide shortage of certified teachers is well documented, particularly in the areas of math, science, technology and special education. Additionally, certification requirements for early childcare workers have been increased causing the need for current child care workers to become degreed. All teacher education programs combined in Maryland produce between two and three thousand new teachers annually while the need is projected to be in excess of nine to ten-thousand openings annually. The gap will widen as baby boomers retire in mass numbers. Community colleges have been asked to take a significant role in recruiting and educating prospective teachers. Carroll Community College has expanded our teacher education offerings in the form of AAT tracts in Early Childhood, Elementary and Secondary Education. We anticipate an expansion of seats in our education program offerings to assist in meeting the demands of teacher replacement over the next decade and beyond.

Allied Health Programs - The exploding demand for employees in healthcare occupations is well documented in local and regional labor market studies. The College stands prepared to serve the Carroll County healthcare community by starting new programs of study and expanding existing curricula in degree, certificate, and continuing education and training programs. The college projects expansion of current facilities and construction of new Nursing and Allied Health facilities. The Nursing and Allied Health Building expansion will provide for specialized clinical laboratories, multi-media learning support labs, and classrooms to support the College’s nursing and allied health curriculum expansion. This facility will enable the College to at least double our current student enrollment base in these programs. A new on-campus facility is needed to meet this challenge.

Physical Education/Athletics Programs - The Fitness Center supports the current program of health and life fitness offerings. These offerings include credit and noncredit classes to support our Health and Exercise Science Credit program as physical education credit offerings as well as numerous lifetime fitness non-credit offerings. The facilities also support limited intramural activities offered with our student life program. However, these facilities cannot support the wide range of activities/programs necessary to meet the needs of the increasing number of transfer students and new programs in health, physical education, leisure and recreation, teacher education, and corporate wellness, nor do they provide adequate facilities for offering intercollegiate athletics or aquatics.

A comprehensive Physical Education facility will allow the College to provide the following expanded services:

1. Individual and team sports such as racquetball, badminton, volleyball, basketball, soccer, lacrosse, tennis and golf
2. Fitness courses such as Weight Control, Swimming for Total Fitness, Bicycling, Canoeing and Camping, Aerobic Dance and Social, Folk and Ballroom Dance
3. Cardiovascular Fitness programs for high risk populations
4. Facility for college/community athletic events requiring large open areas

Maximum capacity schedule for gymnasium use:

1. Intramural sports
2. Intercollegiate sports
3. Recreation and Parks Department Rec Hours
4. Credit and Continuing Education course offerings, including corporate programs
5. Graduation, health fairs, special events, etc.

Continuing Education and Training (non-credit courses and training programs) - CET expects rapid growth in all entry-level career/job training programs and especially in the allied health professions. In addition, the growth of the emerging green economy and development of green careers and jobs will soon provide new opportunities for career/job training. An increased demand for workers in the construction trades and energy systems as part of the national economic stimulus program will result in increased demand for training as well. Demand for training programs leading to industry certification and licensure, particularly in the health care and information technology field is anticipated to continue well into the future.

In a prosperous economy, people have money to spend on leisure time pursuits and that is when the Continuing Education and Training experiences an increase in enrollments in the lifelong learning area particularly in the humanities, the arts and languages. In a slowed economy, people are searching for ways to secure their lives and be financially prudent. During these times, personal enrichment interest shifts to do-it-yourself classes as well as short inexpensive leisure activities such as crafts and lectures. There has been a growing interest in lifestyle activities including cooking and home improvement classes. Health and wellness courses are anticipated to continue to be in demand as our culture embraces nutrition, weight management, and mental and physical fitness as key to healthy living and longevity and healthcare cost management.

Busy adults want flexible learning options. Increasingly, they want to be able to access training and education from home or work and at any time, day or night. There has been rapid growth in online enrollments over the past several years and that is anticipated to continue to grow. Additionally, the use of asynchronous on-line interaction among students and faculty is a value-added component of classroom-based training. Continuing Education will be accelerating web-based components to classroom training and will continue to grow these hybrid types of course offerings. Case studies and situational problem solving will be presented on-line as an enhancement to the knowledge and skills employees learn in the classroom. ESOL courses using

pod casting for instructional reinforcement have been well received. The adult education program will continue adding instructional technology enhancements to their courses.

As the senior adult population grows, the College can expect to see more participation of older adults in credit courses as well as non-credit courses in personal enrichment areas, computer and internet applications, and training for re-entry into the workforce.

NEW OR EXPANDED PROGRAMS

The following program development activities will need to be implemented to meet workforce demands and community interest:

1. Develop new and expand existing training programs and continuing professional education courses in nursing and healthcare to meet the local and regional labor force needs and the professional advancement of healthcare workers.
2. Expand industry certifications, training programs and courses in information technology, and cyber security that support resident businesses, assist in attracting new business, and prepare individuals for jobs in the region.
3. Work with adjunct faculty and trainers to expand and improve implementation of learning outcomes assessments in workforce courses and increase the number of Continuing Education Certificate programs offered.
4. Increase licensure and certification programs in response to new regulations and local need.
5. Increase on-line training programs and courses, add new innovative online course vendors and integrate robust on-line components to classroom training.
6. Adjust lifelong learning courses in response to changing economic conditions and the increased diversity of the older adult demographic.
7. Increase services and programs to assist students' transition from adult education diploma and ESOL programs to workforce training and/or academic coursework..
8. Continue to expand summer programs for children and youth to expose this age group and their parents to the community college and meet their needs and interest for summer enrichment programs.
9. Place a major emphasis and resource allocation on expanding contracted training and services to area business to assist them in employee development and business growth and to meet the challenges of new technologies in the workplace.

10. Align development of new career training programs and continuing professional education to emerging employment areas and high demand occupations.
11. Work with other areas of the College to develop pathways for students to receive academic credit for industry credentials, skills and knowledge gained through continuing education coursework and training programs to accelerate their progress to a degree. Areas to be explored: apprenticeships/construction trades, health informatics, cyber security, juvenile services/law enforcement, healthcare.

NEW OR EXPANDED FACILITY REQUIREMENTS

Facilities will be needed to accommodate the following growth areas:

1. Expand space for growing demand for CET healthcare training programs. New specialized spaces will be needed to meet demand to expand the Medical Assisting program, offer Personal Care Technician Training and to bring the high demand Dental Assisting program back to the Carroll campus and to add other new programs as needed. .
2. Create technical training spaces to accommodate the emerging training demand for manufacturing related training, apprenticeship programs and cyber security.
3. Training spaces with assess to water will be needed to expand training programs in high demand.
4. Access to dedicated classroom space for long career courses (100+ hrs./yr.) to provide a consistent, quality environment for these classes. Currently, many long courses are required to change classrooms many times throughout the year to accommodate them.
5. The need for an easily accessible dedicated business training and services space/facility that incorporates small and large meeting rooms, lobby spaces, computer and technical labs, spaces for business receptions and conferences, and rooms for business counseling is needed for the College and the community.



COLLEGE FACILITIES 2

- General Facilities Description
- Utilization
- Space Guide Calculations
- Planned & Proposed Facilities Projects
- Identification of Specific Facilities & Academic Programs

GENERAL FACILITIES DESCRIPTION

The college, located at 1601 Washington Road, is approximately 267,000 gross square feet. It consists of seven buildings joined together by passageways. It is located on 80 acres.

The Administration Building and Classroom Building I were first used in September of 1990. These two facilities were jointly funded by Carroll County Government and the State of Maryland. The Multipurpose Building opened in September of 1993. This facility was funded by the Carroll County Government. The Learning Resource Center, jointly funded by Carroll County Government and the State of Maryland, opened in November of 1997. An Amphitheater was added to the site in 1998. This 3,500 gross square foot outdoor performance center was funded by private contributions, and a state grant.

The construction of Classroom Building III (Fine and Performing Arts Center, Business and Training Center and the Life Fitness Center) was finished in the fall of 2002 and was jointly funded by the Carroll County Government and the State of Maryland. Classroom Building III is a 59,000 square foot facility designed to accommodate a multi-purpose auditorium, art gallery, and various classrooms and labs to provide a comprehensive Liberal Arts curriculum. This facility also includes a Business and Training Center and a Fitness/Wellness Center, providing for expansion of programs and services currently offered to both the students and citizens of Carroll County. The facility provides a vital element of comprehensive community educational environment for the students and provides a cultural center, as well as expanded business and industry training opportunities for the citizens of Carroll County, enhancing both quality of life and economic development.

The college added a Nursing and Allied Health Building in 2004 jointly funded by the Carroll County Government and the State of Maryland. This 31,000 gross square foot facility supports the colleges growing Nursing and Allied Health Curriculums supported by both credit and non –credit class offerings.

The college constructed an 80,000 gross square foot Classroom Building 4 facility jointly funded by the Carroll County Government and the State of Maryland. This facility houses classrooms, labs, faculty and staff offices, and a conferencing center as well as a child development center and a cafeteria.

The Administration Building and Classroom Building I received their occupancy permits during the fall of 1990. The Multi-Purpose Building received its occupancy permit during the fall of 1993, and the Learning Resource Center received its occupancy permit in November of 1997. The Fine and Performing Art/Business Training Center and the Life fitness Center received their occupancy permits in September of 2002. The Nursing and Allied Health Building received its occupancy permit in the fall of 2004. All codes, safety requirements, and certifications have been received in compliance with the laws of the State of Maryland and Carroll County. These facilities are in excellent condition. Classroom Building 4 is the newest facility on campus. It received its occupancy permit in January 2010 and provides additional instructional and specialized spaces as well as office space, storage area, meeting rooms, and support space.

UTILIZATION

Space at Carroll Community College is efficiently utilized. Classrooms and laboratories are utilized near capacity. The most immediate facility deficit is in parking spaces. The college did add approximately 267 spaces to its inventory during the fall of 2008. However, the college’s growth has already seen half of these spaces being utilized even prior to the opening of Classroom Building 4.

The following represents a summary review of existing classroom and laboratory usage.

Maryland Higher Education Commission
 Community College Space Utilization Survey Room Worksheet

College Carroll Community
 College
 Campus Westminster Main
 Campus

	HEGIS 110	HEGIS 210	HEGIS 210
		Natural Sciences, Social Sciences and Humanities	Specialized - Occupational, Technical and Career
Number rooms dedicated to Credit course use	35	29	3
Number rooms dedicated to non-credit course use	3	0	9
Number of mixed-use rooms	1	0	5
Total	39	29	17

GREAT HALL

Building Designation:	“A” Building
Total Floors:	2 Floors
Net Assignable Square Feet:	39,145 SF
Gross Building Area:	73,000 SF
Net-to-Gross Efficiency:	54%
Year Constructed:	1990
Renovations & Additions:	None

Program: Administrative Offices, Classrooms & Studios

General Conditions: Good

Adequacy of Space: Good

Sprinkler System: Yes

General Description:

The “Great Hall” Administration / Classroom Building is the campus center, serving as the Student Union and Administrative facility for the College, as well as housing numerous classrooms and labs.

The design of the campus plan focuses around the “Great Hall” atrium. The two level sky-lit space is the social space of the campus for students and faculty. Classrooms, offices, and labs open onto this atrium, providing an ideal atmosphere for the learning experience. The success of the College’s physical environment is primarily due to the quality of and social atmosphere of the “Great Hall’s” atrium. Natural light is a primary component of the space, marking dark, narrow corridors nonexistent on campus.

Architectural and Structural Condition:

The building has been maintained in very good condition by means of an annual maintenance program funded by Carroll County and jointly implemented by College and County staff.

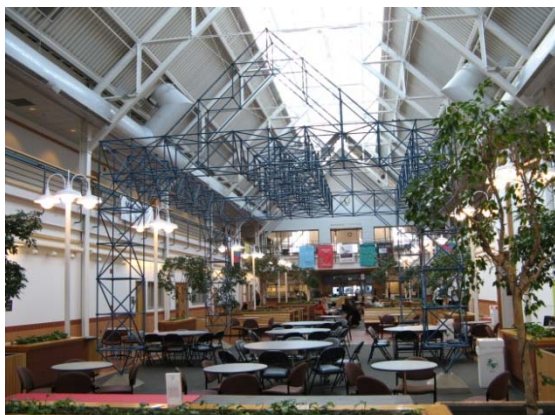
Mechanical and Electrical Conditions:

Mechanical Equipment - The central plant in the Lower Level of the “Great Hall” serves the majority of the space on campus. This system is in need of replacement and is reflected in the systemic renovations project outlined in this document. The Carroll County Government has thus far approved this project in its 2017 capital improvement program and it has been requested for State funding.

Electrical Equipment - The main service equipment is served by a utility owned, pad-mounted transformer through a concrete encased duct bank into a utility approved current

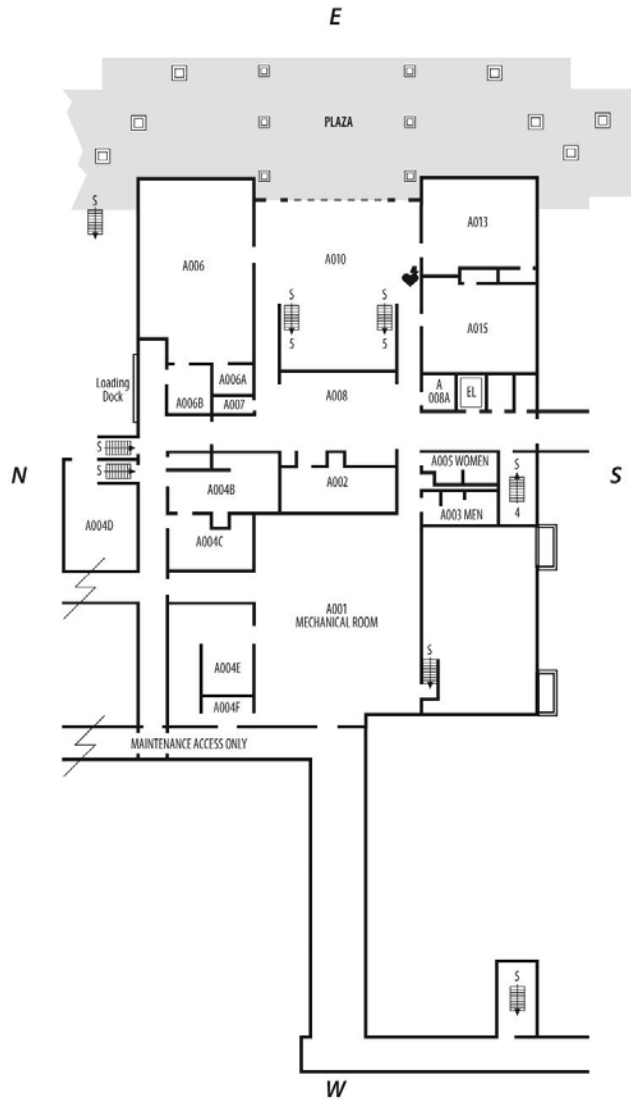
transformer cabinet for utility metering. Secondary power in the building is provided at 480/277 volts, 3-phase, 4-wire. A distribution switchboard is provided in the main electrical room of the facility to distribute power throughout the building and elsewhere on campus through a utility tunnel. The electrical equipment is in very good condition.

GREAT HALL PHOTOGRAPHS



GREAT HALL
A Building
Lower Level

Carroll Community College

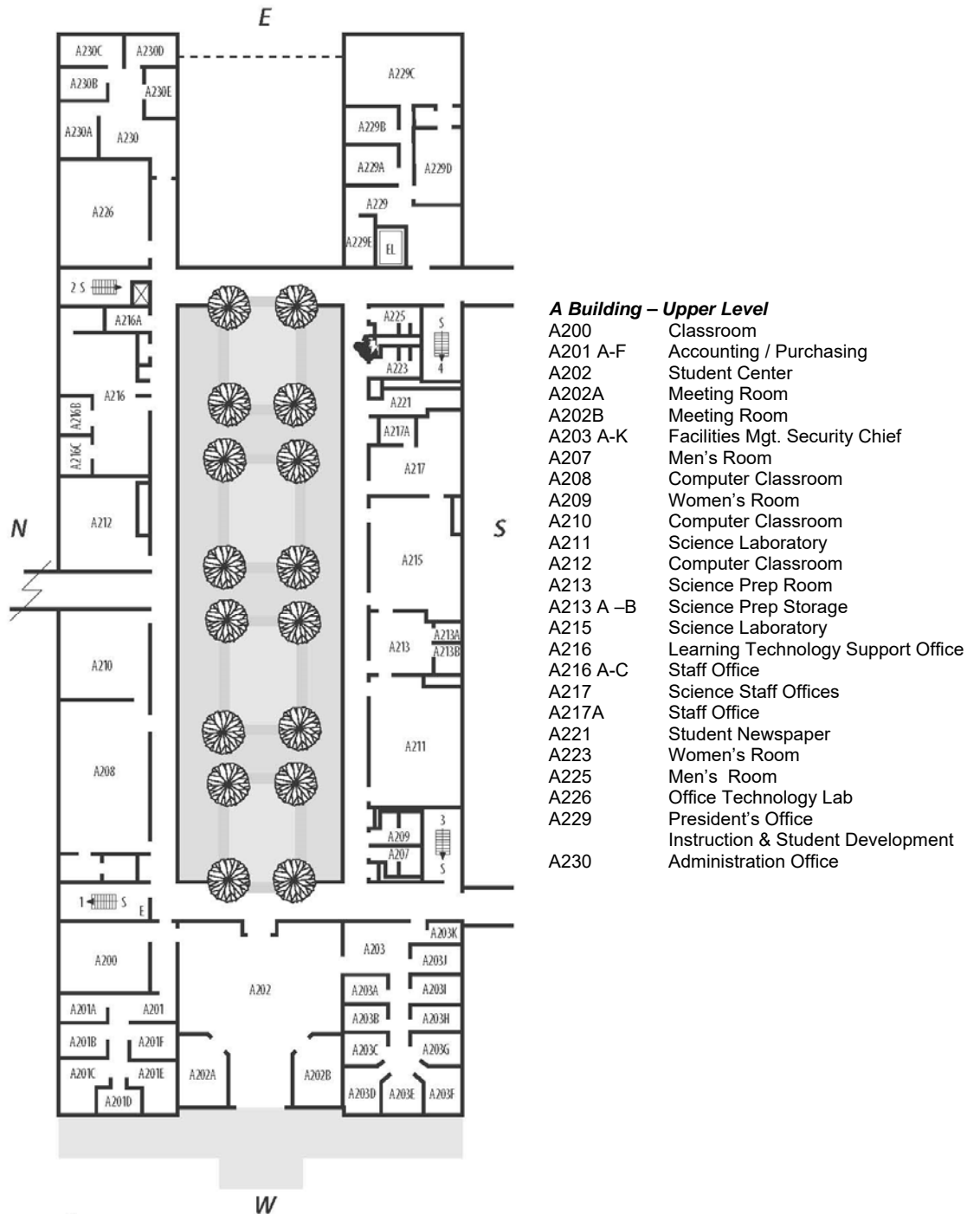


A Building – Lower Level

- A001 Mechanical Room
- A002 Food Locker
- A003 Men's Room
- A004A Bookstore Storage
- A004B Storage
- A004C Lawn Shop
- A005 Women's Room
- A006 Bookstore
- A006A Bookstore Office
- A006B Bookstore Receiving
- A007 Bookstore Office
- A008 Vending Area
- A010 Café Seating
- A013 Art Studio
- A015 Art Studio

**GREAT HALL
A Building
Upper Level**

Carroll Community College



CLASSROOM BUILDING

Building Designation:	“C” Building
Total Floors:	3 Floors
Net Assignable Square Feet:	14,313 SF
Gross Building Area:	21,000 SF
Net-to-Gross Efficiency:	68%
Year Constructed:	1990
Renovations & Additions:	None

Program: Classrooms

General Conditions: Good

Adequacy of Space: Good

Sprinkler System: Yes

General Description:

The three level classroom building with one level below grade was constructed as a wing to the “Great Hall”. It houses various classrooms, science labs and staff office space.

Architectural and Structural Condition:

The building has been maintained in very good condition by means of an annual maintenance program funded by Carroll County and jointly implemented by College and County staff.

Mechanical and Electrical Conditions:

Mechanical Equipment - The central plant in the Lower Level of the “Great Hall” serves the majority of the space on campus. This system is in need of replacement and is reflected in the systemic renovations project outlined in this document. The Carroll County Government has thus far approved this project in its 2017 capital improvement program and it has been requested for State funding.

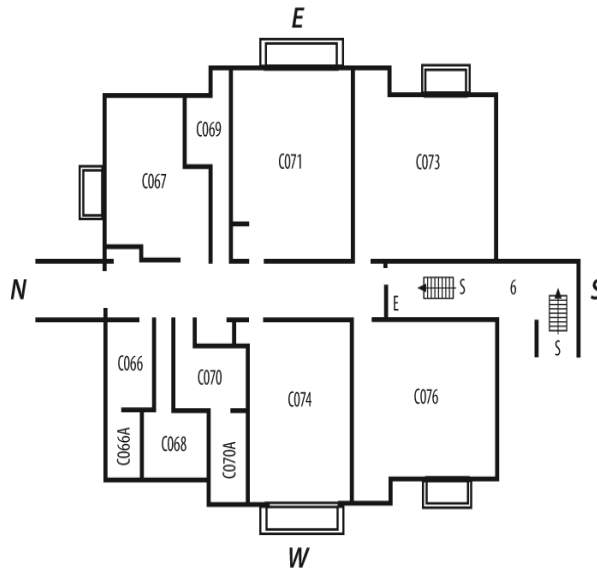
Electrical Equipment – The building is served by the central electrical room in the “Great Hall”. All local panel boards and the distribution system are in very good condition.

CLASSROOM BUILDING PHOTOGRAPHS



**C Building
 Lower Level**

Carroll Community College

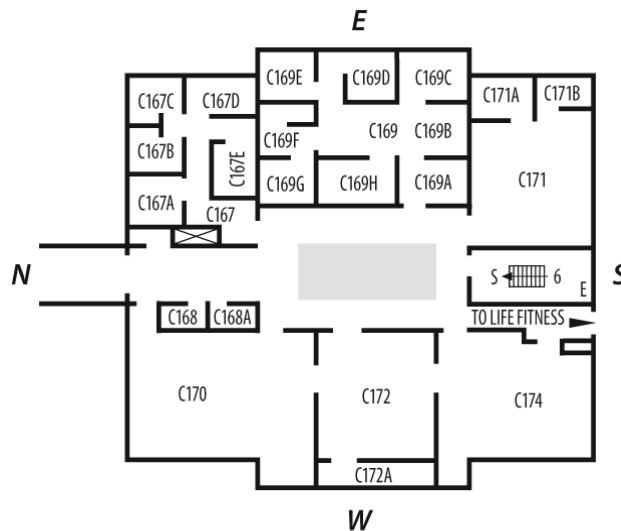


Classroom Building C

Classroom Building C

- C067 Mechanical
- C068 Environmental Service
- C069 Environmental Service
- C070 SGO Storage
- C070A Storage
- C071 Computer Classroom
- C073 Classroom
- C074 Computer Classroom
- C076 Classroom

**C-Building
 Main Level**



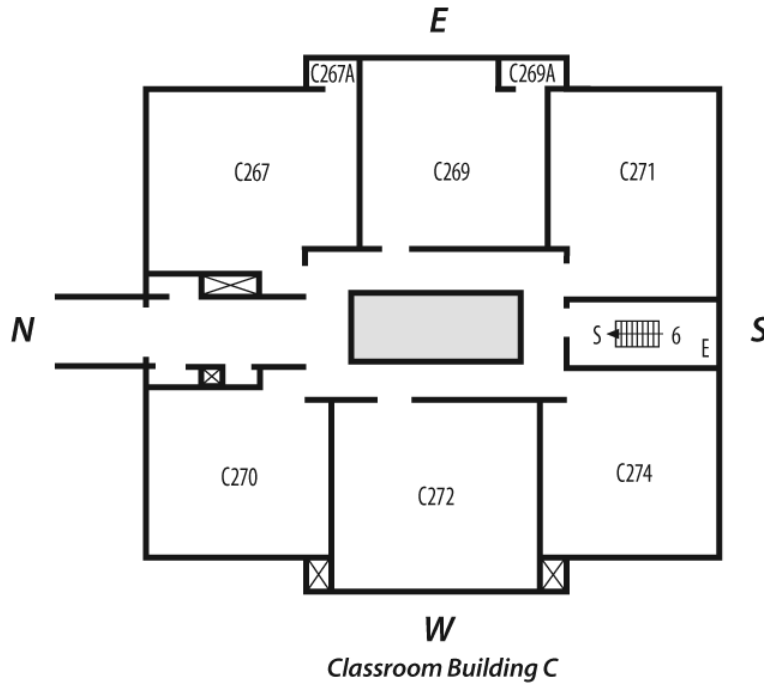
Classroom Building C

Classroom Building C

- C167 A-E IT Offices
- C168 Closet
- C168A Closet
- C169 A-H IT Offices
- C170 Science Lab
- C171 Information Technology
- C171 A & B Staff Offices
- C172 Science Prep Room
- C172A Staff Office
- C174 Science Lab

C Building Upper Level

Carroll Community College



LEARNING RESOURCE CENTER

Building Designation:	“L” Building
Total Floors:	3 Floors
Net Assignable Square Feet:	32,160 SF
Gross Building Area:	57,000 SF
Net-to-Gross Efficiency:	56%
Year Constructed:	1997
Renovations & Additions:	None
Program:	Classrooms, Campus Library
General Conditions:	Good
Adequacy of Space:	Good
Sprinkler System:	Yes

General Description:

The “Learning Resource Center” is composed of 3 levels housing the active campus library, video and digital resources, a distance learning lab and various classroom facilities. The center connects at each floor with the “Great Hall”.

Architectural and Structural Condition:

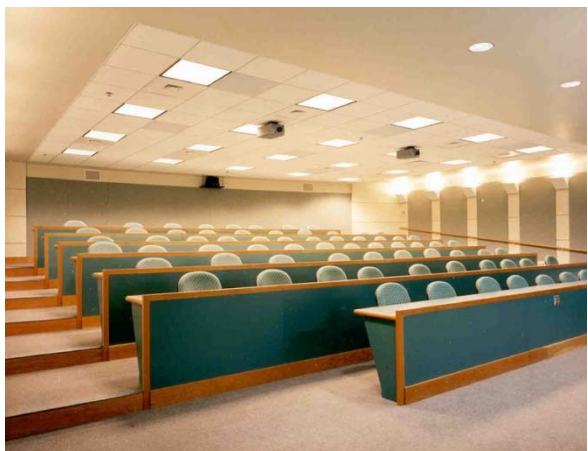
The building has been maintained in very good condition by means of an annual maintenance program funded by Carroll County and jointly implemented by College and County staff.

Mechanical and Electrical Conditions:

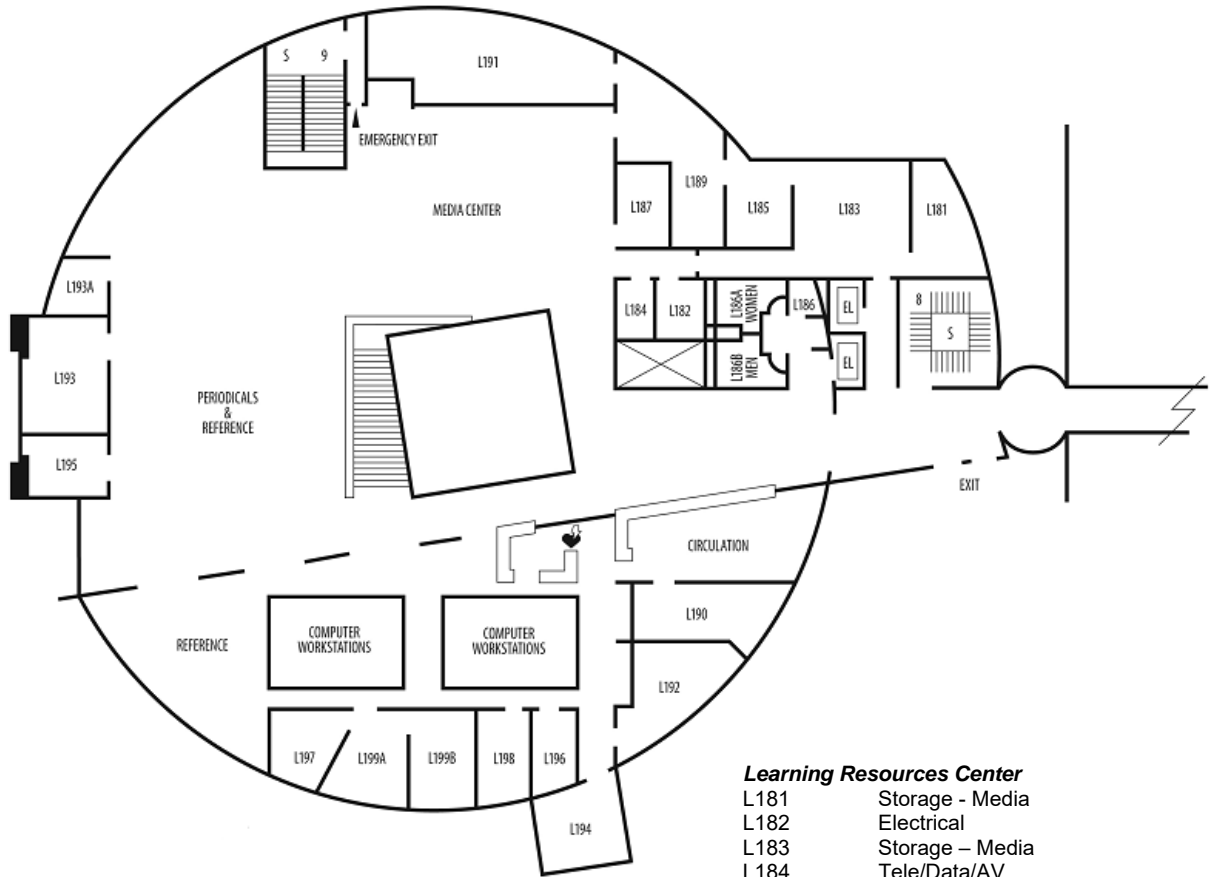
Mechanical Equipment - The central plant in the Lower Level of the “Great Hall” serves the majority of the space on campus. This system is in need of replacement and is reflected in the systemic renovations project outlined in this document. The Carroll County Government has thus far approved this project in its 2017 capital improvement program and it has been requested for State funding.

Electrical Equipment – The building is served by the central electrical room in the “Great Hall”. All local panel boards and the distribution system are in very good condition.

LEARNING RESOURCE CENTER PHOTOGRAPHS



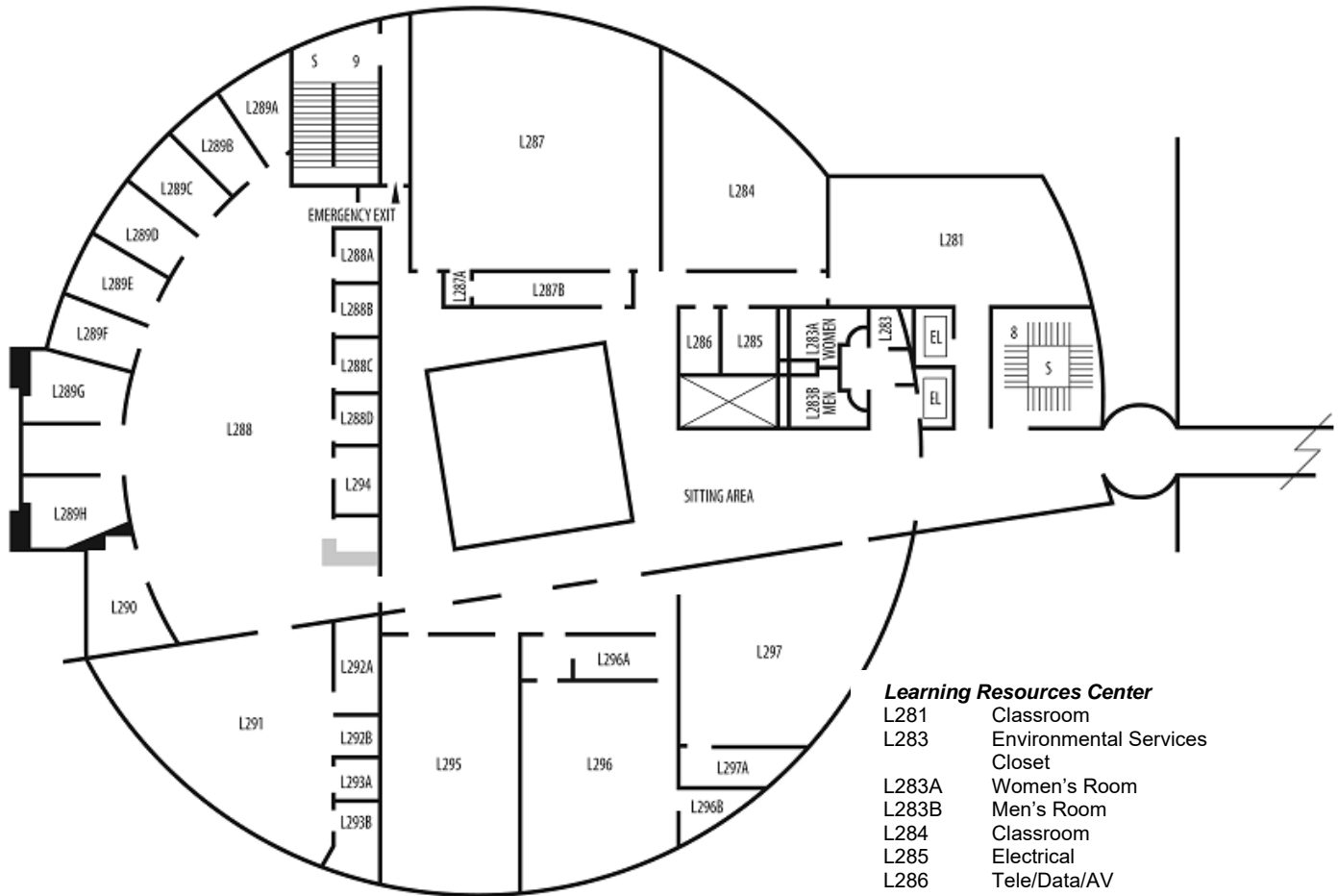
**L Building
 Main Level**



Learning Resources Center

- L181 Storage - Media
- L182 Electrical
- L183 Storage – Media
- L184 Tele/Data/AV
- L185 Storage – Media
- L186 Environmental Services
- L186A Women's Room
- L186B Men's Room
- L187 Media Group Study
- L189 Media Offices
- L190 Circulation Department
- L191 Media Center Broadcast
- L192 Blackboard/Distance Learning Office
- L193 Conference Room
- L193A Group Study Room
- L194 Center for Teaching & Learning
- L195 Group Study Room
- L196 Inter-Library Loan Office
- L197-199B Library Offices

**L Building
Upper Level**



- Learning Resources Center**
- L281 Classroom
 - L283 Environmental Services Closet
 - L283A Women's Room
 - L283B Men's Room
 - L284 Classroom
 - L285 Electrical
 - L286 Tele/Data/AV
 - L287 Distance Learning Lab
 - L287A Storage
 - L287B Control Booth
 - L288 Academic Services Center
 - L288 A-D Faculty Offices
 - L289 A-E Faculty Offices
 - L289 G-H Faculty Offices
 - L289F Student Support Services
 - L290 Conference Room
 - L291 The Write Way Lab
 - L292A Faculty Office
 - L292B Faculty Office
 - L293A Kitchenette
 - L293B Faculty Office
 - L294 Faculty Office
 - L295 Classroom
 - L296 Distance Learning Lab
 - L296B Storage
 - L297 Computer Lab
 - L297A Storage

MULTI-PURPOSE BUILDING

Building Designation:	“M” Building
Total Floors:	3 Floors
Net Assignable Square Feet:	13,041 SF
Gross Building Area:	21,270 SF
Net-to-Gross Efficiency:	61%
Year Constructed:	1993
Renovations & Additions:	None
Program:	Classrooms, Labs & Conference Rooms
General Conditions:	Good
Adequacy of Space:	Good
Sprinkler System:	Yes

General Description:

The three level classroom building with one level below grade was constructed as a wing to the “Great Hall”. It houses various classrooms, science labs and staff office space.

Architectural and Structural Condition:

The building has been maintained in very good condition by means of an annual maintenance program funded by Carroll County and jointly implemented by College and County staff.

Mechanical and Electrical Conditions:

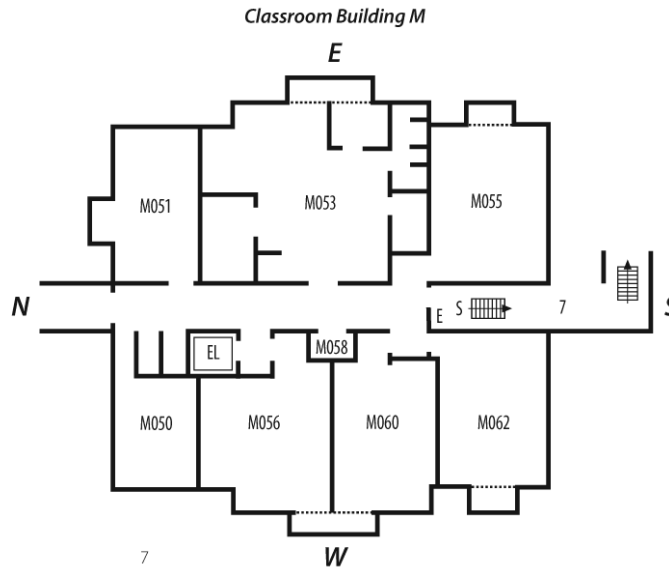
Mechanical Equipment - The central plant in the Lower Level of the “Great Hall” serves the majority of the space on campus. This system is in need of replacement and is reflected in the systemic renovations project outlined in this document. The Carroll County Government has thus far approved this project in its 2017 capital improvement program and it has been requested for State funding.

Electrical Equipment – The building is served by the central electrical room in the “Great Hall”. All local panel boards and the distribution system are in very good condition.

MULTI-PURPOSE BUILDING PHOTOGRAPHS

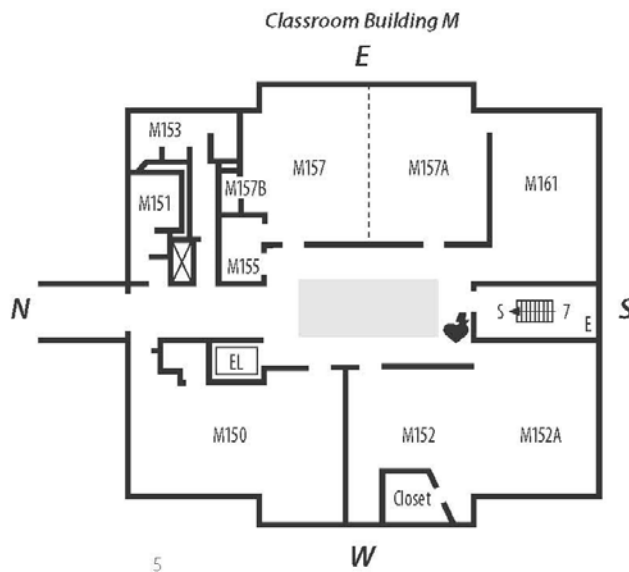


**M Building
 Lower Level**



- Classroom Building M**
- M050 Adjunct Faculty Office
 - M051 Mechanical Room
 - M053 County Maintenance
 - M055 Classroom
 - M056 Classroom
 - M058 Electrical Closet
 - M060 Classroom
 - M062 Computer Classroom

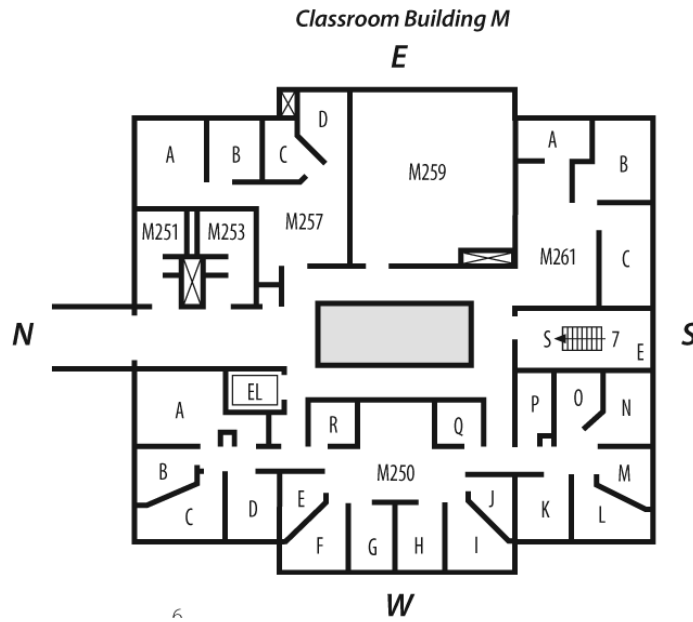
**M Building
 Main Level**



- Classroom Building M**
- M150 Dry Science Lab
 - M151 Women's Room
 - M152 Engineering/Physics Lab
 - M152A Engineering/Physics Lab
 - M153 Men's Room
 - M155 Kitchenette
 - M157 Conference Suite
 - M157A Conference Suite
 - M157B Storage
 - M161 Dental Labs

**M Building
 Upper Level**

Carroll Community College



Classroom Building M

- M250A Conference Room
- M250 B-R Faculty Offices
- M251 Women's Room
- M253 Men's Room
- M257 A-D Foundation Storage / Faculty Offices
- M259 Classroom
- M261 Institutional Development & College Foundation
- M261 A-B Staff Offices
- M261C Storage

NURSING & ALLIED HEALTH BUILDING

Building Designation:	“N” Building
Total Floors:	2 Floors
Net Assignable Square Feet:	19,051 SF
Gross Building Area:	31,557 SF
Net-to-Gross Efficiency:	60%
Year Constructed:	2004
Renovations & Additions:	None
Program:	Lab, Classroom & Office
General Conditions:	Good
Adequacy of Space:	Good
Sprinkler System:	Yes

General Description:

The “Nursing & Allied Health” facility is designed to accommodate a variety of laboratories, classrooms & office spaces. This building forms the north edge of the Entry Court and connects directly into the top floors of the “Great Hall” building.

Architectural and Structural Condition:

The building has been maintained in very good condition by means of an annual maintenance program funded by Carroll County and jointly implemented by College and County staff.

Mechanical and Electrical Conditions:

Mechanical Equipment – Building N has its own stand-alone mechanical system. Gas-fired boilers and chillers provide hot and chilled circulated water respectively. Heating water for the project will be utilized for air handling unit coils, terminal unit coils, baseboard radiation and miscellaneous space heating. Chilled water for the building will be provided to serve the cooling coils in each air handling unit.

Cooling and ventilation air is provided by multiple penthouse mounted air handlers. The air handling units are variable air volume type, each provided with a chilled water cooling coil, a hot water heating coil and a humidifier section. Return air fans are provided for each system as well.

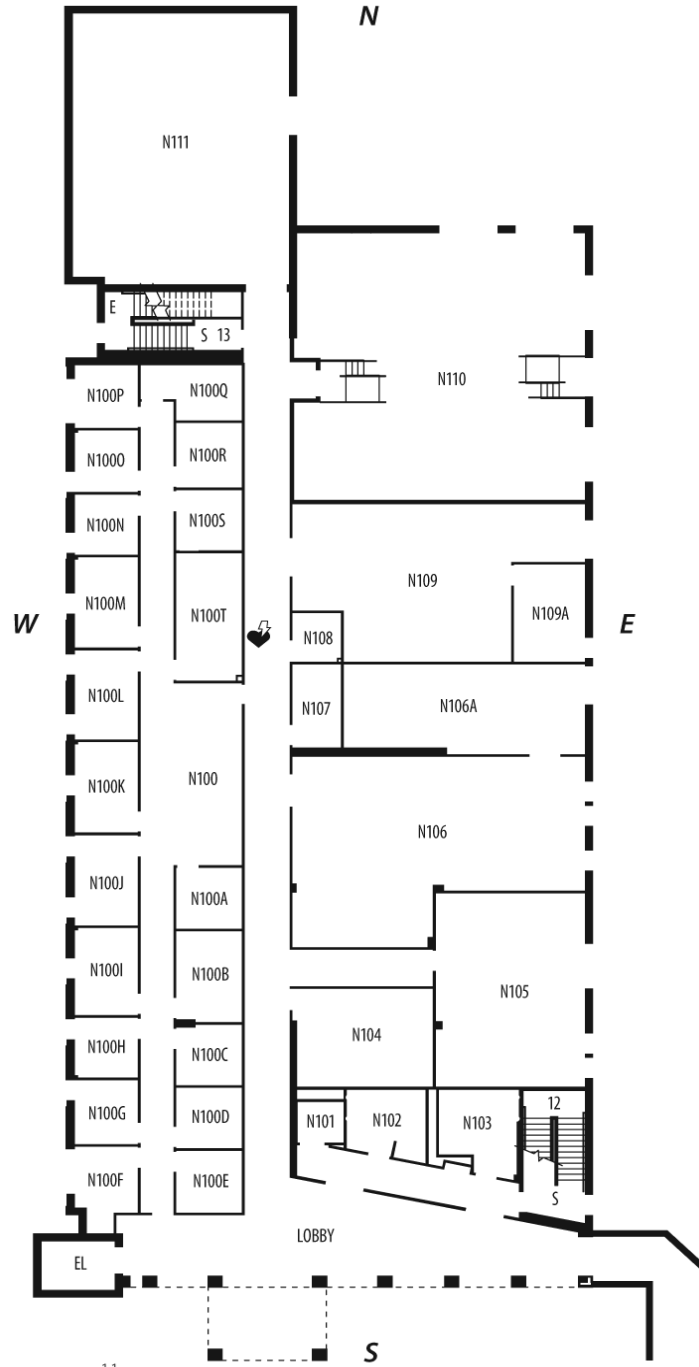
The overall condition of the mechanical system is very good. All of the major components, including circulating pumps, have been replaced or reconditioned during their current 19 year life. The College and Carroll County has an excellent preventive maintenance program.

Electrical Equipment - The main service equipment is served by a utility owned, pad-mounted transformer through a concrete encased duct bank into a utility approved current transformer cabinet for utility metering. Secondary power in the building is provided at 480/277 volts, 3-phase, 4-wire. A distribution switchboard is provided in the main electrical room of the facility to distribute power throughout the building. The electrical equipment is in very good condition.

NURSING & ALLIED HEALTH BULIDING PHOTOGRAPHS

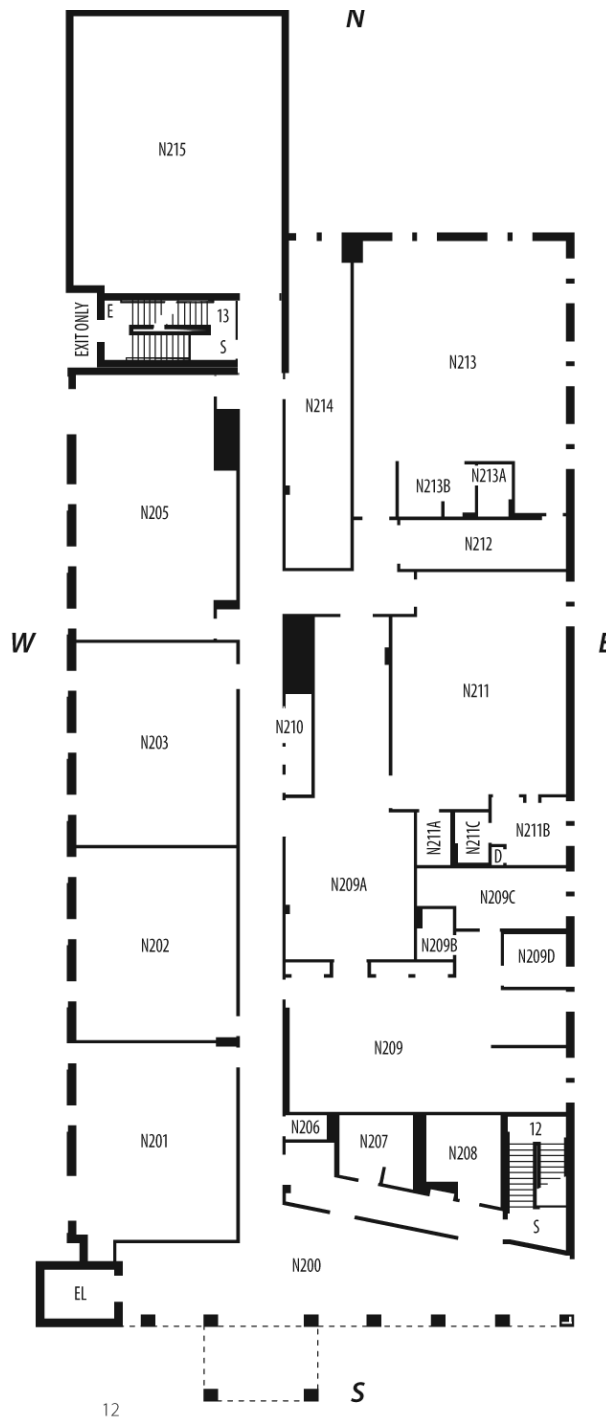


**N Building
 Main Level**



- N Building**
- N100 Faculty Offices
 - N100A Copy Room
 - N100B File Room
 - N100 Faculty Offices
 - C-S
 - N100T Conference Room
 - N101 Elevator Room
 - N102 Men's Room
 - N103 Women's Room
 - N104 Adjunct Offices
 - N105 Classroom
 - N106 EMC Lab
 - N106A EMC Storage
 - N107 Telephone/Data
 - N108 Environmental Services
 - N109 Facilities Storage
 - N109A Electrical
 - N110 Mechanical
 - N111 Facilities Storage

**N Building
Upper Level**



N Building

- N200 Lounge
- N201 Computer Lab
- N202 Classroom
- N203 Skills Lab
- N205 Classroom
- N206 Environmental Services
- N207 Men's Room
- N208 Women's Room
- N209 Allied Health Lab
- N209A Nursing & Allied Health Storage
- N209B Patient Bathroom
- N209C Living Room
- N209D Examination Room
- N210 Telephone/Data
- N211 Nursing Lab
- N211A Nursing Storage
- N211B Patient Room
- N211C Patient Bathroom
- N211D Closet
- N212 PTA Storage
- N213 PTA Lab
- N213A Patient Bathroom
- N213B Patient Kitchen
- N214 Nursing Lab
- N215 Facilities Storage

LIFE FITNESS CENTER

Building Designation:	“P” Building
Total Floors:	1 Floor
Net Assignable Square Feet:	11,457 SF
Gross Building Area:	17,540 SF
Net-to-Gross Efficiency:	65%
Year Constructed:	2002
Renovations & Additions:	None
Program:	Multi-Purpose Gymnasium, Classrooms
General Conditions:	Good
Adequacy of Space:	Good
Sprinkler System:	Yes

General Description:

The “Life Fitness Center” is located adjacent to the existing athletic fields on campus and provides a gymnasium, training rooms & classrooms.

Architectural and Structural Condition:

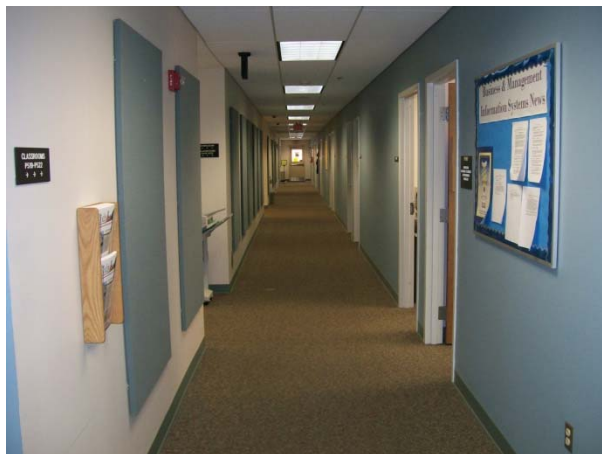
The building has been maintained in very good condition by means of an annual maintenance program funded by Carroll County and jointly implemented by College and County staff.

Mechanical and Electrical Conditions:

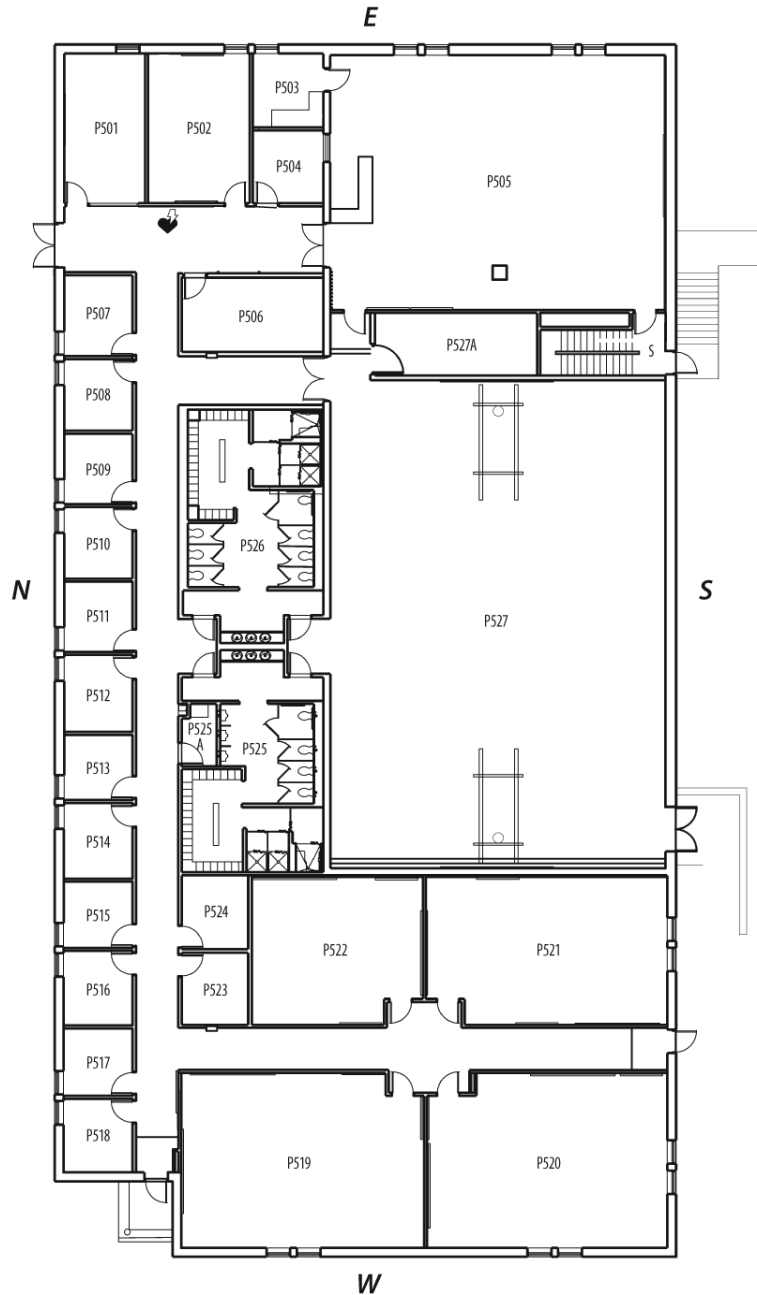
Mechanical Equipment - The central plant in the Lower Level of the “Great Hall” serves the majority of the space on campus. This system is in need of replacement and is reflected in the systemic renovations project outlined in this document. The Carroll County Government has thus far approved this project in its 2017 capital improvement program and it has been requested for State funding.

Electrical Equipment – The building is served by the central electrical room in the “Great Hall”. All local panel boards and the distribution system are in very good condition.

LIFE FITNESS CENTER PHOTOGRAPHS



P Building
Main Level



- P Building**
- P501 Health Science Lab
 - P502 Faculty Resource Room
 - P503 Fitness Technician Office
 - P504 Staff Office
 - P505 Fitness Center
 - P506 Exercise Science Lab
 - P507-518 Faculty Offices
 - P519 Acting Studio
 - P520 Classroom
 - P521 Classroom
 - P522 Classroom
 - P523 Electrical
 - P524 Telephone/Data
 - P525 Men's Locker Room
 - P525A Environmental Services
 - P526 Women's Locker Room
 - P527 Gymnasium
 - P527A Fitness Storage

FINE & PERFORMING ARTS / BUSINESS TRAINING CENTER

Building Designation:	“T” Building
Total Floors:	2 Floors
Net Assignable Square Feet:	21,631 SF.
Gross Building Area:	44,050 SF
Net-to-Gross Efficiency:	49%
Year Constructed:	2002
Renovations & Additions:	None
Program:	Multi-Purpose Auditorium, Labs & Studios
General Conditions:	Good
Adequacy of Space:	Good
Sprinkler System:	Yes
General Description:	

The “Fine & Performing Arts” component provides the College with a 477 seat, two level, multi-purpose auditorium cable of a broad range of musical, theatrical, and academic venues. Associated with the art gallery, art studios, music classrooms, and music practice rooms, the auditorium will strongly enhance the College’s Fine Arts programs it can offer the community. The building also provides office space and training rooms for the Business and Continuing Education Center of campus.

Architectural and Structural Condition:

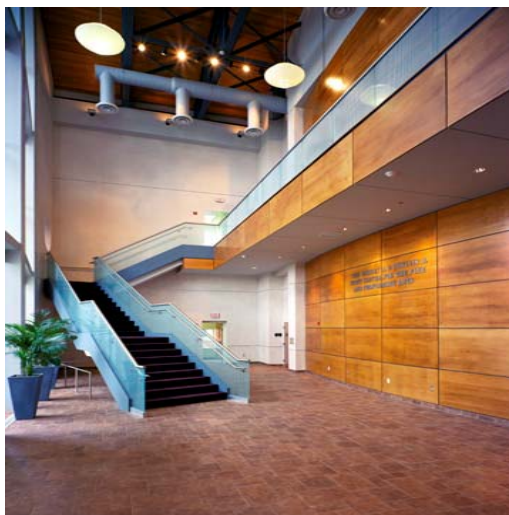
The building has been maintained in very good condition by means of an annual maintenance program funded by Carroll County and jointly implemented by College and County staff.

Mechanical and Electrical Conditions:

Mechanical Equipment - The central plant in the Lower Level of the “Great Hall” serves the majority of the space on campus. This system is in need of replacement and is reflected in the systemic renovations project outlined in this document. The Carroll County Government has thus far approved this project in its 2017 capital improvement program and it has been requested for State funding.

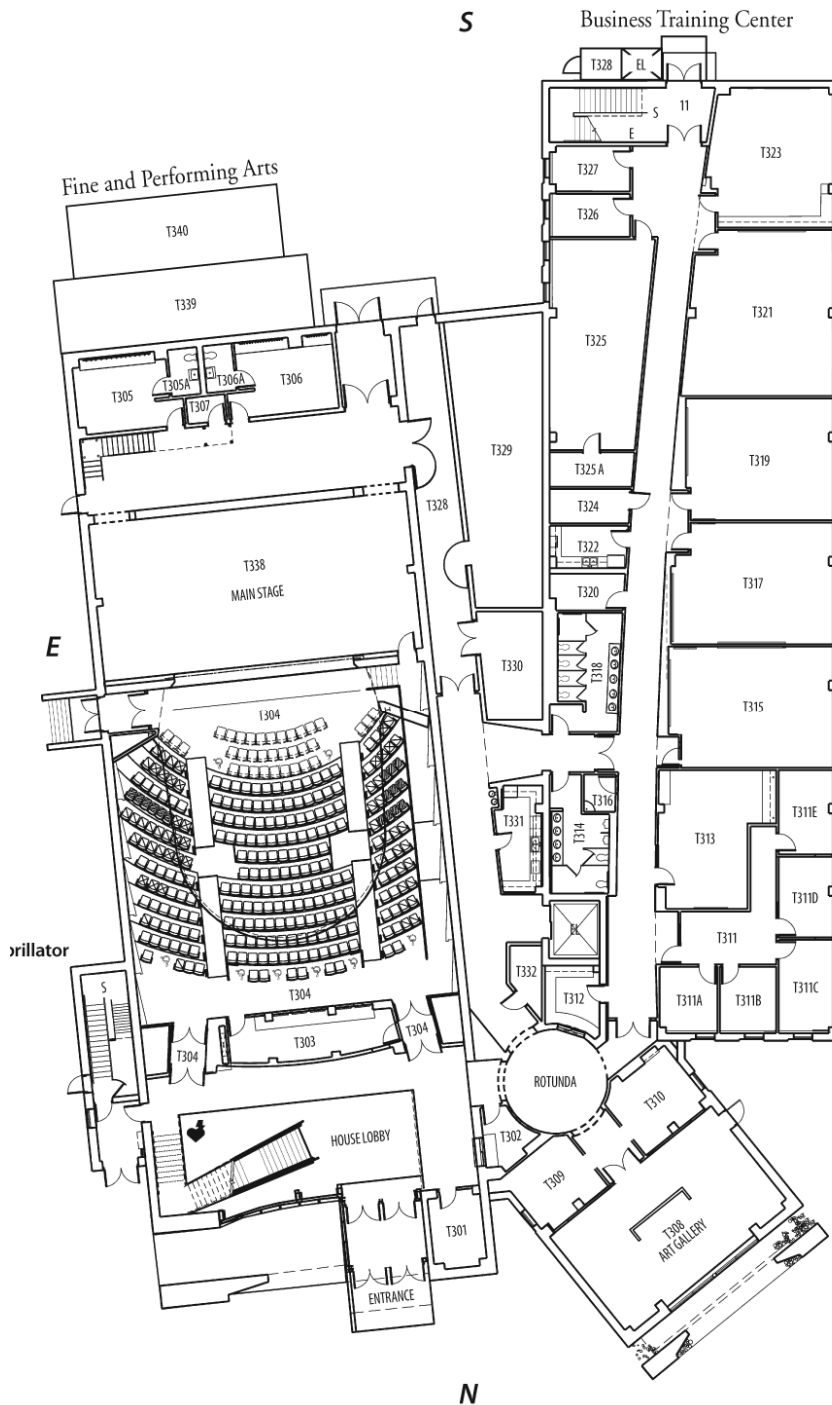
Electrical Equipment – The building has its own transformer and main electrical room. All equipment, panel boards and the distribution system are in very good condition.

FINE & PERFORMING ARTS / BUSINESS TRAINING CENTER



**T Building (Scott Center)
 Main Level**

Carroll Community College



T Building – Fine & Performing Arts Center

- T301 Coat Room
- T302 Ticket Office
- T303 Control Room
- T304 Theater
- T305 Women's Dressing Room
- T305A Women's Restroom
- T306 Men's Dressing Room
- T306A Men's Restroom
- T307 Environmental Services
- T308 Art Gallery
- T309 Gallery Office
- T310 Art Storage

T Building – Business Training Center


- T311 BTC Administration Reception
- T311 A- BTC Administration
- E
- T312 BTC Reception
- T313 Conference Room
- T314 Men's Room
- T315 Training Room
- T316 Environmental Services
- T317 Training Room
- T318 Women's Room
- T319 Computer Lab
- T320 Storage/Duplicating
- T321 Computer Lab
- T322 Kitchenette
- T323 Miller Center for Small Business
- T324 Telephone/Data
- T325 Training Room
- T325A Storage
- T326 Staff Office
- T327 Staff Office
- T328 Mechanical/Electrical
- T329 Mechanical
- T330 Electrical
- T331 Kitchenette
- T332 Elevator Room
- T338 Main stage
- T339 Theater Workshop
- T340 Theater Workshop Storage

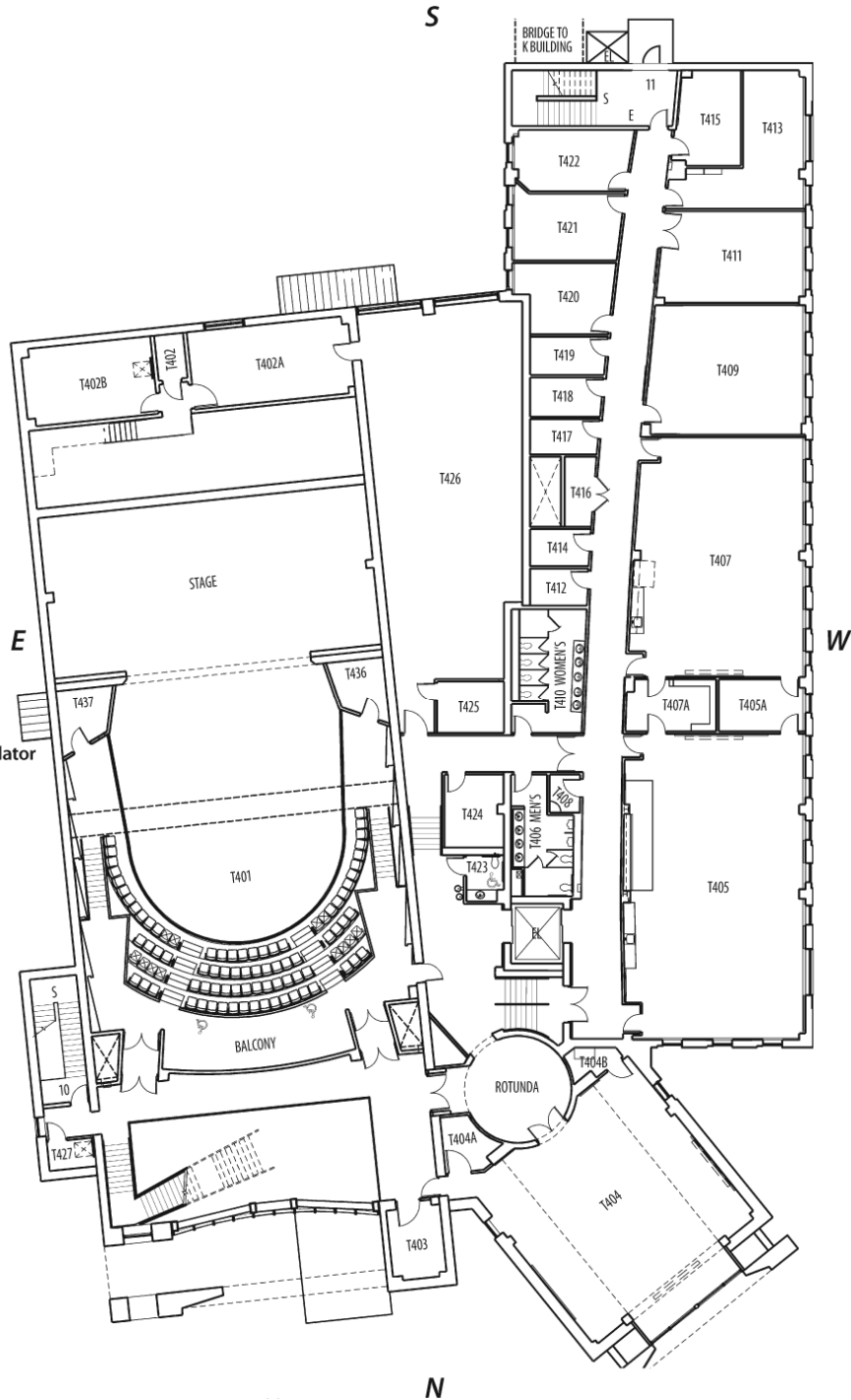
T Building (Scott Center)
Upper Level

Carroll Community College

Fine and Performing Arts Center

- T401 Balcony
- T402 Electrical
- T402 A Mechanical
- T402 B Storage
- T403 Storage
- T404 Rehearsal Hall/Percussion Studio
- T404 A Storage
- T404 B Storage
- T405 Drawing and Painting Studio
- T405 A Art Storage
- T406 Men's Room
- T407 Design Studio
- T407 A Design Storage
- T408 Housekeeping
- T409 Electronic Piano Lab
- T410 Women's Room
- T411 Piano Studio
- T412 Practice Room
- T413 Fine & Performing Arts Office
- T414 Practice Room
- T415 Vocal Studio
- T416 Telephone/Data
- T417-T419 Practice Rooms
- T420 Faculty Office
- T421 Theater Department Office
- T422 Music Department Office
- T423 Handicapped Bathroom
- T424 Adjunct Faculty
- T425 Electrical
- T426 Mechanical
- T427 Storage
- T436 Rigging Room
- T437 Rigging Room

-  Automated External Defibrillator
- EL Elevator
- S Stairs
- E Evac+Chair



AMPHITHEATER

Building Designation:	'Amphitheater'
Total Floors:	1 Floor
Net Assignable Square Feet:	
Gross Building Area:	
Net-to-Gross Efficiency:	
Year Constructed:	
Renovations & Additions:	None
Program:	Performance
General Conditions:	Good
Adequacy of Space:	Good
Sprinkler System:	N/A

General Description:

The amphitheater is designed as an outdoor performance venue. The elevated covered stage is lit for evening performances. The facility also houses a small storage room, utility room and public toilet facilities for the adjacent athletic fields.

Architectural and Structural Condition:

The building has been maintained in very good condition by means of an annual maintenance program funded by Carroll County and jointly implemented by College and County staff.

Mechanical and Electrical Conditions:

The facility has no heating and cooling equipment, except for space heating and exhaust ventilation within the public toilet rooms. Water service is valved and heat-traced for seasonal use. The equipment is in very good condition.

AMPHITHEATER PHOTOGRAPHS



CLASSROOM BUILDING 4

Building Designation: 'K Building'
Total Floors: 3
Net Assignable Square Feet: 47,360 SF
Gross Building Area: 80,000 SF
Net-to-Gross Efficiency: 59%
Year Constructed: Completed 2009
Renovations & Additions: None

Program: Student Services, Lab, Classroom & Office

General Conditions: Excellent

Adequacy of Space: Good

Sprinkler System: Yes

General Description:

The three story building consists of a variety of classroom and student support facilities, including a food service facility, campus bookstore, student life facilities, multimedia meeting rooms, training rooms, staff offices, chemistry/forensic labs, mathematic classrooms, English classrooms and a testing center.

Architectural and Structural Condition:

The building is in new condition, having opened in Fall 2009.

Mechanical and Electrical Conditions:

Mechanical Equipment – Building K has its own stand-alone mechanical system. Gas-fired boilers and chillers provide hot and chilled circulated water respectively. Heating water for the project will be utilized for air handling unit coils, terminal unit coils, baseboard radiation and miscellaneous space heating. Chilled water for the building will be provided to serve the cooling coils in each air handling unit. Cooling and ventilation air is provided by multiple penthouse mounted air handlers. The air handling units are variable air volume type, each provided with a chilled water cooling coil, a hot water heating coil and a humidifier section.

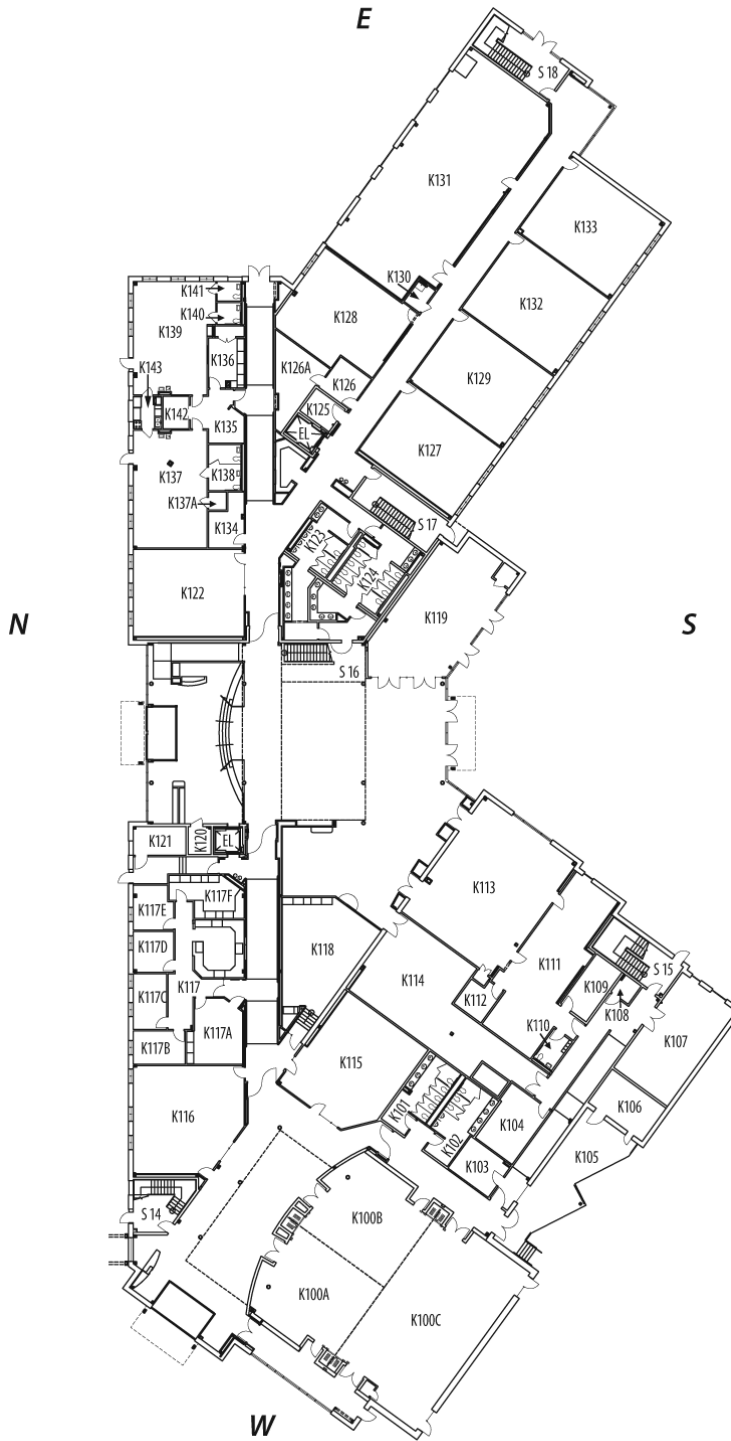
Electrical Equipment - The main service equipment is served by a utility owned, pad-mounted transformer. Secondary power in the building is provided at 480/277 volts, 3-phase, 4-wire. A distribution switchboard is provided in the main electrical room of the facility to distribute power throughout the building.

All mechanical and electrical equipment is in new condition as of Fall 2009.

K BUILDING PHOTOGRAPH



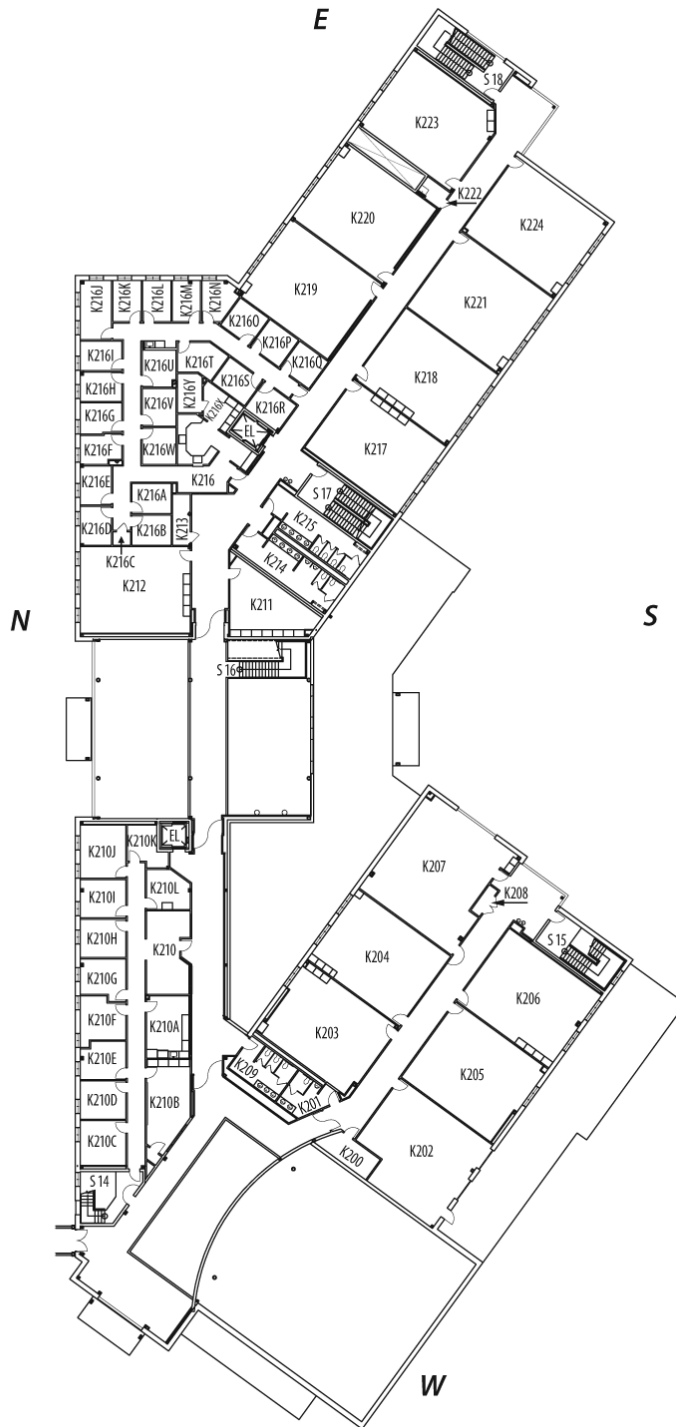
**K Building
 Main Level**



K Building – Main Level

- K100A Meeting Room 1
- K100B Meeting Room 2
- K100C Meeting Room 3
- K101 Women's Room
- K102 Men's Room
- K103 Catering
- K104 Telephone/Data
- K105 Loading Dock
- K106 Electrical
- K107 Mechanical
- K108 Soap Storage
- K109 Dry Storage
- K110 Kitchen Bathroom
- K111 Kitchen
- K112 Kitchen Office
- K113 Servery
- K114 Facilities Storage
- K115 Classroom
- K116 Classroom
- K117A CET Conference Room
- K117 B-F Continuing Education
- K118 Private Dining
- K119 Student Life Lounge
- K120 Elevator Machine Room
- K121 Water/Sprinkler
- K122 Classroom
- K123 Men's Room
- K124 Women's Room
- K125 Elevator Machine Room
- K126 Electrical
- K126A Telephone/Data
- K127 Classroom
- K128 Classroom
- K129 Classroom
- K130 Environmental Services
- K131 Mechanical
- K132 Classroom
- K133 Classroom
- K134 Technical Support
- K135 Child Development Center
- K136 Child Development Office
- K137 Early Childhood 1
- K137A Storage
- K138 Bathroom/Diaper Station
- K139 Early Childhood 2
- K140 Bathroom
- K141 Bathroom
- K142 Child Development
- K143 Observation
- K143 Child Development Kitchen

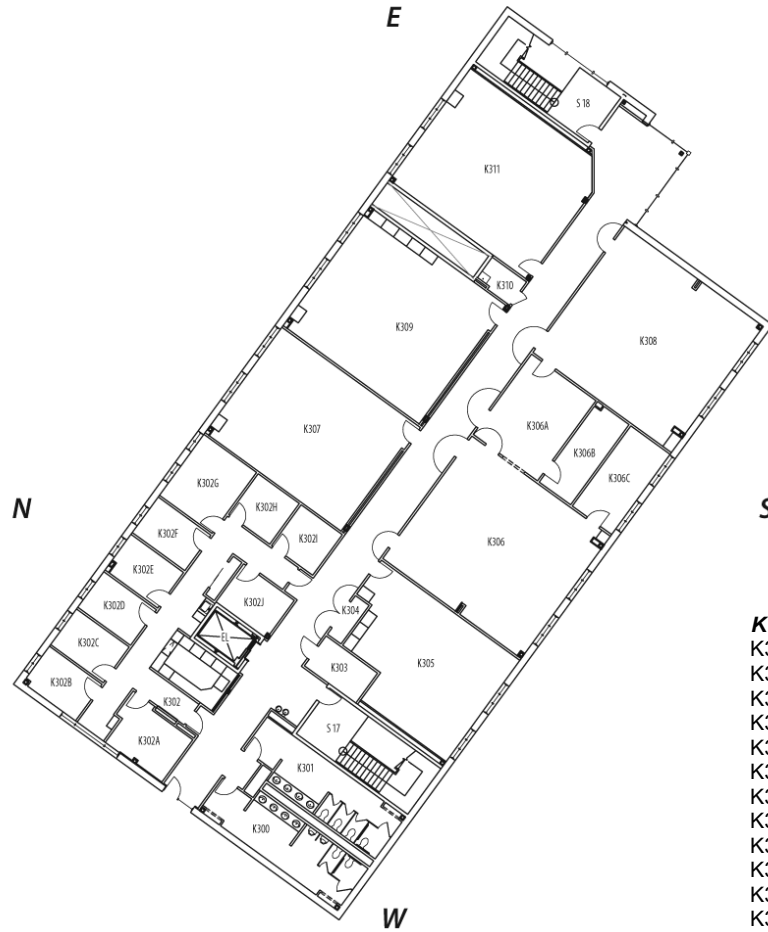
**K Building
 Second Level**



K Building – Second Level

- K200 Telephone/Data
- K201 Men's Room
- K202 Mechanical
- K203 Multi-Media Lab
- K204 Multi-Media Lab
- K205 Classroom
- K206 Graphics Lab
- K207 Multi-Media Lab
- K208 Electrical
- K209 Women's Room
- K210 A-L Planning, Marketing & Assessr
- K211 Conference Room
- K212 English Writing Lab
- K213 Electrical
- K214 Men's Room
- K215 Women's Room
- K216 A-Y Faculty Offices
- K217 Math Development Lab
- K218 Math Development Lab
- K219 English Classroom
- K220 English Classroom
- K221 English Classroom
- K222 Environmental Services
- K223 Language Classroom
- K224 English Classroom

**K Building
 Third Level**



K Building – Third Level

- K300 Men's Room
- K301 Women's Room
- K302 A-J Faculty Offices
- K303 Telephone/Data
- K304 Electrical
- K305 Math Lab
- K306 Organic Chemistry
- K306 A Chemistry/Forensic Prej
- K306 B Chemical Storage
- K306C Instrument Storage
- K307 Math Classroom
- K308 Chemistry/Forensic Lab
- K309 Math Classroom
- K310 Environmental Services
- K311 Classroom

SPACE GUIDELINE CALCULATIONS

On the following pages are the College's space guideline calculations using the currently approved Maryland Higher Education Commission community college guidelines.

HEGIS CODE	HEGIS CATEGORY	Year Constructed	Oldest -> Newest												July 2013			Fall 2013							
			1990	1990	1993	1997	2002	2002	2004	2009	2006	2007	10	11	12	Subtotal On Campus Permanent	Subtotal On Campus Overflow	Total On Campus Space							
			1	2	3	4	5	6	7	8	9	10	11	12	On Campus Permanent	Multi-Service Center	WFS Vols Tech Ctr	Building Name	Building Name	Building Name	#DIV/0!	#DIV/0!	#DIV/0!		
100 (T10-15)	HEGIS ACADEMIC	992	8,694	2,929	2,127	2,173	2,901	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	14,066	
200	LABORATORY	6,642	2,245	3,795	4,912	4,116	9,195	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	
210-15	Class Laboratory	6,642	2,245	3,795	4,912	4,116	9,195	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	
220-25	Open Laboratory																								
250-55	Research Lab																								
300	OFFICE	17,921	2,195	3,837	5,698	3,164	1,787	3,166	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	
310-15	Office/Conf. Room	17,921	2,195	3,837	5,698	3,164	1,787	3,166	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	9,075	
320-25	Testing/Tutoring																								
350-55	Included w/ 310	565																							
400	STUDY	0	0	0	12,874	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
410-15	Study																								
420-30	Stack/Study																								
440-55	Processing/Service																								
500	SPECIAL USE	0	0	0	2,223	0	6,546	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
520-23	Athletic																								
530-35	Media Production																								
580-85	Greenhouse																								
600	GENERAL USE	10,938	351	1,426	2,091	14,891	306	663	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	11,139	
610-15	Assembly	2,920	9,937	830																					
620-25	Exhibition																								
630-35	Food Facility	2,005																							
640-45	Day Care																								
650-55	Lounge	2,298																							
660-65	Merchandising	3,715																							
670-75	Recreation																								
680-85	Meeting Room	351	1,426	1,867	4,124				3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	3,474	
700	SUPPORT	3,480	0	1,165	2,409	0	0	3,729	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	
710-15	Data Processing	1,191																							
720-25	Shop	600																							
730-35	Central Storage	49																							
740-45	Vehicle Storage																								
750-55	Central Services	1,640																							
760-65	Inventory Storage																								
800	HEALTH CARE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
800	RESIDENTIAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
800	INACTIVE AREA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
860	ALTER OR CONV.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
870	UNFINISHED AREA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
880	OTHER ORG. USAGE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total NASP:	39,973	13,152	34,926	57,000	44,090	11,540	19,916	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	44,120	
	Total GSP:	75,000	21,270	57,000	44,090	17,540	31,557	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	
	Efficiency (%):	0.55	0.64	0.62	0.61	0.51	0.56	0.62	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	

ON-CAMPUS PERMANENT SPACE: Space directly related to market-driven conditions (choice of location, not force of location). Includes owned and leased space on the main campus and all off-site locations, provided the space is permanent and dedicated to the college.

ON-CAMPUS OVERFLOW SPACE: Space directly related to overflow conditions (when the college is unable to accommodate on-campus demand). Shared space, such as in K-12 or community facilities, is generally considered overflow.

FACILITIES INVENTORY CHANGES		July 2014		Fall-2015		Fall-2017		Fall-2019		Fall 2023	
HEGIS CODE	HEGIS CATEGORY	[Building Name] Gains	[Building Name] (Losses)	[Project Name] [Building Name] Gains	[Project Name] [Building Name] (Losses)	[Building Name] Gains	[Building Name] (Losses)	[Building Name] Gains	[Building Name] (Losses)	[Building Name] Gains	[Building Name] (Losses)
100 (110-115)	LABORATORY	34,482	0	0	0	0	0	0	0	0	0
200	LABORATORY	42,618	0	42,618	0	42,618	0	42,618	0	42,618	0
210-15	Class Laboratory	39,692	0	39,692	0	39,692	0	39,692	0	39,692	0
220-25	Open Laboratory	2,926	0	2,926	0	2,926	0	2,926	0	2,926	0
250-55	Research Lab.	0	0	0	0	0	0	0	0	0	0
300	OFFICE	46,833	0	46,833	0	46,833	0	46,833	0	46,833	0
310-15	Office/Conf Room	42,375	0	42,375	0	42,375	0	42,375	0	42,375	0
320-25	Testing/Training	4,458	0	4,458	0	4,458	0	4,458	0	4,458	0
350-55	Included w/ 310	12,874	0	12,874	0	12,874	0	12,874	0	12,874	0
400	STUDY	1,411	0	1,411	0	1,411	0	1,411	0	1,411	0
410-15	Study	8,651	0	8,651	0	8,651	0	8,651	0	8,651	0
420-30	Stack/Study	2,812	0	2,812	0	2,812	0	2,812	0	2,812	0
440-55	Processing/Service	8,769	0	8,769	0	8,769	0	8,769	0	8,769	0
500	SPECIAL USE	6,546	0	6,546	0	6,546	0	6,546	0	6,546	0
520-23	Athletic	2,223	0	2,223	0	2,223	0	2,223	0	2,223	0
530-35	Media Production	0	0	0	0	0	0	0	0	0	0
550-85	Greenhouse	41,805	0	41,805	0	41,805	0	41,805	0	41,805	0
600	GENERAL USE	13,832	0	13,832	0	13,832	0	13,832	0	13,832	0
610-15	Assembly	830	0	830	0	830	0	830	0	830	0
620-25	Exhibition	7,020	0	7,020	0	7,020	0	7,020	0	7,020	0
630-35	Food Facility	1,675	0	1,675	0	1,675	0	1,675	0	1,675	0
640-45	Day Care	3,491	0	3,491	0	3,491	0	3,491	0	3,491	0
650-55	Lounge	3,715	0	3,715	0	3,715	0	3,715	0	3,715	0
660-65	Merchandising	0	0	0	0	0	0	0	0	0	0
670-75	Recreation	11,242	0	11,242	0	11,242	0	11,242	0	11,242	0
680-85	Meeting Room	12,943	0	12,943	0	12,943	0	12,943	0	12,943	0
700	SUPPORT	1,191	0	1,191	0	1,191	0	1,191	0	1,191	0
710-15	Data Processing	3,651	0	3,651	0	3,651	0	3,651	0	3,651	0
720-25	Shop	5,178	0	5,178	0	5,178	0	5,178	0	5,178	0
730-35	Central Storage	2,923	0	2,923	0	2,923	0	2,923	0	2,923	0
740-45	Vehicle Storage	0	0	0	0	0	0	0	0	0	0
750-55	Central Service	0	0	0	0	0	0	0	0	0	0
760-65	Hazmat Storage	0	0	0	0	0	0	0	0	0	0
800	HEALTH CARE	0	0	0	0	0	0	0	0	0	0
900	RESIDENTIAL	0	0	0	0	0	0	0	0	0	0
950	INACTIVE AREA	0	0	0	0	0	0	0	0	0	0
960	ALTER OR CONV	0	0	0	0	0	0	0	0	0	0
970	UNFINISHED AREA	0	0	0	0	0	0	0	0	0	0
980	OTHER ORG. USAGE	0	0	0	0	0	0	0	0	0	0
Total NABSF		200,324	0	200,324	0	200,324	0	200,324	0	200,324	0

COMPUTATION OF PARKING NEEDS							
COLLEGE NAME: Carroll Community							
July 1, 2014							
PARKING CATEGORY	FACTOR	Need Current	Inventory 2013	Surplus/ (Deficit)	Need 10 Years	Inventory 2023	Surplus/ (Deficit)
FTDE-T	0.75	1,384	1,294	(90)	1,712	1,797	85
FT-Fac and FT-Staff	0.75	200	222	22	247	222	(25)
SUBTOTAL		1,584	1,516	(68)	1,959	2,019	60
Visitors	0.02	32	4	(28)	39	4	(35)
REGULAR SPACES		1,616	1,520	(96)	1,998	2,023	25
Reserved Accessible*			43	43		54	54
ALL SPACES		1,616	1,563	(53)	1,998	2,077	79
* In addition to the regular parking spaces, the Americans with Disabilities Act requires reserved spaces for disabled individuals. Reserved accessible spaces shall conform to the requirements in the space allocation guidelines:							
	TOTAL SPACES	REQUIRED ADA	TOTAL SPACES	REQUIRED ADA			
	<= 25	1	201 - 300	7			
	26 - 50	2	310 - 400	8			
	51 - 75	3	410 - 500	9			
	76 - 100	4	501 - 1,000	2% of total			
	101 - 150	5	> 1,000	20 plus 1 for each			
	151 - 200	6		100 beyond 1,000			
ONLY PARKING FOR ON CAMPUS SPACE SHOULD BE INCLUDED ON THIS TABLE							
"NEED" DATA FOR RESERVED ACCESSIBLE SPACES MUST ENTERED MANUALLY USING THE ABOVE ADA GUIDELINES							
"NEED" DATA FOR ALL OTHER CATEGORIES ARE ENTERED AUTOMATICALLY FROM THE ENROLLMENT/EMPLOYMENT STATISTICS ON TABLE 3							

PLANNED AND PROPOSED FACILITIES PROJECTS

The current 80 acres at the 1601 Washington Road facility are expected to be adequate for the next ten years and beyond. Expanded growth can only take place on the existing site if current athletic fields are converted to building sites and parking areas. There are plans to seek to purchase additional acreage near the college's current location, if and when, it becomes available.

The existing acreage adequately houses the Administration Building, Classroom Building I, the Multi-Purpose Building, the Learning Resource Center, an Amphitheater, Fine & Performing Arts Center/Business and Training Center and the Life Fitness Center, the Nursing and Allied Health Facility and Classroom Building 4 (the "K" Building).

The college's Master Plan reflects three additional building platforms immediately adjacent to the existing structures. Once those facilities have been constructed all future buildings and parking will need to occur on current athletic fields and surface parking areas.

SYSTEMIC RENOVATION

Central Plant Upgrades – Scope of Work

Existing Conditions: The existing chiller arrangement involves two chillers and an ice storage system. The larger chiller is connected to both the ice storage tanks and a plate frame heat exchanger with a glycol piping loop. The smaller chiller is connected to the heat exchanger and the building chilled water distribution loop with pure water piping. At night, the larger chiller generates low temperatures and this is used to freeze the water in the ice tanks. During the day, the chiller will run at higher temperatures and the ice is used to further cool the glycol mixture such that as it passes through the heat exchanger, the leaving water temperature is suitable for the building distribution loop.

The primary benefit of such a system is to shift the main electrical load of the system from during the day to the night. Many electrical utility rates provide an incentive for off-peak electrical use in the form of either a reduced kwh rate or no off-peak demand charge. This incentive is necessary because this system of producing ice inherently has some inefficiencies associated with it such as greater pumping energy to move the glycol mixture back and forth through the ice tanks, the lower discharge temperatures of the chiller, and the poor thermal conductivity properties of glycol. The current electrical rate structure provides no kwh off-peak incentive and the peak demand charge is very small relative to the overall electrical cost.

The existing boilers are, at best, 80% efficient and oversized for the current load. This makes the boilers operate even more inefficiently during the colder seasons and the summer when there is a reduced load. The secondary heating loop also responds to a temperature reset schedule, however, the non-condensing nature of the boilers means that they cannot take full benefit of the potential efficiency gains from such a control strategy.

Proposed system: It is proposed to replace the existing ice generating system with a standard water loop with the chillers operating in parallel. This will replace both chillers (as

they are both at the end of their service lives) with high efficiency units, remove all the glycol piping from the mechanical room, remove the heat exchanger, and abandon in place the glycol piping leaving the mechanical room and the ice storage tanks. The chillers will then operate according to a standard parallel chiller sequence of operation and be able to benefit from a chilled water reset strategy.

It is also proposed to remove the existing boilers and replace them with modular condensing boilers that can better respond to the load of the combined buildings.

Demolition and Removal Work

Disconnect, remove and properly dispose of one existing 300 ton chiller and one 525 ton chiller.

Disconnect, remove and properly dispose of two 250 hp boilers.

Disconnect, remove and properly dispose of Chilled Water, Condenser Water, Hot Water, Fuel Oil, Natural Gas, and Glycol piping as required for new installation.

Drain, cap, and abandon in place existing glycol piping exiting main mechanical room.

Drain, cap, and abandon in place the existing ice storage tanks.

Disconnect, remove and properly dispose of all other materials or debris related to this project.

Disconnect, remove and properly dispose of gas flue as required.

Remove and properly dispose of all old refrigerant and oils.

Disconnect and secure electrical connections to the chillers and boilers.

New Installation Work

- Mechanical
 1. Provide and install new chillers.
 2. Provide and install new boilers.
 3. The chiller shall be located in the existing location with chilled water piping, condenser water piping and all other piping extended as required for connection.
 4. Reconnect chilled water piping to each new chiller. Match the existing pipe size.
 5. Reconnect condenser water piping to each new chiller. Match the existing pipe size. Reconnect the refrigerant relief piping to each new chiller.
 6. The boilers shall be located in the existing location with gas piping, hot water piping and all other piping extended as required for connection
 7. Reconnect HW Piping to the new boilers. Match the existing pipe size.
 8. Reconnect natural gas piping to the new boiler. Match existing pipe size.
 9. Provide new sealed combustion venting to exterior wall for concentric vent as required. Vent material shall be PVC installed for Category IV venting.
 10. Provide condensate piping from boilers to nearest floor drain with condensate neutralization kit.
 11. Insulate new piping, valves and fittings as required.
 12. Provide and install new refrigerant monitor as required to comply with new refrigerant type.

13. Start-up, checkout and verify all modes (stages) of operation (by factory authorized representative) to include measurement and verification of “part load” and “full load” efficiencies, and all unit control features per manufacturers’ start-up and checkout procedures.
14. Reuse existing piping, pipe fittings, pipe hangers, isolation valves, strainers, check valves, thermal wells, and pressure sensor wells where feasible and serviceable.
15. Connect factory-mounted and wired controls.
16. Disconnect and reconnect to existing controls and control valves. Replace “failed” valves as needed.
17. Provide interface with building automation system as necessary
18. Install each new chiller per manufacturer’s criteria and local codes
19. Contractor to flush all new water pipe and bleed air from the system.
20. Contractor is responsible for ensuring that the correct equipment is ordered, installed, and compatible with existing electrical and gas service, infrastructure, mechanical rough-in and all other requirements that make the newly installed unit a seamless transition after the removal of the existing units.
21. Contractor is solely responsible for all “trades” necessary to complete the installation including but not limited to; touch-up painting, wall repairs, and all other necessary repairs directly related to the new equipment installation.
22. Contractor shall be responsible for all permitting required.
23. Contractor is responsible for a complete and functional hot water heating system and chilled water system.

Controls

****All low voltage (less than 120 Volts) wiring and connections by Controls Contractor****

1. Connect to new building management system.
2. Set up hourly trends of totalized kWh and totalized BTUs delivered. Data to be available for a minimum of 13 months.

Electrical

****All line voltage (120 Volts and greater) wiring and connections by Electrical Contractor****

1. Connect power to new chillers and boilers. Reuse existing electrical devices and wiring. If devices and wiring are found to be of insufficient size, insufficient length, or in poor condition, replacement required.
2. Install kW meter as required for measurement and verification.

Start-Up and Checkout Forms: Provide start-up, checkout and verification of all modes (stages) of operation (by factory authorized representative) including measurement and verification of “part load” and “full load” efficiencies, and all unit control features per manufacturers’ start-up and checkout procedures.

Fire Alarm System Replacement – Scope of Work

We are no longer able to purchase parts for the existing fire alarm system and currently we are using “band aids” to keep the system operational. This project will include removing the existing and installing new fire alarm control panels, annunciators, audio amplifiers and addressable initiating devices and interface modules in all buildings. The new system shall match or exceed the existing system’s functions and sequence of operations.

- Furnish and install new IFC2-3030 addressable fire alarm control panels to replace all MXL control panels.
- Devices/Modules to be removed and replaced include smoke detectors, heat detectors, monitor modules, control modules, relay modules, and pull stations.
- Install new air duct smoke detectors and addressable control relays for AHU shutdown
- Program new fire alarm panels to function in the same manner as the existing fire alarm systems.
- Network new fire alarm control panels to allow two way communications between all new panels and centralized annunciation in the Maintenance Supervisor’s office in lower level of the M Building
- Fire alarm shop drawings, power supply and battery calculations, and catalog submittal documentation shall be provided as well as record drawings and O&M Manuals
- System test and Inspection per NFPA 72

Key Aspects of the Proposed Equipment/ System Design:

- Proposed solution is not a code upgrade. The new system will be programmed to match the existing functions and sequence of operations.
- Existing wiring and device locations are to be utilized throughout.
- Existing speaker, horn, and strobe circuits and devices shall be maintained and replaced only as necessary.
- Proposal provides the latest generation state of the art system to provide the infrastructure, technology, and expansion capacity to support future expansion, renovation, and code upgrade.
- Our approach permits reuse of existing field wiring and audible/visual appliances while allowing the fire alarm control equipment and initiating devices to be upgraded to the latest intelligent addressable standards.
- Proposal provides multichannel audio and networked voice to allow paging between panels.
- Provides digital audio system that eliminates the analog amplifiers and greatly improves sound quality. Digital backup amplifiers are also included.
- New system provides capability of being re-programmed to accomplish additional mass notification functions and/or sequences of operations as required for non-fire emergencies, (signal prioritization based on campus threat/vulnerability assessment).
- One new #18 2-conductor UTP cable will be installed between control panels for

the new fire alarm network circuit. This will enable continuity of operation for both the existing and new systems during the upgrade process, with a single temporary interface between the MXL and new JCI IFC systems maintained until the last MXL is removed.

- Provide, install, and program a JNCA (Network Control Annunciator) to allow all new fire alarm control panels to be controlled and monitored from a central location.
- Provide and install new JPRN-6 event printer to provide a hard copy printout of all system events, status changes, and reports.
- Proposal provides a BACNET Gateway for integration with building automation system for ancillary monitoring of fire alarm.
- Provide Intelligent Fire Integrator (IFI) Fire Alarm UL Listed Graphics work station with full command and control.
- Includes (2) new Custom Graphic Annunciators to replace the existing.
- Includes installation of new surge protection on existing 120VAC fire alarm circuits.
- Includes record drawings developed in AutoCAD format.

Addressable field devices to be replaced:

- Furnish and install approx. (400) new addressable smoke detectors to replace existing. Note: some smoke detectors cannot be accessed (i.e. ceiling mounted detectors in Great Hall). These devices will be abandoned and replaced with long range beam detectors.
- Furnish and install approx. (120) new addressable manual stations to replace existing.
- Furnish and install approx. (75) new air duct smoke detectors including duct housing, smoke sensor, sampling tubes, Remote test stations to replace existing.
- Furnish and install (75) new addressable relay modules for AHU shutdown or damper control.
- Furnish and install approx. (45) new addressable heat detectors in place of existing.
- Furnish and install new addressable supervision modules to monitor existing sprinkler flow switches, tamper switches/ pre-action releasing panel (approx. 105 points).
- Furnish and install approx. (25) new addressable relays for misc. building functions to match existing life safety control functions (i.e. door release, door holder)
- Furnish and install (28) addressable relay modules for elevator recall, shut-trip, and emergency signal. (7) addressable monitor modules for power monitoring.
- Provide new addressable control modules for activation of existing and new NAC panels (approx. 12)
- Furnish and install (5) new LCD-160 LCD annunciators to replace existing.

Summary of Existing FACP Configuration: All existing control panels to be replaced/upgraded with intelligent addressable fire alarm control panels. New system to include all cabinets, CPUs, control equipment, network cards, digital voice command components, digital communicator, inputs/outputs, audio amplifiers, backup amplifiers, auxiliary power, conduit & fittings (at panel locations), and all components necessary for a complete operating system, with spare capacity for future expansion.

Clarification and Exclusions:

- The existing cable and back boxes will be reused.
- The existing notification devices (speaker/strobes, horn/strobes and strobes) shall be reused..
- 120V AC Power at existing fire alarm control panels will be reused for new FACP installation.
- No core drilling is included.

PARKING SHORTAGE

The parking situation at the 1601 Washington Road campus is becoming inadequate. There are 1,566 parking spaces on campus, serving the students, staff, faculty and visitors. Included in this amount is the 258 space surface lot constructed in the southwest quadrant of the parcel in September, 2008. This newest lot displaced an existing softball field, increased the amount of impervious surface and negatively impacted the stormwater management plan. The majority of the parking spaces are open parking, but there are 222 spaces marked for faculty and staff.

The majority of the handicapped parking is provided in a small lot located between buildings N and L. This lot is the closest and most convenient lot on campus. Other handicapped parking is available to the front of the N building and to the front of the K building. The current quantity and design of the HC and van spaces meet building code and ADA requirements.

IDENTIFICATION OF SPECIFIC FACILITIES AND ACADEMIC PROGRAMS

Over the next five years, the following activities have specific needs that need to be met in order to establish viable programs:

- 1) Systemic Renovations
- 2) Parking
- 3) Nursing and Allied Health Programs
- 4) Expansion of core curriculum



CAMPUS ANALYSIS 3

- Introduction
- Geographic Summary
- Zoning Impact
- Site Utilities & Infrastructure
- Access & Vehicular Circulation
- Existing Parking
- Projected Parking Shortage
- Proposed Parking Solution
- Pedestrian Circulation
- Open Space
- Campus Landscape & Image
- Potential Building Sites

CAMPUS ANALYSIS INTRODUCTION

This Master Plan is a design solution that responds to the existing site features, campus improvements currently underway, governmental regulation, projected programmatic needs and economic considerations. All of these issues have been revised by the College's Facilities Master Plan Committee, its executive officers, the college board of directors and its architectural consultant to ensure that the proposed future development is in keeping with the College's original design concepts and long-term needs. The College has continued to experience growth beyond expectations during the past ten years. Carroll Community College's most recent addition is the 80,000 SF Classroom Building 4, a multi-purposed academic facility.

The master plan team members systematically reviewed zoning, land use, utility infrastructure, stormwater management structures, vehicular traffic, parking conditions, site vegetation and topographic conditions while developing the following updated master plan illustrations and narrative.

GEOGRAPHIC SUMMARY

Carroll County is located fifty miles north of Washington, DC and thirty miles northeast of Baltimore, MD. The region surrounding these two cities continues to experience above average growth in new households to the area and commercial development. Carroll County, on the other hand, continues to experience slower, yet steady growth, resulting from planned county government policy. Despite evident commercial growth along the county's major transportation arteries, Carroll County remains an agricultural community recognized for its scenic landscape, historic homes and beautiful farms. It is a region that has combined rural solitude with concentrated residential communities.

Westminster, the largest metropolitan area, is the governmental and economic center of the County. It is also the educational center, offering the academic options of several public primary and secondary schools, various private schools, McDaniel College and Carroll Community College. As can be seen on the following regional map, several state highways and major roadways converge on Westminster, the geographical center of the county.

The Community College is located close to the southeastern city limits of Westminster on an eighty (80.157) acre parcel. Two major roadways, State Route 97 and Route 32 (Washington Road), border the College's east and west property lines respectively.

The area surrounding the College consists of a variety of land uses. To the north are Robert Morton Elementary School, Carroll County Vocational Technical Center and Westminster High School. South of the College is the Carroll Counter Family YMCA. Land areas east and west of the property are primarily agricultural, sparsely developed by private residences. All property surrounding the college parcel is either developed land or productive farmland.

The current development of the College enhances the surrounding area. Much of the campus is open, providing several athletic fields to the south, natural tree stand immediately north and south of the campus buildings and several acres of surface parking lots. The campus' large rolling land forms preserve the rural characteristics that Carroll County is known for.

ZONING IMPACT

Two types of development are permitted on the campus, i.e. Conservation and Transitional. Both development types permit the expansion of the College facilities, although each future building project must be approved by the Zoning and Planning Commission of Carroll County.

Route 97 is a limited access state highway. Route 32 is a state highway that requires a minimum distance of 750 feet between each vehicular entrance. Two-way access roads connecting parking lots and public roads must be at least 20 feet wide. One-way access roads shall be a minimum width of 15 feet. Per zoning regulations, the minimum parking space size is 9 by 18 feet with a credit of one foot overhang if the adjoining space at the front of the space is a landscaped area.

SITE UTILITIES AND INFRASTRUCTURE

Buried utilities are organized about the service loop road that surrounds the campus buildings, with the exception of Classroom Building 4 and the Amphitheater. Water, storm drains and sanitary pipes follow the loop service road, providing connections at several points at the buildings' perimeters. The public utilities mains for water, electricity, gas and sanitary run parallel with Route 32; Stormwater Management is achieved on-site by an underground 84 inch pipe stormwater management infiltration system.

Storm Drainage - Expansion of the stormwater management retention facility was completed during the construction of Classroom Building 4 to accommodate the increased runoff. Future capacity of the modified basin will be limited to minor development. Future classroom and garage building pads will require the construction of both additional stormwater collection systems and further expansion of the Stormwater Management Facility on campus.

Varying sizes of storm drain lines collect property run-off and roof drain water. A loop closed storm drainage system carries the run-off from their recently constructed underground stone and pipe infiltration facility. This facility manages the existing site impervious area as well as the recently constructed building, road, sidewalks and parking lot. Recharge volume is located within the voids in the stone below the 84 inch pipes and the facility has been sized to manage both water quality and water quantity for the 10-year storm. Currently, there is excess capacity in the structure to permit an addition 8,500 +/- SF of new impervious area to be constructed.

Runoff from the College has always discharged into the Liberty Reservoir Watershed. In recent years, the watershed has been categorized in the Watershed Protection zone, and as such new standards for water quality and quantity have emerged. The three major components to be considered in any SWM expansion program are:

1. The impacts from impervious surfaces shall not reduce the site recharge by more than 10% of the predevelopment recharge of the site.
2. A minimum of 90% of the annual, total runoff from all impervious surfaces shall be recharged to the ground within the site property.
3. Stormwater management shall be achieved through the use of a series of connected practices. Water quality management and recharge shall be distributed throughout the site.

The recent redesign of the stormwater management facility positioned the facility to allow for limited expansion in the future for projects which may be constructed in the northern portion of the property.

However, any new construction in the southern portion of the property will require design of several completely new stormwater management facilities that will comply with the guideline that have been previously noted. Serious consideration to “Green Roof” design will greatly assist in achieving the goals set forth.

Water Service - The site is located in the city of Westminster Water Service Area, in Planned Project Area 515. An existing 12-inch water main was extended parallel to Route 32, providing service to the northwest corner of the site. A 12-inch line leads to the loop service road and connects to an 8-inch line that encircles the existing facilities. The current design provides 27 gallons per day per capita at a minimum pressure of 25 psi. As a result of current water appropriation restrictions established by MDE, campus water usage cannot be increased until the City of Westminster has sufficient storage and treatment capacity for their water system.

Sanitary Sewer - The sanitary system includes a pumping station just north of the existing buildings and outside the loop road. The pumping station was evaluated during the design of the Classroom Building No. 4 and found to be adequate for current capacities with some excess capacity available. It is recommended that the pumping station be re-evaluated within the next five (5) years or in conjunction with a major expansion project to determine if the ultimate capacity has or will be reached. The pumping station and 6-inch forced main is sized for all future expansion on the site. The design parameters are a minimum velocity of 2 fps and a minimum slope of 1.0%.

Electrical Service - The source of power for the site is Baltimore Gas and Electric. An overhead line with 13kv is available within the right of way along Route 32.

Gas Service - A 5 inch buried gas line runs parallel with the incoming electrical service at the northwest corner of the campus. The service runs behind and to the east of

the round Learning Resources Center, entering the “Great Hall’s” Lower Level Mechanical Room. The gas service is sized for all future needs on campus.

ACCESS AND VEHICULAR CIRCULATION

Essentially 98% of all students, staff and faculty commute by private car to the campus. The location of the College is convenient and central for most residents of the County. Major county and state roads converge on Westminster, including Routes 97 and 32, which adjoin immediately south of the College. Route 97 is a “limited access highway”, with no direct entrance onto the campus property. Consequently, there are three vehicular entrances along the west side of the campus from Route 32. The College has requested vehicular access from 97 on at least two instances. To date, each request has been denied. Vehicular access from the east is not feasible for the foreseeable future.

As can be determined from the attached Existing Campus Plan, the site roadway system and parking configuration is relatively simple in configuration. The campus is designed to minimize traffic flow on campus due to the large surface lots being located immediately adjacent to Route 32. Student and faculty are encouraged to park quickly and conveniently, avoiding the necessity to drive across the campus looking for the “closest space” to the main entrance. A service loop road encircles the existing buildings with the exception of Classroom Building 4. The service loop serves receiving areas in Building A (the “Great Hall”), the Fine Arts Center (Building T) and the Nursing and Allied Health Center (Building N). Classroom Building 4 is serviced from the southern parking lot with a service drive also connecting to the Amphitheater. The service road experiences minimal traffic from faculty or students, but is primarily used for deliveries and drivers with handicapped designation. The service road traffic will increase slightly in the future, as it will serve as a means for passenger drop-off at the main entrance of Classroom Building 4.

EXISTING PARKING

There are 1,566 parking spaces on campus, serving the students, staff, faculty and visitors. Included in this amount is the 256 space surface lot constructed in the southwest quadrant of the parcel in September, 2008. This newest lot displaced an existing softball field, increased the amount of impervious surface and negatively impacted the stormwater management plan. The majority of the parking spaces are open parking, but there are approximately 250 spaces marked for faculty and staff.

The majority of the handicapped parking is provided in a small lot located between buildings N and L. This lot is the closest and most convenient lot on campus. The current quantity and design of the HC and van spaces meet building code and ADA requirements.

PROJECTED PARKING SHORTAGE

The available 1,563 spaces do not adequately meet the needs of the current student population and class schedule. With the completion of Classroom Building 4, during Fall and Spring semesters when there are concurrent activities in the Theater and Classroom Building

4 conferencing center that there is a parking shortage on campus. Faculty, staff, students and visitors are often forced to park in grassy areas around the perimeter of the facilities. The College and Master Plan A/E team estimates an additional 420 spaces are needed to meet the demand of additional student, staff and faculty growth generated by the current programs and facilities offered. The College has requested State funding for a 700 space parking structure. If denied, the alternative solution is to eliminate another athletic field for the construction of a surface lot.

The College administration, Board of Directors and Master Plan A/E team agree that multi-level structured parking is the best solution for the immediate parking needs as well as the long-term parking solution on campus. This conclusion is based on the following reasoning:

- There is no evidence that adjacent properties will become available for purchase and subsequent expansion in the foreseeable future. Immediate parking demands must be accommodated on the existing 80 acre campus.
- The only feasible future surface parking sites are the existing athletic fields located at the southern end of the campus. Four play fields (one baseball, one softball and two multi-purpose fields) remain. The loss of more than one of these fields will drastically impact the athletic programs currently underway by the College and County.
- The destruction of current open green space for the continued expansion of surface parking is counter-productive and arguably environmentally irresponsible. A responsible land use solution is to minimize the loss of open green space, therefore reducing the *heat island effect* and impervious surface water runoff. The following conditions are directly impacted by increased heat island conditions:
 - *Increased energy consumption:* Higher temperatures in summer increase energy demand for cooling and add pressure to the electricity grid during peak periods of demand. One study estimates that the heat island effect is responsible for 5–10% of peak electricity demand for cooling buildings in cities.
 - *Elevated emissions of air pollutants and greenhouse gases:* Increasing energy demand generally results in greater emissions of air pollutants and greenhouse gas emissions from power plants. Higher air temperatures also promote the formation of ground-level ozone.
 - *Compromised human health and comfort:* Warmer days and nights, along with higher air pollution levels, can contribute to general discomfort, respiratory difficulties, heat cramps and exhaustion, non-fatal heat stroke, and heat-related mortality.
 - *Impaired water quality:* Hot pavement and rooftop surfaces transfer their excess heat to storm water, which then drains into storm sewers and raises water

temperatures as it is released into streams, rivers, ponds, and lakes. Rapid temperature changes can be stressful to aquatic ecosystems.

The above heat island impacts is referenced from “Heat Island Effect”, by the U.S. Environmental Protection Agency, <http://www.epa.gov/heatisland/about/index.htm>

- It is feasible to create natural or synthetic turf athletic field atop a parking structure. This is a common solution seen on public college and private school campuses. A turf surface will eliminate any heat island effect and provide a valuable asset toward the College’s athletic program.
- It is inevitable that structured parking will be required as the College grows unless a substantial amount of additional land is acquired. Refer to the two “Long-Term Development Plans” for the impact of future growth on the campus. A proactive approach to resolving the parking shortage by building structured parking will minimize the long-term expense of the improvements and maintain existing open space on campus for play fields and future growth opportunities.

PROPOSED PARKING SOLUTION

The 700 space parking structure will consist of a minimum of three levels with an approximate total gross area of 245,000 SF. The structure shall be constructed of precast and/or cast-in-place concrete with brick-faced spandrel panels. The design will include a minimum of 2 exit stairs and a hydraulic passenger elevator.

The college has identified two feasible sites for the structure. The preferred site option coincides with the college’s campus master plan currently under development. Its location is directly north of the campus buildings, set within a depressed bowl utilized as a rugby field. Utilizing this site sets the ground floor slab of the garage approximately 20 feet below the surrounding land, minimizing the visual impact of the parking structure. Though this preferred site eliminates a play field, the area is large enough for an additional parking structure.

The second proposed site is located in the southwest corner of the campus. This site also displaces an athletic field. The site is less desirable because of its direct adjacency to the campus entrances off of Washington Road. The site’s footprint is limited to approximately 45,000 SF, requiring an parking structure of the equivalent 700 spaces to be six levels high. The full visual impact of the structure’s size and height would be emphasized on this proposed site.

PEDESTRIAN CIRCULATION

The pedestrians are well-served by a network of sidewalks that radiate from the central entrance courtyard. College patrons move through the two major parking lots to perimeter walkways that ring the lots. The sidewalks are handicapped accessible and provide ample circulation options. There is no evidence of unpaved paths created by walkers taking the shortest route to their destination.

All buildings on campus are connected by enclosed and conditioned pedestrian passageways. This is a significant benefit during the harsh winter months. Classroom Building 4 is served by an enclosed pedestrian bridge spanning over the south service road.

OPEN SPACE

The existing set of buildings is a compact configuration organized about a three-sided courtyard that serves as the entrance plaza of the campus buildings. The Great hall, Fine Arts Center and Nursing Building frame the three sides of the courtyard. Other buildings interconnect with each other forming an attractive composition of building forms and intimate open spaces.

A traditional quad is formed to the north of the Great Hall, providing outdoor seating and informal assembly space. A sloping lawn serves as the seating area for the covered amphitheater. The remainder of the campus is surface parking, athletic fields, the stormwater basin and natural forestation.

The athletic fields comprise a significant portion of the campus' open space. There are four fields, consisting of a baseball field, a softball field, a soccer/rugby field and a multipurpose field. The soccer/rugby field is set within a depressed basin in the form of an elongated oval.

CAMPUS LANDSCAPE AND IMAGE

Prior to the construction of the college, the 80 acre parcel was utilized for farming. Consequently, there are no mature trees on campus. There is approximately an acre of natural forestation at the top of a modest hill directly south of Classroom Building 4. Another woodland area follows a natural stream bed that borders the north side of the campus. Due to the lack of mature vegetation, views from the perimeter road network into the campus are generally unrestricted. This condition is slowly changing along the west edge, Washington Road. A variety of deciduous and evergreen trees were planted during the early stages of campus construction along the 70 feet wide landscape buffer. As one drives southward on Washington Road, Route 32, you often lose sight of the campus buildings due to the vegetation and mounded land forms.

Deciduous trees line the entrance drive that leads to the entry court. Overall, the landscape plantings have a suburban character, utilizing species that are hardy and require minimal maintenance. Trees in areas adjacent to the classroom buildings and within the south quad have not matured to the point of providing significant shade. As the vegetation matures, the tree canopies will create a stronger visual impact and improve the overall appearance of the campus.

Site furniture consists of benches and waste receptacles within the entrance court and south quad. There seems to be ample seating. Pedestrian lighting consists of light bollards

and contemporary light standards within the entry court. Lighting within the parking lots and along the walkways are adequate and provide the correct level of security.

The overall image of Carroll Community College is quite positive set in a pastoral landscape. The building forms are quite attractive and complimentary to its rural surroundings. The buildings are homogenous, yet striking in architectural vocabulary, utilizing strong blue roof forms, a blend of red brick and expansive panels of glass. The overall composition of the campus buildings and rural landscape provides a striking collegiate environment.

POTENTIAL BUILDING SITES

The illustration of potential building sites identifies feasible building pads remaining on the existing campus property. Sites A through C identify building pads directly adjacent to the other campus buildings. There is no order of priority for these three sites.

Site A represents Classroom building site that would serve as an expansion for the existing Classroom Building 4. The footprint of the site represents approximately 20,000 square feet of buildable area.

Site B represents a future expansion of the existing Nursing and Allied Health Building. The sites development will require a reconfiguration of the service road that runs across the west face of the campus buildings. The pad represents a building footprint of approximately 15,000 square feet.

Site C is a recent addition to the plan, representing a feasible building site for a 5,000 square feet general storage building. The site is adjacent to the primary campus receiving area. The development of the pad will require modifications to one or more buried utilities that run along the north side of the campus.

Sites D, E and F represent potential parking structures depicted on the short and long term illustrative master plans. A 45,000 square foot footprint can be initially developed on each of the three potential parking sites. Site D has the potential for a parking expansion, with the capability of doubling its parking capacity. This idea is represented on the Short Term Illustrative Master Plan by the notations "Garage 1" and "Garage 2".

Site D has been designated as the first parking structure site to be developed in the short term. Its location provides the best and most central access to the existing and future classroom buildings. Site D is currently a depressed multi-purpose athletic field, approximately 20 feet below the surrounding area. Utilizing this site for campus's central parking structure will minimize the visual and physical impact of the four or five level facility on campus and within the its surrounding rural context.

Sites E and F represent long term parking solutions as the college grows during the next ten to twenty years. Each of these sites is relatively level with the adjacent Washington

Road. The parking structures will require visual screening by landscaping to minimize their impact to the surrounding properties.

Potential building sites G, H, I represent college classroom and support facilities developed based upon the future academic needs of the college. The long term development of sites H and I are delineated in Long Term Illustrated Master Plan – Option 1. The development of site G is represented in Long Term Illustrated Master Plan – Option 2. The advantages and disadvantages of each are detailed within the written descriptions of the illustrative master plans.



CAMPUS MASTER PLAN 4

- Short Term Development
- Long Term Development
- Master Plan Summary
- Implementation Strategy

CAMPUS MASTER PLAN

The Campus Master Plan illustrates the overall future development of the campus with realistic building footprints. A short term plan and two long term plan options have been developed and adopted by the college.

Short Term Development - The short term solution identifies the following five priority projects:

- **Systemic Renovations:** Updating infrastructure is the College's highest priority. This project includes systemic improvements and renovations to facilities including heating, ventilation, and air conditioning systems. Included are Honeywell Control systems upgrades, fire alarm system upgrades, boiler replacements and chiller replacements.
- **Garage 1:** Seven hundred additional parking spaces are needed to meet the 5-year projected enrollment. Garage 1 will be approximately 245,000 SF composed of 5 levels. Located on a current depressed athletic field, the structure's mass and height will be minimized. The proposed garage will increase the parking space count from 1,566 to 2,266. An access drive will run along the south side of the garage, extending from the existing south parking lot. There is a potential for the new drive to continue east to a new vehicular access point off of Route 97. Note that in the past, the state has refused access from Rt. 97.
- **Garage 2:** The second parking structure can provide an additional 700 spaces. This second parking facility will directly connect to garage 1 for a highly efficient parking structure. Garage 2 has the potential to be larger in footprint and taller with more parking levels than Garage 1. As the on-campus parking needs evolve, the requirements of this parking structure can be adjusted.
- **General Storage Building:** There is a severe shortage of general storage space on campus. Back-of-house space on the lower level of the Great Hall has been utilized as supplemental storage for a number of years, creating fire and exiting safety problems with local and state building inspectors. A long term solution is to construct a single or two-story storage facility near the primary loading and receiving dock on campus. The footprint is represented as 5,000 SF on the illustrative master plan. A final program has not been developed. The building will be clad in face brick and cast stone trim to complement the architecture of the campus.
- **Classroom Site 1:** Planned as an expansion to the existing Nursing and Allied Health Building, the proposed project has the capability of doubling the program's size. The building is proposed as two levels, totaling approximately 30,000 SF.
- **Classroom Site 2:** A second classroom site is shown on the east side of the campus, adjacent to Classroom Building 4. The site represents the last potential building location in direct proximity of the current campus. The illustrated plan represents a 2-story, 50,000

SF classroom facility with an indoor connection to Classroom Building 4. An academic program for the building has not been developed.

Long Term Development – Two options have been considered as long term solutions for the growth of classroom, administrative and student service facilities on the current 80 acre campus. The development represents approximately doubling the academic capacity of the college over the next 20 to 25 years. The two solutions offer different planning characteristics as the college grows and the campus becomes denser.

- Long Term Illustrative Master Plan - Option 1: Option 1 depicts the development of a second academic core of buildings on the south end of campus, directly east of the proposed parking structures, Garages 1 and 2. The plan illustrates six buildings organized around an open quadrangle. The six building quad represents approximately 300,000 SF of academic development. This building area when added to Classroom Site 1 and Classroom Site 2 is equivalent to 380,000 SF, more than doubling the current built space on campus.

Parking capacity will need to grow along with the academic and support space. Parking requirements have been projected at 2,013 spaces for the fall of 2014. Doubling the size of the campus will require the increase of parking to approximately 3,500 spaces on or near the existing campus. Garage locations 3 and 4 represent a combined total of 250 spaces per level. If each garage was built with 3 levels, the total parking capacity of Garages 3 and 4 is 750 spaces.

Parking Capacity represented by Long Term – Option 1:

• Surface Parking	1,366 (200 sp. are lost due to development)
• Garage 1	700
• Garage 2	700
• Garage 3	425
• Garage 4	<u>325</u>
Total Spaces	3,516

The Option 1 campus configuration essentially creates a second, southern campus on the college property. The configuration lends itself to developing specific programs within the southern quadrangle that relate to each other, such as a science and mathematics focus. Specific programs have not been identified for the long term south quad buildings.

- Long Term Illustrative Master Plan - Option 2: The second long term option emphasizes the planning of a more compact, cohesive campus. The proposed long term academic buildings relate to the existing campus, forming a similar scale of buildings facing the

surface parking lot and primary Washington Road vehicular entrance. The master plan represents the same amount of built academic space of 380,000 SF as Option 1. Structured parking will also be developed in a similar fashion as Option 1, though more structured parking is required in the Option 2 solution due to the loss of additional existing surface parking. Garages 1 and 2 remain the same as those in Option 1. The size of Garages 3 and 4 will be increased to 4 levels.

A primary advantage with Option 2 is the extent of the athletic fields that remain on campus. Option 1 completely eliminates the play fields, requiring the leasing of fields off campus or the construction of new fields on newly acquired land.

A second advantage with Option 2 is the composition of the proposed academic buildings relative to the parking structures. The academic buildings are integrated with the garages, helping to mask the utilitarian character of the parking structures with the more contextual quality of the education facilities.

Parking Capacity represented by Long Term – Option 2:

MASTER PLAN SUMMARY

The Facilities Master Plan represents the preferred direction for future development and expansion of Carroll Community College by the Facilities Master Plan Committee and its architect. The organization of the various planning options, short term and long term, takes into account issues such as the space needs program, utility systems in place, available sites within the campus and the architectural planning approach in response to the context of the built environment on campus. Both pedestrian and vehicular traffic have been evaluated to ensure that the circulation of the future campus is as successful as today's College. The authors of this Master Plan believe that it honors the original intent of the College's first Master Plan, while looking toward the future for ways to best serve the educational needs of Carroll County and preserving and protecting environmentally sensitive and rural lands and resources from the impacts of development as deemed appropriate by PlanMaryland.

IMPLEMENTATION STRATEGY

Short and Long Term Capital Improvement Program

	<u>Five-Year Capital Program</u>	<u>Beyond Five-Year Capital Program</u>	<u>Beyond Ten-Year Capital Program</u>
1) Systemic Renovations	X		
2) Parking Garage 1	X		
3) General Storage Building		X	
4) Nursing & Allied Health Expansion (Classroom Site 1)		X	
5) Classroom Site 2		X	
6) Parking Garage 2		X	
7) Future Classroom Buildings (New Quad)			X
8) Parking Garages 3 & 4			X



ILLUSTRATIONS 5

- Aerial View – Existing Campus
- Potential Building Sites
- Short Term Illustrative Master Plan
- Long Term Illustrative Master Plan – Option 1
- Long Term Illustrative Master Plan – Option 2

AERIAL VIEW – EXISTING CAMPUS



POTENTIAL BUILDING SITES



POTENTIAL BUILDING SITES

CARROLL
COMMUNITY COLLEGE

FACILITIES MASTER PLAN

Gaudreau, Inc.

SHORT TERM ILLUSTRATIVE MASTER PLAN



SHORT TERM ILLUSTRATIVE
MASTER PLAN



FACILITIES MASTER PLAN



LONG TERM ILLUSTRATIVE MASTER PLAN – OPTION 1



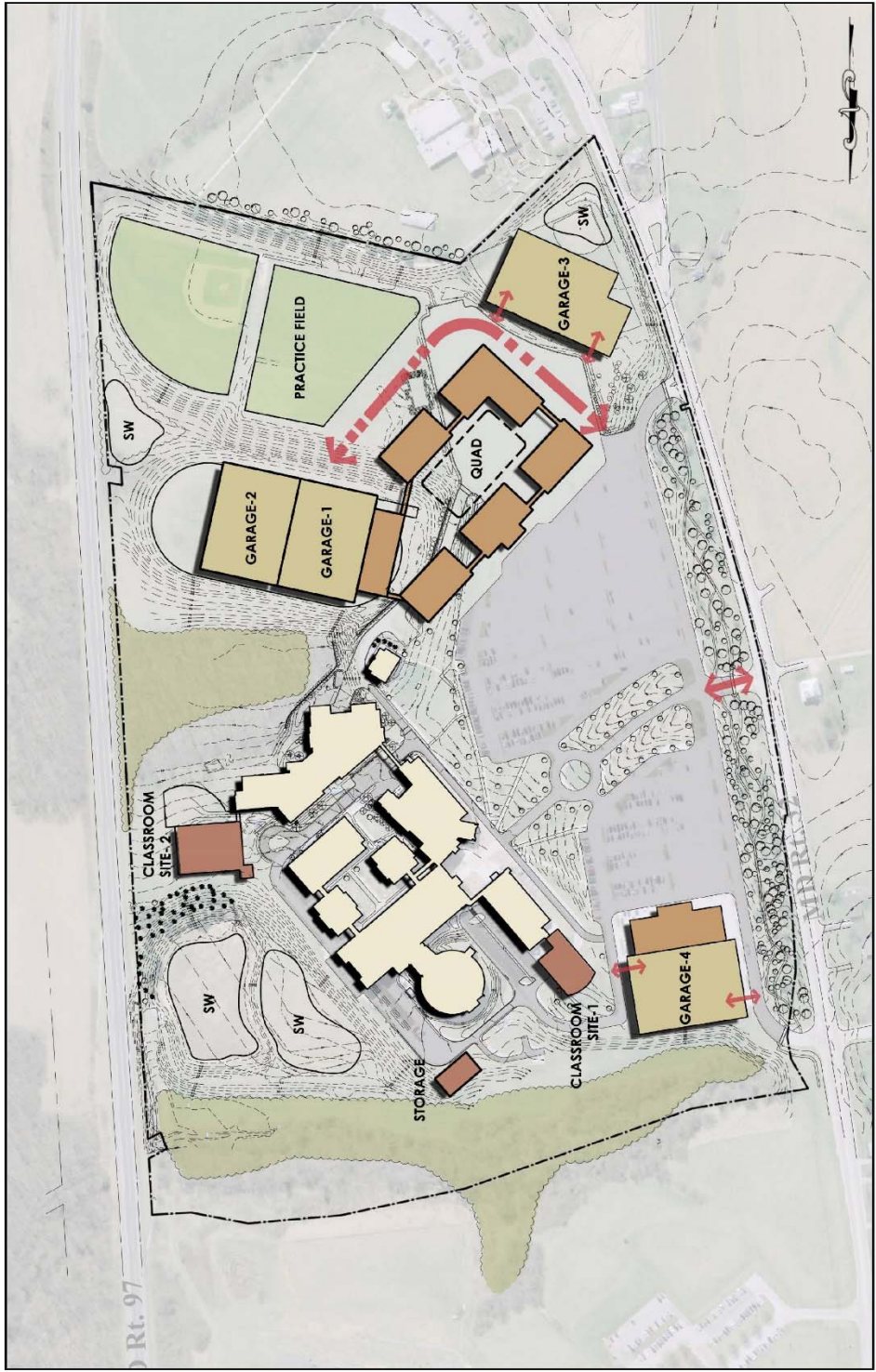
LONG TERM ILLUSTRATIVE
MASTER PLAN, OPTION-1



FACILITIES MASTER PLAN



LONG TERM ILLUSTRATIVE MASTER PLAN – OPTION 2



LONG TERM ILLUSTRATIVE
MASTER PLAN, OPTION-2



FACILITIES MASTER PLAN

