



Institutional Effectiveness Plan

2017 -18

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Institutional Effectiveness Plan

West Virginia Northern Community College

Introduction

Institutional effectiveness is a cycle of planning, implementation, evaluation, and improvement. It is an on-going process designed to foster continuous improvement, and create a culture of evidence to support data driven decision-making in fulfilling the College mission and achieving its goals.

The Office of Institutional Effectiveness supports the institution through systematic, multi-faceted processes of data collection and analysis, and dissemination of results. This Institutional Effectiveness Plan outlines goals and processes used to assess the institutional effectiveness. The plan is a fluid document that is updated based on the goals set in the Community College and Technical System of West Virginia (CTCS) Master Plan, HLC accreditation requirements, and institutional findings.

West Virginia Northern Community College (WVNCC) operates under the Community and Technical College System (CTCS) of West Virginia, and is accredited by the Higher Learning Commission (HLC). In the 2015-2020 Master Plan; Fulfilling the Vision, CTCS focused on preparing students to be successful and competitive in national and global markets through affordable and accessible quality programs and services. Goals outlined in 2015-2020 Master Plan enhance state's efforts to diversify and expand the economy by allocating resources on programs that best serve students, provide the greatest opportunity for job creation and retention, and are supportive of emerging high-technology and knowledge-based businesses and industries.

WVNCC's Strategic Plan aligns with the CTCS Master Plan Goals. Specific outcomes for each goal are determined by faculty, staff, and administrators to ensure the college and the state mission are fulfilled. In addition, WVNCC is an accredited institution and operates under the criteria for accreditation set forth by the Higher Learning Commission (HLC). The office of Institutional Effectiveness works with the President's Cabinet to ensure the State and the Accreditation requirements are fulfilled, and the information gained is used for continuous improvement, and to demonstrate accountability to stakeholders.

Purpose: The purpose of Institutional Effectiveness Plan is to demonstrate West Virginia Northern Community College is fulfilling its mission and achieving its goals. To that extent, institutional effectiveness plan sets goals consistent with the mission of the college and works towards realizing the vision through strategic planning and assessment process.

West Virginia Northern Community College Mission Statement

West Virginia Northern Community College's mission is to educate and empower individuals to achieve academic and career goals, leading to a highly skilled, well rounded, and accomplished workforce which successfully competes and adapts in a global economy.

The College responds to the needs of the region it serves by offering a high quality learning environment that is accessible, safe, and accommodating while nurturing teamwork and community service.

West Virginia Northern Community College Vision Statement

West Virginia Northern Community College is recognized and admired for being a community of learners who model integrity, mutual respect, and a commitment to excellence. The College purposefully strives to:

- Empower students to be successful
- Achieve continued growth
- Respect diversity
- Be responsive and adaptive
- Value personal growth and development
- Be fiscally responsible
- Be entrepreneurial whether in the classroom or online, and
- Enhance partnerships and community service.

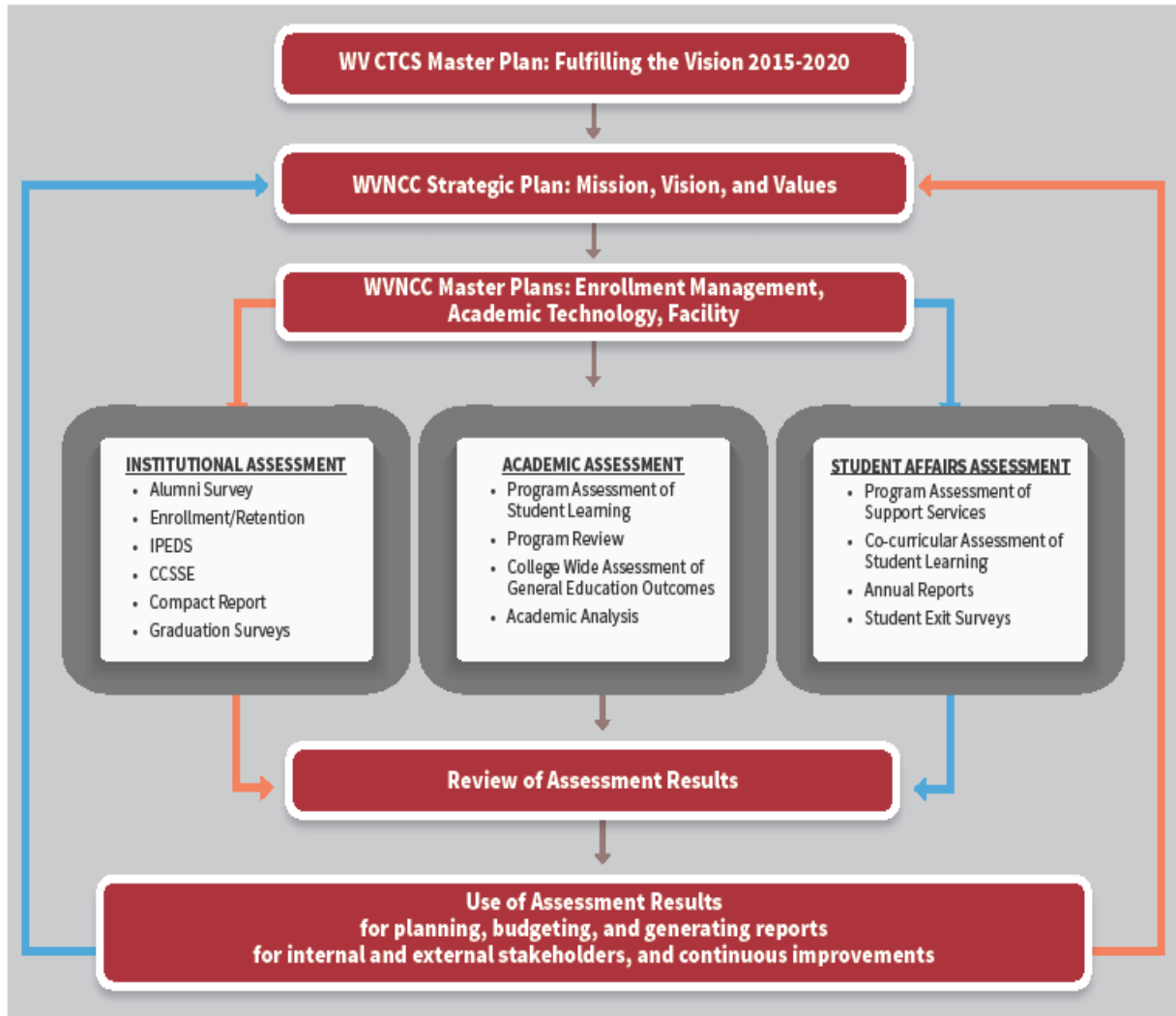
Institutional Effectiveness Mission Statement: The mission of the Office of Institutional Research and Effectiveness is to provide accurate and timely information and expertise to support research, assessment, accreditation, strategic planning and the decision-making processes of West Virginia Northern Community College. The office collects, coordinates, and analyzes data about and for the college and disseminates information to the administrators, faculty, staff, students, and external constituents.

Planning Committees

The President's Cabinet and the Strategic Planning Committees are charged with assisting the President with college planning process including setting institutional priorities, identifying strategies, and evaluation of services, processes, policies, and procedures to ensure college mission is fulfilled and goals are accomplished. Cabinet is comprised of the President, Vice President for Academic Affairs, Vice President of Institutional Effectiveness, Vice President of Workforce Development, Vice President of Student Services, Chief Financial Officer, and the Director of Marketing and Public Relations.

The Strategic Planning Committee is charged with assisting the President in developing goals and strategies to accomplish the mission of the college. The Committee is comprised of faculty, staff, and administrators from all three campuses. Rana Spurlock (Institutional Advancement Coordinator) and Stephanie Kappel (Assistant to the President) serve as the co-facilitators. Current members of the committee are: Melanie Baker, Information System Specialist; Tami Becker, Director of Student Services; Peggy Carmichael, Chief Human Resources Officer; Darryl Clausell, Coordinator of Continuing & Community Education; Chris Corbin, Information Technology Consultant; Jill Loveless, Vice President of Academic Affairs; Kelly Dlesk, Financial Aid Counselor; Jeremy Doolin, Computer Information Technology faculty; CJ Farnsworth, Director of Student Support Services; Janet Fike, Vice President of Student Services; Scott Owen, Business faculty; Michael J Koon, Interim President; Ina Robinson, Counselor; Jeff Sayre, Vice President of Administrative Services/CFO; Dr. Pam Sharma, Dean of Academic Affairs/Interim Vice President of Institutional Effectiveness; Karri Mulhern, Director of Economic & Workforce Development; Lisa Soly, Campus Manager; Larry Tackett, Vice President Workforce and Economic Development; Michele Watson, Medical Assisting & Billing/Coding faculty; and Becky Yesenczki, Executive Secretary to the VPAA.

Institutional Effectiveness Model



Institutional Effectiveness Goals

Goal 1: Assist in designing, implementing, and assessing Strategic Plan.

- Maintain and update Strategic Plan.
- Provide accurate and timely data for the Strategic Plan goals.
- Assist with preparing the mid-year and full year reports.
- Work with the CTCS to submit documents and data specific to the Strategic Plan performance indicators.
- Use assessment results to identify continuous improvement projects.

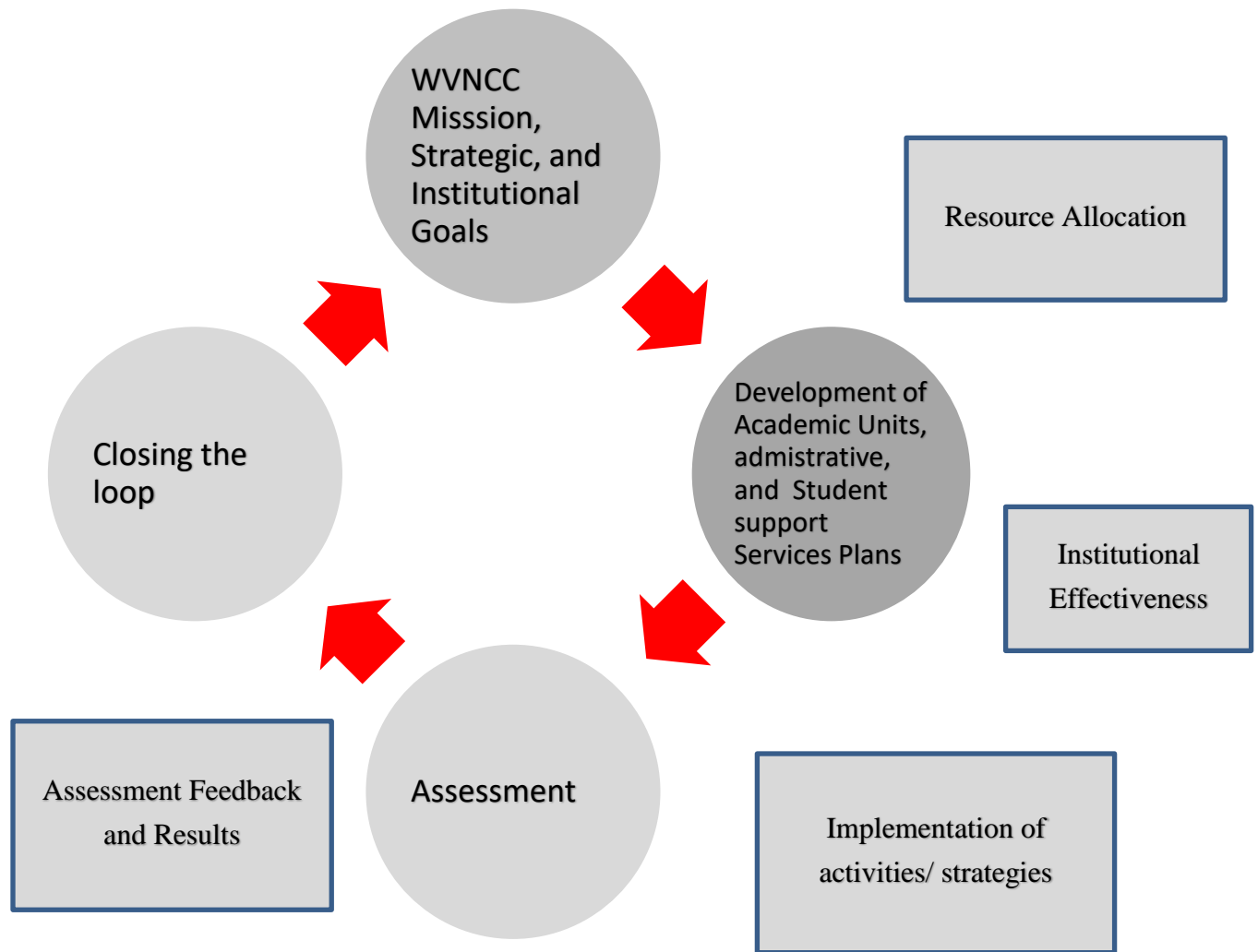
Goal 2: Provide timely and accurate college data to internal and external stakeholders.

- Serve as a data coordinator for state and accreditation agencies.
- Provide accurate job placement data for graduates of career-technical programs.
- Provide accurate transfer outcome data for degree/certificate seeking students.
- Provide accurate data for Accreditation.

Goal 3: Provide leadership in data collection and assessment in academic, administrative, and student services units.

- Assist Vice President for Academic Affairs with Program reviews.
- Assist faculty and staff with the data collection and analysis.
- Assist faculty and staff with designing, conducting, and analyzing surveys to enhance programs and student services.
- Conduct surveys and prepare reports to document success, challenges, and areas of concerns.
- Coordinate, supervise, and assist with the academic and co-curricular assessment of student learning.

Institutional Effectiveness Planning Process



Institutional Effectiveness Planning Process

The institutional effectiveness process begins with the WVNCC's mission and vision, strategic plan goals, and the goals set by the institution. The strategic plan goals are approved by the Board of Governors, and the institutional goals are approved by the President.

Timeline	Process	Responsible Person
2 nd Friday in July	Summary of Academic and co-curricular Assessment Reports from previous fall semester.	Dean of Academic Affairs/IVPIE
July - August	Yearly Planning: Initiatives, data collection and analysis, reporting mechanism.	Executive Committee /President
August –September	Implementation of initiatives	Unit Head and Institutional Effectiveness
2 nd Friday in September	Spring Semester Assessment Reports are due	Program Directors/DAA
February 2019	Fall Semester 2018 Assessment Reports are due	Program Directors/DAA
March	Progress report on the success of initiatives undertaken July - December 2018	Unit Heads Submit reports to VPIE
March	Program Reviews are due	VPAA/VPIE
April	Pre-Assessment forms for Program Assessment due	Program Directors/VPIE
April	Presentation of the midterm progress report to BOG	VPIE
July	Progress report Preparation for January – June	Unit Head Submit report to VPIE
July	Summarize findings and results of first Year initiatives	VPIE
August	Presentation of the results of yearly progress report to BOG	VPIE

Strategic Plan Goals 2015-2020

Goal I Student Success: Increase the success of students by increasing college completion.

Performance Measures:

- Number of certificates and degrees awarded.
- Graduation rate.
- Internal retention rate.
- Number of credits to degree completion.
- Success rate in the first college level math course.
- Success rate in the first college level English course.
- Licensure/certification pass-rate.
- Placement rate.
- Student success rate measured by GPA.

Goal II: Workforce Development: Meet the workforce demands of employers and enhance economic development efforts in the region and the state.

Performance Measures:

- Number of workforce skill sets.
- Number of employers served.
- Number of enrichment and skill workshops.
- Number of trainings for the industry, business, and community.
- Number of faculty/industry interactions.
- Number of entrepreneurship training.

Goal III Affordable Access: Provide access to affordable community and technical college education.

Performance Measures:

- Number of FTE
- Number of headcount
- Early entrance head-count
- Veteran enrollment
- Financial aid participation rate
- Distance education credit hours
- Number of online programs

Goal IV: Fiscal Stability: Ensure the fiscal stability to effectively deliver comprehensive community and technical education.

Performance Measures:

- Annual increases in tuition rates.
- Compensation at market rate.
- Professional development for faculty and staff.
- CFI score.
- Operational spending budget.
- Capital investment in infrastructure and resources for faculty support.
- Faculty to student ratio.
- Budget committee meetings.
- Quarterly financial reports to BOG.

Institutional Goals and Priorities

Goal I: Educational Quality: Improvements in learning environment through excellence in teaching and learning.

Performance Measures:

- Faculty and staff professional development.
- Technology integration in teaching and learning.
- Faculty support through training and access to resources
- Orientation, training, and mentor assistance for new and adjunct faculty.
- Faculty engagement with students through social activities.
- Assessment and continuous improvement through program review.
- Faculty and staff recognition and encouragement through the reward process.

Goal II: Student Success: Provide academic support, and student engagement opportunities to create a community of learners.

Performance Measures:

- Processes to ensure students are guided from admission to graduation/transfer process.
- College success initiatives focused on student satisfaction and completion.
- Supplemental courses to successfully complete gateway math and English courses.
- Online education for flexible learning opportunities.
- A well-defined guided pathway to successfully complete the academic degree.

- Student support system including early intervention to improve student success.
- Student resources including technology, accessibility, and tutoring services.
- Career counseling and support to help students identify career pathways.

Goal III Community Engagement and Partnership: Enhance partnership with public schools and universities, and industry to create career and employment, civic, and social opportunities.

Performance indicators

- Early enrollment data.
- Public school visits.
- Articulation agreements with regional, state, and national institutions.
- Tracking graduate success through clearinghouse.
- Social and cultural events on all three campuses.
- Staff and faculty involvement in community.
- Staff and faculty involvement in area high schools.
- Staff and faculty involvement with the Chamber of Commerce.

Goal IV Economic and Workforce Development: Serve as resource for economic development through education, customized training that responds to the demand of business, industry and the community.

Performance Indicators

- Skill set education offerings.
- Entrepreneurship training.
- Program/course updates based on advisory committee input/ labor market data.
- Needs analysis of business and industry for customized training.
- Satisfaction data concerning customized training.
- New programs and/or modifications of existing programs to meet the needs of business and industry.
- Career services guidance.
- Licensure and certification data.

Appendix

Appendix A	Strategic Plan
Appendix B	Institutional Assessment Plan
Appendix C	Strategic Enrollment Management Plan
Appendix D	IT Plan
Appendix E	Facilities Plan

Appendix A

Strategic Plan



Strategic Plan 2015-2020

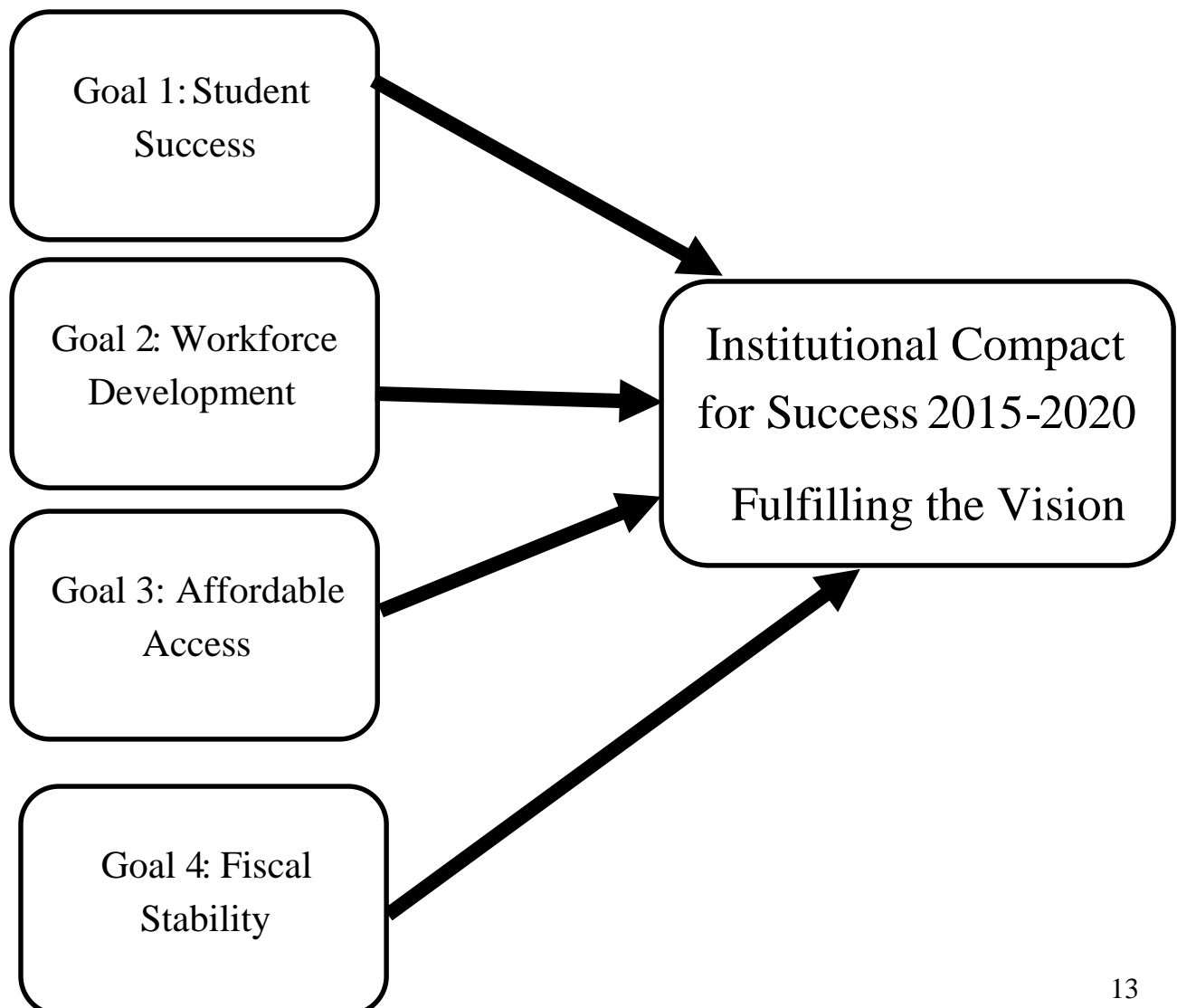


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West Virginia Northern Community College

Mission Statement

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The College responds to the needs of the region it serves by offering a high quality learning environment that is accessible, safe, and accommodating while nurturing teamwork and community service.

Vision Statement

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- Empower students to be successful
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- Enhance partnerships and community service

Alignment with the Community and Technical College System Master Plan, Fulfilling the Vision: 2015-20202

West Virginia Northern Community College (WVNCC) is one of the nine (9) community colleges that operate under the Community and Technical College System (CTCS) of West Virginia. In the 2015-2020 Master Plan; Fulfilling the Vision, CTCS focused its efforts on preparing students to be successful and competitive in national and global markets through affordable and accessible quality programs and services. Goals outlined in 2015-2020 Master Plan enhance state's efforts to diversify and expand the economy by allocating resources on programs which best serve students, provide the greatest opportunity for job creation and retention, and are supportive of emerging high-technology and knowledge-based businesses and industries.

WVNCC's Strategic Plan aligns with the CTCS Master Plan Goals. Specific outcomes for each goal were determined by the faculty, staff, and administrators to ensure college and state missions are fulfilled.

National Context

Complete to Compete, a report by the National Governors Association (2010), states that increasing degree completion at America's public colleges and universities is pivotal to the nation's economic competitiveness and long term economic growth. The American Association of Community Colleges (2011) also reports that the United States continues to fall behind other countries in terms of educational attainment and now ranks 16th in college completion rates for those age 25 to 34.

A report *Help Wanted: Projections of Jobs and Education Requirements through 2018* and produced by the Georgetown University Center on Education and the Workforce (Carnevale, et al, 2010) states that by the year 2018, nearly two-thirds of all American jobs will require a post-secondary certificate or degree. This same study reports that the United States will need 22 million new college degrees and 4.7 million new workers with post-secondary certificates by that same year.

However, the report also predicts the U.S. will fall short of that number by at least 3 million post-secondary degrees, Associates or higher. This predicted shortage is one of the more recent indicators of how crucial post-secondary education and training has become to the American economy.

State Context

Similar job projections are applicable to West Virginia. With the emergence of oil and gas, the re-emergence of advanced manufacturing, and the continued growth of the health care sectors, community and technical colleges must respond to the workforce challenge if West Virginia is to capitalize on this unique opportunity to provide West Virginians with the skills they need to move into high wage jobs. Focus, therefore, should remain on student success, student access, developing the workforce, and securing resources to fulfill the vision of 2020.

Rapidly changing economic conditions have exacerbated the challenges of declining enrollment and reduced state funding to support the delivery of high quality education and training programs already facing the State's community colleges. In addition, the Community and Technical College System faces the ongoing challenge of serving a population where unemployment, financial issues, and family obligations often negatively impact individual decisions about seeking post-secondary education or training; and, if they do choose to enroll, completing their program of study. West Virginia's community and technical colleges must continue to find innovative ways of attracting and effectively serving all students, regardless of their life circumstances. These strategies must include providing the academic and support services that promote completion of higher education credentials that will prepare graduates for success not only today but also in tomorrow's economy. With a highly educated citizenry being essential to economic growth, college completion in West Virginia must continue to increase but must do so at a more rapid rate.

West Virginia Northern Community College strives to advance goals set forth in CTCS Master Plan. WVNCC's Strategic Plan includes specific outcomes for each goal, determined by the faculty, staff, and administrators, to achieve and fulfill State and WVNCC's mission.

Goal 1: Increase the success of students by increasing college completion.

Outcome	Strategy
<p>1.1.a Increase the number of certificates and associate degrees awarded by 1% each year.</p> <p>WV 1.a HLC 4C</p>	<ul style="list-style-type: none"> • Increase enrollment of degree seeking students (See 3.1) • Implement new programs to meet workforce needs. • Increase use of PLA to facilitate completion. • Expand Project Graduation
<p>1.1.b Increase the number of students receiving degrees or certificates by 1%</p> <p>HLC 4C</p>	<ul style="list-style-type: none"> • Increase enrollment of degree seeking students (See 3.1) • Implement new programs to meet workforce needs. • Increase use of PLA to facilitate completion. • Expand Project Graduation
<p>1.2 Increase the graduation rate to 25%.</p> <p>HLC 4C</p>	<ul style="list-style-type: none"> • Implement and evaluate comprehensive advising model. • Implement and evaluate Guided Pathways • Expand Project Graduation
<p>1.3.a Increase the internal retention rate of first-time, fulltime students by 1 percentage point each year.</p> <p>HLC 4C</p>	<ul style="list-style-type: none"> • Implement and evaluate Guided Pathways • Use Guided Pathways to inform scheduling of classes
<p>1.3.b Increase the internal retention rate of all degree- seeking students by 1 percentage point each year.</p> <p>HLC 4C</p>	<ul style="list-style-type: none"> • Implement and evaluate Guided Pathways • Use Guided Pathways to inform scheduling of classes
<p>1.4 Decrease credits to degree to 72 by 2020</p> <p>WV 1.c HLC 4C</p>	<ul style="list-style-type: none"> • Implement and evaluate co-requisite model for math and English • Implement and evaluate Guided Pathways

<p>1.5 Decrease time to degree for full-time students to 3 years by 2020</p> <p>WV 1.d HLC 4C</p>	<ul style="list-style-type: none"> • Promote and increase use of PLA credit. • Facilitate use of Fast Track and/or review/retest. • Develop new accelerated programs. • Evaluate feasibility to accelerate tech programs with decision by Dec 2017 to begin implementation Summer 2018.
<p>1.6 Increase the success rate for the firstlevel college Math course by 3 percentage points annually</p> <p>WV 1.e HLC 4C</p>	<ul style="list-style-type: none"> • Implement and evaluate co-requisite model for math. • Reduce number of students needing corequisite course through expand use of Fast-Track and placement test remediation.
<p>1.7 Increase the success rate for the firstlevel college English course by 3 percentage points annually</p> <p>WV 1.f HLC 4C</p>	<ul style="list-style-type: none"> • Implement and evaluate co-requisite model for math. • Reduce number of students needing corequisite course through expand use of Fast-Track and placement test remediation.
<p>1.8 Maintain or exceed licensure/certification passage rate of 80% thru 2020</p> <p>WV 1.g HLC 4C</p>	<ul style="list-style-type: none"> • Implement and evaluate co-requisite model for math. • Implement test prep activities for all licensure exams • Utilize Blackboard to analyze results of practice tests and develop improvement strategies
<p>1.9 Meet or exceed placement rate of 65%</p> <p>WV 1.h HLC 4C</p>	<ul style="list-style-type: none"> • Develop processes to improve data collection of job placement. • Expand partnerships with employers including internship opportunities.
<p>1.10 Meet or exceed the State Compact success rate of transfer students as measured by GPA.</p> <p>WV 1.i HLC 4C</p>	<ul style="list-style-type: none"> • Provide improved transfer information through GPS sheets.
<p>1.11 Increase percent of students in transfer programs who transfer to baccalaureate institutions by 2 percentage points each year.</p> <p>HLC 4C</p>	<ul style="list-style-type: none"> • Increase enrollment in transfer programs. Improve data collection through expanded use of Clearinghouse data.

Goal 2: Workforce – Meet the workforce demands of employers and enhance economic development efforts in the region and the state.

Outcome	Strategy
<p>2.1 Increase the number of Workforce skill sets awarded by 30 each year.</p> <p>WV 1.b, 2.c HLC 1E</p>	<ul style="list-style-type: none"> • Introduce concept of skill sets and their customizability to each new contact and when visiting companies. • Define and implement welding skill sets to be introduced on WT campus fall 2017
<p>2.2 Increase number of employers served</p> <p>WV 2.d HLC 1E</p>	<ul style="list-style-type: none"> • Develop a data base for business and industry for service area, summer 2017
<p>2.3 Increase personal enrichment and skills workshops to the public, community education</p> <p>HLC 1E</p>	<ul style="list-style-type: none"> • Each campus to determine areas of potential interest and report ideas to Workforce by Aug and Dec each year.
<p>2.4 Increase short-term skillset training for industry, business, and community by 5%.</p> <p>WV 2.a HLC 1E</p>	<ul style="list-style-type: none"> • Develop flyer/brochure that describes capabilities Workforce has to provide specialized training for industry and business. • Promote and distribute brochure to database contacts (2.1.b). • Invite businesses to at least one event per campus per year to introduce our capabilities, training, and services
<p>2.5 Increase faculty/industry interactions</p> <p>HLC 1E</p>	<ul style="list-style-type: none"> • Invite faculty to take part in documenting their involvement/interactions with the industry.
<p>2.6 Increase entrepreneurship training opportunities</p> <p>WV 2.f HLC 1E</p>	<ul style="list-style-type: none"> • Increase interaction and joint program development for entrepreneurship classes and programs to be offered on all campuses • Involve business and CIT faculty in developing workshops, seminars, etc.

Goal 3: Provide access to affordable community and technical college education in all regions of the state.

Outcome	Strategy
3.1 Stabilize unduplicated headcount WV 3.a HLC 4.c.1	<ul style="list-style-type: none"> Expand EM council to provide a structured and comprehensive recruitment and retention plan. Implement recruitment and retention plan for Fall 2018 forward Devise strategy to offset projected loss due to College 101 (approximately 180)
3.2 Stabilize annualized FTE WV 3.a HLC 4.c.1	<ul style="list-style-type: none"> Add a college visit tour page to the college website Emphasize transferability as part of the marketing strategy by increasing communication and cooperation with 4 yr institutions, current 2+2 students, and potential 2+2 students
3.3 Stabilize adult unduplicated headcount WV 3.a HLC 3.b.4	<ul style="list-style-type: none"> Expand partnership with Workforce WV, DHHR and SPOKES Develop outreach for local FRNs
3.4 Stabilize the number of recent high school graduates who attend Northern WV 3.c HLC 4.c.1	<ul style="list-style-type: none"> Continue Open House marketing through local county schools and school outreach systems. Increase communications with parents, starting with the parents of early entrance students. Actively recruit students in EDGE and College 101 for matriculation from high school. Establish webpage for college 101 and EDGE to degree.
3.5 Stabilize early entrance headcount. WV 3.a HLC 4.c.1	<ul style="list-style-type: none"> Increase the number of faculty visits to high school and coordinating these with admissions. Establish Early entrance webpage Provide information for parents of early entrances courses about 2+2 programs.

<p>3.6 Increase veterans enrollment by 2% each year.</p> <p>WV 3.a , HLC 4.c.1</p>	<ul style="list-style-type: none"> • Expand partnership with Veterans resources. • Determine items needed to successfully complete veterans designation surveys.
<p>3.7 Stabilize the degree seeking headcount</p> <p>WV 1.a HLC 4.c.1</p>	<ul style="list-style-type: none"> • Restructure project graduation. • Market program opportunities to nondegree , early entrance and transient students. • Create Guided Pathways sheet for part time for each degree program for 1718.
<p>3.8 Ensure Affordability by maintaining the financial aid participation rate</p> <p>WV 3.b HLC 5.c.4</p>	<ul style="list-style-type: none"> • Continue to contact FAFSA, no admission & accepted students
<p>3.9 Increase credit hours taken of distance education courses 1% annually</p> <p>HLC 3.a.3</p>	<ul style="list-style-type: none"> • Market “Have a seat” campaign to not enrolled returning students to complete needed courses
<p>3.10 Maintain number of online programs as needed</p> <p>HLC 3.a.3</p>	<ul style="list-style-type: none"> • Monitor campus and major of students in distance education programs to match campus and major for outreach

Goal 4: Ensure the fiscal stability to effectively deliver comprehensive community and technical education.

Outcome	Strategy
<p>4.1 Keep WVNCC an affordable choice for students by limiting annual increases in tuition and fees to 5% or less</p> <p>WV 3.c HLC 1.A.3</p>	<ul style="list-style-type: none"> • Alternate tuition and fee increases to avoid simultaneous increases in each: • Fees in even fiscal years • Tuition in odd fiscal years
<p>4.2 Compensate all employees equitably with the goal of paying at market</p> <p>WV 4.a HLC 1.A.3</p>	<ul style="list-style-type: none"> • Evaluate each position in the budgeting process and provide funding to move forward with market based compensation
<p>4.3 Attract students with a quality product by keeping faculty and staff up to date with latest knowledge by sponsoring at least 2 annual professional development events</p> <p>WV 4.b HLC 1.A.3</p>	<ul style="list-style-type: none"> • Priority budgeting process to allot funding for at least two professional development events.
<p>4.4 Maintain fiscal stability by maintaining a CFI score greater than 1.1</p> <p>WV 4.d HLC 1.A.3</p>	<ul style="list-style-type: none"> • Submit and strive for an annual balanced budget • Maintain operational reserves greater than one-third of annual operating expenses • Maintain capital reserves greater than \$750K. • Maintain auxiliary reserves greater than \$500K
<p>4.5 Appropriately proportion spending in cores areas of instruction, academic support and student services; a minimum of 50% of all operational expenses.</p> <p>WV 4.e HLC 1.A.3 / 5.A.2</p>	<ul style="list-style-type: none"> • Perform analytical review of the completed budget by function area. • Annually evaluate faculty and staff salaries with peer institutions.
<p>4.7 Maintain efficient and effective faculty levels to support the operation with a faculty to FTE ratio between 14:1 and 16:1</p> <p>HLC 3.D.4 / 5.A.1</p>	<ul style="list-style-type: none"> • Perform analysis on performance ratios of faculty to FTE, minimum ratio represents efficiency and maximum ratio represents quality.

<p>4.8 Plan and monitor revenue and expenses with monthly meetings with budget managers</p> <p>HLC 5.A.2 / 5.C.1 / 5.C.3</p>	<ul style="list-style-type: none"> • Create budgeting handbook with assistance of budget committee to outline the roles and responsibilities of the constituent groups, budget committee, CFO, and President.
<p>4.9 BOG is provided quarterly financial reports to ensure legal and fiduciary responsibilities are met and receives other relevant reports as necessary.</p> <p>HLC 5.B.1</p>	<ul style="list-style-type: none"> • Provide monthly cash position at each BOG meeting. • Develop a comparison of actual expenses to budgeted items. • Submit quarterly financial statements conducted by third party accounting firm

Appendix B Institutional Assessment Plan



West Virginia Northern
Community College

Academic Assessment of
Student Learning and
Institutional Effectiveness
2018

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- K. Five-Year Program Review Cycle
- L. Program Review Template
- M. BOG Multiyear Process for Curriculum Evaluation Rule
- N. Yearly Program Review
- O. Co-curricular Assessment Plan
- P. Institutional Effectiveness Model
- Q. History of Assessment

Introduction

West Virginia Northern Community College is a learning focused organization and is committed to improving student learning and institutional effectiveness. Assessment is an on-going process embedded in the curriculum as a natural part of teaching and learning. At Northern assessment begins on admission and culminates at the completion level (certificate, degree, or transfer point). Faculty assessment activities are coordinated and supported under the supervision of the Vice President of Academic Affairs, the Dean of Academic Affairs, and the Assessment Committee. Through faculty participation and administration support, the College has developed a culture of assessment that relies on the data-informed decision making process to make enhancements to academic programs and student services. Assessment practices are consistent with the Board of Governors Assessment Rule (Appendix A). Assessment is a critical component in establishing institutional effectiveness and achieving the college's mission.

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Assessment Committee Membership

Name	Division / Service Center	Role
Larry Brown	Applied Technology	Faculty
C J Farnsworth	Academic Support Center	
Darcey Ferrell	Liberal Arts, Communication and Sciences	Faculty
Ben Fulton	Liberal Arts, Communication and Sciences	Faculty
Jennifer Lantz	Faculty	Faculty
Stephen Ledergerber	Applied Technology	Faculty
Dr. Jill Loveless	Vice President for Academic Affairs	Ex. Officio
Cierra Parr		Student
Delilah Ryan	Liberal Arts, Communication and Sciences	Faculty
Dr. Pam Sharma	Interim Vice President of Institutional Effectiveness/Dean of Academic Affairs	Committee Chair
Charleen Stokes	Business and Public Services	Faculty
Larry Tackett	Vice President for Workforce Development	Ex. Officio

Goal: Goal of the Assessment Plan is to have a well-defined continuous assessment process that leads to enhanced student learning, improved instruction and curriculum, and institutional effectiveness.

Principles for Assessment of Student Learning

Student learning improves when faculty and students can identify what students are to learn, how they are to learn, and how they will know that they have indeed learned it. Effective assessment formalizes this knowledge. To be effective, assessment of student learning must be a part of the institution's mission. To ensure institution-wide acceptance and participation, Northern subscribes to the following principles to guide the assessment of student learning:

- Assessment shall flow from the mission and vision.
- Assessment shall improve learning from admission to completion level.
- Assessment shall not be punitive to students, faculty or staff.
- Assessment shall be designed and implemented by the faculty.
- Assessment shall involve multiple measures in multiple contexts to create a composite picture of student learning.
- Assessment results shall be distributed institution wide.
- Assessment results shall be used to improve student learning by improving courses, programs, and institutional support services in a recurring cycle.
- The assessment resources including the plan shall be evaluated for continuous improvement.

Theory and Model for Student as a Developing Learner

Assessment of student learning involves constructing a picture of the students at three points: admission, during enrollment, and after graduation with a focus on the student as a “developing learner”. It starts with collecting the data on: what do they know, what is available when they come to Northern, what they can learn here, and what they can do with what they have learned after they have left the college. Collectively, the data allows informed discussion of educational processes, such as development of curriculum prerequisites, course sequencing; learning technologies - applications of technology in class work, and computer literacy and learning environments - promoting student readiness to learn, learning styles, and learning expectations. The model below illustrates the process at the three key points:



CCSSE Community College Survey of Student Engagement

Students at Admission

To assess what students are ready to learn at Northern, the college has to know the level of their preparation. Although the College has an open door policy allowing anyone holding a high school diploma, or a GED to enroll, all students must take an admission test, either the ACT, SAT, ACCUPLACER, or COMPASS to determine their eligibility to enroll in college-level courses. If students score below a specified score, they are required to take supplemental courses, primarily in mathematics, reading, or writing with the college level courses. On their admission applications, students indicate their goals, such as the programs they are interested in, the degrees, if any, they are seeking, and their transfer plans. This information allows the appropriate personnel to collect entry data for students by program and/or certificate/degree. The final piece of information about the students at this point is the high school or previous college transcript. Information about courses are used to assess the need for an admission test. Some programs may require a specific test to be admitted to the program.

Students during Enrollment

Assessment of student learning begins at the classroom level; however, institutional assessment is not about grading individual students or individual instructors. All assessment data is reported, analyzed, and applied independent of individuals and personalities. Assessment of student learning starts with well-defined learning outcomes and the method of measuring the extent to which the outcomes are met. Faculty adhere to the Master Course Guide (MCG) (**Appendix B**) which identify general education, course, and student learning outcomes that are common to all sections of the course regardless of the instructor, delivery format, or dual credit. MCGs are used to design the Course Syllabus (**Appendix C**) that describes learning activities, assessment methods, and instruments for assessing student learning. Formative assessments are used for the immediate feedback and summative assessments for assigning the final grade. Data on the student performance is collected and analyzed to assess the level the outcomes are met and to identify any gaps in student learning. Based on the gaps identified; strategies are developed to address gaps for improving student learning.

In addition to the Direct Methods, the College administers Indirect Methods such as institutionally designed survey such as the Student Satisfaction Survey to assess student satisfaction with academic programs and services, and the national survey instrument, the Community College Survey of Student Engagement (CCSSE) survey to assess student learning and engagement. The college uses this instrument as a measure of student engagement, learning and satisfaction with services and the quality of academic offerings. Results are used to address identified gaps. The CCSSE survey results also provide comparison data from similar institution allowing the institution to use the information for establishing benchmarks to improve institutional effectiveness.

Students After Graduation

A major component of education is to empower students to apply the knowledge they gain. Socrates said education is to help people learn how to live well. Assessment of student learning must extend after graduation to determine if the graduate “lives well”. Northern recognizes two distinct groups of graduates: those who enter the workforce immediately and those who transfer to a four-year institution for further studies. For the students who enter the workforce, the Office of Institutional Effectiveness (IE) tracks the graduation rate, licensure statistics, job placement data, and transfer to four-year institutions. For the students who transfer to a four-year institution, the IE Office works with the Registrar’s office to tracks the graduation, transfer, and the transfer success rates. The analysis if the data is used to assist the administration and faculty in developing strategies for student advising, career counseling, and improving institutional effectiveness to meet student, community, and workforce needs.

Assessment of Student Learning Outcomes

Program Assessment of Student Learning: Student learning outcomes are assessed at the program, course and the general education levels. Assessment of student learning starts with well-defined program outcomes. The Program Director and faculty work together to design a plan of action; the Program Assessment Plan to assess student learning. The Plan (**Appendix D**)

includes student learning outcomes that clearly state what learners will be able to do when they complete the program. To keep the assessment manageable program outcomes are assessed over a 3-year cycle. Outcomes are mapped to the curriculum in the program matrix. The matrix identifies the course/s where the skills/knowledge/ competencies are introduced (I), reinforced (R), and mastered (M). The plan also includes direct and indirect assessment methods, performance indicators, timeline, and the person responsible (the Lead Faculty) for coordinating assessment activities across campuses, modalities, and faculty. A common assessment activity and measurement instrument is used to assess the outcome/s. Data collected in each section is compiled, analyzed, and discussed by the participating and Lead faculty to prepare the assessment report. The Lead faculty is responsible for submitting the Assessment Report to the Dean of Academic Affairs who forwards them to the Assessment Committee for review.

Assessment of General Education Outcomes: WVNCC believes in the total development of the individual and requires all students to complete a general education core curriculum relevant to their program of study. The College is committed to developing resilient, lifelong learners able to function in a complex, technologically sophisticated world. The College catalog lists six general education outcomes:

- Communicate effectively in oral and written formats.
- Employ or utilize information access and literacy skills.
- Demonstrate problem-solving and critical thinking skills.
- Employ mathematical and science literacy skills.
- Acquire a cultural, artistic and global perspective.
- Demonstrate professional and human relations skills.

General education core curriculum (**Appendix E**) lists courses that address general education outcomes. The number of general education credits vary from 12 -15 credit hours in technical programs (AAS) to 30-45 credits hours in Associate in Arts (AA) and Associate in Science (AS) programs. General education credit required in Certificate programs varies from 6-9 credit hours.

The Assessment Committee, working with the Dean of Academic Affairs (DAA) has designed the General Education Assessment Plan, Assessment Process, and a three-year cycle (**Appendix**

F), consistent with the Program Assessment Plan. The three-year cycle allows faculty to assess two general education outcomes each year. The plan includes student learning outcomes and sample Rubric adapted from the “VALUE” Rubric by the Association of American Colleges and Universities ((AACC). Faculty has the flexibility to design their own rubric/criteria for assessing the general education outcomes.

Faculty uses a Pre-Assessment Form (Appendix G) and Assessment Report Template (**Appendix H**) to prepare assessment reports. Program directors work with faculty to identify program outcomes to be assessed in fall and spring semesters, and the lead faculty responsible for submitting the Pre-Assessment Form. The Pre-Assessment form lists the general education, program, course, and student learning outcomes, assessment method/s, performance indicators, faculty participating in assessment and the Lead faculty responsible for submitting the assessment report. Lead faculty submits the Pre-Assessment form to the Dean of Academic Affairs by the second Friday in April, who reviews the form and provides feedback on: the alignment of program, course and student learning outcomes adequacy and appropriateness of assessment method/s and instruments, and the performance indicators. Lead faculty is responsible for sharing the assessment information with the participating faculty and making the suggested changes.

The Assessment Report Form is used to report results of student learning outcomes addressing the program level outcome/s. There are separate tables for reporting results for the general education and the course outcomes mapped to the program outcomes. Lead faculty member is responsible for analyzing the data and preparing the assessment report. Assessment reports for the fall semester are due on the second Friday in February, and the spring semester is due on the second Friday in September. Faculty submit completed reports to the DAA who forwards the reports to the Assessment Committee for a Peer Review.

Peer Reviews: The Assessment Committee reviews Assessment Reports using a Peer-Review Rubric (**Appendix I**). The Rubric is designed by the Assessment Committee and approved by the Faculty Assembly. Assessment Reports and Peer –Reviewed assessment reports are forwarded to the DAA for analysis. DAA analyzes the data and prepares a summary of assessment finding.

Course Assessment Reports, Peer-Reviewed Reports, and the summary reports are uploaded to the Faculty Document Center; a faculty resource available within the Faculty Portal. Summary report is forwarded to Institutional Effectiveness Office for updating the Strategic Plan Matrices

and sharing information with the President and the Cabinet to identify institutional priorities and resource allocation. If curriculum changes are recommended, the faculty member is advised to work with the division chair to prepare the curriculum change paper work. Detailed Assessment process and timeline follows:

Assessment Process	
Timeline	Function/s
2nd Friday in April	Program director identifies program outcome/s, courses, lead faculty, and resources needed to assess the student-learning outcomes during the academic year. This information is shared with the program faculty.
4th Friday in April	The Lead faculty submits Pre-Assessment Forms for Fall and Spring semesters to the Dean of Academic Affairs.
2nd Friday in May	The Dean provides feedback to the lead faculty.
3rd Friday in August	The Lead faculty shares assessment information with participating faculty.
September-December	Faculty collects data
2nd Friday in February	Fall semester Assessment Reports are due
February- April	The Assessment Committee reviews assessment reports and results are forwarded to the Dean of Academic Affairs.
2nd Friday in June	The Dean of academic affairs prepares a summary report for each program and provides feedback to the program director.
2nd Friday in July	The Dean forwards summary to the Institutional Research Office.
2nd Friday September	Spring semester Assessment Reports are due
September- November	The assessment committee reviews assessment reports and results are forwarded to the Dean of Academic Affairs.
2nd Friday in December	The Dean of academic affairs prepares a summary report for each program and provides feedback to the program director.
2nd Friday in January	Dean forwards summary findings to the Institutional Research Office.

Program Review

In addition to the Program Assessment of Student Learning Outcomes, WVNCC conducts program reviews mandated by the Community and Technical College System (CTCS) Procedural Rule 135-10 (**Appendix J**). Program reviews are conducted on a five-year cycle (**Appendix K**) using the Program Review Template (**Appendix L**), and follow the process outlined in the Board of Governors Multi-Year Process for Curriculum Evaluation Rule (**Appendix M**). Program reviews include but are not limited to; graduation rate, employment rate, student retention, transfer rate, licensure /certification success, student satisfaction with the program and student services, and employer satisfaction. The Dean of Academic Affairs and the office of Institutional Effectiveness assist the program directors in preparing Program Review Reports. Reports are submitted to the Vice President for Academic Affairs for review. The VPAA presents reports to the Board of Governor for approval. Approved reports are submitted to the CTCS.

The College conducts Yearly Program Reviews (**Appendix N**) to make program improvements based on the annual program assessment data. The yearly program reviews were conducted for the first time in spring 2018. The process for the annual program review is in the developing stages however; it will include feedback to the program directors from the Dean of Academic Affairs and recommendations to the Vice President for Academic Affairs in addressing the identified gaps. Like other assessment reports, annual program reviews and the peer-reviewed reports will be available in the Faculty Document Center

External accreditation review: This is a multi-faceted review process in which the elements to be assessed are prescribed by the accreditation agency. Schedule of review is determined by the agency.

Co-curricular Assessment of Student Learning: The College conducts assessment of co-curricular activities that support student learning. In addition to the events sponsored by the Office of the Student Activities (SA), students have the opportunity to participate in academic organizations such as Phi Theta Kappa, clubs: LAN, SCARSI, Student Senate, etc. The Director

of Student Services designs yearly projects to assess student learning by submitting the Co-curricular Assessment Plan (**Appendix O**) to the Dean of Academic Affairs during the fall semester for approval.

Service supervisors have developed co-curricular assessment plans of student learning by deliberately embedding general education outcomes in the services provided. The plan includes the program mission, program goals, and student learning outcomes, assessment methods, performance indicator, and a timeline for conducting assessment activities. Projects are submitted to the Dean of Academic Affairs for approval. The DAA reviews the project report and forwards it to the Assessment Committee for feedback. The DAA prepares a summary of results and recommendations and forwards it to the Office of Institutional Effectiveness to update Strategic Plan Matrices.

Assessment of Student Learning and the Institutional Effectiveness Model

Assessment of student learning is a critical component in the evaluation of institutional effectiveness. The college also uses indirect methods such as the Student Satisfaction Survey, Graduate Survey, and the Community College Survey of Student Engagement results to improve programs, and services offered through the college. The Institutional Effectiveness model (Appendix P) outlines steps to assess various assessment components to improve student learning, academic programs, student services, and the overall institution effectiveness.

Roles and Responsibilities related to the Assessment of Student Learning

Faculty

- Define learning outcomes
- Prepare and update Master Course Guide (**Appendix K**) and submit changes to the Division Chair.
- Determine methods for assessing outcomes
- Participate in data collection and analysis
- Submit appropriate reports: Pre-Assessment Form and Assessment Report to the Dean of Academic Affairs.
- Utilize assessment data to improve teaching and learning.

Program Director

- Identify and provide to the Division Chair and the Dean of Academic Affairs the internal and external assessment and or accreditation requirements.
- Design the Program Assessment Plan.
- Collaborate with faculty for assessment activities related to accreditation, state, or institution requirement.
- Assist with program recommendations resulting from assessment activities.
- Submit annual Program Assessment Report to the Dean of Academic Affairs.

Division Chair

- Review and collect Master Course Guides and the Course Syllabi and then forwards them to the administrative secretary to upload the copies to the Faculty Document Center.
- Coordinate classroom, course, program and division assessment activities.
- Assist the Dean of Academic Affairs with assessment report.

Administration/Staff

- Provide resources through Institutional Research to collect and analyze data.
- Prepares summary of assessment to update the Strategic Plan, and shares it with the President and the Executive Committee.
- Support assessment initiatives with appropriate materials.
- Provide technical expertise to assist with process and professional development.
- Use assessment data in planning processes to improve institutional effectiveness.

Assessment Committee

- Review assessment process and makes recommendations for improvements.
- Review proposed assessment projects and provide assistance.
- Review Assessment Reports and provide feedback using Peer-Review Rubric.
- Maintain a Web Page for faculty, administration, and students.
- Determine professional development needs for assessment and facilitate appropriate professional development activities.

Curriculum Committee

- Review and approves Master Course Guides.
- Approve Curriculum Changes.

Institutional Effectiveness

- Assist faculty with the data collection and analysis.
- Identify reasonable timelines for collection and summarization of data that will involve IR office.
- Administer CCSSE and other evaluation tools.
- Publish Institutional Research data on IR Web Page.

APPENDIX A
Board of Governor's Rule

West Virginia Northern Community College
ASSESSMENT

Effective Date: August 22, 2002

Date Approved by WVNCC Board of Governors: August 22, 2002

Authority Reference:

Replaces previous policy dated:

Rule: Consistent with its mission to provide high quality programs which meet the needs of citizens, employers, and communities, West Virginia Northern Community College will implement assessment across the College. The purpose of assessment is to provide information regarding the curriculum, the learning environment, and student academic achievement. The resulting information is used to improve student learning, benchmark the accomplishment of strategic initiatives, and improve institutional effectiveness. While all college personnel are involved in assessment, the faculty provide the pivotal component of the assessment of student academic achievement. They identify the outcomes in courses and programs as well as the measures for both formative and summative assessment and conduct analysis which results in recommendations for changes.

APPENDIX B
Master Course Guide Template

MASTER COURSE GUIDE

COURSE HEADING & NUMBER:

COURSE TITLE:

COURSE/CATALOG DESCRIPTION:

PREREQUISITES: (must be taken *before* this course)

COREQUISITES: (must be taken at *the same time* as this course)

PRE/COREQUISITES: (can be taken *either before or at the same time as this course*)

CREDIT HOURS:

LECTURE HOURS PER WEEK:

LAB HOURS PER WEEK:

REQUIRED MATERIALS: (Include any materials needed such as a calculator, software, tool kit, etc. A statement "Check with the bookstore regarding any required textbooks" is also helpful.)

COURSE OUTCOMES:

"Upon successful completion of the course, students will be able to":

There are usually 4 or 5 course level outcomes listed here. These are more global in nature than the Student Learning Outcomes (see attached sample of a Master Course Guide)

STUDENT LEARNING OUTCOMES

"Upon successful completion of the course units, modules, or chapters, students will be able to":
The number of student learning outcomes varies based on course level outcomes. Generally, there are 20-30 student learning outcomes for a 3 credit hour course.

GENERAL EDUCATION OUTCOMES:

The College has identified six general education outcomes, listed in the current catalog under “general education”. If your course addresses any or all of the general education outcomes OR you believe that students gain these skills as a result of successfully completing your class, include them as general education outcomes. If you do not believe your students necessarily gain these skills in this specific class, don’t include them (see attached sample).

- Communicate effectively in oral and written formats
- Employ or utilize information access and literacy skills
- Demonstrate problem-solving and critical thinking skills
- Employ mathematical and science literacy skills
- Acquire a cultural, artistic and global perspective
- Demonstrate professional and human relations skills

TYPES OF ASSESSMENT TOOLS USED:

FORMATIVE: At least 3 of the following: participation and/or satisfactory performance in classroom discussions or activities, homework or in-class assignments, student’s self- reports, small group interaction, self-appraisal or application activities or assessments determined appropriate by the instructor.

SUMMATIVE: At least 2 of the following: participation and/or satisfactory performance on quizzes, review questions from textbook, videos, class discussions, or activities, unit exams, final exam, research paper or project, course evaluation, self-evaluation, pre and posttests, or assessments determined appropriate by the instructor.

MINIMUM ACCEPTABLE STANDARDS: For quizzes, homework, and assessment activities listed, the instructor’s analysis of satisfactory demonstration of knowledge will be used; on summative methods such as exams, papers, or projects, achieving a letter grade of “C”, or 70% or above will demonstrate satisfactory understanding and basic mastery of outcomes.

SUBMISSION OR LAST REVISION DATE

SUBMITTED BY,
FACULTY MEMBER:
TITLE:
SUBMISSION DATE:

REVISED BY,
NAME:
POSITION OR TITLE:
REVISED DATE(S):

APPENDIX C
Syllabus Template

SYLLABUS

Semester:

Year:

Course Title:

Course Number:

CRN:

Department:

Class Meeting

Day:

Time(s):

Room No.:

Dates of Course:

Instructor Information

Instructor:

Email (xxxxx@wvncc.edu):

Phone: *(Office phone for full-time faculty; adjuncts- you are not required to give out your home or cell phone number):*

Office Hours:

Required Materials Textbook *(Title, author, edition):*

Optional Materials:

Catalog Description *(This should be copied and pasted from the catalog. The course description MUST match the catalog.):*

Course Focus *(This gives a little more detail. See your division chair for specific information.):*

Program Outcomes:

General Education Outcomes (*Upon satisfactory completion of this course students should be able to*):

Course Outcomes (*Course outcomes can be found on the Master Course Guide for the course*)

Upon satisfactory completion of this course, students should be able to:

- *course outcome 1*
- *course outcome 2*
- *course outcome 3*
- *course outcome 4*

Student Learning Outcomes (*Specific skills, abilities, attitudes, and/or competencies required to accomplish course outcomes listed above*):

1. *Specific skill*
2. *Specific skill*

(There will be more of these and they can also be found on the Master Course Guide)

Course and Institutional Policies

Attendance: (*There is no college-wide attendance policy; this is up to individual programs and instructors. Check with your division chair to see if your program or department has one that you should use.*)

Class Preparation: (*Give specific requirements.*)

Late Assignment Policy (*Include specific expectations of how each of the graded assignment late submission will be addressed. Some examples of activities are*):

- *Tests: Give specifics for preparation and what to do if a student has to miss a test.*
- *Homework: Give specific requirements.*
- *Projects: Give specific requirements.*

Grading Policy: (*Be specific with the kinds of grades (homework, tests, journals, projects, etc.), the number of items, and the value of each.*)

Final Grade: *(This is up to you- some instructors use percentages such as 90, 80, 70, etc.; others use 93-100; 85-92, etc. In any case report total points or percentages, and a letter grade to communicate clear expectations of how final grade will be assigned.)*

Classroom Conduct:

WVNCC seeks to provide educational programs and rules to encourage independence and maturity. Within this context, WVNCC has adopted a “zero-tolerance” Student Code of Conduct Rule. This rule expresses the sanctions for certain inappropriate behaviors for students and establishes due process procedures consistent with regulations governing the College.

Behavior that interferes with the educational mission of WVNCC is unacceptable. Such behavior will result in disciplinary action, including but not limited to disciplinary administrative withdrawal, probation, suspension, expulsion or other appropriate action as determined by the administration. For more information visit:

<http://www.wvncc.edu/uploads/StudentCodeofConductAppvd06.pdf>

Add additional information here

Continuity of Instruction:

Here you should address how instruction will continue in the event that class is canceled either by you or by the College. This can be as simple as emailing students with instruction. This would be a good place to remind students that their student email is the default method of contact you will be using so they should check it frequently.

Add additional information here

Academic Integrity:

All students are responsible for their own academic work and behavior which supports a learning environment. Dishonesty in the form of plagiarism and cheating may result in disciplinary action such as lower grade, failing grade, administrative withdrawal, program probation, suspension or dismissal. Disruptive behavior which interferes with the rights or learning environment of others can result in administrative withdrawal, suspension, or dismissal. Students have rights to appeal such decisions consistent with rule. See Student Rights and Responsibilities available at:

<http://www.wvncc.edu/uploads/AcademicIntegrityandStudentResponsibilities.pdf>

Add additional information here

Non-Discrimination Statement: West Virginia Northern Community College, pursuant to the requirements of Titles IV, VI, VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, does not discriminate against applicants, employees, or students on the basis of race, color, religion, sex, disability, age, gender, ancestry, marital or parental status or national origin in its employment policies and/or educational programs or activities, including admissions to such. Inquiries concerning this rule should be directed to Chief Human Resource Officer Peggy Carmichael, who is designated coordinator for Title IX and Section 504. Her telephone number is 304-214-8901 and her office is located in Room 125-B, B&O Building, Wheeling campus. Her email address is pcarmichael@wvncc.edu.

Add additional information here

Academic Support Services:

The Academic Support Center (ASC) provides WVNCC students with varied resources for success, including but not limited to: learning strategies instruction, academic coaching, study groups, study partners, mental health referrals, and accessibility services. The ASC can be reached at 304.214.8853 and or visit: asc@wvncc.edu or visit:

<http://www.wvncc.edu/offices-and-services/accessibility-services/575>

Add additional information here

External Assessment for Certification:

This is for courses to which a fee is attached for an external assessment that leads to a credential/certification upon successful completion under Perkins guidelines. This would be a course that is part of an applied program. See your program director for more information.

As a part of this course you have been assessed a fee for an external assessment that may lead to a certification or credential. (Then tell how the tests are scheduled- students schedule on their own, program director sets up a group time, etc.)

Add additional information here

Timeline

Insert a table showing a timeline of activities for the semester.

Click here to add timetable

Additional Information for Students

Click here to enter text.

APPENDIX D
Program Assessment Plan Template

Program Assessment Plan

Program: (Enter Here)

Degree: (Enter Here)

Division: (Enter Here)

West Virginia Northern Community College

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West Virginia Northern Community College Mission Statement

West Virginia Northern Community College's mission is to educate and empower individuals to achieve academic and career goals, leading to a highly skilled, well-rounded, and accomplished workforce which successfully competes and adapts in a global economy.

The College responds to the needs of the region it serves by offering a high-quality learning environment that is accessible, safe, and accommodating while nurturing teamwork and community service.

Division (Enter Here):

Division Name (Enter Here)

Mission Statement (Enter Here)

Program Assessment of Student Learning

Outcomes

Division Mission Statement:

Our mission is to _____.

Associate in _____, _____ Division Program Outcomes:

Upon completion of this program, students will:

[Enter Outcomes Here:](#)

Degree (Enter Here)
Program (Enter Here)

Program Outcomes and Curriculum Mapping

Course	Demonstrate (Enter Text Here)	Demonstrate (Enter Text Here)	Demonstrate (Enter Text Here)	Demonstrate (Enter Text Here)

I: Introduction of Concepts

R: Reinforcement of Concepts

M: Mastery of Concepts

General Education Outcomes and Curriculum Mapping

Course No.	Communicate Effectively in oral and Written Formats	Employ or utilize information access and literacy skills	Demonstrate problem-solving and critical thinking skills	Employ mathematical and science literacy skills

Assessment Plan of Student Learning

Student Learning Outcome Assessment Plan				
Program Outcome 1: (Enter Text Here)				
Student Learning Outcome	Assessment Tool	Benchmark	Timeline/Courses	Person Responsible
Upon program completion, students will be able to				

Add additional program outcomes table if needed.

Student Learning Outcome Assessment Analysis

Student Learning Outcome Assessment Analysis				
Program Outcome 1: (Enter Text Here)				
Student Learning Outcome Upon program completion, students will be able to:	Assessment Tool	Benchmark	Results	Recommendations

Add additional program outcomes table if needed.

Program Learning Outcome Assessment Plan

Program Learning Outcome Assessment Plan				
Program Outcome 1: (Enter Text Here)				
Student Learning Outcome Upon program completion, students will be able to:	Assessment Tool	Benchmark	Timeline/Courses	Person Responsible

Add additional program outcomes table if needed.

APPENDIX E

General Education Core Curriculum Requirements

Associate in Arts Programs

GENERAL EDUCATION CORE REQUIREMENTS

Each A.A. program is required to include a minimum of 41 credit hours in general education coursework, called core requirements, already selected or to be selected from the following: **Humanities**

Required Courses (9 credit hours)	Cr. Hrs.
ENG 101 College Composition I*	3
ENG 102 College Composition II*	3
SPCH 105 Fundamentals of Speech Communication*	3
Plus 6 credit hours required from:	
ART 150 Art Appreciation*	3
ENG 200 American Literature Through the Civil War*	3
ENG 201 American Literature Since the Civil War*	3
ENG 208 Renaissance Drama	3
ENG 210 English Literature Through the Eighteenth Century*	3
ENG 211 English Literature Since the Eighteenth Century*	3
ENG 225 Shakespeare – Comedies	3
ENG 226 Shakespeare – Tragedies/Histories	3
MUS 105 Appreciation of Music*	3
PHIL 200 Introduction to Philosophy	3

Social Science

Required Courses (15 credit hours)	Cr. Hrs.
ECON 104 Principles of Macroeconomics*	3
ECON 105 Principles of Microeconomics*	3
GEOG 205 World Geography	3
HIST 100 World Cultures I*	3
HIST 101 World Cultures II*	3
HIST 110 The United States to 1865*	3
HIST 111 The United States Since 1865*	3
POLS 102 American National Government and Politics*	3
PSYC 105 Introduction to Psychology*	3
PSYC 208 Developmental Psychology	3
SOC 125 Introduction to Sociology*	3
SOC 126 Social Problems*	3
SS 255 The Global Community*	3

Laboratory Sciences/Mathematics (Science/Math hours must total 11 credits) Laboratory Sciences

Select a minimum of 4 credit hours from:	Cr. Hrs.
ASTR 125 Introduction to Astronomy	4
BIO 110 Principles of Biology*	4
BIO 112 Plant Biology*	4
BIO 113 Animal Biology*	4
BIO 117 Microbiology	4
BIO 218 General Ecology	4
CHEM 108 General Chemistry I*	4
CHEM 109 General Chemistry II*	4
GSC 100 Science in the Contemporary World*	4
PHYS 104 General Physics I*	4
PHYS 105 General Physics II*	4

Mathematics

Select a minimum of 3 credit hours from:	Cr. Hrs.
MATH 108 College Algebra*	4
MATH 110 Pre-Calculus Mathematics*	5
MATH 204 Mathematics for Teachers I (K-9)	4
MATH 205 Mathematics for Teachers II (K-9) ¹	4
MATH 210 Introduction to Statistics*	3
MATH 279 Calculus I*	5

The additional 11 credit hours required hours may be chosen from either science OR math.

¹These courses may not transfer to some Associate in Arts baccalaureate programs as an acceptable math core. Students should check with the transfer institution before choosing these courses for their math core requirements.

Remaining academic work is composed of courses relating to specific programs. Courses required for each program are prescribed in sequence within the Academic Programs section in this catalog. *See Core Coursework Transfer Agreement information in General Education section.

Associate in Science Programs

GENERAL EDUCATION CORE REQUIREMENTS

Each A.S. program is required to include a minimum of 36 credit hours in general education courses, called core requirements, already selected or to be selected from the following: **Humanities**

Required Courses (9 credit hours) Cr. Hrs.

ENG 101 College Composition I*	3
ENG 102 College Composition II*	3
SPCH 105 Fundamentals of Speech Communication*	3

Plus 3 credit hours required from:

ART 150 Art Appreciation*	3
ENG 200 American Literature Through the Civil War*	3
ENG 201 American Literature Since the Civil War*	3
ENG 208 Renaissance Drama	3
ENG 210 English Literature Through the Eighteenth Century*	3
ENG 211 English Literature Since the Eighteenth Century*	3
ENG 225 Shakespeare – Comedies	3
ENG 226 Shakespeare – Tragedies/Histories	3
MUS 105 Appreciation of Music*	3
PHIL 200 Introduction to Philosophy	3

Social Science

Required Courses (9 credit hours) Cr. Hrs.

ECON 104 Principles of Macroeconomics*	3
ECON 105 Principles of Microeconomics*	3
GEOG 205 World Geography	3
HIST 100 World Cultures I*	3
HIST 101 World Cultures II*	3
HIST 110 The United States to 1865*	3
HIST 111 The United States Since 1865*	3
POLS 102 American National Government and Politics*	3
PSYC 105 Introduction to Psychology*	3
PSYC 208 Developmental Psychology	3
SOC 125 Introduction to Sociology*	3
SS 255 The Global Community*	3

Laboratory Sciences

(Minimum of 8 credit hours - but at least two must be from the same discipline, that is Biology, Chemistry or Physics)

	Cr. Hrs.
ASTR 125 Introduction to Astronomy	4
BIO 110 Principles of Biology*	4
BIO 112 Plant Biology*	4
BIO 113 Animal Biology*	4
BIO 117 Microbiology	4
BIO 218 General Ecology	4
CHEM 108 General Chemistry I*	4
CHEM 109 General Chemistry II*	4
GSC 100 Science in the Contemporary World*	4
PHYS 104 General Physics I*	4
PHYS 105 General Physics II*	4

Mathematics

Select a minimum of 7 credit hours from: Cr. Hrs.

MATH 108 College Algebra*	4
MATH 110 Pre-Calculus Mathematics*	5
MATH 204 Mathematics for Teachers I (K-9) ¹	4

MATH 205 Mathematics for Teachers II (K-9) ¹	4
MATH 210 Introduction to Statistics *	3
MATH 279 Calculus I*	5

¹These courses may not transfer to some Associate in Arts baccalaureate programs as an acceptable math core. Students should check with the transfer institution before choosing these courses for their math core requirements.

Remaining academic work is composed of courses relating to specific programs. Courses required for each program are prescribed in sequence within the Academic Programs section in this catalog. *See Core Coursework Transfer Agreement information in General Education section.

Associate in Applied Science Programs

GENERAL EDUCATION CORE REQUIREMENTS

Each A.A.S. program is required to include a minimum of 15 credit hours in general education courses, called core requirements, already selected or to be selected from the following: **Humanities**

(minimum of 6 credit hours)	Cr. Hrs.
ENG 101 College Composition I*	3
ENG 102 College Composition II*	3
ENG 115 Technical Writing	3
SPCH 101 Interpersonal Communication	3
SPCH 105 Fundamentals of Speech Communication*	3

Social Science

(minimum of 3 credit hours)	Cr. Hrs.
ECON 104 Principles of Macroeconomics*	3
ECON 105 Principles of Microeconomics*	3
GEOG 205 World Geography	3
HIST 100 World Cultures I *	3
HIST 101 World Cultures II*	3
HIST 110 The United States to 1865*	3
HIST 111 The United States Since 1865*	3
POLS 102 American National Government and Politics*	3
PSYC 105 Introduction to Psychology*	3
PSYC 155 Human Relations	3
PSYC 208 Developmental Psychology	3
SOC 125 Introduction to Sociology*	3
SS 255 The Global Community*	3

Mathematics

(Minimum of 3 credit hours of Math, as specified in program requirements)	Cr. Hrs.
MATH 101 Intermediate Algebra	3
MATH 108 College Algebra*	4
MATH 109 Math of Business & Finance ²	3
MATH 110 Pre-Calculus Mathematics*	5
MATH 113 Technical Mathematics	4
MATH 115 Mathematics for Health Sciences ³	3
MATH 204 Mathematics for Teachers I (K-9) ¹	4
MATH 205 Mathematics for Teachers II (K-9) ¹	4
MATH 210 Introduction to Statistics*	3
MATH 279 Calculus I*	5

¹ These courses may not transfer to some Associate in Arts baccalaureate programs as an acceptable math core. Students should check with the transfer institution before choosing these courses for their math core requirements.

² This course may only be used by students in the following AAS programs to fulfill math core requirements: Business Studies/Accounting, Business Studies/Business Administration, Business Studies/Executive Administration Assistant, CIT/Cyber Security, CIT/Microsoft Applications/Support Desk, CIT/Networking: Microsoft, CIT/Software Engineering, Clinical Medical Assisting, Culinary Arts, Human Services, Welding Technology.

3 This course may only be used by students in the following AAS programs to fulfill math core requirements: Clinical Medical Assistant, Health Information Technology, Radiography, Radiologic Technology/Degree Completion, Surgical Technology.

Laboratory Sciences	Cr. Hrs.
BIO 110 Principles of Biology*	4
BIO 112 Plant Biology*	4
BIO 113 Animal Biology*	4
BIO 114 Anatomy and Physiology I	3
BIO 115 Anatomy and Physiology II	3
BIO 117 Microbiology	4
CHEM 108 General Chemistry I*	4
CHEM 109 General Chemistry II*	4
GSC 100 Science in the Contemporary World*	4
PHYS 104 General Physics I*	4
PHYS 105 General Physics II*	4
PHYS 115 Applied Physics	4

Additional General Education Core courses may be selected from any of the above,

OR: CIT 117 (3 credits) and/or any HPE course (1 credit hour each)

Remaining academic work is composed of courses relating to specific programs. Courses required for each program are prescribed in sequence within the Academic Programs section in this catalog. *See Core Coursework Transfer Agreement information in General Education, this section.

Certificate of Applied Science Programs

GENERAL EDUCATION CORE REQUIREMENTS

Each C.A.S program is required to include a minimum of 6 hours of general education courses, called core requirements, already selected or to be selected from the following: **Humanities**

	Cr. Hrs.
(Minimum of 3 credit hours)	
ENG 101 College Composition I*	3
ENG 102 College Composition II*	3
ENG 115 Technical Writing	3
SPCH 101 Interpersonal Communication	3
SPCH 105 Fundamentals of Speech Communication*	3

Mathematics

(Minimum of 3 credit hours)	Cr. Hrs.
MATH 101 Intermediate Algebra	3
MATH 108 College Algebra*	4
MATH 109 Math of Business & Finance ²	3
MATH 110 Pre-Calculus Mathematics*	5
MATH 113 Technical Mathematics	4
MATH 115 Mathematics for Health Sciences ³	3
MATH 210 Introduction to Statistics*	3
MATH 279 Calculus I*	5

² This course may only be used by students in the following C.A.S programs to fulfill math core requirements: Business Career Studies/Business Office, Business Career Studies/ Small Business Management, CIT/A+ Computer Repair, CIT/Microsoft Applications, Culinary Arts, Medical Assisting/Administrative Medical Assistant, Medical Billing & Coding, Welding Technology.

³ This course may only be used by students in the following C.A.S programs to fulfill math core requirements: Patient Care Technician.

Social Sciences	Cr. Hrs.
ECON 104 Principles of Macroeconomics*	3
ECON 105 Principles of Microeconomics*	3
GEOG 205 World Geography	3
HIST 100 World Cultures I *	3
HIST 101 World Cultures II*	3
HIST 110 The United States to 1865*	3
HIST 111 The United States Since 1865*	3
POLS 102 American National Government and Politics*	3
PSYC 105 Introduction to Psychology*	3
PSYC 155 Human Relations	3
PSYC 208 Developmental Psychology*	3
SOC 125 Introduction to Sociology*	3
SS 255 The Global Community*	3

Laboratory Sciences **Cr. Hrs.**

BIO 110 Principles of Biology*	4
BIO 112 Plant Biology*	4
BIO 113 Animal Biology*	4
BIO 114 Anatomy and Physiology I	3

BIO 115 Anatomy and Physiology II	3
BIO 117 Microbiology	4
CHEM 108 General Chemistry I*	4
CHEM 109 General Chemistry II*	4
GSC 100 Science in the Contemporary World*	4
PHYS 104 General Physics I*	4
PHYS 105 General Physics II*	4
PHYS 115 Applied Physics	4

Additional General Education Core courses may be selected from any of the above OR: CIT 117 and/or any HPE course (1 credit each)

Remaining academic work is composed of courses relating to specific programs. Courses required for each program are prescribed in sequence within the Academic Programs section in this catalog. *See Core Coursework Transfer Agreement information in General Education, this section



APPENDIX F

INSTITUTIONAL EFFECTIVENESS PLAN

[Document subtitle]

Abstract

[Draw your reader in with an engaging abstract. It is typically a short summary of the document.
When you're ready to add your content, just click here and start typing.]

Institutional Effectiveness /Research
[Email address]

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General Education Outcomes and Curriculum Mapping

Communicate Effectively in Oral and written Formats	Employ or utilize information access and literacy skills	Demonstrate problem solving and critical thinking skills	Employ mathematical and science literacy skills	Acquire a cultural, artistic, and global perspective	Demonstrate professional and human relation skills
ENG 101	CIT 117	BIO 218	ASTR 125	ART 150	SPCH 101
ENG 102	HIST 100	CHEM 108	BIO 110	ENG 200	PSYC 105
ENG 115*	HIST 101	CHEM 109	BIO112	ENG 201	PSYC 208
SPCH 105	HIST 110	ECON 104	BIO113	ENG 208	SOC 125
	HIST 111	ECON 105	BIO 117	ENG 210	PSYC 155
	GEOG 205	MATH 204	GSC 100	ENG 211	
	POLS 102	MATH 205	PHYS 115*	ENG 215	
		MATH 210	MATH 108	ENG 225	
		MATH 279	MATH 110	MUS 105	
		PHYS 104	MATH 101	PHIL 200	
		PHYS 105	MATH 115	SS 255	
			MATH 109		

General Education Outcomes Assessment Cycle

Outcome	Year 1 Fall 2017 –Spring 2018		Year 2 Fall 2018 –Spring 2019		Year 3 Fall 2019 –Spring 2020	
Communicate Effectively in oral and written Formats	Fall 2017 ENG 101, SPCH 105 ENG 115	Spring 018	Fall 2018	Spring 2019	Fall 2019	Spring 2020
Employ or utilize information access and literacy skills		CIT 117,HIST 100 HIST 101,HIST 110 HIST 111, GEOG 205,POLS 102				
Demonstrate problem solving and critical thinking skills			BIO 218, CHEM 108, CHEM 109, ECON 104,ECON 105, MATH 204 MATH 205, MATH 210, MATH 279			
Employ mathematical and science literacy skills				ASTR 125, BIO 110 BIO112, BIO113, BIO 114* BIO 115*, BIO 117,GSC 100, PHYS 115*, MATH 108, MATH 110, MATH 101, MATH 115, MATH 109		

Acquire a cultural, artistic, and global perspective					ART 150, ENG 200, ENG 201,ENG 208, ENG 210, ENG 211, ENG 215, ENG 225, MUS 105, PHIL 200, SS 255	
Demonstrate professional and human relation skills						SPCH 101, PSYC 105, PSYC 208, SOC 125,PSYC 155

General Education Outcome: Communicate effectively in oral and written format.

Student Learning Outcomes: Upon completing this course students will be able to

1. Plan and deliver interactive and formal presentations (written and oral) that accomplish the intended goal and meet the needs of the audience.
2. Interpret the sender's message, both verbal and nonverbal, with accuracy.
3. Articulate with accuracy the intended purpose and develop an appropriate introduction or thesis.
4. Use the appropriate organization or logical flow.
5. Demonstrate accurate use of the language, including language development, syntax, mechanics, and varied types of expression.
6. Deliver written and oral message with confidence while conveying sensitivity toward the attitudes and opinions of the sender and receiver, appropriate to the mode and intent of the communication and to the situation.

Rubric

	Performance Level		
Criterion	Does not Meet Expectations	Meets Expectations	Exceeds Expectations
Presentation Delivery	<ul style="list-style-type: none"> • Presentation goal was not accurately stated. • Delivery techniques were 	<ul style="list-style-type: none"> • Presentation goal was articulated. • Delivery techniques were compelling 	<ul style="list-style-type: none"> • Presentation goal was accurately articulated. • Delivery techniques were compelling.
Message interpretation	<ul style="list-style-type: none"> • Most of the verbal and non-verbal messages were missed 	<ul style="list-style-type: none"> • Most of the verbal and non-verbal messages were interpreted and responded with accuracy 	<ul style="list-style-type: none"> • All messages were accurately interpreted and responded.
Purpose	<ul style="list-style-type: none"> • Purpose is stated in the beginning but not referenced in the rest of the presentation 	<ul style="list-style-type: none"> • Purpose is accurately and precisely stated, appropriately repeated. 	<ul style="list-style-type: none"> • Purpose is accurately and precisely stated, appropriately repeated, memorable, and strongly supported.
Organization	<ul style="list-style-type: none"> • Presentation lacked structure • Content was not sequenced 	<ul style="list-style-type: none"> • Presentation had clear structure; thesis is clearly stated in the introduction. • Content is logically sequenced. 	<ul style="list-style-type: none"> • Presentation had clear and deliberate structure; thesis is clearly stated in the introduction.

	<ul style="list-style-type: none"> • Main points are not summarized. 	<ul style="list-style-type: none"> • Main points are summarized signaling the end. 	<ul style="list-style-type: none"> • Content is logically sequenced and relevant. • Main points are summarized signaling the end.
Style/Mechanics	<ul style="list-style-type: none"> • Language was appropriate. • There were grammatical and spelling errors. 	<ul style="list-style-type: none"> • Language was appropriate to the audience and aids the expression of ideas with clarity and fluency. • There were some grammatical errors. 	<ul style="list-style-type: none"> • Language was appropriate to the audience and aids the expression of ideas with clarity and fluency. • Presentation was virtually error-free.
Tone	<ul style="list-style-type: none"> • Presenter lacks confidence • Audience was occasionally engaged • Questions were not accurately responded. 	<ul style="list-style-type: none"> • Messages were delivered/presented with confidence. • Presenter kept the audience engaged through most of the presentation • Presenter responded to audience questions with accuracy. 	<ul style="list-style-type: none"> • Messages were delivered/presented with confidence • Presenter kept the audience engaged throughout the presentation. • Presenter responded to audience questions with accuracy • Presenter was sensitive to attitudes and opinions of the audience

			questions and comments.
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General Education Outcome I: Communicate effectively in oral and written format.				
Student Learning Outcomes	Assessment Tool	Benchmark	Courses/Timeline	Responsible Person/s
<p>After the course completion, students will be able to</p> <ul style="list-style-type: none"> • Articulate the intended purpose of the message and develop an appropriate introduction or thesis. • Use the appropriate organization or logical flow for the message prior to delivery. • Demonstrate clear and accurate use of the language, including language development, syntax, and mechanics. • Plan and deliver interactive and formal presentations (written and oral) that accomplish the intended goals and meet the needs of the audience. • Interpret the sender's message, both verbal and nonverbal, with accuracy. 	Rubric	80% students will score 70 % or above on the Rubric	<p>ENG 101, SPCH 105</p> <p>ENG 115</p> <p>Fall 2017, 2020, 2023</p> <p>Spring 2018, 2021, 2024</p>	<p>John Reho, Crystal Harbert, Charlie Rogerson, Greg Winland, Kathy Herrington</p>

General Education Outcome II: Employ or utilize information access and literacy skills.				
Student Learning Outcomes	Assessment Tool	Benchmark	Courses/Timeline	Responsible Person/s
<p>After the course completion, students will be able to</p> <ul style="list-style-type: none"> • Determine the extent of information needed. • Locate relevant information using academic resources. • Organize information from various sources. • Synthesize the information from various sources. • Evaluate the information. • Utilize the information effectively and responsibly. 	Rubric	80% students will score 70 % or above on the Rubric	CIT 117, HIST 100, HIST 111, POLS 102 Fall 2018, Fall 2021, Fall 2024 HIST 101, HIST 111, GEOG 205 Spring 2018, Spring 2021, Spring 2024	Dave Stoffel, Delilah Ryan, Frank Decaria, Adjunct Faculty

General Education Outcome III: Demonstrate problem solving and critical thinking skills				
Student Learning Outcomes	Assessment Tool	Benchmark	Courses/Timeline	Responsible Person/s
<p>After the course completion, students will be able to</p> <ul style="list-style-type: none"> • Define problem • Identify Strategies to solve the problem • Formulate hypothesis or solution • Evaluate proposed solution • Implement the solution • Evaluate the outcome. 	Rubric	80% students will score 70 % or above on the Rubric	<p>BIO 218, ECON 104, MATH 204, MATH 210 Fall 2018, 2021, 2024 ECON 105, MATH 205, MATH 279 Spring 2019, 2021, 2024 CHEM 108, CHEM 109, PHYS 104, PHYS 105 Summer 2018, 2021, 2024</p>	Ben Fulton, Mary Ann Merz, Mark Goldstein, Hollie Buchanan, Rustem Myuluk

General Education Outcome IV: Employ mathematical and science literacy skills				
Student Learning Outcomes	Assessment Tool	Benchmark	Courses/Timeline	Responsible Person/s
<p>After the course completion, students will be able to</p> <ul style="list-style-type: none"> • explain the information presented in mathematical forms. • convert relevant information into various mathematical forms. • Carry out calculations to solve for unknown. • draw relevant conclusions based on the quantitative analysis of data, while recognizing the limits of the analysis. • make and evaluate important assumptions in estimation, modeling, and data analysis. • expressing quantitative evidence in support of the argument or purpose of the work 	Rubric	80% students will score 70 % or above on the Rubric	PHYS 115*, MATH 108, MATH 110, MATH 101, MATH 115, MATH 109 Fall 2018, Fall 2021, Fall 2024 ASTR 125, BIO 110, BIO112, BIO113, BIO 114* BIO 115*, BIO 117, GSC 100 Spring 2019, 2022, 2025	Rustem Myuluk, Mark Goldstein, Hollie Buchanan, Jennifer Lantz, Jennifer Kriechbaum Pam Sharma, Ben Fulton, Mary Ann Merz

General Education Outcome V: Acquire a cultural, artistic, and global perspective				
Student Learning Outcomes	Assessment Tool	Benchmark	Courses/Timeline	Responsible Person/s
	Rubric	80% students will score 70 % or above on the Rubric	ART 150, ENG 200, ENG 201,ENG 208, ENG 210, ENG 211, ENG 215, ENG 225, MUS 105, PHIL 200, SS 255 Fall 2019, 2022, 2024	Crystal Harbert, Charlie Rogerson, Greg Winland, Adjunct Faculty

General Education Outcome VI: Demonstrate professional and human relation skills				
Student Learning Outcomes	Assessment Tool	Benchmark	Courses/Timeline	Responsible Person/s
•	Rubric	80% students will score 70 % or above on the Rubric	SPCH 101, PSYC 105, PSYC 208, SOC 125,PSYC 155 Spring 200, 2023, 2026	Joyce Britt, Darcey Ferrell, Kathy Herrington, R J Canter, Adjunct Faculty

General Education Outcome: Communicate effectively in oral and written format.

Student Learning Outcomes: Upon completing this course students will be able to

7. Plan and deliver interactive and formal presentations (written and oral) that accomplish the intended goal and meet the needs of the audience.
8. Interpret the sender's message, both verbal and nonverbal, with accuracy.
9. Articulate with accuracy the intended purpose and develop an appropriate introduction or thesis.
10. Use the appropriate organization or logical flow.
11. Demonstrate accurate use of the language, including language development, syntax, mechanics, and varied types of expression.
12. Deliver written and oral message with confidence while conveying sensitivity toward the attitudes and opinions of the sender and receiver, appropriate to the mode and intent of the communication and to the situation.

Rubric

	Performance Level		
Criterion	Does not Meet Expectations	Meets Expectations	Exceeds Expectations
Presentation Delivery	<ul style="list-style-type: none"> • Presentation goal was not accurately stated. • Delivery techniques were 	<ul style="list-style-type: none"> • Presentation goal was articulated. • Delivery techniques were compelling 	<ul style="list-style-type: none"> • Presentation goal was accurately articulated. • Delivery techniques were compelling.
Message interpretation	<ul style="list-style-type: none"> • Most of the verbal and non-verbal messages were missed 	<ul style="list-style-type: none"> • Most of the verbal and non-verbal messages were interpreted and responded with accuracy 	<ul style="list-style-type: none"> • All messages were accurately interpreted and responded.
Purpose	<ul style="list-style-type: none"> • Purpose is stated in the beginning but not referenced in the rest of the presentation 	<ul style="list-style-type: none"> • Purpose is accurately and precisely stated, appropriately repeated. 	<ul style="list-style-type: none"> • Purpose is accurately and precisely stated, appropriately repeated, memorable, and strongly supported.
Organization	<ul style="list-style-type: none"> • Presentation lacked structure • Content was not sequenced 	<ul style="list-style-type: none"> • Presentation had clear structure; thesis is clearly stated in the introduction. • Content is logically sequenced. 	<ul style="list-style-type: none"> • Presentation had clear and deliberate structure; thesis is clearly stated in the introduction.

	<ul style="list-style-type: none"> • Main points are not summarized. 	<ul style="list-style-type: none"> • Main points are summarized signaling the end. 	<ul style="list-style-type: none"> • Content is logically sequenced and relevant. • Main points are summarized signaling the end.
Style/Mechanics	<ul style="list-style-type: none"> • Language was appropriate. • There were grammatical and spelling errors. 	<ul style="list-style-type: none"> • Language was appropriate to the audience and aids the expression of ideas with clarity and fluency. • There were some grammatical errors. 	<ul style="list-style-type: none"> • Language was appropriate to the audience and aids the expression of ideas with clarity and fluency. • Presentation was virtually error-free.
Tone	<ul style="list-style-type: none"> • Presenter lacks confidence • Audience was occasionally engaged • Questions were not accurately responded. 	<ul style="list-style-type: none"> • Messages were delivered/presented with confidence. • Presenter kept the audience engaged through most of the presentation • Presenter responded to audience questions with accuracy. 	<ul style="list-style-type: none"> • Messages were delivered/presented with confidence • Presenter kept the audience engaged throughout the presentation. • Presenter responded to audience questions with accuracy • Presenter was sensitive to attitudes and opinions of the audience

			questions and comments.
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Communicate Effectively in Written and Oral Format Rubric

General Education Outcome: Employ or utilize information access and literacy skills.

Student Learning Outcomes: Upon course completion students will be able to

- Determine the extent of information needed.
- Locate relevant information using academic resources.
- Organize and synthesize information from various sources.
- Evaluate the information
- Utilize the information effectively and responsibly.

Assessment Methods: Direct

Research papers, editorials, speeches, marketing or business plans, PowerPoint presentations, posters, literature reviews, position papers, and argument critiques, discussion forum postings, lab or technical reports, etc..

Assessment Instrument: Rubric.

	Performance Level		
Criterion	Exceeds Expectations	Meets Expectations	Not Acceptable
Scope of Information needed.	<ul style="list-style-type: none"> Scope of the research question or thesis is accurately defined. Key concepts are clearly identified. Information (sources) selected directly relate to concepts or research question. 	<ul style="list-style-type: none"> Defines the scope of the research question or thesis completely. Some of the key concepts are identified Information (sources) selected relate to concepts or research question. 	<ul style="list-style-type: none"> Has difficulty defining the scope of the research question or thesis. Most key concepts are missed. Information (sources) selected do not relate to concepts or research question.
Use of search strategies.	<ul style="list-style-type: none"> Search strategies are well designed. Strategies are appropriate, varied, and effectively used. 	<ul style="list-style-type: none"> Search strategies are adequately used to access relevant information sources. Strategies are appropriate 	<ul style="list-style-type: none"> Information is randomly retrieved, lacks relevance and quality.
Information evaluation	<ul style="list-style-type: none"> Systematically analyzes own and others' assumptions. Carefully evaluates the relevance of contexts when presenting a position. 	<ul style="list-style-type: none"> Identifies own and others' assumptions. Recognizes relevant contexts when presenting a position. 	<ul style="list-style-type: none"> Shows an awareness of assumptions (sometimes labels assertions as assumptions). Identifies some contexts when presenting a position.
Effective use of information	Information from sources is organized and synthesized to fully achieve a specific purpose, with clarity and depth.	Information from sources is organized and synthesized to achieve intended purpose.	The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), and the intended purpose is not achieved.
Ethical use of information	<ul style="list-style-type: none"> All information strategies; citations and references; paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishes between common knowledge and ideas requiring attribution are used. Standards to observe ethical and legal restrictions on the use of published, confidential and/or 	<ul style="list-style-type: none"> Three of the following information strategies; use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution are used. 	<ul style="list-style-type: none"> One of the information strategies is used. No evidence of an understanding of the ethical and/or legal restrictions on the use of published, confidential and/or proprietary information.

	proprietary information are clearly evident.	<ul style="list-style-type: none">• Standards to observe most ethical and legal use of published and/or proprietary information are evident.	
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General Education Outcome: Problem Solving and Critical Thinking Skills

Student Learning Outcomes: Upon course completion students will be able to

- Define problem
- Identify Strategies to solve the problem
- Formulate hypothesis or solution
- Evaluate proposed solution
- Implement the solution
- Evaluate the outcome.

Assessment Methods: Direct

Research papers, marketing or business plans, position papers, discussion forum postings, lab or technical reports, Math or science problems, etc.

Assessment Instrument: Value Rubric designed to assess the problem solving and critical thinking process.

	Performance Level		
Criterion	Exceeds Expectations	Meets Expectations	Not Acceptable
Problem Definition	Demonstrates the ability to construct a clear problem statement with evidence of all relevant contextual factors.	Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors.	Demonstrates a limited ability in identifying a problem statement or related contextual factors.
Strategy/strategies to solve problem	Identifies multiple approaches for solving the problem that apply within a specific context.	Identifies multiple approaches for solving the problem, only some of which apply within a specific context	Identifies one or more approaches for solving the problem that do not apply within a specific context
Proposed solution/hypothesis	Proposes one or more solutions /hypotheses that indicates a comprehension of the problem. Solution/hypotheses are sensitive to contextual factors as well as ethical, logical, and cultural dimensions of the problem.	Proposes one or more solutions / hypotheses that indicates comprehension of the problem. Solutions/hypotheses are sensitive to contextual factors as well as the one of the following: ethical, logical, or cultural dimensions of the problem.	Proposes a solution/hypothesis that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.
Evaluation of proposed solution	Evaluation of solutions includes history of problem, reviews logic/reasoning, feasibility of solution and impacts of solution.	Evaluation of solutions is adequate and contains history of problem, reviews logic/reasoning, feasibility, and impact of solution.	Evaluation of solutions contains cursory, surface level explanation, history of problem, reviews logic/reasoning, and examines the feasibility of solution.
Solution Implementation	Implements the solution in a manner that addresses thoroughly and deeply	Implements the solution in a manner that addresses multiple contextual	Implements the solution in a manner that does not directly address the problem statement.

	multiple contextual factors of the problem.	factors of the problem in a surface manner.	
Evaluation of the outcome	Reviews results relative to the problem defined with thorough, specific considerations of need for further work.	Reviews results relative to the problem defined with some consideration of need for further work.	Reviews results superficially in terms of the problem defined with no consideration of need for further work.

General Education Outcome: Employ mathematical and science literacy skills.

Student Learning Outcomes: Upon course completion students will be able to

- explain the information presented in mathematical forms.
- convert relevant information into various mathematical forms.
- carry out calculations to solve for unknown.
- draw relevant conclusions based on the quantitative analysis of data, while recognizing the limits of the analysis.
- make and evaluate important assumptions in
- estimation, modeling, and data analysis.

Assessment Methods: Direct

Mathematical problems, lab or technical reports, Math or science projects, etc.

Assessment Instrument: Value Rubric designed to assess the quantitative skills.

	Performance Level		
Criterion	Exceeds Expectations	Meets Expectations	Not Acceptable
Interpretation	Provides accurate explanations of information presented in mathematical forms and makes appropriate inference based on the information	Provides explanations of information presented in mathematical forms, inference is somewhat vague.	Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about the what the information means
Representation	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.
Calculation	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented clearly, and concisely.	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations are attempted but are both unsuccessful and are not comprehensive.
Application / Analysis	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from the work	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from the work.	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from the work.
Assumptions	Explicitly describes assumptions and provides rationale for each assumption. Final conclusions is based on the accuracy of the assumptions.	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.	Attempts to describe assumptions.
Communication	Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality.	Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format	Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support.

APPENDIX G

West Virginia Northern Community College Pre-Assessment Proposal Form

Division: Click or tap here to enter text.	Department: Click or tap here to enter text.
Date: Click or tap here to enter text.	Academic Year: Click or tap here to enter text.

Assessment Type:	<input type="checkbox"/> Course	<input type="checkbox"/> Gen Ed	<input type="checkbox"/> Program
Semester:	Choose an item.		
Course and Section being assessed:	Click or tap here to enter text.		
Faculty Members Participating in Assessment:	Click or tap here to enter text.		
Person Responsible for Submitting Report:	Click or tap here to enter text.		
Semester when the Assessment will be conducted:	Click or tap here to enter text.		

General Education Outcome/s being assessed:

Click or tap here to enter text.

Program Outcome/s being assessed:

Click or tap here to enter text.

Course Outcome/s being assessed:

Click or tap here to enter text.

Student Learning Outcome/s being assessed:

Click or tap here to enter text.

Assessment Activities:

Click or tap here to enter text.

Assessment Measurements:

Click or tap here to enter text.

Is Institutional Research or Assessment Committee assistance needed?

Click or tap here to enter text.

APPENDIX H

West Virginia Northern Community College Course Assessment Report Form

Division: Click or tap here to enter text.	Department: Click or tap here to enter text.
Date: Click or tap here to enter text.	Academic Year: Click or tap here to enter text.

Assessment Type:	<input type="checkbox"/> Course	<input type="checkbox"/> Gen Ed	<input type="checkbox"/> Program
Semester:	Choose an item.		
Course/Section/Title being assessed:	Click or tap here to enter text.		
Faculty Members Participating in Assessment:	Click or tap here to enter text.		
Person Responsible for Submitting Report:	Click or tap here to enter text.		

General Education Outcomes

Student Learning Outcomes	Assessment Method/Instrument	Performance Indicator	Results
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Course Outcomes:

Student Learning Outcomes	Assessment Method/Instrument	Performance Indicator	Results
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Recommendations Based on Assessment Results:

Click or tap here to enter text.

Effective Date/Timeline for Changes (if recommended):

Click or tap here to enter text.

If major curriculum changes are necessary, when will the proposal go to the Academic Affairs Committee/Curriculum Committee for review?

Click or tap here to enter text.

Proposed Re-Assessment Date:

Click or tap here to enter text.

APPENDIX I

Assessment Committee

Peer Review: Course Assessment Report

Course Number and Title: Click here to enter text.	Peer Reviewer Name: Click here to enter text.
Course Assessment Report Submitted By: Click here to enter text.	Date of Peer Review: Click here to enter a date.
Date of Assessment Report: Click here to enter a date.	

Reviewer Instructions: Please use the following guidelines to evaluate each course assessment report. Identify the level of development for each of the four components of the report. Select only one level of development for each plan component. Include rationale and comments for appraisal.

Assessment Components	Levels of Development		
	Undeveloped	Developing	Established
<u>Outcomes Assessed:</u> Course outcomes are clearly stated in terms of student learning.	Course outcomes are listed. Choose an item.	Course outcomes are stated in terms of what students will be able to do. Choose an item.	Course outcome are written in terms of what student will be able to do at the completion of the course. Choose an item.
Course outcomes are measurable.		More than 70% course outcomes are not measurable. Choose an item.	Course Outcomes are measurable. Choose an item.
Student Learning Outcomes (SLOs) are written in terms of student learning.	Student Learning Outcomes are listed. Choose an item.	SLOs are listed in terms of what students will be able to do at course completion. Choose an item.	SLOs are clearly stated in terms of student learning. Choose an item.
Student Learning Outcomes are measurable.	Majority of the SLOs are not measurable Choose an item.	SLOs are measurable. Choose an item.	SLOs are measurable. Choose an item.

Student Learning Outcomes are consistent with the course Learning Outcomes.		A relation between the Course Outcome/s and SLOs IS or IS NOT established. Choose an item.	A relation between the Course Outcome/s and SLOs IS clearly established. <input type="checkbox"/> IS Clearly established
General Education Outcomes are clearly stated.	General Education Outcomes are included. Choose an item.	General Education Outcomes are included. Choose an item.	General Education outcomes are clearly stated and written from students' perspective. Choose an item.
Comments:	<u>Evaluator Comments:</u> Click here to enter text.	<u>Evaluator Comments:</u> Click here to enter text.	<u>Evaluator Comments:</u> Click here to enter text.
Assessment Components	Levels of Development		
	Undeveloped	Developing	Established
<u>Assessment Method/Data Collection:</u> Assessment methods are appropriate for assessing stated course learning outcomes.	Assessment methods are not included. <input type="checkbox"/> NOT included	Assessment methods are appropriate for assessing stated learning outcomes. Choose an item.	Assessment methods are appropriate for assessing stated learning outcomes. Choose an item. Learning activities are appropriate for assessing stated learning outcomes. Choose an item.
Multiple Assessment Methods are used.		Assessment methods are limited in scope. (Only indirect assessment methods are used.) <input type="checkbox"/> Limited scope	Multiple assessment methods are used to assess student learning. Choose an item.
Minimum performance standards are defined.	Performance indicators are not defined.	Performance indicators are defined.	Performance indicators are clearly defined.

	<input type="checkbox"/> NOT defined	<input type="checkbox"/> defined	<input type="checkbox"/> clearly defined
Comments:	<u>Evaluator Comments:</u> Click here to enter text.	<u>Evaluator Comments:</u> Click here to enter text.	<u>Evaluator Comments:</u> Click here to enter text.

Assessment Components	Levels of Development		
	Undeveloped	Developing	Established
<u>Assessment Results: Data Summarization and Analysis</u> Analysis includes description of sample used for assessment.	Analysis includes description of sample used. Choose an item.	Analysis includes description of sample used. Choose an item.	Analysis includes description of sample used. Choose an item.
Results provided for each SLO ₂	Analysis of data supporting SLOs. Choose an item.	Analysis of data supporting SLOs. Choose an item.	Analysis of data supporting SLOs. <input type="checkbox"/> Comprehensive analysis
Summary of results address measures described in method of assessment.		All planned activities are not analyzed. Choose an item.	All planned activities are analyzed Choose an item.
Results compared to earlier assessments (if data is available).	Results compared to earlier assessments. Choose an item.	Results compared to earlier assessments. Choose an item.	Results compared to earlier assessments. Choose an item.
Comments:	<u>Evaluator Comments:</u> Click here to enter text.	<u>Evaluator Comments:</u> Click here to enter text.	<u>Evaluator Comments:</u> Click here to enter text.

Assessment Components	Levels of Development		
	Undeveloped	Developing	Established
<u>Recommendations/Action Plan</u> Report includes recommendation(s) for improvement for selected SLOs.	<input type="checkbox"/> No recommendation given or recommendation does not appear to be supported by data.	Recommendation or action plan is identified. Assessment support data provided. Choose an item.	<input type="checkbox"/> Report included recommendation, comprehensive plan, and steps for improving student learning.
Curriculum modifications/plan of action recommended based on results of assessment activities. Data clearly supports recommendations provided.		Data clearly supports recommendations provided. Choose an item.	Data clearly supports recommendations provided. Choose an item.
When available, assessment report builds on previous assessment activities.	When available, assessment report builds on previous assessment activities. Choose an item.	When available, assessment report builds on previous assessment activities. Choose an item.	When available, assessment report builds on previous assessment activities. Choose an item.
There is evidence that data is shared with other faculty (feedback loop evident in recommendation).	There is evidence that data is shared with other faculty. Choose an item.	There is evidence that data is shared with other faculty. Choose an item.	There is evidence that data is shared with other faculty. Choose an item.
Comments:	<u>Evaluator Comments:</u> Click here to enter text.	<u>Evaluator Comments:</u> Click here to enter text.	<u>Evaluator Comments:</u> Click here to enter text.

APPENDIX J
CTCS PROCEDURAL RULE

135CSR10
TITLE 135
PROCEDURAL RULE
WEST VIRGINIA COUNCIL FOR COMMUNITY AND TECHNICAL
COLLEGE EDUCATION
SERIES 10
POLICY REGARDING PROGRAM REVIEW

§135-10-1. General.

certificate or degree.

1.1. Scope. -- This rule delineates the responsibilities of the institutional governing boards and the Council for Community and Technical College Education in the review of existing academic programs.

1.2. Authority. -- W. Va. Code §18B-2B-6, 18B-1-3(h)(2).

1.3. Filing Date. -- August 26, 2005.

1.4. Effective Date -- September 30, 2005.

§135-10-2. Basis of Program Review Process.

2.1. W. Va. Code §18B-2B-6 and 18B-2A-4 delineate responsibilities for the review of academic programs. Each institutional governing board has the responsibility to review at least every five years all programs offered at the institution(s) of higher education under its jurisdiction and in the review to address the viability, adequacy, necessity, and consistency with mission of the programs to the institutional master plan, the institutional compact, and the education and workforce needs

of the responsibility district. Additionally, each governing board as part of the review is to require the institution(s) under its jurisdiction to conduct periodic studies of graduates and their employers to determine placement practices and the effectiveness of the education experience. The Council for Community and Technical College Education has the responsibility for review of academic degree programs, including the use of institutional missions as a template to assure the appropriateness of existing programs and the authority to implement needed changes.

2.2. For the purpose of this document, a "program" is defined as curriculum or course of study in a discipline specialty that leads to a

§135-10-3. Assumptions Used in Developing the Review Process.

3.1. A rational and comprehensive program review process requires differentiation among levels of degrees. The process, criteria, and standards for associate degree programs will differ significantly from those applied to graduate programs.

3.2. The program review process must be accomplished within the limits of available staff and resources.

3.3. A continuous auditing process allowing for early identification of programs that need particular scrutiny is required to permit changes to be anticipated, appropriate intervention to take place, and corrective action to be accomplished within normal institutional planning efforts.

3.4. A readily accessible computerized data base should be available to support the program review process.

§135-10-4. Program Review Levels.

4.1. The program review process Will provide for a review and evaluation of all programs leading to a certificate or degree at the institution. The institutional governing board will constitute a committee or committees to review appropriate wrograms during a given year. The institution will draft, in accord with the appropriate governing boards' guidelines, a self-study. The governing board will report to the Chancellor, by May 31, the results of the program reviews conducted each academic year. The Council

for Community and Technical College Education, through its staff or other appropriate entities, shall review annually the program review actions reported by each institution. The Council may modify any institutional action consistent with its authority for review of academic programs.

4.1.1. Program Review by the Institutional Board of Governors - The purpose of the appropriate Board review, conducted on a regular five-year cycle, will be to conduct an in-depth evaluation of the viability of, adequacy of, necessity for each academic program, consistent with the mission of the institution. Comprehensive institutional self-studies conducted in compliance with accreditation or institutional processes and completed within the previous 60 months may be used to provide the base line data for the review, with any necessary updating of factual information or interim reports to the accrediting body.

Programs that are accredited by specialized accrediting or approving agencies (for disciplines for which such agencies exist) recognized by the Federal Government and/or the Council on Higher Education Accreditation shall be considered to have met the minimum requirements of the review process with respect to adequacy. For programs so accredited or approved, institutions shall submit: the comprehensive institutional self-study conducted in compliance with the accreditation or approval process, a copy of the letter containing the conferral of accreditation or approval and a documented statement from the chief academic officer regarding program consistency with mission, viability and necessity. In preparing the institutional self-study, each institution will utilize a collaborative process which includes faculty, students and administrators.

4.1.2. Program Review by the Council - The Council has the responsibility for review of academic programs including the use of institutional missions as a template to assess the appropriateness of existing programs and the authority to implement needed changes. The reports on actions resulting from program review at each institution shall be reviewed by the staff of the Council. The review will focus on the appropriateness of the institutional action, particularly as the actions relate to adequacy, viability, necessity and consistency with institutional mission for each program. The Council staff may request a copy of the self-study or other supporting materials, if deemed essential. If the Council staff concludes that the

institutional program review action should be modified, the staff shall consult with the president or designee to reach consensus on the appropriate steps. Should a consensus and agreement not be reached, the matter would be referred to the Council for resolution.

4.1.3. Institutional personnel, external consultants, and the staff of the appropriate Board of Governors will be involved in establishing the criteria, standards, and process of evaluation, and in interpreting the information resulting from the review. It is the responsibility of the institution to assure that the program review process is carried out objectively and that persons external to the academic unit in which the program is housed and/or external to the institution participate in the review. To ensure that each program is reviewed at least once every five years, consistent with statutory requirements, the appropriate Board of Governors will select approximately 20 percent of all programs for review each year. For each program identified for review, the institution will develop a self-study statement addressing the following items.

4.1.3.1. Viability - Viability is tested by an analysis of unit cost factors, sustaining a critical mass, and relative productivity. Based upon past trends in enrollment, patterns of graduates, and the best predictive data available, the institution shall assess the program's past ability and future prospects to attract students and sustain a viable, cost-effective program.

4.1.3.2. Adequacy - The institution shall assess the quality of the program. A valuable (but not the sole) criterion for determining the program's adequacy is accreditation by a specialized accrediting or approving agency recognized by the Federal Government or the Council for Higher Education Accreditation. The institution shall evaluate the preparation and performance of faculty and students, and the adequacy of facilities.

4.1.3.3. Necessity - The dimensions of necessity include whether the program is necessary for the institution's service region, and whether the program is needed by society (as indicated by current employment opportunities, evidence of future need, rate of placement of the programs'

graduates). Whether the needs of West Virginia justify the duplication of programs in several geographic service regions shall also be addressed.

4.1.3.4. Consistency With Mission - The program shall be a component of, and appropriately contribute to, the fulfillment of the institutional and system missions. The review should indicate the centrality of the program to the institution, explain how the program complements other programs offered, and state how the program draws upon or supports other programs. Both institutional aspects of the program should be addressed. The effects (positive or negative) that discontinuance of the program might have upon the institution's ability to accomplish its mission should be stated.

4.1.4. Special Program Review - Either the Council or the appropriate Board of Governors may request at any time that special program reviews be conducted for a given purpose. Formal strategies for conducting such reviews will be developed, consistent with the purpose of the review.

§135-10-5. Possible Outcomes.

5.1. Institutional Recommendation - The appropriate Board of Governors' five-year cycle of program review will result in a recommendation by the institution for action relative to each program under review. The institution is clearly obligated to recommend continuation or discontinuation for each program reviewed. If recommending continuation, the institution should state what it intends:

5.1.1. Continuation of the program at the current level of activity, with or without specific action;

5.1.2. Continuation of the program at a reduced level of activity (e.g., reducing the range of optional tracks) or other corrective action.

5.1.3. Identification of the program for further development; or

5.1.4. Development of a cooperative program with another institution, or sharing of courses, facilities, faculty, and the like.

5.1.5. If it recommends discontinuance of the program, then the provisions of Council policy on approval and discontinuance of academic programs will apply.

5.1.6. For each program, the institution will provide a brief rationale for the observations, evaluation, and recommendation. These should include concerns and achievements of the program. The institution will also make all supporting documentation available to the Council upon request.

5.2. Committee Recommendation - The appropriate Institutional Program Review Committee will develop a recommendation for action and present it to the institutional Board of Governors for action and referral to the Council.

5.2.1. The committee may make recommendations that go beyond those also. The committee may request additional information and may recommend continuance on a provisional basis and request progress reports.

5.3. Appeals Committee and the Appeals Process - Any disagreement between a final recommendation of the Institutional Program Review Committee and the recommendation of the academic unit may be appealed to an institutional Program Review Appeals Committee.
Committee.

APPENDIX K

FIVE YEAR PROGRAM CYCLE REVIEW



INSTITUTIONAL EFFECTIVENESS PLAN

Institutional Effectiveness /Research

WVNCC General Education Outcome Assessment Plan

Division/Program	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Health Sciences						
• Health and Physical Education						
• Health Information Technology (AAS)			☒			
• Medical Assisting CAS		☒				
• Medical Assisting AAS		☒				
• Nursing (AAS)			☒			
• Patient Care Technology (CAS) Post Audit	☒		☒			
• Radiography (AAS)	☒					
• Radiological Technology (AAS) Degree Completion	☒					
• Surgical Technology						
Applied Technology						
• Appliance Repair						
• Chemical Operator Technology (AAS) Post Audit				☒		

• Industrial Maintenance Technology (CAS)	<input checked="" type="checkbox"/>					
• Mechatronics		<input checked="" type="checkbox"/>				
• Petroleum Technology (CAS) Post Audit		<input checked="" type="checkbox"/>				
• Petroleum Technology (AAS) Post Audit		<input checked="" type="checkbox"/>				
• Refrigeration, Air Conditioning, and Heating Technology (AAS)	<input checked="" type="checkbox"/>					
• Welding Technology (AAS) Post Audit			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Business and Public Services						
• Business Career Studies (CAS)			<input checked="" type="checkbox"/>			
• Business Career Studies (AAS)			<input checked="" type="checkbox"/>			
• Computer Information Technology (CAS)			<input checked="" type="checkbox"/>			
• Computer Information Technology (AAS)			<input checked="" type="checkbox"/>			
• Criminal Justice (AAS)				<input checked="" type="checkbox"/>		
• Culinary Arts (CAS)		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
• Culinary Arts (AAS)				<input checked="" type="checkbox"/>		

• Paralegal CAS		<input checked="" type="checkbox"/>				
• Paralegal AAS		<input checked="" type="checkbox"/>				
Liberal Arts, Communication and Social Sciences						
• Associate in Arts (AA)				<input checked="" type="checkbox"/>		
• Associate in Science (AS)				<input checked="" type="checkbox"/>		
• Early Childhood Care and Education						
• Human Services AAS				<input checked="" type="checkbox"/>		
Board of Governors						
• Board of Governors (AAS)				<input checked="" type="checkbox"/>		

APPENDIX L

CTCS Program Review MEDICAL BILLING AND CODING SPECIALIST, CAS PROGRAM REVIEW 2012-2017

I. Name and degree level of program

MEDICAL BILLING AND CODING SPECIALIST, CAS

II. Significant Findings

YEAR	# TESTED	PASS	FAIL	PASS RATE
2013	25	18	7	72.00%
2014	32	26	6	81.25%
2015	31	19	12	61.29%
2016	25	16	9	64.00%
2017	20	12	8	60.00%
	133	91	42	68.42%

III. Program Improvement

- 2014-2015 Transitioned 100% from ICD-9-CM coding to ICD-10-CM to correlate to mandated implementation of ICD-10-CM October 1, 2015
- 2016 Addition of SimChart – electronic office management system – for medical records, billing, and coding processes

IV. Deficiencies from Previous Review

Prior review was the initial 3-year audit and no deficiencies were yet identified in that report. However, over the last five years, annual assessments have identified several deficient areas which were corrected. These include, as noted above, the requirement to implement ICD-10-CM coding and the need to provide students with application skills in the use of an electronic office management system. As noted in *Program Improvement*, each of these deficiencies was addressed.

V. Trend Data

Fall 2013		Fall 2014		Fall 2015		Fall 2016		Fall 2017		Total	Total
HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
47	34.27	46	33.13	43	28.00	32	21.60	31	25.00	199	142.00

HEADCOUNT AND FTE

GRADUATES

2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
26	19	28	21	19	113

VI. Assessment Model

Assessment in the Medical Billing and Coding, CAS program is multifaceted.

- Course Assessment occurs in the form of cognitive testing with supplemental application exercises, for example, in medical billing and coding and the use of the electronic health record. Students complete a combination of written exams, assignments, and medical billing case studies.
- Program Assessment incorporates analysis of the course assessment overall results and the results of the national certification examination – Certified Billing and Coding Specialist (CBCS/NHA) – taken prior to graduation.
- Program Director assesses individual courses on a rotating basis each semester as set by WVNCC Assessment policies. Annual review is completed to determine whether course outcomes and student learning objectives were met based on coursework as well as the results of the CBCS[NHA] examination. NHA certification results provide the Program Director with detailed information on subject areas with overall scoring data. Analysis of all the data on an annual basis assists the Program Director and faculty members in revising curriculum to improve upon any identified weak areas.

VII. Placement Data

PLACEMENT

	2013 Graduates	2014 Graduates	2015 Graduates	2016 Graduates	2017 Graduates	Total
Working in major field	6	4	4	0	2	16
Working in another field	2	4	9	2	2	19
Pursuing further education	12	2	4	9	3	30
Unknown	6	9	11	10	12	48
	26	19	28	21	19	113

VIII. Recommendations and Approval

-Final recommendations approved by governing board selecting one:

- *Continue program at current level BOG meeting 4/19/2018*

MEDICAL BILLING AND CODING SPECIALIST, CAS

First Year - Fall Semester			
AHS	102	Electronic Health Records	1
AHS	103	Medical Terminology	1
AHS	108	Disease Process Applications	3
BIO	114	Anatomy & Physiology I	3
ENG	101	College Composition I	3
MAS	125	Basic Diagnostic and Procedural Coding	2
MAS	153	Medical Insurance and Reimbursement Methodologies	2
			15
First Year - Spring Semester			
CIT	117	Microsoft Applications	3
MATH	109	Math of Business and Finance	3
BIO	115	Anatomy and Physiology II	3
AHS	110	Medical Legal / Ethical Issues	1
MAS	151	Medical Financial management	2
MAS	155	Medical Billing and Coding Applications	3
			15
			TOTAL HOURS 30
A minimum grade of a "C" is required in all courses to remain in the program and graduate.			

APPENDIX M

West Virginia Northern Community College MULTI-YEAR PROCESS FOR CURRICULUM EVALUATION

Effective Date: September 27, 2001

Date Approved by WVNCC Board of Governors: September 27, 2001

Authority Reference: WV Code 18B-1-6; 18B-1B-4; 18B-2A-4; HEPC, Title 133, Series 10

Replaces previous policy dated: WVNCC Policy No. 5.4.2 effective May 21, 1998,
"Institutional Program Review"

WVNCC General Education Outcome Assessment Plan

RULE

All curricula shall be periodically evaluated by an external panel of curriculum consultants consisting of (a) a minimum of two professionals in the field or from another institution chosen for their knowledge and expertise, at least one of whom shall be employed outside of the education field; (b) a faculty member from another program within the institution.

1. A written evaluation report by the panel shall be submitted to the faculty unit, the Academic Director and the Dean of Academic Affairs.
2. A final report to the President on the formal evaluation shall consist of (a) self-study report prepared prior to the visit, (b) the evaluation panel report, and (c) the faculty unit's response to the evaluation report.
3. The final report shall be reviewed with the Institutional Governing Board. An institutional recommendation from the Board regarding the program shall be forwarded by the President to the Chancellor.

Formal Evaluation Procedures

A. Internal Evaluation Report - Two months prior to the evaluation visit, the appropriate program director and/or academic center director, in conjunction with faculty assigned to the curriculum, shall review program objectives and outcomes and request relevant data from Career Services and Institutional Research and any other data source for the purpose of preparing a critical self study report.

1. The self-study should include the following elements: stated objectives, curriculum structure, degree requirements, faculty vitae, current and projected enrollments, resources and facilities, student achievement and graduate success.

Multi-Year Process for Curriculum Evaluation

2. In its preparation, the program faculty should consult the Checklist for Self-Study and Data Submission Form provided by the Office of the Dean of Academic Affairs.

3. The critical section of the self-study should outline briefly the faculty unit's perception of the strengths and weaknesses of the curriculum and new directions under consideration.

4. A file of those documents relating to the curriculum shall be prepared which may include but is not limited to the following: course syllabi, final examination copies, budget information, the original curriculum proposal (or previous formal evaluation reports); and institutional research documents such as graduate follow-up studies, attrition/persistence reports, standardized test results and student profiles. Additionally, any documentation relating to quality indicators, such as logs, student letters, faculty exchange may be cited.

B. The Evaluation Panel - The purpose of the visiting panel is to provide consultation to the faculty rather than merely a critique. The panel shall be chosen by the Dean of Academic Affairs in consultation with the Academic Director. The faculty unit shall suggest the names of individuals they believe are qualified to evaluate the curriculum. The College representative on the panel shall be appointed by the Dean of Academic Affairs with the approval of the program core faculty.

1. The panel shall receive the Self-Study report at least one week prior to the scheduled visit.

2. During the visit, the College faculty member on the panel shall be relieved of all other duties. Class coverage shall be arranged.
 3. The consulting team will convene on the morning of the scheduled visit for a meeting with the program faculty and administrators in order to review the visit agenda.
 4. Specific arrangements shall be made by the Academic Director for the team members to meet with students and with members of the program's Advisory Committee, if possible.
- C. The Visit - The visit shall last for approximately a day and half day and shall include interviews with faculty, students, support staff, and administrators related to the curriculum as well as examination of pertinent materials and inspection of facilities and equipment. Classrooms and laboratories may be visited. The panel shall discuss its findings with the faculty on the second day. The evaluation report shall be submitted within one week of the visit by the lead member of the panel.
- D. The Evaluation Report - The report shall summarize the panel's findings in three main sections; strengths, weaknesses, suggested new directions. Following are some of the questions to be addressed:
1. Is the need for the curriculum justified? Is it clearly related to the College mission?
 2. Are the curriculum objectives valid? Are the objectives clearly articulated and understood by faculty and students in the program?
 3. Is the curriculum content current? Are proposed curriculum directions appropriate considering the needs of students and the field for which they are being trained? Do the courses relate well? Is there an integrated basic skills component?
 4. What are the students' perceptions of the overall quality of instruction? Of their needs satisfaction? Is there evidence of good rapport with faculty?
 5. What conclusions may be drawn about the persistence/attrition and graduation data?
 6. Are graduates being employed in the field or successfully transferring for higher degree study?
 7. What are the professional aims of the faculty, both full time and part time? Is there evidence of academic vitality?
 8. Does the program enjoy sufficient support from the administration and other support areas (e.g., library)?
 9. Are sufficient resources available to support the program? Are existing resources and facilities appropriately and well used?
 10. Are there any obstacles to the continuation of the program?
- E. Response to the Evaluation - The faculty unit shall meet to consider the panel's findings following the visit and shall prepare a written response to the evaluation report within two weeks. This response may express agreement or disagreement with the report recommendations. It should be a summary of the value of the experience but should not attempt to provide further detailed documentation.

Evaluation Scheduling

1. Normally, evaluations shall be scheduled every five years. Periodic reports may be required, and in some cases, follow-up reviews may be scheduled in a shorter time frame. The rotation schedule shall be published by the Dean of Academic Affairs Office.
2. During initial preparation for the evaluation, if the faculty unit discovers major

weaknesses to be corrected, they may request delay of the scheduled visit with provision for another time.

3. Those curricula which undergo other types of evaluation by outside agencies for accreditation may be excluded from the list.

4. In cases involving a small program with less than three core faculty members, the evaluation may be shortened to one day with an evaluation team membership of two professionals.

5. This process shall be examined for possible amendment following five program evaluations in which it is implemented.

APPENDIX N

West Virginia Northern Community College

Yearly program assessment

PROGRAM BEING ASSESSED **(Radiography A.A.S)** YEAR **(2017-2018)**

PERSON RESPONSIBLE **(Misty Kahl)**

Email: (mkahl@wvncc.edu)

I. ENROLLMENT INFORMATION

A. Program Name: Radiography A.A.S.

(FT&PT) # Students (Current Year): **Fall 2017 = 32 / Spring 2018 = 29**

(FT&PT) # Students (Past Year): **Fall 2016 = 31 / Spring 2017 = 31**

% Enrollment Change: **Fall = 3% decrease / Spring = 10% increase**

B. Additional Program Name: N/A

(FT&PT) # Students (Current Year):

(FT&PT) # Students (Past Year):

% Enrollment Change:

C. Additional Program Name: N/A

(FT&PT) # Students (Current Year):

(FT&PT) # Students (Past Year):

% Enrollment Change:

(Percent enrollment change is calculated by dividing increase or decrease by past year's #)

% Enrollment Change:

(Percent enrollment change is calculated by dividing increase or decrease by past year's #)

COMMENT:

D. Average Faculty/Student Ratios:

Lecture (Fall 2017 / Fall 2016):	6.99:1 / 7.87:1	Lab: 10:1
Lecture (Spring 2018 / Spring 2017):	5.62:1 / 7.62:1	Lab: 10:1

COMMENT:

II. FACULTY INFORMATION *(For program instructors)*

A. Please identify program and list: **Radiography A.A.S.**
Number of Full Time (Current Year): **2**

Number of Part Time (Current Year): **2**

B. Please identify program and list: **N/A**
Number of Full Time (Past Year):

Number of Part Time (Past Year):

NOTE: Reporting Of Professional Development *(Faculty Professional Development Form)* Must Be Submitted with this Annual Report for All Current Faculty (Full and Part-Time).

C. Number of Technical Faculty with Industry Certification: (IF APPLICABLE) **N/A**

Number of Technical Faculty Eligible for Industry Certification: : (IF APPLICABLE) **N/A**

III. PROGRAM DIRECTOR: Name and Level: **Misty Kahl, M.S., R.T.(R)**

A. Has there been a change in Program Director since the last report? **No**

B. Has there been a change in Institutional Presidency since the last report

IV. PLEASE INCLUDE ANY CHANGES INFORMATION ON TO THE PROGRAM DURING THE PAST YEAR: (YEAR ONE PLEASE INDICATE IF AREA IS ADEQUATE and COMPREHENSIVE FOR YOUR PROGRAM)

- A. Facility: Yes
- B. Resources: Yes
- C. Equipment: Yes
- C. Budget: Yes
- D. Course Titles/MCG'S: Yes
- E. *Course Assessments*: Yes
- F. Support Staff: Yes
- G. Mission and Goals of the Program and/or College: Yes
- H. Institution and/or Program Accreditation and State Approvals:
- I. Student Services: Yes
- J. Program Additions: Yes
- K. Any Other Category of Change Which Affects the Program:

v. SUBMITTED BY: **Misty Kahl, M.S., R.T.(R)**

DATE: **August 1, 2018**

VI. MUST BE SUBMITTED WITH THIS REPORT: (see pgs. 7-10)

A. . Most current Assessments that have been completed. (list the ones turned in to assessment committee)

Semester	Program Outcome/s	Course/s	Result	Recommendations
Fall 2017		RAD 100		

Fall 2017		RAD 120		
Spring 2018		RAD 260		

- B. Faculty Professional Development (for each Faculty) (see pgs. 4-6)
- F. Minutes from **at least 1** of the past year's Advisory Committee Meetings (dated with list of attendees and their titles): <http://www.wvncc.edu/programs-of-study/advisory-committee-meeting-minutes/6263>
- G. Curriculum changes made to program in the past year(Brief narrative) **N/A**
- F. Updated "MASTER COURSE GUIDES" (if there have been any changes to curriculum) **N/A**
- G. Most current results of any graduate and/or employer surveys completed. **Please provide actual data, not just blank forms.** (see end of report for summaries). (see pgs. 11-13)
- H. Any other materials which are needed to explain changes as reported in Part IV of this report

West Virginia Northern Community College
Faculty professional development

NAME OF FACULTY: Misty D. Kahl, M.S., R.T.(R)

RANK: Radiography Program Director / Assistant Professor

YEARS AT NORTHERN: 7

PROFESSIONAL DEVELOPMENT COMPLETED THIS YEAR:

- Faculty Enrichment Day (Faculty Return Week); Various workshop/sessions regarding assessment 8/24/2017
- Professional Development Day; Assessment 9/29/2017
- WVSRT (West Virginia Society of Radiologic Technologists) 65th Annual Conference 10/26/17-10/28/17
- Faculty Training for Schedule Builder 11/2/17
- ASRT Directed Reading 11/21/17
- Trajecsyst Corporation Conference Call & Web Tour; New System for Clinical Attendance Tracking, Evaluation, and Competencies 2/5/2018
- ASRT Directed Readings 2/19/18
- Web Ex Rad Review Training 3/7/18
- WVNCC Spring Open House 3/24/2018
- WVNCC Assessment Workshop / Presenter 3/30/18
- Kettering ARRT (American Registry of Radiologic Technologists) Registry Review Seminar 4/26/18-4/27/18 = 13 CEUs

West Virginia Northern Community College
Faculty professional development

NAME OF FACULTY: Melissa Stephens, B.A., R.T.(R)

RANK: Radiography Program Clinical Coordinator / Instructor

YEARS AT NORTHERN: 7

PROFESSIONAL DEVELOPMENT COMPLETED THIS YEAR:

- Faculty Enrichment Day (Faculty Return Week); Various workshop/sessions regarding assessment 8/24/2017
- Professional Development Day; Assessment 9/29/2017
- WVSRT (West Virginia Society of Radiologic Technologists) 65th Annual Conference 10/26/17-10/28/17
- Trajecsyst Corporation Conference Call & Web Tour; New System for Clinical Attendance Tracking, Evaluation, and Competencies 2/5/2018
- WVNCC Spring Open House 3/24/2018
- Kettering ARRT (American Registry of Radiologic Technologists) Registry Review Seminar 4/26/18-4/27/18 = 13 CEUs
- Certified Surgical Technologist (CST) Examination Proctor 5/9/18

West Virginia Northern Community College

Faculty professional development

NAME OF FACULTY: Tonya Trigg, R.T.(R)

RANK: Radiography Program Adjunct Clinical Instructor

YEARS AT NORTHERN: 4

PROFESSIONAL DEVELOPMENT COMPLETED THIS YEAR:

- Kettering ARRT (American Registry of Radiologic Technologists) Registry Review Seminar
4/26/18-4/27/18 = 13 CEUs

West Virginia Northern Community College

Faculty professional development

NAME OF FACULTY: Molly Dutton, A.S., R.T.(R)

RANK: Radiography Program Adjunct Clinical Instructor

WVNCC General Education Outcome Assessment Plan

YEARS AT NORTHERN: 1

PROFESSIONAL DEVELOPMENT COMPLETED THIS YEAR:

- E-Rad Imaging Radiology CE Courses 8/26/17
- Kettering ARRT (American Registry of Radiologic Technologists) Registry Review Seminar 4/26/18-4/27/18 = 13 CEUs

West Virginia Northern Community College
Course Assessment Report Form

Division: Health Sciences	Department: Radiography Program
Date: 1/22/18	Academic Year: 2017-2018

Assessment Type:	<input checked="" type="checkbox"/> Course	<input type="checkbox"/> Gen Ed	<input type="checkbox"/> Program
Semester:	Fall		
Course/Section/Title being assessed:	RAD 100-001 / Introduction to Radiography		
Faculty Members Participating in Assessment:	Misty Kahl		
Person Responsible for Submitting Report:	Misty Kahl		

General Education Outcomes (*Communicate effectively in oral & written formats).

Student Learning Outcomes	Assessment Method/Instrument	Performance Indicator	Results
#37 – Explain how a person's cultural beliefs toward illness & health affect his or her health status.	Handout describing Culture Group/ Language, Belief Practices, Nutritional Preferences, Communication Awareness, & Patient Care/Handling of Death will be	The overall class average on the WS this semester will be higher than the class average on the WS given in the Fall 2016 Semester course. In 2016, 17	The overall class average on the WS this semester was 100.66%, which reflects a 1.86% increase in the OA class average on the WS in Fall 2016 (which was 98.8%).

	distributed & discussed in class. A graded worksheet (WS) will then be given to the class.	students were enrolled in the course; in 2017, 16 students were enrolled.	
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Course Outcomes: (*Recognize the importance of cultural diversity, Maslow's Hierarchy, & the Grieving Process as they relate to patient interaction.)

Student Learning Outcomes	Assessment Method/Instrument	Performance Indicator	Results
#37 – Explain how a person's cultural beliefs toward illness & health affect his or her health status	Handout describing Culture Group/ Language, Belief Practices, Nutritional Preferences, Communication Awareness, & Patient Care/Handling of Death will be distributed & discussed in class. A graded worksheet (WS) will then be given to the class.	The overall class average on the WS will be 95% or above.	The overall class average on the WS was 100.66%.
#39 – Differentiate between Culture & Ethnicity.	A question addressing Culture & Ethnicity will be included on the final exam for the course.	At least 95% of the students will answer the final exam question correctly.	100% of students answered the question correctly.
#45 – Identify the 5 levels of Maslow's Hierarchy & how it affects patient interaction.	A graded "Assigned Reading" on Maslow's Hierarchy will be given to the class.	The overall class average on the graded "Assigned Reading" will be 95% or above.	The overall class average on the assignment was 101.66%

Recommendations Based on Assessment Results: A detailed discussion of the "Cultural Diversity" Handout will be continued next year in "Introduction to Radiography", followed by a graded worksheet. Revisions may be made to the handout if necessary to keep information current. The addition of the "Assigned Reading" has helped to reinforce knowledge of the Student

Learning Outcome regarding Maslow's Hierarchy, so this will be continued, as well. The grades on these assignments will continue to be monitored.

Effective Date/Timeline for Changes (if recommended): N/A

If major curriculum changes are necessary, when will the proposal go to the Academic Affairs Committee/Curriculum Committee for review? N/A

Proposed Re-Assessment Date: Fall 2020

West Virginia Northern Community College Course Assessment Report Form

Division: Health Science	Department: Radiography
Date: 8-1-18	Academic Year: 2017-18

Assessment Type:	<input checked="" type="checkbox"/> Course	<input type="checkbox"/> Gen Ed	<input type="checkbox"/> Program
Semester:	Fall		
Course/Section/Title being assessed:	Radiographic Procedures I (RAD 120-001)		
Faculty Members Participating in Assessment:	Melissa J. Stephens, B.A., R.T.(R)		

Person Responsible for Submitting Report:	Melissa J. Stephens, B.A., R.T.(R)
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General Education Outcomes

Student Learning Outcomes	Assessment Method/Instrument	Performance Indicator	Results
Communicate effectively in oral & written formats.	Positioning /Clinical Terminology & Abbreviations Quiz Chpt. 1 Test (Preliminary Steps in Radiography) Chpt. 3 Test (General Anatomy & Radiographic Positioning Terminology)	Overall Class avg. 95% or higher	Quiz - 99.53% Chpt. 1 Test – 95.86% Chpt. 3 Test – 94.71%

Course Outcomes: Have a reinforced understanding of entry level examinations, patient movement, and exam positioning.

Student Learning Outcomes	Assessment Method/Instrument	Performance Indicator	Results
Describe standard positioning terms.	Positioning /Clinical Terminology & Abbreviations Quiz Chpt. 1 Test (Preliminary Steps in Radiography) Chpt. 3 Test (General Anatomy & Radiographic Positioning Terminology)	Overall Class avg. 95% or higher	Quiz - 99.53% Chpt. 1 Test – 95.86% Chpt. 3 Test – 94.71%

Recommendations Based on Assessment Results:

Continue providing this information along with testing & practicing the skills taught on a regular basis in preparation for upcoming clinical rotations. Continue to stress the importance of knowing the building blocks of the profession as they move forward in training.

Effective Date/Timeline for Changes (if recommended):

NA

If major curriculum changes are necessary, when will the proposal go to the Academic Affairs Committee/Curriculum Committee for review?

NA

Proposed Re-Assessment Date:

NA

SUMMARY OF EMPLOYER SURVEYS BEGINNING IN 2013*

Surveys are sent out annually in January to employers of graduates of West Virginia Northern Community College (WVNCC). The first class graduated from WVNCC in 2013. Two out of eight surveys were returned for the Class of 2013; four out of 11 surveys were returned for the Class of 2014; six out of eight were returned for the Class of 2015, nine out of fifteen were returned for the Class of 2016.

The employers were questions about five items. They were asked to rate the graduates' abilities using a scale of 1-5 with 5 being "excellent" & 1 being "poor/unsure". The responses are as follows:

<u>QUESTION TOPIC</u>	<u>CLASS OF...</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>Ave.</u>
1. Pt. care skills & professionalism.		4.78	4.83	4.75	4.50	4.71
2. Communication skills & cooperation.		4.89	4.50	4.75	5.0	4.79
3. Critical thinking & problem-solving skills.		4.78	4.17	4.75	3.50	4.30
4. Functionability & reliability.		4.89	4.67	5.0	4.75	4.83
5. Overall impression of performance.		4.78	4.67	4.50	4.0	4.49
6. Would you hire other grads?		Yes = 100% (every year)				

RECOMMENDATIONS / COMMENTS: "Venipuncture/infiltrates, more time with fluoro procedures, radiographic contrast injections & contraindications (kidney function, allergies, lab results) (2013)"; "Collimation needs to be stressed***, smaller cassettes to be used on smaller body parts would help the collimation issue (2013)"; "They need more practice with skull work. Many unsure of views to take (2014)"; "Molly has worked out very well for us here (2015)"; "More fluoro time & more spine work (2015)". "Bre is an outstanding employee-you prepared her well (2016)"; "She needed more confidence in the hospital setting – she now has improved on this (2016)"; "Gina has been a great addition to our team! (2016)"; "If student is thinking of a career in a VIR Dept. I would recommend extra time in that area (2016)"; "As much fluoro & OR time as possible, talking through as many unusual scenarios as possible to have a better knowledge of how to react fast when the situation presents itself (2016)"; "Lindsey has been an asset to our department – we're happy to have her working here! (2016)".

CONCLUSION = Based on responses from the employers of WVNCC graduates, it is felt that the students are being appropriately trained. More practice in venipuncture has been implemented. Fluoro rotations were

moved to earlier in the semester to allow for more time in that area & spine work is stressed thoroughly in Procedures class. More discussions of “unusual” scenarios will be implemented in Clinical Fundamentals class. Surveys will continue to be sent out annually & the responses will be monitored for any trends or issues that need to be addressed by the program. The information is included in the program’s Assessment Plan & data is monitored closely to identify any trends that may be developing. A comparison of the previous years at Wheeling Hospital is kept on file for review.

Comparison of Graduate RT Surveys from the Classes of 2013-2016

Surveys are sent out each year in January after graduation to each of the West Virginia Northern Community College (WVNCC) Radiography Program graduates. The topics are based on the program’s goals and mission. The last class to graduate from Wheeling Hospital was in 2011, so those results are available for review. The following results started in 2013 when the first class graduated from WVNCC. The responses are as follows:

<u>QUESTION TOPIC</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>Ave.</u>
1. Perform routine exams	3.9	3.8	3.71	3.33	3.69
2. Knowledge of radiographic procedures	3.9	3.8	3.71	4.33	3.69
3. Pt. care skills	3.9	4.0	4.0	3.67	3.89
4. Entry level knowledge skills	3.9	4.0	3.86	3.33	3.77
5. Perform non-routine exams	3.4	3.0	3.14	2.67	3.05
6. Effective communication with all ages	3.9	4.0	4.0	4.0	3.98
7. Perform in a professional manner	4.0	4.0	4.0	3.67	3.92
8. Continuing ed/life-long learning	3.9	3.6	3.86	3.67	3.76
9. Determine exposure factors	3.7	3.0	3.57	3.0	3.32
10. Adapt exposure factors	3.7	3.0	3.43	2.67	3.2
11. Radiation protection	3.9	4.0	4.0	4.0	3.98

12. First aid/life support	3.8	3.8	3.71	3.0	3.58
13. Evaluate images	3.9	3.8	3.86	3.33	3.72
14. Quality assurance	3.7	3.8	3.71	3.33	3.64
15. Independent judgement of technical Performance	3.7	3.8	3.71	3.33	3.64
16. Familiar with ancillary areas	3.5	3.2	3.43	2.67	3.2
17. OR Procedures	3.2	3.0	3.0	2.67	2.97
18. Fluoroscopic Procedures	3.5	3.0	3.0	2.67	3.04
19. Venipuncture	3.4	3.4	2.29	2.0	2.77
20. Cultural diversity knowledge	3.8	4.0	3.86	3.67	3.83
21. OVERALL Satisfaction with Rad. Program	4.0	n/a	n/a	n/a	4.0

4 = Very Competent; 3 = Competent; 2 = Moderately Competent; 1 = Unsure

NUMBER OF RESPONSES: 2016 = 10 out of 19; 2015 = 5 out of 13; 2014 = 7 out of 21; 2013 = 3 out of 13.

SOME EXAMPLES OF COMMENTS: (2016) "I've met so many great people – I love telling my "story" to new students & techs just starting out. I'll never forget my sense of accomplishment when I graduated & passed my registry!" "Great program that prepared me for additional schooling!" "I am so glad I went through the WVNCC Radiography Program. The teachers were very organized. However as an entry level tech, I wish they would have taught a baseline for technique per body part. I feel like I learned how to set technique on the job." (2015) "Overall I had a great experience with this program once I finally got accepted into it." "I believe the Kettering review is a must! It helped a lot!" "As a student you need to experience every shift. As an employee you are not always going to get day shift" "The saying "one day you're a student the next you're a tech" is a very true & scary statement!" "I felt very prepared when I stepped on the floor for my first day as a technologist". "I am very thankful to have had you & Missy Stephens as my instructors for 2 years. I can't thank you enough for giving me an opportunity to better myself & receive an education that has gotten me to where I want to be in my life." (2014) "I think it would be beneficial to have a smaller class size because of the limited clinical sites. It makes it hard for everyone to get enough experience in all the important areas. Also, it would greatly help to have all the positioning taught within the first year so the last year can be spent applying that at clinicals". "I loved the program & Misty/Missy are great people & educators! I was sad to leave but felt prepared to have a job as a tech." "Working as a tech now at a teaching hospital I think it would be very beneficial for the students if the tech or the person checking the student off reviewed the anatomy with them by asking questions such as the muscle in a KUB or why a fan lateral is done. And it seems less stressful for them even after 3-5 check offs to go back in & review their films if the hospital allows." "I enjoy working as a Radiology technologist. I'm very grateful for the opportunity WVNCC Radiology Technology Program gave me for the career that is/was my ultimate goal." "I feel that afternoon shift is beneficial because I feel like the ER is usually busier then & it gives you a chance to see a variety of exams & you might have to approach them in a different way than a routine exam." "Since I am doing midnight shifts alone, I wish I could have seen what that would be like to be responsible for an entire dept. by myself & I hate doing CT with contrast alone, so definitely spend more time on that, but maybe just this facility does it without a "CT Tech". "Afternoon shift was beneficial because it allowed us to see

a few more things that did not come in during the day. There were also only 2 of us students allowing us to see more exams that we couldn't help do with other students already in the room or with a tech." "Afternoon shift allows you to see more trauma."

CONCLUSION: Based on the responses from the graduates, it is felt that the goals of the program are being met and the mission is being upheld. More focus will be placed on understanding technique. Also, "Overall Satisfaction of the Program" was added as an additional evaluation tool following the JRCERT Site Visit in October of 2016. A yearly graduate survey will continue to be sent out, and the responses will be monitored for any information that needs addressed by the program. The findings from this survey are a crucial part to the Assessment Plan & are monitored closely for any trends that may be identified. Some comments have been addressed, EX: only 18 students were accepted for the Class of 2017 instead of 20. Although it would be great to teach all positions the first year, it is impossible to do. CIs & Techs are always encouraged to review the anatomy with the students as time permits when they complete the exam. Venipuncture was started earlier in the semester this year to allow students to have more time to practice & become proficient. Fluoro was moved up in the curriculum, as well, to allow more time to become familiar with fluoro procedures & equipment. The Kettering Review Seminar has become an annual event in April.

FINDINGS FROM 2013 GRADUATE SURVEY GENERAL INFORMATION

**3 out of 13 surveys were returned (23%).

**Since graduation, 3 out of 3 graduates are working in the field of radiology (100%).

**There are 2 graduates working as a staff technologist in a hospital (67%) & 1 graduate working as a staff technologist in an urgent care center (33%).

**There are no graduates pursuing additional training.

FINDINGS FROM 2014 GRADUATE GENERAL INFORMATION

**7 out of 20 surveys were returned (35%).

**Since graduation, 7 out of 7 are working in the field of radiology; 3 are working as staff technologists in a hospital (43%), 2 are working as staff technologists in an urgent care center (28.5%), & 2 did not state what type of facility (28.5%).

**One graduate has received training in MRI & one graduate in Mammography.

FINDINGS FROM 2015 GRADUATE GENERAL INFORMATION

**5 out of 13 surveys were returned (39%).

**Since graduation, 3 out of 5 are working in the field of radiology as staff technologists in a hospital (60%); 1 has not yet passed the registry (20%).

**One graduate has received training in Ultrasound (20%).

FINDINGS FROM 2016 GRADUATE GENERAL INFORMATION

**10 out of 19 surveys were returned (53%).

**Since graduation, 8 out of 10 are working in the field of radiology: 6 are working as staff technologists in a hospital (60%), 2 are working as staff technologists in an urgent care center (20%), 1 is still seeking employment.

**One graduate has received training in MRI (10%) & one has received training in Peripheral Vascular Interventional Radiology (10%).

APPENDIX O

LIBRARY/LEARNING RESOURCE CENTER CO-CURRICULAR ASSESSMENT – SPRING 2018 – FINAL REPORT

THIS SEMSTER WAS A CONTINUATION OF THE FALL 2017 ASSESSMENT PROJECT

The following chart will show the difference in the classes that were assessed this semester in the General Education Cycle:

Outcome	Year 1 – Fall 2017	Spring 2018
Communicate Effectively in oral and written formats	ENG 101 SPCH 105 ENG 115	Repeat fall group
Employ or utilize information access and literacy skills		CIT 117 HIST 100, HIST 101, HIST 110, HIST 111 GEOG 205 POLS 102

In the fall we had 5 instructors from the English and Speech classes that participated. In the spring we had 6 instructors from English, Speech, Geography, and History that participated.

General Education Outcomes

The following outcomes were used to guide our assessment project:

2. Employ or utilize information access and literacy skills
3. Demonstrate problem-solving and critical thinking skills

The library developed several goals:

Goal I: Assist students to be self-directed learners

Goal II: Facilitate students to be basic academic library users

Goal III: Guide students to use resources ethically when completing written and oral assignments

Goal I: Assist Students to be Self-directed Learners

This goal was based on each campus library keeping track of the type of computer questions that we help our students with each day. We would help the student to use the computer to successfully complete the task that they started out to do. The areas we looked at were:

- Students will access their student portal independently
- Students will send an email using their college supported email account
- Students will access and use the college's course management system (Blackboard)
- Students will access and use the Microsoft Office software
- Students will use the library printing resources unaided

Staff would demonstrate and give instruction and then observe student success and document. We also included any other type of computer assistance that we would give beyond the tasks listed above.

Summary of Totals – All Computer Areas Recorded

Fall of 2017

Spring 2018

Area	Total	Success	No Success		Area	Total	Success	No Success
Weirton LRC	141	130	11		Weirton LRC	151	146	5
Wheeling LRC	642	641	1		Wheeling LRC	685	670	15
NM LRC	216	173	43		NM LRC	254	101	153
All Campuses	984	942	42		All Campuses	1090	917	173

Summary of Totals from Goal I – Fall of 2017

spring 2018

Computer Task	Total-All LRCs	Success	No Success		Computer Task	Total-All LRCs	Success	No Success
Printer	603	582	21		Printer	600	474	126
Portal	10	9	1		Portal	29	28	1
Email	6	6			Email	6	6	
Blackboard	39	37	2		Blackboard	40	38	2
Microsoft Office	22	22			Microsoft Office	23	22	1
Totals	680	656	24		Totals	698	568	130

Following is a chart of the individual actions by campus of the Spring 2018 computer assessment:

Spring 2018-Computer Use

Computer Use	We Total	S-OK	S-No		NM Total	S-OK	S-No		WH Total	S-OK	S-No	TOTALS
Printer	112	109	3		178	58	120		310	307	3	600
Portal	1	1			2	2			26	25	1	29
Email					1	1			5	5		6
Blackboard	1	1			5	5			34	32	2	40

Computer - Log In	5	4	1	32	21	11	34	30	4	71
Added Printer	2	2					215	214	1	217
Document Help	4	4					10	8	2	14
Microsoft Word				1	1		13	12	1	14
Computer Error				9	1	8				9
Microsoft Powerpoint	4	4		1	1		4	4		9
Passwords				1	1		3	3		4
Library Database Help	6	6		2	2		3	3		11
EBooks	3	3								3
USB Drive				1	1					1
FAFSA							12	11	1	12
Communty Computer	6	6					11	11		17
Student Loan				1	1					1
Transcript				1	1					1
Access Web Site	1		1							1
Math Lab							2	2		2
Simchart							2	2		2
Opening PDF				5	4	1				5
Open Multiple										
Windows				1	1					1
Document Scanning				12		12				12
Switched Browsers	1	1								1
Reboot	1	1								1
Printed in another room	2	2								2
Access Owl at Purdue	1	1								1
Turned Computer Off	1	1								1
PAL							1	1		1
Other - NM				1		1				1
TOTALS	151	146	5	254	101	153	685	670	15	1090

Co-curricular Assessment Analysis Plan

Goal I: Assist students to be self-directed learners				
Student Learning Outcome	Measurement	Benchmark	Result	Recommendations
Students will access their student portal independently	Staff will observe student success and document	85% of the students will have success with the help of LRC Staff	97% success 29 total, 28 were successful, 1 not Goal Met	Continue to assist and document.

Students will send an email using their college email account	Staff will observe student success and document	85% of the students will have success with the help of LRC Staff	100% success 6 total with success Goal Met	Continue to assist and document. Observation: Students are not having a problem with college email.
Students will access and use the college's course management system (Blackboard)	Staff will observe student success and document	85% of the students will have success with the help of LRC staff	95% success 40 total, 38 with success and 2 not Goal Met	Continue to assist and document.
Students will access and use the Microsoft Office Software	Staff will observe student success and document	85% of the students will have success with the help of LRC staff	96% success 23 total 22 with success and 1 not Goal Met	Continue to assist and document.
Students will use the library printing resources unaided	Staff will observe student success and document	85% of the students will have success with the help of LRC staff	79% success- 600 total, 474 with success and 126 not Goal not met	Staff will investigate the high number of unsuccessful results from NM and ask IT for assistance.

Goals II and III

Fall of 2017 and Spring 2018 – Patricia Stroud, Lee Ann Blair, and Darcy Ferrell promoted our assessment project to all of the faculty in faculty meetings and by email. We asked faculty to have the LRC staff come in and do a library orientation. When their research projects were completed, we asked them to send us a copy of each students' works cited pages from their assignment. LRC Staff then created and used a rubric (total score of 6) to assess the assignment in three areas, use of citation, type of information sources, and quality of information sources.

Following are the faculty who followed through with our assessment request.

Fall 2017 -

Campus	Instructor	Course	# of Classes	# of Assessments	Average Score
New Martinsville	Ferrell	PSYC 208	2	17	4.88
New Martinsville	Manuel	ENG 092/101	1	8	3.38
New Martinsville	Manuel	ENG 097	1	9	5.11
Weirton	Winland	ENG 101	3	79	5.03
Wheeling	Herrington	SPCH 105	3	39	4.44
Wheeling	Baker	ENG 101	1	14	4.07

				166	4.72
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Spring 2018

Campus	Instructor	Course	# of Classes	# of Assessments	Average Score
New Martinsville	Manuel	ENG 101	1	7	3.57
Weirton	Winland	ENG 102	1	36	4.91
Weirton	Winland	ENG 102	1	6	5.00
Weirton	Winland	ENG 102	1	23	4.39
Weirton	Boring	GEOG 205	1	7	2.86
Weirton	DeCaria	HIST 111	1	30	3.93
Wheeling	Baker	ENG 101	1	8	4.50
Wheeling	Herrington	SPCH 105	1 (3 speeches)	56	3.75
				173	4.11

Results

	Fall 2017	Spring 2018
Total Number of Courses	6	8
Total Number of Assessments	166	173
Total Average Score	4.72	4.11
Number with Library Orientations	99	111
Average Score with Library Orientations	4.79	4.31
Number without Library Orientations	67	62
Average Score without Library Orientations	4.61	3.85

Fall 2017	Increase of average score with a library orientation	3.90%
Spring 2018	Increase of average score with a library orientation	11.95%

Following are the results according to the Co-Curricular Assessment Analysis Plan – fall 2017:

Goal II: Facilitate students to be basic academic library users				
Student Learning Outcome	Measurement	Benchmark	Result	Recommendations
Students will use Library academic research databases in their research assignments	Use a rubric to evaluate works cited, bibliography, or reference pages provided by instructors of classroom assignments	50% will list a library database on their works cited page	68% Goal Met	Continue with library orientations and encourage faculty and students to use library resources.

Students will use appropriate resources of good quality in their research assignments	Use a rubric to evaluate works cited, bibliography, or reference pages provided by instructor of classroom assignments	50% of students will successfully use quality resources	93% Goal Met	Continue with library orientations and encourage faculty and students to use library resources.
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Spring 2018:

Goal II: Facilitate students to be basic academic library users				
Student Learning Outcome	Measurement	Benchmark	Result	Recommendations
Students will use Library academic research databases in their research assignments	Use a rubric to evaluate works cited, bibliography, or reference pages provided by instructors of classroom assignments	50% will list a library database on their works cited page	26% Goal Not Met	Promote library resources to faculty and students. Encourage faculty to require the use of library databases in assignments.
Students will use appropriate resources of good quality in their research assignments	Use a rubric to evaluate works cited, bibliography, or reference pages provided by instructor of classroom assignments	50% of students will successfully use quality resources	93% Goal Met	Continue with library orientations and encourage faculty and students to use library resources.

Fall 2017

Goal III: Guide students to use resources ethically when completing written and oral assignments				
Student Learning Outcome	Measurement	Benchmark	Result	Recommendations
Students will provide proper citations using the APA or MLA format	Use a rubric to evaluate works cited, bibliography or reference pages provided by instructors of classroom assignments	65% of students will receive a passing score from the rubric	78% Goal Met	Continue library orientations and encourage faculty to require citations in assignments.

Spring 2018

Goal III: Guide students to use resources ethically when completing written and oral assignments				
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Student Learning Outcome	Measurement	Benchmark	Result	Recommendations
Students will provide proper citations using the APA or MLA format	Use a rubric to evaluate works cited, bibliography or reference pages provided by instructors of classroom assignments	65% of students will receive a passing score from the rubric	38% Goal Not Met	Encourage faculty to require citations in assignments and promote assistance for students from the library staff.

Example of the rubric used in the scoring of the works cited pages:

RUBRIC: SELECTION AND USE OF SOURCES

CATEGORY	UNSATISFACTORY -0	SATISFACTORY - 1	GOOD -2
Information Citation	Incomplete/Does not comply with format standards	Most entries conform to style; a few minor errors	All entries conform to style with no punctuation errors.
Information Sources	Does not contain any scholarly sources	Contains some scholarly sources but does not include an academic database.	Mostly scholarly sources obtained from academic databases or other trusted sources.
Information Quality	Information is does not address topic and is unverifiable, outdated and/or biased.	Information addresses topic but is not current and/or not from a trusted source.	Information addresses topic, is from a trusted source, information, can be verify by other sources, is objective and is current for topic.

Total score _____

Person ____ had ____ did not have library orientation.

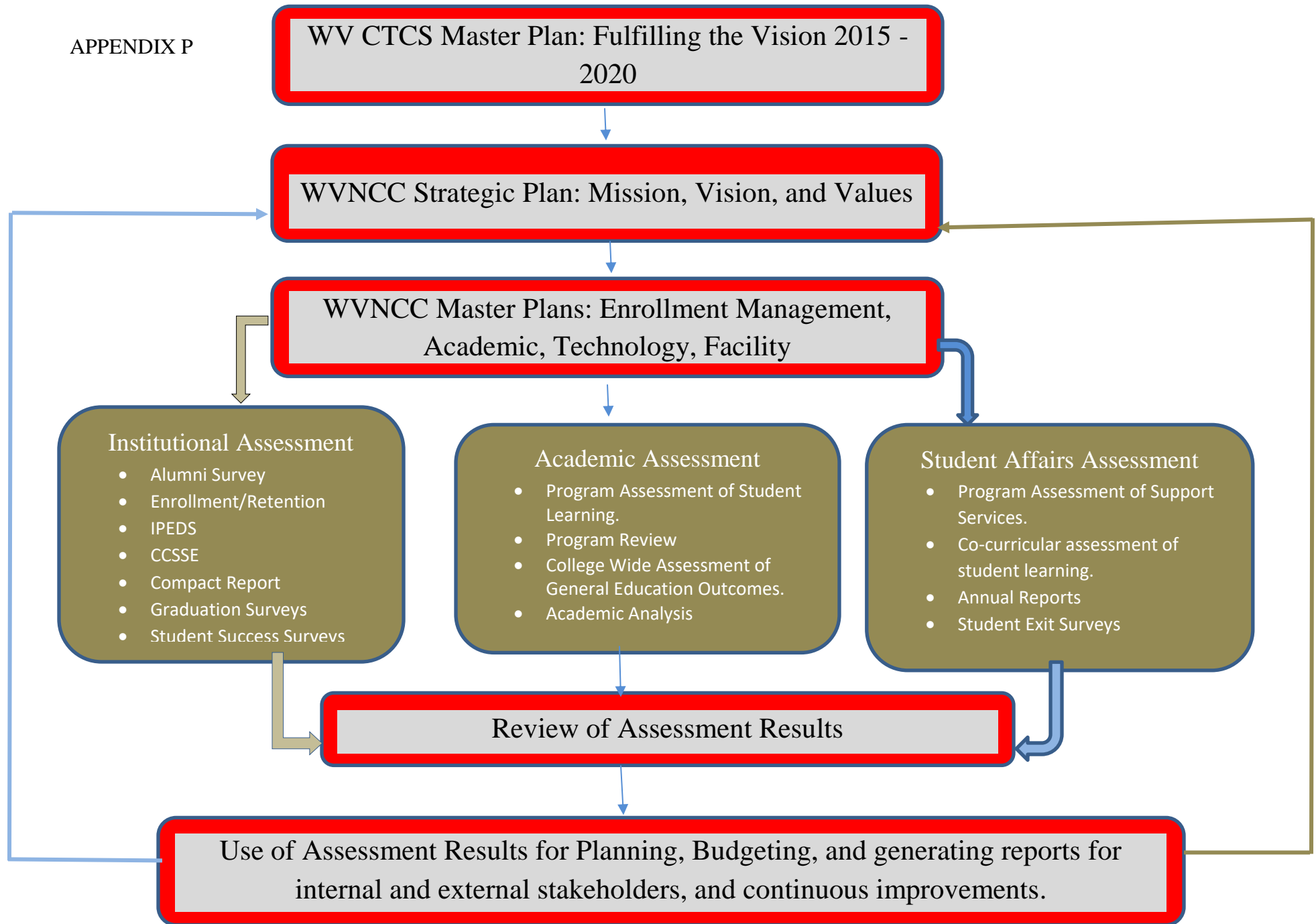
NAME: _____ COURSE: _____

Goal I was very important for the library staff. We became aware of all of the services that we help our students with on the computers in our libraries. Not only can we see what we are helping them with but also how many times that we do help them. We succeeded in reaching our goals in this area except in one case in the spring 2018 assessment. Many times when printing the students in New Martinsville were not successful. This seems to be a result of printer, computer, and network problems. Library staff will have to work with the IT department in trying to help students be more successful in this area in the future. Staff is going to continue to document this area in future semesters.

Goals II and III were important to us by showing some of the research assignments in use in specific classes. We have seen that the use of our databases needs to be promoted more to both faculty and students. Citations were used more correctly in the English classes but dropped off in other classes and we should encourage the proper use of citations in all research projects.

The library orientation is valuable to students when doing research. Scores increased with a library orientation. Staff will need to encourage faculty to schedule a library orientation to assist with research projects in their classes.

Completed by Patricia Stroud and Lee Ann Blair – June 2018



APPENDIX Q

Historical Perspective of Assessment at WVNCC

Assessment at Northern had its unofficial beginnings in 1992 with the institutional self-study in preparation for a re-accreditation visit by NCA. The College was required to have an assessment plan as part of the process. Like many institutions at that time, Northern and its faculty were grappling with terminology and philosophy and attempting to develop an assessment plan to measure student learning which would also satisfy state and NCA requirements. Several of the faculty and the academic vice president had attended a workshop by Patricia Cross in 1991. Much of the faculty efforts related to assessment centered around Cross and Angelo's classroom assessment techniques. The faculty had spent considerable time between 1988 and 1991 debating, developing, and implementing a program for College entry-level assessment and placement. As a result of the self-study in preparation for the 1992-93 visit and a deeper understanding of assessment by the faculty and administration, a core group was formed to coordinate development of the assessment plan. A key element in the development of the plan was that assessment should be linked to the College's mission and this component has remained consistent throughout revisions of the plan. Assessment data and information gathered through focus group meetings held during the Fall of 1992 and the 1993 NCA team visit provided valuable guidance regarding assessment of student academic achievement. Not surprising to the institution, the NCA Team report indicated that minimal progress had been made in the area of assessment and included this concern as an area to be addressed in a focus visit scheduled for 1996-1997.

A committee comprised mainly of faculty was formed in the Fall of 1993 to develop an assessment plan. After a review of various assessment models and spirited debate within the committee, the Assessment Committee recommended that the institution begin with micro-assessment at the course level and move to a macro approach as the assessment initiative matured. The assessment plan recommended by the committee, was adopted by the institution, submitted to NCA, reviewed as part of the focus visit in 1997, and subsequently approved by NCA. The team report from the focus visit reported that "it has been determined that the concern for assessment has been addressed, since a plan is in place and is being implemented." (*Report of a Focus Visit, April 15-16, 1997, Pg. 10.*)

The Assessment Committee continued to evaluate and refine the assessment program and faculty implemented the plan by attending professional development activities, establishing Outcomes for individual courses and programs, establishing cycles for assessing courses and collecting and analyzing the data. The Assessment Committee reviewed the data and made recommendations to programs and academic divisions about refinements in the micro-level assessment and changes that needed to be made to move to a macro-level approach. The Associate Dean for Academic Affairs facilitated much of the data compilation and provided technical assistance to the program faculty for both assessment and program review. By the Spring of 2000, outcomes had been submitted for 294 of 300 possible courses (98%). Assessment reports had been received for 166 courses by the Spring of 2001. However, 65 of the courses without assessment reports had not been offered since the outcomes had been defined or still were within the 2-year review cycle. Therefore, assessment reports had been received for 166 of the 235 possible courses (71%).

A significant impediment to complete implementation was that acquisition of data was difficult because the College did not have a functional institutional research office. Prior to 2001, institutional research was a shared function between the computer center and other offices within the College that needed the data. Recognizing the need to improve the institutional research area, the College included development of an IR office in a Title III Grant which was funded in 2001. The College established a full-time position of Director of Institutional Research in Summer 2001 and has used the Title III grant to provide financial assistance to help fund the position, to establish the IR office, and to establish systems to enhance assessment of student learning and evaluation of institutional effectiveness.

Several organizational changes occurred in the Fall of 2001 which impacted upon implementation of the assessment plan. The position of the Associate Dean of Academic Affairs was eliminated and responsibility for facilitating data collection was assigned to the Director of Institutional Research. In addition, the Assessment Committee was changed from a standing committee to a sub-committee of the Academic Affairs Committee with the goal of better linking assessment and curriculum development.

By 2001 the College was in the midst of another self-study process in preparation for a NCA re-accreditation visit in 2002-03. The self-study process made it obvious to faculty and the administration that implementation of the assessment plan was proceeding much slower than had been anticipated. The Academic Affairs Committee determined that curriculum development and assessment each required too much time for one committee and recommended that assessment once again be the responsibility of a separate assessment committee. Faculty in some divisions and programs were continuing assessment efforts but implementation was sporadic. There was limited progression to macro-level assessment. Further indication that the assessment program was lagging came from an HEPC review of student academic achievement at all State colleges and universities conducted by the National Center for Higher Education

Management Systems (NCHEMS). The NCHEMS report indicated that many West Virginia institutions were struggling with assessment and expressed concern that Northern was making little progress in implementing its assessment plan.

In light of the findings of the self-study committee, the Academic Affairs Committee and the NCHEMS review, the college began the process to revitalize the assessment program.

A revised assessment plan, which built upon the previous efforts but more aggressively moved toward macro-level assessment, was presented to the faculty in August 2002. The College community moved to implement the revised plan. A new assessment committee called the College Leadership Team for Assessment (CLTA) was established and the Faculty Senate established a General Education Committee. A new appointment to the position of Director of Institutional Research was made. A key element in the revised assessment plan was the requirement that Master Course Guides (MCG's) be developed for all courses. The MCG's were established to improve many aspects of instruction and assessment by standardizing the process and defining expectations for students. A format was developed for the MCG's and workshops were conducted for both full-time and part time faculty to explain the process. The self-study found that progress had been made in many areas but there were numerous deficiencies. Some of the problem areas were that the College had not moved to macro-level assessment as planned, feedback loops were not well developed, documentation and review of assessment activities was not systematic, general education was not assessed as a program area, and there was little connection between assessment processes and budget development. The NCA Team report verified many of the College's findings and a focus visit on assessment was scheduled for 200708.

Organizational changes in 2003 and 2004 blunted some of the momentum gained during the self-study process. In two academic administration re-organizations, academic centers were eliminated and replaced by departments and then two associate deans were established. Forms which referred to academic centers and divisions, were obsolete and there was confusion about where assessment reports were to be submitted and who was coordinating implementation. The position of Dean of Institutional Effectiveness was created for the 2003 academic year with coordination of assessment as a major responsibility. However, the search became prolonged and the Dean was not hired until spring 2004. Shortly after that the Dean of Academic Affairs office was re-organized and the Dean position was vacant from July 2004 until January 2005.

The Assessment Committee was re-constituted for the 2004-05 academic year and began working with faculty to revitalize assessment. The Committee began making reports at Faculty Senate meetings and gathering input from faculty. Some best practices in assessment were shared with faculty at a January meeting on assessment. New forms for reporting assessment activities were prepared and shared with faculty. The Committee asked all faculty to participate in an assessment activity for the 2004-05 year and submit reports on the activities. All full-time faculty indicated they were participating in an assessment activity. The Committee drafted a

revised assessment plan to be presented to the faculty for discussion, revision and adoption in the fall of 2005.

In 2009, discussion began about the assessment of institutional processes and staff unit operations not considered “academic”. In 2010, annual staff unit (department) assessment reports were initiated. In the following year, a co-curricular assessment report peer review form was created and 2010 staff unit reports were peer reviewed. This process is now in place and will continue on an annual basis.

After the HLC visit in 2012, a recommendation was made to include assessment of general education outcomes. General Education and Assessment Committee made a decision to conduct college wide assessment of two general education outcomes at the course level. A general education core outcome survey (Appendix D) was designed and emailed to faculty in fall 2014. Survey listed two general education outcomes:

1. Communicate effectively
2. Demonstrate Human and professional development skills.

Survey required faculty to report if stated general education outcomes are assessed and to provide specific examples of outcomes assessed. Faculty completed the survey during a professional development in spring 2015. General education committee created a General Education Outcomes Assessment Form (Appendix E) to organize data. During a meeting with the VPAA, Chair of the General Education Committee Chair, Director of

Institutional Effectiveness and Liberal Arts, Communication, and Sciences division chair, it was determined; the data collected was not useful in determining the degree to which the outcomes were met. It was also determined that the same information is missing on the submitted assessment reports. A decision was made to include the degree to which the assessment is met on the assessment report. This required updating Pre-Assessment Forms, and the Assessment reports.

In October 2015, Director of Institutional Effectiveness and the Liberal Arts, Communication and Sciences division Chair attended Assessment workshop sponsored by Higher Education Public Commission (HEPC). During the workshop, a Guide for Assessing General Education Outcomes (Appendix F) was distributed. The guide included general education outcomes for students receiving a certificate, an associate, a bachelor, and a master’s degree. Guide also listed Essential Traits and acceptable Benchmarks for each of the levels. Guide was approved by WV Higher Education Council. Using the guide as a framework, Assessment Reporting Form was updated to include Essential Traits, Learning Activities, Measurement instruments, and the degree to which the outcome was met.

During a professional development workshop in November 2015, the updated Pre-Assessment Form and the Assessment Reporting form was shared with faculty. A timeline and procedure for submitting Pre-Assessment and Assessment Reporting Form was shared.

During the spring semester; a total of thirty (30) Pre-Assessment Forms (Appendix G) were submitted. A review of the submitted form indicated a lack of understanding in foundation and procedural knowledge in assessing and reporting assessment of learning outcomes. This was an important finding and needed to be addressed to make the process, reporting, and using assessment data to improve student learning.

Appendix C

WV Northern Community College

Strategic Enrollment Management Plan

Strategic Enrollment Management Plan: Academic Year 2018 to 2020

Introduction:

WV Northern Community College's mission includes to educate and empower individuals to achieve academic and career goals and responds by offering a high-quality learning environment that is accessible, safe and accommodating while nurturing teamwork and community service. We are committed to providing access to quality college education to the community. This three- year Strategic Enrollment Management Plan (SEMP) is grounded in carrying out the College's mission.

The Enrollment Management Council reviewed WV Northern's strategic plan, WV Compact, institutional data, and WV state report card. This environmental data will provide the necessary baseline for the preliminary enrollment targets, target populations, strategies and the overarching enrollment management goals.

Guiding Principles:

The following guiding principles anchor this enrollment management plan, and are aligned with the Vision, Mission and Pledge to Students of the College. The guiding principles will be evident in implementation of the SEMP as it represents the heart of the commitment we make to students at WV Northern.

- SEMP facilitates student learning and success through a commitment to provide the right mix of academic programs, course scheduling, advising, and student services.
- SEMP is aligned with the College's Strategic plan.
- SEMP is a shared responsibility.
- SEMP focuses on the recruitment of a diverse student population, admissions, retention and completion.
- SEMP includes a focus on workforce development in the community.
- SEMP includes a focus on building relationships with partnerships and community service.

In addition to the Guiding Principles, the planning group believes that enrollment management planning is most effective when it includes the following best practices:

- Academic integrity that leads to student success, such as balanced and relevant program and course offerings, diverse modes of delivery, adequate scheduling, enhanced advising and counseling, etc.
- An evidence based system that is data driven to reflect the needs of our student population.
- Student focused processes that are models for facilitating student satisfaction and student learning.

- An inclusive plan that includes incorporation of a Recruitment Plan and Retention Plan into this SEMP.
- Ongoing enrollment management planning and regular reviews and updates.

Current Enrollment Situation:

West Virginia community colleges have been experiencing declining enrollments over the last five years due to a decline in high school graduates and an improving economy. From Fall 2011 to Fall 2015, WV Northern experienced a decline in enrollment.

Unduplicated Headcount

2015-16	2016-17	2017-18	2018-19	2019-20
2910	2872	2800	2800	2800

Data Source: Strategic

Plan

At WV Northern, we believe that enrollment growth can be strategically influenced by internal actions when these actions are tightly coupled with the Strategic Enrollment Management Plan. This plan will allow us to use marketing, scheduling, staffing, budgeting, etc., in a strategic manner to enable us to meet our enrollment targets.

The strategic enrollment planning process enables WV Northern faculty and staff to create action plans that turn our vision and concepts for the future into reality. Through the planning process we can:

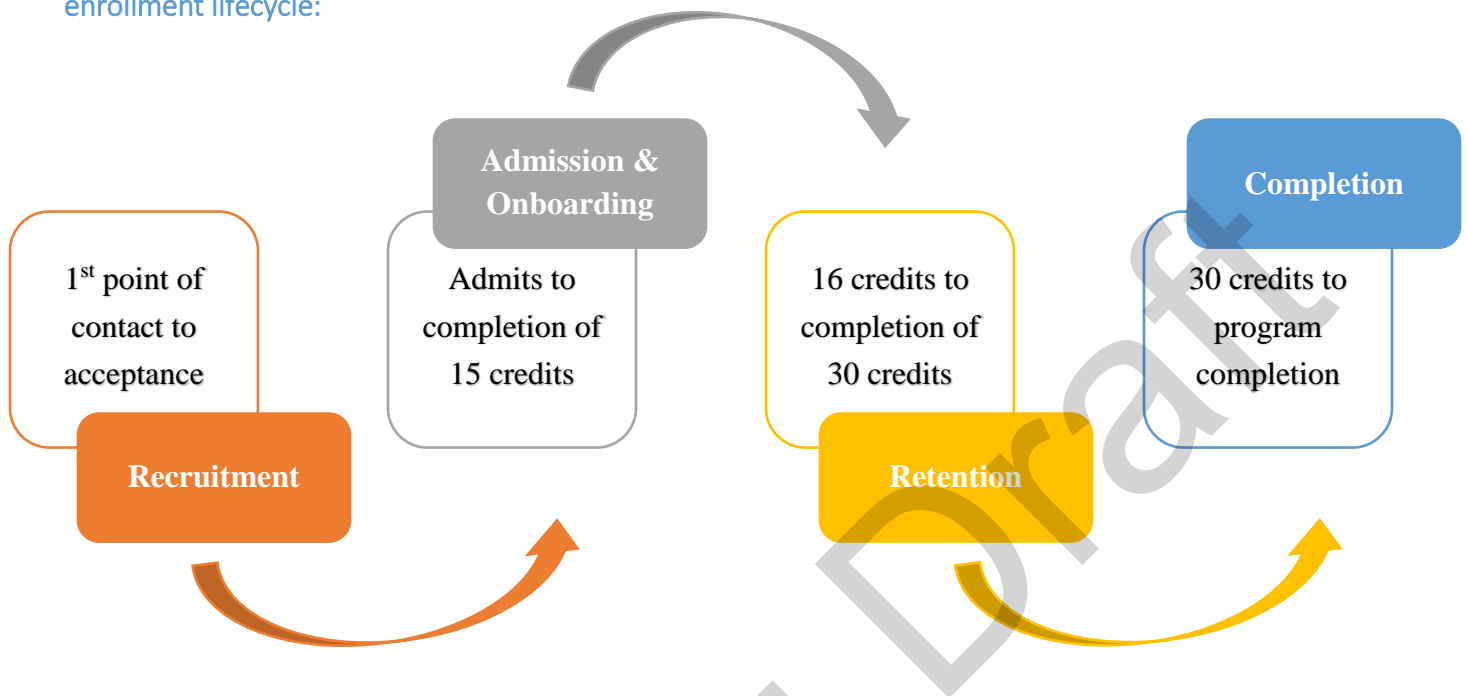
- make clearer choices about growth.
- define clear lines of responsibility for different aspects of the growth process.
- connect the budget, scheduling, staffing, and marketing processes.
- have clear objectives for each moving to a more efficient scheduling model.
- develop long-range planning for programs, space, etc.
- put all resources to work.

Focus on Student Learning:

The purpose of WV Northern Community College's Strategic Enrollment Plan is to improve student learning performance by:

- Increasing course completion rates.
- Increasing satisfactory student progress to degree completion.
- Increasing semester-to-semester retention rates.
- Increasing three-year graduation rate.

The Strategic Enrollment Management Plan focuses on the four major phases of the student enrollment lifecycle:



Overarching Enrollment Management Goals:

- Continue to increase student retention and graduation rates as stated in WV Northern's Strategic Plan.
- Stabilize enrollment in credit and non-credit courses and programs. At the end of the three years, the goal is to reach an enrollment of 2800 stabilized
- Monitor the rapidly changing demographic and economic state of the region.
- Develop a clear, cohesive and comprehensive Admissions & Admissions & Onboarding process for new students that will provide them with a clear plan for graduation.
- The Enrollment Management Council will monitor and share with the President the updated progress related to the Strategic Plan Operational Objectives

Performance Assessment:

- The EM Council through review of the Assessment activities will identify and make necessary adjustments to processes and practices before the next registration cycle begins.
- Annual assessment will be conducted by the Enrollment Management Council to assess the progress toward accomplishing the overarching enrollment management goals, and make necessary changes to accomplish these goals.

Strategic Enrollment Management Plan: AY
2018-2020 Goals and Strategies

Key Enrollment Lifecycle	Goal	Target Population	Strategies	Accountability Leaders
<div style="background-color: #c00000; color: white; padding: 5px; text-align: center; margin-bottom: 10px;">RECRUITMENT</div> <p>Starts from the first point of contact to the point of acceptance to WV Northern</p>	<ul style="list-style-type: none"> • Increase number of inquiries • Increase conversion rate of inquiries to applications • Increase conversion rate of applicants to admits • Use Registration Ticketing process 	<ul style="list-style-type: none"> • Recent high school graduates • Individuals enrolled in approved ABE/Spokes programs • Young adults 24 and younger • Adults • Service members - Veterans • Transfer students • Students enrolled in Continuing Education programs 	<ul style="list-style-type: none"> • Increase WV Northern's outreach to the local high schools and junior high schools • Open houses/Information night for returning adults; other special events focused on returning adults • Financial Aid workshops at local high schools and Financial Aid Completion Night Events for students and parents • Recruit recent high school graduates who did not enroll in a college • Connect all veterans with the Veteran's Affairs Office 	

Key Enrollment Lifecycle	Goal	Target Population	Strategies	Accountability Leaders
<div>ADMISSIONS & ONBOARDING</div> <p>Starts from the point of acceptance to the completion of the first 15 college level credits</p>	<ul style="list-style-type: none"> • Increase conversion rate of admitted applicants to registered students • Increase completion of Student Orientation by newly admitted students • Increase recruitment and enrollment of Stop-Outs • Increase completion of financial aid application two weeks before the first day of classes 	<ul style="list-style-type: none"> • Newly admitted students • All WV Northern student – both FT and PT, who completed less than 15 college level credits • Stop-Outs with less than 15 college level credits • Transfer students with 15 or less college level credits 	<ul style="list-style-type: none"> • Identify admitted students who are most likely to matriculate at WV Northern • Establish a sense of community with newly admitted applicants through effective communication, academic and social activities • Market and provide placement test preps • Complete Student Planning for all new credit students through individual or group advising • Offer STAR days • Work closely with Financial Aid to assist newly admitted students in timely completion of financial aid application, including documents for verification • Create schedule planner options as preloaded for new students 	

Key Enrollment Lifecycle	Goal	Target Population	Strategies	Accountability Leaders
<div>RETENTION</div> <p>Starts from the 16 college-level credit hours to completion of 30 college-level credit hours</p>	<ul style="list-style-type: none"> Steadily increase student retention in support of the College's strategic goals Increase student satisfaction with registration Increase student satisfaction with academic advising and counseling Reduce # of students put on academic probation, suspension and dismissal Increase number of re-admits Use Registration Ticketing process to enhancing registration, advising/counseling, and process for handing over a cohort of students over to the their academic advisor in their program 	<ul style="list-style-type: none"> Currently enrolled students Visiting students Previously enrolled WV Northern students (Stop- Outs) Transfer students with over 15 college level credit hours 	<ul style="list-style-type: none"> Summer schedule promotion with year round Pell Enhance co-curricular and extra-curricular activities to strengthen students' engagement with WV Northern Increase the # of students who register for the following semester prior to the conclusion of a semester via multi-prong outreaches Streamline registration process for new and returning students Conduct an in-depth analysis of class schedule to determine whether courses are offered to accommodate scheduling needs of working students 	

Key Enrollment Lifecycle	Goal	Target Population	Strategies	Accountability Leaders
<div>Completion</div> <p>Starts from 30 college level credits to program completion</p>	<ul style="list-style-type: none"> • Increase number of students who graduate within three years • Continue to expand Project Graduation • Have all students with 30+ college level credits aware of their degree audit 	<ul style="list-style-type: none"> • All currently enrolled students with 30+ college level credits • All inactive students who accumulated 30+ college level credits 	<ul style="list-style-type: none"> • Identify clear pathways that help students to complete on time • Reach out to WV Northern Stop-Outs with 30+ credits – Bring these students back to the College • 	

Note: The SEMP acknowledges that student success strategies that are being developed through the Complete College America project will be incorporated into this plan as it becomes available.

Preliminary Enrollment Targets

Assumptions Used for Targets:

The following assumptions were developed based on the WV Northern County demographic projections, high school graduate projections, national trend on community college enrollment, and WV budget projections (updated yearly for upcoming budget year)

Summer 2017:	Summer 2018:	Summer 2019:
Fall 2017:	Fall 2018:	Fall 2019:
Spring 2018	Spring 2019:	Spring 2020:

Internal Data Examined:

- Enrollment Trend of Fall and Spring Semesters
- Enrollment Trend of Summer Sessions
- Overall Retention Data
- Enrollment Trend by Program
- Retention and Graduation Trend by Program
- Community College Survey of Student Engagement

External Data Examined:

- WV Report Card

Note: Special thanks to Bergen Community College for allowing us to use their template in our plan.

Appendix D

WV Northern Community College

IT PLAN

IT Master Plan Fall 2018

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 - b. IT Committee
 - c. Consultants
 - d. Financial Activity Tracking
- III. External Connectivity / ISP
 - a. Key Factors
 - b. Current Performance
 - c. Vendor Relationship
- IV. Network
 - a. Internal Standardization
 - b. Architecture (including network diagram)
 - i. External & Wireless included
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 - d. Replacement schedule
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 - b. Policy & Procedure verification
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IT Master Plan

Fall 2018

Introduction & General Philosophy / Overview

West Virginia Northern Community College (WVNCC) is committed to being a leader in higher education by providing information technology resources on par with, or exceeding, all other institutions of higher education in the state. Through well-developed planning, standardization to gain efficiencies, and training for IT personnel, all constituents of the college can expect high quality technology resources. The driving philosophy is to enhance the learning experience for students and faculty while supporting the general operation of the College.

Key areas of emphasis include robust and reliable internet connectivity, highly available and appropriately sized network, modern IP Video Learning systems, great wireless services as well as general excellence in all equipment and services provided.

Information Technology is a landscape that changes quickly and often. Many institutions ignore the constant upkeep needed in IT infrastructure, creating a need for an aggressive, and often desperate, investment to catch up. WVNCC seeks to make smaller, continual investment to avoid being out of date with service or creating the need for complete overhaul of systems.

WVNCC strategic plan aligns with this philosophy as goal 4.6 is defined as “Maintain a quality student experience with top notch infrastructure and resources to support effective teaching through annual capital investment equal to 2% of total net assets.” This is a commitment of approximately \$700K on an annual basis, which funds much of the process to keep current the IT equipment.

Having sufficient financial support is only half of the equation when developing effective and efficient IT resources to support the College. There must be a clear vision set forth with distinct parameters that grow and maintain the College’s infrastructure and systems. It is the current philosophy to:

1. Utilize a change control process:
 - a. The IT department must ensure the network is appropriately diagramed and equipment is identified with pertinent information.
 - b. Systems should be documented with regards to service agreements, user access and other pertinent information.
 - c. No changes should occur in the WVNCC IT environment without appropriate authority and documentation.
2. Maintain support and service agreements
 - a. The WVNCC staff will always be a first line of troubleshooting and assistance to the employees. However, the depth of complexity that accompanies all systems and equipment requires great expertise.
3. Standardization
 - a. With limited human resources to maintain a plethora of equipment and systems, standardization allows for IT staff to become experts in a limited number of systems instead of a generalist of many systems
 - b. Though purchase bidding ensures competitiveness in pricing and service, a sole source vendor (or at minimum brand of equipment) will be used when replacing and growing network resources to create a more easily administered network.
 - c. Desktop PC’s, tablets, monitors, and the like should be bought in relative consistency over a three-year period. This should prevent no more than two brands of equipment being in existence at a time.

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- d. Customized scripts and processes should be used with caution. These fixes are often dependent on one person's knowledge and can be challenging to manage if the creator is not present. Developed scripts and processes should be done using industry standards and documented in full.
- 4. Consolidation
 - a. The similarities of the functions of a desktop PC, laptop, and tablet continually evolve making their functionalities very similar. Therefore, an employee should only be granted one of these devices with the ability to 'dock' it at the office desk to have the feel of a full computer with a full keyboard, mouse and monitor(s).
 - b. An agreement with a printing / copying vendor will always exist. With few exceptions, the elimination of desktop printers should occur. Where there is a need for a desktop printer, the copy machine vendor should supply and service the machine.
- 5. Purchase rotation
 - a. Equipment should be replaced methodically on a periodic rotation.

It is extremely difficult to see the complete direction of IT with the rapidness with which technology progresses. There will be new opportunities and the IT plan should not be practiced with rigidity. However, the general vision of the College:

- 1. Online learning is rapidly growing and the infrastructure needs to be scalable when necessary
- 2. Shared services across all three campuses for academics, student services, and administrative services continually need to take advantage of technology to improve service and reduce costs.
- 3. IT personnel resources will likely always be limited

Department Structure

More than the funds committed, it is people that make a College successful. WVNCC currently employs an IT Manager to lead an internal team; three on the Wheeling Campus with an additional designated employee at each of the outer campuses, New Martinsville and Weirton. The IT Manager is ultimately responsible for the implementation of new systems, maintenance of network & servers, administration of software systems, support for hardware repair and end-users questions, and relationships with vendors.

Currently a disproportionate amount of time is designated to break/fix of equipment needed to resolve issues. The goal is to migrate the IT Department to a Help Desk format. WVNCC employees will be the immediate first call for assistance to faculty, staff and students. To accomplish this, there will become an increased need for standardization and establishing & maintaining change control.

The IT Manager pulls on the collective College community through the IT Committee, which he/she is the Chairman. The representation of faculty, staff, and students on the committee allows for communication between the IT department and all constituents. It provides a regular forum where the concerns of the College can be expressed, new ideas discussed, and schedules of upgrades / changes can be disseminated. The IT Committee should annually submit to the IT Manager a list of priorities for capital purchases and operational needs.

Knowing the vastness and complexity of the IT field, WVNCC will maintain a close relationship with an outside consulting firm. The consulting firm can employ the full breadth of experience needed and can support WVNCC in its endeavors.

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The IT Manager will use the guidance of the IT committee and consulting firm to drive decision making for fiscal year planning. Plans will be documented by updating the IT Master plan. This plan will be reviewed by Cabinet and submitted to the Board of Governors.

Financial activity will be tracking through four departmental budgets:

1. 6003 –Administration used for the tracking of personnel costs such as wages & training, as well as general office supplies
2. 6000 –Communications designated for connectivity contracts.
3. 6001 –Student Services reserved for expenses directly relating to the technology or support provided directly to solely students.
4. 6002 – Support Services reserved for expenses directly relating to the technology or support of any constituency outside the scope of students.

External Connectivity / ISP

Reliability is key with external connectivity. Historically, WVNCC has had challenges brought on by two main factors, 1) Internet service and connectivity between campuses has been a splicing of several vendors making it difficult to hold any one vendor accountable and 2) Relying on a wireless point-to-point solution for New Martinsville restricted bandwidth and being vulnerable to disruptions.

In 2018, the IT department put out for bid the internet and intercampus connectivity with the goal of resolving those issues. Lumos was able to provide the most single vendor solution and expand fiber connectivity to New Martinsville. The only lacking part is a leased portion of fiber to Weirton from Frontier as Lumos did not have connectivity clear to that campus.

As of 2018, performance speeds for the three campuses have increased to:

Campus	Lumos	Prior
New Martinsville	500 MB	30MB
Weirton	500 MB	50 MB
Wheeling	1 GB	100 MB

The process in 2018 brought to light that WVNCC was also overpaying for substandard service. This is a function of technology simply improving and a neglect in updating, even with the same vendor. Though Lumos will be the ISP for three years, the contract should be reviewed each and every year with the vendor. The annual meeting should be the forum to discuss upgrading performance, pricing and the past performance of the network (see Exhibit A – Annual ISP Review).

Network

Like the College's ISP, the key to the internal network must be reliability. Students, faculty and staff rely on the technical resources to be available when they are needed. This will be accomplished through standardization and simplification.

Extreme Network is the current backbone of the network equipment. This should be considered the single source provider. The standardization provides advantages of greater compatibility reducing device conflicts and also allowing the IT staff to become experts in a single product instead of generalist in many different

IT Master Plan Fall 2018

brands. The network vendor should be reviewed every five years to determine if there should be a change. If a new vendor is chosen, rotation of older equipment can begin. Hence, there should never be more than two types of network equipment.

The network architecture is designed to allow each campus to be interconnected, but operate independently if necessary during a disruption from the ISP.

Maintenance of the network is also reliant on up-to-date and accurate records. The network was first mapped completely in 2018. The IT team uses a careful change control process to ensure that the network remains current at all times. However, an outside IT consulting firm should be engaged on a periodic basis to ensure records are current. The diagram, upon completion, will be included as Exhibit B.

Servers

Currently WVNCC hosts most of its resources onsite. The College lacks the appropriate environmental conditions to host a server room. The lack of waterless fire suppression, HVAC and backup power threatens the reliability of the IT resources and leaves vulnerability for catastrophic events.

The server room will be modified as much as possible to minimize these factors. However, there will be a concerted effort to move as many of the resources to a hosted solution. A hosted solution will increase uptime, security, and safety of the equipment. It will also decrease maintenance time. This strategy will likely be deployed in fiscal year 2020. This will provide enough time to ensure the new ISP is reliable and performs well with high speeds.

While the servers are still housed on site, a detail list outlining the functionality, the operating systems, and service / warranty terms should be maintained. Exhibit C is the list of current servers and will be part of the IT audit by an independent firm to ensure we are continual up-to-date with the information.

When an offsite data room is established, there will still be the need to host some servers, but this will be minimal. This ties into the philosophy of the limited personnel resources being experts in the few things maintained by the college.

Systems

The College uses many software systems to support and enhance the mission. The key to effectively using software is consistency in its use and regular training. With the number of software packages, it is not possible for the IT Team to be the context expert in each one. The responsibility of the IT Team will be a System Administrator who will ensure:

1. The availability of the system from the server, internet connection, and internal network.
2. The health of the system through regular updates.
3. The permissions access is administered for security.

Through time, the IT System Administrator will often become a content expert in the system. However, operational departments should not rely on the System Administer for daily use questions. For that reason, each system should have a designated Power User. The Power user will be highly trained and have a global

IT Master Plan Fall 2018

understanding of all parts of the system. Power Users' responsibilities would primarily encompass the use of the software, specifically the training of new users and the consistency in processes.

Exhibit D is a list of prominent systems used by the college. (Summer 2019)

Interfaces / Custom Scripts

There is often a need for separate system to share information. To make the processes as efficiently as possible, interfaces and scripts are designed to automate interaction of two systems. Great caution should be exercised at this point. Interfaces and scripts become outdated and no longer work appropriately when one of the systems is upgraded or other changes occur. In addition, interfaces and scripts are generally custom made and the intricacies lie with one individual.

If interfaces and scripts are employed, there should be detailed documentation accompanying the programming code that would allow the transfer of knowledge if necessary. In addition, the most common programming languages and standard conventions should be used.

Exhibit E lists current interfaces and scripts (Fall 2019)

Software / Subscription Services

As the success of the physical mapping and inventory progresses, the IT Department will list all major software and subscription services. Software systems should be identified by product, version number, licensing type and functionality.

Exhibit F lists current software and subscription services (Fall 2020)

IT Master Plan

Fall 2018

Chronological Action Items

1. Immediately
 - a. Network Diagram not inclusive of end-devices or port-assignment except for significant links
 - b. Lumus ISP Service
 - c. Capital Project - Unified phone system
2. Fall 2018
 - a. Server Inventory
 - b. Capital Project - Replacement of one fifth of computers
 - c. Capital Project - Replacement of all non-POE switches
 - d. Capital Project - Upgrade / Expand IP Video systems
3. Spring 2019
 - a. Review IT Plan
 - i. Network map should be included (Exhibit B)
 - ii. Server inventory should be included (Exhibit C)
 - iii. Introduce or revise the 5 year plans network equipment plan
 - iv. Submit to BOG
 - b. IT Distribution Points / Closets clean up
 - i. Removal of legacy, non-used equipment and cabling
 - ii. Install cable management
 - iii. Labels on cables
4. Summer 2019
 - a. First IT audit reviewing documentation collected over the prior year
 - b. ISP meeting to review services and prior year internet availability statistics
 - c. Systems Inventory
 - d. Standardize system access roles
 - i. Each system should have pre-defined security access roles that every user can be assigned to; no custom permissions
 - e. Capital Project: Replacement of one fifth of computers
 - f. Replace non-Extreme switches to standardize network equipment
5. Fall 2019
 - a. Custom interfaces & scripts inventory
6. Spring 2020
 - a. Relocation of servers to an offsite data center (following the determination that Lumus has proven reliable connectivity)
 - b. Review IT Plan
 - i. Should include systems (Exhibit D)
 - ii. Should include interfaces / scripts (Exhibit E)
 - iii. Submit to BOG
7. Summer 2020
 - a. IT Audit inclusive of penetration testing, documentation and policy review
 - b. ISP meeting to review services and prior year internet availability statistics
 - c. Replace one fifth of computers
 - d. Extreme Network training for IT personnel
8. Fall 2020
 - a. Software Inventory

IT Master Plan Fall 2018

9. Spring 2021
 - a. Review IT Plan
 - i. Submit to BOG
10. Summer 2021
 - a. IT Audit inclusive of penetration testing, documentation and policy review
 - b. Lumus meeting to review services and prior year internet availability statistics
 - c. Replace one fifth of computers
11. Spring 2022
 - a. Review IT Plan
 - i. Should include software (Exhibit F)
 - ii. Submit to BOG
12. Summer 2022
 - a. IT Audit inclusive of penetration testing, documentation and policy review
 - b. Lumus meeting to review services and prior year internet availability statistics
 - c. Replace one fifth of computers
 - d. Extreme Network training for IT personnel
13. Spring 2023
 - a. Rebid of ISP to ensure pricing and service on par with other Higher Ed institutions
 - b. Evaluation of networking infrastructure vendor; committing to next five years to maintain consistency
 - c. Review IT Plan
 - i. Should be completely comprehensive
 - ii. Submit to BOG
14. Summer 2023
 - a. IT Audit inclusive of penetration testing, documentation and policy review
 - b. ISP meeting to review services and prior year internet availability statistics
 - c. Replace one fifth of computers

IT Master Plan Fall 2018

Exhibit A – Annual ISP Review

WVNCC should meet annually with the current ISP to discuss at minimum the following items. The results of this discussion should be shared with the IT Committee and the College Community in general. The Annual ISP Review Checklist can include:

- ☐ Report of up-time for all connectivity for the year.
- ☐ Usage / load reports for the year, particularly identifying any stress points.
- ☐ Review of WVNCC's internal equipment connecting to Lumos to ensure full capability.
- ☐ Identify any outages lasting longer than 15 minutes in the last year
 - Identify specific cause of outage.
 - Were the outages natural disaster / out of control of both WVNCC and Lumos?
 - How long did it take to begin addressing the outage?
 - How long did the outage last?
- ☐ Review of current capacity as compared to other higher education institutions and/or Lumos customers.
- ☐ Reviewing status of current contract inclusive of pricing terms and adjust as necessary.
- ☐ Lumos to provide recommendations to keep current.

Exhibit B – Network Diagram - Target Fall 2018

Exhibit C – Servers – Target Fall 2018

- Brand
- Model
- Serial #
- Operating System
 - Version
- Function
- Location
- Warranty
- Service Terms

Exhibit D – Systems – Summer 2019

- Product
- Version
- Function
- Operating System Platform
- Server / Hosted
- Service Terms

IT Master Plan Fall 2018

- System Administrator
- Power User
- Position Matrix
 - College Position
 - System
 - Access Level
- Start of list
 - Banner
 - Weave
 - DigArc
 - Door lock system
 - Surveillance
 - Scanning Systems
 - WV Oasis
 - Kronos

Exhibit E – Interfaces & Scripts – Fall 2019

- Purpose
- Systems connected
- Language
- Author
- Documentation location

Exhibit F – Software – Fall 2020

- Product
- Version
- Licensing
 - Type (Concurrent vs. Seat)
 - Count
 - Expiration
- Function

Appendix E

WV Northern
Community College

Facilities Plan

Facilities Master Plan

- I. Overview
- II. Campuses & Buildings
- III. Systems
 - a. HVAC
 - b. Building Exteriors
 - c. Parking lots
- IV. Green Spaces
- V. Annual Goals & Actions
- VI. Future Projects
- VII. Communication and Input
- VIII. Appendix A – Capital Renewal (Sightlines)
- IX. Appendix B – Seasonal Maintenance Schedules
- X. Appendix C - Current condition (Sightlines Study)
- XI. Appendix D – HVAC Audit
- XII. Appendix E – Roof Audit
- XIII. Appendix F – Parking Lot Audit

Facilities Master Plan

Overview

Philosophy

West Virginia Northern Community College (WVNCC) has tremendous pride in its facilities. As the school has been in existence for approximately fifty years and many of the building were in existence prior to the College's use of them, the facilities are in fantastic overall condition.

WVNCC believes the condition of the physical plant is important because it affects the ability to recruit students. A perspectives student's first impression is likely what they see. Having clean and modern facilities to compete with other options is imperative.

WVNCC believes maintaining the physical plant is important because it truly belongs to the community. Funded heavily by state tax funds and bond proceeds, there is a great obligation to care for the property as if it were our own homes.

WVNCC believes the sustainability of physical plant is important because routine maintenance, preventive & predictive measures can ward off large scale problems. This is challenging as spending money on something that works is sometimes hard to do in times of budget constraints. However, the simple analogy of changing the oil in your car to prolong the life of the engine is applicable and needs to be remembered.

In short, WVNCC wishes to have facilities that are on par, or exceed, all other higher education institutions in the state of West Virginia and surrounding areas. This is evidenced by goal 4.6 of the strategic plan:

Maintain a quality student experience with top notch infrastructure and resources to support effective teaching through annual capital investment equal to 2% of total net assets. With assets about \$35M, the annual capital spend is approximately \$700K with a large portion being attributed to the physical plant.

With this significant annual spend, there must be a coherent plan. All investments should be both sustainable, easily maintained in the future without specific knowledge tied to a single individual, and cost effective, decreasing operational expenses where possible.

This path is consistent with a March 2018 review of Capital Renewal conducted by Sightlines (Appendix A). The study identified \$7.6M of improvements need over the next ten years. If annualized, this is approximately \$760K in capital investment each year.

Development Note – It is the belief that accurate records to ensure the management of the facilities department can be efficient and most effective. As part of this plan will be the collection of such records. The facilities plan can become increasingly detailed once this is compiled. Future needs are denoted in *italics print*.

Facilities Master Plan

Department Structure

More than the monetary resources, it is people who make the College successful in all endeavors, including the physical plant. The current structure of the department is led by a Director of Facilities. This individual should possess general knowledge all trades as well as a strong ability to manage projects. To execute the Director's plan should be two individuals strong in the trades (especially one in HVAC), two generalists, and a janitorial staff. Currently, all skilled labor is assigned to the Wheeling campus and commute to other campuses as necessary while each of the other campuses employ 1 full time and 1 part time janitor to maintain coverage during hours of operation.

Financial Tracking

The function area of Operations & Maintenance is one of the largest OTPS expenses on campus. The Director should have very strong budgeting experience and monitor the budget closely. To do so, there have been several department budgets created as follows:

- Plant Operation that can be contributed specifically to a single building, excluding janitorial supplies
 - 2100 – Plant Operation B&O
 - 2104 – Plant Operation EC
 - 2105 – Plant Operation ATC
 - 2106 – Plant Operation Student Union
 - 2109 – Plant Operation ITC
- Janitorial obligations on the Wheeling campus are significant and are tracked in an individual department.
 - 3014 – Wheeling Campus Janitorial
- Plant Operation of the two other campuses including janitorial supplies
 - 3024 – Plant Operation Weirton
 - 3034 – Plant Operation New Martinsville
- Plant Operations that are multi-site related, labor for the Wheeling staff, and general supplies for administration of the department
 - 2107 – Department Administration
- All capital project work is tracked separately but divided into two categories;
 - 2000 – College Expansion
 - 2013 –Capital Projects

The Director of Facilities will present to the Budget Committee the list of capital priorities each year. The presentation will allow for full justification for each request and the committee opportunity to ask questions to gain understanding.

Facilities Master Plan

Routine / Preventative Maintenance

As previously note, WVNCC positions itself to be proactive by conducting regular preventative maintenance on equipment as well as keeping up with regular janitorial duties. These activities will prolong the life of a piece equipment and the life of the buildings as well. Though there is expense to conduct such programs, each has a return on investment.

A program with detailed assignments is maintained in Appendix B. Included in this program are seasonal maintenance schedules for HVAC, lawn and snow removal equipment, garage doors, and water fountains. At more detail, 'Punch List' are created for times of the years for maintaining floors, ADA doors, restrooms, parking lots and landscaping. The janitorial staff maintains check lists for daily, weekly, bi-monthly and monthly activities. Preventative maintenance tasks are kept on a monthly and quarterly basis.

Paramount in these programs of preventative maintenance and general upkeep are life safety systems. An external vendor will be engaged on a regular basis to review all life safety units and provide a detailed report noting all deficiencies and resolutions.

Campuses & Buildings

With three campuses, it is good to acknowledge their inherent difference. However, common architectural elements should be considered to provide commonality that promotes a student or community member knowing they are truly on a WVNCC campus no matter which one it is. Likewise, standardization and even interconnectivity of systems should be encouraged to leverage economies of scale in purchasing, maintaining and administering efficiency.

The Weirton Regional Campus located in Weirton Heights, approximately 3 miles east of downtown Weirton, WV, serves the Brooke and Hancock County region of the WVNCC. The Weirton campus' one building includes 11 classrooms, 5 computer labs, 2 wet and 2 dry laboratories, technical program space, student centers, college bookstore, administrative offices and conference rooms for business & community meetings. The campus is comprised of 20 acres of hillside, woodland property of which approximately 6 acres have been cleared for the current developed campus.

The building is two floors with first floor with approximately 18,500 sq. ft. and second floor of approximately 17,500 sq. ft. for a total of roughly 36,000 sq. ft. *CAD drawings, or similar floor plans, should be acquired with as much detail as possible. Over time, it is the goal to have HVAC, electrical, and plumbing layered on a floor plan. In addition, property records need obtained from the County Assessor.*

The New Martinsville Regional Campus is located at 141 Main St. adjacent to the New Martinsville Municipal Building. Both facilities, constructed in the late 1980's are build about the 100 year flood plain. This placed their first floor elevation some 10 feet above the adjacent street level. The college facility is a two-story brick building which houses administrate and faculty offices; counseling and student services; the Learning Resource Center; college bookstore; 8 classrooms, 3 computer labs, 2 dry laboratories, and an auditorium style area. The property sides

Facilities Master Plan

is approximately 16,500 sq ft with the property line about 25 feet from the perimeter of the building.

The buildings two floors are approximately 16,200 sq ft. *CAD drawings, or similar floor plans, should be acquired with as much detail as possible. Over time, it is the goal to have HVAC, electrical, and plumbing layered on a floor plan. In addition, property records need obtained from the County Assessor.*

The Wheeling Campus is a multi-building site located in downtown Wheeling WV. With the exception of the Industrial Technology Center, the campus is contiguous but requires the crossing of city streets to access all areas. Amongst the Wheeling building are:

Baltimore & Ohio Railway (B&O) Building located at 1704 Market St. This building is the show piece of the college and is on the National Historic Registry. It contains the administrative offices, 9 classrooms, 5 computer laboratories, 2 dry and 1 wet laboratory, library and auditorium. Each of the first three floors are approximately 19,500 sq ft with the fourth floor being about 15,500 sq. ft. for a total of 74,000 sq. ft. *CAD drawings, or similar floor plans, should be acquired with as much detail as possible. Over time, it is the goal to have HVAC, electrical, and plumbing layered on a floor plan.*

The Educational (EC) is a former warehouse renovated to fit the delivery of education. Located on Chapline St adjacent to the B&O, it houses student lounge and study areas, 13 classrooms, 4 computer laboratories, a gymnasium, administrative offices, and specialty learning spaces for culinary arts and health sciences. Three of the floors are approximately 19,500 sq. ft. with the second floor, disrupted by the height of the gymnasium, being 10,000 sq. ft. for a total of 68,500 sq. ft. *CAD drawings, or similar floor plans, should be acquired with as much detail as possible. Over time, it is the goal to have HVAC, electrical, and plumbing layered on a floor plan.*

The Applied Technology Center (ATC) is located at the northwest corner of Market and 16th St. across from the B&O Building. The ATC houses administrative offices, 2 traditional classrooms, and 5 specialty spaces to support programs such as Petroleum Technology, Refrigeration, Mechatronics, and HVAC technology. The two-story building is 10,000 sq. ft. on the first floor and 9,000 sq. ft. on the second for a total of 19,000 sq. ft. *CAD drawings, or similar floor plans, should be acquired with as much detail as possible. Over time, it is the goal to have HVAC, electrical, and plumbing layered on a floor plan.*

The Student Union is located on the southwest corner of Market and 16th street adjacent to the B&O Building. The Student Union is the location of the college bookstore on the first floor and student activity center on the second floor. The two story building is about 4,500 sq. ft. on each floor for 9,000 sq. ft. total. *CAD drawings, or similar floor plans, should be acquired with as much detail as possible. Over time, it is the goal to have HVAC, electrical, and plumbing layered on a floor plan.*

The Facilities Garage is located on South St. adjacent to the B&O building. The steel frame building is covered by steel sheeting. Though the building's 20,000 sq ft. is structurally sound and

Facilities Master Plan

provides adequate space for the storage of supplies and equipment, as well as administrative areas and employee breakroom, it is in poor condition on the outside.

The Industrial Technology Center (ITC) was renovated from an manufacturing facility to industrial program education in 2018. It is the only non-contiguous property in the downtown area. The building's first floor of 20,000 sq. ft. houses 3 classrooms, 3 administrative offices, conference room, student lounge, and 3 specialty spaces. There is a mezzanine level that is not suitable for occupancy, however, the fire marshal has allowed this 6,500 sq. ft. to be incidental storage. *CAD drawings, or similar floor plans, should be acquired with as much detail as possible. Over time, it is the goal to have HVAC, electrical, and plumbing layered on a floor plan.*

The property owned by WVNCC include:

District	St. Address	Legal Description	Owner	Deed Book/Page	Map / Parcel
10 - Wheeling	South St.	Market to Creek & 88.3 Ft Fronting On S. St.	B&O Railroad Co.	607 / 0394	W58 0113 0001 0000
10 - Wheeling	1535 Market St.	66' x 132' SQ 7 Lot 16	BOG	827 / 325	W58 0104 0000 0000
10 - Wheeling	8 16th St.	E W Sq 8 75' Lot 5	BOG	827 / 325	W58 0105 0000 0000
10 - Wheeling	6 South St.	66' x 144' Sq 9 LT 4 .217 AC Sq 13 L 13 14 & Updegraff	BOG	827 / 325	W58 0113 0000 0000
10 - Wheeling	16th & Market	3&7 Pt 4 8 Alley & PT 17th St	WVNCC	776 / 709	W59 0002 0000 0000
10 - Wheeling	Eoff St.	Updegraff PTS 4-5-6-7-8 & 13	WVNCC	752 / 281	W59 0010 0000 0000
10 - Wheeling	17th St.	E W Pt Lt 117 49x125	WVNCC	824 / 178	W59 0143 0000 0000
10 - Wheeling	17th Eoff St	East 1/2 Baldwin Row	WVNCC	824 / 178	W59 0143 0002 0000
10 - Wheeling	18th St	South of 18th Street 1.069 AC (Inc Lease 578/490)	WVNCC	739 / 500	W59 0316 0000 0000
10 - Wheeling	18th St	N Side 18th Street RR R of W .7088 AC	WVNCC	704 / 117	W59 0485 0000 0000

The records for Weirton and New Martinsville need to be obtained.

In 2018, WV CTCS commissioned an evaluation of the condition and utilization of the buildings throughout all of higher education. WVNCC received a score card for each classroom and lab focused on the current condition of floors, walls, ceiling, windows, and window treatments as well as the level of technology. WVNCC will use this information in prioritizing the general maintenance and upkeep of classrooms and laboratories. It is noted that WVNCC scored very well with minimal immediate needs (Appendix C). It is suggested that this type of audit be conducted by an outside firm every 4 years.

The Facilities Department has adopted a philosophy focused on simplification and consistency. In general practice, four colors of paint have been selected for all refreshing. Flooring choices have been reduced to three, two colors of carpet squares and a lamen hardwood look. Ceiling tile is paired down to one option. These actions, and similar thoughts, allows the department to keep stock available for quicker replacement.

Facilities Master Plan

Systems

HVAC

Heating, Ventilation, and Air Conditioning (HVAC) has significant impact in both the comfort of the learning and work environment as well as the financials of the college. These systems are generally the number one consumer of power. Therefore, it is important to keep HVAC systems in peak condition, running as efficiently as possible. This is done through regular preventative maintenance.

In addition, an HVAC audit should be done every five years to assess the condition of equipment and plan a replacement cycle. An audit was completed in 2017 and is included in Appendix D.

Building Exteriors

The envelop of a building is the first line of protection for the assets inside the building. Roof leaks, drafty seals and ill-fitting doors can allow elements into the building that could damage the interior contents and lead to excessively high utility bills.

A roof audit was completed in 2017 and is included in Appendix E. Since the audit, the WV CTCS has approved the use of bond funds to replacing the roofs in New Martinsville and Weirton. The replacement projects will add insulation value to the roofs, slope the roofs, and replacing 8 windows in Weirton to fortify the outside of the building.

Parking Lots

Though deteriorating lots can be driven on safely and serve as a parking area, this leads to the general impression people have of the college. Areas showing poor conditions should either be patched or completely repaved. The decision to patch or pave a deteriorating area can be challenges. Paving vendors will general provide a free evaluation of the lots and this should be taken into account every three to five years. Recommendation on crack filling and resealing to prolong the life of the lot will be solicited.

See the current parking lot audit done in 2017 in Appendix F.

Green Spaces

Though a commuter college with no residents; students, faculty and staff enjoy break times in WVNCC outdoor spaces. Not only are these areas for relaxation for the college constituencies, but also the community. WVNCC also serves a good environmental steward by the creation of green spaces.

Outdoor areas should be developed with two driving factors: 1) The maintenance required to keep the area in peak condition, and 2) cost. Currently the outside spaces are in satisfactory condition, but present an opportunity to raise the bar and make each campus attractive.

The primary green spaces owned by WVNCC are the B&O Courtyard (North), the B&O Plaza (South), the ITC Plaza, Weirton Plaza and Weirton Outlying Area.

Facilities Master Plan

Annual Goals and Actions

The priorities and needs for the physical plant of the college are fluid, shifting often. For that reason, the WVNCC long-term plan does not list specific projects to complete. Instead, there is guidance for assurance that the actions will align with the strategic plan and are developed in cooperation with the budget committee as the operational and capital budgets are created. However, there are some basic tenants that are kept in the forefront:

1. Equipment and structures that are near their end-of-life should be considered as the highest priorities.
2. Classrooms that are graded poorly and have significant requirements should be considered as high priorities.
3. Regular audits should not be neglected to ensure an objective view of priorities is kept.

Future Development

The College is fortunate to be financially stable at this time. It is an opportunity to modernize and improve the facilities to competitively position ourselves better when enrollment trends pick up. There is an aggressive push to address areas on the priority of:

1. Improving the ability to provide quality educational experience
2. Create efficiencies that may lower operational costs
3. Upgrade the appearance of the College

The following is a list of projects that could enhance the college along the lines of priority above:

1. Guaranteed Performance Contracts
 - a. WVNCC has been in conversation with companies offering 'Guaranteed Performance Contracts'. The concept is centered around an engineering firm making recommendations for investment into our infrastructure that will have a return on investment. The firm will guarantee and supplement the payback if the performance standards are met.
 - i. HVAC Controls will likely to be one of the recommendation of the firms
 - ii. Currently the global controls are lacking with independent systems instead of the comprehensive ability to see all units in one application.
2. ACT Parking Lot
 - a. Currently a bare bones lot that is located on a Main St. in Wheeling. The lot is barely recognizable as WVNCC property. Elements that tie it to the campus need to be established.
3. B&O Building Rehab
 - a. FY 2019 Capital Budget allocated \$28,000 for the fixing of concrete work on the front of the B&O building. To take advantage of economies of scale, the building should be completely rehabbed and cleaned at the same time
4. Patient Care Tech Observation Room

Facilities Master Plan

- a. As part of the curriculum of Patient Care Tech, students are expected to conduct simulations. Currently our simulations are done with the instructor in the same area. An observation would provide a more realistic experience.
5. B&O Auditorium
 - a. FY 2019 Capital Budget allocated \$10,000 for the replacement of flooring in the auditorium. The area needs a refresh from top to bottom with an upgrade in technology.
6. Library Renovations
 - a. Current space utilization on all three campuses for library is antiquated. The spaces need updated to support collaborative learning, 'maker spaces', and other current trends.
7. B&O Courtyard
 - a. The existing structure was recently demolished due to structural concerns. This presents an opportunity to revitalize and start developing common architectural elements that should be common throughout the colleges, all campuses, to ensure the WVNCC feel is always present.
8. ECS Lot
 - a. Through full confidence that the WVNCC Foundation will regain the property, it should be developed into additional parking
9. Weirton Windows
 - a. The Weirton Campus has a wall of windows in which the seals have broken and weather is entering the building. There is not structural concerns, not will problems get worse, but it is an item that needs addressed.
10. Lobby / Service Center Remodels (Weirton & Wheeling)
 - a. Modernize the look and functionality of the entryway including the service center.
 - b. This is already underway in New Martinsville.
11. B&O Lighting Package
 - a. As the centerpiece of the college, a dynamic lighting package to make it a tourist draw and standout building in the area would attract notoriety and in turn students.
12. Sign Package
 - a. Update external and internal signage to be modern and consistent across all campuses.
13. Facilities Garage
 - a. Though the garage is structurally sound and provides enough square footage, the outside is an eyesore. The exterior needs to be addressed to bring it up to the standards of the entire Wheeling Campus.
14. Concrete and Paving Repairs (All three campuses)
 - a. With an eye for safety concerns and aesthetics this would be a help in all of our campuses
15. CAD Drawings
 - a. To better manage our facilities, detail 'as built' drawings need to be created.
 - b. The safety committee has recently requested the floor plans for evacuations plans. Current drawings are outdated.
16. Elevator Cab (B&O & Weirton)

Facilities Master Plan

- a. Though impractical of replacing entire elevator, the cab can be refreshed / upgraded to a modern level (walls, ceiling, floors & lighting)

17. President's Suite and Boardroom

- a. Update to bring up to current standard of interior finishes, furniture and technology to increase the appearance and functionality.

Communication and Input

As WVNCC is committed to shared governance, it is imperative that input is solicited from the college community. Much of this is achieved through the budgeting process, but the following additional actions will be taken on an annual basis.

1. August – Director of Facilities Review
 - a. Appropriate updates will be made to the factual information of the plan
 - b. If audits are conducted in the prior year, appendix updates will occur
2. October - Master Plan distributed to College Community
 - a. Feedback is solicited through the Director of Facilities or Cabinet Members.
3. January – Board of Governors Approval
 - a. Note – This timing allows the BOG to have both the Facilities Master Plan and at least a preliminary look at capital projects upcoming in the next fiscal year.

Facilities Master Plan

Appendix A

Capital Renewal - Sightlines

Working Draft

West Virginia Northern Community College

Capital Renewal

March 2018

University of the Sciences in Philadelphia
University of Toledo
University of Vermont
University of Washington
University of West Florida
University of Wisconsin - Madison
Vanderbilt University
Virginia Commonwealth University
Wake Forest University
Washburn University
Washington State University
Washington State University - Tri-Cities Campus
Washington State University - Vancouver
Washington University in St. Louis
Wayne State University
Wellesley College
Wesleyan University
West Chester University
West Virginia Health Science Center
West Virginia University
Western Oregon University
Westfield State University
Widener University
Williams College
Worcester Polytechnic Institute
Worcester State University



What We Do

Data, software and expertise for all phases of The Building Lifecycle

GORDIAN[®] for Operations

Optimize ongoing maintenance, repairs and operations.



GORDIAN[®] for Planning

Analyze and benchmark facilities against others in the industry.



GORDIAN[®] for Construction

Manage change orders and construction projects with proven systems and services.



GORDIAN[®] for Design

Create accurate estimates using industry-standard RSMeans data.



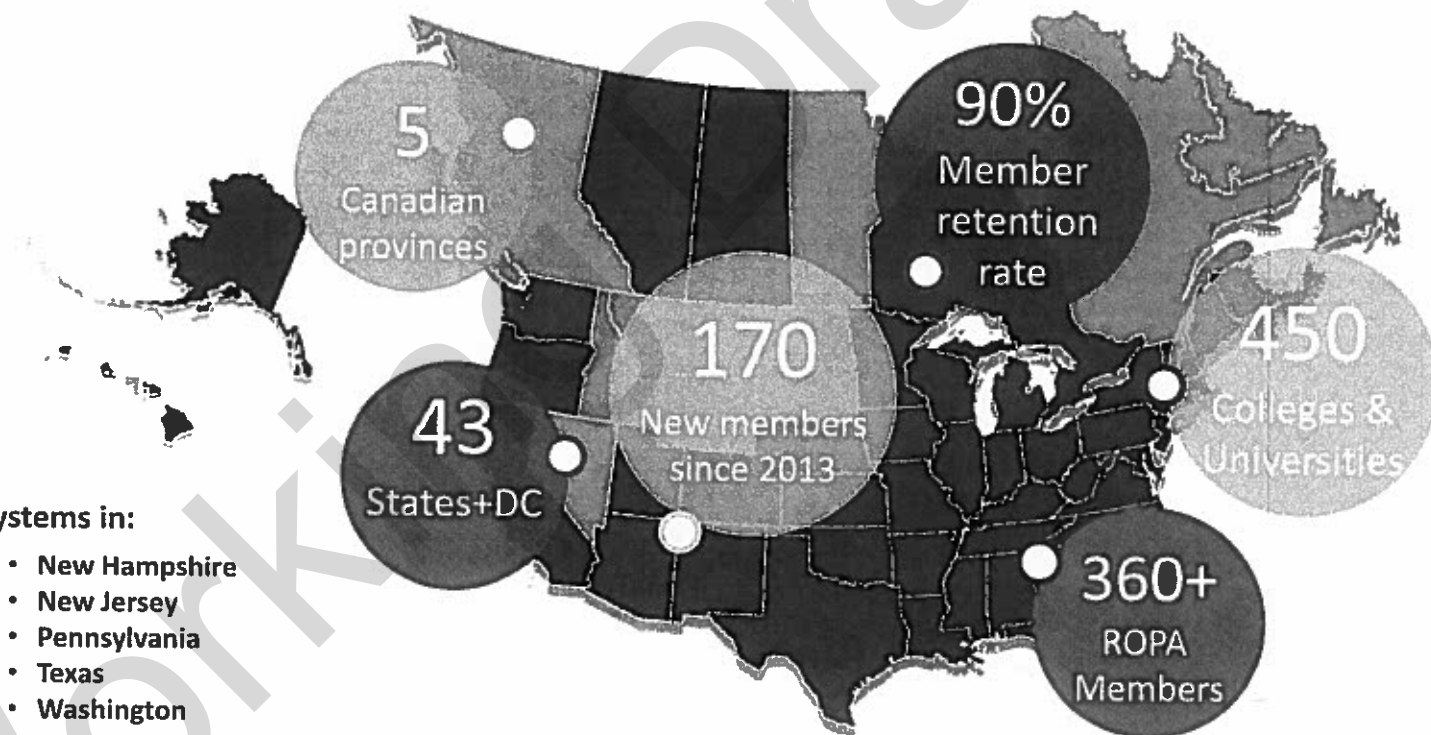
GORDIAN[®] for Procurement

Use detailed data and workflow tools to competitively contract construction.



Sightlines by the Numbers

Robust membership includes colleges, universities, consortiums, and state systems



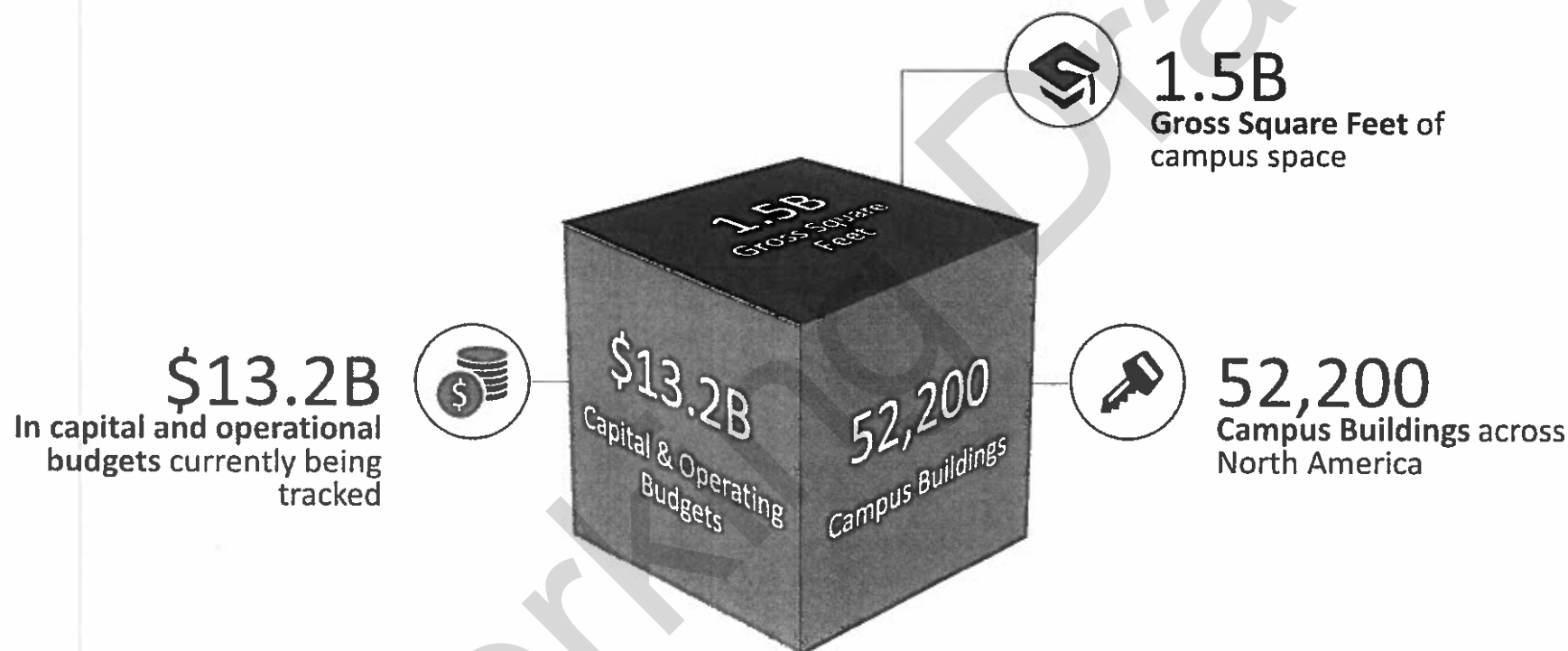
Sightlines has advised state systems in:

- Alaska
- California
- Florida
- Hawali
- Maine
- Massachusetts
- Minnesota
- Mississippi
- Missouri
- Nebraska
- Ohio
- New Hampshire
- New Jersey
- Pennsylvania
- Texas
- Washington

sightlines

a GORDIAN company

The Largest Verified Facilities Database



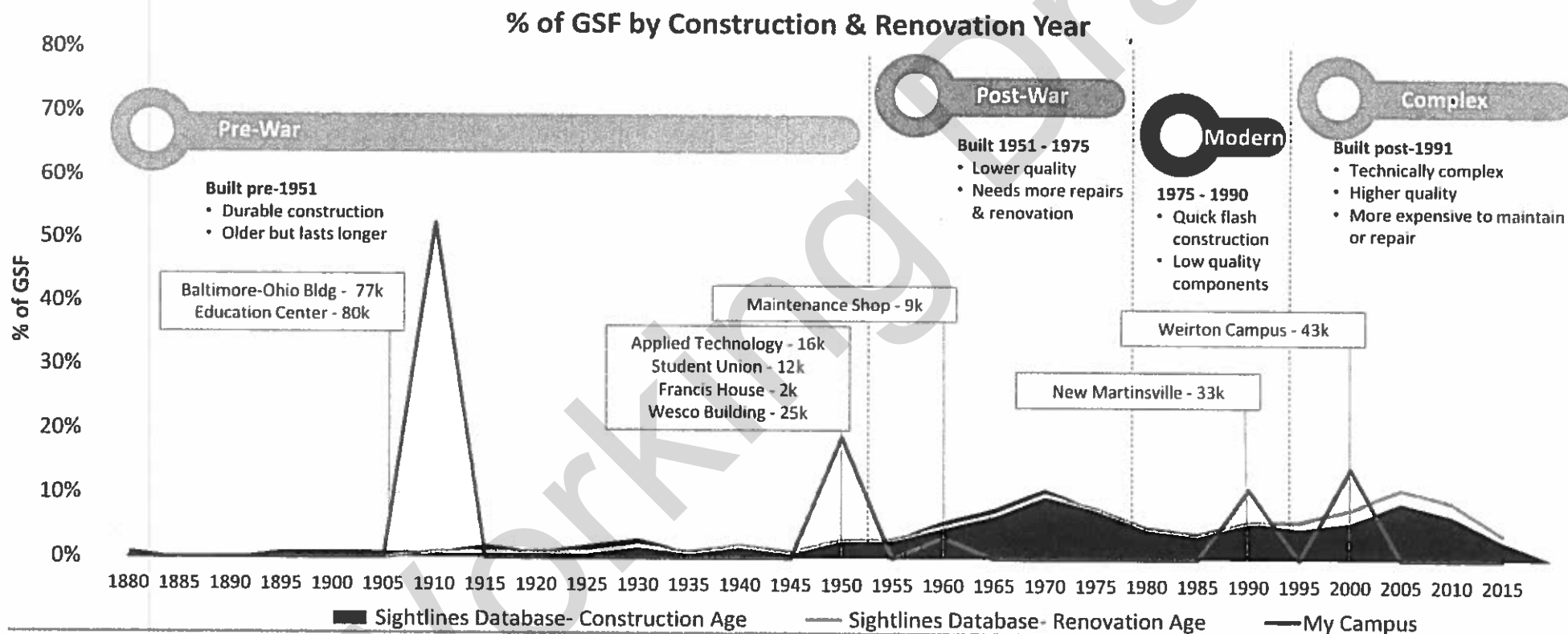
Sightlines members serve **over 20%** of US College Enrollment

Scope of Analysis

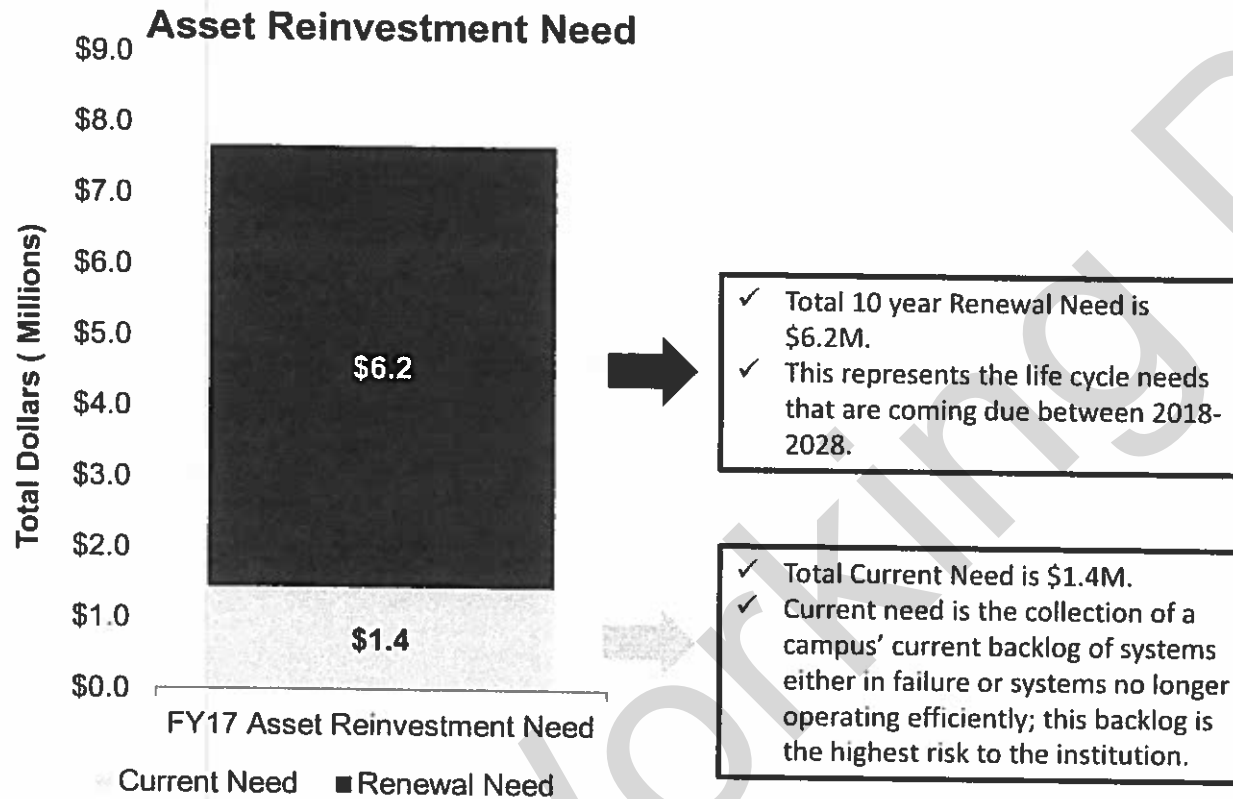
Building Name	GSF	Construction Year	Tech Rating
APPLIED TECHNOLOGY	16,500	1949	3
BALTIMORE-OHIO-BLDG	77,482	1907	3
EDUCATION CENTER	80,000	1910	3
FRANCIS HOUSE	2,800	1950	2
MAINTENANCE SHOP	9,900	1960	1
NEW MARTINSVILLE CAMPUS	33,000	1990	3
STUDENT UNION	12,600	1949	3
WEIRTON CAMPUS	43,000	1999	3
WESCO BUILDING	25,143	1950	3

Putting Your Campus Building Age in Context

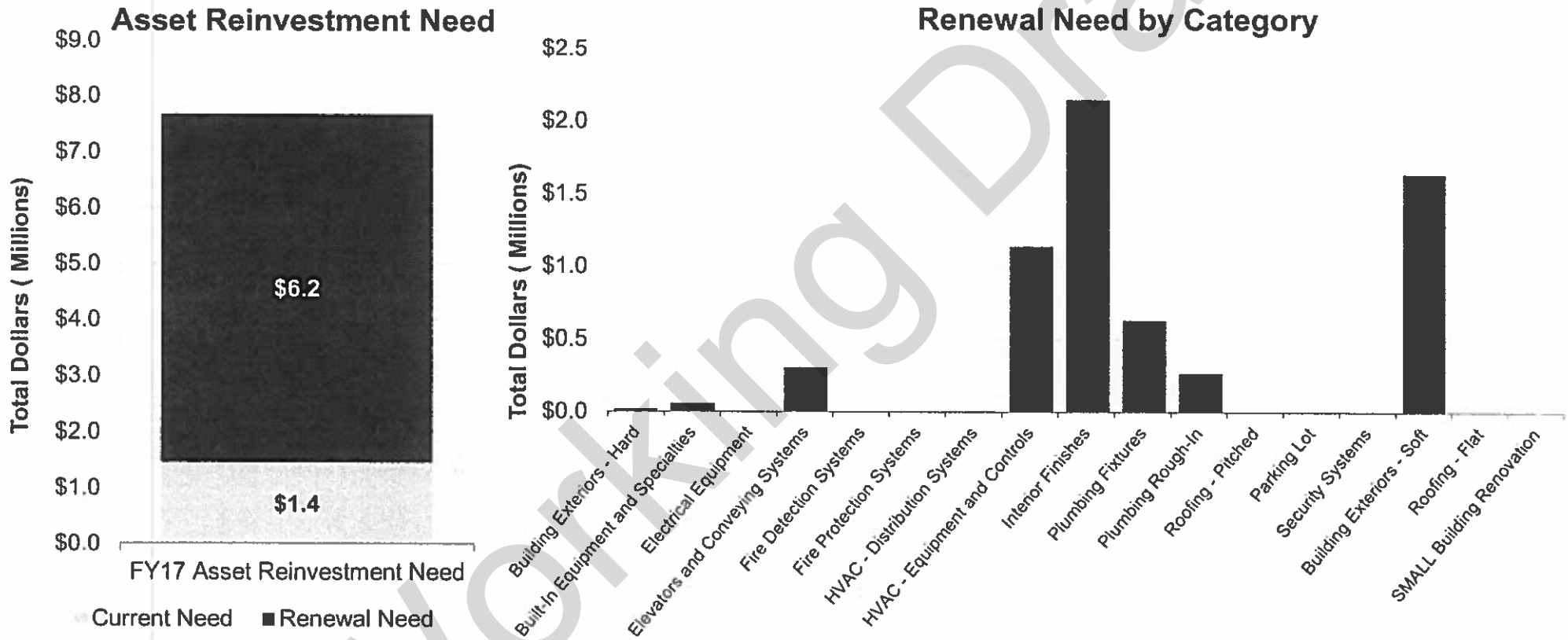
Advanced Technology Center added in 2016



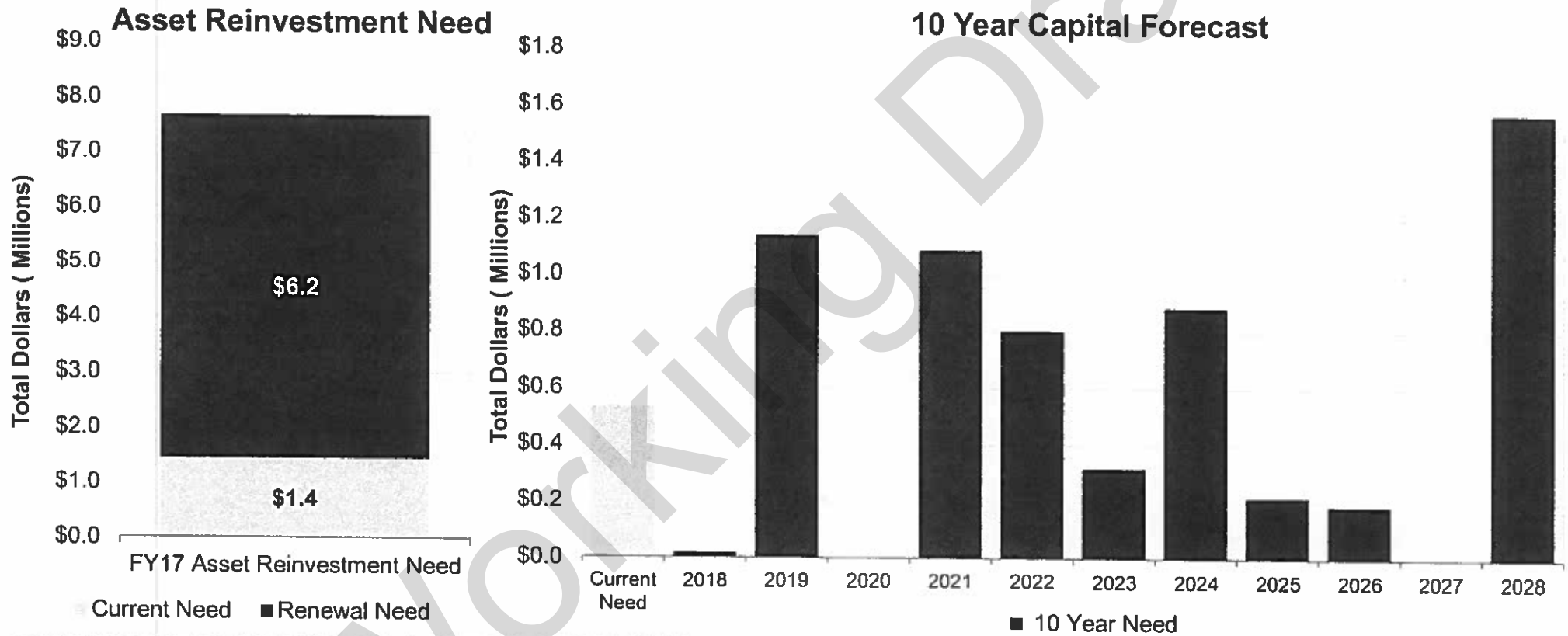
Understanding Asset Reinvestment Need at WVNCC



Asset Reinvestment by System Category

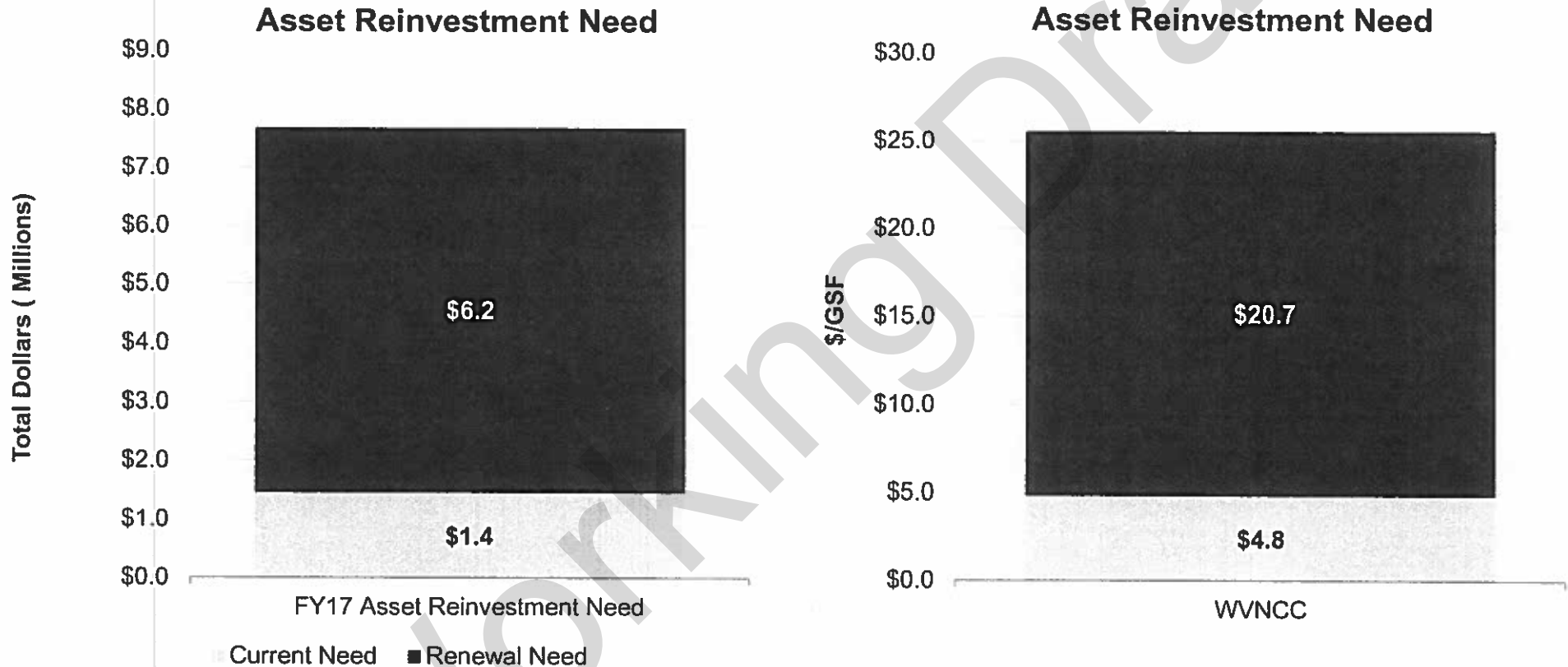


Majority of Need Comes Due in FY2028



WVNCC Asset Reinvestment Need

WVNCC has \$7.6M, \$25.50/GSF in Asset Reinvestment Need



Facilities Master Plan

Appendix B

Seasonal Maintenance Schedules

Working Draft

Monthly Inspection List

Monthly Inspections							
				Inspection Passed			
AED		YES	NO	Date of Inspection	Inspector Name	Notes/Comments	
1	Is Unit Clean and Undamaged						
2	Are There any Cracks or Loose Parts in the Housing						
3	Electrodes are Connected to the AED and Sealed in their Package						
4	Are all Cables free of Cracks, Cuts and Exposed or Broken Wires						
5	Turn the AED On and Off and Verify the Green Check Indicates Ready for Use						
6	Batteries within Expiration Dates						
Boiler Circulation Pump							
1	Inspect for Proper Operation						
2	Lubricate if Needed						
EC Chiller Pump							
1	Check Operation						
2	Replace Filters						
Emergency Eye Wash							
1	Check for Leaks						
2	Proper Placement of Protective Covers						
3	Activate Unit for 15 Minutes						
Exit Signs							

1	Press Test Button to Verify Operation on Battery Backup							
2	Replace Batteries if Needed							
Fire Extinguishers								
1	Check Pressure is in the Green "Appropriate Pressure" Range							
2	Check Safety Pin is in Place with Tamper Tag							
3	Check Hose for Obstruction and Clearance							
4	*Every Six Inspections Turn Extinguisher Upside Down to "Shake" Powder							
B&O Generator								
1	Run for 15 min							
2	Check Oil Level							
3	Check Belts							
4	Check all Hoses							
5	Check Coolant Level							
6	Check Wires for Loose Connections and Breakage							
7	Check all Plugs							
8	***Oil Change Every 100 Hours							
Hose Bibs								
1	Flush for 2 Min to Remove any Debris							
Nursing Compressors								
1	Check Oil Level							
2	Check Drain Trap for any Blockage							
3	Remove Condensate from Tank							
4	*Annually Test Bleed Valve							
Roof Drains								
1	Verify no Debris							

[illegible]

Quarterly Maintenance

Quarterly Inspections								
				Inspection Passed				
				YES	N O	Date of Inspection	Inspector Name	Notes/Comme nts
AHUs								
1	Disconnect Power and Perform Lockout/Tagout Procedure							
2	Check Bearings for Unusual Noise or Vibration							
3	Grease Bearings if Needed							
4	Check Pulleys for Wear and Replace if Needed							
5	Check Filters and Replace if Needed							
6	Check Amperage Draw and Motor Voltage							
7	Lubricate Motor Bearings							
8	Inspect Coils and Clean if Needed							
9	Vacuum Out Interior of Air Handler							
10	Check Out Interior of Air Handler							
11	Check Out Controls for the Air Handler							
12	Check Out Condition of Belts and Replace if Needed							
13	Discard of Trash and Clean up Area							
14	Visually Inspect the AHU for Damage or Rust							
15	Restore Power and Check Amperage Draw							
16	Check All Electrical Connections and Tighten							
Chiller								
1	Disconnect Power and Perform Lockout/Tagout Procedure							

2	Check Bearings for Unusual Noise or Vibration				
3	Grease Bearings if Needed				
4	Check Pulleys for Wear and Replace if Needed				
5	Check Filters and Replace if Needed				
6	Check Amperage Draw and Motor Voltage				
7	Lubricate Motor Bearings				
8	Inspect Coils and Clean if Needed				
9	Vacuum Out Interior of Air Handler				
10	Check Out Interior of Air Handler				
11	Check Out Controls for the Air Handler				
12	Check Out Condition of Belts and Replace if Needed				
13	Discard of Trash and Clean up Area				
14	Visually Inspect the AHU for Damage or Rust				
15	Restore Power and Check Amperage Draw				
16	Check All Electrical Connections and Tighten				
Condensers					
1	Disconnect Power and Perform Lockout/Tagout Procedure				
2	Check Bearings for Unusual Noise or Vibration				
3	Grease Bearings if Needed				
4	Check Pulleys for Wear and Replace if Needed				
5	Check Filters and Replace if Needed				
6	Check Amperage Draw and Motor Voltage				
7	Lubricate Motor Bearings				
8	Inspect Coils and Clean if Needed				
9	Vacuum Out Interior of Air Handler				
10	Check Out Interior of Air Handler				
11	Check Out Controls for the Air Handler				
12	Check Out Condition of Belts and Replace if Needed				
13	Discard of Trash and Clean up Area				

14	Visually Inspect the AHU for Damage or Rust					
15	Restore Power and Check Amperage Draw					
16	Check All Electrical Connections and Tighten					
Boiler						
1	Clean Burners					
2	Clean Hood Area					
3	Tighten All Electrical Controls					
4	Inspect All Controls and Gas Valves					
5	Inspect System for Gas Leaks					
6	Check Air Intakes for Obstruction					
7	Remove all Combustables, Trash & Debris from Area					
8	Examine Venting System					
9	Examine Pilot and Burner Flame Condition					
10	Flush System					
11	Grease Water Pump Bearings					
12	Grease Linkages					
13	Check Hot Water Temps and Set Schedule					
Rooftop Unit						
1	Check Condensate Drains					
2	Clean Evaporator Coils					
3	Clean Condenser Coils					
4	Lubricate All Bearings					
5	Check or Replace Belts					
6	Clean or Replace Filters					
7	Lubricate Linkages					
8	Check All Fans					
Hot Water Tanks						

	Check for Gas Valve Leakage					
	Check All Electrical Connection					
	Check for any Corrosion					
	Check All Operating Temperatures					
	Ribbon Burners					

Working Draft

Seasonal Maintenance

Seasonal Inspections (Spring & Fall)									
						Inspection Passed			
				YES	NO	Date of Inspection	Inspector Name	Notes/Comments	
Restroom Exhaust Fans									
1	Check for Unusual Vibration/Damage								
2	Lockout/Tagout if Applicable								
3	Check/Replace Belts if Applicable								
4	Grease Bearings								
5	Check All Electrical Connections								
C-Arts Exhaust Fans									
1	Check for Unusual Vibration/Damage								
2	Lockout/Tagout if Applicable								
3	Check/Replace Belts if Applicable								
4	Grease Bearings								
5	Check All Electrical Connections								
Lawn Equipment									
****	add information								
Snow Removal Equipment									
****	add information								

Seasonal Inspections (Spring & Fall)							
				Inspection Passed			
				YES	NO	Date of Inspection	Inspector Name
							Notes/Comments
Roll Up Doors							
1	Oil Chain						
2	*EC & Maintenance Shop						
Water Fountains							
1	Remove Side Panel						
2	Clean Coil						
3	Vacuum Out Interior						

Punch List - May/June

#	Name	Description	Completed?	By Who?	Date	Notes/Comments
1	Office Clean Out	Email beginning of May to each campus asking faculty and staff to schedule any "heavy" clean out of their area Ask for any furniture that needs removed (email to rest of campus) or furniture that needs disposed of, complete asset disposal and put in scrap dumpster. Order Paper Dumpster Schedule Office clean out 2nd week of May into June				
2	Floors (Multi-Campus)	Strip and Wax (additional instruction list required) Shampoo Carpet (additional instruction list required)				
3	Restroom Doors	Paint - an audit should be done prior to summer break **Schedule should be 2 sets of doors (2 floors) done at the end of Friday afternoon shift to allow drying over the weekend **Approximate completion 6 Fridays				
4	Restrooms	Wipe down all walls Run side by side on all floors				
5	Mulch	Refresh all beds each year Order bulk for refresh Audit walkthrough in May for approximate amounts and tentative scheduling				
6	Multi-Campus Deep Clean	Rotate cleaning crew to; Wipe down steps and hand rails Wall clean up - scuff marks Restrooms - deep clean				
7	Multi-Campus Maintenance Prep	Rotate maintenance crew to; Check all cove base (provide building layout sheets) ** Replace and repair any damaged VCT Check ** Replace and repair any damaged Carpet Check ** Replace/Repair/Deep Clean any damaged				
8	Parking lot Re-sealing					

Punch List - August

#	Name	Description	Completed?	By Who?	Date
		*Send email first of August asking if faculty or staff have any special adjustment requests to their class rooms so it may be scheduled during the month of August and ready for Fall semester			
1	Restrooms	Check all lights for operation			
		Flush all toilets so no traps are dry			
		Tighten all stall doors and toilet seats			
		Check operation of all handicap doors			
		Wipe down all walls			
		Run side by side on all floors			
2	Classrooms (Janitorial/Maintenance)	Dust mop all floors			
		Wipe all tables/shelves/furniture			
		Check all lights for operation			
		Check all ceiling tile for stains - replace as needed			
		Dust mop all floors and steps			
		Wipe down all handrails and all common area surfaces			
		Clean all interior glass of entrances			
3	Signage - Wheeling Campus	"Welcome Back" banner (tie-dyed)			
		**Need count and location			
		"Student Welcome" (hung inside buildings)			
		**Need count and location			
		Hallway information/Literature			
		**Check for all outdated and remove			
		Parking & Walking signs			
		**Need count and location			

Punch List - Custodial - Daily

#	Name	Description	Completed?	By Who?	Date	Notes/Comments
1	Garbage	Empty all garbage receptacles indoors				
		Replace liners as needed				
		Spray deodorizer in all liners				
		Locate all garbage inside dumpster				
		Notify supervisor of overloaded dumpster				
2	Restrooms	Disinfect all handles				
		Replenish all supplies				
		Clean/Sanitize all fixtures				
		Dust mop and wet mop all floors				
3	Corridors/Stairwells/Open Spaces/ Elevators	Pick up loose items/trash				
		Dust mop				
		Wet mop as needed				
		Dust corners/edges				
		Clean water fountains				
		Clean tables as needed				
		Sanitize handles				
4	Classrooms	Dust mop as needed				
		Wet mop as needed				
		Clean tables as needed				
		Clean chalk/white boards and trays				
		Sanitize handles/telephone/mouse				
		Dust monitors				
		Clean podiums as needed				
5	Offices	Sanitize handles/telephone/mouse				
		Dust mop as needed				
		Wet mop as needed				
		Vacuum				
		Dust monitor/corners/unoccupied surfaces				
6	C.A.R.T.S. (Culinary Arts Floor Care)	Remove standing mats and access items				
		Relocate items to lobby area				
		Wet mop tile floors from dinning side to loading dock side				
		Use specific floor cleaner as designated by C.A.R.T.S. for wet mopping				
		Relocate items back to designated areas after floor has dried				
		Clean equipment and return to C.A.R.T.S. storage				

Punch List - Custodial - Weekly

#	Name	Description	Completed?	By who?	Date	Notes/Comments
1	Garbage	Remove Garbage and replace liner in all outdoor cans				
		Clean the exterior of indoor cans as needed				
2	Restrooms	Clean walls and remove excess grime from under and around dispensers, soap/paper towels/toilet paper				
		Clean Stalls				
3	Floors	Burnish corridor floors				
		Wet mop corridor floors				
		Wet mop stairwells				
4	Entrances	Clean interior/exterior glass at all building entrances				
		Remove cob web/debris from entrances				
5	Classrooms	Dust/Clean window ledges				
		High dust: diffusers, cabinets, etc.				

Punch List - Custodial - Bi-Monthly

#	Name	Description	Completed?	By who?	Date	Notes/Comments
1	Showers	E.C. and President's showers. Scrub walls, floors and fixtures				
		Sanitize handles				
2	Multipurpose Room	Machine scrub rubber floor				
3	Floor Care	Wet mop all vct floor classrooms				
		Clean all base boards/cove case				
		Remove markings from corridors				
4	Stairwells	Sanitize all hand rails				
5	Confrence Room 121E	Sanitize all tables				
		Sanitize all chairs				

Punch List - Custodial - Monthly

#	Name	Description	Completed?	By Who?	Date	Notes/Comments
1	Glass	Clean interior/exterior E.C. lobby glass				
		Clean interior classroom windows				
		Clean interior office windows				
2	Floors	Burnish classroom vct floors				
		Wet mop office vct floors				
3	Lights	Clean bugs from interior light fixtures				
4	Supplies	Inventory, order and stock custodial supplies				
5	Equipment	General cleaning of custodial equipment				
		Perform required maintenance on custodial equipment				

[illegible]

Preventive Maintenance - Monthly

#	Name	Description	Completed?	By Who?	Date
1	AED	Is the unit clean and undamaged?			
		Are there any cracks or loose parts in the housing?			
		Electrodes are connected to the AED and sealed in their package?			
		Are all cables free of cracks, cuts, and exposed or broken wires?			
		Turn the AED on and off and verify the green check indicates ready for use			
		Batteries within Expiration dates			
2	Boiler Circulation Pump	Inspect for proper operation			
		Lubricate if needed			
3	EC Chiller Pump	Check operation			
		Replace filters			
4	Emergency Eye Wash	Check for leaks			
		Proper placement of protective covers			
		Activate unit for 15 minutes			
5	Exit Signs	Press test button to verify operation on battery backup			
		Replace batteries if needed			
6	Fire Extinguishers	Check pressure is in the green "appropriate pressure" range			
		Check safety pin is in place with the tamper tag			
		Check hose for obstruction and clearance			
		*Every six inspections turn extinguisher upside down to "shake" powder			

7	B&O Generator	Run for 15 minutes			
		Check oil level			
		Check belts			
		Check all hoses			
		Check coolant level			
		Check wires for loose connections and breakage			
		Check all plugs			
		***Oil change every 100 hours			
8	Hose Bibs	Flush for 2 minutes to remove any debris			
9	Nursing Compressors	Check oil level			
		Check drain trap for any blockage			
		Remove condensate from tank			
		*Annually test bleed valve			
10	Roof Drains	Verify no debris			
11	ATC Dry Sprinkler System	Drain Condensate Line			
12	Stairwell Lights	Test battery backup			
13	Tamper Switch	***Call fire alarm monitoring company to place on bypass for testing			
		Close Valve			
		Verify alarm sounds			
		Verify alarm was reported to fire alarm monitoring company			
		***Verify fire alarm monitoring company has taken system off bypass			
14	Vehicles	Check oil level			
		Check transmission fluid			
		Check air pressure			
		Wash and clean interior			
15	Handicap Doors	Check operation			
		Oil hinges			
16	Electrical Closets	Panels are free of ANY blockage by 3 ft.			

Preventive Maintenance - Quarterly

#	Name	Description	Completed?	By Who?
1	AHUs	Disconnect power and perform lockout/tagout procedure		
		Check bearings for unusual noise or vibration		
		Grease bearings if needed		
		Check pulleys for wear and replace if needed		
		Check filters and replace if needed		
		Check amperage draw and motor voltage		
		Lubricate motor bearings		
		Inspect coils and clean if needed		
		Vacuum out interior of air handler		
		Check out interior of air handler		
		Check out controls for the air handler		
		Check out condition of belts and replace if needed		
		Discard of trash and clean up area		
		Visually inspect the AHU for damage or rust		
		Restore power and check amperage draw		
		Check all electrical connections and tighten		

2	Chiller	Disconnect power and preform lockout/tagout procedure		
		Check bearings for unusual noise or vibration		
		Grease bearings if needed		
		Check pulleys for wear and replace if needed		
		Check filters and replace if needed		
		Check amperage draw and motor voltage		
		Lubricate motor bearings		
		Inspect coils and clean if needed		
		Vacuum out interior of air handler		
		Check out controls for the air handler		
		Check out condition of belts and replace if needed		
		Discard of trash and clean up area		
		Visually inspect the AHU for damage or rust		
		Restore power and check amperage draw		
		Check all electrical connections and tighten		
3	Condensers	Disconnect power and preform lockout/tagout procedure		
		Check bearings for unusual noise or vibration		
		Grease bearings if needed		
		Check pulleys for wear and replace if needed		
		Check filters and replace if needed		
		Check amperage draw and motor voltage		
		Lubricate motor bearings		
		Inspect coils and clean if needed		
		Vacuum out interior of air handler		
		Check out interior of air handler		
		Check out controls for the air handler		
		Check out condition of belts and replace if needed		
		Discard of trash and clean up area		
		Visually inspect the AHU for damage or rust		
		Restore power and check amperage draw		
		Check all electrical connections and tighten		

4	Boiler	Clean burners		
		Clean hood area		
		Tighten all electrical controls		
		Inspect all controls and gas valves		
		Inspect system for gas leaks		
		Check air intakes for obstruction		
		Remove all combustables, trash and debris from area		
		Examine venting system		
		Examine pilot and burner flame condition		
		Flush system		
		Grease water pump bearings		
		Grease linkages		
		Check hot water temps and set schedule		
5	Rooftop Unit	Check condensate drains		
		Clean evaporator drains		
		Clean condenser coils		
		Lubricate all bearings		
		Check or replace belts		
		Clean or replace filters		
		Lubricate linkages		
		Check all fans		
6	Hot Water Tanks	Check for gas valve leakage		
		Check all electrical connection		
		Check for any corrosion		
		Check all operating tempatures		
		Ribbon burners		

Facilities Master Plan

Appendix C

Space Utilization - Sightlines

Working Draft

Northern Community & Technical College

FY17 Space Utilization

March 2018

University of the South
University of Toledo
University of Vermont
University of Washington
University of West Florida
University of Wisconsin - Madison
Vanderbilt University
Virginia Commonwealth University
Wake Forest University
Washburn University
Washington State University
Washington State University - Tri-Cities Campus
Washington State University - Vancouver
Washington University in St. Louis
Wayne State University
Wellesley College
Wesleyan University
West Chester University
West Virginia Health Science Center
West Virginia University
Western Oregon University
Westfield State University
Widener University
Williams College
Worcester Polytechnic Institute
Worcester State University



Scope of Work - # of Classrooms

Building Name	Room Number	Room Condition
New Martinsville	207	Minimal
New Martinsville	212	Minimal
New Martinsville	211	Limited
New Martinsville	210	Minimal
New Martinsville	209	Minimal
New Martinsville	202	Limited
New Martinsville	201	Limited
New Martinsville	200	Minimal
New Martinsville	204	Minimal
New Martinsville	115 Math Lab	Limited
New Martinsville	113	Limited
New Martinsville	111	Limited

Building Name	Room Number	Room Condition
New Martinsville	110	Minimal
Education Center	304	Minimal
Education Center	408	Minimal
Education Center	418	Minimal
Education Center	415	Minimal
Education Center	411	Minimal
Education Center	410	Minimal
Education Center	409	Minimal
Education Center	407	Minimal
Education Center	406	Minimal
Education Center	404	Minimal

Scope of Work - # of Classrooms

Building Name	Room Number	Room Condition
Education Center	405	Minimal
Education Center	305	Minimal
Education Center	307	Minimal
Education Center	306	Minimal
Education Center	308	Minimal
Education Center	Surgical technology	Limited
Education Center	309	Minimal
Education Center	310	Minimal
Education Center	Kitchen	Minimal
Education Center	318 Patient care tech	Minimal
Education Center	121	Minimal

Building Name	Room Number	Room Condition
B&O	301	Minimal
Applied tech	200	Minimal
Applied tech	208B	Limited
Applied tech	208	Limited
Applied tech	113 Welding Lab	Limited
Applied tech	111	Limited
Applied tech	110B	Minimal
Applied tech	110	Minimal
B&O	A&P Lab 302	Limited
B&O	418	Limited
B&O	416	Limited

Scope of Work - # of Classrooms

Building Name	Room Number	Room Condition
B&O	411	Limited
B&O	405	Limited
B&O	ACT test center 406	Limited
B&O	303	Minimal
B&O	304	Minimal
B&O	313	Minimal
B&O	312	Minimal
B&O	316	Minimal
B&O	323	Minimal
B&O	325	Limited
B&O	330B	Minimal
B&O	220	Limited
B&O	219	Minimal
B&O	201	Limited
B&O	202	Minimal

Building Name	Room Number	Room Condition
B&O	219	Minimal
B&O	201	Limited
B&O	202	Minimal
Wierton	117B	Minimal
Wierton	109	Minimal
Wierton	114	Limited
Wierton	115	Limited
Wierton	142	Limited
Wierton	134	Minimal
Wierton	218E	Minimal
Wierton	218H	Minimal
Wierton	218D	Minimal

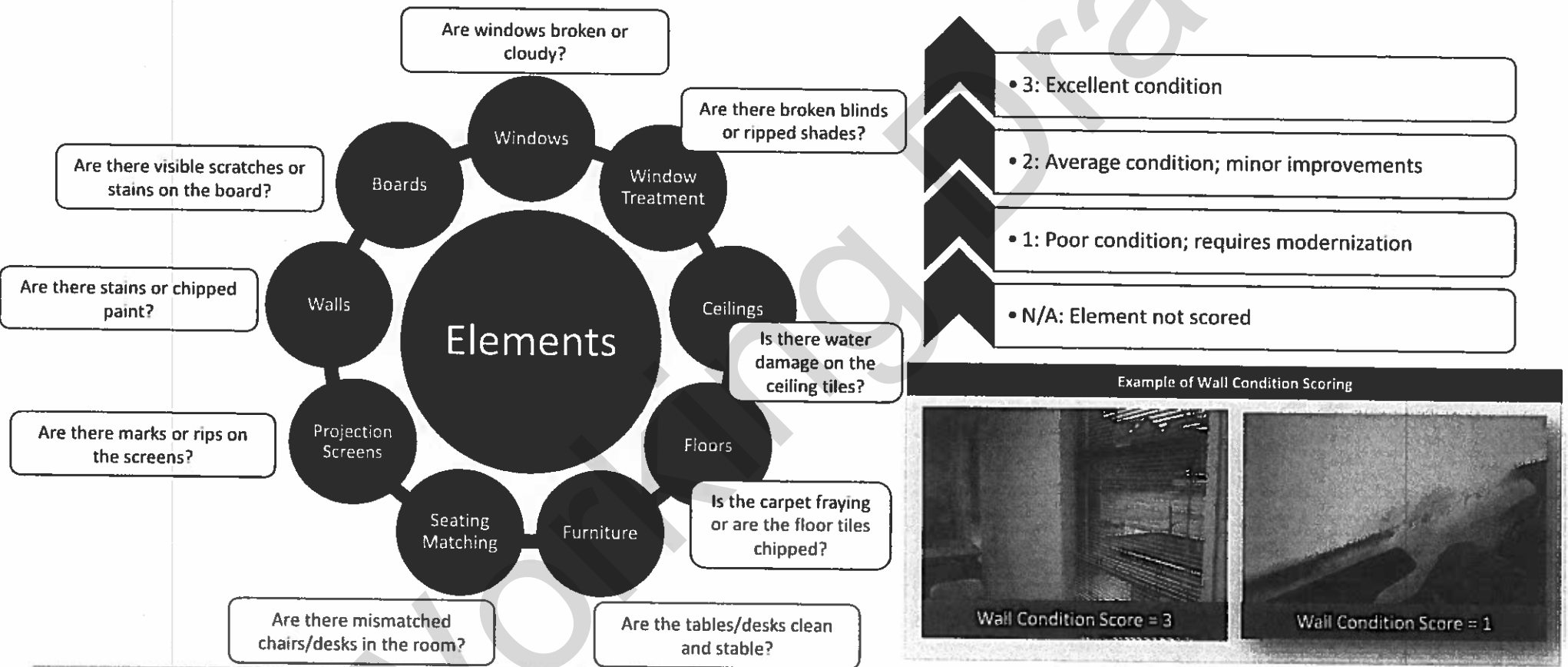
Scope of Work - # of Classrooms

Building Name	Room Number	Room Condition
Wierton	209A	Limited
Wierton	209-B	Limited
Wierton	214	Limited
Wierton	208	Limited
Wierton	215	Limited
Wierton	241	Limited
Wierton	254	Limited
Wierton	251	Limited
Wierton	244	Limited
Wierton	248	Limited
Wierton	243	Minimal

Initial Walkthrough Findings



Condition Scoring Methodology



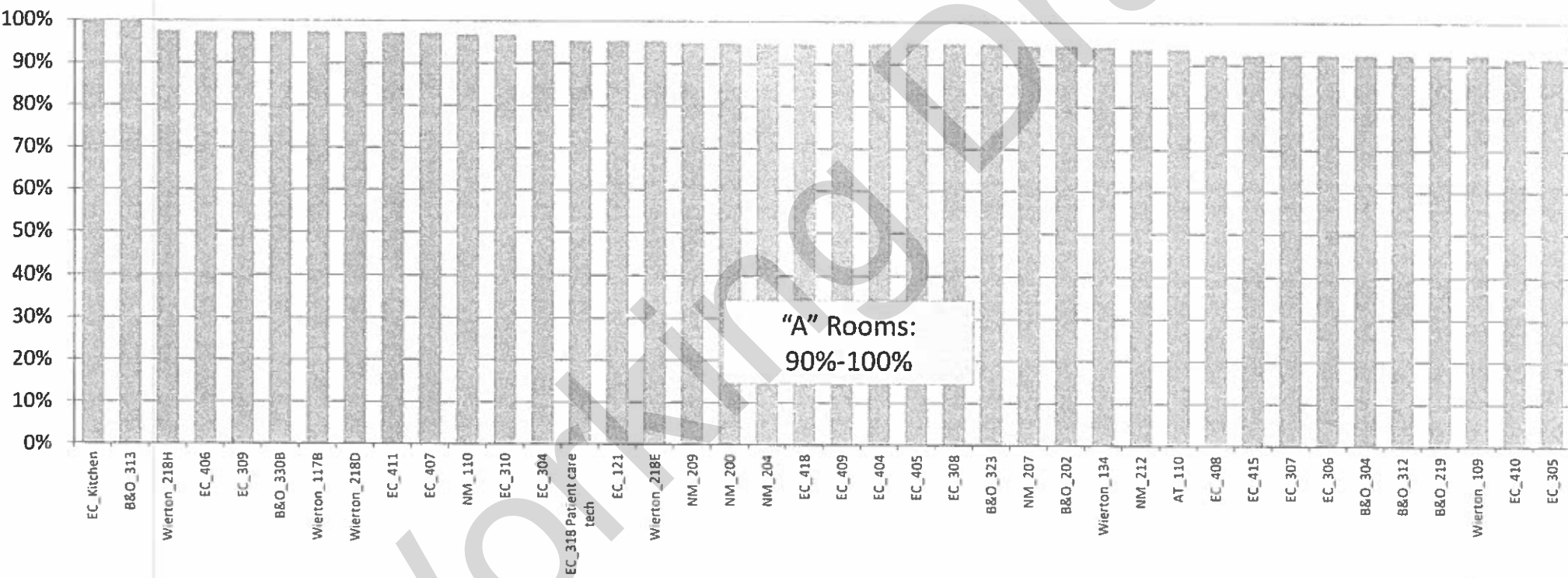
Example of Wall Condition Scoring



Condition Inspection

58% of rooms fall under Condition Score A

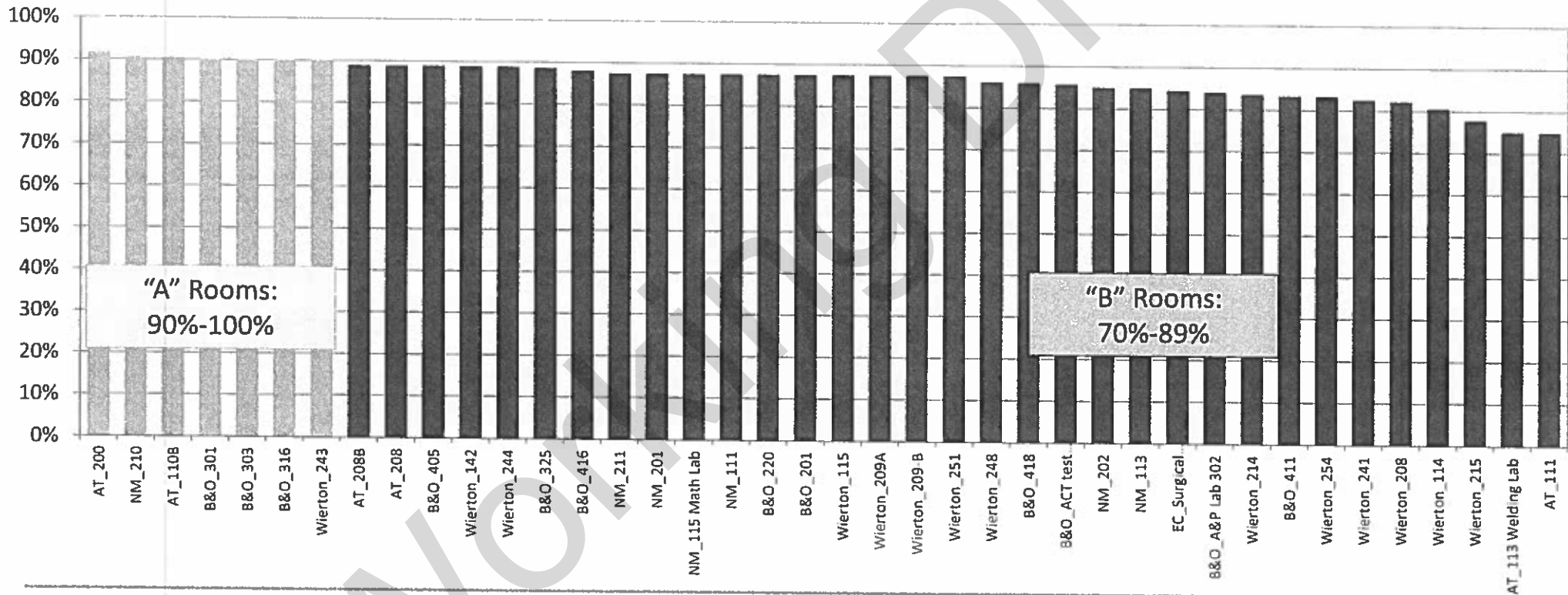
Condition Score



Condition Inspection

58% of rooms fall under Condition Score A

Condition Score



Condition Scores by Building

New Martinsville



- Scuffs and scratches in high traffic areas

Education Center



- Space in very good condition
- Classroom furniture in good shape

Weirton



- Classroom furniture showing signs of age
- Walls Scuffed slightly

Applied Technology



- High traffic areas showing signs of age
- Floors worn by use

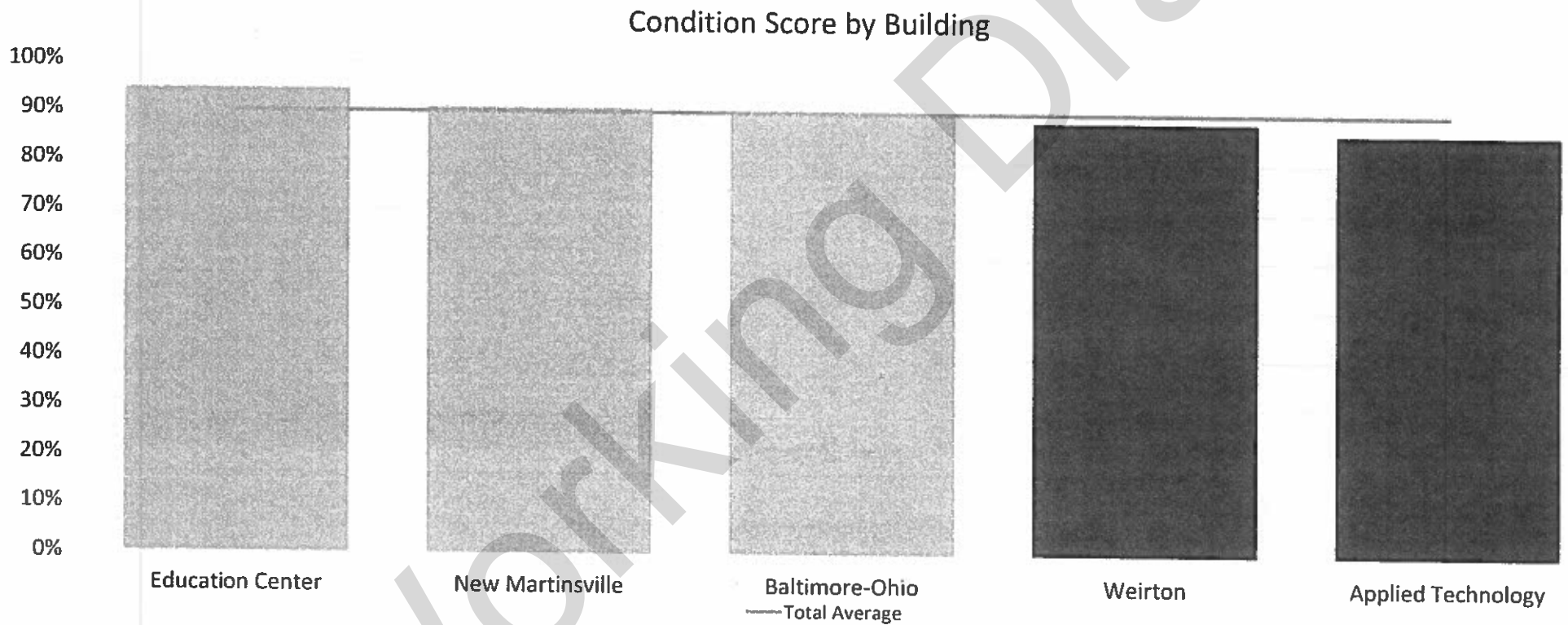
Baltimore - Ohio



- Walls in excellent condition
- Floors and windows in excellent condition

Condition Score by Building

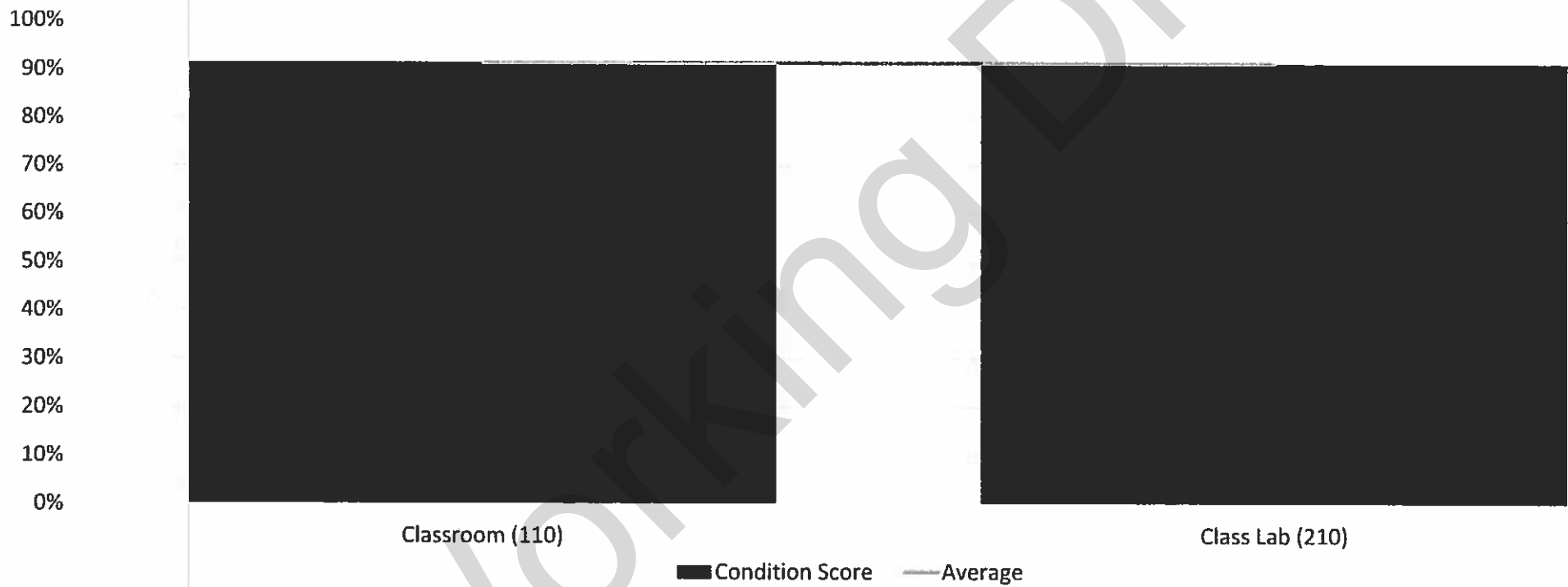
Average Condition Score for Northern Community and Technical College at 90%



Condition Scores by Room Type

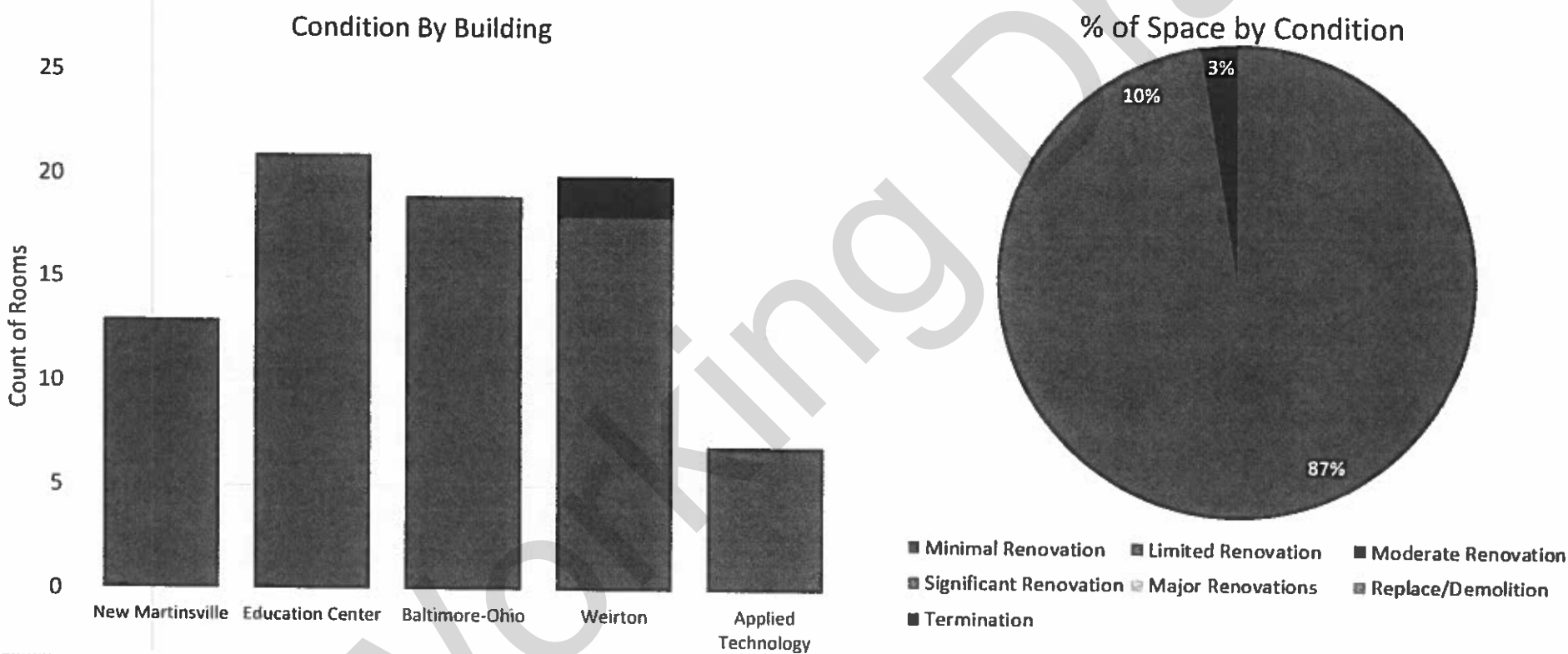
Average Condition Across All Room Types at 91%

Average Condition Score by Room Type

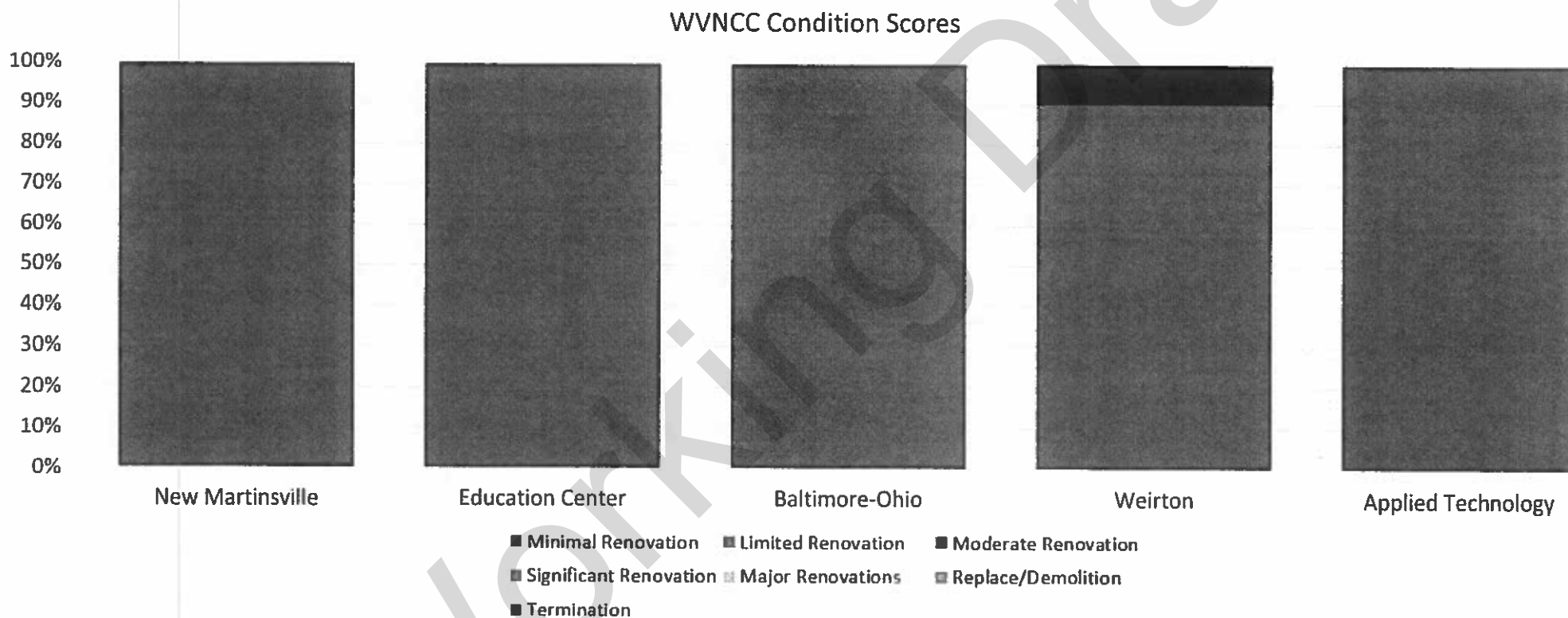


Condition Score Summary

88% of space at WVNCC at Minimal Renovation Condition Score



Condition Scores by Building



Technical Components Inspection Process

Element	0	1	2	3	4	Conditions for "Not Scored"
Window Tech Score	Non-operable Windows, No Air Conditioning	Operable Windows, manual treatment	Operable Windows, automatic treatment	Air-Conditioning, manual treatment	Air-Conditioning, automatic treatment	No windows
Lighting	Inadequate Lighting	No Controls	Dimming capabilities	Zone control or independent board lighting	Dimming, and zone control and/or independent board lighting	
Total Proj. Screen Tech [score for rooms <1000 SF]	No Projection Screen [no projection screen]	Manual Projection Screen [n/a]	Multiple Manual Projection Screens [manual projection screen(s)]	Automatic Projection Screen [n/a]	Multiple Projection Screens, at least one of which is automatic [automatic projection screen(s)]	
Total Board Tech	No Boards	Chalk Board Only	White Board Only	Multiple White Boards/ whiteboard paint	Smart Board (s)	
Sound Amplification	No Amplification and Loud Ambient Noises	No Amplification	Audio Amplification Only	Speech Amplification Only	Audio and Speech Amplification	Rooms smaller than 1000 SF
Projection Capability Score	No projection	Overhead Projector(s)	Document Projector(s)	Long-Throw Projector(s)	Short-Throw Projector(s) or Large TV	
Video Capability Score	None	Video Capabilities (incoming)	Video Capabilities (outgoing)	Videoconferencing	eBeam Technology	
Computer Access Score	No Plugs	Few plugs/few computers around perimeter	Professor Access and few plugs/few computers around perimeter	Plugs or computers at Each Station	Plugs/computers at each station with ability to tie into main screen(s)	
Internet Access Score	No Internet Access	Access to cell network only	Wired Internet Access	Weak wireless internet connection (0 or 1 "bars")	Strong wireless internet connection (2 or 3 "bars")	

Calculation:

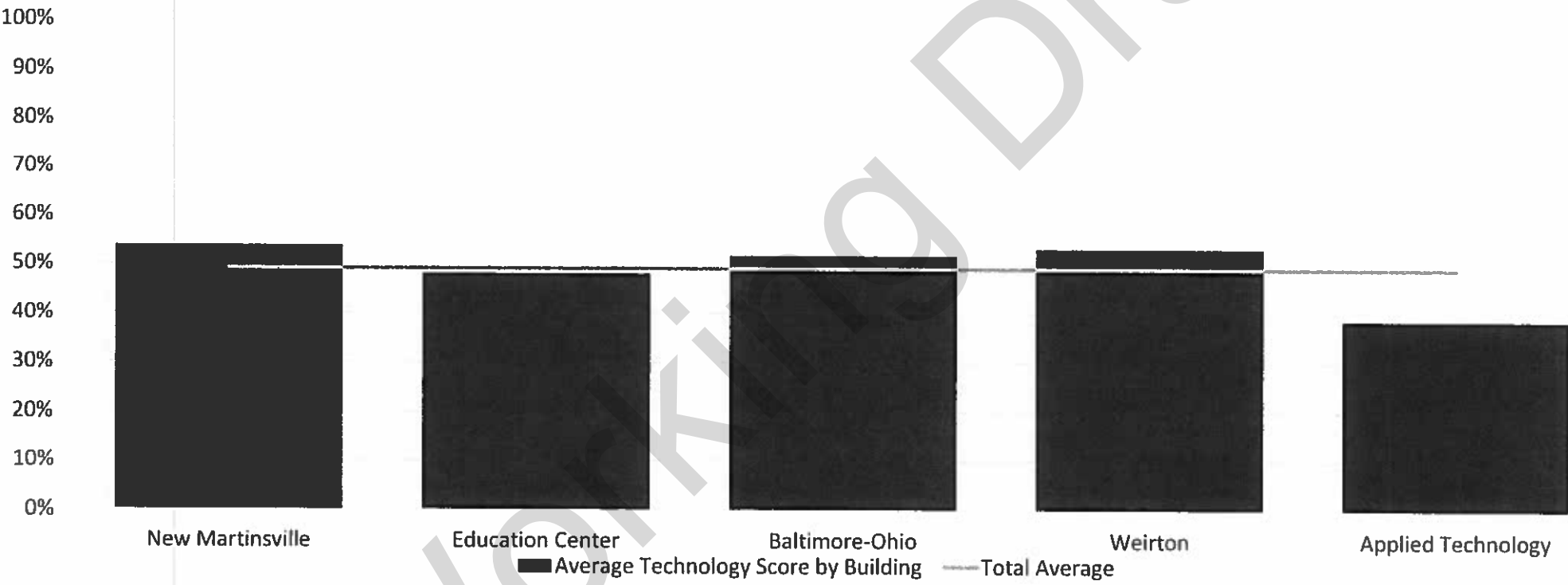
- Maximum score = Number of components examined *4
- Room score = Sum of component grades
- Final Score % = Room Score / Maximum score

"Adequate lighting is very important"

Technology Scores by Building

Average Technology Score Across All Buildings at 49%

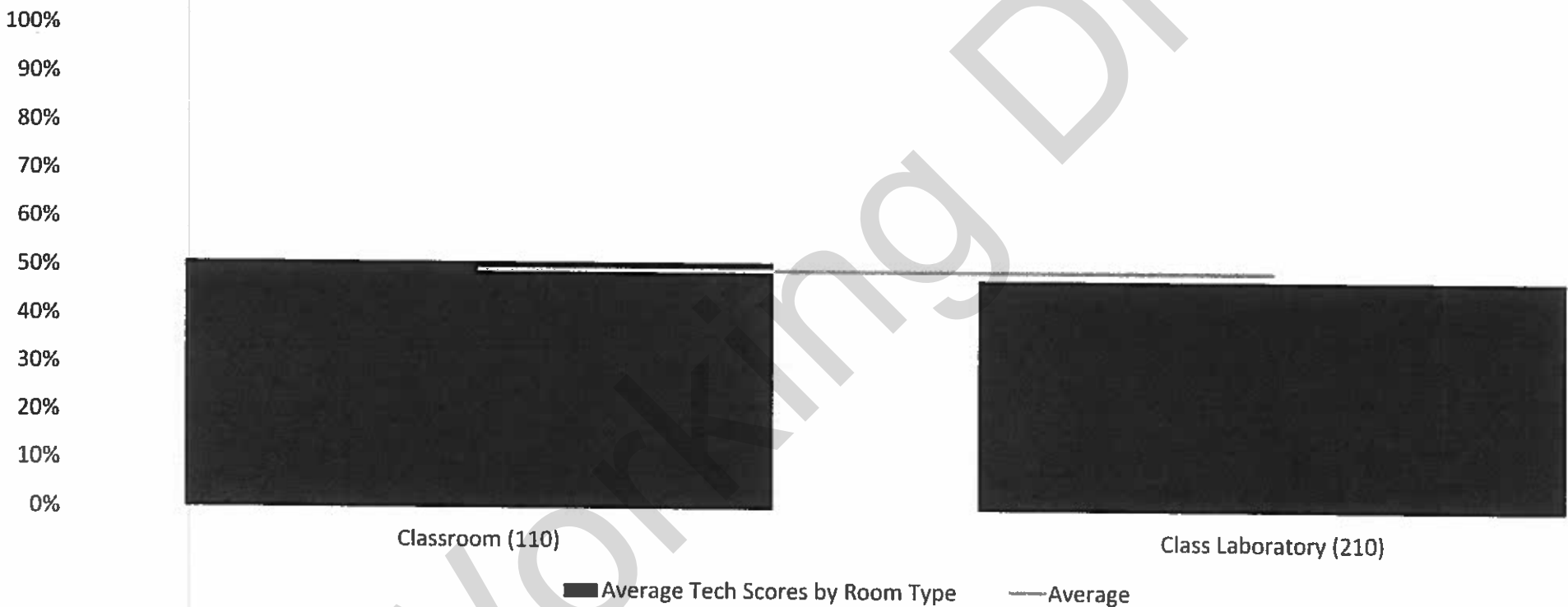
Average Technology Score by Building



Technology Scores by Room Type

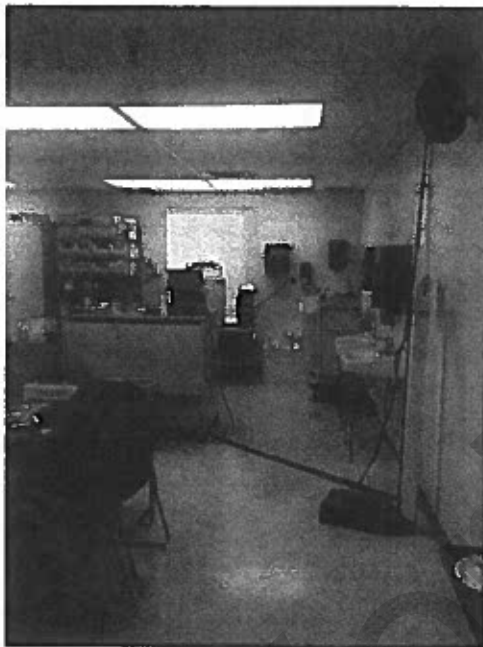
Average Technology Score Across All Room Types at 49%

Average Technology Score by Room Type

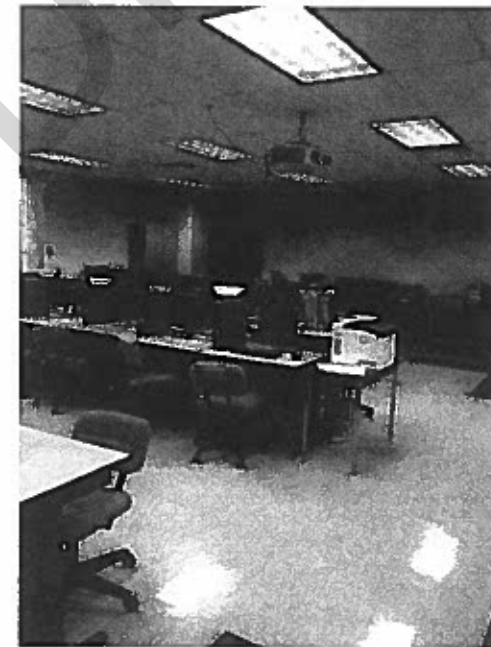


Examples of High and Low Technology Scores

Low Technology Score



High Technology Score



Facilities Master Plan

Appendix D

HVAC Audit

Working Draft

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4/13/2017

SCHEDULE I – EQUIPMENT COVERED

.WVNCC - Wheeling - B&O Building -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
3	Boiler 300, 301 & 302	HTP	850,000 Btuh	MOD CON 850	4 th Floor
	Master	(2009)	Condensing	(300) I15P29966	Boiler Room
	#1		No Neutralizer	(301) I02P27896	
	#2			(302) I23P31526	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
All 3 boilers are operating normally. There are no alarms. No leaks noted at this time.					
1	Expansion Tank 301				4 th Floor
					Boiler Room
					Ceiling
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Expansion tank is original from the old boiler system.					
No issues noted at this time.					
1	Filter Feeder 301				4 th Floor
					Boiler Room
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
No Issues.					

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SCHEDULE I – EQUIPMENT COVERED

.WVNCC - Wheeling - B&O Building -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Pump 301		15 Hp		4 th Floor
	Hot Water		Floor Mount		Boiler Room
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
No issues.					
Pump motor was replaced and pump was rebuilt in January 2016.					
2	Rooftop Unit 301 & 302	McQuay	75 ton	(301) RDT075CLY	Roof
			All Year Oper.	(301) F8OU030700525-02	(Harness & Lanyard)
			25.0 Hp Sup.	(302) RDT075CLY	
				(302) F8OU030700598-02	
RTU-301: Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES: Contactors for all (6) compressors are arcing over and should be replaced. One condenser fan motor has a bad bearing and needs replaced. Coils are extremely dirty and should be cleaned. PM program is recommended.					
See attached repair quote: Q56368					
RTU-302: Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES: Contactors for compressors are arcing over and should be replaced. Wires running from contactors to compressors are in a metal flex conduit. This conduit is so corroded out and the wires are exposed and sitting in a puddle of water. Some of the wires are bare and need repaired ASAP.					
See attached repair quote: Q56369					
2	Exhaust Fan 301 & 302				Roof
					(Harness & Lanyard)
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Exhaust fans for this unit are vibrating and the bearings are loose.					

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4/11/2017

SCHEDULE I – EQUIPMENT COVERED

-WVNCC - Wheeling - B&O Building -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Air Handling Unit 303	Trane (1996)	Hot Water Coil DX Cooling	Type - M-21 K76G03796	1 st Floor Mech. Room
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/> Poor					
NOTES:					
Unit is running in Hand position. When switched to Auto, the air handler does not run.					
Belts are worn badly and making noise.					
Bearing for blower opposite end of motor is wearing out and starting to make noise					
Bearing Info - SealMaster #TFT-23, 1/2" shaft, #2-178 Lock Ring, Qty. 2 - B67 Belts					
Unit is approximately 22 years old, and should be considered for replacement. Replacement quote to follow after site visit.					
See attached repair quote: Q56413					
1	Condensing Unit 303	Carrier	~ 15 ton		Ground
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/> Poor					
NOTES:					
This is the condensing unit for Air Handling Unit 303 above. Unit should be considered for replacement.					
1	Air Handling Unit 304	Trane (2007)	Hot Water Coil DX Cooling	LPCAD17D2FORBP S# T06L58108	1 st Floor Mech. Room
Condition of Unit: Excellent <input checked="" type="checkbox"/> Good Fair Poor					
NOTES:					
Unit was installed in 2007.					
Blower drive pulley adjusted to max position open.					
May need to verify proper airflow and adjust pulley, or replace pulley is necessary.					

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SCHEDULE I – EQUIPMENT COVERED

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QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Condensing Unit 304	Trane (2007)	~ 15 ton	TTA240B300FA 6483LYPAD	Ground
Condition of Unit: <input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
This is the condensing unit for Air Handling Unit 304. No issues.					
1	Air Handling Unit 305	Carrier (1994)	DX Cooling ~ Summer Oper. Only	FB4AN8048000ACAA 2094A04658	1 st Floor Field Verify
Condition of Unit: <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input checked="" type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
Unit has Honeywell #W77508011 Constant Volume AHU controller on it.					
Thermostats and controller have LED blinking 2 times per second, which means that the control is overridden and is in remote control mode.					
Filter extremely dirty and needs to be washed.					
See attached replacement quote: TMS-04171586					
1	Condensing Unit 305	Payne	4 ton	PA13NR048-E 3007X70275	Ground
Condition of Unit: <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input checked="" type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
This is the condensing unit for Air Handling Unit 305.					

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SCHEDULE I – EQUIPMENT COVERED

-WVNCC - Wheeling - B&O Building -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Air Handling Unit 306	Carrier	DX Cooling	FY4ANB060	Server Room
	Server Room Primary		All Year Oper.	5109A82029	
			5 ton		
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Found that insulation on bottom cover has become detached and being held in place by the A-coil.					
Should be reattached to access panel to prevent it from ending up in the blower wheel.					
See attached repair quote: Q56416					
1	Condensing Unit 306		5 ton		Roof
	Server Room Primary		All Year Oper.		(Harness & Lanyard)
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
This is the condensing unit for Air Handling Unit 306. No issues.					
1	Air Handling Unit 307	York	DX Cooling	F2RP030H06G	Server Room
	Server Room Back-Up		All Year Oper.	AON5517159	
			2.5 ton		
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/>					
NOTES:					
A-coil has been changed to a 3 ton A-coil.					
Air handler has been modified to allow A-coil to fit.					
There is no refrigerant in this system. Recommend leak check.					
See attached repair quote: Q56417					

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SCHEDULE I – EQUIPMENT COVERED

-WVNCC - Wheeling - EC Building -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
2	Pump 401 & 402 (P2 & P3)	Taco	15.0 Hp	F12510E2HAJ1L0A	Boiler Room
	Hot Water	(08/2005)	Freq. Drive		
			Floor Mount		
Pump 401:					
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Fair Poor					
NOTES: Has a bad seal and is leaking water. Discharge pressure gauge is defective and needs replaced.					
See attached repair quote: Q56432					
See attached repair quote: Q56375					
Pump 402:					
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Fair Poor					
NOTES: The manual buttons for the VFD on this pump do not work to put the pump into on/off/auto.					
2	Pump 404 & 405		Armstrong	L2810508F	Boiler Room
	Hot Water		Pipe Mount	Q3Q5	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Good Fair Poor					
NOTES:					
No issues. Both pumps are operating properly.					
1	Chiller 401	Carrier	~ 200 ton	30GXR204-A-661AM	Ground
		(2005)	3 - Screw Comp.	2205F15863	
			Glycol		
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Fair Poor					
NOTES: Found chiller in alarm. Code CCP2 communication failure.					
Found board that is labeled CCP2 is missing completely from the chiller.					
According to on-site maintenance staff, this board is no longer produced by Carrier. It was given to H.E. Neumann to send to Carrier to get rebuilt 7-8 months ago.					
Found that the water inlet temp sensor is bad. Entering water temp sensor reading over 100 Deg F (actual around 50 Deg F).					
A1, B1 works properly on CPI					
B2 works on CP2					
B2 compressor cannot be run to check operation and charge.					
See attached repair quote: Q56375					

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SCHEDULE I – EQUIPMENT COVERED

.WVNCC - Wheeling - EC Building .

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Expansion Tank 402	Taco		CA215-3	Boiler Room
	Chilled Water	(7/2005)		F07010	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
No issues.					
1	Filter Feeder 403	Vector Industries			Boiler Room
	Chilled Water	(2005)			
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
No issues.					
1	Pump 403 (P1)	Taco	15.0 Hp	F12510EZHAJ1L-0A	Boiler Room
	Chilled Water	(2005)	Freq. Drive		
			Floor Mount		
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Pump operating properly.					
Discharge pressure gauge - 0-100 PSIG, 4.75" dial, .25 MPT					

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SCHEDULE I – EQUIPMENT COVERED

.WVNCC - Wheeling - EC Building -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Air Handling Unit 401	Carrier	Hot Water Coil	39MN25B0058WH11SXS	1 st Floor
		(2005)	Chilled Water Coil	2405F16890	Mech. Room
			Freq. Drive		
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
No Issues.					
1	Air Handling Unit 402	Carrier	Hot Water Coil	39MN25B0058WG11SXS	1 st Floor
		(2005)	Chilled Water Coil	2405F16815	Mech. Room
			Freq. Drive		
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
No Issues found at this time.					
Filters are getting dirty and will need to be changed soon.					
1	Air Handling Unit 403	Carrier	Hot Water Coil	39MN36B0058WJ22XXS	3 rd Floor
		(2005)	Chilled Water Coil	2505F17446	Mech. Room
			Freq. Drive		
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Filters need replaced.					
The room is in negative pressure very badly.					
Return is on top straight off of the unit pulling from the room. There are holes cut into the wall against the ceiling for a plenum return into the space, but it is not enough return.					

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SCHEDULE I – EQUIPMENT COVERED

-WVNCC - Wheeling - EC Building -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Air Handling Unit 404	Carrier	Hot Water Coil	39MN50B0058WK22XS	4 th Floor
		(2005)	Chilled Water Coil	2605F17934	Mech. Room
			Freq. Drive		
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Automatic air bleeder for hot water coil removed and manual bleeder hose has been ran into garbage can.					
Automatic air bleeder on chilled water loop removed and laying to the side.					
Qty. 3 – BX95 belts need to be replaced as soon as possible.					
See attached repair quote: Q56519					
1	Air Handling Unit 405	Carrier	Hot Water Coil	39MN12B0058WL22XS	2 nd Floor
		(2005)	Chilled Water Coil	2405F16839	Mech. Room
			Freq. Drive		
Condition of Unit: Excellent Good Fair Poor					
NOTES:					
Filters are very dirty and need to be changed.					
1	Air Handling Unit 406	Carrier	Hot Water Coil	39MN21B0058WM22XS	2 nd Floor
		(2005)	Chilled Water Coil	2405F16844	Mech. Room
			Freq. Drive		
Condition of Unit: Excellent <input checked="" type="checkbox"/> Good Fair Poor					
NOTES:					
No issues found at this time.					
Filters are getting dirty and will need to be changed soon.					

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SCHEDULE I – EQUIPMENT COVERED

-WVNCC - Wheeling - Student Union -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 101	Daikin McQuay	17 ton	MPS017FE2DV1CYBV	Roof
			18 KW Electric Heat	FBOU130300409	
			(1) Freq Drive Sup.		
Condition of Unit: <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
No issues found at this time.					
Filters are getting dirty and will need to be changed soon.					
1	Rooftop Unit 102	Daikin McQuay	15 ton	MPS015FE2DV1CYBV	Roof
			18 KW Electric Heat	FBOU130300408	
			(1) Freq Drive Sup.		
Condition of Unit: <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
No issues found at this time.					
Filters are getting dirty and will need to be changed soon.					
1	Exhaust Fan 101	Cook	0.50 Hp	150 ACRUH 150RH17DEC	
		(02/2013)		158SE54180-00/0002201	
				165ACRUX165RX17DEC	
				158SE54180-00/0000701	
Condition of Unit: <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
No issues found at this time.					
These exhaust fans are direct drive, no belts.					

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SCHEDULE I – EQUIPMENT COVERED

-WVNCC - Wheeling - ATC Building -

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Boiler 201	HTP	500,000 Btuh	MOD CON 500	2nd Floor
		(11/06/2012)	Condensing	11061281057901	Boiler Room
			(1) Neutralizer		
Condition of Unit: <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
No issues at this time. Boiler is operating properly.					
1	Boiler 202	HTP	500,000 Btuh	MOD CON 500	2nd Floor
		(10/24/2012)	Condensing	10241281033054	Boiler Room
			(1) Neutralizer		
Condition of Unit: <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
No issues at this time. Boiler is operating properly.					
1	Expansion Tank 201	Taco		363870	2nd Floor
		(2013)			Boiler Room
Condition of Unit: <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
No issues at this time.					

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SCHEDULE I – EQUIPMENT COVERED

.WVNCC - Wheeling - ATC Building .

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
777	VAV Box				Various Ceilings
Condition of Unit: Excellent Good Fair Poor					
NOTES:					
See Controls Report.					
1	Exhaust Fan 201	Cook (08/2012)	0.75 Hp	135 ACRU 135R17DEC 239SE30372-00/0005401	Roof - Lower
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Found exhaust fan in the off position at switch. Turned switch on and fan still did not turn on.					
Fan has power to it, but unable to identify where the power is coming from.					
1	Exhaust Fan 202	Nederman (2011)	Direct Drive	NCF 120/15 1111077	Roof - Lower
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Exhaust fan is working properly at this time.					

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WVNCC - Wheeling
Air Handling Unit 303



WVNCC - Wheeling
Air Handling Unit 304



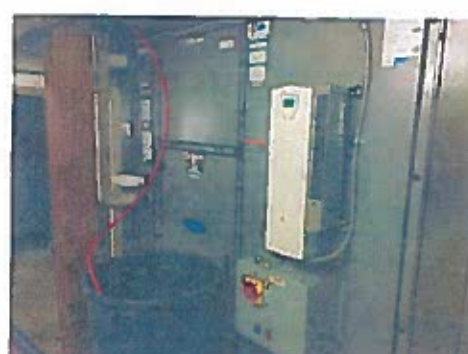
WVNCC - Wheeling
Air Handling Unit 401



WVNCC - Wheeling
Air Handling Unit 402



WVNCC - Wheeling
Air Handling Unit 403



WVNCC - Wheeling
Air Handling Unit 404

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**WVNCC - Wheeling
Air Handling Unit 405**



**WVNCC - Wheeling
Boiler 201**



**WVNCC - Wheeling
Boiler 202**



**WVNCC - Wheeling
Boiler 300, 301 & 302**



**WVNCC - Wheeling
Boiler 401 & 402**



**WVNCC - Wheeling
Chiller 401**

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Mechanical Systems



**WVNCC - Wheeling
Condensing Unit 303**



**WVNCC - Wheeling
Condensing Unit 304**



**WVNCC - Wheeling
Condensing Unit 305**



**WVNCC - Wheeling
Condensing Unit 306 & 307**



**WVNCC - Wheeling
Exhaust Fan 101**



**WVNCC - Wheeling
Exhaust Fan 201**

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Mechanical Systems



**WVNCC - Wheeling
Exhaust Fan 202**



**WVNCC - Wheeling
Exhaust Fan 301**



**WVNCC - Wheeling
Expansion Tank 201**



**WVNCC - Wheeling
Expansion Tank 301**



**WVNCC - Wheeling
Expansion Tank 401**



**WVNCC - Wheeling
Expansion Tank 402**

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**WVNCC - Wheeling
Fan Powered Box 205**



**WVNCC - Wheeling
Fan Powered Box 206**



**WVNCC - Wheeling
Make-Up Air Unit 406**



**WVNCC - Wheeling
Pump 201 & 202**



**WVNCC - Wheeling
Pump 203**



**WVNCC - Wheeling
Pump 204**



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TUDI
Mechanical Systems



WVNCC - Wheeling
Pump 301



WVNCC - Wheeling
Pump 401 & 402



WVNCC - Wheeling
Pump 403



WVNCC - Wheeling
Pump 404



WVNCC - Wheeling
Pump 405



WVNCC - Wheeling
Rooftop Unit 101

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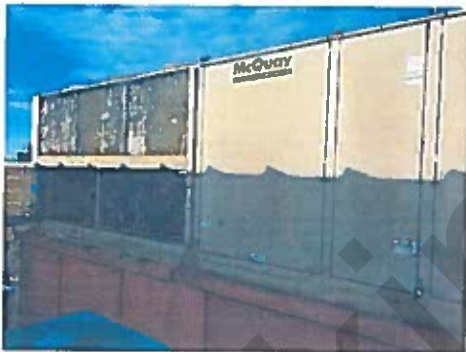
TUDI
Mechanical Systems



WVNCC - Wheeling
Rooftop Unit 102



WVNCC - Wheeling
Rooftop Unit 201



WVNCC - Wheeling
Rooftop Unit 301



WVNCC - Wheeling
VAV Box 201



WVNCC - Wheeling
VAV Box 401



WVNCC - Wheeling
Water Treatment 300

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SCHEDULE I - EQUIPMENT COVERED

-WVHCC - Weirton-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 01	Carrier	4 ton 150,000 Btuh	48TCFD12A2A6A0B0C0 1610G50559	Roof
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Found that the belt was in poor shape and needs replaced.					
Condenser coil is very dirty and needs cleaned.					
See attached repair quote: Q56422					
1	Rooftop Unit 02	Carrier	4 ton 150,000 Btuh	50TC-D08A2A6A0B0C0 1710G3596	Roof
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Unit is for cooling only.					
Found that the belt was in poor shape and needs replaced.					
Condenser coil is very dirty and needs cleaned.					
See attached repair quote: Q56422					
1	Rooftop Unit 03	Carrier	7.5 ton ~ Electric Heat	48TCFA05A2A6A0B0C0 1610G50279	Roof
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/>					
NOTES:					
Unit has a cracked heat exchanger, which needs replaced.					
Belt is broken and needs replaced. Unit is off.					
Condenser coil extremely dirty and needs to be cleaned.					
See attached repair quote: Q56422					
See attached repair quote: Q56377					
See attached replacement quote: TMS-04171581					

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SCHEDULE I - EQUIPMENT COVERED

-WVNC - Weirton-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 04	Carrier	10 ton	48TCFA05A2A6A0B0C0	Roof
			250,000 Btuh	1610G50280	
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/>					
NOTES:					
Unit has a cracked heat exchanger, which needs replaced.					
Belt is broken and needs replaced.					
Condenser coil extremely dirty and needs to be cleaned.					
See attached repair quote: Q56422					
See attached repair quote: Q56379					
See attached replacement quote: TMS-04171582					
1	Rooftop Unit 05	Carrier	4 ton	50TC-012A2A6A0B0C0	Roof
			~ Electric Heat	1610G50563	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES: Unit is for cooling only.					
Found that the belt was in poor shape and needs replaced.					
Condenser coil is very dirty and needs cleaned.					
See attached repair quote: Q56422					
1	Rooftop Unit 06	Carrier	~ 10 ton	48TCFA05A2A6A0B0C0	Roof
			~ Electric Heat	1610G50283	
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/>					
NOTES:					
Belt is broken off and needs replaced. Unit is off.					
Coil is extremely dirty and needs to be cleaned.					
Heat exchanger is cracked and needs replaced.					
The economizer module are bad and need replaced.					
See attached repair quote: Q56422					
See attached repair quote: Q56433					
See attached replacement quote: TMS-04171583					

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SCHEDULE I – EQUIPMENT COVERED

-WYNCC - Weirton-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 07	Carrier	5 ton 150,000 Btuh	48TCFA05A2A6A0B0C0 1610G60170	Roof
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/>					
NOTES:					
Heat exchanger is cracked and needs replaced.					
Belt is worn and needs replaced.					
Coils are dirty and need cleaned.					
See attached repair quote: Q56514					
See attached repair quote: Q56434					
See attached replacement quote: TMS-04171584					
1	Rooftop Unit 08	Carrier	5 ton 150,000 Btuh	48TCFA06A2A6A0B0C0 1610G60171	Roof
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/>					
NOTES:					
Belt is in poor condition and should be replaced.					
Coil is dirty and should be cleaned.					
Heat exchanger is cracked and should be replaced.					
See attached repair quote: Q56514					
See attached repair quote: Q56418					
See attached replacement quote: TMS-04171585					
1	Rooftop Unit 09	Carrier	~ 6 ton ~ Gas Heat	48TCFA07A2A6A0B0C0 1610G40243	Roof
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Coil is dirty and needs cleaned.					
See attached repair quote: Q56514					

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SCHEDULE I - EQUIPMENT COVERED

-WVNEC - Weirton-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 10	Carrier	4 ton	50TC-A05A2A6A080C0	Roof
			150,000 Btuh	1610GH0243	
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Belt broken off completely (A35). Needs replaced.					
Coils are extremely dirty. Needs cleaned.					
Unit is off until belt is replaced and coils cleaned for proper air flow.					
See attached repair quote: Q56514					
See attached repair quote: Q56422					
1	Rooftop Unit 11	Carrier	4 ton	48TCFA05A2A6A080C0	Roof
			150,000 Btuh	1610G50281	
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Unit has a cracked heat exchanger.					
Indoor blower belt about to break (A35).					
Economizer stays in full open position, and heat cycles on and off more frequently due to cold air being drawn in through economizer.					
See attached repair quote: Q56419					
See attached repair quote: Q56492					
See attached replacement quote: TMS-04171591					
1	Rooftop Unit 12	Carrier	6 ton	48TCFA05A2A6A080C0	Roof
			150,000 Btuh	1610G50282	
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Unit has a cracked heat exchanger.					
Condenser coil needs cleaned.					
Indoor blower belt needs replaced (AX35).					
Economizer does not operate.					
See attached repair quote: Q56514					
See attached repair quote: Q56492					
See attached repair quote: Q56420					
See attached replacement quote: TMS-04171592					

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SCHEDULE 1 - EQUIPMENT COVERED

-WYNCC - Weirton-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 13	Carrier	4 ton	48TCFA07A2A6A0B0C0	Roof
			120,000 Btuh	1710G10121	
Condition of Unit: <input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
Condenser coil is very dirty and needs cleaned.					
Indoor blower belt is worn and will need to be changed soon.					
1	Rooftop Unit 14	Carrier	35 ton	48P3K035610Z4XBXR	Roof
			325,000 Btuh	3611039991	
			Supply & Relief Fans		
Condition of Unit: <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
Compressor B-1 contactor contacts worn #HN53TD024. Needs replaced.					
Setpoint on Comfort-Link on unit are as follows: occupied cool 55 Deg F, occupied Heat 52 Deg F, unoccupied cool 90 Deg F,					
Unoccupied heat 55 Deg F. Unit running in economizer mode. The later in the day the unit was also running mechanical cooling					
supplying 55 Deg F air to space. Suspect that VAV boxes are re-heating air to maintain space temp. Further evaluation of controls is					
necessary to determine if this is needed.					
See attached repair quote: Q56423					
1	Rooftop Unit 15	Carrier	20 ton	50PM-C24-C-6009413	Roof
			~ Electric Heat	21110Q40033	
Condition of Unit: <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor					
NOTES:					
Condenser coil is very dirty and needs cleaned.					
Indoor blower belt is cracked and needs replaced. BX42					
Filters will need to be changed soon.					
See attached repair quote: Q56514					

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QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 16	Carrier	60 ton	50P3B0605500006348	Roof
			~ Electric Heat	2010U10903	
			~ Supply & Relief Fans		
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Bottom 4 electric heat contactors are welded shut & 3 of 6 fuses are blown.					
Contactors Qty. 4 - #HN53TD115, Fuses Qty. 3 - FRN-R-60					
Economizer screen is torn & missing most of the screen.					
Indoor blower belts need replaced. Qty. 2 - 5XVI180					
Unit has been in unoccupied mode all day and has not run at all. Controls need adjusted.					
See attached repair quote: Q56424					
1	Air Handling Unit 17	~ Mitsubishi	Ductless	PLH36FK	~ Server Room
			All Year Oper.	76F001176	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
New pump and drain line recently installed.					
Unit is operating properly at this time.					
1	Condensing Unit 17	Mitsubishi	3.5 ton	PU42EK2	Roof
			All Year Oper.	92E00404	
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Very rusty inside unit.					
Reversing valve sticking up periodically. May need replaced.					
Unit is operating properly.					

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QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
9	Fan Powered Box X01 thru X09		~ Electric Reheat		1 st Floor
Condition of Unit: Excellent Good Fair Poor					
NOTES:					
See Controls Report.					
9	Fan Powered Box X10 thru X18		~ Electric Reheat		2 nd Floor
Condition of Unit: Excellent Good Fair Poor					
NOTES:					
See Controls Report.					
5	"Slave" ~VAV X01 thru X05				1 st Floor
Condition of Unit: Excellent Good Fair Poor					
NOTES:					
See Controls Report.					

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SCHEDULE I – EQUIPMENT COVERED

-WVNC - Weirton-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
7	FPV X01 thru X07		~ Fan Powered Box		Field Verify
			~ Electric Reheat		
Condition of Unit: Excellent Good Fair Poor					
NOTES:					
See Controls Report.					
9	RT X01 thru X09		~ VAV		Field Verify
Condition of Unit: Excellent Good Fair Poor					
NOTES:					
See Controls Report.					
1	Controls 01	Tridium / Niagara			Computer In
			Managed Offsite		Maintenance
					Office
Condition of Unit: Excellent Good Fair Poor					
NOTES:					
See Controls Report.					

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SCHEDULE I - EQUIPMENT COVERED

-WVHCC - Weirton-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
10	Exhaust Fan 01 thru 10				
	EF-1	Loren Cook		210C5B50	Roof
	EF-2	Loren Cook		70C3B	Roof
	EF-3	Loren Cook		100CPV	Roof
	EF-4	Nederman		FQ356N4ARD90 / 1198346	Roof
	EF-5	Loren Cook		100C10DH	Roof
	EF-6	Loren Cook		210C5B33	Roof
	EF-7	Greenheck		G-097-B / 126274031110	Roof
	EF-8	Penn Ventilator		BB-45	Roof
	EF-9	Penn Ventilator		BB-45	Roof
	EF-10	Penn Ventilator		BB-45	Roof
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES: All exhaust fans could use new belts. 1 exhaust fan closest to the roof hatch has motor locked up and is tripping on internal overload. The shutoff switch has been removed so there is no way to shut off power unless we find a breaker inside.					
Motor Info: Emerson - Model # SAS5NXSFA-4865, CAT-8000, HP-44, RPM-1725, SF 1.35, 115 volts, 60 HZ, 1 PH, Code M, Amps 5.3A					
SFA-5.9					
See attached repair quote: Q56426					
2	Cabinet Heater - Electric 01 & 02				Entryways
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Units are operating properly. No issues at this time.					
1	Unit Heater - Electric 03				Metal Working Shop
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Units are operating properly. No issues at this time.					

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Cabinet Heater - Electric 01**



**WVNCC - Weirton
Cabinet Heater - Electric 02**



**WVNCC - Weirton
Caondensing Unit 17**



**WVNCC - Weirton
Controls 01**



**WVNCC - Weirton
Exhaust Fan 01**



**WVNCC - Weirton
Exhaust Fan 02**

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**WVNCC - Weirton
Exhaust Fan 03**



**WVNCC - Weirton
Exhaust Fan 04 & 05**



**WVNCC - Weirton
Exhaust Fan 06**



**WVNCC - Weirton
Exhaust Fan 07**



**WVNCC - Weirton
Exhaust Fan 08**



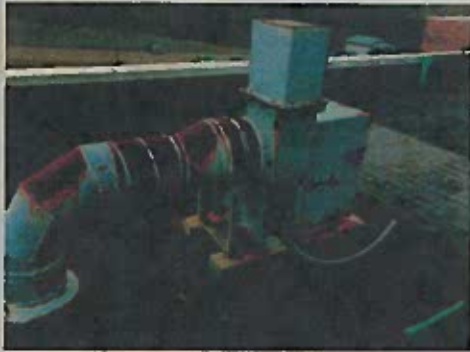
**WVNCC - Weirton
Exhaust Fan 09**

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**WVNCC - Weirton
Exhaust Fan 10**



**WVNCC - Weirton
FPB's**



**WVNCC - Weirton
Rooftop Unit 01**



**WVNCC - Weirton
Rooftop Unit 02**



**WVNCC - Weirton
Rooftop Unit 03**



**WVNCC - Weirton
Rooftop Unit 04**

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WVNCC - Weirton
Rooftop Unit 05



WVNCC - Weirton
Rooftop Unit 06



WVNCC - Weirton
Rooftop Unit 07



WVNCC - Weirton
Rooftop Unit 08



WVNCC - Weirton
Rooftop Unit 09



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Rooftop Unit 10

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**WVNCC - Weirton
Rooftop Unit 11**



**WVNCC - Weirton
Rooftop Unit 12**



**WVNCC - Weirton
Rooftop Unit 13**



**WVNCC - Weirton
Rooftop Unit 14**



**WVNCC - Weirton
Rooftop Unit 16**



**WVNCC - Weirton
Unit Heater - Electric 03**

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SCHEDULE I - EQUIPMENT COVERED

-WVNEC - New Martinsville-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 01	Carrier	17.5 ton	48PMFC20-D-61-G6	Roof
	T'stat in room 212	(2010)	400,000 Btuh	1710G30033	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Economizer screens are completely plugged and being sucked out of the metal frames. One filter was totally out & laying inside economizer dampers. Removed. Condenser coils are very dirty and need cleaned.					
Compressor "B1" crankcase heater not heating. Heater is open.					
Qty. 2 - BX38 indoor blower belts worn badly & need replaced.					
See attached repair quote: Q56428					
See attached repair quote: Q56521					
1	Rooftop Unit 02	Carrier	5 ton	48TFE006-A-611--	Roof
	T'stat in room 214	(2005)	115,000 Btuh	2405G10197	
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Condenser coil needs split and cleaned thoroughly.					
See attached repair quote: Q56521					
1	Rooftop Unit 03	Carrier	~ 15 ton	48PMFC16-C-60-G6	Roof
	T'stat in room 100	(2010)	400,000 Btuh	1710G50005	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Filter direction marked incorrectly & filters were installed backwards. We corrected.					
Economizer screens are totally plugged up. Need washed.					
Indoor blower belt (BX41) has several small cracks, needs replaced.					
Outer condenser coil is right at the edge of the roof. Cannot be cleaned safely without a man lift.					
See attached repair quote: Q56521					

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SCHEDULE I - EQUIPMENT COVERED

.WVNCC - New Martinsville-

QTY	SYSTEM COMPONENTS	MFR	SIZE	MODEL # SERIAL #	LOCATION
1	Rooftop Unit 04	Carrier	7.5 ton	48PGFC08-D-60-G6	Roof
	T'stat by front desk	(2010)	226,000 Btuh	1710G40012	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Found unit in alarm T111 - Circuit "B" loss of charge. Verified no refrigerant in Circuit "B". Will need leak checked & repaired.					
Condenser coils need cleaned.					
Economizer screen totally packed & being pulled out of frame. Needs replaced.					
See attached repair quote: Q56521					
See attached repair quote: Q56429					
1	Rooftop Unit 05	Carrier	25 ton	48TMF028---611AA	Roof
	T'stat by front desk	(2006)	360,000 Btuh	2906U16201	
Condition of Unit: Excellent Good <input checked="" type="checkbox"/> Poor					
NOTES:					
Horizontal condenser coil very dirty above compressors. All condenser coils needs cleaned.					
Economizer screens totally packed. They are pulling apart and should be replaced.					
Qty. 2 - B47 belts for indoor blower are worn & stretched. Need replaced.					
Indoor motor contactor getting worn & should be replaced. #HN53CC024. Unit operates normally at this time.					
See attached repair quote: Q56430					
See attached repair quote: Q56521					
1	Rooftop Unit 06	Carrier	30 ton	48P2D030600003GT1N	Roof
	T'stat in room 210		325,000 Btuh	1910U10090	
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Unit operates normally in heating & cooling.					
Found crankcase heater on Compressor "B" open. Needs replaced.					
Found Compressor "A" & "B" contactors are getting worn. Recommend replacing. Qty. 2 - #HN53TD024					
Condenser coil getting dirty. Needs to be cleaned.					
See attached repair quote: Q56521					
See attached repair quote: Q56431					

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SCHEDULE I - EQUIPMENT COVERED

-WVHCC - New Martinsville-

QTY	SYSTEM COMPONENTS	MPR	SIZE	MODEL # SERIAL #	LOCATION
1	Exhaust Fan 01	No Visible Information			Roof
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Exhaust fan running properly.					
1	Exhaust Fan 02	No Visible Information			Roof
Condition of Unit: Excellent Good Fair <input checked="" type="checkbox"/> Poor					
NOTES:					
Belt worn so badly that it came off.					
Exhaust fan has not run in a long time.					
If this exhaust fan is needed, we recommend replacement.					
1	Exhaust Fan 03	Centri Master		PV135 EI 1/4HP 115/1/60/ODP W/ 05E830601	Roof
Condition of Unit: Excellent <input checked="" type="checkbox"/> Fair Poor					
NOTES:					
Exhaust fan running properly.					

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**WVNCC - New Martinsville
Exhaust Fan 01**



**WVNCC - New Martinsville
Exhaust Fan 02**



**WVNCC - New Martinsville
Exhaust Fan 03**



**WVNCC - New Martinsville
Exhaust Fan 04**



**WVNCC - New Martinsville
Rooftop Unit 01**



**WVNCC - New Martinsville
Rooftop Unit 02**

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**WVNCC - New Martinsville
Rooftop Unit 03**



**WVNCC - New Martinsville
Rooftop Unit 04**



**WVNCC - New Martinsville
Rooftop Unit 05**



**WVNCC - New Martinsville
Rooftop Unit 06**

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Facilities Master Plan

Appendix E

Roof Audit

Working Draft

The Garland Company, Inc.

Roof Asset Management Program



Weirton/New Martinsville Roof Inspection Reports

Prepared By
Sam Roberts

Prepared For
Patricia Marker

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Facility Summary

Client: West Virginia Northern Community College

Facility: New Martinsville Campus

Facility Data

Address 1	141 Main St
Address 2	-
City	New Martinsville
State	West Virginia
ZIP	26155
Type of Facility	Higher Education
Square Footage	16,700
Contact Person	Patricia Marker

Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Roof	N/A	16,600	Internal Roof Hatch



Construction Details

Client: West Virginia Northern Community College

Facility: New Martinsville Campus

Roof Section: Entire Roof

Information

Year Installed	N/A	Square Footage	16,600
Slope Dimension	Flat	Eave Height	2 Stories
Roof Access	Internal Roof Hatch	System Type	EPDM: Ballasted

Assembly

Roof #	Layer Type	Description	Attachment	R-Value	Thickness
1	Deck	Metal		-	-
1	System	Ballasted EPDM	Ballasted	-	-
1	Insulation	Polyisocyanurate - tapered	Ballasted	-	-





Inspection Report

Client: West Virginia Northern Community College

Facility: New Martinsville Campus

Report Date: 02/14/2016

Roof Section: Entire Roof

Inspection Information

Inspection Date	02/14/2016	Core Data	Yes
Inspection Type	Visual Inspection	Leakage	Yes
Deck Conditions	Unknown		

Flashing Conditions

Perimeter	Failed	Wall	N/A
Projections	Poor	Counterflashing	N/A

Miscellaneous Details

Reglets	N/A	Debris	Yes
Control Expansion Joints	N/A	Ponding Water	Minor
Parapet Wall	N/A	Coping Joints	Poor

Overall

Rating	Failed
Condition	<p>The roof system on the New Martinsville Building is in a failed state. Below is a list of issues identified on the roof:</p> <ul style="list-style-type: none"> • Severe membrane shrinkage • Cuts and perforations • Ponding water • Metal edge damage <p>Due to the condition, it is recommended to replace the roof as soon as possible to stop the leaking within the building and prevent permanent damage to the roof deck and internal building.</p>



Photo 1

The roof system of the New Martinsville Campus Building is composed of a ballasted EPDM membrane over tapered polyisocyanurate insulation and a metal deck.



Photo 2

Core Analysis:

- Flat metal deck
- Tapered polyisocyanurate
- Ballasted EPDM membrane



Photo 3

A large number of stained tiles were identified in the second floor of the New Martinsville Building.



Photo 4

The cause of the darker areas of ballast stone is a built up of mildew resulting from ponding water. Through the roof is sloped, overtime, ballast stone tends to compress the underlying insulation, creating areas of ponded water on the roof membrane. Ponding water will lead to premature deterioration of the roof membrane.



Photo 5

EPDM Tenting occurs at the perimeter of the roof. As the single ply membrane is exposed to UV rays it shrinks. This in turn causes the perimeter to look like a tent and exerts extreme pressure on this 1 millimeter thick membrane. Couple this pressure with the brittleness of this old rubber membrane and multiple tears/punctures develop which in turn cause leaks inside the building and will lead to complete roof failure.



Photo 6

Shrinkage of the EPDM membrane has cause the membrane to completely separate from its termination along the perimeter of the roof. In this particular area, the membrane perimeter was open for approximately 5', exposing the wood nailer and insulation to the elements.



Photo 7

Multiple leaks have occurred in this ballasted EPDM roof system. Because of the know leaks, partial or full saturation of the underlying insulation is likely and will require complete replacement.



Photo 8

Over time the stones or ballast on EPDM roofs split causing sharp razor-like edges, which easily puncture the single ply EPDM membrane. This condition occurs when the rock ballast is exposed to moisture and the freeze/thaw cycles found in our area. Rapid thermal movement and/or ice expansion causes rapid deterioration resulting in sharp edged objects that can puncture the thin membrane especially during roof traffic.



Photo 9

This image shows a separation in the metal edge of the building.



Photo 10

A number of cuts and perforations for were in the brittle EPDM membrane.



Photo 11

All roof top gas lines should be painted as a part of the upcoming replacement.

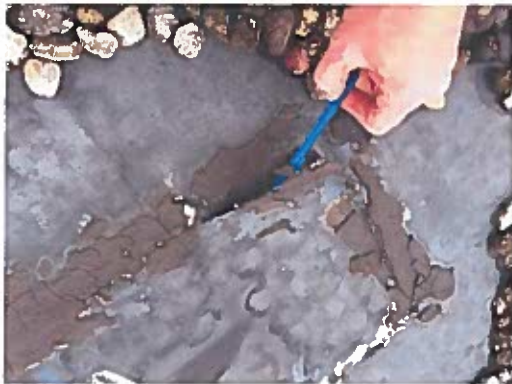


Photo 12

Adhesive used in patches and seams has deteriorated and allow the EPDM membranes to separate.



Photo 13

All unused penetrations should be removed during the upcoming roof replacement.



Photo 14

Three internal drains exist near the center of the roof. Each has an emergency overflow in close proximity.



Photo 15

Severe tenting of the membrane can be seen along the elevator shaft.



Solution Options

Client: West Virginia Northern Community College

Facility: New Martinsville Campus

Roof Section: Entire Roof

Replace Options

Solution Option:	Replace	Action Year:	2017
Square Footage:	16,600	Expected Life (Years):	40
Budget Range:	\$332,000.00 - \$350,000.00		

Replace the existing roof with a hot applied, 2-ply, modified bitumen roof system with a flood and gravel surfacing. The new roof system will be constructed according to IBC/IECC 2015, as required by The State of West Virginia, and will include ANSI-SPRI ES-1 certified metal edge. A 40 year warranty, solely held by the Garland Company, will be provided to West Virginia Northern Community College at the completion of the project.

Scope of Work:

- Remove the existing ballasted EPDM roof system and insulation down to the metal deck.
- Mechanically attach tapered polyisocyanurate insulation with a slope of 1/4:12 to the metal deck. The insulation should be attached in 2 layers with joints staggered.
- Hot apply a 1/2" coverboard to the tapered insulation
- Construct 8' X 8' sumps and install 30" gravel guards around each drain. Crickets are to be constructed between each drain.
- All drains are to be inspected and receive new clamping rings and strainers.
- Install a modified bitumen base sheet in hot asphalt followed by a urethane modified cap sheet.
- Flashings to be constructed of 2 plies of modified bitumen membrane with all lap seams reinforced with a 3-course application of mastic and mesh. Flashings will be completed with 2 coats of a reflective, aluminized, asphalt paint.
- Complete roof system with a flood coat and gravel.
- Install new .050 aluminum counterflashing and ANSI SPRI ES-1 metal edge.

Replace Options

Solution Option:	Replace	Action Year:	2017
Square Footage:	16,600	Expected Life (Years):	30
Budget Range:	\$285,000.00 - \$315,000.00		

Replace the existing roof with a hot applied, 3-ply, modified bitumen roof system with a flood and gravel surfacing. The new roof system will be constructed according to IBC/IECC 2015, as required by The State of West Virginia, and will include ANSI-SPRI ES-1 certified metal edge. A 30 year warranty, solely held by the Garland Company, will be provided to West Virginia Northern Community College at the completion of the project.

Scope of Work

- Remove the existing ballast, EPDM membrane, and insulation down to the metal deck.
- Mechanically attach tapered polyisocyanurate insulation with a slope of 1/4:12 to the metal deck. The insulation should be attached in 2 layers with joints staggered.
- Hot apply a 1/2" coverboard to the tapered insulation
- Construct 8' X 8' sumps and install 30" gravel guards around each drain. Crickets are to be constructed between each drain.
- All drains are to be inspected and receive new clamping rings and strainers.
- Install 2 Type IV felts and a modified bitumen cap sheet in hot asphalt.
- Flashings to be constructed of 2 plies of modified bitumen membrane with all lap seams reinforced with a 3-course application of mastic and mesh. Flashings will be completed with 2 coats of a reflective, aluminized, asphalt paint.
- Complete roof system with a hot asphalt flood coat and gravel.
- Install new .050 aluminum ANSI SPRI ES-1 metal edge.



Facility Summary

Client: West Virginia Northern Community College

Facility: Weirton Campus

Facility Data

Address 1	150 Park Ave
Address 2	-
City	Weirton
State	West Virginia
ZIP	26062
Type of Facility	Higher Education
Square Footage	27,540
Contact Person	Patricia Marker

Asset Information

Name	Date Installed	Square Footage	Roof Access
Section #1	1989	8,000	Internal Roof Hatch
Section #2	1989	14,900	Internal Roof Hatch
Section #3	2011	4,782	Internal Roof Hatch



Construction Details

Client: West Virginia Northern Community College

Facility: Weirton Campus

Roof Section: Section #1

Information

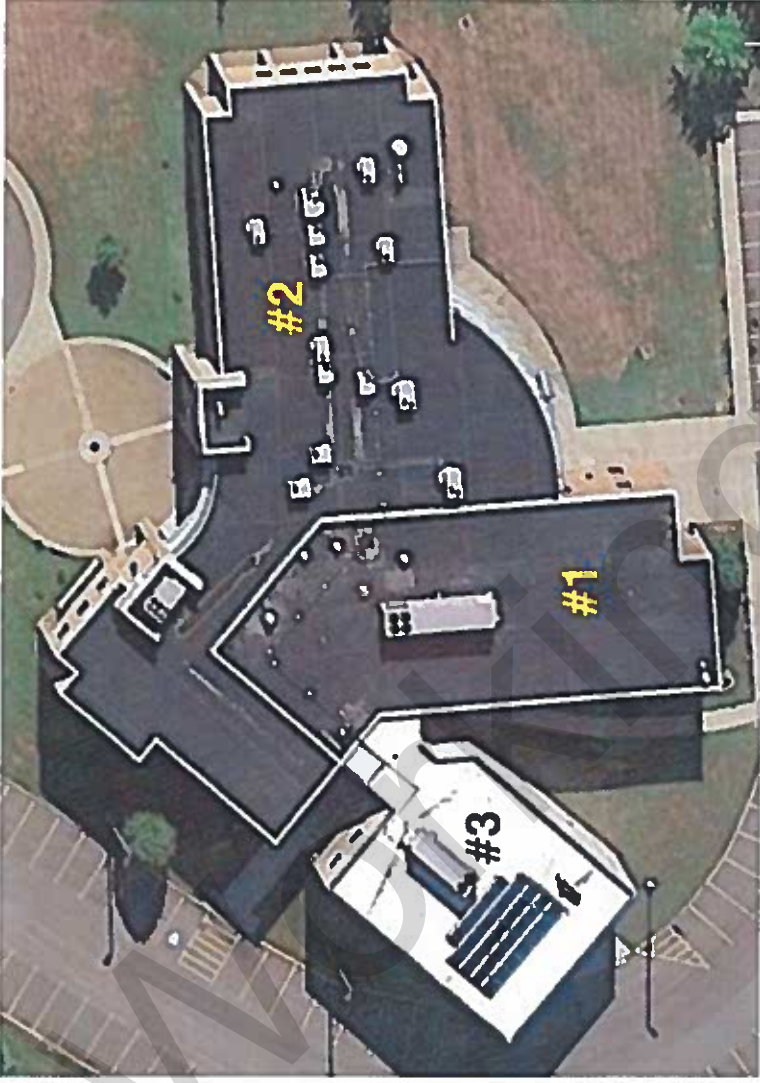
Year Installed	1989	Square Footage	8,000
Slope Dimension	Flat	Eave Height	-
Roof Access	Internal Roof Hatch	System Type	EPDM: Fully Adhered

Assembly

Roof #	Layer Type	Description	Attachment	R-Value	Thickness
1	Deck	Metal		-	-
1	Insulation	Polyisocyanurate	Mechanically attached	-	3.5"
1	Membrane	EPDM	Fully Adhered	-	-

Details

Drain System	Internal Roof Drains
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Inspection Report

Client: West Virginia Northern Community College

Facility: Weirton Campus

Report Date: 02/17/2017

Roof Section: Section #1

Inspection Information

Inspection Date	02/17/2017	Core Data	Yes
Inspection Type	Visual Inspection	Leakage	Yes
Deck Conditions	Good		

Flashing Conditions

Perimeter	Poor	Wall	N/A
Projections	Fair	Counterflashing	-

Miscellaneous Details

Reglets	N/A	Debris	No
Control Expansion Joints	N/A	Ponding Water	Moderate
Parapet Wall	Fair	Coping Joints	Fair

Overall

Rating	Fair
Condition	Roof Section #1 is in Fair to Poor condition. The lack of adequate slope has resulted in substantial ponding of water across the section, but no major damage to the membrane was found in Section #1. Due to its lack of slope and age of the membrane, the roof section should not be considered for restoration and should be replaced within 3 years.



Photo 1

Core Sample:

- Metal Deck (Flat)
- 3.5" Polyisocyanurate (2 Layers)
- Fully Adhered EPDM



Photo 2

Minor ponding was found across section #1 due to the lack of positive slope toward the drains.

This condition can damage the roof in a number of ways. Additional structural loads create more movement of the roof assembly creating more tear stress and of course a potential for structural failure. UV intensity also increases under ponding conditions as the sun's rays are increased to the point where it accelerates deterioration in most all roof systems. EPDM roof systems rot and burn out when the ponding area is exposed to sunlight. The added weight can also crush insulation increasing the ponding condition and creating a condition where the insulation becomes a useless thermal barrier. This condition then affects the mechanical system and the cost of heating and cooling the building. In the winter ponding water will expand as it freezes. This expansion will weaken small imperfections in the roof system. Small cracks and tears will widen until they rupture to allow water into the building.

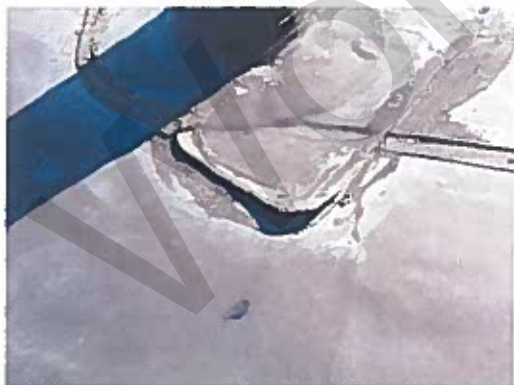


Photo 3

The adhesive used to bond the pipe boots and patches to the EPDM membrane has deteriorated severely in some locations. While this deterioration may have not yet lead to leaks, the patches and pipe boots will continue to separate from the membrane.



Photo 4

It is somewhat difficult to see in this image, but the EPDM membrane is separating from the parapet walls. This condition is caused by shrinkage of the EPDM membrane. As the EPDM membrane ages, the membrane shrinks due to photo-oxidation. This condition also causes the membrane to become less flexible and brittle.



Photo 5

A few of the fasteners used to attached the insulation to the roof deck are beginning to back out.

This condition can occur on mechanically fastened roof systems depending upon the location of the fastener. Typically this condition is found where the system configuration has the fastener immediately below the surface membrane. In these conditions thermal bridging and condensation from the thermal bridge creates a situation whereby the fastener begins to back out. Additionally, wind loads, incorrect fastener type for the substrate and dimensional instability of the insulation also contributes to this condition. In some cases, what appears to be fastener back out is actually insulation dimension loss typically due to the use of low density insulation and/or moisture contamination. Roof traffic can also create conditions that appear to be fastener back out as well. With fastener back out comes the high probability of the fastener puncturing the waterproofing surface membrane and eventually causing a leak. Proper design reduces or eliminates fasteners having direct contact with the surface membrane.



Photo 6

This image shows a pipe boot which has been skewed due to the shrinkage of the membrane.

Due to the inherent nature of EPDM membranes, which shrink with exposure to the elements, a large amount of pressure is put on fixed points in the membrane. Weather cycles and thermal shock provide additional forces that lead to membrane tears and eventually complete failure. Once damaged, there are no additional redundant layers to keep moisture from damaging the investment in insulation or the buildings interior.



Photo 7

Another image of a patch separating from the roof membrane.



Photo 8

Stained tiles found under roof Section #1



Solution Options

Client: West Virginia Northern Community College

Facility: Weirton Campus

Roof Section: Section #1

Replace Options

Solution Option:	Replace	Action Year:	2019
Square Footage:	8,000	Expected Life (Years):	40
Budget Range:	\$168,000.00 - \$190,000.00		

Replace the existing roof with a hot applied, 2-ply, modified bitumen roof system with a flood and gravel surfacing. The new roof system will be constructed according to IBC/IECC 2015, as required by The State of West Virginia, and will include ANSI-SPRI ES-1 certified coping. A 40 year warranty, solely held by the Garland Company, will be provided to West Virginia Northern Community College at the completion of the project.

Scope of Work:

- Remove the existing EPDM roof system and insulation down to the metal deck.
- Mechanically attach tapered polyisocyanurate insulation with a slope of 1/4:12 to the metal deck. The insulation should be attached in 2 layers with joints staggered.
- Hot apply a 1/2" coverboard to the tapered insulation
- Construct 4' X 4' sumps and install 30" gravel guards around each drain. Crickets are to be constructed between each drain.
- All drains are to be inspected and receive new clamping rings and strainers.
- Install a modified bitumen base sheet in hot asphalt followed by a urethane modified cap sheet.
- Flashings to be constructed of 2 plies of modified bitumen membrane with all lap seams reinforced with a 3-course application of mastic and mesh. Flashings will be completed with 2 coats of a reflective, aluminized, asphalt paint.
- Complete roof system with a flood coat and gravel.
- Install new .050 aluminum counterflashing and ANSI SPRI ES-1 coping.

Replace Options

Solution Option:	Replace	Action Year:	2019
Square Footage:	8,000	Expected Life (Years):	30
Budget Range:	\$140,000.00 - \$165,000.00		

Replace the existing roof with a hot applied, 3-ply, modified bitumen roof system with a flood and gravel surfacing. The new roof system will be constructed according to IBC/IECC 2015, as required by The State of West Virginia, and will include ANSI-SPRI ES-1 certified coping. A 30 year warranty, solely held by the Garland Company, will be provided to West Virginia Northern Community College at the completion of the project.

Scope of Work:

- Remove the existing EPDM roof system and insulation down to the metal deck.
- Mechanically attach tapered polyisocyanurate insulation with a slope of 1/4:12 to the metal deck. The insulation should be attached in 2 layers with joints staggered.
- Hot apply a 1/2" coverboard to the tapered insulation
- Construct 4' X 4' sumps and install 30" gravel guards around each drain. Crickets are to be constructed between each drain.
- All drains are to be inspected and receive new clamping rings and strainers.
- Install 2 Type IV felts and a modified bitumen cap sheet in hot asphalt.
- Flashings to be constructed of 2 plies of modified bitumen membrane with all lap seams reinforced with a 3-course application of mastic and mesh. Flashings will be completed with 2 coats of a reflective, aluminized, asphalt paint.
- Complete roof system with a hot asphalt flood coat and gravel.
- Install new .050 aluminum counterflashing and ANSI SPRI ES-1 coping.



Construction Details

Client: West Virginia Northern Community College

Facility: Weirton Campus

Roof Section: Section #2

Information

Year Installed	1989	Square Footage	14,900
Slope Dimension	Tapered	Eave Height	3 Stories
Roof Access	Internal Roof Hatch	System Type	EPDM: Fully Adhered

Assembly

Roof #	Layer Type	Description	Attachment	R-Value	Thickness
1	Deck	Metal		-	-
1	Insulation	Polyisocyanurate - tapered	Mechanically attached	-	3.0"
1	Membrane	60 Mil Unreinforced EPDM roof	Adhesive	-	-

Details

Perimeter Detail	Parapet Wall
Drain System	Internal Roof Drains
Coping Cap	Metal



Inspection Report

Client: West Virginia Northern Community College

Facility: Weirton Campus

Report Date: 02/20/2017

Roof Section: Section #2

Inspection Information

Inspection Date	02/20/2017	Core Data	Yes
Inspection Type	Visual Inspection	Leakage	Yes
Deck Conditions	Good		

Flashing Conditions

Perimeter	Poor	Wall	N/A
Projections	Fair	Counterflashing	N/A

Miscellaneous Details

Reglets	N/A	Debris	No
Control Expansion Joints	N/A	Ponding Water	Minor
Parapet Wall	Fair	Coping Joints	Poor

Overall

Rating	Poor
Condition	Overall, Roof Section #2 is in poor condition due to its age. The membrane is shrinking due to photo-oxidation of the rubber which has caused pulling on penetrations and fixed points. Also identified on the roof were three large cuts in the membrane, deteriorated sealant, and minor ponding along the drain lines. Due to the shrinkage of the membrane and known areas of wet insulation, this section of roof is not a restoration candidate and should be replaced within 3 years.



Photo 1

Core Sample:

- Metal Deck
- 3.5" Polyisocyanurate
- Fully Adhered EPDM Membrane.

The core sample was taken in an area of one of the large cuts found in the membrane. The sample confirmed presence of wet insulation in this area.



Photo 2

A majority of the leaks found in Section #2 are entering along the divorced wall flashing detail which separates sections #1 and #2. In this flashing there are a number of repaired flashing seams, exposed brick, and deteriorated caulking which could be caused the leaks.



Photo 3

This image gives a better view of a repaired flashing seam, the small amount of exposed brick face, and the deteriorated caulking.



Photo 4

Minor ponding was found along a drain line in Section #2. During a future replacement, a cricket should be installed in this area to push the water toward the drains.



Photo 5

As we found in Section #1, the flashing reinforcement patches and pipe boots are separating from the underlying EPDM membrane.



Photo 6

Two rows of brick were left exposed between the coping cap and EPDM termination. Small sections of exposed brick can lead to minor, but persistent leaks caused by water percolating through the brick and masonry joints.



Photo 7

The slope of Section #2 provide adequate drainage, but a small amount of ponding water was still found along the drain lines.



Photo 8

Three large gashes were found in the EPDM of Section #2. Each of the gashes likely started as smaller punctures which stretched and tore due to the tension on the shrinking membrane. Each of the three cuts in the membrane were patched during the inspection. The insulation around each of the cuts felt soft which is an indicator of wet insulation.



Photo 9

Membrane Cut #2



Photo 10

Membrane Cut #3



Photo 11

Tenting of the membrane around the drain sumps confirms the shrinkage of the membrane.



Photo 12

The pipe boots in Section #2 were also found to be skewed, another confirmation of the shrinking membrane.



Photo 13

Deteriorated caulking along a counterflashing. In the absence of a through-wall or reglet-mounted counterflashing, caulking is the first line of defense against water infiltration, but caulking will degrade due from exposure to UV radiation and exposure to the elements.



Photo 14

This image shows deteriorated caulking which has separated from the brick wall. Water running down the face of the wall will now be able to enter this joint and possibly leak into the building.



Photo 15

The shrinking and pulling of the EPDM membrane covering the vertical walls around the mechanical units has caused the membrane to pull away from the wall.

Working Draft



Solution Options

Client: West Virginia Northern Community College

Facility: Weirton Campus

Roof Section: Section #2

Replace Options

Solution Option:	Replace	Action Year:	2019
Square Footage:	14,900	Expected Life (Years):	40
Budget Range:	\$298,000.00 - \$320,000.00		

Replace the existing roof with a hot/cold applied, 2-ply, modified bitumen roof system with a flood and gravel surfacing. The new roof system will be constructed according to IBC/IECC 2015, as required by The State of West Virginia, and will include ANSI-SPRI ES-1 certified coping. A 40 year warranty, solely held by the Garland Company, will be provided to West Virginia Northern Community College at the completion of the project.

Scope of Work:

- Remove the existing EPDM roof system and insulation down to the metal deck.
- Mechanically attach tapered polyisocyanurate insulation with a slope of 1/4:12 to the metal deck. The insulation should be attached in 2 layers with joints staggered.
- Hot apply a 1/2" coverboard to the tapered insulation
- Construct 8' X 8' sumps and install 30" gravel guards around each drain. Crickets are to be constructed between each drain.
- All drains are to be inspected and receive new clamping rings and strainers.
- Install a modified bitumen base sheet in hot asphalt followed by a urethane modified ca sheet in cold adhesive.
- Flashings to be constructed of 2 plies of modified bitumen membrane with all lap seams reinforced with a 3-course application of mastic and mesh. Flashings will be completed with 2 coats of a reflective, aluminized, asphalt paint.
- Complete roof system with a cold applied flood coat and gravel.
- Install new .050 aluminum counterflashing and ANSI SPRI ES-1 coping.

Replace Options

Solution Option:	Replace	Action Year:	2019
Square Footage:	14,900	Expected Life (Years):	30
Budget Range:	\$254,000.00 - \$295,000.00		

Replace the existing roof with a hot applied, 3-ply, modified bitumen roof system with a flood and gravel surfacing. The new roof system will be constructed according to IBC/IECC 2015, as required by The State of West Virginia, and will include ANSI-SPRI ES-1 certified coping. A 30 year warranty, solely held by the Garland Company, will be provided to West Virginia Northern Community College at the completion of the project.

Scope of Work

- Remove the existing EPDM roof system and insulation down to the metal deck.
- Mechanically attach tapered polyisocyanurate insulation with a slope of 1/4:12 to the metal deck. The insulation should be attached in 2 layers with joints staggered.
- Hot apply a 1/2" coverboard to the tapered insulation
- Construct 8' X 8' sumps and install 30" gravel guards around each drain. Crickets are to be constructed between each drain.
- All drains are to be inspected and receive new clamping rings and strainers.
- Install 2 Type IV felts and a modified bitumen cap sheet in hot asphalt.
- Flashings to be constructed of 2 plies of modified bitumen membrane with all lap seams reinforced with a 3-course application of mastic and mesh. Flashings will be completed with 2 coats of a reflective, aluminized, asphalt paint.
- Complete roof system with a hot asphalt flood coat and gravel.
- Install new .050 aluminum counterflashing and ANSI SPRI ES-1 coping.



Construction Details

Client: West Virginia Northern Community College

Facility: Weirton Campus

Roof Section: Section #3

Information

Year Installed	2011	Square Footage	4,782
Slope Dimension	Tapered	Eave Height	3 Stories
Roof Access	Internal Roof Hatch	System Type	EPDM

Assembly

Roof #	Layer Type	Description	Attachment	R-Value	Thickness
1	Deck	Metal		-	-
1	Insulation	Polyisocyanurate	Mechanically attached	-	-
1	Membrane	EPDM	Adhesive	-	-

Details

Perimeter Detail	Parapet Wall
Drain System	Internal Roof Drains
Coping Cap	Metal



Inspection Report

Client: West Virginia Northern Community College

Facility: Weirton Campus

Report Date: 02/20/2017

Roof Section: Section #3

Inspection Information

Inspection Date	02/20/2017	Core Data	No
Inspection Type	Visual Inspection	Leakage	No
Deck Conditions	Good		

Flashing Conditions

Perimeter	Good	Wall	N/A
Projections	Good	Counterflashing	Good

Miscellaneous Details

Reglets	N/A	Debris	No
Control Expansion Joints	N/A	Ponding Water	Minor
Parapet Wall	Good	Coping Joints	Good

Overall

Rating	Good
Condition	Overall, Roof Section #3 is in good condition. This 6 year old white EPDM roof has adequate slope to the drains and was detailed/installed properly. Although it is a fairly new roof, limit foot traffic around the mechanical units and solar panels to prevent punctures and cuts in the membrane.



Photo 1

A white EPDM membrane has been installed over mechanically attached insulation on the new addition.



Photo 2

Tapered insulation has been used to push water toward the drains on the roof. Minor ponding existing along the cricket lines.



Photo 3

This image shows the metal detail between Section #1 and #3. An opening appeared to exist under this transition and should be sealed using a durable caulking.



Photo 4

Damage to the existing coping cap on Section #1. This damage likely occurred during construction of the addition.



Photo 5

Ponding water found along the cricket drain line.



Photo 6

A number of solar panels have been installed on the roof surface. Be careful to control foot traffic in this area to prevent accidental roof membrane punctures and damage.

Facilities Master Plan

Appendix F

Parking Lot Audit

Working Draft



ALEX E. PARIS

CONTRACTING COMPANY, INC.

P.O. BOX 369 • 1595 SMITH TOWNSHIP STATE ROAD (RT. 18)

ATLASBURG, PA 15004-0369

e-mail: sdefaney@alexparis.com

Office Phone No. (724) 947-2235

FAX No. (724) 947-3820

Our Greatest Assets

Our Employees

December 22, 2017

Tricia Marker
WVNCC Director of Facilities
1704 Market Street
Wheeling, WV 26003

Ph# 304-214-8960

Email-pmarker@wncc.edu

**RE: Asphalt Paving and Concrete Replacement
Quotation # 2017-428**

Dear Ms. Marker

Please accept the following correspondence for your consideration. The proposed rate schedule is based on site visit, information provided during job walk and our experience with similar projects.

Scope of Work Concrete- (Weirton Campus)

- Concrete sidewalk repairs (6) separate areas estimated 1250 sq. ft.
- Concrete Curb Repair- (2) sections 18 liner feet.
- Concrete Sidewalk remove and replace (Cost per sq. ft. \$38.00)
- Concrete Curb remove and replace. (Cost per Liner Ft. \$170.00)

Scope of Work Asphalt – (Weirton Campus)

- Crack sealer- Cost per liner foot: \$0.80
- Asphalt Sealer existing asphalt surface: Cost per Sq. Yd.: \$1.65
- Line Striping: Cost per liner foot: \$0.40

Scope of Work Concrete and Brick Sidewalk- (Wheeling Campus)

- Concrete Sidewalk remove and replace: (Cost per Sq. Ft. \$38.00)
- Concrete Sidewalk Stamped Concrete Brick Pattern: (Cost per sq. ft. \$45.00)
- Brick Sidewalk Provide and install (Cost per sq. ft. \$58.00)
- No estimated quantities no defined area for work

Scope of Work Asphalt- Wheeling Campus)

- Proposed new Parking Lot (3,263 Sq. Yds.)
- Site Grading
- Provide and install stone base, 4" Crusher Run
- Provide and Install 3.5" Base course asphalt 19mm.
- Provide and install 1.5" ID wearing course 9mm
- Provide all required line stripping and markings.
- Provide curb blocks along edge of sidewalks, 40 each
- **Proposed Lump Sum Cost: \$135,000**

Scope of Work Asphalt Parking area B&O Parking Lot – (Wheeling Campus):

- Asphalt Milling existing asphalt and concrete surface 1.5" (Estimate 603 Sq. Yds.)
- Provide and place new asphalt 1.5" ID wearing Course.
- Line Stripping and marking to match existing.
- Remove and replace curb blocks, 17 each
- **Proposed Lump Sum Cost: \$23,800**

Project Exclusions:

- Any and all Federal, State and Local permits and inspection fees.
- Relocation of interfering utilities.
- Pedestrian and Traffic Control.
- Evening, weekend or Holidays working Hours.
- Engineering Design and Services.
- Over excavation and Base repair.
- Storm Drain inlets and pipe.
- ADA ramps
- Geotextile fabric.
- Asphalt wedge curb.

Please contact Todd Bogar or myself should you have any questions. Thank you for the opportunity to provide this project estimate.

ALEX E. PARIS CONTRACTING CO., INC.

Shawn Delaney
Account Manager