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1. Introduction

Kirtland Community College commissioned Mathison | Mathison Architects to update the Campus Facilities Master Plan, completed in 2016. This plan is intended to guide the physical development of the College in ways that respect the environment, maximize existing assets, and reflect its mission and vision for the future. It further reflects established priorities at KCC as it strives toward excellence in educational opportunity for all.

We appreciate and acknowledge the assistance of the KCC Board of Trustees, Administration, faculty, and staff for their contributions to this update, including their time, interest, advice and constructive thoughts. In particular, the leadership of President Thomas Quinn, as well as the guidance and organization of Jason Broge, Vice President of Business Services Administration were most appreciated during the entire study process.

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2. Summary

A. Background / Purpose of the Campus Facilities Master Plan Update

In 2012, with a 2016 update, Kirtland Community College commissioned a master plan to guide the future physical development of the College. During this process, a thorough assessment of existing facilities on the Roscommon campus identified priorities for improvement for each building and the campus site over a ten-year time frame. Since that time, a number of projects have been accomplished or are underway at the Roscommon Campus:

- Roadway and parking lot replacement.
- New campus signage at the north entrance to the campus
- Loading dock improvements
- Boiler replacements
- Upgraded temperature controls
- Fire alarm system replacements
- Upgraded site lighting
- Landscaping improvements
- Interior lighting improvements
- New vestibule at Administration Building
- Interior remodeling for Criminal Justice Program at Administration Building
- Interior remodeling for Composite Materials Program at CTC
- Toilet room renovation at Administration
- Renovation of Auto Lab at CTC

At the Gaylord MTEC Campus, improvements have been completed for the Front Entrance, Welding program and Applied Technology programs.
The 2012 Master Plan envisioned a series of improvements to the Roscommon Campus to expand facilities and improve the campus site in anticipation of new programming and enrollment growth. The top priority identified in the Master Plan was the creation of a new Health Science Education and Training Center at the Roscommon Campus. Concurrent with the writing of the 2012 Plan, acquisition of property at I-75 and 4 Mile Road in Grayling had just occurred, but no specific facilities or site improvements had been made or planned at that time.

Since then, KCC has planned and implemented a new building, the Health Sciences Education and Training Center (HSC), which will open for classes in Fall, 2016 at the Grayling campus. This has had a significant impact on the facility planning for KCC, and it is a primary impetus for this Master Plan Update. A major expansion of the HSC is underway and will be occupied in 2019, including the Michigan Forest Products Institute.

The decision to relocate the health science education facility to the Grayling Campus has had a dramatic effect upon the anticipated future facility utilization at the Roscommon Campus, primarily at the Student Center and at the Instructional Center, where many of the health programs were located. In addition, the Library and Cosmetology program will be moving to the Grayling campus in 2019, from the Roscommon campus.

A primary purpose of this Plan, therefore, is to recommend improvements that meet the challenges of a new reality in enrollment, academic pedagogy, course offerings, physical location and aging facilities / deferred maintenance – all aligned with the vision, mission, and guiding principles of the College. It recommends specific projects and budgets within the context of broad strategies for overall campus improvements. It provides a framework for future decision-making and a roadmap for academic and financial management.

Just as change has created the need for this Update, future changes will continue to make the planning process dynamic. Therefore, to be an effective consensus-building and decision-making tool, this Master Plan Update should be seen as a flexible, living document, able to be periodically evaluated and revised as new ideas emerge.
2. **Summary** *(continued)*

**B. Planning Goals, Guidelines and Process**

The broad goal of this update is to provide Kirtland Community College with a more comprehensive roadmap for meeting facilities and deferred maintenance issues over the next ten years, reflecting the new emphasis on facilities at the Grayling Campus location. This roadmap is created in the context of rapid growth of the Grayling campus facilities and programs, as well as the declining utilization of existing buildings on the Roscommon campus.

Based on its historic role as the higher education leader in this part of Michigan, the College seeks to maintain its commitment to open access to education in a student-focused environment, providing transfer and career technical programs, development studies, workforce development, personal enrichment and culture opportunities.

Specifically, there are several goals:

- Identify sites for new construction or expansion of existing facilities.
- Develop a plan for future property acquisition / disposal.
- Identify strategies to address traffic and parking conditions, including pedestrian and vehicular traffic patterns.
- Recommend a plan to maximize the value of existing assets.
- Recommend a plan for responding to emerging and changing physical needs related to academia offerings and technology.
- Maintain stewardship of the natural environment.
2. **Summary (continued)**

- Identify priorities for recommended projects and budgets. This Plan observes several guidelines for shaping future facilities and environments:
  - Kirtland Community College facilities, programs and services are focused on the needs of students, creating the optimum environment for learning and growth.
  - Kirtland Community College is committed to making educational services available and accessible to all, taking full advantage of emerging technologies, partnerships and networks.
  - Environmental quality and barrier-free issues must be considered in all facilities.
  - Facilities must be flexible and provide a variety of learning environments toward the advancement of lifelong learning.
  - Kirtland Community College is committed to being responsive to the changing needs of its component communities.
2. **Summary** *(continued)*

The process of developing this Plan included several component steps:

- A review of the assessment of the physical condition of existing buildings and sites, first conducted in 2012, including site, architectural, mechanical, electrical, and plumbing systems.

- An assessment of current and future programming for services, courses, programs, etc.

- An analysis of needs based on the data for space utilization and the assessments of physical condition and programming.

- Development of recommendations for new facilities, expanded and/or renovated facilities, and deferred maintenance. These recommendations include plan and budget components.

- Documentation and presentation of the final plan for KCC approval.
2. **Summary (continued)**

C. **Recommendations**

Based on the analysis of the gathered information and data, several recommendations are presented in the following areas:

- Site recommendations
- Student Academic Center (SAC)
- Instructional Center (INS)
- Fine Arts Center (FAC)
- Physical Plant Building (PHY)
- Performing Arts Center (PAC)
- Career Technology Center (CTC)
- Student Center (SC)
- Library (LIB)
- MTEC / Gaylord
- HSC / Michigan Forest Products Institute
  Grayling Campus
- New Events Center

*The New Events Center is the top priority project.*
3. History, Mission, Vision, Values, & Purposes

A. History

Kirtland Community College is a public, two-year community college located in Roscommon County, Michigan. It was founded in 1966, in accordance with provisions of Public Act 188 of the Michigan Public Acts of 1955, and upon the vote of the electorate from six local K-12 school districts (Crawford-AuSable, Fairview Area, Gerrish-Higgins, Houghton Lake, Mio-AuSable, and West Branch – Rose City). Classes began in 1968 with one-hundred sixty students in five portable classrooms.

Kirtland is the largest Michigan community college district, by geographic area, totaling 2,500 square miles and servicing five major counties (Roscommon, Crawford, Ogemaw, Otsego, and Oscoda). The combined population of these five major counties as of the 2010 census is 93,000. The Roscommon campus is located close to the geographic center of the College’s district and the area is very rural. The College is surrounded by the following communities:

- Grayling (30 miles)
- Fairview (40 miles)
- Frederic (35 miles)
- Houghton Lake (30 miles)
- Mio (30 miles)
- Roscommon (11 miles)
- Rose City (35 miles)
- St. Helens (8 miles)
- West Branch (25 miles)

The Higher Learning Comission, a commission of the North Central Association of Colleges and Schools granted Kirtland Community College status as a candidate for accreditation in 1972, and the College has been accredited as an associate degree-granting institution since 1975. Kirtland Community College holds memberships in the Michigan Community College Association and the American Association of Community Colleges. The College is named after the Kirtland Warbler.
Today, Kirtland Community College has an enrollment of over 1,600 students, with the main campus location near Roscommon (approximately 80 acres and 50,000 SF of space), as well as extension sites in West Branch, Gaylord (MTEC), and Grayling (HSC). The West Branch site is currently dormant.

The College operates on a semester calendar, with a shorter session offered during the summer months. The College offers 38 degrees and certificates, as well as transfer degree programs. The College also competes in intercollegiate athletics as a member of the Eastern Conference of the Michigan Community College Athletic Association. The Kirtland Firebirds complete in men’s and women’s basketball, men’s and women’s cross-country running, and men’s golf.

B. Mission

To provide innovative education opportunities to enhance student lives and build stronger communities

C. Vision

Kirtland will be the first choice for learner-centered education, guiding students and communities toward success.

D. Values

- **Excellence:** Expectation that all college activities are conducted with attention to quality and the highest levels of academic and professional standards.
- **Inclusiveness:** Conducting the activities of the college in a manner that inspires tolerance and welcomes diversity of people and thought.
3. History, Mission, Vision, Values, & Purposes

Innovation: Addressing challenges and issues from multiple perspectives to solve problems and advance college processes and knowledge. Supporting progressive and meaningful research, creative activity and teaching.

Reflection: Evaluating processes and assessing success through honest conversation and the use of data.

Character: Steadfast adherence to the principles of integrity, honesty reliability, transparency, and accountability.

Respect: Respect for the rights, differences and dignity of others and their contribution to the overall success of the College.

E. Purposes

To accomplish the mission, Kirtland:

1. Provides occupational programs that educate learners for the workforce of the future.

2. Provides transfer courses and programs that encourage learners to continue education at other colleges and universities.

3. Offers non-credit community and cultural education that enhance the lives of citizens.

4. Offers education to the incumbent workforce thereby supporting community economic development.
3. **History, Mission, Vision, Values, & Purposes (continued)**

5. Provides supportive services that mentor learners to become successful while enrolled in courses.

6. Provides student activities that encourage the development of community service and leadership skills.

7. Facilitates collaborations with other colleges and schools that enhance the educational services in Kirtland’s service area leading to a better education citizenry.

8. Encourages innovation among employees and community members for the benefit of Kirtland and its communities.
4. Facility Assessment

A. Site – Roscommon Campus

The Roscommon campus is the original site for KCC, located on approximately 80 acres at St. Helen Road (F-97) and Sunset Drive, plus 20 acres on the north side of Sunset Drive and 40 acres east of St. Helen Road, in the northeast corner of Roscommon County in AuSable Township. The site is geographically central within the service area of KCC. The nearest community is St. Helen (8 miles). The land surrounding the main campus is both agricultural and wooded area, with sparse population.

The Roscommon campus is located on a wooded hill and was originally designed to integrate with the natural surroundings. The primary entry drive has recently moved to Sunset Drive location at the north edge of the main campus. This entrance leads to the Student Academic Center and adjacent parking lots. Previously, the primary entrance fronted St. Helen Road. However, with the construction of the new Health Science Center in Grayling and the shift of health programs away from the Roscommon Campus and the Instructional Center, the Sunset Road entrance is now recognized as the preferred entrance by most students as the Student Academic Center becomes the primary location for most classes on the Roscommon campus.

There is another secondary drive along St. Helen Road leading west to Kirtland House and former student housing buildings. Another secondary drive along St. Helen Road leads east to the firing range, observatory building, and CDL driving course.

The southwest corner of the intersection of St. Helen Road and Sunset Drive is the location of a natural wooded area that has been designated as a wetland by the state of Michigan. Similarly, the western-most part of the main campus remains mostly undeveloped as wooded area, wetlands, and a bog. A portion of this area has been engineered to satisfy the wastewater needs of the campus through broadcast and
4. Facility Assessment (continued)

filtration techniques. The twenty acres north of Sunset Drive was acquired by the College with the intended purpose for possible future student housing or other use as programs and needs develop. However, these plans did not develop and no College use of this site is anticipated in the future.

Drives and parking lots have been developed to form a ring road around the campus, within which all major campus buildings are found. The lots and drives are repaired and upgraded on a cyclical basis.

In 2018, due to the cost of maintenance and upkeep, combined with the lack of utilization, the College removed selected drives and parking areas, and returned these areas to a natural state. The removed paving material was recycled and provides an excellent base for the new CDL Training Course on the east side of St. Helen Road.

Over the past several years, landscape plant beds have consistently been updated and improved around building foundations and building entrances. In addition, older overgrown plant material has been removed from building perimeters and within open wooded areas between buildings to improve aesthetics and campus security. Away from the central part of campus, forest management practice of keeping wooded areas natural by allowing ecological succession should continue.

Since 2012, landscape improvements have been made at the Student Center, Career Tech Center, Library, and Instructional & Administration buildings. Selected trees were removed from the central wooded area of campus to create a park-like setting with wi-fi, historical landscaped beds and added lighting.

The College maintains transportation links to this campus via the Roscommon County transit and Crawford County Transit systems.
4. Facility Assessment (continued)

When the Library and Cosmetology program move to the Grayling campus in 2019, the Roscommon campus will contain the following unutilized buildings: Student Center, Library, Instructional Center, and significant portions of the Career Technical Center and Performing Arts Center.

Grayling Campus

The Grayling campus is located at 4800 W. Four Mile Road, at an exit from I-75. It is visible from the expressway, and it is the home of general education courses, the Health Sciences programs (nursing, cardiac sonography, medical assistant, surgical technology, health information technology, EMT & Paramedic programs, and phlebotomy technician courses). Currently, a major expansion is underway for the new Michigan Forest Products Institute, the Workforce Development Office, as well as space for a new library and relocation of the cosmetology program from the Roscommon campus.

For the 2012 Master Plan, the Grayling property had just been acquired, but firm plans were not yet determined for development of the site. In the short time since then, the new facilities at the Grayling campus have become the home of signature KCC programs. The new, modern facilities, with immediate access to major roads make this site a prime location for community events, regional conferences, public meetings, student gatherings, etc. As the College adds facilities at this site, the center of gravity (in terms of student and public activity) for KCC shifts toward Grayling and away from the Roscommon campus.

Ideas for future development of the Grayling campus site include student housing, recreation fields, diesel mechanics program, and Public Safety programs.
4. Facility Assessment (continued)

UC / M-TEC Campus - Gaylord

The Gaylord campus is located at 60 Livingston Blvd. in a state-of-the-art building located adjacent to Gaylord High School. It contains the University Center, as of 2017 operated by KCC management under a contract with Otsego County, comprised of offices of several Michigan college and universities as well as general education and the MTEC, comprised of professional trades programs in CNC machining, electrical technology, heating/cooling/air-conditioning/refrigeration, mechatronics, and welding/fabrication. Sustained growth in these programs has caused pressure to expand the building to meet the demand for equipment, storage, and work space. Recent improvements to the entrance and reception areas have been completed.
4. Facility Assessment (continued)

B. Student Academic Center (SAC)

The Student Academic Center (SAC), originally the Administration Center renamed in 2018, was built in 1980 and included a total area of 45,323 SF on two levels. In 1999, an addition of 11,955 SF (on two levels) increased the total square footage to 57,278 SF. Today, the Student Academic Center contains for College administration offices, student services offices (admissions, financial aid, etc.), accounting and business offices, Flex Lab and testing center, general classrooms, developmental classrooms and police academy spaces. Recently, improvements were made to space at the lower level to improve facilities for the police academy, including virtual training facilities, weight and fitness facilities, and open space for tactical training and instruction.

Because of its proximity to parking, and because student services and many general classrooms are located here, the Student Academic Center is a primary gateway to the rest of campus.

At the upper level, a boulder-lined entry walk and enclosed vestibule were added at the north entry of the building, providing an air-lock for increased temperature control and overall comfort for students and staff members. Toilet rooms have recently been renovated and a new entry walk is planned for completion by the end of 2018. Future plans call for canopies at the main entry and entrance of the Police Academy, as well as a new vestibule entrance on the south side of the upper level.

Although the roofing was replaced between 2000 - 2005, it may be necessary to reroof all or parts of the roof area before the conclusion of the ten-year life of this plan. This building, as in all the existing buildings on this campus, contains some exterior cedar shake siding that is deteriorating. Windows in the original buildings are energy-inefficient, as are existing hollow metal doors and frames at the building’s exterior.
At the lower level, there are several classrooms below grade that are windowless. The absence of natural light makes these unpopular spaces for teaching and learning. There is a general lack of natural light in the interior spaces of the building. The original building was built prior to ADA legislation, so toilet rooms and other features of the building need to be upgraded for compliance.

Boilers in the building were replaced in 2012. The HVAC system in the original building is in poor condition, and chilled water piping is absent in the 1999 addition. The entire fire alarm system has been replaced, and new energy-efficient lighting has been added in some areas. There are no automatic light controls in the building. The exit signs and master clock systems are in need of replacement, and there is no emergency generator.
C. Instructional Center

The original Instructional Center was built in 1968 and included an area of 27,555 SF on one floor. A two-story addition of 17,783 SF was completed in 1999, to bring the building to a total of 45,338 SF. The Instructional Center was the home of classrooms, faculty offices, all science labs, and the Health Sciences program. Because of this, the Instructional Center had historically been heavily used and adjacent parking lots were often full.

In Fall, 2016, all programs located in this building moved to the new Health Science Center at the Grayling campus. No consistent alternative use has been identified for this building, as for now the building is vacant, though it is sometimes used for tactical training by the Police Academy. The building is heated and cooled at a minimal level to prevent deterioration. However, the exterior of the building includes extensive cedar shake siding which is deteriorating. There are no vestibules at entry points. Roofing and roof insulation will need to be replaced as should the exterior door and window units at the original building.

Generally on the interior, floor and ceiling finishes need to be replaced, as do the doors and hardware in the original building. Select casework is worn and dated, and some teaching areas retain chalkboards. Laboratory gas shut-off buttons are wired in series, requiring a visual check of all five to turn the system on. The classrooms in the southwest pod lack ventilation because of a non-functioning air-handling unit. Some of the building has been converted to automatic temperature controls.

The building has the original fire alarm panel and devices. There are no automatic lighting controls or emergency power generator in the building. The original primary electrical cable feeding this building was replaced, and some lighting has been upgraded.
4. Facility Assessment (continued)

D. Student Center

The Student Center was the first building constructed on this campus built in 1968. It includes 17,870 SF on one level. Formerly it housed non-academic spaces on campus, such as a modest bookstore, café', student organization space, and COOR offices. The center of the building was devoted to open, common area, with various kinds of seating, a fireplace, and several wall-mounted flat-screen televisions.

With the move of these functions to the Grayling Campus and elsewhere on the Roscommon Campus, the buildings are now being used for cold storage by the College. No alternative use has been identified.

At the exterior, there is no clear separation between vehicular drive and pedestrian walkway. There are no vestibules at entry points. The exterior includes a cedar shake mansard roof that is deteriorating. Exterior windows and doors are not energy-efficient, as well as the hollow metal frame at the mechanical room.

There is little natural light in the interior of the building, and toilet rooms are not barrier-free. Floor and ceiling finishes are in need of replacement, as are interior doors and hardware, interior folding partitions, demountable walls, and casework in the offices.

Mechanically, the original HVAC system is at the end of it life, and part of the building lacks air-conditioning. Temperature controls are not automated. Electrically, the distribution panel in the boiler room is original. All branch panelboards are outdated. The entire fire alarm system is in need of replacement. There is need for upgraded egress lighting, additional electrical circuits, and automatic lighting controls.
4. Facility Assessment (continued)

E. Library

The library was built in 1968 and contains 15,510 SF on one level. It has operated continuously as the campus library, although it has undergone a number of small internal changes to accommodate changing needs. Today, it includes space for the primary book stacks, space for separate circulation and reference desks, a stand-up computer area for research, a tutoring area, and space at the perimeter for tables and computer stations for student use. The building contains a large learning lab, video viewing facilities, and the eServices department.

The building is not totally barrier-free, and the main entry to the building is opposite the side with the parking lot for physically-challenged patrons and students. The lobby also serves as a student lounge area, with vending machines.

The road leading from the ring road to the Library was expanded and re-surfaced in 2013. The building exterior displays cedar shake siding that is deteriorating. The warranty for roofing and roof insulation has expired. Exterior windows, doors, frames and hardware are in need of replacement.

On the interior, the toilet rooms are not ADA-compliant, and floor and ceiling finishes are in need of replacement in select areas. Interior doors and hardware need to be replaced, as does select casework.

Mechanically, the HVAC system is original to the building, and the building lacks building-wide automated temperature controls. The entire fire alarm system is in need of replacement. The primary electrical cable feeding this building was replaced in 2013, and light fixtures were upgraded in 2012.

In 2019, the Library will move to new space at the Grayling Campus. The building at the Roscommon Campus will be mothballed until an alternative use is identified.
F. Career Technology / Performing Arts Center

The original building was constructed in 1969 and includes 42,084 SF. The building has served as the facility for vocational-technical education, as well as performing arts education continuously since its beginning. The Performing Arts portion of the building includes an 840+ seat auditorium that is dividable by means of movable partitions. The Career Technology portion of the building contains programs in cosmetology, automotive arts, machining and manufacturing processes, and welding (COOR classes only – KCC college welding classes consolidated at the MTEC facility in Gaylord in 2013). Spaces are utilized by KCC students as well as COOR technical education students. Space was renovated in 2015 for a new Composite Materials program, and the Auto Lab facility was renovated and expanded soon thereafter.

On the exterior of this building, the building lacks entrance canopies and adequate signage. Existing cedar shake siding and soffits are deteriorating. Exterior windows and hollow metal doors and frames are in need of replacement. Some overhead doors were replaced with the Auto Lab renovation. Some of the deteriorating cedar shake exterior siding was replaced with a similar-looking man-made product that seems to be performing well.

A primary shortcoming of the theater is the lack of convenient parking to the theater lobby. The lobby is not easy to see from the campus entrance, and walking from the lower parking lot uphill to the theater can be a physical challenge. While the seating capacity may be adequate, the lobby is too small, as is the backstage and back-of-house facilities for dressing rooms, storage, scene shop, green room, toilet facilities, etc.

The theater is currently being used by the College for a children’s concert series, as well as College wide functions, such as graduation.
4. Facility Assessment (continued)

On the interior, there are several interior classrooms that are windowless. Toilet rooms are not barrier-free. Carpet and vinyl tile flooring are in need of replacement throughout the facility, including the auditorium. Auditorium seating, interior doors hardware and ceilings are in need of replacement, as is casework in select rooms.

Mechanically, the original HVAC system should be replaced with new, including upgrading the entire building to automatic temperature controls.

Electrically, this building needs a new main distribution panel. The primary electrical cable feeding the building was replaced in 2014. Light fixtures through the building were upgraded in 2012. The dressing room lights do not have lamp guards. The branch panelboard are outdated, and egress lighting is in need of upgrading. The building does not contain lighting controls or emergency generator capacity.
4. Facility Assessment (continued)

G. Fine Arts / Physical Plant

Built in 2000, this building includes 30,123 SF. It includes the entire fine arts department studios, including a graphic arts studio, metals room, photography, ceramics, kiln, clay room, glazing room, sculpture, drawing, and painting studios. Currently, with a reduced Art faculty, Fine Arts courses are limited to graphic design and two-dimensional media. The Physical Plant side includes storage and warehouse space, offices, a print shop, and equipment storage space.

On the exterior of the building, asphalt pavement is in need of replacement. A canopy was built over the entrance to the Print Shop in 2012. Cedar shake siding at entrances is deteriorating, as are exterior windows and all exterior hollow metal doors and frames.

On the interior, toilet partitions are in need of replacement, and carpet and vinyl tile flooring is in need of replacement in selected areas. There is a need for repainting existing interior walls and to replace select interior doors and interior casework.

Mechanically, air-handling units do not include air-conditioning, and the diffusers in ceramics, weaving, and commons area are in need of change. There is insufficient heat at the north wall of the men’s toilet room and the entire building should be upgraded to automated temperature controls. There is no capture hood over the kilns, and a clay trap is missing in the ceramics studio.

Electrically, there are no lighting controls or emergency power capacity in the building.
4. Facility Assessment (continued)

H. MTEC / Gaylord

This facility was built in 2001 and was created as a shared facility. Of the total 46,621 SF, about 28,000 SF are operated by Kirtland Community College. The balance is operated as a University Center managed by Kirtland under a contract from Otsego County. The two parts of the building operate independently, although KCC maintains the entire building.

The MTEC contains two computer classrooms, a distance learning lab, two general classrooms, a general-purpose lab and labs for welding and HVAC. The building is used primarily by KCC during the day and by university partners during evening hours and it is designed to change with changing programming needs.

Since the building is relatively new, the exterior issues are limited. In 2018, a new permanent entry was added to the building, and lighting and finishes were improved. Interior carpet will need to be replaced in select locations and ceilings should be installed in high volume office areas. Some casework is in need of replacement in offices.

Mechanically, in 2013, modifications were made to upgrade the ventilation in the welding area in anticipation of a consolidated welding program at this site. Modifications were also made in the electrical closet at the University Center.

The College is starting to replace classroom lighting with LED fixtures. Corridor light fixtures also being replaced. The emergency generator should be upgraded to include the egress lighting.

The sustained growth of the welding program requires additional space and reorganization of existing space for storage and equipment. Similarly, the machining program requires additional areas to accommodate new equipment and workspace. The construction trade program is likely to grow and will need dedicated space to sustain the growth.
4. Facility Assessment (continued)

I. HSC / Grayling

The Health Sciences Center at the Grayling campus was built in 2016 and houses classrooms and labs for health care careers and general education. Also included are faculty offices, food service area, and meeting rooms.

Currently a major addition is under construction, which will house the new Michigan Forest Products Institute, Library space, classrooms, labs, and offices.
5. Facility Analysis

A. Instructional Programming

The Roscommon Campus of Kirtland Community College lies near the center of a large, sparsely-populated service area. In the context of a market-driven economy for higher education programs and services, the College has sustained its service to students and constituent communities through satellite campus locations, on-line course offerings, technology-based resources, and strategic modifications to existing facilities. KCC is positioned as the center of education, culture, and opportunity for the region.

The acquisition and development of a new satellite campus in Grayling is indication of KCC’s focus on service and access to higher education for its citizens. By placing its signature health sciences programming at a convenient, accessible location, it solidifies its position in this core area. Future expansion and development of the Grayling site holds additional potential to expand the health sciences course offerings, as well as add new programs or extend existing programs to this location. The proposed Michigan Forest Products Institute is planned for the Grayling Campus, as is the potential of future student housing (under study), recreation fields, and expansion of the new Health Science Center.

The creation of the Grayling campus, however, has an impact on services and course offerings at the Roscommon Campus and other satellite locations. A reduction and/or dispersion of services at the Roscommon campus and other campus locations necessitate the recalibration of facility needs and the consolidation of services and spaces to retain sustainable operations.
5. Facility Analysis (continued)

B. Site

The Roscommon campus is accessible by vehicles from Sunset Drive (primary entrance) and from St. Helen Road (secondary entrance). Most of the facilities are located in the upland area, but there is an open area on the east side of St. Helen Road that has been developed for athletic fields, observatory, community garden, and a firing range, used by the police academy. In 2018, a portion of the property was developed as a new driver’s training area for CDL candidates.

Although, this property has the capacity to be further developed for use in competitive sports, including new paved drives and parking area. However, the new land and interest available at the Grayling campus makes development of recreation and competition fields more likely at that location.

Recently, the Sunset Drive entry was established as the primary entry point to campus. Marquis signage was relocated from St. Helen Road to Sunset Drive, and combined with new landscaping at Sunset Drive, it serves to identify this as a primary entry. Plans are in place to revise the entry drive to create more convenient wayfinding, pickup/drop-off, parking opportunities, and enhanced lighting. More substantive signage and way-finding is needed along the entry drive and at the Administrative Center.

The parking area west of the Student Academic Center is used primarily by the Police Academy program. It was upgraded and redesigned in 2013. The drive and parking lot leading to the library was also redesigned and upgraded for greater capacity and convenience for handicapped patrons, and for more efficient maintenance.

Parking lots and drive adjacent to the Instructional Center were removed in 2018 and are currently being returned to a natural forested state.
5. Facility Analysis (continued)

The opening of the Grayling campus has had a significant impact on the Roscommon Campus site circulation, as it renders two buildings on this campus – the Student Center and the Instructional Center - as excess space. Without backfilling these buildings with new programs and purpose, they become candidates for either mothballing or demolition to reduce or eliminate the cost of operation and maintenance.

In 2019, the Library and Cosmetology program will also relocate to the Grayling Campus, resulting in more vacant space and reduced traffic load in Roscommon.

It is anticipated that the college will continue to use off-site facilities for some programming, such as the Roscommon County Fairgrounds for use as a Regional Fire Training Facility and Camp Grayling for use as a driving training facility for the police academy.

The twenty-acre parcel worth of Sunset Drive recently purchased by the College for possible future student housing has become redundant with the acquisition and development of the Grayling Campus and intended future campus development. As such, the College should consider a sale of this property.
5. Facility Analysis (continued)

C. Buildings

Student Academic Center

As the new primary entrance to the Roscommon campus, the Student Academic Center serves multiple roles as the center of College administration, student services, developmental programming, testing services, special programming, and general instruction. With the health science programs move to Grayling in Fall, 2016, the Student Academic Center now serves as the primary location for general course offerings at this campus. With the closure of the existing Student Center, functions now located there will be displaced – some of which will relocate to the Student Academic Center.

The College Foundation offices, now located in the lower level of the building, will be moving to the Grayling Campus. The lower level spaces can then be used for other offices.

At the upper level, the men’s and women’s toilet rooms have been renovated. With some student services being located at the new Grayling location, the student services could be consolidated to the northwest corner of the building. This provides the center of the upper level to be used for alternative purposes, including a student lounge, relocation of the Arts programs, or other academic programming.

In response to the facility assessment, several items should be replaced:
- Exterior windows
- Roofing
- Cedar shake siding
- Exterior hollow metal doors and frames
- Interior doors and hardware
- Flooring and ceilings
- Casework
- HVAC system in the original building
- Fire alarm system
- Automatic lighting controls
- Exit signs and master clock system
5. Facility Analysis (continued)

The College has an opportunity to reorganize the administration offices and create a location for professional development and training. Some of the need for additional testing facilities could be addressed by trading spaces between the existing testing center and the adjacent FLEX lab.

Throughout the building, every attempt should be made to provide barrier-free improvements. Outside and near the building, there also potential for establishing new outdoor seating space.

Chilled water piping should be installed in the 1999 addition. The College should provide an emergency generator for egress lighting in the case of power failure. Secondary power needs an isolated ground.
5. Facility Analysis (continued)

Instructional Center

The 2016 Facilities Master Plan identified several improvements that had been made, including remodeling of the physics and chemistry labs and the creation of an assessment lab in 2013.

However, with the relocation of the health sciences programs to the Grayling campus in Fall, 2016, and without identified programming to replace it in the Instructional Center, additional improvements have been suspended. For the immediate future, the building is minimally heated and cooled to keep it in a stable condition until its future function is determined.

If programs and/or tenants are found to occupy a portion of the building, the College should make sufficient improvements to provide appropriate utilities to support the new purpose as well as appropriate separations and exit ways for life safety, while retaining minimal heating and cooling in the unoccupied portion of the building. The College should revisit the status of this building within three years to assess the increasing costs of deferred maintenance (based on the recommendations from the 2012 facility assessment) and the ongoing operational costs against the costs of renovation or replacement to determine the viability of this building to serve the College in the future.
5. Facility Analysis (*continued*)

Student Center

The 2016 Facilities Master Plan identified a number of modest improvements that had been made.

The opening of the Health Sciences Center at the Grayling campus in Fall, 2016, including bookstore and student lounge spaces, reduced the size of the student body at the Roscommon Campus as well as the resultant need for spaces and services formerly housed in the Student Center. Functions such as COOR offices, student lounge and study space, and a modest food service facility can be consolidated into smaller space. Specifically, the Student Academic Center will develop into the Roscommon building with the highest student activity and available space for consolidated student services, student center functions, classrooms and offices. The services now located in the Student Center should, therefore, be relocated and right-sized at the Student Academic Center.

Currently, the Student Center building is used for temporary storage, and the building is not heated. The likelihood for future use as education space or other lease space to support the deferred maintenance and operational costs for this building is low. The recommendation of this master plan update is to raze the Student Center and to return the grounds to a landscaped environment, with appropriate walks and pathways from the parking areas to the upland campus areas. The existing Switchgear building, located immediately west of the Student Center, will remain as part of the overall utility infrastructure of the campus.
5. Facility Analysis (continued)

Library

Programmatically, the library contains several important functions: the primary repository of books, tapes, CD’s, references, etc.; tutoring services; and the location of the E-Services Department for the College.

Book stacks are located at the center of the building, and the perimeter is populated with tables with computer stations and space for individuals or small groups to work quietly. The entire library collection is accessible online, and there are no libraries at any of the existing satellite campus locations.

The lobby of the building serves both the library and E-Services. In addition, the lobby is set up as a small student lounge / study area, with vending machines available.

In 2019, the Library function will move to new facilities at the Grayling campus. To date, no alternative use for the existing Library building has been identified. Therefore, the recommendation of this master plan update is to raze the Library and to return the grounds to a landscaped environment, with appropriate walks and pathways from the parking areas to the upland campus areas.
5. **Facility Analysis (continued)**

**Career Technology (CTC)/ Performing Arts Center (PAC)**

Programmatically, the CTC is currently comprised of specialized space for cosmetology, automotive technology, composite materials, machining/welding and related curricula. In fall 2019, the Cosmetology program will relocate to the Grayling Campus.

Needed changes to the CTC include the addition of a canopy at the east entrance to the CTC, and the repurposing of the welding lab. Exterior windows, doors, frames and hardware should be replaced, as should original overhead doors. Cedar shake material should be replaced. On the interior, existing flooring, ceilings and wall finishes should be replaced. The addition of interior spans of glass between the corridors and teaching spaces would improve visibility with the building, particularly at the interior classrooms that are windowless. Toilet rooms should be renovated to be barrier-free.

The existing PAC is set up to be used primarily as a recital hall, lecture hall or auditorium for production of limited cast and set size. The ability to offer attractive performance options is limited by three significant components: backstage area, comfortable patron seating and accessibility to the stage; and sufficient lobby space with convenient, accessible parking and walks for patrons. Currently, the theater is featuring only a children’s series of productions.

Equally as important is the approach to the lobby from a convenient, barrier-free parking area adjacent to the building.

Mechanically, the original HVAC of the CTC/PAC should be replaced with new, including upgrading the entire building to automatic temperature controls. Electrically, this building needs a new main distribution panel. Outdated branch panelboards should be replaced, and egress lighting should be upgraded. Lighting controls should be provided throughout the building, and an emergency generator should be provided for egress lighting. The primary electrical cable feeding the building was replaced in 2014, and light fixtures were upgraded in 2012.
5. Facility Analysis (continued)

Physical Plant / Fine Arts Center

On the exterior of this building, asphalt pavement should be replaced, and new overhead doors should be provided at the Print Shop and Sculpture Lab. Cedar shake siding at entrances should be replaced, as should exterior windows and all exterior hollow metal doors and frames. There is a need for additional space for material storage and access by labs.

The Fine Arts Center needs space to display and sell art, which could take place at repurposed space within the Fine Arts Building, new lobby space at the PAC, and/or space within the Student Academic Center.

On the interior, replacement items include toilet partitions, select carpet and vinyl tile flooring, select interior doors, and select casework. Interior masonry walls should be repainted.

Mechanically, air-conditioning should be added at select air-handling units, and heat should be added to the north wall off the men’s toilet room. The entire building should be upgraded to automatic temperature controls. A capture hood should be installed over the kilns and a clay trap should be added in ceramics.

Electrically, automatic lighting controls should be installed throughout the building, and an emergency generator should be provided for egress lighting. Post protection is needed at the transformer.
5. Facility Analysis (continued)

MTEC / Gaylord

As this building is relatively new, the exterior issues are limited, such as the need for a canopy at the north entry to prevent significant snow-drifting during winter months. An addition at the north end of the building is needed for storage and reorganization of space for the welding program. Interior carpet will need to be replaced at select locations, and ceilings should be installed in high volume office areas. Select casework should be replaced in offices.

Mechanically, ventilation upgrades were made in 2013. The College is starting to replace classroom lighting with LED fixtures, and new lighting has been installed in corridors and at the main entry. The emergency generator should be upgraded to include egress lighting.
5. Facility Analysis (continued)

D. Enrollment

As was cited in the 2012 Facilities Master Plan, Kirtland Community College is experiencing a decline in enrollment following record high levels of enrollment in 2009. In 2009, during the deepest part of an ongoing nation-wide recession, the combination of high unemployment and stimulus funding of education programs through state and federal agencies drove new students to Kirtland for retraining, new skills, and alternative careers. As the federal stimulus funding depleted, and as the economy slowly improved, enrollment levels have trended downward. Also contributing to the enrollment challenge has been a steadily declining K-12 population in KCC’s service area and an aging population.

As a counterbalance, the rising cost of higher education at four-year institutions is motivating a higher proportion of traditional high school graduates to seek lower tuition costs and housing costs by taking core coursework at KCC and transferring to another institution for advanced education after two years. In addition, the increased accessibility and convenience of on-line coursework, as well as the development of the new satellite campus in Grayling provides greater access to more students than in the past. The development of unique new programming will also attract students from outside the traditional service area of KCC.

The ability of KCC to attract students will rest on factors such as cost, quality, service, technology, student amenities, community relevance, consistent marketing and messaging, and effective recruitment.
5. Facility Analysis *(continued)*

An analysis of enrollment data supports the continuation of the profile of the typical KCC student as a female in the late-20’s, looking to acquire additional job-training skills, pursue additional degrees or professional certification / licensure, and attending part-time. Most students drive substantial distances to attend classes at the Roscommon campus.

It also highlights the duality of the declining number of traditional high school graduates in the KCC service area and the opportunity to attract a larger share of this population through competitive tuition costs and other amenities.

Further, it points out the significant growth of the aging “boomer” generation. The needs and desires of this age group represent an opportunity and potential incentive for KCC to develop or enhance post-graduate curricula, community service curricula, leisure-related curricula and fitness/wellness programming. In addition, the relative under-education of the general population in the KCC service area, compared to Michigan and national statistics, provides an opportunity for growth.

**Educational Attainment in 2012 - 2016 Average, by Percent**
*(People, Completed College)*

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>MI</th>
<th>Cra</th>
<th>Oge</th>
<th>Osc</th>
<th>Ros</th>
<th>Otts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>34.2</td>
<td>27.4</td>
<td>16.7</td>
<td>11.4</td>
<td>10.2</td>
<td>13.9</td>
<td>20.5</td>
</tr>
</tbody>
</table>
5. Facility Analysis (continued)

E. Space Utilization

A goal of this master plan update is to review the need for remodeling or expansion of existing physical assets. We reviewed class schedules for two consecutive semesters. For each teaching space, we documented class hours scheduled for each space over the course of a typical week. In the spreadsheets that follow, composite classroom utilizations are identified and color-coded as follows:

- 0-9 hours of scheduled class time per week
- 10-19 hours of scheduled class time per week
- 20-29 hours of scheduled class time per week
- 30-39 hours of scheduled class time per week

Following is a summary matrix of campus teaching spaces, organized by building. The “capacity” identifies the seating capacity of each space. The “Enrollment” identifies the actual number of students enrolled in this class. “Hrs/Wk” indicates the number of hours the space is actually scheduled each week. The “Day” column identifies how many hours each week the space is scheduled during daytime hours (8 am – 5 pm, Monday – Thursday). The “Night” column identifies night class hours (5 pm – 9 pm, Monday – Thursday). The “Friday” column indicates how many hours the space is scheduled on Fridays.

General consensus for classroom utilization is that general classroom spaces scheduled more than 25-30 hours/week or more would be considered fully utilized. For lab spaces, this number would be 18-22 hours/week.

Specialized spaces, such as art studios and automotive labs may indicate relatively low scheduled use, but are often open for student use on an unscheduled basis for individual or independent work.
6. Master Plan

Overview

The Master Plan combines the vision of Kirtland Community College with the input of stakeholders and the assessment of existing facilities and sites to identify opportunities to maximize physical assets. The Master Plan supports the College’s strategic plan by offering tangible facility recommendations that give structure and direction for the future development of KCC.

The Master Plan also organizes new, expanded, and renovated facilities and site projects together in a single vision for the future. This assures that any single project will be implemented within an integrated framework that anticipates infrastructure needed to support the project.

The plans that follow illustrate existing facilities, followed by a description of recommended projects. More detailed individual project descriptions are keyed to the site plan. Section 7 includes the cost summaries for each project. Section 8 describes the implementation strategy to achieve these projects.
6. Master Plan (continued)

Proposed Projects

A. Site – Roscommon Campus

Projects related to the existing Roscommon campus should retain KCC’s core value of stewardship and enhancement of the natural environment. All projects affecting the site and individual buildings should complement the natural environment enhance its quality, utilize the existing terrain, and take advantage of existing available infrastructure.

The College should continue proper management of the landscape to improve user comfort, convenience and safety. The work that has been completed throughout the campus to improve sight lines, add aesthetic appeal, and provide safe pedestrian pathways should be continued throughout the campus.

Following are individual site-related projects recommended for the Roscommon campus:

1. Development of canopies at the north and west entrances to the Student Academic Center. A new entry walk will be completed in 2018.

2. Raze the existing Student Center and Library, and return the sites to natural landscaping, with connecting walks from parking areas to the upland campus area.

3. Redevelopment of the parking lot west of the Student Academic Center for increased parking and clearer circulation.
6. Master Plan (continued)

B. Site – Grayling Campus

The acquisition of 188 acres at I-75 and Four Mile Road south of Grayling brought a major opportunity for KCC to establish a highly visible and accessible presence along a major transportation artery. In Fall, 2016, the new Health Sciences Education and Training Center opened for classes. The building was planned for future expansion with appropriately-sized infrastructure in place. Currently, a 47,000 sf addition is under construction for the new Michigan Forest Products Institute, as well as additional classroom, lab, and office space for the College.

As it assesses the success and value of the new Center, the College should continue to plan for potential additions and new facilities at this site. This includes academic facilities and amenities to enhance the Kirtland experience for its students, such as recreation facilities and student housing to attract and retain students from areas outside its formal service area. The College should also examine the potential for developing this site to encourage new partnerships with local business and industry interests to develop new, relevant programming that distinguishes KCC among other colleges. The new Michigan Forest Products Institute represents such partnerships.
6. Master Plan (continued)

C. Buildings

Based upon the facility assessments and stakeholder input for future KCC needs, following is a description of recommended projects. For all projects and building improvements, Kirtland Community College plans to demonstrate its commitment to environmental stewardship by emphasizing sustainability and recycling efforts in the planning, design, construction and operation phases.

It is worth stating here that, although not part of a specific project, addressing deferred maintenance issues is an important ongoing activity at KCC. With buildings dating back to the 1960’s, it is important to maintain this ongoing effort. Each year, KCC budgets for various improvements across each campus location and the expectation is that the College will continue to fund the repair and replacement of existing systems as necessary to sustain proper function and to avoid exponentially higher costs in the future.

Examples of deferred maintenance items area:
- HVAC system replacement and upgrades
- ADA improvements
- Roof replacement / repairs
- Insulation replacement
- Cedar shake siding replacement
- Window / door replacement
- Flooring replacement
- Landscaping
- Furniture / Equipment replacement
- Parking lot resurfacing, repair, restriping
6. Master Plan (continued)

1. New Events Center / Grayling

The new events center would provide an additional 72,300 SF to the Graying campus as an extension of the Michigan Forest Products Institute addition, currently under construction. This center would provide the spaces and amenities essential to successful student life at KCC, with education program space and wellness facilities to serve key KCC programs. The facilities and services provided in this new center will serve students, faculty, staff, and members of the community.

A primary component of this facility will be a fieldhouse for large gatherings and events, courts for recreational and competitive sports, requisite locker rooms and support spaces, classrooms for wellness programming, fitness center, lobby, information desk, lounge, offices, training rooms and laundry room.

2. Student Academic Center Renovation (SAC)

With the opening of the Health Sciences Education and Training Center at the new Grayling campus in Fall, 2016, the Student Academic Center will become the single most utilized facility at the Roscommon Campus. Its proximity to convenient parking and the new primary campus entry at Sunset Drive makes it the natural front door to the campus. The consolidation of classrooms, administration offices, student services, and student center amenities makes this the new focus for activity on this campus. For this reason the renovation and improvement of the Student Academic Center is a high priority recommendation for this Master Plan update.
6. **Master Plan** *(continued)*

In addition to the deferred maintenance items mentioned in the facility assessment section of this update, the renovation work should include new canopy entrances, a new entry vestibule at the south entrance, relocation and right-sizing of key foundation offices moving to Grayling, consolidation of KCC administration and student services, greater transparency between spaces, expanded teaching spaces, enhanced technology tools for effective teaching and learning, and improved environmental controls for comfort and economy.

The art department, comprised of two-dimensional and digital media studies would occupy space at the upper level of this building. A new gallery space would be located at the building entrance. The area southeast of the gallery would function as art storage and processing for travelling exhibits, or it could be the location of an art studio. Adjacent to the gallery would be a student lounge space, with seating and vending available.

3. **MTEC / Gaylord**

The College should expand the building to accommodate growth in the welding and machining program. An expansion of approximately 2,200 sf at the north end of the building would provide space for receiving and storing materials, while allowing the existing space to be rearranged for more effective teaching and additional equipment.

4. **Career Technology Center (CTC) / Performing Arts Center (PAC) Expansion and Renovation**

Some of the most consistent, signature programs at KCC have been the Cosmetology program, the Automotive Technology program, and the Welding program, all located with facilities in the existing Career Technology Center. Although the welding program is now based from the MTEC campus in Gaylord, some welding equipment and facilities remain at the CTC.
6. Master Plan (continued)

Expansion and renovation of the Automotive Technology program facilities has been completed, as has a lab and classroom for a composite materials program. This plan envisions potentially repurposing the welding lab and composite materials lab to serve as a heavy duty diesel engine lab, with its own adjacent classroom space.

5. Physical Plant (PHY) / Fine Arts Center (ART) Renovation

The scope of this project does not expand the building, but provides for relocation of the print shop and paper storage to the Student Academic Center. The fine arts portion of the building would be repurposed for building trade programs and courses. The large, open spaces available will enhance the Construction Trades program. Work will also include improvements and upgrades to mechanical and electrical systems to better support the curricula, as well as provide greater energy efficiency.
LEGEND
A. Kirtland House (Vacant)
B. Existing Student Academic Center
C. Existing Instructional Center (Vacant)
D. Existing Student Center (Vacant)
E. Existing Library (To be vacated in 2019)
F. Existing Career Technology / Performing Arts Center
G. Existing Physical Plant / Fine Arts Center
H. New Entry Canopy
I. New Criminal Justice Entry Canopy
J. Warbler’s Nest (Vacant)
K. Firing Range
L. Existing Community Garden
M. CDL Driving Range

ST. HELEN ROAD
SUNSET DRIVE
LEGEND
A. Kirland House (Vacant)
B. Existing Student Academic Center
C. Existing Instructional Center (Vacant)
F. Existing Career Technology / Performing Arts Center
G. Existing Physical Plant / Fine Arts Center
H. New Entry Canopy
I. New Criminal Justice Entry Canopy
J. Warbler’s Nest (Vacant)
K. Firing Range
L. Existing Community Garden
M. CDL Driving Range
STUDENT ACADEMIC CENTER - PROPOSED LOWER

NEW CRIMINAL JUSTICE ENTRY CANOPY

EXISTING GENERAL EDUCATION CLASSROOMS

ACADEMY CLASSROOM

EXISTING POLICE ACADEMY PROGRAM SPACES & MECHANICAL SPACES

MASTER PLAN - 54
August 2019

CTC/PAC - PROPOSED

MACHINING/STORAGE

DRIVE THRU

EXISTING AUTO PROGRAMS

FUTURE PROGRAM SPACE

CLASSROOM

STORAGE

MACHINING

FUTURE PROGRAM SPACE

CLASSROOM

EXISTING AUTO PROGRAMS

EXISTING THEATER PROGRAM

EXISTING COSMETOLOGY PROGRAM

OPTION A

2019 Campus Facilities Master Plan

Master Plan- 58
NEW ENTREPRENEURIAL BUSINESS CENTER

Electronics / HVAC Lab

LAB SPACES REMODELED

2,200 SF STORAGE ADDITION
Expansion of Health Science Center & Michigan Forest Products Institute

Future Student Housing

Proposed Events Center
HEALTH SCIENCES, EDUCATION, & TRAINING CENTER - 1ST FLOOR - WEST - PROPOSED

UPDATE PROGRAM LAYOUT
(SEE EAST PROPOSED PLAN FOR EXTENTS)

ADDITIONAL SEATING SPACE
NEW WELCOME CENTER AREA WITH DESK

NEW ADMINISTRATION ADDITION

UPDATE PROGRAM LAYOUT
7. Cost Summaries

For each KCC building and projected project, the following pages contain cost information related to the specific recommendations identified in Section 2. The first spreadsheet summarizes the construction costs and project costs for all buildings, as well as sites. Costs are based upon prevailing wages anticipating capital outlay funding.

The Construction Cost is the cost one would expect when soliciting competitive bids for construction from general contractors or construction managers. It includes the cost of materials and labor to install the materials, as well as a reasonable factor for contractor overhead and profit.

The Project Cost includes the Construction cost and other costs required to complete the project for use by the College. These include budgets for professional design fees and reimbursable expenses, plan review fees, material and construction testing services, movable furniture, movable equipment, technology systems, and a contingency. For planning for KCC, the Project Costs should be used.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Project Cost</th>
<th>New 1-3 Yrs.</th>
<th>4-6 Yrs.</th>
<th>7-10 Yrs.</th>
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<tbody>
<tr>
<td>1</td>
<td>New Events Center</td>
<td>$15,754,875</td>
<td>$10,075,000</td>
<td>-</td>
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<tr>
<td>2</td>
<td>Student Academic Center</td>
<td>$5,521,119</td>
<td>$437,250</td>
<td>$2,819,446</td>
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<tr>
<td>3</td>
<td>UC / MTEC</td>
<td>$1,956,545</td>
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<td>4</td>
<td>CTC / PAC</td>
<td>$6,277,626</td>
<td>$1,429,500</td>
<td>$3,205,375</td>
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<td>5</td>
<td>PHY / ART</td>
<td>$1,591,270</td>
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<td>TOTAL</td>
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<td>$31,101,435</td>
<td>$19,841,239</td>
<td>$6,360,196</td>
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Note: Costs above do not include decommissioning of existing buildings, demolition of existing buildings, or site work following demolition.
# New Events Center
Kirtland Community College  
January, 2019

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>$/SF</th>
<th>Budget ($)</th>
<th>Total for Item ($)</th>
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</thead>
<tbody>
<tr>
<td><strong>Construction Costs - New Work</strong></td>
<td></td>
<td></td>
<td>$10,232,978</td>
<td></td>
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<tr>
<td><strong>New Events Center:</strong></td>
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<tr>
<td>New construction</td>
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<td><strong>Construction Total for New Events Center - New Work:</strong></td>
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<td>A/E Fees (8%)</td>
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<td>Local Agency Plan Review</td>
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<td>Testing and Inspection Services (by Owner)</td>
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<td>Furniture, Fixtures, and Equipment (by Owner @ 5%)</td>
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<td>Technology Equipment (by Owner @ 8%)</td>
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<tr>
<td>Deferred Maintenance Backlog (1-5 Years)</td>
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<td>Contingency (10%)</td>
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<td><strong>Project Total for Events Center - New Work</strong></td>
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**Total Budget for New Events Center: $15,754,875**
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<tr>
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<th>$/SF</th>
<th>Budget ($)</th>
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<td>Building Additions:</td>
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<td>South Entry Vestibule</td>
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<td>North Entry Canopy</td>
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<td>West Entry Canopy - Criminal Justice</td>
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<td>Building Renovations:</td>
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<td>Upper Level Classrooms, Gallery, Lounge</td>
<td>9,500</td>
<td>$65</td>
<td>$517,500</td>
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</table>

**Total for Building Additions and Renovations:**

**Construction Total for the Student Academic Center:**

A/E Fees (8%): $82,073

Reimbursable Expenses (8% of AE fee): $6,566

Local Agency Plan Review: $1,500

Testing and Inspection Services (by Owner): $7,500

Furniture, Fixtures, and Equipment (by Owner @ 5%): $51,296

Technology Equipment (by Owner @ 8%): $82,073

Deferred Maintenance Backlog (1-5 Years): $93,265

Contingency (10%): $93,265

**Project Total for Student Academic Center:**

$1,256,923

**1-3 Years**

<table>
<thead>
<tr>
<th>2012 Estimate</th>
<th>x 1.25%</th>
</tr>
</thead>
</table>

Architectural

Replace windows in original building: $108,000 $135,000

Replace hollow metal doors and frames (11): $22,000 $27,500

**Total for 1-3 Years Architectural:** $437,250

Electrical

Upgrade egress lighting: $55,900 $69,875

Replace master clock system: $52,200 $65,250

Emergency generator for egress lighting: $111,700 $136,625

**Total for 1-3 Years Electrical:** $2,819,446

**4-6 Years**

<table>
<thead>
<tr>
<th>2012 Estimate</th>
<th>x 1.25%</th>
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</table>

Architectural

Replace cedar shakes and metal panel fascia: $75,000 $93,750

Replace VCT floor covering: $8,800 $11,000

Replace original building doors and hardware: $153,000 $191,250

**Total for 4-6 Years Architectural:** $1,007,500

Mechanical

Replace HVAC in original building; add chilled water piping in newer areas: $1,344,257 $2,430,321

**Total for 4-6 Years Mechanical:** $2,819,446

Electrical

Provide automatic lighting controls throughout the building: $74,500 $93,125

**Total for 4-6 Years Electrical:** $2,819,446

**5-10 Years**

<table>
<thead>
<tr>
<th>2012 Estimate</th>
<th>x 1.25%</th>
</tr>
</thead>
</table>

Architectural

Replace roofing: $480,000 $600,000

Replace ceilings: $234,000 $292,500

Replace casework in original building: $92,000 $115,000

**Total for 5-10 Years Architectural:** $1,007,500

**TOTAL**

$5,521,119
## MTEC
Kirtland Community College
January, 2019

### Description Area $/SF Budget ($) Total for Item ($)

**Construction Costs - New Work**

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>$/SF</th>
<th>Budget ($)</th>
<th>Total for Item ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Additions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North End Welding</td>
<td>2200</td>
<td>$ 280</td>
<td>$616,000</td>
<td></td>
</tr>
<tr>
<td>Building Renovations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Center</td>
<td>2850</td>
<td>$ 65</td>
<td>$185,250</td>
<td></td>
</tr>
</tbody>
</table>

**Contractor G.C.’s and O.H.&P. (15%)**: $120,188

**Construction Total for MTEC**: $927,438

**A/E Fees (8%)**: $81,087

**Reimbursable Expenses (8% of A/E fee)**: $6,487

**Local Agency Plan Review**: $1,500

**Testing and Inspection Services (by Owner)**: $7,500

**Furniture, Fixtures, and Equipment (by Owner @ 5%)**: $50,679

**Technology Equipment (by Owner @ 8%)**: $81,087

**Deferred Maintenance Backlog (1-5 Years)**: $92,144

**Contingency (10%)**: $92,144

**Project Total for MTEC**: $1,241,920

#### 1-3 Years

**2012 Estimate x 1.25%**

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Estimate</th>
<th>2012 Estimate x 1.25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revise exterior soffit</td>
<td>$130,000</td>
<td>$162,500</td>
</tr>
<tr>
<td>Add ceilings in high-volume office areas</td>
<td>$2,600</td>
<td>$3,250</td>
</tr>
<tr>
<td>Repaint ductwork in shop area</td>
<td>$52,000</td>
<td>$65,000</td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add ventilation to elec. closet in University Center</td>
<td>$6,500</td>
<td>$8,125</td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade classroom light fixtures</td>
<td>$110,500</td>
<td>$138,125</td>
</tr>
<tr>
<td>Replace exit signs with wired signs and battery backup</td>
<td>$22,800</td>
<td>$28,500</td>
</tr>
<tr>
<td>Upgrade emergency generator for egress lighting</td>
<td>$60,700</td>
<td>$75,875</td>
</tr>
<tr>
<td><strong>TOTAL 1-3 Years</strong></td>
<td>$481,375</td>
<td>$481,375</td>
</tr>
</tbody>
</table>

#### 4-6 Years

**2012 Estimate x 1.25%**

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Estimate</th>
<th>2012 Estimate x 1.25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace carpet</td>
<td>$138,000</td>
<td>$172,500</td>
</tr>
<tr>
<td><strong>TOTAL 4-6 Years</strong></td>
<td>$172,500</td>
<td>$172,500</td>
</tr>
</tbody>
</table>

#### 7-10 Years

**2012 Estimate x 1.15%**

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Estimate</th>
<th>2012 Estimate x 1.15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace casework in office areas</td>
<td>$46,000</td>
<td>$57,500</td>
</tr>
<tr>
<td>Replace casework in reception/office area</td>
<td>$2,600</td>
<td>$3,250</td>
</tr>
<tr>
<td><strong>TOTAL 7-10 Years</strong></td>
<td>$60,750</td>
<td>$60,750</td>
</tr>
</tbody>
</table>

**TOTAL** $1,956,545
<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>$/SF</th>
<th>Budget ($)</th>
<th>Total for Item ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Costs</strong></td>
<td></td>
<td></td>
<td>$342,000</td>
<td>$342,000</td>
</tr>
<tr>
<td><strong>Building Renovations:</strong></td>
<td></td>
<td></td>
<td>$51,300</td>
<td>$393,300</td>
</tr>
<tr>
<td>Renovate welding, machining lab, classroom</td>
<td>3,800</td>
<td></td>
<td>$ 90</td>
<td>$51,300</td>
</tr>
<tr>
<td>Contractor G.C.’s and O.H.&amp;P. (15%)</td>
<td></td>
<td></td>
<td>$51,300</td>
<td>$393,300</td>
</tr>
<tr>
<td><strong>Construction Total for the CTC / PAC Center:</strong></td>
<td></td>
<td></td>
<td>$34,610</td>
<td>$34,610</td>
</tr>
<tr>
<td>A/E Fees (8%)</td>
<td></td>
<td></td>
<td>$34,610</td>
<td></td>
</tr>
<tr>
<td>Reimbursable Expenses (8% of A/E fee)</td>
<td></td>
<td></td>
<td>$2,769</td>
<td></td>
</tr>
<tr>
<td>Local Agency Plan Review</td>
<td></td>
<td></td>
<td>$1,500</td>
<td></td>
</tr>
<tr>
<td>Testing and Inspection Services (by Owner)</td>
<td></td>
<td></td>
<td>$7,500</td>
<td></td>
</tr>
<tr>
<td>Furniture, Fixtures, and Equipment (by Owner @ 8%)</td>
<td></td>
<td></td>
<td>$21,632</td>
<td></td>
</tr>
<tr>
<td>Technology Equipment (by Owner @ 8%)</td>
<td></td>
<td></td>
<td>$34,610</td>
<td></td>
</tr>
<tr>
<td>Deferred Maintenance Backlog (1-5 Years)</td>
<td></td>
<td></td>
<td>$39,330</td>
<td></td>
</tr>
<tr>
<td><strong>Project Total for CTC / PAC Center</strong></td>
<td></td>
<td></td>
<td>$535,251</td>
<td>$535,251</td>
</tr>
</tbody>
</table>

### 1-3 Years

- **Architectural**
  - Replace cedar shakes (includes asbestos abatement) $240,000 $300,000
  - Replace windows $270,000 $337,500
  - Replace hollow metal doors and frames $53,000 $66,250
  - Remodel toilet rooms $143,000 $178,750
  - Replace interior doors and hardware $106,200 $136,500

- **Mechanical**
  - Upgrade entire building to AutoMatrix Control $273,600 $342,000

- **Electrical**
  - Provide automatic lighting controls $54,800 $68,500

**Total for 1-3 Years** $1,429,500

### 4-6 Years

- **Architectural**
  - Add entrance canopies (4) $120,000 $150,000
  - Replace auditorium seating $273,000 $341,250
  - Replace carpet and VCT flooring $48,000 $60,000
  - Replace carpet in auditorium $45,000 $56,250

- **Mechanical**
  - Replace original HVAC system $1,806,000 $2,257,500

- **Electrical**
  - Replace master clock system $38,300 $47,875
  - Replace outdated branch panelboards $104,000 $130,000

**Total for 4-6 Years** $3,205,375

### 7-10 Years

- **Architectural**
  - Replace roofing and insulation $704,000 $880,000
  - Replace 2x4 ceilings $90,000 $112,500
  - Replace casework in original building $92,000 $115,000

**Total for 7-10 Years** $1,107,500

**Total** $6,277,626
### PHY / ART Center

**Kirtland Community College**

**January, 2019**

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
<th>$/SF</th>
<th>Budget ($)</th>
<th>Total for Item ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Costs - New Work</td>
<td></td>
<td></td>
<td>$678,000</td>
<td></td>
</tr>
<tr>
<td>Building Renovations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renovation for Construction Trades</td>
<td>11,300</td>
<td>$ 60</td>
<td>$678,000</td>
<td></td>
</tr>
<tr>
<td>Contractor G.C.'s and O.H.&amp;P. (15%)</td>
<td></td>
<td></td>
<td>$101,700</td>
<td></td>
</tr>
<tr>
<td>Construction Total for the Administration Center - New Work:</td>
<td></td>
<td></td>
<td>$779,700</td>
<td></td>
</tr>
<tr>
<td>A/E Fees (8%)</td>
<td></td>
<td></td>
<td>$68,614</td>
<td></td>
</tr>
<tr>
<td>Reimbursable Expenses (8% of AE fee)</td>
<td></td>
<td></td>
<td>$5,489</td>
<td></td>
</tr>
<tr>
<td>Local Agency Plan Review</td>
<td></td>
<td></td>
<td>$1,500</td>
<td></td>
</tr>
<tr>
<td>Testing and Inspection Services (by Owner)</td>
<td></td>
<td></td>
<td>$7,500</td>
<td></td>
</tr>
<tr>
<td>Furniture, Fixtures, and Equipment (by Owner @ 5%)</td>
<td></td>
<td></td>
<td>$42,884</td>
<td></td>
</tr>
<tr>
<td>Technology Equipment (by Owner @ 8%)</td>
<td></td>
<td></td>
<td>$58,614</td>
<td></td>
</tr>
<tr>
<td>Deferred Maintenance Backlog (1-5 Years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency (10%)</td>
<td></td>
<td></td>
<td>$77,970</td>
<td></td>
</tr>
<tr>
<td>Project Total for Administration Center - New Work</td>
<td></td>
<td></td>
<td>$1,052,270</td>
<td>$1,052,270</td>
</tr>
</tbody>
</table>

#### 1-3 Years

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Estimate</th>
<th>x 1.25%</th>
<th>Budget ($)</th>
<th>Total for Item ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace aluminum windows</td>
<td>$36,000</td>
<td></td>
<td>$45,000</td>
<td></td>
</tr>
<tr>
<td>Replace exterior hollow metal doors and frames</td>
<td>$29,200</td>
<td></td>
<td>$36,500</td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post protection for transformer</td>
<td>$2,600</td>
<td></td>
<td>$3,250</td>
<td></td>
</tr>
<tr>
<td>Provide automatic lighting controls</td>
<td>$39,000</td>
<td></td>
<td>$48,750</td>
<td></td>
</tr>
<tr>
<td>Replace master clock system</td>
<td>$30,000</td>
<td></td>
<td>$37,500</td>
<td></td>
</tr>
<tr>
<td>Emergency generator for egress lighting</td>
<td>$97,500</td>
<td></td>
<td>$121,875</td>
<td>$292,875</td>
</tr>
</tbody>
</table>

#### 4-6 Years

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Estimate</th>
<th>x 1.25%</th>
<th>Budget ($)</th>
<th>Total for Item ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace cedar shakes fascia at entrances</td>
<td>$9,000</td>
<td></td>
<td>$11,250</td>
<td></td>
</tr>
<tr>
<td>Replace carpet and VCT in select areas</td>
<td>$3,000</td>
<td></td>
<td>$3,750</td>
<td></td>
</tr>
<tr>
<td>Replace casework</td>
<td>$118,300</td>
<td></td>
<td>$147,875</td>
<td>$162,875</td>
</tr>
</tbody>
</table>

#### 7-10 Years

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Estimate</th>
<th>x 1.25%</th>
<th>Budget ($)</th>
<th>Total for Item ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace toilet partitions</td>
<td>$9,100</td>
<td></td>
<td>$11,375</td>
<td></td>
</tr>
<tr>
<td>Replace select interior wood doors</td>
<td>$5,500</td>
<td></td>
<td>$6,875</td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add AC to AHU-4 and AHU-5</td>
<td>$52,000</td>
<td></td>
<td>$65,000</td>
<td>$83,250</td>
</tr>
</tbody>
</table>

**TOTAL**                                                                 |               |         | $1,591,270 |                    |
8. Implementation Strategy

Moving forward, based upon the recommendation and the information gathered, the following represents an appropriate implementation strategy for Kirtland Community College. It should be stated that though these are listed in prioritized order, the actual implementation of a specific priority may occur in a different order, depending on funding opportunities and programs not yet known.

1. New Events Center at Grayling Campus
   A new events center includes classrooms, large multi-use space for events and community use, as well as support spaces, i.e. locker rooms, training rooms, weight and fitness rooms, etc.

   **Project Cost: $15,754,875**

2. Student Academic Center Renovation
   As the new “front-door” to the Roscommon Campus, this project consolidates administrative and student service offices and creates a new home for the art program, featuring classroom and studio space for digital art and two-dimensional media. In addition this project creates a new public gallery at the main public entrance to the building to display student art and to host travelling exhibitions, including storage, processing, and office support space.

   **Project Cost: $5,521,119**
8. Implementation Strategy *(continued)*

3. Addition and Renovation of MTEC

The new addition will house space for storage of welding program materials, thereby allowing expansion and reorganization of welding spaces, as well as space in the machining program. Renovation includes a new entrepreneurial center, new lighting, and new finishes in classrooms, offices, and primary corridors.

**Project Cost: $1,956,545**

4. CTC/PAC Renovation

Renovate the former welding and machining lab into a heavy diesel lab, with a separate, adjacent classroom. The proximity to the existing Auto Training Program and the diesel rig driving course at the Roscommon Campus makes this building a good location for this new program. The newly renovated Composite Materials Lab can provide additional space for this program.

Renovate space currently used by the Cosmetology program for use as classrooms. Renovate the Performing Arts Center, including the existing theater, offices, and support spaces, as well as deferred maintenance items.

**Project Cost: $6,277,626**

5. PHY/ART Renovation

Renovate the existing art department spaces for use by the construction trades program, including creation of large-volume space for large construction projects.

**Project Cost: $1,591,270**