INITIAL MASTER PLAN PROGRAM AND CAMPUS OPPORTUNITY ZONES

During the Information Gathering Phase, the Harper community identified numerous programs and facility initiatives for consideration as the project moved into the master planning phase. The Master Planning Team developed a master list of these initiatives and an “Opportunity Zone” campus map that identified potential locations for improved and new facility initiatives.

During Workshop #3 the Master Plan Steering Committee, guided by the Campus Master Plan Vision Statement, reviewed the findings of the Space Utilization Analysis, identified the most pressing campus needs and the most promising new and expanded programs identified by the Deans and Faculty Chairs and Coordinators of Harper’s five academic divisions, and identified other initiatives to incorporate into the master plan, and refined the “Opportunity Zone” map to guide the locations of future improvements. Refinements of these zones included protection of the northwest corner’s grove of trees and other natural features of the site, and the preservation of the most desirable parking areas on the south side of the campus.

10-YEAR LOOK-OUT: PROPOSED NEW AND EXPANDED PROGRAMS

Health Careers:
- Proposed New Programs: Respiratory Therapy, Cannabis Science & Therapeutics, Dietician Internship
- Proposed Expanded Programs: Interprofessional Education (Virtual Hospital)

Career Technical Programs:
- Proposed New Programs: Aviation, Automotive Technician, Culinary, Additive Manufacturing
- Proposed Expanded Programs: Paralegal Studies (Moot Courtroom)

Liberal Arts:
- Proposed New Programs: Electronic Music Production, AV Technology, Digital Aviation
- Proposed Expanded Programs: Physical Science + Engineering (Planetarium)

Math and Science:
- Proposed New Programs: Drone Certificate
- Proposed Expanded Programs: Entrepreneurship (Makerspace)

Business + Social Sciences:
- Proposed New Programs: Entrepreneurship (Makerspace)
Comprehensive Facilities Planning, Inc. (CFP) conducted a space needs analysis for the campus master plan. Their assessment addresses the space needs for the Main Campus, the Learning and Career Center and Professional Center Campus sites. The analysis identifies the current and future space needs by type and departmental assignment as compared to existing facilities. The findings from the study will be used to manage current space, assist with the development of future capital projects and provide data to be used in developing the overall master plan. Key data from the report’s Executive Summary are included here; the full report can be found in the Appendix.

The methodology to quantify and measure space needs used a formula-based modeling process that applies the following data: facilities space inventory, personnel, class schedule, student credit hours, and library collections. Space needs are based on higher education space planning guidelines for classrooms, labs, offices, library, athletic, assembly, broadcasting, lounge, merchandising, meeting rooms, recreation, support facilities and student health care. Planning assumptions provide direction for future student enrollment, personnel changes, and potential new programs.

**KEY STEPS IN THE ASSESSMENT PROCESS INCLUDED:**
- Verifying the existing space inventory by room type and division/program assignment
- Identifying and confirming current space utilization patterns to establish a baseline reference
- Applying appropriate space guidelines for each academic and administrative division
- Developing space needs by division/program based on current and projected enrollment
- Providing data to assist in developing informed decisions for the management of the College’s space resources and as input for updating the campus master plan.

**NEW PROGRAM INITIATIVES AND ENROLLMENT ASSUMPTIONS**
- Eleven new academic programs were identified by the College that will have a positive impact on enrollment, recruitment and retention.
- The enrollment growth rate related to these new programs is approximately 5%. This rate was applied for estimating future space needs for other college operations sensitive to enrollment change.
- The total student enrollment for Fall 2019 was 7,986 FTE. Only the “on-ground” enrollments were used for estimating the space needs totaling 6,701 FTE. It is assumed the overall future enrollments for existing academic programs will remain stable over the 10-year planning period.

**SPACE NEEDS RESULTS: MAIN CAMPUS**

<table>
<thead>
<tr>
<th>Space Type</th>
<th>Existing Space Assignable Square Feet</th>
<th>Surplus (Deficit)</th>
<th>Projected Need Assignable Square Feet</th>
<th>Surplus (Deficit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms - General Use</td>
<td>122,668</td>
<td>13,434</td>
<td>119,234</td>
<td>7,972</td>
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<tr>
<td>Classrooms - Departmental</td>
<td>11,078</td>
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<td>11,078</td>
<td>0</td>
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<tr>
<td>Instructional Laboratories</td>
<td>108,747</td>
<td>(3,524)</td>
<td>112,271</td>
<td>(4,520)</td>
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<td>Offices</td>
<td>105,445</td>
<td>6,527</td>
<td>112,104</td>
<td>6,677</td>
</tr>
<tr>
<td>Library / Study</td>
<td>41,502</td>
<td>3,416</td>
<td>45,123</td>
<td>3,416</td>
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<tr>
<td>Special Use Facilities</td>
<td>29,569</td>
<td>-3,416</td>
<td>33,000</td>
<td>-3,416</td>
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<td>Athletic / Student Recreation</td>
<td>73,471</td>
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<tr>
<td>Other General Use</td>
<td>107,423</td>
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<td>107,423</td>
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<tr>
<td>Assembly Facilities</td>
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<td>Exhibition Space</td>
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<td>Food Facilities</td>
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<td>Student Lounge</td>
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<tr>
<td>Campus Support</td>
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<td>50,527</td>
<td>0</td>
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<tr>
<td>Student Health Care</td>
<td>225</td>
<td>0</td>
<td>225</td>
<td>0</td>
</tr>
<tr>
<td>Inactive</td>
<td>3,390</td>
<td>0</td>
<td>3,390</td>
<td>0</td>
</tr>
</tbody>
</table>

**SPACE NEEDS RESULTS: MAIN CAMPUS**

The figure to the right summarizes the current and future calculated space needs for the Main Campus compared to the existing space inventory by room type category.
GENERAL:
- The largest current and future space type needs (deficits) are for instructional laboratories, food/dining space and meeting rooms.
- The projected space needs indicate a deficit of 51,517 ASF / approximately 87,000 GSF or 6.6% more than the existing inventory.
- Space classified as inactive is shell space in the Math and Academic Enrichment & Engagement building.

SUMMARY RESULTS BY MAJOR SPACE TYPE CATEGORY

CLASSROOMS
- The calculated need for the general use classrooms is 103 rooms and 109,234 ASF (including service space) compared to the current inventory of 116 rooms and 122,668 ASF.
- The calculated need for departmental classrooms indicates the existing 11 rooms are sufficient with a potential enrollment growth capacity of 80%. Because these rooms are program specific, the existing inventory is adequate.

INSTRUCTIONAL LABORATORIES
- The current calculated need indicates a deficit of 12,542 ASF or 6.6% more than the existing inventory. This need is the result of rightsizing several existing labs and for additional labs to provide adequate space for several existing programs.
- The projected calculated need indicates a deficit of 45,520 ASF or 24.1% more than the existing inventory. These additional future requirements will address the needs of the new program initiatives.

OFFICE SPACE
- The current overall calculated office space needs indicate a surplus. However, the office support calculation identifies a deficit of 2,410 ASF or 5.3% more than existing.
- The projected overall calculated office space needs indicate a smaller surplus and the office support calculation identifies a deficit of 3,236 ASF or 7.1% more than existing. Although there is a net surplus, several departments have office space need.

STUDENT LOUNGE
- Space classified as student lounge is adequate for both current and future student enrollment.

LIBRARY / STUDY SPACE
- In general, the overall amount of space classified as library/study is adequate.
- Shortfall of archival space was identified with a current deficit of about 65% more than existing. If planned growth in the collection occurs, future SF needs might triple in size.

CONFERENCE ROOMS
- The Main campus has 36 rooms classified as a conference room (room type 350). With about 28% of these rooms not assigned to an individual department for this analysis, conference room space is being assessed as a shared-campus resource.
- The calculated need for conference rooms indicates a deficit of 3,127 ASF or about 28% more than existing.

ATHLETIC / STUDENT RECREATION
- The current calculated need for Assembly space indicates a deficit of 3,477 ASF or 63.4% more than existing. The projected need increases the deficit to 3,800 ASF.

FOOD / DINING
- The current calculated need for Food/Dining space indicates a deficit of 5,866 ASF or 37.2% more than the existing inventory. With future enrollment growth this shortfall increases by another 1,000 ASF.

MERCHANDISING
- The calculated need for Merchandising space indicates existing inventory is adequate.

MEETING ROOMS
- The current calculated meeting room space need indicates a deficit of 10,505 ASF with a projected shortage of 11,027 ASF.

CAMPUS SUPPORT
- The calculated need for Campus Support space indicates existing space is adequate.
PRIORITIZED CAMPUS FACILITY NEEDS

BUILDING NEEDS
Through a prioritization survey regarding the Initial Master Plan Program and Opportunity Zones Map, the Steering Committee identified primary and several secondary building needs. The primary facility needs are due to deteriorating condition of the oldest buildings on campus:

1. Facilities for student services, culinary/hospitality education and the campus dining center, located in Building A, are deficient in multiple ways, to the point that they are significantly impacting recruitment, retention and the quality of the student experience.

2. Academic facilities in Buildings I and J, specifically classrooms, labs and faculty offices related primarily to the Business and Social Sciences academic division including Early Childhood Development, are deficient environments in multiple ways.

Buildings A, I and J are the oldest on campus. Their plans no longer function for today's activities, their HVAC systems are at the end of their expected lifespans, their appearance is dated, finishes are worn, lighting and acoustic separations are not adequate, windows are limited, and floor-to-floor heights are short by today's standards.

Buildings C, P and L, the next-oldest academic buildings on campus, require upgrading as well. Their condition does not warrant demolition, but their occupants endure many of the same deficiencies as those in Buildings I and J. The academic programs in these buildings would be well-served by renovations of finishes, furnishings, restrooms, lighting and HVAC systems.

Secondary needs respond to emerging opportunities for enhancing the campus experience for student, faculty members and staff. Additional new facilities that were identified and strongly supported by the Steering Committee as having potential to benefit the College and the local community include an Innovation (Lab) Center, a Child Care Center, a dedicated Film (Appreciation) Lab and a Planetarium.

INFRASTRUCTURE NEEDS
Through the Facility Conditions Assessment, the master planning team identified improvements to existing buildings and grounds conditions that will be needed during the next ten years. These items were prioritized according to need and construction:

grounds/site needs
New outdoor space for recreation and education were identified as desirable outdoor amenities. Concerns for safety and congestion at the north campus entrance from Euclid Avenue and interior vehicular traffic, particularly at peak traffic time periods, as well as pedestrian safety near these roadways, were identified as locations for additional improvements to the grounds. The Ender Pavilion, the focal point of the annual graduation ceremony, may no longer be large enough to accommodate all graduation attendees; an alternative location was included among potential site needs.

infrastructure needs
Through the Facility Conditions Assessment, the master planning team identified improvements to existing buildings and grounds conditions that will be needed during the next ten years. These items were prioritized according to need and construction.
The Master Plan’s two primary initiatives’ programs are focused on improving the quality of teaching and learning environments and student support facilities by replacing Buildings A, I and J. These two initiatives include (estimated Gross Square Footage):

**PRIMARY INITIATIVE A: NEW CANNING CENTER (175,000 GSF)**
- **A-1**: Student Center new administrative office and meeting space to improve the first-time visitor experience, the enrollment process, and all other student services
- **A-2**: University Center offices, meeting spaces and resource center to support students transitioning to four-year institutions or the workforce
- **A-3**: Campus Dining Center
- **A-4**: Culinary / Hospitality Center classrooms, teaching kitchens and offices
- **B-1**: Innovation Center flexible experimental lab space
- **B-2**: New Canning Center additional academic facilities for expanded existing programs and new programs; this includes nearly all additional Assignable Square Footage needs identified by the Space Utilization Analysis
- **B-3**: Existing Building A and replace it with a new “Front Door” to the campus that includes:
  - Innovation Center
  - Student Center

Upon completion of the Canning Center, Building A will be retained for use as swing space for renovations elsewhere on campus. When swing space is no longer needed, Building A is planned for demolition. After the demolition, the redevelopment of the west campus will be completed by an additional new building that connects Buildings W and C with the New Canning Center:
- **C-1**: Student Meeting, Study and Collaboration Center classrooms, offices and conference space (44,000 GSF)
- **C-2**: Innovation Lab flexible labs to accommodate multiple research subjects (5,000 GSF)
- **C-3**: Building L music programs (25,900 GSF)
- **D-1**: Innovation Lab flexible experimental lab space
- **D-2**: Child Care Center to support students, faculty and staff with young children (7,000 GSF)
- **D-3**: Film (Appreciation) Lab new dedicated lecture center (2,300 GSF)
- **D-4**: Planetarium new dedicated lecture center for students and the community (2,300 GSF)

**PRIMARY INITIATIVE C: SIGNIFICANT RENOVATIONS**
- **C-1**: Building C art programs (23,300 GSF); includes overhead bridge to Building D to complete the campus interior circulation loop
- **C-2**: Building P music programs (25,900 GSF)
- **C-3**: Building L liberal arts programs (89,700 GSF)
- **C-4**: Building A Academic Center labs, classrooms, teaching kitchens and offices
- **C-5**: Building A Administrative Center offices, meeting spaces and resource center

**PRIMARY INITIATIVE B: REDEVELOPMENT OF BUILDINGS I AND J (174,000 GSF)**
- **A-1**: Student Center
- **A-2**: University Center
- **A-3**: Campus Dining Center
- **A-4**: Culinary / Hospitality Center
- **B-1**: Innovation Center
- **B-2**: New Canning Center
- **B-3**: Existing Building A

This initiative focuses on the quality of teaching and learning space in the campus academic core:
- **New, improved classrooms, laboratories and offices to replace those in existing Buildings I and J**
- **Additional academic facilities for expanded existing programs and new programs; includes nearly all additional Assignable Square Footage needs identified by the Space Utilization Analysis**
- **Innovation Center flexible experimental lab space**

**PRIMARY INITIATIVE D: BUILDING DEVELOPMENTS**
- **D-1**: Innovation Lab flexible experimental lab space
- **D-2**: Child Care Center to support students, faculty and staff with young children (7,000 GSF)
- **D-3**: Film (Appreciation) Lab new dedicated lecture center (2,300 GSF)
- **D-4**: Planetarium new dedicated lecture center for students and the community (2,300 GSF)
PROPOSED CAMPUS MASTER PLAN PROGRAM

GROUNDS / SITE IMPROVEMENTS

Solutions to the primary building projects 1 and 2 described above provide opportunities for developing new iconic outdoor spaces for landscaping, recreation, education and special events. The Master Plan program includes:

- **New West Quadrangle** landscaping between the new Canning Center and Lake Harper
- **New East Quadrangle** landscaping defined by the solution to Buildings I and J
- **Relocated Algonquin Entrance Road Turning Circle** and improvements to nearby parking, necessitated by new Canning Center location, an opportunity to create a memorable foreground for the new Canning Center / campus “Front Door”

Other site redevelopments to address the issues described above include:

- **New North Entrance from Euclid Avenue** includes closure of existing north entrance, new entrance with traffic light and other improvements to the public way, and new interior connection to the campus Loop Road
- **New Loop Road** to take vehicular circulation to only the outer perimeter of the north parking lots, allowing for a landscaped pedestrian- and bicycle-friendly pathway network north of Lake Harper
- **New Rideshare Pick-Up / Dropoff location** to alleviate vehicular congestion near building entrances by specifying where rideshare drivers should be met; ideally where student and faculty movement in and out of the academic buildings core is significant

Other site improvements are incorporated into building projects on the previous page. Additional improvements are suggested in sections under sustainability, open space and circulation.
SUSTAINABILITY PROGRAM

Harper College believes that environmental design must be integrated with existing facilities and future development initiatives. The Harper College Office of Sustainability has detailed its plans for maintaining current sustainable campus initiatives (included in the Campus Facility Design Guidelines) and is making plans to expand the campus sustainable program.

Highlighted future sustainable initiatives under consideration are briefly described here and on the maps that follow:

1. Green Campus: In addition to existing green site practices, Harper is planning sustainable improvements to ponds, pathways and landscaping.

2. Green Buildings: LEED Silver Certification will be the minimum requirement for all significant new Harper College building projects and renovations; emissions reduction standards will be progressively increased towards achieving carbon neutrality by 2053.

3. Waste Reduction: Greater efficiencies in food service and increased restrictions on disposable food packaging; more compact campus development and replacement of additional aging buildings that cannot be effectively improved with respect to energy use and other sustainable strategies; use of renewable energy sources, either located on campus or through purchase of offsite renewable energy.

SUSTAINABLE BUILDINGS

SUSTAINABLE GROUNDS

NATURALIZED MEADOW PLANTING
NATURALIZED SHORELINE
RAIN GARDEN
BIOSWALE INFILTRATION
ELECTRIC VEHICLE CHARGING

LEGEND
EXISTING GREEN INFRASTRUCTURE DIAGRAM

GREEN CAMPUS INITIATIVES

Harper College Campus Master Plan