

FOREWORD

Plan which was inspired by the hard work and dedication of countless individuals. Your contributions have been invaluable, and I am profoundly grateful for your support in shaping the future of Broome-Tioga BOCES.

At Broome-Tioga BOCES, our mission is to "Enrich Lives Through Education." Serving 15 component school districts, we offer a diverse range of programs designed to cater to students with varied needs and those eager to explore career paths or early college opportunities. Moreover, we extend our educational services to adults seeking to enhance their skills and pursue new career possibilities.

BOCES are unique in the way they are allowed to improve facilities. To expand our facility's footprint, all residents in our 15 component school districts must vote on a proposed project. For substantial improvements that entail borrowing but don't increase the footprint, district boards must vote for approval. Meanwhile, ongoing maintenance is funded through our Operations and Maintenance budget or surplus funding. Our main student campus was established in 1954 and has only seen one capital project since then for expansion purposes.

As Broome-Tioga BOCES has grown, we have extended our facilities by Rebecca Stone leasing additional facilities. While the main campus houses a majority of Broome-Tioga District Superintendent our special needs students and Career and Technical Education Students, we house other students and adult learners in facilities such as East Learning Center, West Learning Center, and Johnson City Learning Center. Additionally, we operate business functions like document services, food services, and RIC functions in additional leased spaces across the region.

I am thrilled to present our comprehensive and strategic Campus Master In today's ever-changing education landscape, great institutions do not remain static. They embrace change and adapt to the evolving needs and expectations of students, communities, and the world. To address the increasing student enrollment and expanding cooperative services, Broome-Tioga BOCES has developed a comprehensive and strategic Campus Master Plan to guide our physical development over the next decade. This plan lays out a vision for optimizing our physical spaces and resources, both owned and leased and offers recommendations for expansion that are both efficient and fiscally responsible. Moreover, it provides a transparent blueprint for our continued growth, ensuring the districts we serve are kept informed and involved.

> Special thanks go to those who provided input to create this Master plan. Achieving our goal of "Enriching Lives Through Education" wouldn't be possible without the unwavering commitment of our BOCES staff, the support from our component school districts, and the steadfast dedication of our BOCES Board of Trustees.

Thank you for supporting Broome-Tioga BOCES.

Sincerely,

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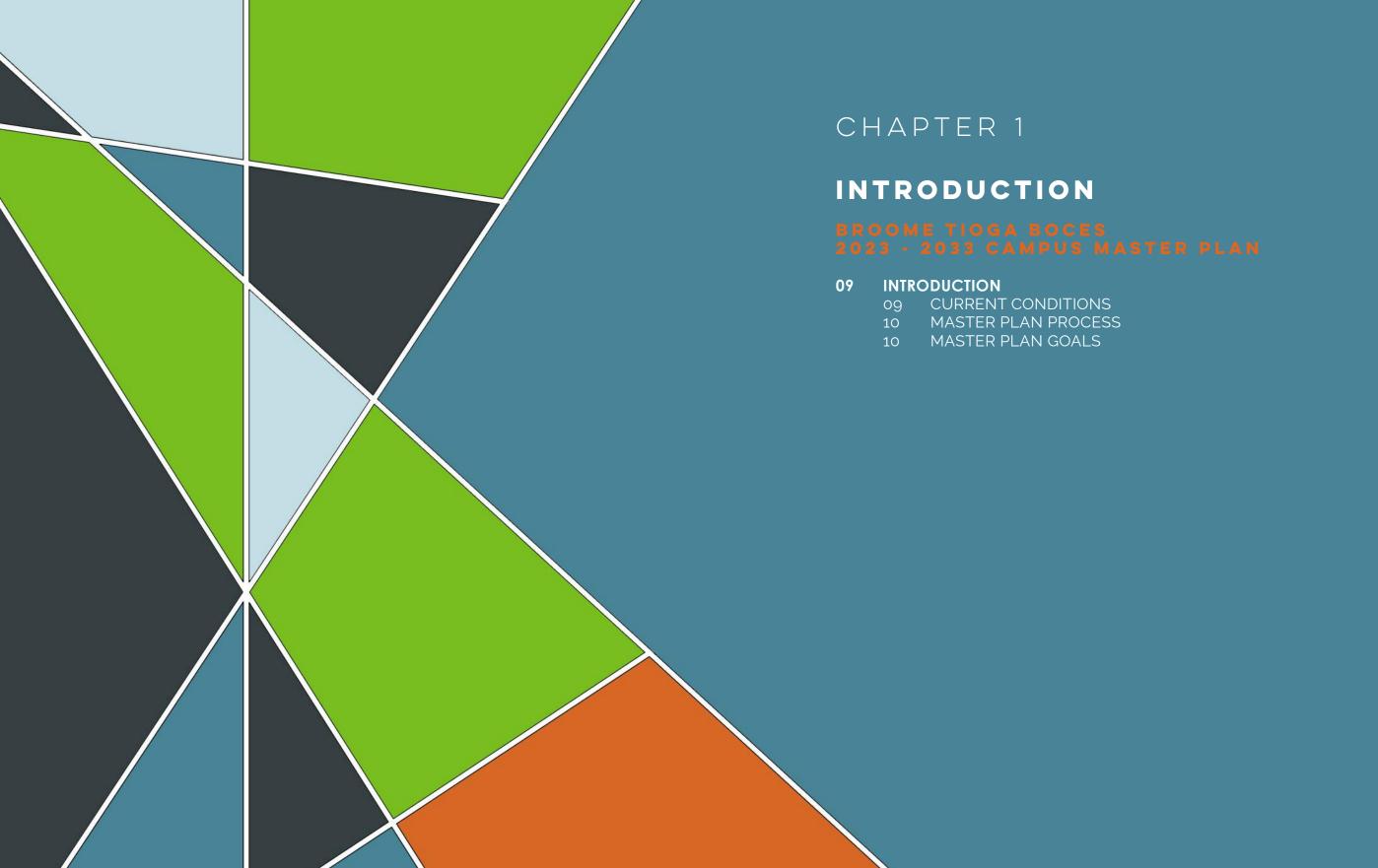
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INTRODUCTION

The Broome County Board of Cooperative Educational Services (BOCES) The 2023-2033 Master Plan is a direct result of Broome Tioga BOCES inwas founded in 1954 and is one of 37 such entities located around New York State. Each BOCES functions as an extension of the local school districts, and the BOCES system allows school districts to share certain administrative and educational services.

Broome Tioga BOCES (BT BOCES) has been serving students and the of BOCES. community for 69 years. They offer programs in occupational training, computer services, special education, and college prep. BOCES also works with nearby school districts, community agencies, local colleges, and other resident partners to offer students specialized educational opportunities.

Broome Tioga BOCES employs approximately 1,200 full-time and 200 part-time staff. BOCES serves 15 component school districts in Broome and Tioga Counties, including Binghamton, Chenango Forks, Chenango Valley, Deposit, Harpursville, Johnson City, Maine-Endwell, Newark Valley, Owego-Apalachin, Susquehanna Valley, Tioga, Union-Endicott, Vestal, Whitney Point, and Windsor.

While the size and complexity of the institution have changed over the past seven decades, the mission has remained true to its origins of "enriching lives through education." The institution's diverse elements are united by the core values of providing high-quality educational opportunities, while also building versatile and healthy communities that cultivate a challenging, creative, and nurturing environment.

tention to be a top-tier educational institution. The Master Plan develops short and long-term strategies for growth and transformation. It provides a detailed framework for development of the physical plan, which reinforces BOCES goals. This will allow the institution's campus to grow in a way that contributes to the quality of education, character, and identity

The Master Plan provides a roadmap for future growth while allowing flexibility in its implementation. The plan reinforces the existing campus while creating new campus spaces vital to student success. The plan also strengthens the relationship with their component districts and connections with private partnerships.

The 2023-2033 Master Plan is Broome Tioga's vision, balancing the physical elements of the campus with educational needs and requirements. Simultaneously, the Master Plan allows BOCES to adjust to future changes in our environment and community. This Master Plan will create strategies for the growth and transformation of BOCES.



CURRENT CONDITIONS

Broome Tioga BOCES maintains a strong tradition of service to their component districts by providing an excellent education to future trades persons, law enforcement officers, nurses, and other professionals. BOCES also prepares students on the autism spectrum by promoting independence through supportive learning. The institution serves a wide variety of students, such as at-risk individuals, adults, and many others.

The Master Plan identifies goals, needs, and priorities for the Broome Tioga BOCES organization. It will guide BOCES decision making, from creation of new educational curriculums to the planning of physical space. Key points of the Master Plan revolve around the planning and development of the main campus and leased spaces. The following are goals of the Master Plan, created by BOCES with the guidance of LaBella Associates:

- The Master Plan will assist BOCES in shaping budget priorities.
- The district will establish a process to identify, coordinate and prioritize building projects.
- The Master Plan will address topics such as buildings, infrastructure, sustainability, projected lifespans for facilities and infrastructure, maintenance of existing buildings, the need for new and renovated classroom space, and environmental sustainability.
- Throughout the Master Plan process, ideas such as reconfiguring of space, infrastructure upgrades, vehicular/pedestrian safety, and parking were explored

These recurring topics are incorporated into the Master Plan:

- Add and upgrade facilities.
- Provide a safe and inclusive environment.
- Consolidate leased spaces.
- Build a pedestrian-friendly campus.
- Improve vehicular traffic circulation.

The planning process commenced in October 2022 and was guided by the BOCES administration. Many meetings were held with key stakeholders, such as administration, faculty, and staff.

These collaborative meetings and interviews invited discussions on important planning themes such as programs, land use, transportation, landscape, open space, sustainability, infrastructure, student needs and success, departments needs/requirements, leased spaces, and site signage. These program needs were carefully considered relative to the BOCES mission, such as departmental adjacencies, land use opportunities, and fiscal availability.

MASTER PLAN PROCESS

to study, analyze, and integrate campus needs and desires.

1. Data Collection and Analysis

Data collection from multiple meetings with the district superintendent, executive operations officer, assistant superintendent for instruction, de- 3. Develop a proactive plan for investment and infrastructure that places partmental directors, facilities, and staff provided the basis for under-high importance on fiscal responsibility and environmental assets. standing the academic programs, current and future enrollment, and operational needs. The data was interpreted and presented to BOCES for 4. Accomplish the goals of the Master Plan in a fiscally responsible manner. review. The analysis of space needs was critical to this phase, identifying current and future space deficits.

2. Analysis

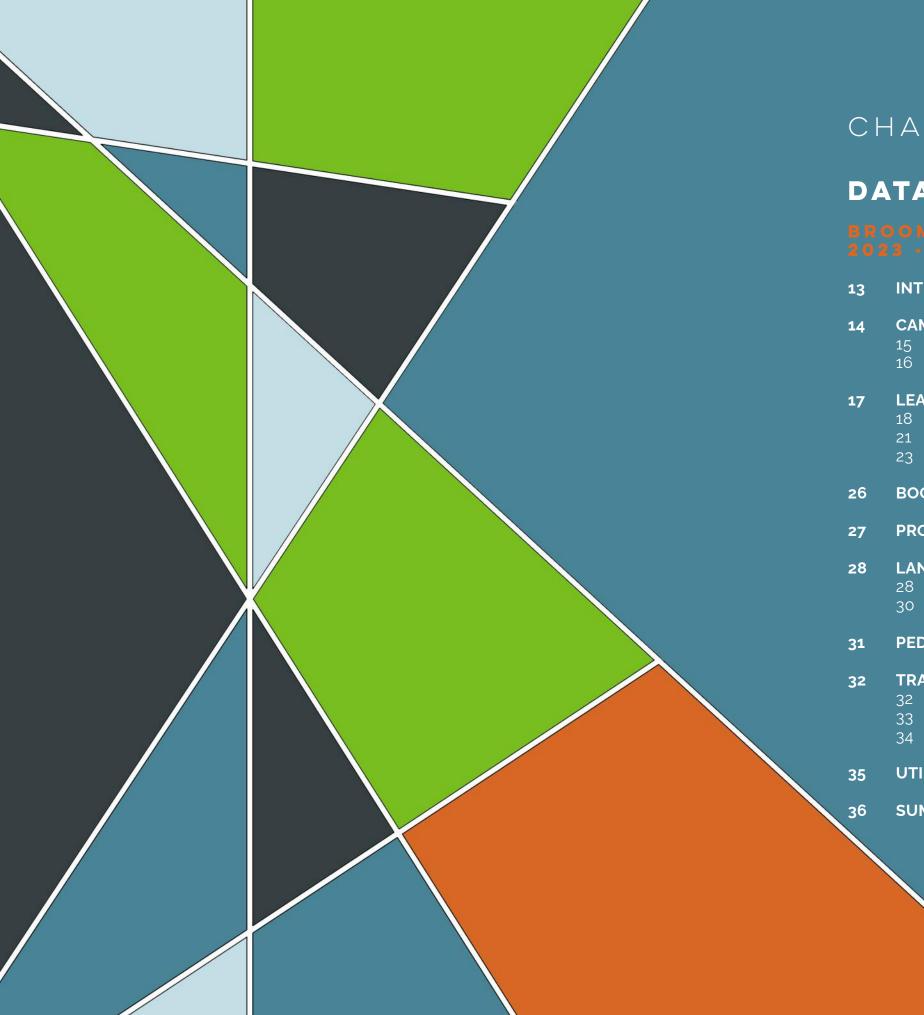
Issues and opportunities that were identified in the data collection phase were analyzed and compared to BOCES' goals. Analysis of the campus identified areas for development for future growth and opportunities. These plans were developed with the key focus groups in meetings and working sessions.

3. Concept Development

The preferred concept was developed, and conceptual approaches and guidelines were established to form a framework that met BOCES needs.

MASTER PLAN GOALS

- The Master Plan process encompassed three stages and was implemented 1. Develop a "living Master Plan" that remains flexible and dynamic, accommodates future growth, and creates ownership.
 - 2. Develop a safe and accessible campus that embraces inclusivity for all students.



CHAPTER 2



DATA COLLECTION

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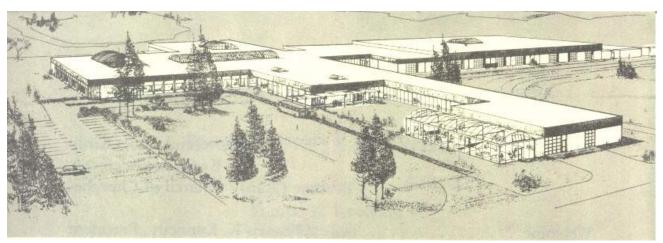
INTRODUCTION

The data collection phase of the planning process helped the team develop an understanding of the existing conditions, assets, deficiencies, issues, growth opportunities, and space needs. This process provides the foundation to begin analyzing campus patterns and develop planning concepts.

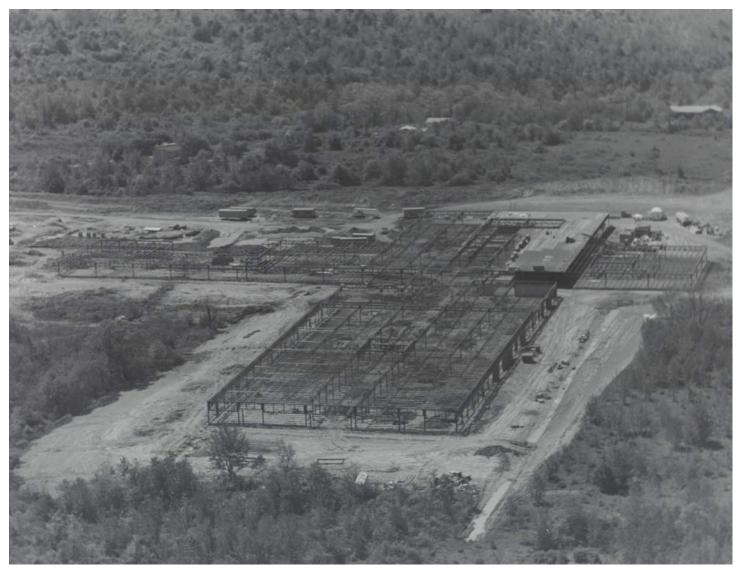
This chapter presents an overview of the existing main campus and offsite buildings, as well as current conditions. Current conditions include circulation, parking, land use, infrastructure, and space. These factors are reviewed to provide a basis for physical issues and future planning.



Groundbreaking circa 1971.



Architect's rendition circa 1970.



Broome Tioga BOCES Campus View from the North, looking South circa 1971.

CAMPUS CONTEXT

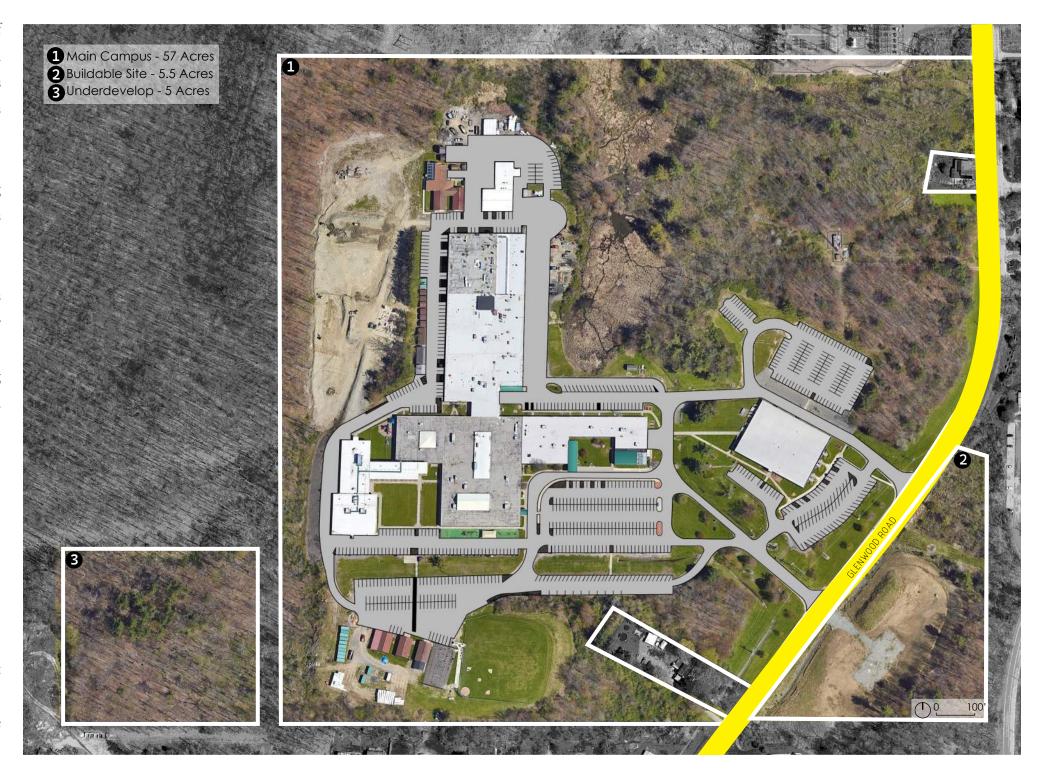
The Binghamton metropolitan area is located in the south-central area of New York State, anchored by Binghamton and bordered by Pennsylvania to the south. The metro area encompasses Broome and Tioga counties. As of the 2020 census, the combined population count for both counties is 247,138.

Historically, this region has been known as the "Triple Cities," consisting of Binghamton, Johnson City, and Endicott. The three incorporated areas are close enough to appear as a single sprawling city.

The Broome Tioga BOCES main campus, located in the northern outskirts of Binghamton, was established in 1954 and currently consists of four buildings. The main campus is located near interstates 81 and 86. The district leases educational spaces at the East Learning Center, West Learning Center, Johnson City Learning Center, and the Metro Center. Additionally, BOCES leases four buildings that house:

- Document Services, Food Service Management, and Storage
- BOCES Business Office
- Central Business Office
- Regional Information Center (RIC)

The main campus currently consists of four major buildings: the Leslie F. Distin Education Center Building, Allen D. Buyck Instructional Support Center, Animal Science Building, and the Maintenance Building. The district collectively occupies 67.5 acres of land and has 285,445 gross square feet that support academic, administrative, maintenance/facilities operations.

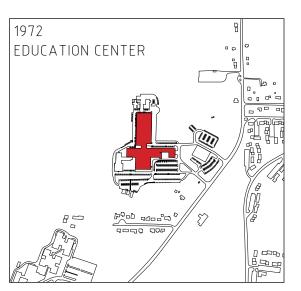


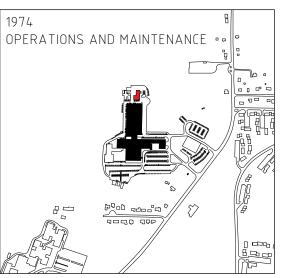
BUILDING AGE

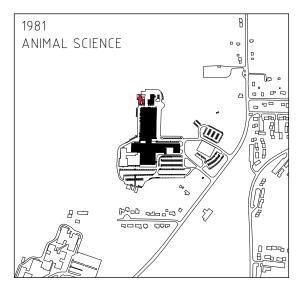
Every five years, a building condition survey assessment is performed by the district architect. A building condition survey assessment is a complex process of the evaluation of many building systems and elements, but oftentimes building age is a key factor when assessing overall building health.

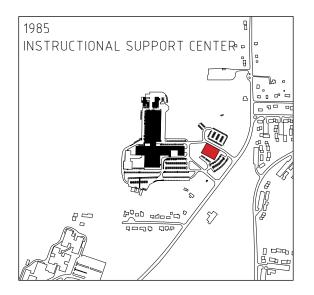
The facilities were constructed between 1972 and 1985 and have seen multiple additions and renovations over the subsequent years.

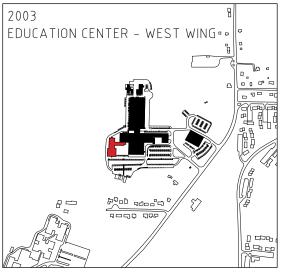
Deferred modernization needs have been identified in these buildings, and the cost of modernization was determined. (\$30,524,895).

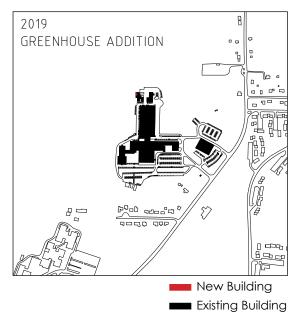












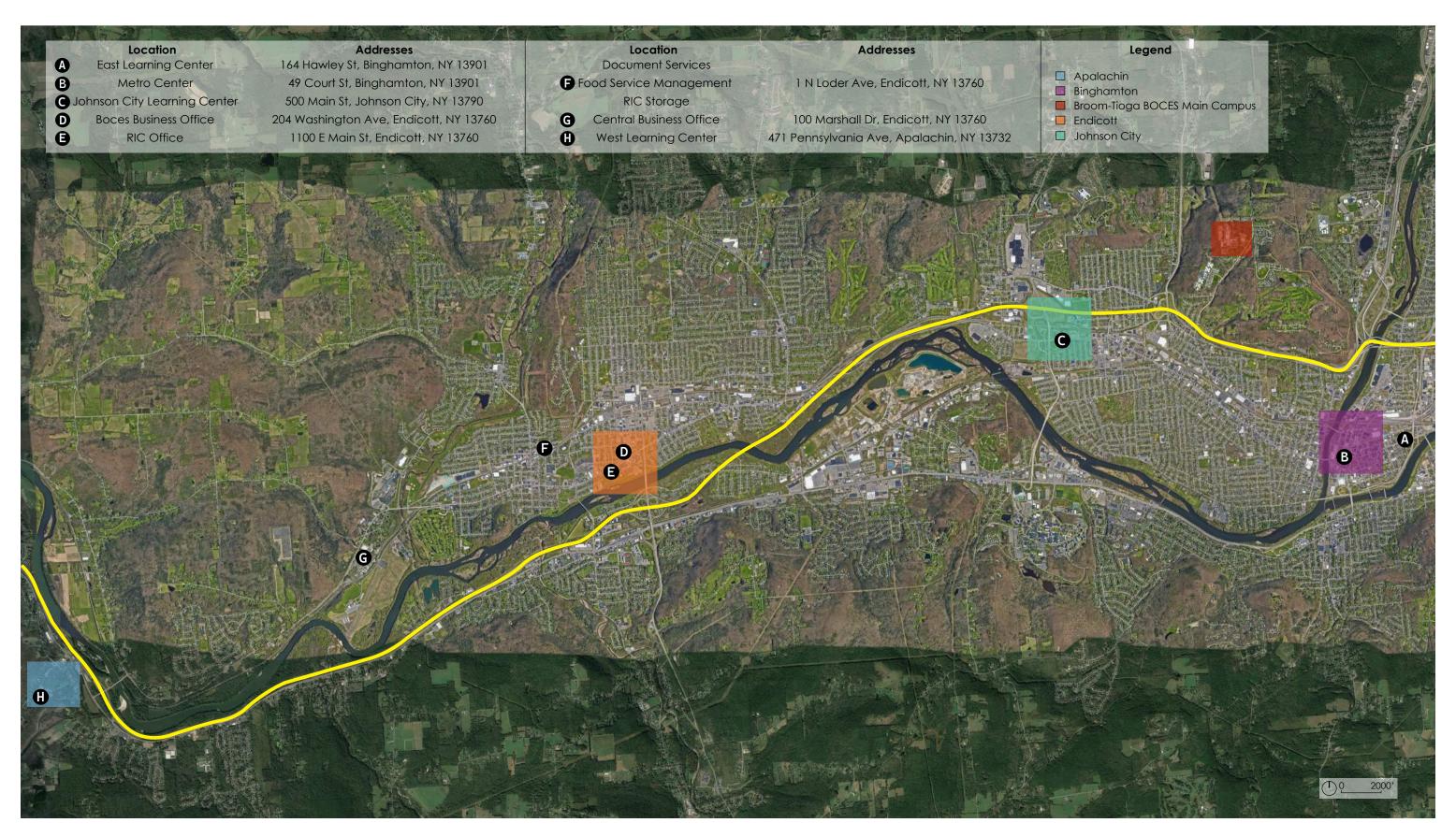
BUILDING CONDITION

BOCES maintains an updated database of facility conditions for the campus built environment. The district relies on the New York State Building Condition Survey (building systems, code compliance, occupant comfort, and accessibility), conducted every five years, to inform the Master Plan and capital priorities.

Today, BOCES faces a significant maintenance challenge, as most of the buildings are 40-50+ years old; there has not been any significant upgrades to the infrastructure since their original construction, so it has exceeded its lifespan and currently does not meet modern standards. The infrastructure would therefore benefit from a comprehensive renewal and modernization program.



LEASED BUILDINGS



EDUCATIONAL FACILITIES

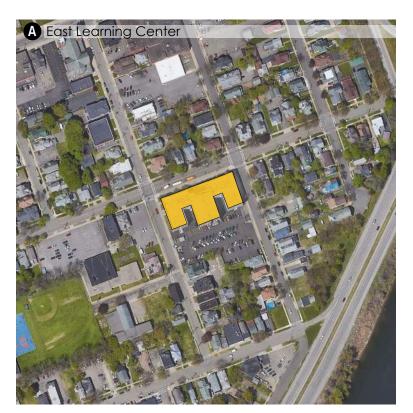
Broome Tioga BOCES currently leases three buildings for educational purposes:

- East Learning Center
- West Learning Center
- Johnson City Learning Center



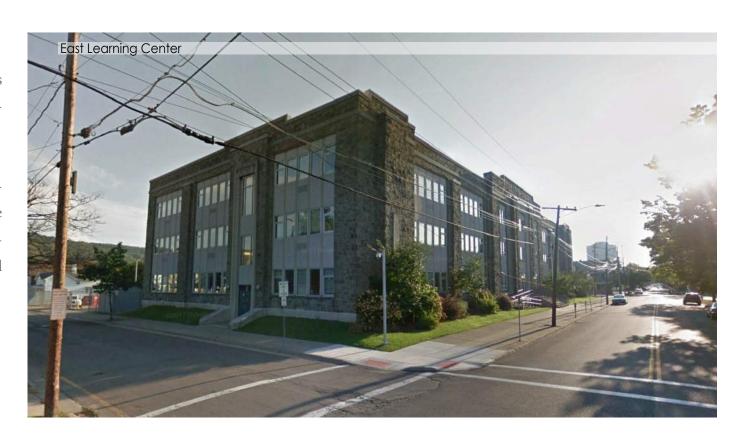






The East Learning Center is a three-story building located at 164 Hawley Street, Binghamton. BOCES leases 55,000 square feet of space on the first two floors, consisting of classrooms, a gym, a cafeteria, and office space.

The building is owned by the Binghamton City School District and is located in a disadvantaged neighborhood. The East Learning Center offers programs in alternative education for at-risk students and serves students with emotional and/or learning disabilities for grades 6-12.





The West Learning Center, located at 471 Pennsylvania Avenue, Apalachin was built in 1957. The building is a onestory structure and encompasses 58,726 square feet. The building was expanded in 1961 and is currently owned by the Marchuska Brothers, who lease the building to BOCES.

The building is in fair condition but requires updates to continue functioning efficiently for BOCES. The programs offered at the West Learning Center support disabled students, including those with intensive social, emotional, and behavioral needs. It also provides an alternative high school for at-risk youth. A proposed 19-classroom addition was to be built but was canceled due to the COVID-19 pandemic. BOCES does not intend to move forward with the project currently.





The Johnson City Learning Center, located at 500-502 Main Street, Johnson City, was built in 1951 and owned by the Marchuska Brothers as a church and school.

The building is in good condition.

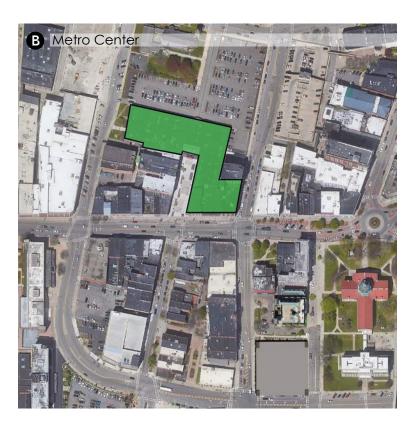
The program offered to students at the Johnson City Learning Center focuses on adult educational needs. The building is 11,509 square feet and houses classrooms, offices, and a large conference room.



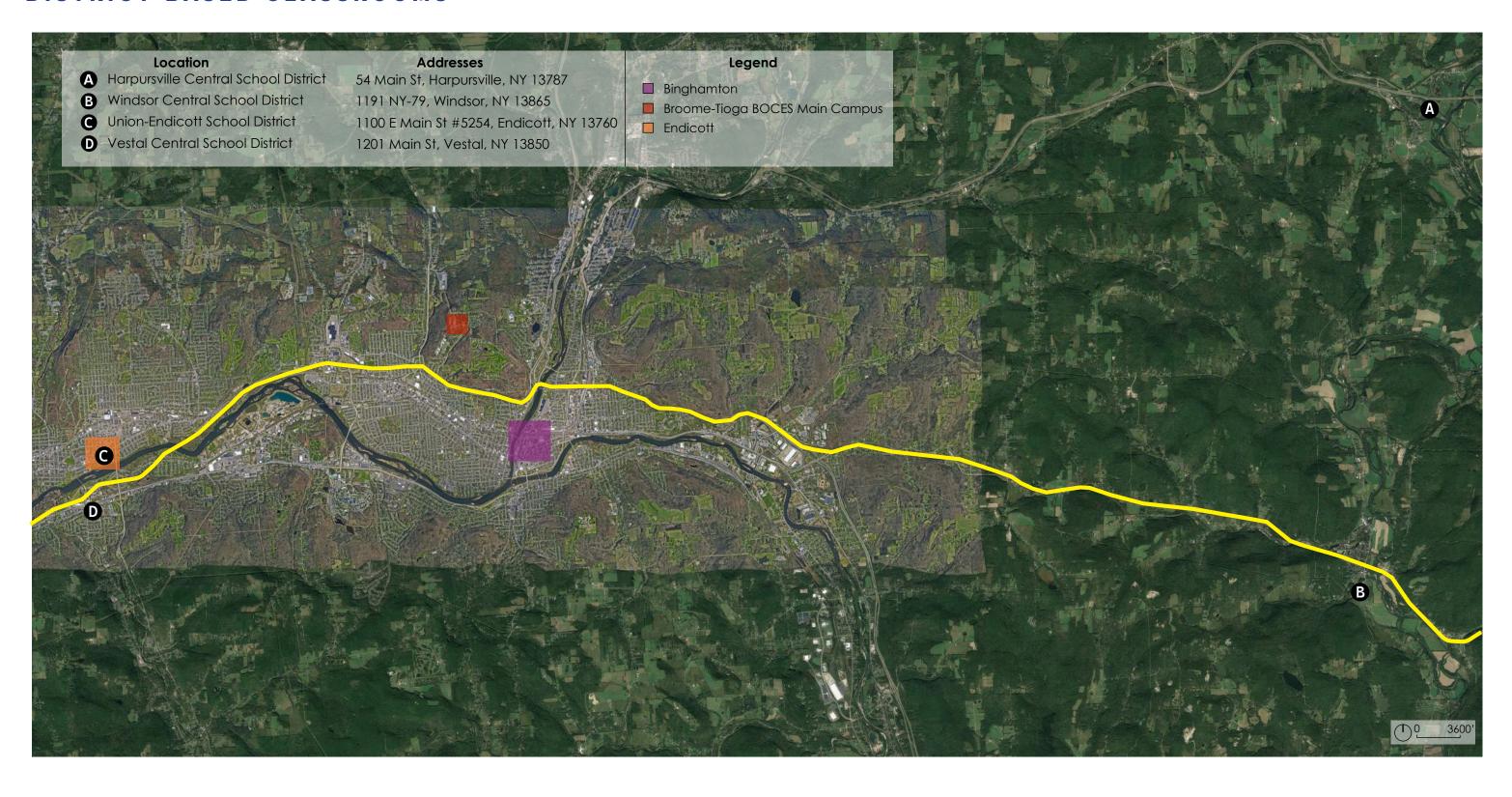


The BOCES "New Visions" program operates from leased space in the Metro Center, located at 49 Court Street, Binghamton. The space has approximately 1,540 square feet and consists of two classrooms in good condition.

The Metro Center is a collection of retail and professional offices located in downtown Binghamton. The building is one block from the Chenango River and Martin Luther King Park and Promenade to the west, and one block west of the Broome County Courthouse.



DISTRICT-BASED CLASSROOMS



DISTRICT-BASED CLASSROOMS

BOCES operates 21 district-based classrooms located in 4 component Windsor CSD districts, which offer two different programs. The Union-Endicott City School District and The Harpursville City School District offer the Crossroad program. The Vestal City School District and the Windsor City • School District offer the Oak Tree program. Each school's district-based • classrooms are distributed as follows:

Union Endicott District

- JFS Middle School 2 classrooms, 1 office space
- LWW Elementary School 2 classrooms, 1 classroom for Related service, 1 office space

Vestal CSD

- Tioga Hills Elementary School 3 classrooms, 1 classroom for related services
- Vestal Middle School 1 classroom

Harpursville CSD

Harpursville Elementary School - 3 classrooms, 1 classroom for related services, 2 office spaces, 1 space for coaches, 1 classroom for sensory, 1 space for balance, 1 staff area.

- Windsor High School 1 classroom
- Windsor Middle School-1 classroom
- CR Weeks Elementary-2 classrooms
- Bell Elementary-2 classrooms

Through these programs, BOCES provides support to students with an inclusive focus.

The Crossroad program serves students in grades K-8 that need help with learning and students that have behavioral needs. The Oak Tree program aids students in an age range from 5 to 21 years old. The program supports students on the autism spectrum to promote their independence and life skills. Both Crossroad and Oaktree consist of 8:1:1 classrooms.

ADMINISTRATIVE FACILITIES

Broome Tioga also leases space for administration, food services, and support functions in four buildings. The building leases were signed prior to or shortly after the COVID-19 pandemic.

The nature of how BOCES conducts business has changed dramatically in recent years, as remote working has gained popularity. As businesses reopened throughout 2022, BOCES had many employees who could successfully work remotely. This change significantly reduced the amount of square footage BOCES required to conduct business.

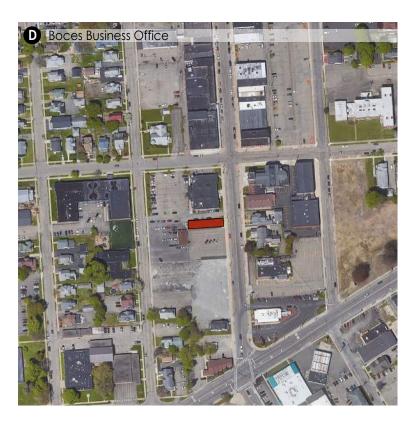
As part of the Master Plan, each department's needs were explored along with the square footage requirements for each type of space. Opportunities exist to consolidate space and improve upon the district's stewardship of public resources.



Central Business Offices



Document Services



The BOCES Business Office is currently located at 204 Washington Avenue, Endicott. The district leases three floors that total 10,300 gross square feet of space. The building is long and narrow, which creates a functionally limited layout.

As of now, approximately six people work in the office at any given time, with the remaining employees working remotely off site.





The Central Business Office (CBO), located at 100 Marshall Drive, Endicott, is a single-story, open-planned office building with 15,821 square feet of space. The structure consists of two separate buildings, connected by a single corridor. The parking lot has a capacity for 82 vehicles in total: 70 spaces for employees, eight for visitors, and four for handicapped drivers.

The CBO employs 59 people and is not currently occupying the building to full capacity. Similar to the BOCES Business Office, 25 employees have occupied the building each day since the COVID-19 pandemic.





BOCES leases a large building at 1 N. Loder Avenue, Endicott, that houses Document Services, Food Service Management, and the Regional Information Central Storage (RIC). The building is 38,800 square feet and includes unoccupied loft space. The concrete floor slab in the loft requires repairs if it is to be used as finished space.

The majority of the building area is occupied by Document Services, followed by RIC Storage, and then Food Service Management. The building's square footage is not in full use, as there are areas that remain unoccupied.





BOCES leases 9,455 square feet of office space on the third floor of the Union Endicott District office, located at 1100 East Main St., Endicott.

The space consists of work cubicles, offices, and a conference room, which can collectively support 50 employees. The space is limited in its ability to meet BT BOCES evolving spatial needs due to asbestos-containing material, which prevents the reconfiguration of the area.

Similar to the BOCES Business Office and Central Business Office, the majority of employees currently work remotely.



BOCES-OWNED FACILITIES

Broome Tioga BOCES manages most of its educational, administrative, and maintenance operations from its main campus, located at 435 Glenwood Road, Binghamton. The buildings on campus are the Leslie F. Distin Education Center, Allen D. Buyck Instructional Support Center (ISC), Animal Science Building, and Maintenance/Operations Building.

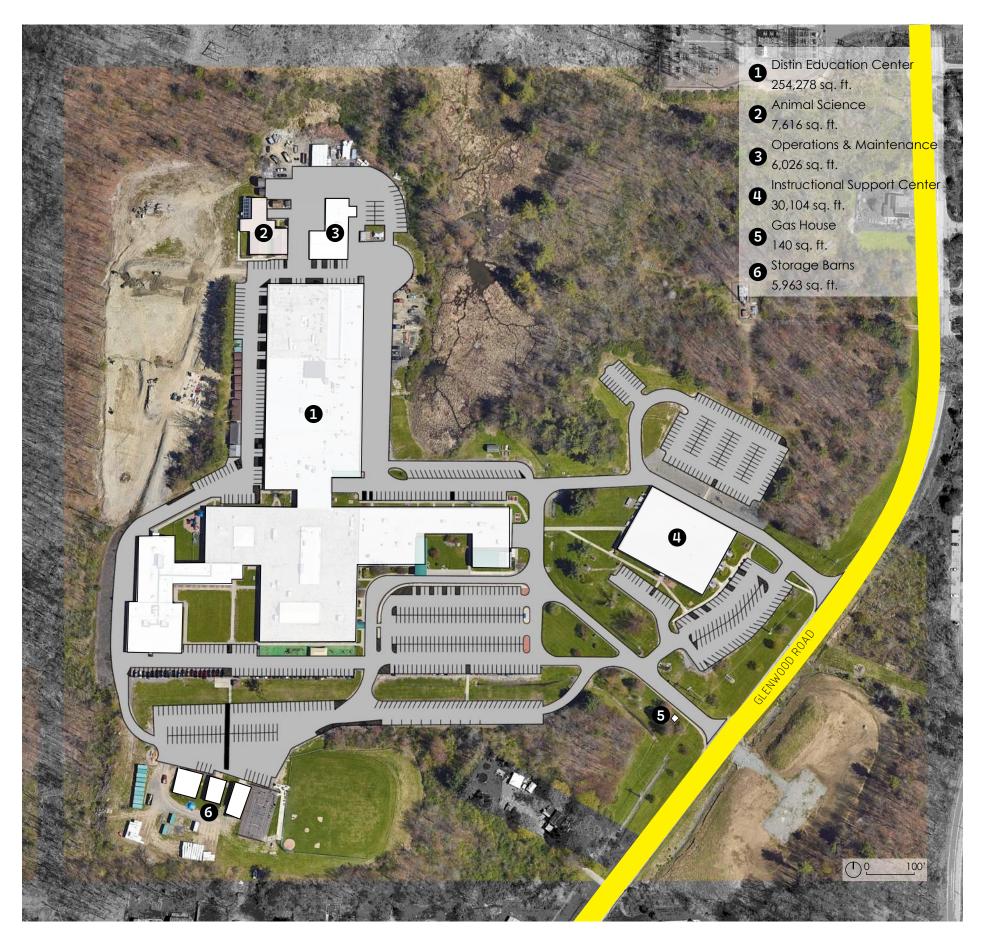
The Education Center is currently 254,278 square feet. The original building, constructed in 1972, was 213,152 square feet. A 2003 addition increased the original square footage by another 41,126 square feet. The building is in fair condition and would benefit from upgrading the HVAC and electrical systems, which are at the end of their useful life. The public toilet rooms are in poor condition and do not serve the current population size.

Currently, the Education Center serves 1,947 students in various curriculums. The district has outgrown the space, as evidenced by the subdivision of larger rooms to provide additional classroom space.

The Instructional Support Center is the main administrative building for Broome Tioga BOCES. The building is 30,104 square feet and is currently undergoing interior renovations. The space functions well for the district's needs, with the largest necessity being an additional large conference space, a non-gender toilet room, and new roofing.

The Maintenance Building, originally constructed in 1974, is a 6,025 square foot pre-engineered metal structure that houses maintenance, automotive repair, receiving, and storage. Three additions to the building were completed between 2019 and 2020, and the building is in good condition.

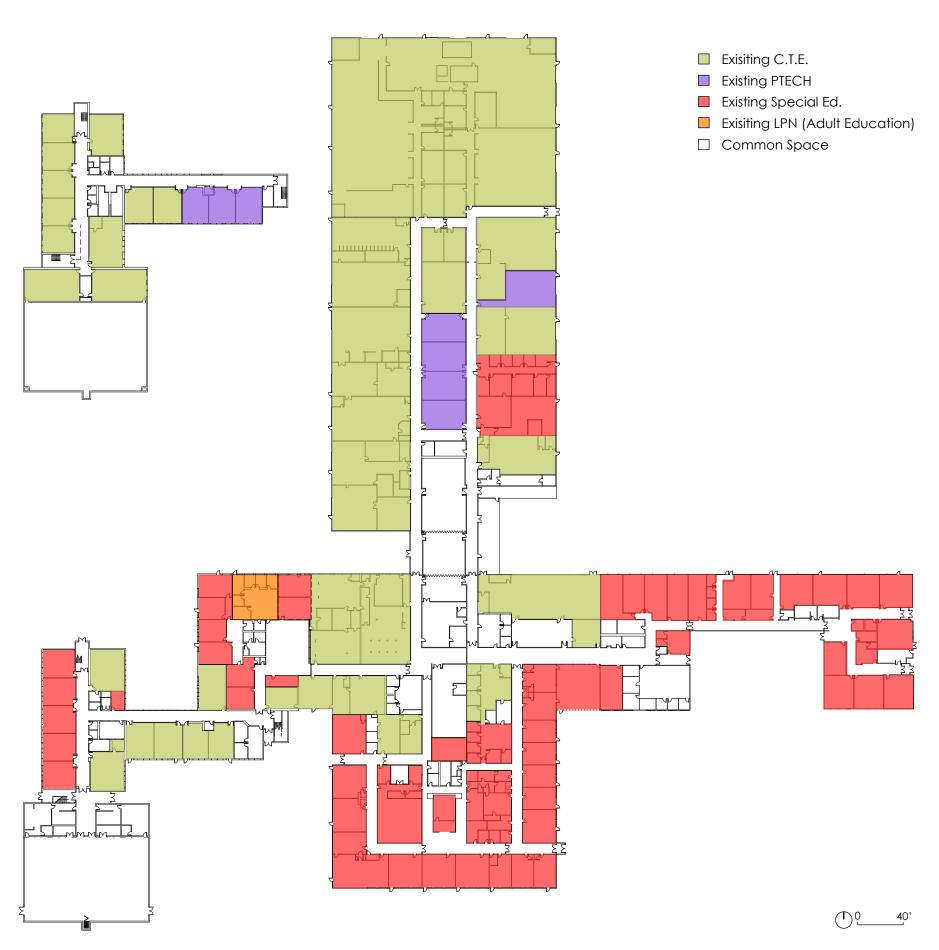
The Animal Science Building is an academic building that contains spaces for dog grooming, cat rooms, a classroom, plant science labs, greenhouse, outdoor kennels, storage, and support space. The building is 7,616 square feet and is in poor condition due to the foundation requiring major repairs.



PROGRAM SPACE DESIGNATION

The program locations as they currently exist are shown to the right. This arrangement presents challenges to the learning environment for both the special education and general education students; the special education students require additional support to maximize their learning experience, while the general education students also have their own unique needs that should be met.

Students should have dedicated spaces that provide for their individual needs. The education programs should be arranged in close proximity to each other to provide a more seamless educational experience. As per the mission to "enhance student outcomes and lifelong learning," BOCES should consider reorganizing the program locations to best serve all students.



LAND USE

Figure 2-1 demonstrates existing land use by function, which allows the understanding of patterns, adjacencies, and future areas of development.

LAND USE DEFINITIONS

- Academic: primary location of academics for BOCES, which includes student and faculty support.
- Support: support spaces are ancillary to academics and include maintenance/operations and parking
- Athletics: playing surface dedicated to student recreation and competition.
- Administrative/Student Counseling: primary purpose is to manage the functioning of the district.
- Open Spaces: the dedication of land for environmental quality and passive use
- Undeveloped: land that has not been assigned a use or value for future development. Examples would be forests and fields.



FIGURE 2-1: LAND USE

As figure 2-2 indicates, approximately half of all available acreage is unusable due to wetlands, steep terrain, adjacent properties, and forest. Individual use areas do not overlap and have clear boundaries. This indicates a concentration of use but also requires people to move from one area to the other for access.

One notably difficult problem lies with an adjacent property in the southeast corner of the campus grounds. The property, located at 409 Glenwood Road currently bisects this area of the campus; this interruption of space significantly impacts BOCES' ability to utilize the piece of land.

The land use arrangement is not typical of many school districts due to the landform and topography. The steep slopes, low areas, and wetlands are important factors in determining available usable acreage for future development.

The west side of the campus follows a pronounced ridge that quickly falls away to the south and west. A lesser ridge runs north to south along the northeast side of the campus and drains to the wetlands in the west.

The forested and wetland areas are valuable assets, both ecologically and aesthetically. Forest and wetland resources are vital to the green infrastructure, as they provide habitat, open space, and connections to the local ecosystem. A thriving forest cover and wetlands are important to maintaining a healthy watershed, flood, and erosion control. The majority of the forested areas are mature growth and are therefore valuable to the local and regional ecosystems.

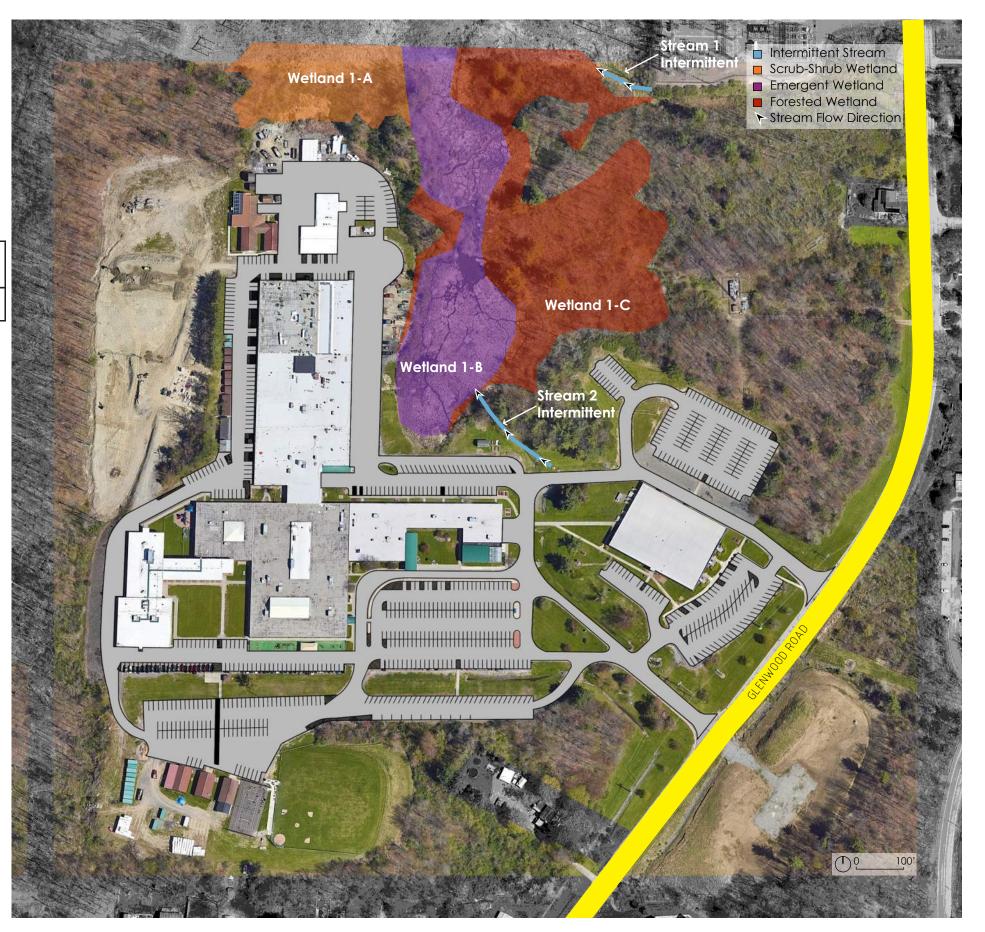


FIGURE 2-2: VEGETATION & WETLAND AREAS

WETLAND AND STREAM DELINIATION SURVEY

Wetland - ID	Cowardin Classification	Within Study Area		
	PFO	4.71	USACE	
Wetland 1	PSS	1.49		
	PEM	3.19		

Stream Name	Classification	NYSDEC Waterbody Classification	Approximate Stream Length Within Study Area (If)	Jurisdiction
Stream 1	Intermittent	Unclassified	125	USACE
Stream 2	Intermittent	Unclassified	170	USACE



PEDESTRIAN CIRCULATION

The campus has a limited network of pedestrian pathways within the campus core. In general, the pedestrian experience is fair, with average connectivity and safety. The pedestrian pathways, sidewalks, crosswalks, and vehicular speed limits are reasonable across campus. However, conflicts exist between roads and pathways. Some notable points of conflict are: the student parking area; between the Education Center and Maintenance Building and Animal Science Building; at the bus "loop" along the north wing of the Education Center; and the upper parking lots and crosswalks. There are areas of concern for pedestrian safety. The following locations are difficult for pedestrians to traverse:

- The road between the Maintenance Building, Animal Science Building and the Education Center needs to be addressed. Cars, district vehicles, and heavy construction vehicles utilize this section of roadway, and with no crosswalks or road traffic signage provided, this could lead to accidents. Students and employees consistently walk between these buildings, which creates a dangerous situation for pedestrians.
- Student parking along the north side of the 300 wing at the Education Building presents another challenge. The parking arrangement has students backing into the main access road used by delivery vehicles, buses, and cars. The sidewalk network is incomplete here, which forces students to walk in the partially marked crosswalk to access the building. This significant oversight could lead to accidents.
- In order to travel from the upper south parking lots, pedestrians access stairs that take them to the lower parking areas. Pedestrians then need to cross a campus road to access the Education Center.
- The pedestrian routes can be strengthened by adding sidewalks and crosswalks in these areas.

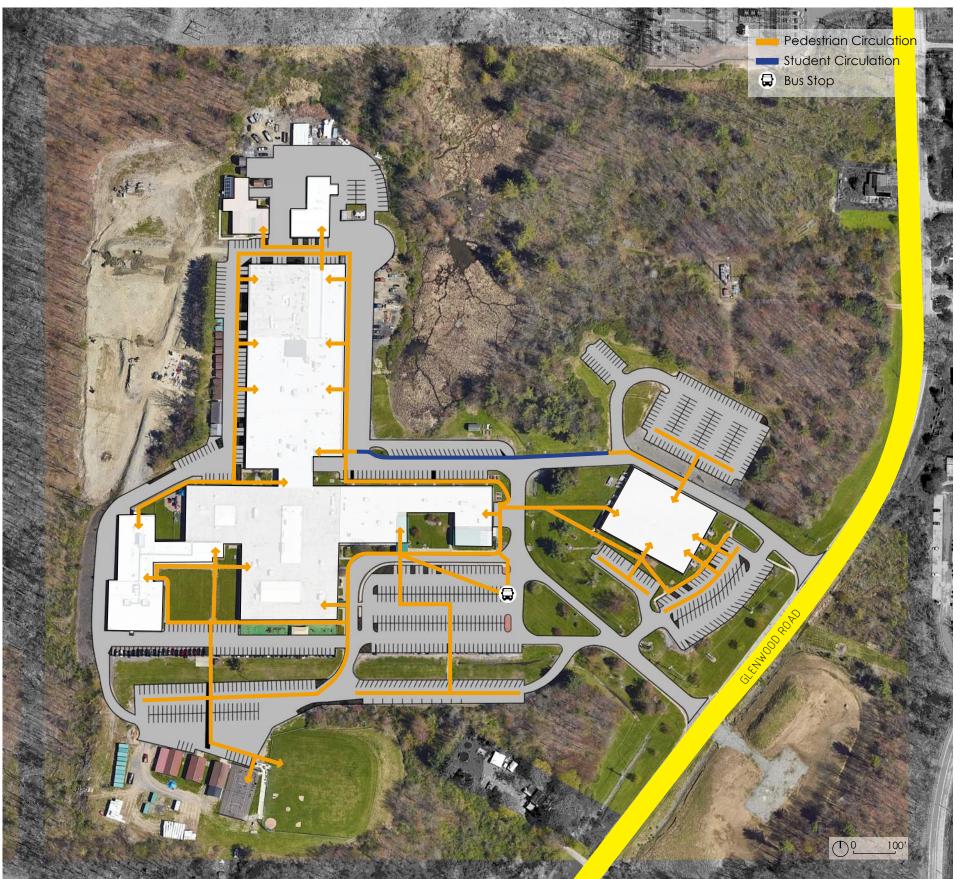


FIGURE 2-3: PEDESTRIAN CIRCULATION

TRANSPORTATION AND PARKING VEHICULAR CIRCULATION

Transportation infrastructure, including roads, sidewalks, and parking lots comprise a large part of the campus, and directly influences the growth of the campus. The infrastructure competes with potential future projects.

Campus circulation has been relatively unchanged over the years, even as BOCES' needs and programs have evolved. The campus circulation can be confusing for first-time visitors, as it is difficult to navigate; the site wayfinding signage is currently inadequate, which could be solved by providing more obvious signage. The combination of buses, delivery vehicles, and cars using the same roads, coupled with building location, leads to congestion and unsafe conditions.

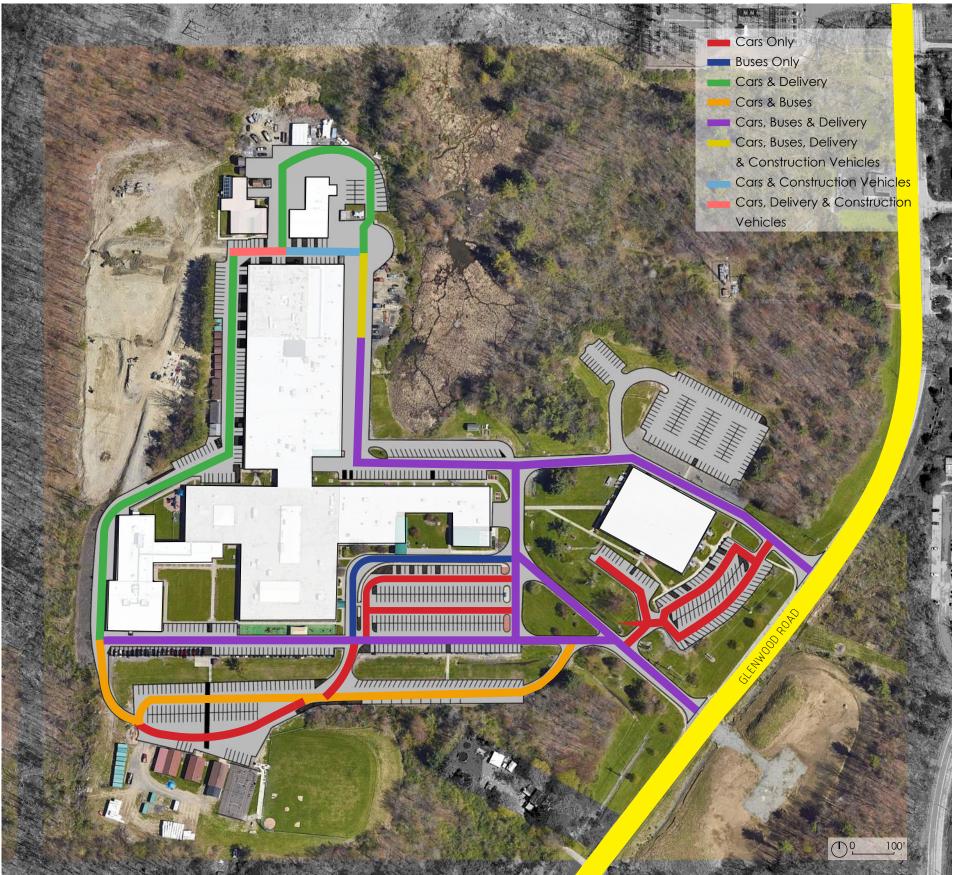


FIGURE 2-4: VEHICULAR CIRCULATION

ACCESS AND ARRIVAL

The current arrival experience for visitors can be challenging. The first thing that visitors experience as they approach campus is the minimal hierarchy between the two entrances. This can lead to confusion as to which entrance should be used. Despite its daily use by visitors, staff, and students, the scale of the primary entrance sign and landscaping is incongruous with its significance.

The wayfinding signage on campus can be confusing and has led to visitor's becoming disoriented in the past. Another access issue is intermixed visitors and service routes; this is problematic due to the volume of traffic and pedestrians that are converging in the narrow intersection and student parking area. This sharing of roads can lead to accidents.



FIGURE 2-5: VEHICULAR CIRCULATION

EXISTING PARKING

There are 753 parking spaces throughout the campus; half of the parking is located south of the Education Center, 231 spaces are located at the Instructional Support Center and the remainder are scattered throughout campus. Overall, parking on campus is plentiful for faculty and staff at the Education Center and the ISC. However, there is a deficit of student and maintenance parking.

The main campus road that serves the north end of the site crosses student parking and pedestrian pathways, creating conflict points. The current parking lot configuration requires many drivers to cross the road to access the Education Center, Maintenance Building, and the Animal Science Building. Crossing this road can be difficult for both student drivers and pedestrians alike, especially during times of high traffic volumes.



FIGURE 2-6: EXISTING PARKING

UTILITIES AND INFRASTRUCTURE

The successful operation of Broome Tioga BOCES requires a reliable infrastructure system. The existing campus infrastructure includes heating, electrical, water, sewer, and telecommunications systems. Most of these systems are adequate to meet the campus needs, but not all are sufficient to meet the needs of the facilities.

- The heating system at the Education Center is made up of geothermal heat pumps, rooftop units, and furnace/forced air.

 The geothermal system that serves the 100/200 wing was installed in 2003 and is at the end of its life expectancy. The rooftop unit that delivers fresh air to the 100/200 wing requires replacement
- Electrical infrastructure is adequate for the Instructional Support

 Center, but is in need of replacement at the Education Center due to
 age and condition
- Domestic water and sanitary sewer systems are in good condition and of adequate capacity. Deficiencies in the domestic water system should be corrected.
- Telecommunication systems are adequate for the existing facilities





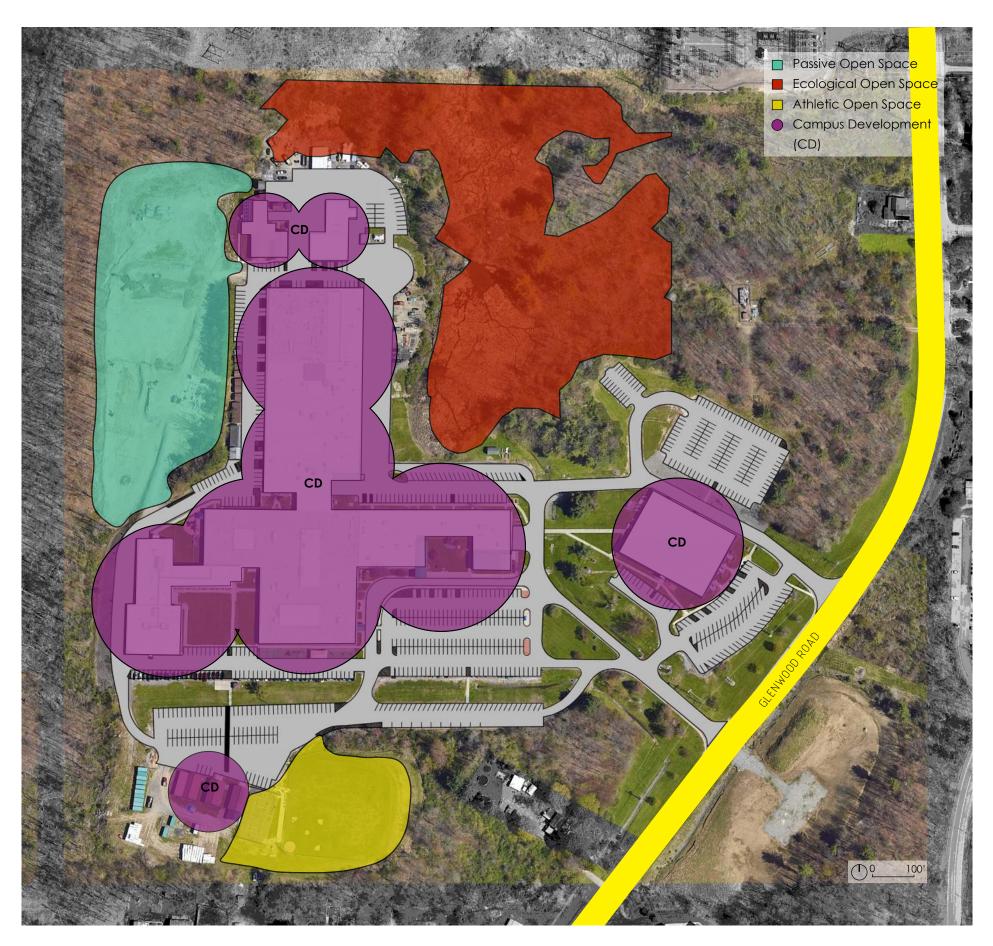


SUMMARY

Broome Tioga is a dynamic institution that will increase enrollment and continue to add and expand programs. The campus must evolve to meet the ever-changing needs of education, students, and staff. During the numerous meetings and conversations held with key BOCES personnel, it became clear that the existing spaces and building systems are not up to date.

The Education Center will need many updates in the coming years. The plan must address the challenges of expansion, addition, and renewal of existing facilities to meet the needs of the campus, while simultaneously providing the information necessary to accommodate future growth for evolving twenty-first century challenges.

- Existing land use has limited open space for future campus growth
- Campus access and circulation are adequate from a functional perspective, but are not clear in terms of wayfinding. As the campus grows, circulation will become more congested and student parking will experience further shortfalls





CHAPTER 3



ANALYSIS

BROOME TIOGA BOCES 2023 - 2033 CAMPUS MASTER PLAN

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INTRODUCTION

This phase of the planning process added to the design team's understanding of the campus and the existing conditions. Through further discussions, observation, and meetings, the planning team analyzed the campus systems and their relationships to physical constraints, program needs, growth opportunities, and fiscal responsibility.

Important needs and goals emerged from this greater understanding of Broome Tioga BOCES. These goals became the driving force for concept development. The concepts were integrated with the collected data, which created the framework for potential campus growth and sustainability.









NATURAL SYSTEMS

Native plant growth location is determined by slopes, elevations, and soil conditions. The area was once comprised of ridgetops, rolling hills, steep slopes, and a low-area pond. However, the construction of the campus has modified the natural systems over time to create a new landscape, as shown in figure 3-1.

Historic landscapes have become "cultural properties" that should be protected as much as possible. The developed campus area totals approximately 33.7 acres of the main campus. Very moderate levels of vegetation have been reintroduced in developed areas. When healthy, these vegetative areas act as a living ecosystem that supports wildlife and the regeneration of soils. The challenge for this campus is to build in areas that will minimize the impact on the natural environment.

A variety of open spaces would add a natural tapestry to the environmental landscape. However, the campus does not currently have quality open spaces. New open spaces would combine the built and natural environment, providing staff and students a gathering space while unifying the landscape. These areas provide healthy hydrology and habitat by managing runoff through natural systems and improving the quality of water downstream. This in turn makes the campus more desirable for people to use.

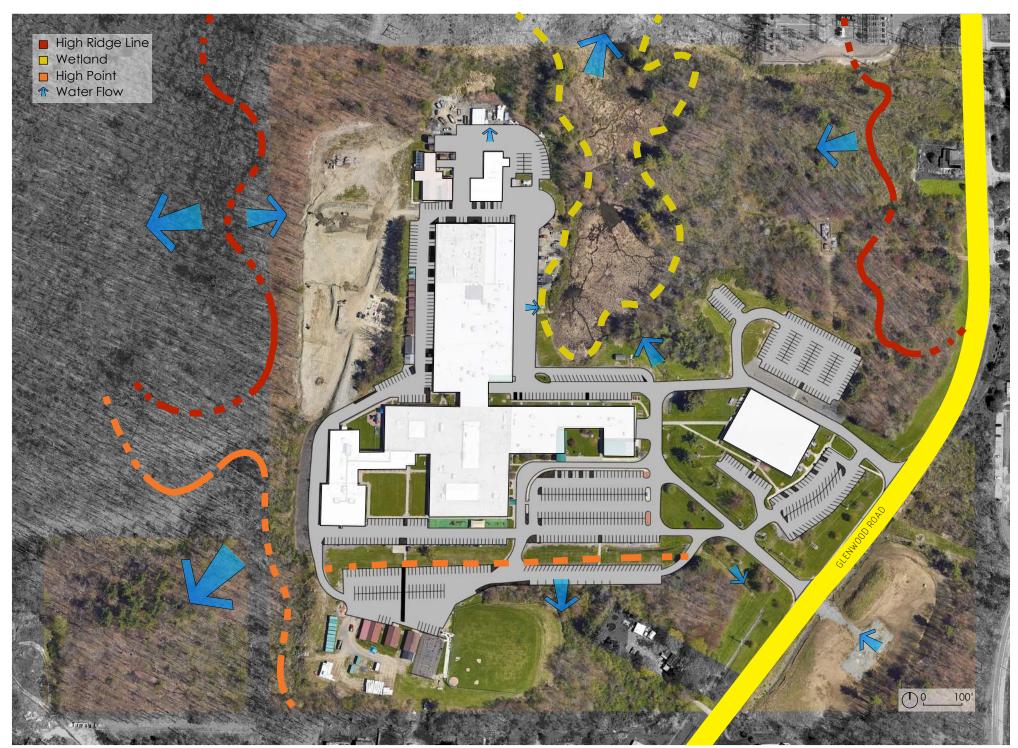


FIGURE 3-1: NATURAL SYSTEMS

PEDESTRIAN AND VEHICULAR CONFLICTS

The campus circulation network is a series of short roads that interconnect the parking areas with the main road that rings the Education Center. The campus has two entryways that lead to two common intersections. This characteristic makes for slower traffic conditions, as buses and personal vehicles back up along the main campus entry. The main campus entry and its streetscape should have improvements that will beautify, improve, and identify it as the primary entrance.

Improvements will be needed to the circulation network as the campus expands. The main entry is currently prone to congestion, especially during the early morning. The district would benefit from adding a traffic lane dedicated to buses, which would alleviate congestion as well as improve overall safety. Another safety improvement to consider would be to close the access between the main parking lot and the student parking lot.

Currently staff parking at the Instructional Support Center (ISC) and Education Center are adequate. However, improvements to parking are needed at the ISC. As of now, the primary parking entrance is connected directly to the main entry road. Removing this access will alleviate traffic entering and exiting along this road.

Student parking has the greatest need for improvement, as the existing parking conditions are dangerous. The students must back out into the road that buses, delivery vehicles, and personal vehicles use to access the northern section of the campus. Redesigning this parking lot and road would greatly improve safety conditions. Another parking concern is the inadequate student driver parking count. The students are currently using the upper ISC parking as overflow, which has led to students vandalizing cars that are not easily visible. Additional student parking is needed close to the student center to alleviate the lack of parking and reduce vandalism.

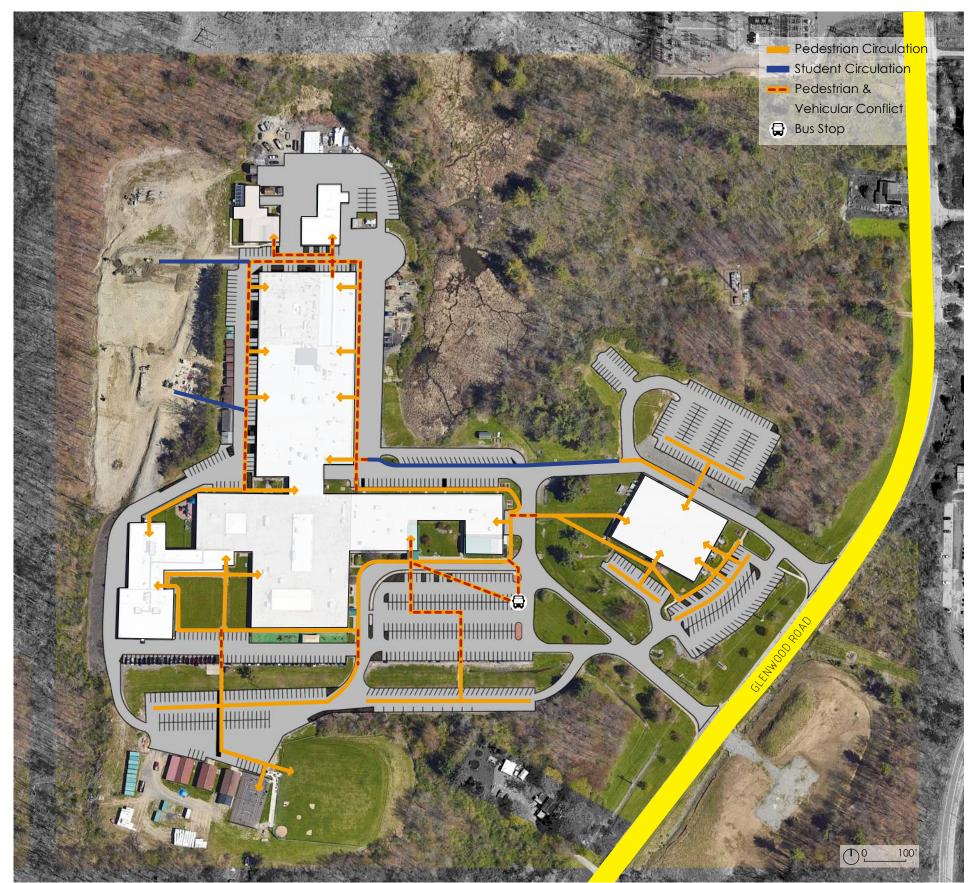


FIGURE 3-2: PEDESTRIAN AND VEHICULAR CONFLICTS

EDUCATION PROGRAMS

BOCES offers many programs, from Special Education to Career and ALTERNATIVE EDUCATION Technology Education. Other programs offered are Technology, Management Services, Professional Development and Adult Education.

The numbers and types of services offered change based on the component district's needs. Three of the newest programs are Pathways in Technology, Early College High School (P-TECH), TECH Academy (TA) and Futures. The following is a brief overview of each program.

CAREER AND TECHNICAL EDUCATION PROGRAM (CTE)

The Career and Technical Education Program (CTE) offers training opportunities in many career fields. Areas of training include automotive, building trades, health science, cosmetology, computer services and others. The program offers introductory, intermediate, and advanced levels. Each level is a two-year curriculum designed to provide students with a foundation to develop a meaningful career. Each program has partnerships with post-secondary institutions and/or unions for concurrent course credits.

SPECIAL EDUCATION (SP. ED.)

the instructional needs of students with exceptionalities who are not able to be educated in their home districts." (www.capitalregionboces.org) Broome Tioga BOCES offers six programs based on the individual needs of each student. The program serves students (K-21) with emotional and/ or learning disabilities. The student-to-teacher/aid ratios are comprised into 6:1:1, 8:1:1 and 12:1:1 classrooms. Each program is developmentally appropriate to maximize each student's potential and provide a supportive learning environment.

"Special Education is a comprehensive array of programs available to meet

grades 7-12 that are considered at risk. This includes BOCES alternative middle and high school programs as well as GED/High School equivalency programs. The Middle School and High School programs are located at the East and West Learning Centers, as well as the Glenwood Education Center. Each program is full-time and focuses on providing students NEW VISIONS ACADEMY (NV) with the knowledge and skills that lead to a high school diploma.

The program goals for middle school students include a "successful transition to the component school setting, career education, employment preparation skills, life skills training, and improved self-image." (www.btboces.org) The High School program includes the "Evertech

Academy which allows students to explore a career and technical or creative arts curriculum." (www.btboces.org) The GED program is designed for students 16-21 who are at risk of not completing the course requirements for a high school diploma. The program is either half or full-day and offers academic preparation or academic preparation with work ex- TECH ACADEMY (TA) perience respectively.

PATHWAYS IN TECHNOLOGY EARLY COLLEGE HIGH SCHOOL (P-TECH)

"P-TECH (pathways in technology early college high school) is an academically rigorous project-based learning program that offers students a unique tion field." (www.btboces.org) experience that combines the best elements of high school, college, and the world of work. Students can choose from three fields of study: computer technology, engineering, or health.

Students will be matched with a corporate mentor, take college classes and gain professional work experience, all during their high school years. Stu-Broome-Tioga BOCES provides alternative education for students in dents successfully completing the program will graduate with a NYS regents' diploma, a technical endorsement, and a no-cost Associate in Applied Science degree from SUNY Broome in the computer technology, engineering, or health field." (www.btboces.org)

"New Visions is an academically rigorous program for college-bound high school seniors seeking to learn more about their chosen career field. Each New Visions academy provides students with practical, real-world work experiences that enhance their knowledge in their chosen career field while they apply their academic content knowledge in an integrated setting. Students have the opportunity to shadow professionals in a variety of positions within a career field. These experiences support and guide students in making fundamental decisions about their career goals." (www.btboces.org)

"A half-day career and technical education program. Students begin in 9th grade and continue through graduation. The Tech Academy focuses on project-based learning in an applied, real-world model, and studies the methods and theories of design while using cutting-edge technology. Students leave the program prepared to continue and education in a career and technical educa-

PREPARATION FOR ADULT LIVING SERVICES (PALS)

The PALS program includes three different programs: PALS 8:1:1, PALS 12:1:1, and MOVE 12:1+4.

The PALS 8:1:1 program serves students who have moderate-to-severe developmental disabilities, while the PALS 12:1:1 serves students who have moderate developmental disabilities. Both programs provide a supportive learning community that balances the academic, pre-vocational, social, and workforce development of the students.

"The MOVE 12:1+4 program is an activity-based program serving students ages 5-21 who are mobility impaired. The program teaches the basic, functional motor skills necessary for adult life, combining natural body movement with an instructional process to help individuals acquire increasing amounts of independence in sitting, standing, and walking."

(www.btboces.org)

CENTER-BASED OAK TREE (OAK TREE)

"This program offers students (5-21) a structured teaching environment that uses the TEACCH methodology to promote independence for students on the autism spectrum. The program provides a supportive learning environment encompassing academics, social skills, pre-vocational and life skills. Students are characterized by intensive management needs that require a structured learning environment, small class sizes and individualized instruction. Additionally, students participate in the NYS alternate assessment and receive a skills and achievement commencement credential upon graduation." (www.btboces.org)

EVERTECH HIGH SCHOOL (ETHS)

Evertech Academy is a full-day career and technical education (CTE) program that begins in 9th grade and continues through graduation. The academy offers students the opportunity to pursue a CTE program simultaneously with a regents diploma. Students participate in half-day CTE project-based learning courses in 9th and 10th grades and attend traditional half-day CTE courses in 11th and 12th grades. The academy provides a tight-knit, supportive high school experience offering students a highly individualized education. (www.btboces.org)

FUTURES

This program serves students in grades 9-12. The program goal is to help students develop independent living skills and to facilitate active and positive community participation. Students are able to earn credit toward a NYS Regents or local diploma. Transition services are available to assist students as they move to the world of work. (www.btboces.org)

ENROLLMENT GROWTH AND SPACE

Broome Tioga BOCES anticipates significant student enrollment increases over the next 10 years at the main campus; the total number of students is expected to grow by 17%. BOCES enrollment has grown by 37% over the past 10 years equating to 515 additional students from 2013-23. BOCES is projected to add 334 more students in the next 10 years. As enrollment grows, additional space will subsequently be required to accommodate students and programs. See figures 3-3 through 3-6.

	2012-2013	2017-2018	2022-2023	2027-2028	2032-2033
CTE(Inclusive of NV/TA)	941	1108	1252	1390	1490
SPECIAL ED.	355	394	405	447	471
ALT. ED.	108	246	262	275	292
CTE	886	988	1100	1227	1314
P-TECH	0	125	130	135	140
NEW VISIONS (NV)	55	70	84	90	98
TECH. ACADEMY (TA)	0	50	68	73	78
PALS	247	258	191	183	175
OAK	108	136	176	224	248
ETHS	108	121	132	140	152
FUTURES	0	0	38	40	48

FIGURE 3-3: 20 YEAR GROWTH TABLE

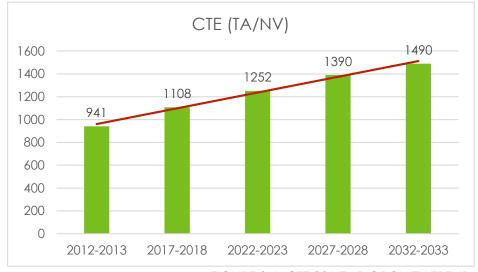
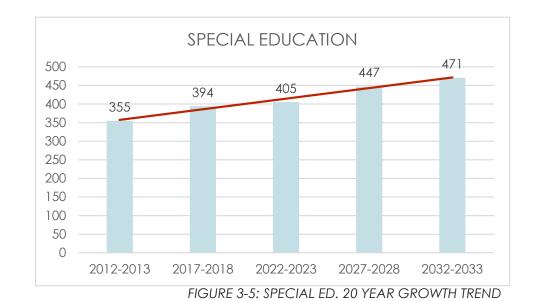


FIGURE 3-4: CTE 20 YEAR GROWTH TREND



350 300 275 262 246 250 200 150 108 100 50 2012-2013 2017-2018 2022-2023 2027-2028 2032-2033 FIGURE 3-6: ALT. ED. 20 YEAR GROWTH TREND

ALTERNATIVE EDUCATION

SPACE NEEDS ANALYSIS

The two biggest areas of growth are in Career and Technical Education (CTE) and the Oak Tree programs. CTE labs and Oak Tree classrooms emerged as the top priorities for the continued growth of Broome-Tioga BOCES. The district projects a 19% increase in CTE programing over the next 10 years which makes up nearly 56% of the new space needs. The Oak Tree program forecasts a 41% anticipated growth rate over the next 10 years. See figures 3-7 and 3-8.

The projected increases in the Oak Tree Program enrollments are largely due to the fact that the rate of children diagnosed with autism has increased exponentially over the past 2 decades. More specifically, statistics show that in the year 2000, 1 in 150 children were diagnosed. In 2023, the incident rate is now 1 in every 36 children being diagnosed with autism.

The Space Needs Analysis that was conducted during the Master Plan demonstrated a current space deficit of 58,859 net square feet (NSF) at the Education Center. See figure 3-9. This is the amount of area that is needed to satisfy the program's needs for the next 10 years, representing a 23% increase over existing square footage. NSF averages 15% of gross square feet (GSF) because NSF does not require corridors, wall thickness, and chases be included.

The quality of existing space is also a challenge. Building age, deficient classroom facilities, and inadequate square footage at the Education Center has identified a need for 39,000 square feet of classroom renovations.

Currently, the district re-purposes larger spaces into smaller classrooms to alleviate the classroom shortage. While this may correct the classroom shortage in the short term, it is not a long-term solution. The Master Plan program was developed from the space needs program analysis.

This list is not fixed and will evolve with BOCES as their needs change.

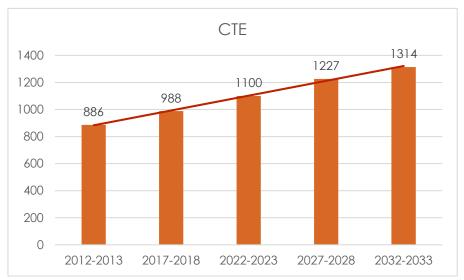


FIGURE 3-7: CTE 20 YEAR GROWTH TREND

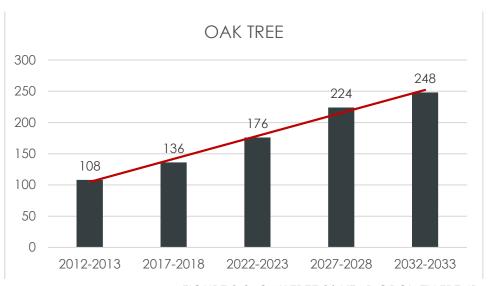


FIGURE 3-8: OAK TREE 20 YEAR GROWTH TREND



FIGURE 3-9: SPACES NEEDS ANALYSIS

THE FUTURE

Planning meetings, interviews with stakeholders, and the space needs analysis has documented the necessity of providing modern buildings through a mix of new construction and adaptive reuse of the aging building stock. This will allow BOCES to meet their foundational needs while also providing opportunities for current and future academic growth. The Master Plan framework outlines future development opportunities throughout the campus core and off-site facilities as funding becomes available.

The main campus currently houses a mix of functions in four buildings, which includes educational, administrative, and maintenance/operations. The Distin Education Center classrooms and academic programs include Career and Technical Education (CTE), Pathways in Technology (PTECH), and Special Education. Most academic programs are compressed within the limited space of the Education Center, which is geographically fragmented. The building also lacks student and faculty spaces that support To accomplish the goal of "Enriching Lives Through Education," this community identity.

The existing building configuration often does not allow for departmental growth or the creation of new programs that support emerging technologies. The construction of new facility space will allow opportunities to reorganize fragmented programs, reconfigure the existing building, and allow for a carefully thought out modernization that will improve all programs. The opportunities for new academic space within the main campus exists by creating an addition that welcomes students, staff, and visitors upon entry to the campus.

The demolition of the Animal Science Building will provide an opportunity to gain valuable campus space, which will allow the Education Center to be expanded for the growing CTE and PTECH programs. The program currently located in the Animal Science Building would relocate into the proposed Education Center addition.

The removal of the existing Maintenance/Operations Building will provide additional open space needed to expand the Education Building. A new facility located across the street from the main campus core would house the new Maintenance and Operations Department. With the construction of a new Maintenance Building, campus safety and traffic patterns will improve. Similarly, traffic patterns would improve by removing delivery vehicles and fueling stations from the campus core.

Inspired by the goal to become a first-class institution of learning, BOCES is challenged to prepare students for lifelong learning, productive citizenship, and success. To achieve these goals, the strategies implemented can influence the physical campus plan. Strengthening academics requires an investment in new facilities and grounds.

Master Plan process reviewed how spaces should be organized to best meet the needs of the students. The resultant changes are a reconfiguration of classrooms based on student and departmental needs. New learning methods, driven by digital technology advancements, are being implemented into new and current programs. When new teaching spaces and buildings are designed, current teaching methods and technologies need to be included.

Strategies for achieving student success will affect the physical campus in a far-reaching manner. A philosophy of excellence, collaboration, and strengthening core programs requires careful consideration of departmental teamwork and shared resources. Collaboration among the students, teachers, and staff will foster a culture of committed excellence to education. Promoting existing and new opportunities will allow for student enrichment growth and a greater capacity to serve society. These goals will require new facilities, as well as reimagining existing facilities in how they are occupied and used.

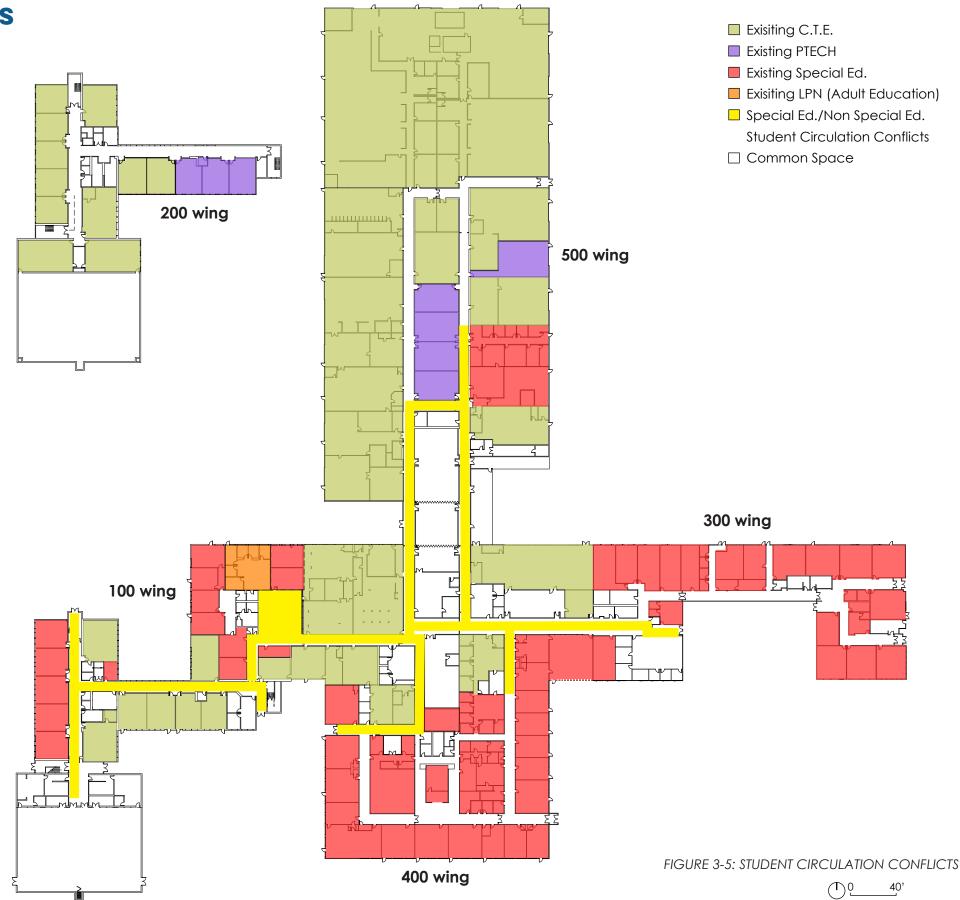
STUDENT CIRCULATON CONFLICTS

The student circulation at the Education Center is minimally adequate but needs to be improved. The current location of existing programs is intermixed throughout the building, so special education students and general education students with varied educational needs commingle in the corridors. This layout can create unhealthy circulation conflicts where students needs are not being met to their full potential.

Students with Disabilities receive related services (OT, PT, Speech) as part of their programming. The location of these office spaces are located in the middle of the 500 CTE wing. This location makes for a lengthy transition time and distance for students to travel from their classroom locations. Transitions are traditionally a challenge for students, both physically and behaviorally. As such, the staff will frequently utilize adaptive equipment (such as tricycles, and scooters), along with their personal devices (such as wheelchairs and walkers) to help alleviate the stress associated with the travel distance.

This scenario can create an unsafe, hallway circulation scenario for both special education and general education students. To improve building circulation, the Master Plan recommends that BOCES group programs together that are similar in academic pursuits. The special education programs would be located within the 100, 200, 300 and 400 wings. The CTE, PTECH and other remaining programs would then be housed in both the 500 wing and the proposed addition north of the 500 wing. The relocation of programs would greatly reduce the areas of conflict and support the needs of students.

The vision of the proposed re-alignment of special education programming and general education is to help meet the needs of all students regardless of their educational situation. The re-alignment will provide intentional opportunities for collaborative approaches to learning versus intermingling in unhealthy hallway environments.



GROWTH OPPORTUNITIES

The Master Plan is focused on the stewardship of the existing buildings and natural resources. It also focuses on the allocation of resources to prioritize new and existing facilities. This is accomplished by weaving them into a comprehensive whole to operate cohesively and achieve the mission of student and staff excellence. The goal of this Master Plan is to provide the framework to expand existing facilities, modernize existing teaching spaces, improve stewardship of resources, and support BOCES' educational mission.

The core campus has limited growth opportunities in its current configuration. A significant factor restricting expansion is the topography of steep slopes and low wetlands. The area north of the Education Center 500 wing can be optimized for expansion by removing and relocating the Animal Science Program and Maintenance/Operations Building. An addition located here would create a dynamic area with open space and an excellent view. Other areas for growth are located on the south side of the Education Center and would entail infilling an area of the 300 and the 100/200 wings.

The campus contains other land areas that can be redeveloped. Such areas include the upper portion of the "sandbox," the upper parking lot behind the ISC, the baseball field, and storage barn spaces. These areas would present a planning challenge, as many of the spaces are currently utilized for other functions.

Overall, the campus opportunity zones allow for potential areas of redevelopment and growth, as shown in figure 3-6.



FIGURE 3-6: GROWTH OPPORTUNITIES

SUSTAINABLE GROWTH AND RESOURCE

To be fiscally and environmentally responsible, BOCES should invest in This chapter provides an understanding of the campus context and conand repair aging infrastructure. This change would reduce reliance on carbon-based fuels and is a long-term commitment to the environmental and fiscal health of BOCES. New York State is proposing an aggressive ban on fossil fuels in new and existing buildings. The ban would phase out the sale of fossil fuel heating equipment existing in commercial buildings by 2035. The proposal would also require all commercial buildings to be all-electric by 2030. This legislative proposal could have far-reaching consequences for BOCES in the near future.

Redevelopment of areas that currently serve a different purpose on campus, especially the area occupied by the Maintenance and Animal Science Building, will maximize land resources and provide opportunities to consolidate programs. Redeveloping these areas will lead to greater efficiency of campus resources.

Improving access and connections across the campus will help manage traffic congestion and parking count shortfalls. Improving the bus loop system will make traffic patterns more efficient and safer.

SUMMARY

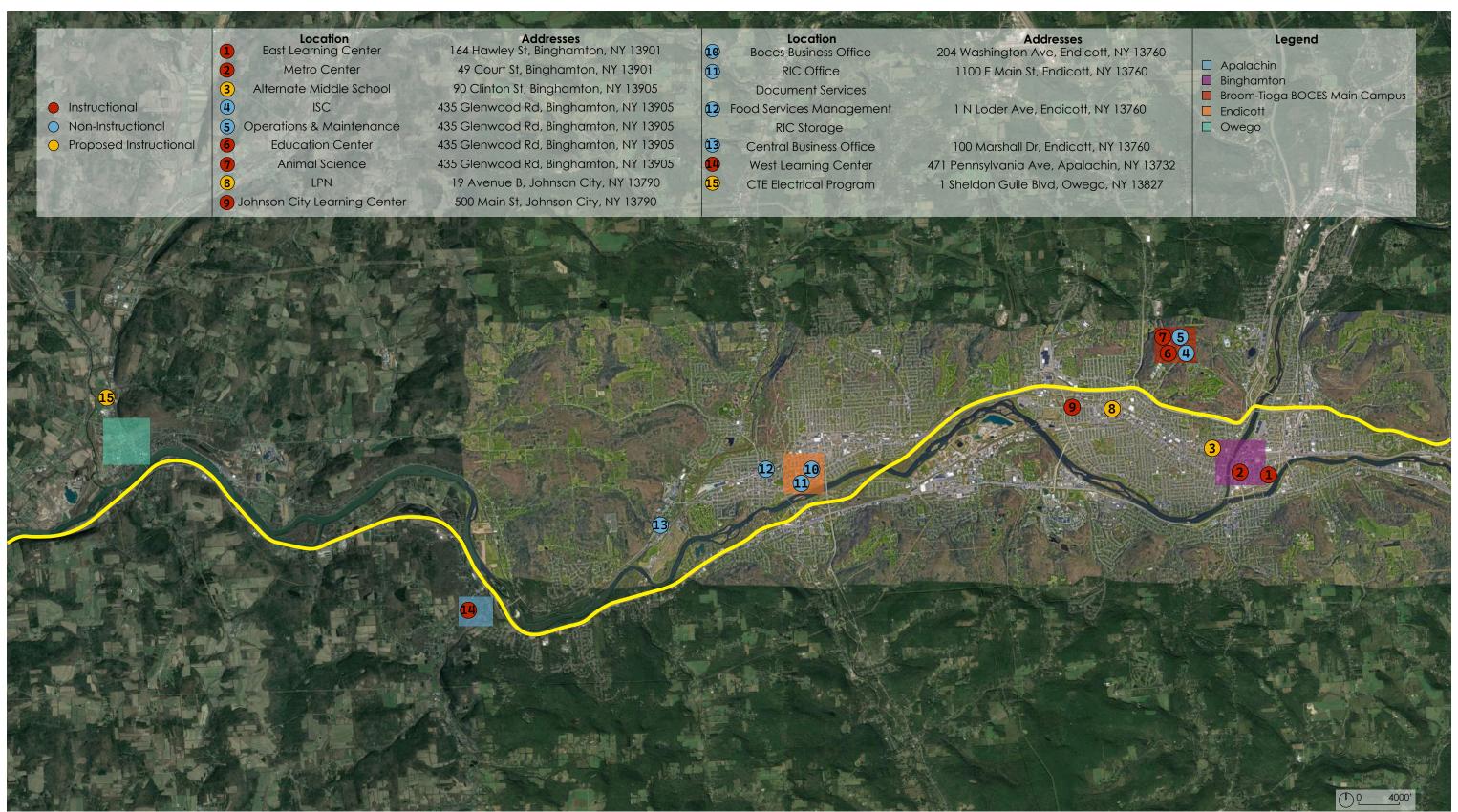
ditions. It develops the data collected while exploring the constraints, opportunities, and academic needs into a resource that both informs and supports Broome Tioga's strategic goals.

Broome Tioga BOCES is in a period of significant growth. The district enrollment has increased by 515 students over the last 10 years, and has a projected student increase on the main campus of 334 students. The Master Plan provides a flexible framework for future campus growth that supports current decision making and also implements a long term vision.









INTRODUCTION

A well-designed campus presents a logical whole from the sum of its parts. The main focus of an educational institution will be on the students, but the buildings and grounds also hold high importance in defining its character and mission. New projects must contribute to and enhance the existing campus fabric, as well as support the educational needs of Broome Tioga BOCES.

This chapter defines the concept for aligning the long-term academic goals with the physical condition, public image, and student appeal. The Master Plan assists BT BOCES in building a community of learners with a place for all students, faculty, staff, and visitors to learn, meet, and work.











PLANNING PRINCIPLES

Planning principles guide the development of the physical campus and reflect the culture and needs of BT BOCES. The following planning principles were adopted to guide the development of the Master Plan.

- Provide physical and social spaces that will strengthen and enhance the human connection. The spaces can enhance interaction with local communities and the region.
- Provide facilities informed by best practices that support teaching and learning.
- Protect the natural and constructed resources of the campus. Expand the green spaces and integrate sustainable practices.

The Master Plan lists potential projects that line up with program, space, and alignment needs. Projects are put into two separate categories: academic and auxiliary.

Academic projects respond to the current and projected space deficiencies. Their goal is to add classrooms while increasing the use of new technology, allowing for flexible learning. Proposed projects include adding a CTE and PTECH addition, realigning program space, and relocating non-essential administrative areas for academic purposes.

Potential projects that involve partnerships with community and private organizations include a nursing center, an alternative middle school, and a West CTE Center. To gain a better understanding of the potential areas for major development, figure 4-1 illustrates potential campus growth. The areas identified are projects that would be in the 10-year horizon planning timeline. The areas can take on a greater or lesser importance, or may never be built at all.

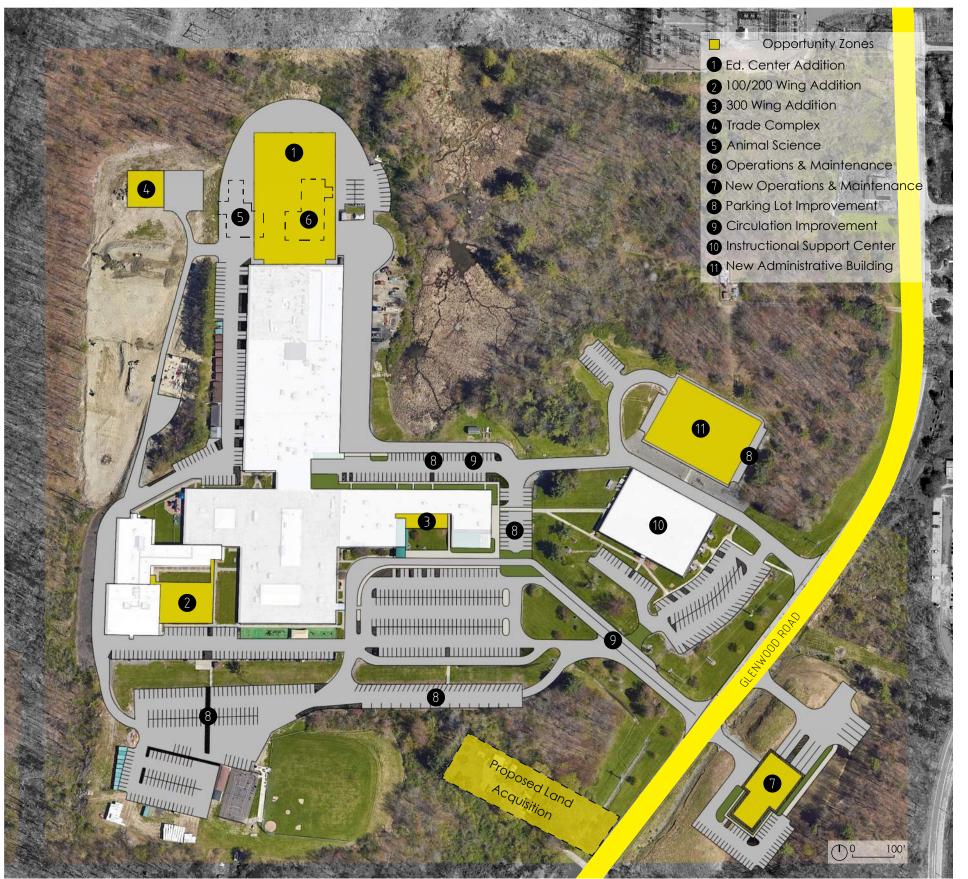


FIGURE 4-1: FUTURE FACILITY OPPORTUNITIES

PREFERRED OPTION

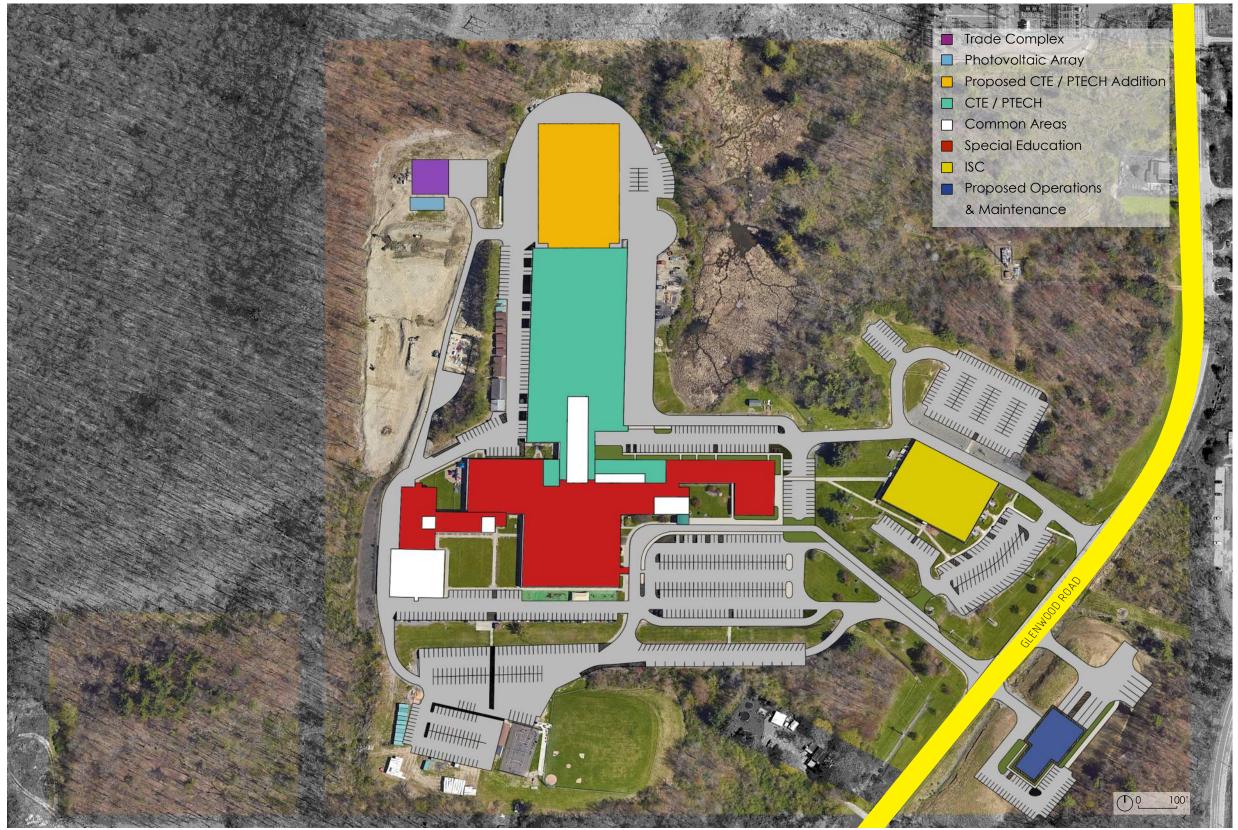


FIGURE 4-2: PREFERRED OPTION

PROJECT DESCRIPTIONS

ACADEMIC PROJECTS

1. Education Center addition and renovations: this would be a significant addition to the Education Center. This facility is the major academic building on campus. It houses primarily CTE, PTECH, and special education programs. The Education Center, built in 1972, is showing its age. The building condition survey conducted in 2020 identifies major systems in need of replacement. The systems identified are the exterior envelope, electrical systems, the HVAC system for the 100/200 wing, and the expansion/renovation of toilet rooms. The roofing was replaced in 2020 and 2022. The remainder of the identified work consists of deferred maintenance projects.

The proposed addition would provide approximately 65,000 gross square feet, primarily housing academic space and support functions. The building site is constricted but provides an opportunity to improve the bus loop, develop connections to the exterior, and improve the view of the campus. Another advantage an addition would provide is the creation of open space usable by both students and staff. As part of this project, the existing Animal Science Building and Maintenance Building demolition coincides with the completion of the addition. The project would reconfigure select areas of the building's interior, allowing for the improved functionality of programs and student circulation.

- 2. 100/200 wing addition: this project provides for the renovation and addition for academic-based activities.
- 3. Addition to the 300 wing: this project would add classroom space to the Education Center, allowing BOCES to meet future classroom needs.
- 4. The Trades Complex Building: the project responds to the changing industries that students face today. The facility will utilize solar power on the roof and an array field. This will provide students the opportunity to study the installation and service of various photovoltaic systems.

The building will also house space to repair and store heavy construction equipment as part of a CTE program. Future classroom space within the building can be planned to accommodate expanding educational needs.

5. Animal Science Building: the building foundation has deteriorated and will require a significant cost expenditure to assure its viability going forward. The demolition of this facility will provide space to construct the new addition to the Education Center.

AUXILIARY PROJECTS

- 6. Maintenance/Operations demolition: This building's viability for BOCES' use is diminishing due to its size and location. It will be removed to open up land for an addition to the Education Center.
- 7. New Maintenance/Operations Building: as BT BOCES continues to expand, there is a need for a future building that can accommodate the department's growing needs. BOCES has acquired land across the street from the campus core. This new location will increase the needed square footage, and it will also limit delivery vehicles on the main campus.
- 8. Parking improvement projects: these projects include necessary upgrades to the parking lots throughout campus, while also addressing the shortage of student parking.
- 9. Circulation improvements: the scope of work would entail rebuilding the main entry road to reduce peak morning congestion and improve vehicular circulation patterns.
- 10. Instructional Support Center renovations: interior renovations are currently in progress and address evolving administrative needs and priorities. The Master Plan proposes to repurpose the Career Development Center to a large conference space in the future.

- 11. Administrative Building project: this project would address relocating the administration staff and repurposing the existing ISC facility to classroom space. The Network Operations Center (NOC) located in the ISC is the regional network connection for fifty three school districts. The NOC was relocated in 2009 and would require a significant capital expenditure to transfer to a new location. An additional cost-benefit analyses should be conducted before a final decision is made to relocate the NOC. The project would be considered in the 10 year timeline based on student population growth.
- 12. Wayfinding and monument sign projects: these projects would add wayfinding signs throughout campus to improve circulation and identify the arrival to BOCES.
- 13. BOCES should consider purchasing the property at 409 Glenwood Road. The acquisition of this land would unify the southeast corner of the campus into a continuous area of approximately 4 acres that can be utilized for future expansion.

CIRCULATION NETWORK

VEHICULAR AND PEDESTRIAN CIRCULATION

The overall circulation on campus is good, but there are locations that can be improved. BOCES should pursue these improvements in several areas to benefit both drivers and pedestrians alike.

- An area of concern is the student parking area. A significant portion of BOCES transit, delivery, and personal vehicles use the road that bisects the parking lot to access the northern section of the campus. As vehicles travel along the road, they must pass through the student parking area, and then make a right turn through the crosswalk to access the remainder of the campus. Student drivers and pedestrians are put at risk while navigating this parking area. The Master Plan recommends BOCES should relocate the road to the north and create a parking lot without through traffic while adding more visible crosswalks and traffic control signage.
- To improve traffic circulation along the main entry, the road should be reconfigured. The entry operates poorly during the peak morning commuter hours. BOCES should further study this entry and consider adding a dedicated bus loop. They should also consider eliminating the south entry to the ISC parking. Reconfiguring the campus entry will improve traffic circulation and reduce congestion.

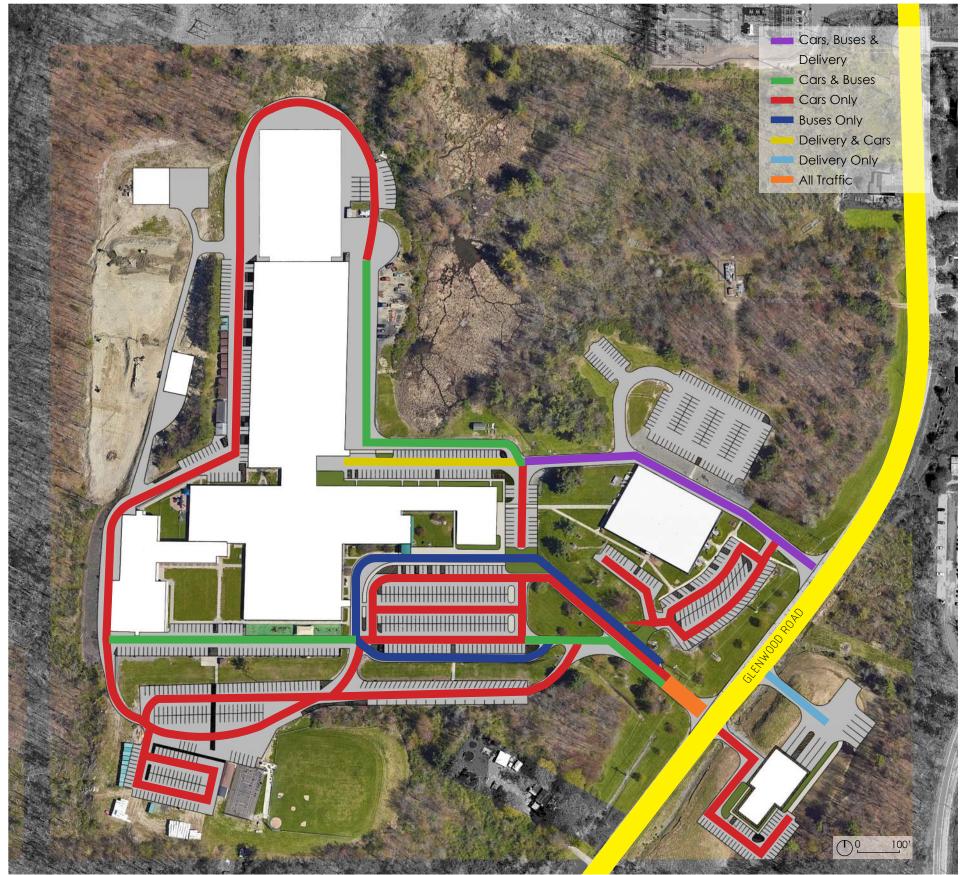


FIGURE 4-3: PROPOSED VEHICULAR CIRCULATION

• Relocate the bus loop along the 500 wing of the Education Center. The bus loop is currently in conflict with both pedestrians and vehicles that are frequently moved for automotive technology classes. Students must navigate between buses, which reduces the driver's field of vision and increases the possibility of an accident. Further study for relocating the bus loop should be explored. The construction of a proposed addition north of the 500 wing provides an opportunity to reduce vehicle circulation, improving both pedestrian and vehicular safety.



FIGURE 4-4: PROPOSED PEDESTRIAN CIRCULATION

PARKING

Although the overall parking supply is sufficient to handle the current staff and visitor demands, a deficiency exists for students. As the campus expands and the number of staff and students increases, it is important to ensure adequate parking is provided. Depending on the overall growth, the number of new parking spaces needed are estimated between 60-120. The construction of a proposed 500-wing addition will eliminate at least 40 spaces. Many of the spaces eliminated at the Education Center will be BOCES is also currently undertaking the replacement of the monument replaced by new spaces at the proposed Maintenance Building.

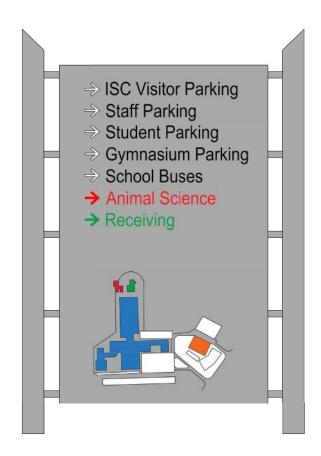
The Master Plan recommends adding new student parking at the end of the sign will direct visitors to the main entryway, as well as welcome them to 300 wing of the Education Center. More remote locations were explored, campus. but due to potential student vandalism, the Education Center was determined to be the preferred location. This parking lot will add 23 spaces. While new parking will eventually be needed, it is important that students be encouraged to utilize component district-provided transportation to reduce student parking.

The redevelopment of the upper south parking lot should be considered. There is the potential to increase this parking area by demolishing the current storage buildings and repurposing the land. By expanding the parking, it is possible to add 80 additional spaces.

WAYFINDING

BOCES is in the process of redesigning its wayfinding standards. This project has been an effort to unify both the appearance and location of wayfinding signage. The wayfinding plan also includes a sign schedule indicating the locations. BOCES will develop signage text and graphics to coordinate with the overall wayfinding standards.

sign adjacent to the main campus entry. The wayfinding and monument signs will share common materials to unify their appearance. The new



INFRASTRUCTURE

Development of the Master Plan provides BOCES an opportunity to assess BOCES has three major facilities that offer programs for at-risk individfuture utility needs. This includes investigating modern technologies that support the existing campus and anticipated future growth. Various systems have been considered and further exploration is needed to maximize striving to enhance the student experience. benefits.

Currently, there are two projects in the design phase:

- Upgrading electric service, transformer, and switchgear at the Education Center. The current electric service was installed in 1972 and is at the end of its useful life.
- BOCES facilities staff has concerns regarding the longevity of the heating/fresh air system for the 100/200 wing of the Education Center. The system is at the end of its useful life and is currently being investigated for the most appropriate replacement.

The replacement of fluorescent light fixtures is also an ongoing project. BOCES would like to replace all existing light fixtures with LED fixtures to save energy costs and reduce their carbon footprint.

The district would also like to explore options to replace individual rooftop units with a centralized HVAC system. Potential future replacement requires further study and continued evaluation to be conducted.

ACADEMIC LEASED SPACE **OPPORTUNITIES**

A priority for Broome Tioga BOCES is to provide a foundation for lifelong learning, social interaction, and living environments through a quality education. As a living/learning environment, academic success is greatly enhanced by teaching all students and preparing them to become productive citizens.

uals and emotionally/learning disabled students. These students require modern and safe environments. BT BOCES is reviewing these facilities,

• East Learning Center:

This facility requires continued evaluation for possible program relocation. The East Learning Center is a leased facility that has restricted opportunities to meet the current and future needs of the students. Green spaces have been linked to greater focus and higher academic sucess, so it would be beneficial for students to have those spaces in and around schools. The students require a place that will provide them with the opportunity to succeed, unburdened by external influences.

• West Learning Center:

This project would include replacing the original windows and expanding the parking area. Currently, the faculty and staff are double parking due to the lack of space. The parking expansion design is currently ongoing. The existing playground will be relocated to accomodate the expanded parking.

• Johnson City Learning Center:

Currently, the JCLC facility is underutilized. The adult education program can be relocated to the Education Center, and the large conference space relocated to the ISC. Repurposing space at other facilities will provide BOCES the opportunity to close the JCLC and reallocate resources to support other academic priorities and facilities.

ADMINISTRATIVE LEASED SPACE OPPORTUNITIES

Broome Tioga's steady growth has necessitated the acquisition of additional off-site work space. The planning team conducted focus group meetings with each department to assess their space needs. The overarching theme discovered was that the Regional Information Center (RIC), BOCES Business Office, and Central Business Office (CBO) had a surplus of space, despite steady employee increases. This surplus is a direct result of the increase in telecommuting; the new office model allows BOCES to potentially consolidate space and exercise fiscal prudence.

The BOCES Business Office currently employs 16 staff members and occupies a facility with 10,300 square feet on three floors. Based on the number of employees working in person, the department requires 2,370 square feet of space. The Business Office would then have a surplus of 7,430 square feet of space.

The CBO facility, a 15,821 square foot space capable of serving 59 employees, is similarly underutilized. The district has anticipated future staffing needs will require space for 26 employees, with the remainder working remotely. The workspace required based on accepted design standards is 4,000 square feet, which leads to an excess of 11,821 square feet.

In addition to remote work, the reconfiguration of space at the ISC has also reduced space requirements for the RIC. A significant amount of the department's office space is located in the Union Endicott District Office. BOCES leases 9,455 square feet of office space on the third floor, which cannot be reconfigured due to asbestos concerns. RIC office space needs have been greatly reduced due to telecommuting and being able to share space with other departments. The office space at Union Endicott can be consolidated at the ISC, reducing the needed space to 4,500 square feet.

A Loder Avenue facility project would entail a partial redevelopment of the interior to better serve the departments that reside there.

Telecommuting has dramatically changed how BOCES will utilize their leased space going forward, terminating the current lease agreements for BOCES Business Offices (204 Washington Ave) and RIC Offices (1100 East Main Street). This lease termination would allow BOCES to reapportion limited resources to better serve students and staff. The BOCES Business Office can be consolidated with the Central Business Office to take advantage of underutilized square footage at 100 Marshall Drive.

FUTURE PROJECTS

Providing state-of-the-art facilities to students would present new op- • New Energy NY Battery Grant Program portunities for educational enrichment. The Master Plan identifies four projects that BOCES is currently evaluating or pursuing:

• LPN nursing program:

BOCES would partner with local care facilities to open a nursing center in the Toe Box Building located at 19 Avenue B, Johnson City. Enrollment in 2023-2024 is estimated to be 45 students, with a projected enrollment to double to 90 students by 2025-2026. The space would provide a modern teaching facility adjacent to the medical district.

• Alternative Middle School at the Boys and Girls Club:

BOCES is currently exploring the possibility of relocating the alternative middle school from the East Learning Center to the Boys and Girls Club, located at 90 Clinton Street, Binghamton. Currently, BOCES operates two classrooms with 20 students total; enrollment in the school is expected to double to 40 students within two years. The East Learning Center is not an ideal area to host the Alternative Middle School, as it has limited space for projectbased learning, no green/recreational space, and does not meet the developmental needs of students. Leasing the Boys and Girls Club would provide BOCES with an ideal facility due to the close alignment of their missions. The club location will provide students with a safe environment in which to live, learn, and play.

• CTE West Learning Center:

Owego-Apalachin Central school district would be a potential location for BT BOCES to expand its CTE program. The location would serve students from Owego, Tioga, and Newark Valley. This opportunity requires continued evaluation regarding BOCES' repurposing it for its CTE program.

This project requires further evaluation. Currently, there isn't any space available at the Education Center to house this program. Classroom space is available at Chenango Forks School District.

CONCLUSION

The 2023 Broome Tioga Master Plan, guided by the administration, faculty, and staff, is a collective vision for BOCES future and ongoing transformation. The Master Plan will assist BOCES in determining future campus and organizational investments while also addressing today's complex challenges. This collective vision will guide the implementation for the construction of a new classroom addition, facility renovations, and consolidation of departments. The plan upholds the existing campus while identifying new opportunities to strengthen BOCES' mission to "enrich lives through education."

















