

DATE: May 15, 2020

SUBJECT: Master Plan Amendment – TCAT Shelbyville

ACTION RECOMMENDED: Approval

BACKGROUND INFORMATION

Campus master plans are an essential element of higher education public policy. Master plans provide an opportunity for long-range planning that incorporates the institution’s needs and ambitions, while also providing the public and state government a sense for how the institution might evolve over time. Whether the acquisition of strategic property, the need for and efficient use of facilities, or an analysis of how the campus footprint meshes with the surrounding community, master plans provide a method of anticipating and preparing for the future needs of the campus and the students it serves. THEC requires institutions to produce a master plan every ten years that addresses short-, mid-, and long-term needs of the campus with respect to building and land use, open space, vehicular circulation and parking, and land acquisition opportunities. Pursuant to THEC Policy 4.1.30B, institutions may amend a master plan in consideration of changes that are consistent with the objectives of the original plan.

MASTER PLAN SUMMARY

The proposed Master Plan Amendment to the 2014 Master Plan for TCAT Shelbyville will add a +/-20-acre property to the TCAT land acquisition plan for the purpose of relocating the current main campus to the new site. The site is approximately 4 miles from the existing campus, and is located on Frank Martin Road adjacent to the 231 Business Park, an industrial development project in Shelbyville.

The 2014 Master Plan recommended the expansion of program areas with the purchase of a different site - a 39,500 square foot building on 6.27 acres (the Bedford County Vocational Center) adjacent to the existing campus. That acquisition was deemed infeasible following a 7-year effort to implement the transaction. Currently Bedford County, the City of Shelbyville and local business leaders are working in partnership with TBR and TCAT Shelbyville to envision a new higher education center on the Frank Martin Road site. If approved, the property will be a gift by Bedford County and the City of Shelbyville.

The acquisition was approved by the Executive Subcommittee of the State Building Commission on March 23, 2020, contingent on THEC Commission approval to add this land to the TCAT land acquisition plan.

TCAT Shelbyville will submit a future capital outlay project to fully relocate the existing main campus, allowing the facilities to expand from the existing 81,882 square feet, constructed in 1964 on 8+ acres, to approximately 117,000 square feet. The new facility, named the Bedford County Higher Education Center, will allow for growth of existing programs and will add new proposed programs listed in the current Master Plan. Currently, the main campus cannot increase enrollment or add new programs due to space constraints. Bedford County plans to recruit new industry to an adjacent business park, utilizing training provided by TCAT Shelbyville in close proximity. The future prospective capital project, with an approximate cost of \$42.4 million, also proposes space for use by Motlow State Community College, MTSU, TTU, and UT.

During the Fall 2019 trimester, the student enrollment at the main campus was 408 headcount, and 405.8 FTE, and an additional 139 headcount and 136.8 FTE at five (5) other off-campus locations. An additional 120 headcount is expected Fall 2020 at the new Franklin County extension campus, 30 miles from the main campus. As of December 2019, TCAT Shelbyville has an 80% completion rate and an 89% placement rate. The existing campus offers the following programs: Administrative Office Technology, Automotive Technology, Computer Aided Design Technology, Industrial Electricity, Industrial Maintenance Automation, Information Technology and Infrastructure Management, Heating Ventilation A/C & Refrigeration (HVACR), Machine Tool Technology, Practical Nursing, Truck Driving, and Welding Technology. The campus plans to add Diesel Technology, Cosmetology, Supply Chain/Logistics, Farming Operations Technology, Dental Assisting, Construction Technology, and Surgical Technology based on industry needs and current master plan recommendations.

RECOMMENDATION

The proposed Master Plan Amendment is consistent with the objectives of the 2014 Statewide Master Plan for expansion of the TCAT Shelbyville campus in consideration of local industry workforce development opportunities. The land acquisition plan revision was recommended by the original Master Plan consultant, Woody Giles of TSW on February 26, 2020. The approval of the amendment does not represent a future recommendation of the outlay project needed to relocate the campus. THEC staff recommends this Master Plan Amendment for approval.



TENNESSEE COLLEGE OF APPLIED TECHNOLOGY

SHELBYVILLE

The Tennessee College of Applied Technology Shelbyville is located on Madison Street/State Highway 16, about two miles east of downtown Shelbyville and about a 20 minute drive from Interstate 24.

The campus consists of one interconnected group of buildings. There is also a mobile truck driving classroom north of the main building. Buildings total 81,882 gross square feet. During the 2012-2013 academic year, TCAT Shelbyville had an adjusted full-time equivalent enrollment of 295 students.

WORKFORCE INVESTMENT AREA 6



TCAT Shelbyville is located in the seven-county area of Local Workforce Investment Area 6



REGIONAL CONTEXT

The Tennessee College of Applied Technology Shelbyville is located in Local Workforce Investment Area 6, which consists of Bedford, Moore, Coffee, Lincoln, Franklin, Grundy, and Warren Counties. The population of this region was 232,171 as of 2010. There were 69,374 primary jobs as of 2011.

Between 2010 and 2020, population in the region is expected to grow at the same rate as the state as a whole. This indicates that job growth may be consistent with that expected statewide. Worker age profiles are similar to those for the state as a whole, although the region has a slightly higher percentage of older workers. There are significantly fewer workers in the region with salaries above \$40,000.

Educational attainment in the region lags behind that in Tennessee as a whole. Compared to the statewide average, 3% fewer residents of the region have a high school diploma or equivalent, and 6% fewer residents have a Bachelor's degree or higher.

According to the U.S. Census, the following industry sectors occupy a significantly higher percentage of the regional labor pool compared to the statewide average: agriculture, forestry, fishing & hunting; utilities; manufacturing; and educational services.

The following industry sectors occupy a significantly lower percentage of the regional labor pool compared to the statewide average: wholesale trade; transportation & warehousing; information; finance & insurance; real estate & rental & leasing; management of companies & enterprises; health care & social assistants; arts, entertainment & recreation; accommodation & food services; and other services.

The regional employment outlook by industry cluster shown on page 466 comes from the Occupational Trends in Tennessee Employment Report (OTTER) from the Tennessee Department of Labor. All data are shown for Local Workforce Investment Area 6, which includes Shelbyville, except for Industrial Maintenance data, which is only available for the state as a whole.

According to this data, all industry demand clusters related to programs taught at TCAT Shelbyville are expected to grow between 2012 and 2020 except for Machine Tool Technology.

POPULATION

| | LWIA 6 | Tennessee |
|-----------------------------|---------|-----------|
| 2000 Population | 247,779 | 5,689,283 |
| 2010 Population | 232,171 | 6,346,105 |
| 2020 Population (projected) | 251,996 | 6,894,708 |
| Annual Growth (projected) | 0.8% | 0.8% |

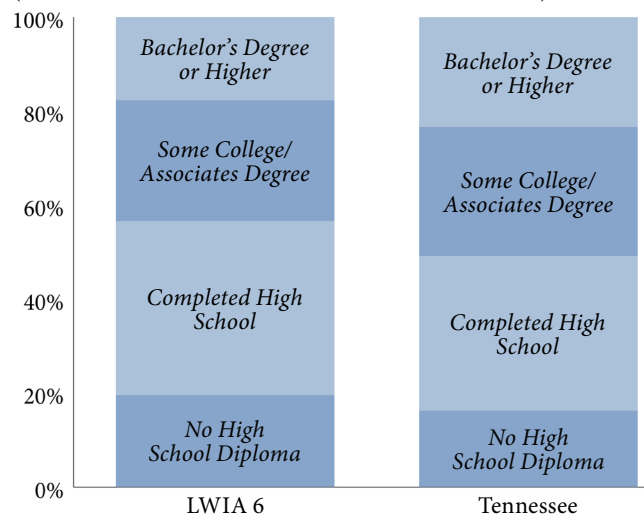
Source: U.S. Census, Tennessee State Data Center

EMPLOYMENT BY AGE AND SALARY (2011)

| | LWIA 6 | Tennessee |
|------------------------------------------|--------|-----------|
| Total Primary Jobs | 69,374 | 2,478,765 |
| Jobs held by those age 29 and younger | 21% | 23% |
| Jobs held by those age 30 to 54 | 57% | 57% |
| Jobs held by those age 55 and older | 22% | 20% |
| Jobs with salary of \$15,000 or less | 22% | 22% |
| Jobs with salary of \$15,000 to \$40,000 | 48% | 42% |
| Jobs with salary of \$40,000 or higher | 30% | 37% |

Source: U.S. Census On The Map

2012 EDUCATIONAL ATTAINMENT (PERCENT OF POPULATION AGE 25+)



Source: U.S. Census

EMPLOYMENT BY INDUSTRY SECTOR (2011)

| | LWIA 6 | Tennessee |
|----------------------------------------------------------|--------|-----------|
| Agriculture, Forestry, Fishing & Hunting | 1.3% | 0.3% |
| Mining, Quarrying, & Oil & Gas Extraction | 0.2% | 0.1% |
| Utilities | 1.2% | 0.7% |
| Construction | 4% | 4.1% |
| Manufacturing | 24.4% | 12.4% |
| Wholesale Trade | 3.2% | 4.7% |
| Retail Trade | 11.6% | 12.1% |
| Transportation & Warehousing | 2.9% | 5.0% |
| Information | 1.1% | 1.8% |
| Finance & Insurance | 2.8% | 4.1% |
| Real Estate & Rental & Leasing | 0.7% | 1.2% |
| Professional, Scientific, & Technical Services | 4.9% | 4.3% |
| Management of Companies & Enterprises | 0.7% | 1.2% |
| Administration & Support, Waste Management & Remediation | 6.1% | 6.5% |
| Educational Services | 12% | 9.4% |
| Health Care & Social Assistance | 10.9% | 14.3% |
| Arts, Entertainment, & Recreation | 0.4% | 1.0% |
| Accommodation & Food Services | 6.1% | 8.7% |
| Other Services (excluding Public Administration) | 1.4% | 2.7% |
| Public Administration | 4.1% | 5.3% |

Source: U.S. Census On The Map

The job outlook in all industry clusters takes into consideration the following factors:

- Growth rate in the industry cluster relative to the statewide growth rate for that industry cluster
- Number of annual job openings
- Supply demand ratio (the ratio of graduates of programs in all related higher education programs to the number of job openings)

Based on these factors, the following programs are predicted to have an excellent job outlook in the region: Computer Information Technology and Industrial

The region's population growth, low educational attainment, and lower than average wages are evidence of a continued need for technical education.



Electricity. The Truck Driving program is expected to have favorable job prospects.

The following programs are expected to have a more competitive job market, in part due to the higher number of graduates in these fields relative to the number of anticipated job openings: Automotive Technology, Business Systems Technology, Practical Nursing, and Welding Technology.

Five of the industry demand clusters related to existing programs are shown as ungraded, primarily due to the low number of jobs and graduates in this rural region.

PROGRAM ANALYSIS

The regional context above shows broader trends in the region. In order to obtain a more detailed picture of the needs of each program, the master planning team interviewed members of the campus administration, members of the Business and Industry Advisory Group, and key faculty. In addition, all faculty were invited to participate in an online survey.

The following paragraphs summarize the results of the input received by these methods for each program. The Industrial Maintenance program is offered during the evening as well as during the day.

Enrollment in the **Auto Body/Collision Repair** program is expected to remain steady in the next five years.

The **Automotive Technology** program is expected to experience an increase in enrollment in the next five years, based on increasing demand for graduates in the field.

REGIONAL EMPLOYMENT OUTLOOK BY INDUSTRY CLUSTER (2012-2020)

| Program | Related Industry Demand Cluster(s) | Graduates to Jobs Ratio | Average Annual Growth in Jobs | Job Outlook |
|----------------------------------------------|----------------------------------------------------------------|-------------------------|-------------------------------|----------------------|
| Auto Body/ Collision Repair | Collision Repair Technology | 2.7 | 1.4% | Ungraded |
| Automotive Technology | Automotive Technology | 4.3 | 1% | E (Very Competitive) |
| Business Systems Technology | Administrative and Information Support | 2 | 1.1% | D (Competitive) |
| Computer Information Technology | Web/Multimedia Management Programming | 0.7 | 1.8% | A (Excellent) |
| Drafting and CAD Technology | Drafting and Design Technology | 0 | 2.1% | Ungraded |
| Heating, Ventilation, A/C & Refrigeration | Construction HVAC/R | 0 | 2.1% | Ungraded |
| Industrial Electricity | Construction Electrical | 0.4 | 1.6% | A (Excellent) |
| Industrial Maintenance* | Operations and Maintenance | 0.5 | 0.8% | B (Very Good) |
| Machine Tool Technology | Precision Production Pathway | 0.1 | -0.1% | Ungraded |
| Practical Nursing (LPN) | Practical Nurse (LPN) | 6.7 | 1.7% | E (Very Competitive) |
| Truck Driving | Truck, Bus, Rail, Water Transportation, and Heavy Equipment | 1.2 | 1.3% | C (Favorable) |
| Welding Technology | Construction Welding | 2.5 | 0.2% | D (Competitive) |

Data shown is for Local Workforce Investment Area 6

Source: Tennessee Department of Labor & Workforce Development, Labor Market Information Section

Ungraded programs are those without enough jobs or graduates to count, a negative job growth rate, or fewer than 10 placements

*Information for this program is based on statewide data because regional data is not available

Demand for graduates of the **Business Systems Technology** program is expected to increase as the new curriculum is implemented statewide and local demand remains strong.

Enrollment in the **Drafting and CAD Technology** is expected to increase during the next five years as the industry grows and technology changes.

Demand for graduates of the **Computer Information Technology** program is expected to increase in the coming years. Interest in this program is consistently high.

Strong job growth is expected to lead to an increase in demand for graduates of the **HVACR** program over the next five years.

Enrollment in the **Industrial Electricity** and **Industrial Maintenance** programs is expected to increase as workers reach retirement age and the

regional manufacturing sector expands. Interest in these programs is consistently high.

The **Machine Tool Technology** program is expected to increase in enrollment as manufacturing jobs in the region increase.

Demand for graduates of the **Practical Nursing (LPN)** program is expected to increase, but the health care sector is not strong in the region. Interest in this program is consistently high.

The **Truck Driving** program is expected to increase in enrollment in the next five years due to a continued need for graduates in the region and beyond.

The **Welding Technology** program is expected to increase enrollment in the next five years due to an aging workforce and regional industry growth.

COMPLETION RATES BY PROGRAM (2012-2013)

| Program | Enrollment Headcount | Completion Count | Completion Rate | Statewide Average |
|-------------------------------------------|----------------------|------------------|-----------------|-------------------|
| Auto Body/Collision Repair Technology | 16 | 9 | 56% | 79% |
| Automotive Technology | 17 | 12 | 71% | 83% |
| Business Systems Technology | 64 | 45 | 70% | 80% |
| Computer Information Technology* | 98 | 90 | 92% | 84% |
| Drafting and CAD Technology | 17 | 14 | 82% | 80% |
| Heating, Ventilation, A/C & Refrigeration | 16 | 14 | 88% | 84% |
| Industrial Electricity | 33 | 28 | 85% | 86% |
| Industrial Maintenance | 48 | 42 | 88% | 87% |
| Machine Tool Technology | 29 | 23 | 79% | 87% |
| Practical Nursing | 72 | 49 | 68% | 79% |
| Truck Driving | 29 | 26 | 90% | 93% |
| Welding Technology | 37 | 32 | 87% | 89% |
| Total/Average | 488 | 394 | 81% | 84% |

Source: Tennessee Board of Regents Central Office

*Some portion of this program may be taught online

PLACEMENT RATES BY PROGRAM (2012-2013)

| Program | Available for Placement | Placement Count | Placement Rate | Statewide Average |
|-------------------------------------------|-------------------------|-----------------|----------------|-------------------|
| Auto Body/Collision Repair Technology | 8 | 8 | 100% | 86% |
| Automotive Technology | 12 | 9 | 75% | 87% |
| Business Systems Technology | 42 | 22 | 52% | 76% |
| Computer Information Technology | 78 | 68 | 87% | 77% |
| Drafting and CAD Technology | 14 | 12 | 86% | 84% |
| Heating, Ventilation, A/C & Refrigeration | 14 | 13 | 93% | 85% |
| Industrial Electricity | 28 | 27 | 96% | 86% |
| Industrial Maintenance | 42 | 39 | 93% | 83% |
| Machine Tool Technology | 23 | 23 | 100% | 88% |
| Practical Nursing | 47 | 43 | 92% | 90% |
| Truck Driving | 26 | 24 | 92% | 94% |
| Welding Technology | 30 | 26 | 87% | 85% |
| Total/Average | 374 | 322 | 86% | 85% |

Source: Tennessee Board of Regents Central Office

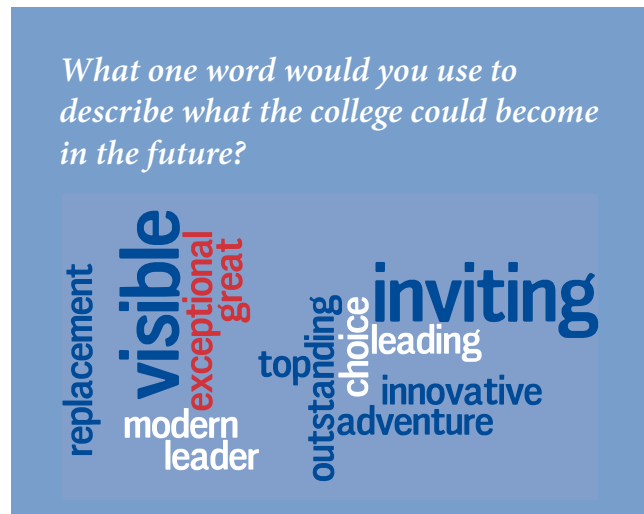
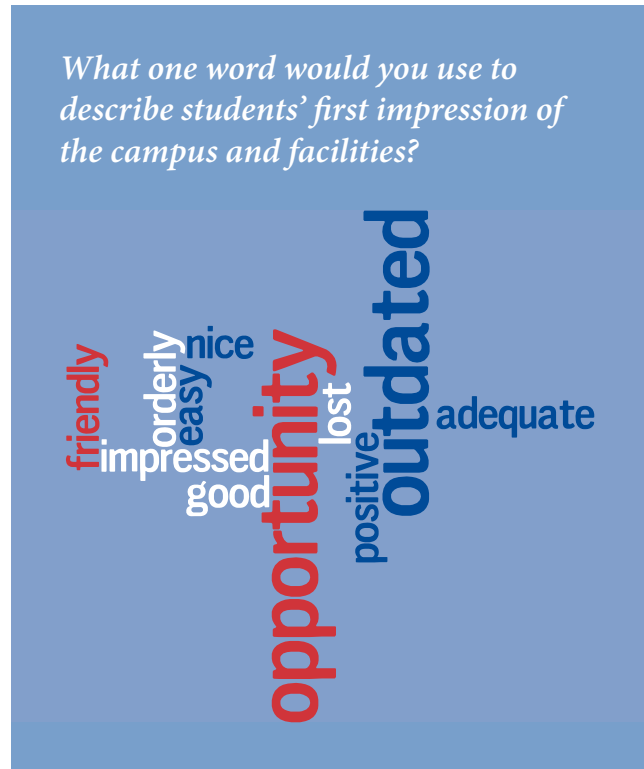
*Some portion of this program may be taught online

POTENTIAL FUTURE PROGRAMS

The TCAT Shelbyville main campus hopes to add the following programs in the near future: cosmetology, surgical technology, and electronics technology.

Based on data from the Tennessee Department of Labor, the following industries have excellent or very good job outlooks, but there are not currently any programs at TCAT Shelbyville that meet these industries' needs: veterinary technology, accounting administrative support, banking & finance support services, and restaurants & food & beverage services.

Local industry leaders mentioned the construction and green technology job sectors as potentials for the campus to address with new programs.



The "wordles" above are based on responses to the online survey

SPACE NEEDS

The master planning team performed a detailed space audit of the Tennessee College of Applied Technology Shelbyville in order to obtain the most up-to-date room inventory. Room areas and use codes were updated as needed; a list of updates was provided to the campus.

Numbers from the updated space audit, combined with adjusted FTE enrollment data provided by the Tennessee Board of Regents central office (see table on following page) and employee counts provided by the campus, served as the inputs for the space model that calculated needed space. For details regarding the model and an explanation of its methodology, see Appendix A.

As shown in the chart at right, the model shows that there is a need for additional **faculty office space**. Faculty surveys confirmed this fact. The model also shows a surplus of **administrative office space**. This may indicate the possibility for more efficient use of space.

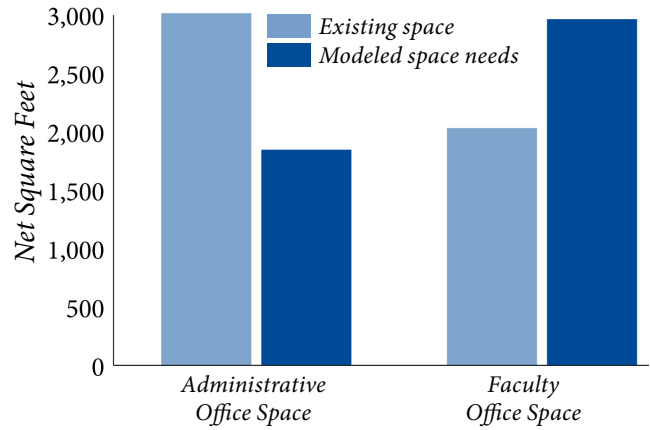
The chart at center right compares four existing types of space with modeled space needs in those categories. **Open computer lab space**, which includes space for Technology Foundations, testing, and open computer labs, shows a significant need for more space.

The model shows a significant existing surplus of **food service space**. This category includes student lunch rooms or lounges, vending machine areas, and the like. This number is likely high because of the existing cafeteria and covered outdoor dining area. Shelbyville is one of only two TCAT campuses to serve hot food.

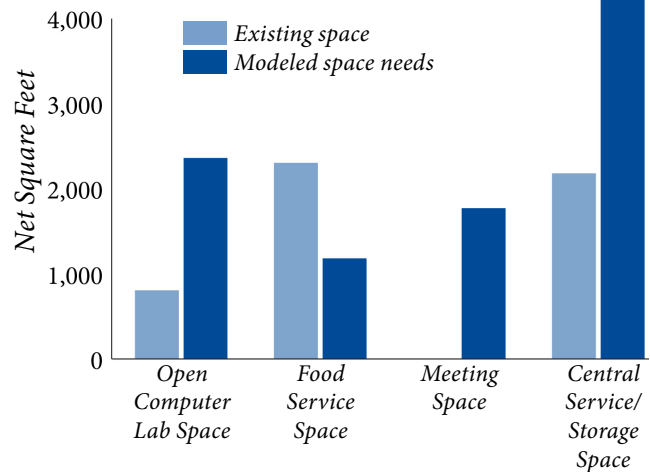
Meeting space includes space available for community use, staff meetings, and large gatherings of students. There is currently no such space on campus, so the model shows a significant need. This space is important for its role in marketing to the regional community.

Central service and storage space does not include storage and service space for individual programs or for offices. It includes storage for campus-wide supplies, maintenance and janitorial supplies, surplus equipment, vehicle storage, and the like. The model shows that this type of space would need to double to be adequate. The campus identified a need for additional server space.

OFFICE SPACE NEEDS



OTHER SPACE NEEDS



NON-TEACHING SPACE NEEDS

| | Existing Assignable Sq. Ft. | Additional Space Needed (Sq. Ft.) |
|-------------------------|-----------------------------|-----------------------------------|
| Administrative Offices | 3,015 | -1,169 |
| Faculty Offices | 2,031 | 933 |
| Open Computer Labs | 806 | 1,556 |
| Food Service | 2,305 | -1,124 |
| Meeting Space | 0 | 1,772 |
| Central Service/Storage | 2,181 | 2,249 |

Each space category includes related support space such as conference rooms and storage closets; negative numbers indicate a space surplus

The chart on the following page shows the model's calculated needs for **teaching space** for each program. Teaching space is the sum of classroom and lab (also referred to as shop) space, as well as any storage or other space that directly supports teaching space.

Bars that extend to the right in the chart indicate a need for more space, while bars that extend to the left show a surplus of existing space. Where the bars show both surplus and need, the amount of existing space is within the acceptable range.

Because the model assumes a range of acceptable space, the darker blue bars show the minimum amount of space needed and the lighter blue bars show the maximum amount of space needed. All calculations are based on existing enrollment rather than capacity, so modeled needs would increase with enrollment. Adjusted FTE enrollment numbers include dual enrollment high school students.

The following paragraphs summarize each program's space needs, based on the results of the model, interviews with faculty and administrators, and online survey responses.

- The model shows that teaching space for the **Auto Body/Collision Repair** program needs to expand by between approximately 600 and 1,800 square feet to be adequate to serve current enrollment. The campus also indicated needs for additional space.
- The existing amount of lab space for the **Automotive Technology** program is at the low end of the acceptable range according to the model. The campus expressed needs for additional space to relieve overcrowding and allow for newer technology. Classroom space needs to expand according to the model.
- The **Business Systems Technology** program has a surplus of space according to the model and based on current enrollment. The campus indicated that the existing amount of space is adequate.
- **CAD Technology** also shows an existing surplus of space according to the model, as confirmed by the campus.
- The **Computer Information Technology** program would need between approximately 1,400 and 1,800 square feet more teaching space than it currently has to meet the needs of existing enrollment. The campus confirmed this need.

ADJUSTED FTE ENROLLMENT

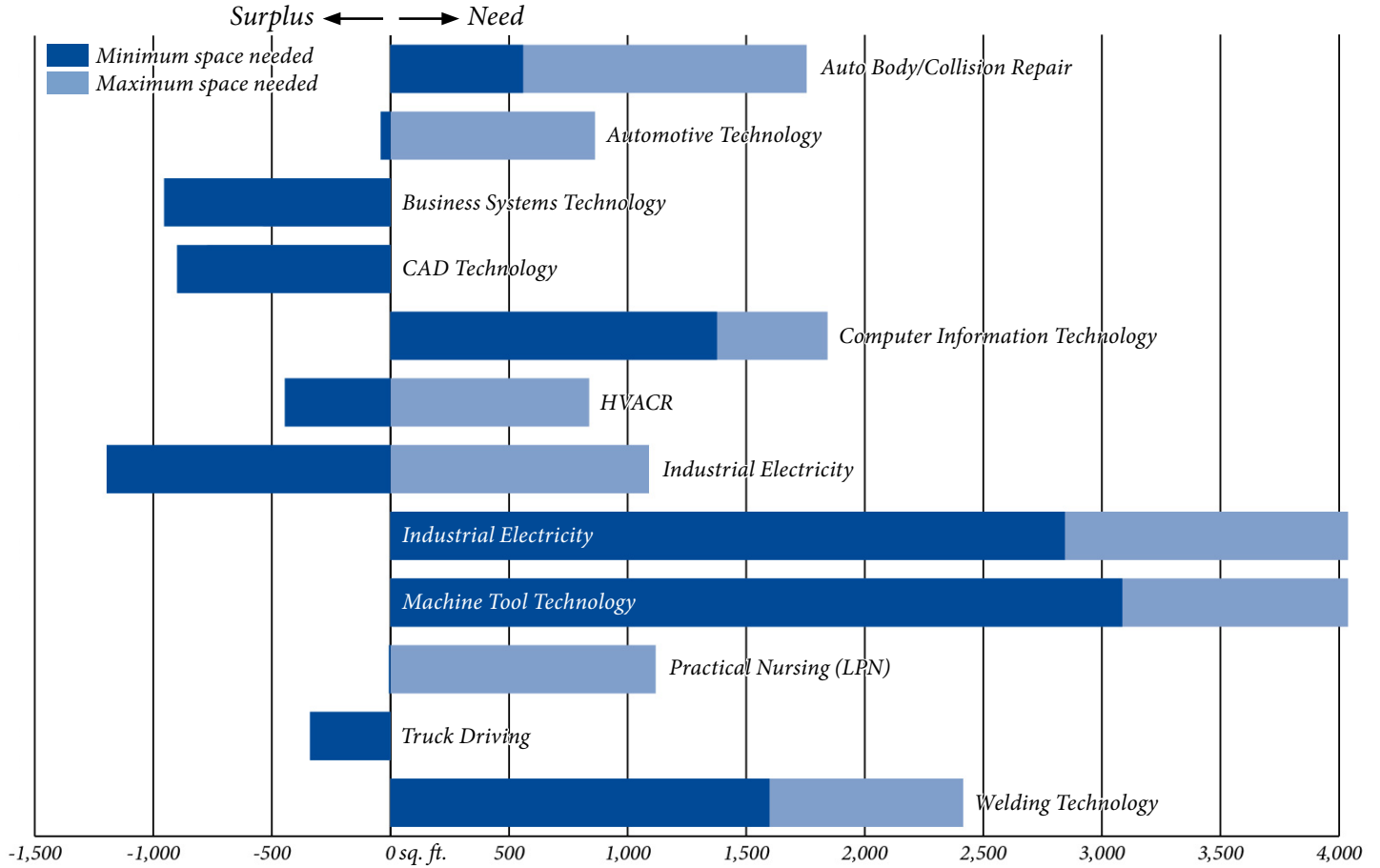
| | 2012-2013 Enrollment |
|---------------------------------|-------------------------|
| Auto Body/Collision Repair | 15 |
| Automotive Technology | 15 |
| Business Systems Technology | 42 |
| CAD Technology | 13 |
| Computer Information Technology | 47 |
| HVACR | 17 |
| Industrial Electricity | 23 |
| Industrial Maintenance | 39 |
| Machine Tool Technology | 27 |
| Practical Nursing (LPN) | 37 |
| Truck Driving | 4 |
| Welding Technology | 16 |
| Total | 295 |

Enrollment is based on total contact hour data for the 2012-2013 academic year and assumes 1,296 contact hours per full-time equivalent student

Source: Tennessee Board of Regents Central Office

- The existing amount of lab space for the **HVACR** program is within the acceptable range according to the model. The campus indicated that space would need to expand to accommodate non-residential HVACR equipment in the future. Classroom space is also adequate.
- The existing amount of lab space for the **Industrial Electricity** program is within the acceptable range according to the model, although the campus expressed some needs for additional space. Classroom space is adequate.
- The **Industrial Maintenance** program would need to expand its lab space by between 2,800 and 6,800 square feet to meet current needs. The need for more space was confirmed by the campus. The existing small classroom is also inadequate.
- The model shows that the **Machine Tool Technology** program would need to expand its lab space by at least 3,100 square feet to meet current needs, although the campus indicated that the existing quantity of space is enough based on current equipment. Classroom space is adequate for this program.
- The **Practical Nursing** program would need to expand by up to 1,100 square feet to meet existing needs. The campus confirmed the need for more space. There is a surplus of existing classroom space.

TEACHING SPACE NEEDS



TEACHING SPACE NEEDS

| | Total Existing Classroom & Lab Space | Minimum Additional Space Needed | Maximum Additional Space Needed |
|---------------------------------|--------------------------------------|---------------------------------|---------------------------------|
| Auto Body/Collision Repair | 5,920 | 559 | 1,755 |
| Automotive Technology | 4,755 | -41 | 862 |
| Business Systems Technology | 3,037 | -954 | -538 |
| CAD Technology | 1,910 | -900 | -773 |
| Computer Information Technology | 3,471 | 1,377 | 1,843 |
| HVACR | 3,939 | -445 | 838 |
| Industrial Electricity | 4,031 | -1,196 | 1,090 |
| Industrial Maintenance | 4,012 | 2,844 | 6,785 |
| Machine Tool Technology | 5,585 | 3,086 | 4,692 |
| Practical Nursing (LPN) | 3,153 | -6 | 1,118 |
| Truck Driving | 839 | -339 | -339 |
| Welding Technology | 2,989 | 1,598 | 2,415 |

All numbers shown are in assignable square feet and include related support space related to each program, such as storage closets and tool rooms; negative numbers indicate a space surplus

DETAILED TEACHING SPACE NEEDS

| | Existing Classroom Space | Additional Classroom Space Needed | Existing Lab Space | Minimum Additional Lab Space Needed | Maximum Additional Lab Space Needed |
|---------------------------------|--------------------------|-----------------------------------|--------------------|-------------------------------------|-------------------------------------|
| Auto Body/Collision Repair | 376 | 124 | 5,544 | 435 | 1,631 |
| Automotive Technology | 420 | 80 | 4,335 | -121 | 782 |
| Business Systems Technology | 0 | 0* | 3,037 | -954 | -538 |
| CAD Technology | 0 | 0* | 1,910 | -900 | -773 |
| Computer Information Technology | 683 | 433 | 2,788 | 941 | 1,407 |
| HVACR | 672 | -172 | 3,267 | -273 | 1,010 |
| Industrial Electricity | 523 | 26 | 3,508 | -1,222 | 1,064 |
| Industrial Maintenance | 354 | 587 | 3,658 | 2,253 | 6,193 |
| Machine Tool Technology | 648 | -10 | 4,937 | 3,092 | 4,698 |
| Practical Nursing (LPN) | 1,764 | -865 | 1,389 | 859 | 1,983 |
| Truck Driving | 839 | -339 | 0 | 0** | 0** |
| Welding Technology | 437 | 63 | 2,552 | 1,535 | 2,352 |

All numbers shown are in assignable square feet and include related support space related to each program, such as storage closets and tool rooms; negative numbers indicate a space surplus

*The model assumes that these programs do not need separate classroom space

**The model assumes that the Truck Driving program does not need indoor lab space

- The **Truck Driving** program does not need indoor lab space and so is not addressed by the model, although a surplus of existing classroom space is indicated, probably due to the existing low enrollment. The campus expressed that the amount of existing space is adequate.
- Lab space for the **Welding Technology** program needs to increase by at least 1,600 square feet according to the model. This need was confirmed by the campus. The model and the campus indicate a need for more classroom space.



A number of programs have needs for more lab space

SPACE RECOMMENDATIONS

The following recommendations offer a potential set of solutions to address the space needs identified above. The acquisition of the Bedford County Vocational Center building would allow some programs to be relocated to that building and have expanded space, as well as the creation of new programs. The space vacated by these programs could then be backfilled by other programs in need of space as shown on the following page.

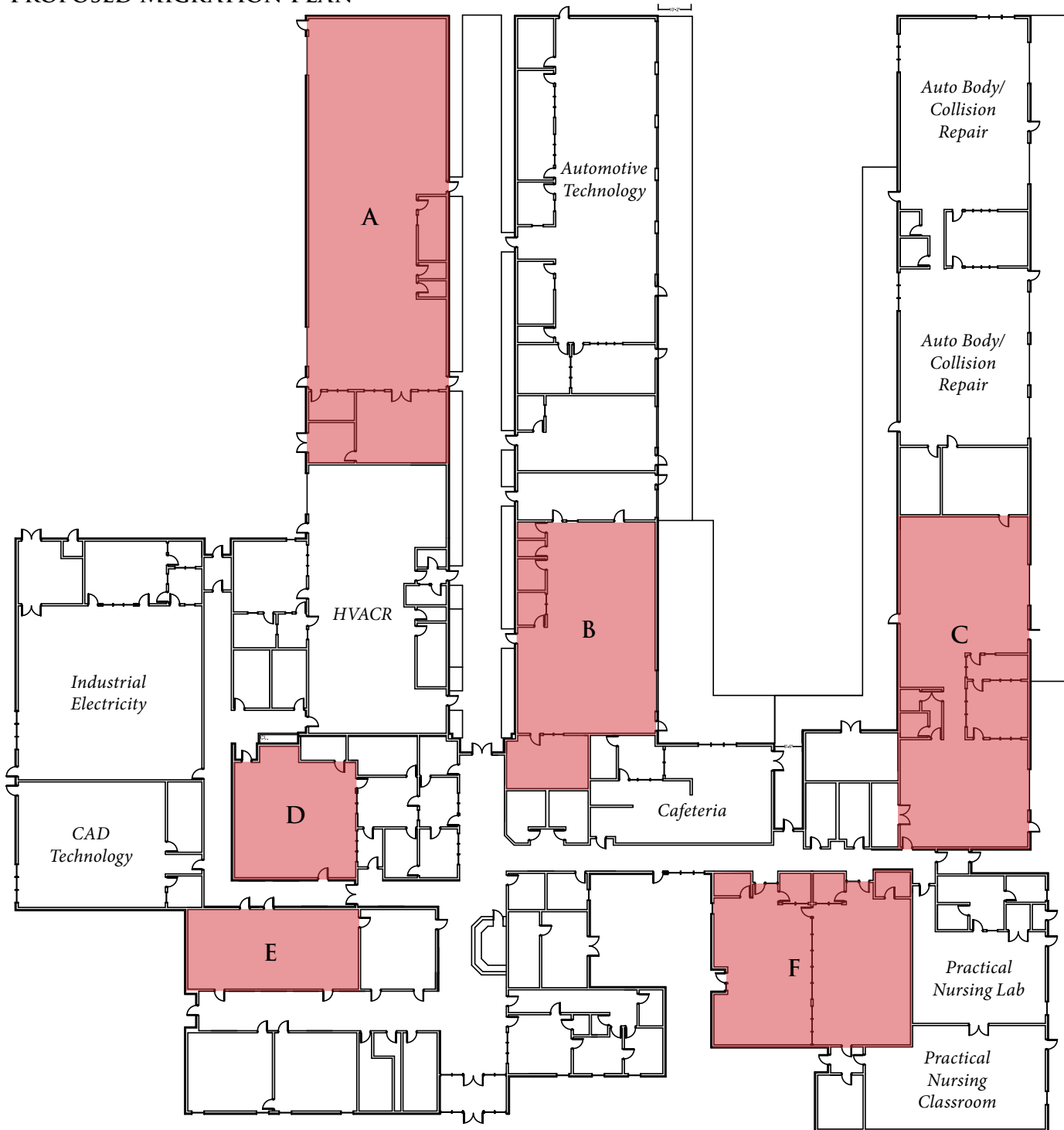
- The Vocational Center building, estimated at 39,500 square feet, should be purchased. The existing Industrial Maintenance, Machine Tool and Business Systems Technology programs should be relocated to this building, along with the proposed Electronics Technology program.
- The Welding program should be relocated to the existing Industrial Maintenance space. This would expand Welding space by 1,100 square feet. The former Welding space should be converted for the proposed Cosmetology program.
- The Computer Information Technology (CIT) program should be relocated to the former Machine Tool space. This would expand CIT space by 2,100 square feet. Existing CIT space should be converted to an open computer lab (rooms 108-109) and meeting space (room 119).
- The existing Practical Nursing program should expand to incorporate the former Business Systems Technology space. Some of this space could also be used for the proposed Surgical Technology program.
- The existing Truck Driving mobile classroom should be replaced with a new mobile classroom.

The acquisition of the adjacent Vocational Center building would allow programs to relocate into a larger space, as well as enabling other programs to expand in the existing building, and providing space for proposed programs.



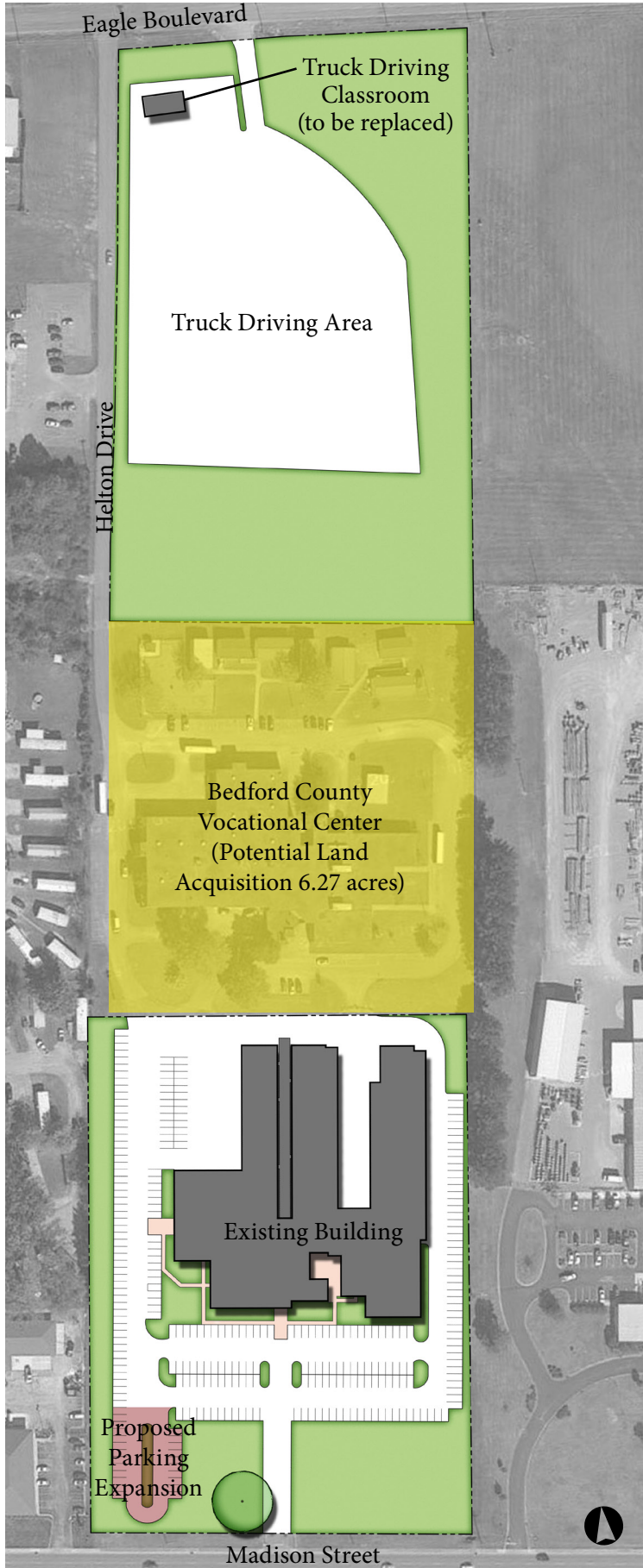
| Key | Existing Use | Proposed Use |
|-----|----------------------------------------|----------------------------------------------------------|
| A | Machine Tool Lab & Classroom | Computer Information Technology Lab & Classroom |
| B | Welding Lab & Classroom | Cosmetology Lab & Classroom |
| C | Industrial Maintenance Lab & Classroom | Welding Lab & Classroom |
| D | Computer Information Technology Lab | Meeting Room |
| E | Computer Information Technology Lab | Open Computer Lab |
| F | Business Systems Technology Lab | Practical Nursing Lab & Proposed Surgical Technology Lab |

PROPOSED MIGRATION PLAN



Floor plans were provided by the campus and may not be to scale or accurately reflect existing conditions

PROPOSED SITE IMPROVEMENTS & LAND ACQUISITION



FACILITIES NEEDS

A comprehensive facilities needs assessment was conducted by architectural and engineering representatives of the master planning team. The detailed results and comments of that assessment have been documented in the online Physical Facilities Survey. The primary needs are as follows:

- The existing boiler system is aging.
- The air handling unit in room 188 is original to the building and has exceeded its life span.
- Some plumbing fixtures observed in the lab areas are aging.
- The existing roof-mounted make-up air unit is no longer in use. Several roof mounted exhaust fans appear to have reached their expected life span
- The electrical system in the front portion of the building (Computer Information Technology program) is at capacity. The balance of the electrical system has some spare capacity.
- Twelve different locations were observed with shear or step cracking. Most cracking appears to be within expected settlement for a building of this age.
- In rooms 160 (Automotive Technology Lab) and 178 (Welding Technology Lab), the metal bar joist has multiple locations where the lateral “X” bracing support is missing.
- The Truck Driving classroom building is showing structural stress in the floor system. The building is also not compliant with ADA standards for access, doors, or restroom fixtures and accessories.
- The HVAC unit for the Truck Driving classroom building is mounted directly on the ground with no concrete pad or condensate drain. The wiring to the unit has been pulled away from the wall mounted disconnect.



The mature oak tree serves as a prominent entry feature to the campus and should be preserved

SITE NEEDS

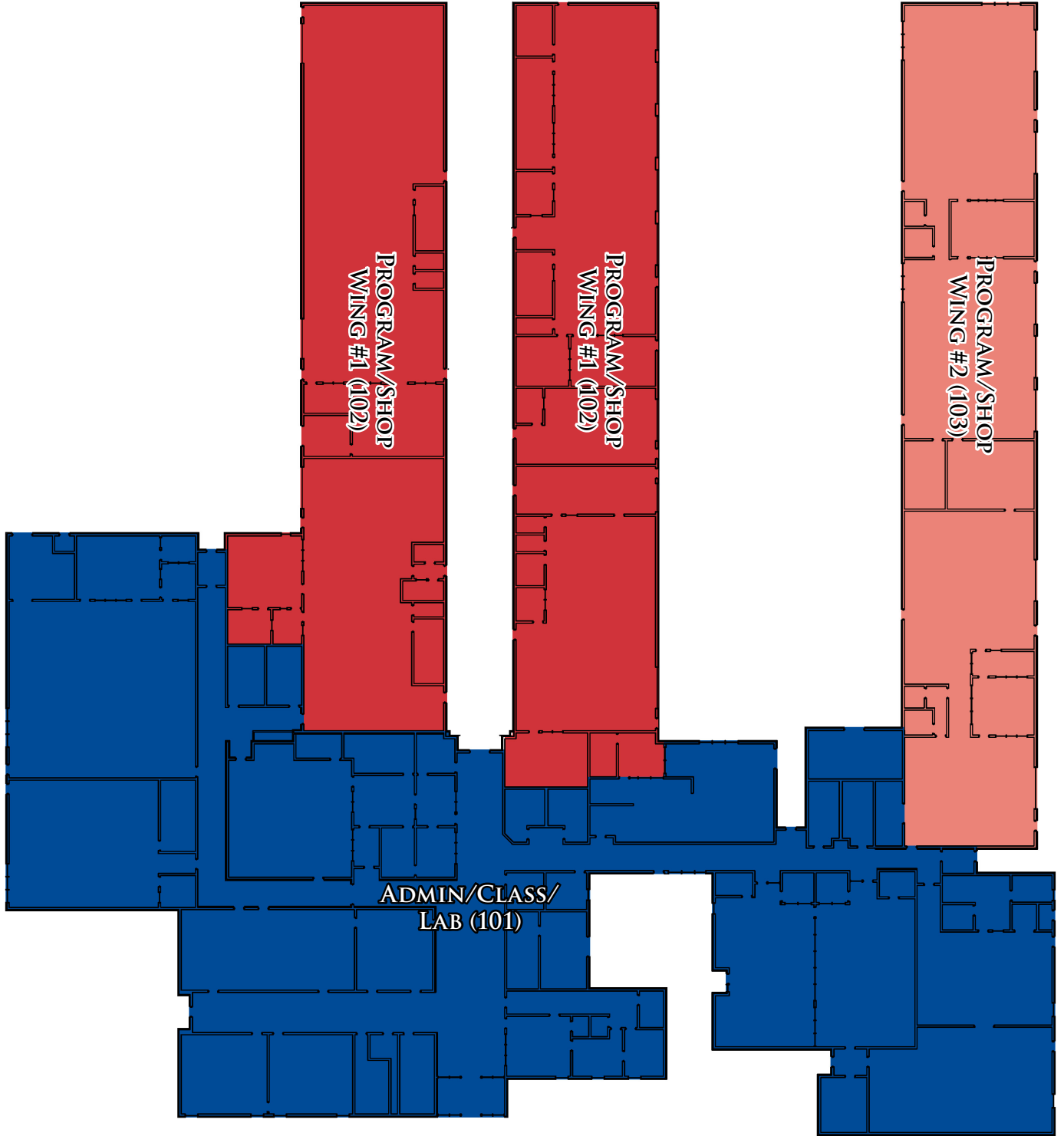
In addition to the proposed acquisition, migration, and renovations shown above, a few other site improvements are recommended. The parking lot and driveways have several potholes and cracks that need patching. There is also some erosion in the ditch at the north end of the property, next to the truck driving area.

According to parking ratio assumptions developed as part of this Master Plan, and based on the existing number of students, faculty, administrators, and staff on the Main Campus, there is currently a deficit of 59 parking spaces. In order to address this, a small expansion of existing parking is recommended at the front (south end) of campus.

BUILDING CLARIFICATION DIAGRAM



inset



PHYSICAL FACILITIES SURVEY RATINGS SUMMARY

| System | | Admin/Class/Lab, Program/ Shop Wings #1 and #2 | TD Classroom |
|--------------|-------------------------|---------------------------------------------------|--------------|
| Substructure | Foundation | 90% | 70% |
| | Basement Construction | 90% | 70% |
| Shell | Superstructure | 70% | 80% |
| | Exterior Enclosure | 80% | 70% |
| | Roofing | 90% | 80% |
| Interiors | Interior Construction | 100% | 80% |
| | Stairs | 100% | 60% |
| | Interior Finishes | 80% | 70% |
| Systems | Conveying | 100% | 100% |
| | Plumbing | 90% | 70% |
| | HVAC | 80% | 80% |
| | Fire Protection | 100% | 90% |
| | Electrical | 80% | 90% |
| | Data & Communications | 90% | 100% |
| | Equipment & Furnishings | 100% | 100% |
| General | Special Construction | 100% | 100% |
| | Site Conditions | 70% | 70% |
| | Safety Standards | 100% | 100% |
| | Building Suitability | 100% | 80% |
| | Building Adaptability | 100% | 100% |
| | Weighted Average | | 88% |

Source: Tennessee Board of Regents Physical Facilities Survey online database, review ratings (updated by Master Plan team in June 2013)
Weighted averages take into account the respective weights of each system

EXISTING BUILDINGS

| Building ID | Building Name | Year Built | Use Code | Gross Sq. Ft. |
|-------------|----------------------|------------|-------------------------|---------------|
| 101 | Admin/Class/Lab | 1964 | 10 (Classroom/Office) | 33,349 |
| 102 | Program/Shop Wing #1 | 1964 | 14 (Instructional Shop) | 23,961 |
| 103 | Program/Shop Wing #2 | 1981 | 14 (Instructional Shop) | 15,086 |
| 104 | TD* Classroom | 1995 | 10 (Classroom/Office) | 1,200 |

Source: Tennessee Board of Regents

*Truck Driving

