This page intentionally left blank
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Executive Summary</strong></td>
<td>4</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td><strong>Existing Campus</strong></td>
<td>5</td>
</tr>
<tr>
<td>Existing Campus Program Location</td>
<td>5</td>
</tr>
<tr>
<td>Facility Ages, Areas, Topography &amp; Floor Elevations</td>
<td>6</td>
</tr>
<tr>
<td>Land Ownership and Use</td>
<td>7</td>
</tr>
<tr>
<td>Utilities</td>
<td>8</td>
</tr>
<tr>
<td>Campus and Facility Character - Exterior</td>
<td>10</td>
</tr>
<tr>
<td>Campus and Facility Character - Interior</td>
<td>11</td>
</tr>
<tr>
<td>Campus Access - 10,000 feet</td>
<td>12</td>
</tr>
<tr>
<td>Parking &amp; Building Access - 1,000 feet</td>
<td>13</td>
</tr>
<tr>
<td><strong>Campus Needs</strong></td>
<td>14</td>
</tr>
<tr>
<td>Growth Summary</td>
<td>14</td>
</tr>
<tr>
<td>Findings and Recommendations</td>
<td>15</td>
</tr>
<tr>
<td>Enrollment Growth - Historical and Projected</td>
<td>17</td>
</tr>
<tr>
<td><strong>Long-Term Campus Planning Recommendations</strong></td>
<td>18</td>
</tr>
<tr>
<td>Long-Term Campus Master Plan</td>
<td>18</td>
</tr>
<tr>
<td>Access, Parking and Circulation - 1,000 feet</td>
<td>19</td>
</tr>
<tr>
<td>Opportunities</td>
<td>20</td>
</tr>
<tr>
<td>Implementation</td>
<td>26</td>
</tr>
</tbody>
</table>
Introduction

CO-OP Architecture and Confluence were hired by LATI to work with staff and faculty to develop a campus plan addressing the following goals:

1. Maintain high quality technical education and competitiveness in student recruitment and retention by making available the best tools and facilities for the programs offered and the amenities expected by current and future students.
2. Identify the optimal template for long-term campus growth.
3. Identify a flexible approach to meeting the space and configuration requirements of expanding programs.
4. Consider land acquisition and facility development priorities.

Campus Planning Process

From November 2015 and through March 2016, the master planning team utilized an approach that places at its forefront an understanding of the campus, the community of Watertown, and the needs of the school. The first step was to form a deep understanding of the community’s shared set of values and its highest aspirations. We held early workshops with community, faculty, staff, and students to understand the successful principles, values, and aspects of previous campus plans and the areas where new directions are called for by the evolving ambitions of the school. This base of information allowed us to move into defining the long-term vision for Lake Area Tech and identifying implementable projects. Through various meetings with the members of the college community and broad organization of the campus character and patterns of use, our process provided a series of opportunities for LATI to enhance and articulate their mission for the campus environment. The master plan document explains this vision into a consistent framework for the campus that compliments Lake Area Tech’s goals.
Existing Campus

Existing Campus Program Location

1. Agriculture
2. Automotive Technology
3. Aviation Maintenance Technology
4. Building Trades Technology
5. Business Associate
6. Computer Information Systems
7. Cosmetology
8. Custom Paint and Fabrication
9. Dental Assisting
10. Diesel Technology
11. Electronics Systems Technology
12. Energy Operations
13. Energy Technology
14. Environmental Technology
15. Financial Services
16. Heavy Equipment Operator
17. High Performance Engine Machining
18. Human Services Technician
19. Law Enforcement
20. Med/Fire Rescue
21. Medical Assisting
22. Medical Lab Technician
23. Nursing
24. Occupational Therapy Assistant
25. Physical Therapy Assistant
26. Precision Machining
27. Robotics
28. Welding Technology
Existing Campus

Land Ownership and Use

LAKE AREA TECHNICAL INSTITUTE | 7
Existing Campus
Campus and Facility Character - Exterior

VIEW FROM ARROW AVENUE AND 11TH STREET INTERSECTION

VIEW FROM 1ST AVENUE AND 13TH STREET INTERSECTION

VIEW FROM 3RD AVENUE AND 13TH STREET INTERSECTION

VIEW FROM 3RD AVENUE AND 11TH STREET
AUTOMOTIVE TECHNOLOGY

CUSTOM, PAINT & FABRICATION

ELECTRONICS AND ROBOTICS

MAKER SPACE

CORRIDOR VIEW

DIESEL TECH

MAIN STUDENT CENTER LOBBY

SIMULATION LAB
Existing Campus

Parking & Building Access - 1,000 feet

Total Parking Spaces with Airport Aviation = 1,152
Key Findings

A. General

- Enrollment has grown at an average rate of 5.6% per year from 2006 to present. The fall of 2015 marked 12 consecutive years of enrollment growth for Lake Area Technical Institute. Due to the increasing number of students, the school began a four-phase campus expansion project in the fall of 2008. The project included a new Diesel, Energy, and Welding facility, a new Automotive facility, a centralized Student Center, and a new Agriculture facility. The school has developed new programs including High Performance Engine Machining and Heavy Equipment Operator including a new Law Enforcement program which began Fall 2014.

- The LATI administration aspires future growth to be at 3000 students by 2025, provided space is available.

- LATI programs have evolved continuously to meet changing workforce needs. Facilities meet education requirements and are expected to continue to increase at a rate at least consistent with enrollment growth. High workforce demand facilities must meet workforce education.

- Space needs vary widely by program. For example, Diesel Tech requires approximately 450 s.f./student compared to Human Services Technology at 35 s.f./student.

- Space configuration needs are in many cases program specific (i.e. Auto, Diesel, and Welding) minimizing the potential for sharing or easy space reassignment.

- The current campus and facilities are insufficient to meet future needs.
A. Land Acquisition

Finding: Current LATI owned property is nearing full capacity for development.

Recommendation: Additional land adjacent to the campus should be acquired to provide for improved use organization and needed facility and parking growth.

B. Campus Access, Parking and Circulation

Finding: The majority of students and visitors approach the campus from the south along 11th Street and 13th Street via 1st Avenue, leading the public at its southern access.

Recommendation: The Student Center building entrance should continue to serve as the primary access for continual central access. The Student Center's role in student life and experience is evident and crucial to recruitment and retention.

Finding: There are many on-street perpendicular parking spaces resulting in a relatively unsafe, congested condition.

Recommendation: Surface parking at the perimeter of campus is the most economic option for development. When access to campus requires pedestrians to cross a major street, special consideration should be given to the street treatment in order to provide a safe path of travel and reduce pedestrian-vehicular conflict. Parking should be distributed throughout campus to provide convenience parking for visitors and students.

C. Use Organization and Facility Utilization

Finding: Facilities are being fully utilized. Space limitations are beginning to affect the quality of future education and leave nominal room for enrollment growth.

Recommendation: Facilities should continue to increase at a rate at least consistent with enrollment growth.

Finding: In general, programs are located in the west building (i.e. 100, 200, and 300) and central campus. More industrialized programs are located in the east and south areas of the campus.

Recommendation: Industrialized programs should be located in the east and south area of campus for ease of access.

Finding: Custom Paint and Fabrication is currently located in a separate building from Automotive Technology.

Recommendation: A new Custom Paint and Fabrication facility should be connected to the existing Auto building for continuity for incoming and outgoing projects.
Campus Needs
Findings and Recommendations

Finding: The daycare facility is in need of extensive renovation.

Recommendation: Based on the condition of the existing daycare building and the limited land available on campus, the daycare facility should be relocated to an off campus location easily accessible to students and faculty.

Finding: Generally, facilities include design with classroom space and breakout space to engage in formal and informal interaction between students and faculty. The campus is dissected in half by Arrow Avenue, which affects student interaction and facility function.

Recommendation: As the campus develops, buildings should be sited to allow for the potential to connect all buildings south to north. The convenience of circulation in inclement weather and design for interaction of students and faculty will strengthen the student experience. The value of this student experience, strengthened by relationships, can have long-term impacts on graduates, which will help develop alumni support in future years. This connection also reduces vehicular and student conflicts on Arrow Avenue.

D. Campus Image and Character

Finding: There is an opportunity for campus landscape to provide better definition and visual continuity. This campus appeal will positively impact recruitment and blend the school into the residential neighborhood.

Recommendation: Uniform landscape treatment and campus signage help to define the campus edge and provide a sense of arrival. As LATI campus grows, the campus landscape and signage should be expanded with development.

Finding: The land on which the campus sits slopes downhill substantially from north to south, from an elevation of 1765 at the north end to 1750 feet at Arrow Avenue to 1735 at the south end. The elevation from the east to west from an elevation of 1766 on 13th Street to 1747 on 11th street. The slope has played a significant role in campus planning to date, resulting in the stepping of the west building and the construction of the west and north buildings at substantially different floor elevations.

Recommendation: Consideration for universal accessibility should be one of the priorities in shaping the building structures on all new projects and developments. The critical areas that have been identified to impede accessibility due to existing topography should be more closely studied connectivity on campus will improve accessibility.
Enrollment Notes:
Lake Area Tech currently has a student enrollment of 2138.
The LATI administration aspires future growth to be at 3000 students by 2025 (based on previous trends and community growth). This master plan would provide ample space for enrollment growth until at least 2025 (with additional space for growth beyond). While 6%-7% growth is optimistic, based on the past 8 years of growth, it is possible. With continued exposure on workforce shortage and opportunities like Build Dakota, this growth is possible. However, 6%-7% growth is likely not sustainable through 2025, as population, growth trends, economy/education policies, and pedagogies will eventually affect growth. Beyond 2025, it may be reasonable to predict growth at a more conservative 2%-3% growth.

Parking Notes:
Lake Area Tech currently has 1,152 parking spaces (with 50 spaces located at the Aviation Building). An evaluation done determined that 2,309 spaces are required to meet future demands. Those demands include: students, faculty, staff, visitors, BIT customers, Auto Fleet, Auto and Diesel learning aids, Auto and Diesel patrons, Multi-District students, Educare customers, Cosmetology patrons, and community events.

Lake Area Tech has a person to parking ratio of 2:1 (2.1 students per parking space and 1.3 staff/faculty per parking space). Campus parking needs are periodically evaluated by LATI and the City of Watertown. As campus expands, calculations of parking needs are also updated to ensure that adequate parking is provided on campus for all staff, students and visitor commuters that drive a vehicle to campus during peak hours of usage.

It is important to note that LATI has few non-commuter students and students generally attend classes on campus for the majority of the day, as opposed to only periodically at the state Universities.

Based on LATI administration’s projected future growth, LATI will need approximately 2,309 parking spaces by the year 2025. This includes approximately 33 spaces for visitors. See Access, Parking and Circulation on Page 19 for the location of future parking.
Long-Term Campus Planning Recommendations

Long-Term Campus Master Plan

- **Corner Campus Element**
- **New Health Program Addition**
- **New CPF and High Performance Engine Machining Addition**
- **11th Street Improvements**
- **Future Building Link**
- **Parking Improvements**
- **Future Building Link**
- **Arrow Avenue Improvements**
- **Future Opportunity/Link**
- **Future Building Link**
- **Future Open Gateway Element**
- **Elec/Robotics (Flex) Addition**
- **Parking Improvements**
- **Future NE Tech/Multi-Purpose Building Addition**
- **Parking Improvements**
- **New Diesel Addition**
- **Future Opportunity**
- **Temp. Elec/Robotics Addition and Future Opportunities**

**Existing**

**Proposed Building**

**Future Opportunity**

**Future Building Opportunity**

**Corner Campus Element**

**Parking Improvements**
Long-Term Campus Planning Recommendations
Access, Parking and Circulation - 1,000 feet

Total Parking Spaces with Airport Aviation = 2,309
Long-Term Campus Planning Recommendations

Electronics and Robotics Program Requirements
Existing Size: 19,445 sq. ft.
Proposed Addition: 10,000 sq. ft. (temporary pre-eng. steel building)
Proposed Location: East of existing Diesel
Primary Space Type: Classroom, Shop and Storage Space
Primary Needs: Additional space for growing program
Estimated Cost: $1 million

Diesel Program Requirements
Existing Size: 42,928 sq. ft.
Proposed Addition: 18,000 sq. ft.
Proposed Location: West and South of existing Diesel building
Primary Space Type: Classroom, Shop and Storage
Primary Needs: Additional space for growing program, including: continued access for trucks, space for refrigerated trailers and combines, larger doors, ventilation, acoustics, dyno-chassis, truck lifts, overhead hoist, overhead clearance, storage, classrooms.
Estimated Cost: $2.5 million

Opportunities

Future Opportunity

Proposed Building
(3% per year inflation based on 2016 dollars)
Future Opportunity
(cost not calculated at this time)
Custom Paint & Fabrication and High Performance Engine Machining Program Requirements

Existing Size: 25,150 s.f.
Proposed Size: 18,200 sq. ft.
Proposed Location: South of existing Auto building
Primary Space Type: Classroom, Shop and Storage
Primary Needs: Additional space for growing program, including; modern facility, ventilation, safety, mechanical/electrical access, lighting, drainage, vehicle accessibility, parking and noise control.
Estimated Cost: $2.5 million
### Long-Term Campus Planning Recommendations

#### Opportunities

**Electronics and Robotics (Flex Space) Program Requirements**

- **Existing Size:** 19,445 sq. ft.
- **Proposed Addition:** 16,800 sq. ft.
- **Proposed Location:** North of existing Ag building
- **Primary Space Type:** Classroom, Flex and Office Space
- **Primary Needs:** Additional space for growing student program

**Business and General Education (Flex Space) Requirements**

- **Existing Size:** 24,797 sq. ft.
- **Proposed Addition:** 29,000 sq. ft.
- **Proposed Location:** West of existing 300 building with Link to new Electronics/Robotics and Flex Space addition
- **Primary Space Type:** Classroom, Lab, Flex and Office Space
- **Primary Needs:** Additional space for growing student population, temperature control, ventilation, natural light, more modern technological equipment and lighting.
- **Estimated Cost:** $4.8 million
Healthcare Programs Requirements

Existing Size: 43,490 sq. ft.
Proposed Addition: 26,000 sq. ft.
Proposed Location: West of existing 100 building

Primary Space Type: Classroom, Clinic “feel”, Lab and Storage

Primary Needs: Additional space for growing program, including; modern clinic-like facility, additional Sim Lab space, additional storage, temperature control, ventilation, lighting, safety, parking for clinic visitors and noise control, temperature control, ventilation, natural light, and more modern technological equipment with addition of cosmetic improvements in the 100 and 200 buildings.

Estimated Cost: $3.9 million
**Aviation Program Requirements**

**Existing Size:** 19,200 sq. ft.

**Proposed Addition:** 20,000 sq. ft. (pre-eng. steel building)

**Proposed Location:** Expand onto current facility with opportunity for additional space

**Primary Space Type:** Classroom, Lab Space, Office Space, and Storage

**Primary Needs:** Additional space for growing program, including; modern facility, ventilation, mechanical/electrical access, lighting, drainage, safety, vehicle accessibility, parking and noise control.

**Estimated Cost:** $2 million

**500 Building**

**Existing Size:** 33,800 sq. ft.

**Proposed Addition:** 20,000 sq. ft.

**Proposed Location:** Second floor of 500 building. While not specifically designated, this building was designed for a second story addition.

**Primary Space Type:** TBD

**Estimated Cost:** TBD
**Northeast Technical High School**

**Existing Size:** 20,176 sq ft.

**Proposed Addition:** 25,000 sq ft.

**Proposed Location:** West of campus, South of Watertown High School

**Primary Space Type:** TBD

**Primary Needs:** TBD

**Estimated Cost:** $3.8 Million
This master plan is intended to be a flexible tool to guide Lake Area Technical Institute campus development.

To be effective, this plan must be understood and supported by the leaders of Lake Area Tech and a sense of ownership is important. The leadership committee has been structured to facilitate understanding and support.

The Plan provides direction for improving the College’s facilities and is a dynamic document, flexible enough to adjust to new space requirements and potential instructional needs, while at the same time, providing parameters for future development of the campus. To remain pertinent and useful, this plan should be modified whenever a physical change is made to the campus. Modifications should also be made concurrently with future Lake Area Tech strategic planning efforts or at least every five years.

Opportunities for joint development and cooperation with the City of Watertown should continue. A committee of Lake Area Tech representatives and City of Watertown officials should continue in effort to realize the recommendations in this plan.