



# Facilities Master Plan and Educational Specifications 2013 - 2017

December, 2012

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Architectural Research Consultants, Incorporated  
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# Acknowledgements

## **Academy of Trades and Technology High School**

Physical Address: 2551 Karsten, Albuquerque, NM 87102

Phone: (505) 765-5517

<http://www.atths.com/>

Original charter date - 2005

First charter renewal - 2010

Current enrollment cap - 300

### **Governance Council**

Henry Lackey - President

Lee Maxwell - Vice President

Bruce Bixby - Member

Richard Winterbottom - Member

Rudy Sporing - Member

### **Steering Committee Members**

Alfred Martinez - Business Office

Arlene Trujillo - Principal

Elizabeth Dorado - Counselor

Ray Ortiz - Construction Teacher

Christina Alarid - Administrative Assistant

Ramon Benitez - Maintenance Director

Bruce Bixby - Governance Council Member

### **PSFA**

Bill Sprick, Facilities Master Planning Manager

### **Planning Consultant**

Architectural Research Consultants, Incorporated

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## List of Abbreviations

<b>ADA</b>	Americans with Disabilities Act
<b>AMOG</b>	Annual measurable objectives
<b>ARC</b>	Architectural Research Consultants, Incorporated
<b>ATTHS</b>	Academy of Trades and Technology High School
<b>AYP</b>	Annual yearly progress
<b>CIP</b>	Capital improvement projects or plan
<b>CTE</b>	Career technology education
<b>EdSpec</b>	Educational specifications
<b>EETT</b>	Enhancing Education Through Technology
<b>ELL</b>	English language learners
<b>FAD</b>	Facility adequacy database
<b>FMP</b>	Facilities master plan
<b>FCI</b>	Facility condition index
<b>GC</b>	Governing Council
<b>GSF</b>	Gross square feet, or the sum of net assignable square feet plus all other building areas that are not assignable (the area remaining is called “tare,” which includes areas such as hallways, mechanical areas, restrooms, and the area of interior and exterior walls)
<b>HVAC</b>	Heating, ventilating, air conditioning
<b>IEP</b>	Individualized education program
<b>LCD</b>	Liquid crystal display
<b>NASF</b>	Net assignable square feet, or the total of all assignable areas in square feet
<b>NMAC</b>	New Mexico Administrative Code
<b>NMCI</b>	New Mexico Condition Index
<b>NMPED</b> or <b>PED</b>	New Mexico Public Education Department
<b>PE</b>	Physical education
<b>PSCOC</b>	Public School Capital Outlay Council
<b>PSFA</b>	Public School Facilities Authority
<b>PTR</b>	Pupil/teacher ratio
<b>RETA</b>	Regional Educational Technology Assistance
<b>SHAC</b>	School Health Advisory Council
<b>UNM</b>	University of New Mexico
<b>VAC</b>	Volts AC
<b>WAP</b>	Wireless access point



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## Guide Facility Decisions

This document is a combination of the Facilities Master Plan (FMP) and Educational Specifications (EdSpec) for Academy of Trades and Technology High School (ATTHS), which is a state-chartered public school. The intent of the plan is to guide capital planning decisions that support the charter school's educational mission and that meet minimum state adequacy standards for school facilities. The Public School Capital Outlay Council (PSCOC) and the Public School Facilities Authority (PSFA) require that all New Mexico public charter schools develop a five-year FMP and EdSpec as a prerequisite for eligibility to receive state capital outlay assistance. This facilities master plan and educational specifications is in accordance with guidance issued by the PSCOC and PSFA.

This document identifies specific current and projected facility needs for accommodating the charter school's anticipated five-year enrollment, and forecasts strategies and required resources for implementing those needs. The document is a flexible facility planning tool that the school can revise on a periodic basis as conditions change.

Five main sections and this introduction comprise the master plan and educational specifications:

- **Introduction**
- **Section 1 - Goals / Process** presents the charter school's goals and the planning process
- **Section 2 - Existing and Projected Conditions** presents programs and delivery methods, enrollment, details about the school's existing facilities, and technology and energy management. It outlines facility goals and concepts, details space needs and other facility requirements, and describes strategies for implementing space needs.
- **Section 3 - Facility Requirements** presents facility goals and concepts, lists and diagrams specific facility needs to accommodate projected enrollment, and describes how the school will implement facility needs over time





- **Section 4 - Capital Plan** presents information about capital resources, capital needs, project priorities, and capital project implementation
- **Section 5 - Master Plan Supporting Material** contains details about school facilities, evaluations, plans, and other information



### 1.1 Goals<sup>1</sup>

#### ATTHS Mission

The Academy of Trades and Technology High School (ATTHS) serves “at-risk” students from Albuquerque and the surrounding areas in grades 9 through 12 for whom traditional or alternative education models have not worked. Many of the school’s students are high school dropouts. ATTHS welcomes students who have not succeeded elsewhere and seeks to provide them with the special and particularized services they need to meet their goals. The vast majority of ATTHS students are economically disadvantaged, living lives below the poverty line. Most have multiple challenges such as substance abuse, encounters with the justice system, and mental health issues.

The mission of Academy of Trades and Technology is to provide a combination of career technology education (CTE) and academic classes to reach “at-risk” students for whom school success has previously been unattainable. ATTHS will develop students’ **vocational, academic and personal** skills in order for them to attain quality employment in today’s economy and learn skills required for success in postsecondary education. Methods for achieving this mission include mastery learning and project-based learning, and utilization of the national CTE pathways model. ATTHS students focus on life skills and wellness in a safe school environment of caring adults.

#### Educational Philosophy

ATTHS offers vocational and job readiness training and a life-skills curriculum while meeting the New Mexico standards-based high school curriculum requirements. The program offers a variety of support services to help students cope with their life challenges. ATTHS’s vocational focus provides a marketable skill for students upon graduation.

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<sup>1</sup> From ATTHS charter renewal application, submitted 2010



## MISSION STATEMENT:

*The mission of the Academy of Trades and Technology is to develop youth's academic, technical, personal and critical thinking skills to meet the standards required for success in both post-secondary education and quality employment in today's economy. Geared toward student success.*

All students take a Career Pathways class each semester they are enrolled. The school currently offers two career pathways for students to learn job skills, one in **construction** and one in **graphic design**. In the construction pathway, students study construction fundamentals, structural systems, framing and building techniques. In graphic design, students study computer graphics, visual design, 3-D technology and programming.

## Serving the Community

The student population at ATTHS is 100% at-risk students who have not been able to create successful educational experiences for themselves in the traditional public school setting. ATTHS offers a pathway to success for these students by providing vocational and job readiness training, and a life-skills curriculum in addition to the required New Mexico standards-based high school curriculum. A portion of the program offers a variety of support services to young leaders to help them cope with their life challenges. Turning at-risk high school students into high school graduates is a valuable service to the community.

One of the primary tenets of the ATTHS vision is that the school reflects and capitalizes upon its community. This means working closely with the community and ensuring that:

- The community has a broadening involvement and increasing awareness of ATTHS's purpose
- Parents, students, teachers and the community work together to create a safe educational environment in which students are eager to learn and have the tools and resources to achieve excellence in learning and personal development
- ATTHS has resources in local experts in areas ranging from the construction industry to hospitality, involving community members as leaders for seminars, lectures, advanced learning and mentoring



*Turning at-risk high school students into high school graduates is a valuable service that Academy of Trades and Technology provides to the community.*

- ATTHS is committed to building each student's self esteem through a variety of community-based activities, from the volunteer activities to the "world of work"
- ATTHS asks the community to support the school in time, talent and/or treasury
- ATTHS looks to the community for ideas in developing student responsibility models, career shadowing, and expertise sharing. Specific community involvement includes:
  - » Attending open monthly meetings
  - » Participating as mentors
  - » Volunteering
  - » Attending and/or sponsoring student exhibitions and programs
  - » Inviting student participation in civic organizations
  - » Establishing a community advisory panel to provide insight into relevant economic, environmental, business and academic areas



# Adoption of Facilities Master Plan



Academy of Trades and Technology  
GOVERNING COUNCIL BOARD MEETING MINUTES  
Thursday October 25, 2012  
6:00 p.m.  
Conference Room  
2551 Karsten Ct. SE Suite C, Albuquerque NM, 87102  
Phone: (505)765-5517 Fax :(505)765-5898

- I. **Call to Order-** The meeting was called to order at 6:05pm by Henry Lackey
- II. **Roll Call**  
**Present:** Henry Lackey-President  
Lee Maxwell-Vice President  
Bruce Bixby-Governing Council Member  
Richard Winterbottom-Governing Council Member  
Rudy Sporing-Governing Council Member  
Arlene Trujillo  
Al Martinez  
**Guests:** Christina Alarid
- III. **Adoption of October 25, 2012 Regular Governing Council Agenda (Discussion/Action)-**  
Mr. Winterbottom made a motion to approve the October 25, 2012 regular Governing Council Agenda as presented. The motion was second by Mr. Maxwell; and passed unanimously as indicated by Mr. Lackey, and the motion to adopt the agenda was approved.
- IV. **Approval of September 20, 2012 Regular Governing Council Meeting Minutes (Discussion/Action) –**At this point Mr. Maxwell made a motion to approve the minutes as presented. The motion was second by Mr. Bixby and unanimously passed by vote as indicated by Mr. Lackey.
- V. **Public Forum –** No necessary actions/discussions
- VI. **Approval of Facilities Master Plan and Energy Management Plan**  
At this time the Facilities Master Plan Specifications along with the Energy Management Plan was reviewed by the board in the form of an updated packet. The board was informed that the packet was the same plan that was previously reviewed by the board at a prior



board meeting with the small change of more emphasis on the schools construction program. At this time Mr. Sporing made a motion to approve the Facilities Master Plan and Energy Management Plan as presented. The motion was second by Mr. Winterbottom and passed unanimously by vote as indicated by Mr. Lackey.

VII. **President Election (Discussion/Action)**- At this point the board discussed possible nominations for board president as Mr. Lackey expressed his wish to step down as Board President. All nominations for other board members were denied by the nominated person. A decision was then agreed upon by the board to include nominations and interviews in the agenda for the next few board meetings consecutively in hopes to find three people who meet the job backgrounds of banker/financial manager, social worker, and construction, to make the total number of members seven. Henry agreed to continue with his Presidency until the positions were filled with the correct people. It was noted that the correct person for the job shall be someone who has a heart for helping the students at our unique school and who will maintain focus on the foundations and goals the school was built upon.

VIII. **Principal's Report**

a. **Enrollment**- Mrs. Trujillo began by saying that current enrollment had gone up to 91 students. She explained that she had done a presentation to a group who was looking at enrolling about 12 students soon; while monthly presentations are being done at BCJDC along with a couple other programs.

b. **Instructional Programs Audit Information** –Mrs. Trujillo quickly briefed the board on a school-wide project based learning idea implemented through the development of a mock construction company. The students will be interviewed for jobs in areas of the company and will be paid in the form of a fake paycheck that will have been budgeted for and used for grades and getting ahead in the company. The students will learn how to apply all courses, core and otherwise, to real life situations.

IX. **Financial Report**

a. **Finance Committee Report**- Mr. Al Martinez reported that at this point in the year the school should have encumber about 25% of budgeted money and the actual percentage is 23% as of September 30, 2012. Arlene then noted that she had been working on getting together a grant for \$11,500, which was requested by PED. Al then noted that he had put together the SB9 application with APS which would be \$10,000.

b. **BARS-5**- Mr. Martinez reported that the bar was for \$10,250.00 which is profit from the sale of the schools portable building. The motion to approve the bar was made by Mr. Maxwell and second by Mr. Winterbottom. Mr. Lackey indicated that it was passed unanimously by vote.



c. **Audit Committee Report-** At this point Mr. Martinez noted that the Audit review was scheduled to be held at Moss Adams on October 30, 2012 at 1:15p.m.

X. **President's Report-** No information to present

XI. **Closed Session-** No need for closed session was present

XII. **Limited Personnel Matters** pursuant to NMSA 1978 10-15-h.(2)

XIII. **Return to Open Session**

XIV. **Action on Closed Session Executive Session (Discuss Personnel Matters)**

XV. **Adjournment**

Meeting Adjourned at 6:44 p.m.

The next Regular Governing Council Meeting will be held November 15, 2012 in accordance with the set meeting date of the third Thursday of the month.

All Meetings are conducted in Accordance with Applicable State of New Mexico Open Meetings Act, OMA Fifth Edition N2005.

The agenda was posted at least 24 hours in advance of the meeting

Administrator: \_\_\_\_\_ Date: \_\_\_\_\_





## 1.2 Process

### Data Collection and Analysis

Architectural Research Consultants (ARC) worked with a steering committee, whose members represented the administration, Governing Council (GC) and staff, to understand and document the charter school's programs and delivery methods, and to establish facility needs to support the charter's educational requirements. The planning team held committee workshops for information-sharing and feedback after each phase (data collection, space needs determination, and facility implementation phases).

### Authority and Facilities Decision Making<sup>2</sup>

The Head Administrator is the lead administrator for all operations and functions within the school. The Head Administrator has final authority in assuring that the school meets all required rules and regulations related to site management.



The school does intensive, long-range planning early and late in the school year, when it conducts more in-depth programmatic assessments. All staff participate.

Fiscal decisions involve the business manager, who consults with outside resources as needed and presents financial reports at the Governing Council Financial Committee meetings. The committee presents a summary of reports and discussions, with their recommendations, to the Governing Council at the regular Governing Council meetings.

The administration and support staff maintain the infrastructure, manage the fiscal operations, establish and maintain the systems for student records, grades, credits, state reporting, etc. All parent councils, advisory committees and community groups report directly to the Head Administrator.

<sup>2</sup> From ATTHS charter renewal application, submitted 2010



The Governing Council is publicly accountable for student academic achievement and funds expenditure through regular public meetings generally held monthly to conduct school business.

## **Community Involvement in Decision Making<sup>3</sup>**

The school informs families and community of the opportunity to be involved in the governance of the school at registration, the annual open house, the parent involvement meetings, by invitation, and as questions arise, through the school office. The Head Administrator informs staff of the option to be involved, and young leaders are informed through the student council.

ATTHS posts announcements of Governing Council meetings and the proposed agenda in three public areas of the school, including the front door, at least 24 hours prior to each meeting. The school's monthly newsletter publishes the date of each meeting.

The community is formally involved through the two advisory boards and the School Health Advisory Council (SHAC) team. The school administration attends several community meetings each year for neighboring communities. The school continues to work on resolving any issues from the community.

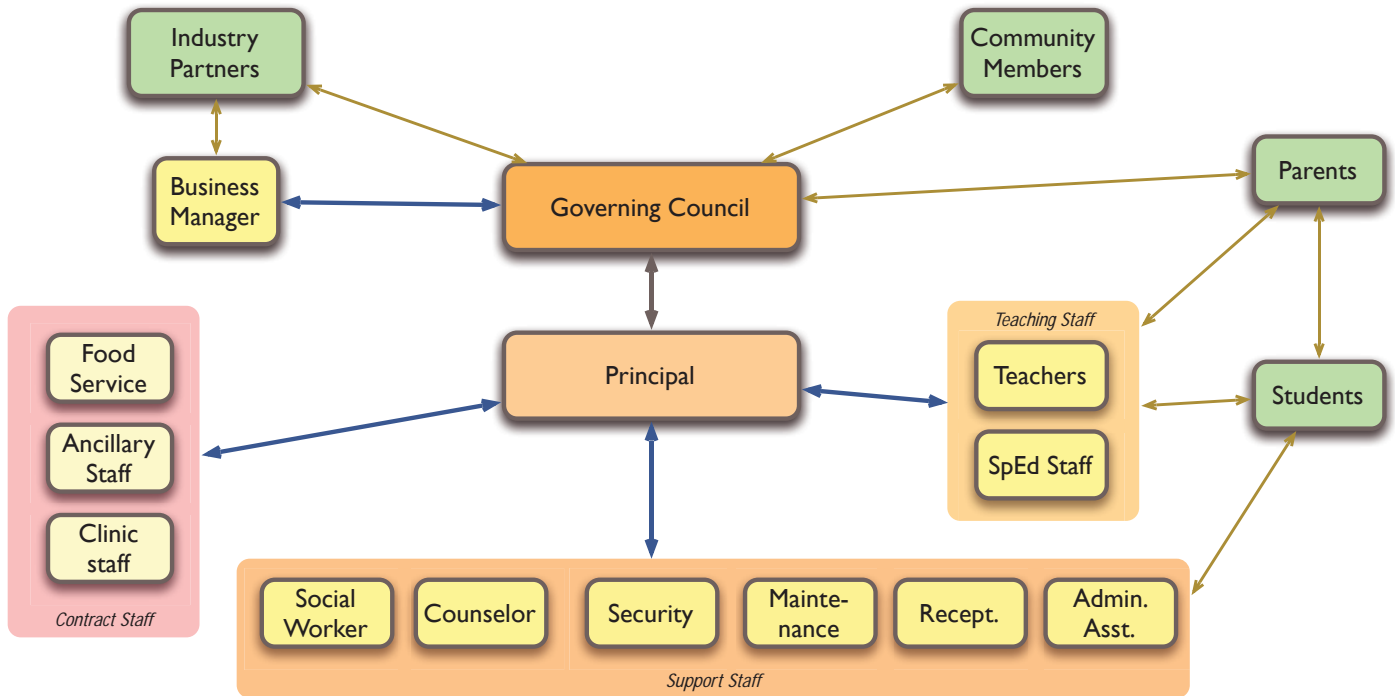
See Exhibit 1-1 for a diagram of community involvement in school organizational structure.

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<sup>3</sup> From ATTHS charter renewal application, submitted 2010



**Exhibit 1-1**  
**Community Involvement**  
**Diagram**



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## 2 EXISTING AND PROJECTED CONDITIONS

# Charter School Conditions

### 2.1 Educational Programs And Delivery Systems

#### Programs Overview

##### Organization

ATT high school enrolls students in 9th through 12th grades. The program combines career technology education (CTE) with academic classes. The school assigns students to grade-level courses according to course completion. Grade level assignments are as follows:

Freshman - 0 to 6 credits

Sophomore - 6 to 12.5 credits

Junior - 12.5 to 18 credits

Senior - 18+ credits

##### Instructional Environment

ATTHS creates a safe school environment that emphasizes life skills and wellness, and provides a meaningful success-based lifestyle choice.

##### Mastery Learning

Mastery learning is based on the principle that all students can learn reasonable objectives with appropriate instruction, support, and sufficient time to learn. ATTHS recognizes that students master content and integrate skills at different rates. Its curriculum supports mastery learning while supporting individual differences. ATTHS encourages students to take individual responsibility for their learning through structured goal-setting.



## Programs Provided

### Core and Electives

ATTHS provides all high school core courses: English, mathematics, science, and social studies. Electives include physical education, career pathways (construction trades and graphic arts), and “group project.” Group project is a required elective that consists of team-taught, project-based courses. All full-time faculty participate in teaching these courses, which have larger class sizes. Students enroll in the group project that most effectively fills their individual achievement needs (i.e., a student who lacks science credits enrolls in the science/English group project).

### Remedial

Students who need to recover credits can catch up through Read 180 (a remedial reading program), and A+ (a computer-based credit recovery program).

### Special Education

Students with qualifying individualized education programs (IEPs) can attend special education classes and receive instruction through inclusion in general classrooms; 20% of the student population receives special education services.

### English Language Learner (ELL) Support

The school plans to include English language learner support during the 2012-13 school year, which it has not offered in the past.

### Delivery Systems

#### Core Courses

ATTHS delivers core courses in classroom settings by credit needs, in a group setting with students and the teacher working collaboratively.

#### Career Pathways Programs

Of the two career pathways programs, Construction Trades

*Engineering, construction and manufacturing are the building blocks for designing, developing and producing any structure that shapes the world we live in or product that defines how we interact in that world.\**

*\*from Work in New Mexico: New Mexico Career Clusters Guidebook*



and Graphic Design, the main emphasis is on Construction Trades.

ATTHS uses construction training to develop job skills because it offers the following benefits:

- It provides marketable skills that young people can learn in a limited period of time
- It offers the type of physical job training that especially appeals to young men and women who might otherwise not join a job training program
- It yields tangible products, which gives young people a sense of personal accomplishment and value
- It creates an opportunity to use academic and leadership skills in a practical context
- It offers a meaningful way for young people to contribute to rebuilding their communities, and experience the respect of their families and neighbors
- It provides work within the community that would not otherwise be accessible to young people
- On a daily basis, it provides communities with a hopeful and reassuring view of young people who play a positive role



ATTHS uses graphic design to develop job skills because it offers the following benefits:

- ATTHS offers the technology resources of the modern workplace with an industry-standard setting.
- It prepares students to function effectively in a high technology economy
- The program prepares students for careers in technology by providing access to tools and developing skills
- Technology training encourages scientific inquiry and quantitative reasoning
- Technology training prepares graduates for post-secondary education, gainful employment and leadership in New Mexico's high technology industries
- Student projects contribute to the workplace or community
- Students use artistic expression in developing projects, which improves their emotional development, including self-perception and personal expression



Construction trades focuses on developing carpentry, plumbing, and electrical skills. Classes provide introductory information in a lecture format and via DVDs and computer programs. Students develop hands-on skills, tool safety, interpersonal skills and habits, and management in the construction lab. Each class includes service learning through community projects, job shadowing and internships every afternoon.

Graphic design course delivery is in a lab room with drafting tables and computer stations. Hands-on learning involves creating publications and products for sale to the public, such as T-shirts and skateboard decks. Students create a portfolio to display their graphic skills.

### **Physical Education**

The school offers two PE courses: basketball and weightlifting. Basketball class delivery is at the Herman Sanchez Community Center, located within walking distance from the ATTHS campus. Weightlifting classes, a joint program with the University of New Mexico (UNM) that features instructors from UNM, are in a facility leased by the school and within walking distance of the main ATTHS building.

### **Group Project**

These projects combine two courses that blend subject matter, team-taught by full-time ATTHS instructors. Teams of students develop semester or half-semester hands-on projects. Enrollment in these courses could be as many as 50 students per class. Project-based instruction requires more space per student than lecture format delivery.

### **Special Education**

Special education delivery at ATTHS is via full inclusion in regular education classrooms. This strategy allows students to benefit from augmented instruction in class with fellow students and avoids the stigmatization of pull-out instruction. Regular education students in the class benefit from the additional support as a result of in-class instruction. Some students periodically receive customized attention in the Special Education computer lab during unscheduled sessions.

### **Remedial Programs**

Read 180 is a specific remediation reading program, a tier 2 response to intervention. Its delivery is via a combination of group reading, hands-on work at a table, and independent





learning through reading material and computer software programs. Students can select reading material which is coded by skill level. Students take comprehension tests at the completion of each level and receive Lexile scores which determine progression to the next level. Students receive an elective credit at the completion of the class.

A+ is a self-paced, computer-based credit recovery learning system which students access on the internet at the special education room. Students progress through course work at their own pace, and fit computer time into their weekly class schedules on campus or through off-site Internet access. The courseware involves research and objective problem solving, as well as assessment, alignment and curriculum management tools. It provides Lexile measures which allow matching the appropriate lesson content to readers with known Lexile measures.

### Support Services

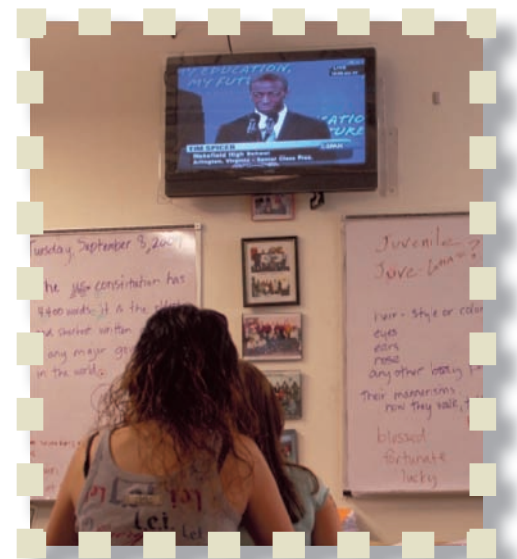
ATTHS is a sanctuary for its at-risk students. The school is committed to eliminating verbal or physical altercations between students or between students and staff. Many ATTHS students do not have a home in which they feel safe. Even students who do not have abuse or addiction in their homes have been exposed to harassment and violence in their neighborhoods. The school aims to provide a safe haven for the students. The school has a full-time social worker and full-time counselor on site to help students work through personal issues that detract from their school work. These staff members see individuals or groups in their offices. Confidentiality is a concern that is addressed through facility solutions. Both staff meet with parents and do crisis intervention with students.

### Meals

The school provides breakfast and lunch, brought to campus by a vendor and warmed in the cafeteria. Students eat breakfast in the classrooms and lunch in the cafeteria. All students eat lunch at the same time, after which they can spend recess on the back patio.

### Technology

Computer instruction takes place in a limited way in each classroom, due to the lack of equipment. The school expects to receive an E-Rate grant for school year 2012-13 to provide additional access for classrooms. A room which had served as storage will become a computer lab for occasions when an instructor needs the entire class to simultaneously access computers or the Internet.



*Curriculum development continues, in part, through a dialogue with construction and technology leaders in the Albuquerque community. All curriculum development is consistent with the ideas in the book, The Last Dropout: The Epidemic*

- A one-on-one relationship with a caring adult*
- A safe place to learn and grow*
- A healthy start and a healthy future*
- A marketable skill to use upon graduation*
- A chance to give back to peers and community*

## **Student Health Center**

The school has an office for a contract nurse and two exam rooms. It also has a pharmacy for student medications.

## **Anticipated Changes in Programs**

ATTHS does not anticipate any changes to existing programs in the next five years. When enrollment in construction trades courses reaches capacity (the occurrence of this level is difficult to predict), the school would like to expand construction offerings to include advanced carpentry and welding. It will need additional specialized space to deliver those programs.

## **Schedule**

During school year 2011-12, school was in session five days per week from 8:39 a.m. to 3:23 p.m. Classes were during six one-hour periods with three-minute passing periods and a 33-minute lunch was between 3rd and 4th periods. Tuesday and Thursday mornings were reserved for group project classes. The school schedule is flexible to allow students to meet family and work needs. The mastery-based credit system allows students to work at their own pace.

## **Partnerships**

ATTHS does not have formal partnerships, although career pathways classes engage with organizations, businesses, or private citizens to provide construction and graphics products as part of service learning.



## 2.2 Enrollment

### Historic and Current Enrollment

ATTHS began operations in school year 2007-08 with 175 students and grew to 222 within two years at the former location on Yale Boulevard. In 2010, the school began the new academic year at a new location, 2551 Karsten. Enrollment dropped off that year due to the change in venue and student difficulties with campus access. Enrollment on the 40th day of school year 2011-12 reported to PED was 136.

### Projected Enrollment

The charter renewal application, which the Public Education Commission approved in 2010, allows for an enrollment cap of 300 students. The challenges of teaching at-risk students **vocational, academic and personal** skills, which is the mission of the charter school, preclude enrollment from growing beyond 225. However, ATTHS offers a curriculum and job readiness program that may be attractive to students who are seeking a diploma and have not yet given up on traditional school delivery methods. Enrollment growth beyond 225 up to 300 is possible with additional student population that requires less adult attention.

This master plan's enrollment projection is based on the assumption that the school may take certain measures within the next five years to promote enrollment growth to 300. However, attainment of this level is unpredictable and growth could take longer than projected. Therefore, the plan recommends that the school plan to provide facility accommodations according to actual year-by-year enrollment and capacity rather than by calendar year.

Exhibit 2-1 illustrates the factors that will potentially influence enrollment growth at ATTHS during the next five years. Exhibit 2-2 is a graph of historic and projected enrollment and enrollment cap.



**Academy of Trades and Technology - Enrollment Trend**

	Historic					Projected				
	2007-08*	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
9th Grade	85	105	112	63	60	60	100	100	120	150
10th Grade	45	49	60	44	35	40	60	70	70	70
11th Grade	30	35	26	31	30	30	35	50	50	50
12th Grade	15	15	24	19	11	20	25	30	30	30
<b>Total Enrollment</b>	<b>175</b>	<b>204</b>	<b>222</b>	<b>157</b>	<b>136</b>	<b>150</b>	<b>220</b>	<b>250</b>	<b>270</b>	<b>300</b>

\* Actual enrollment by grade is estimated

*Enrollment stabilizes as programs restructure*

*New partnerships help retain students*

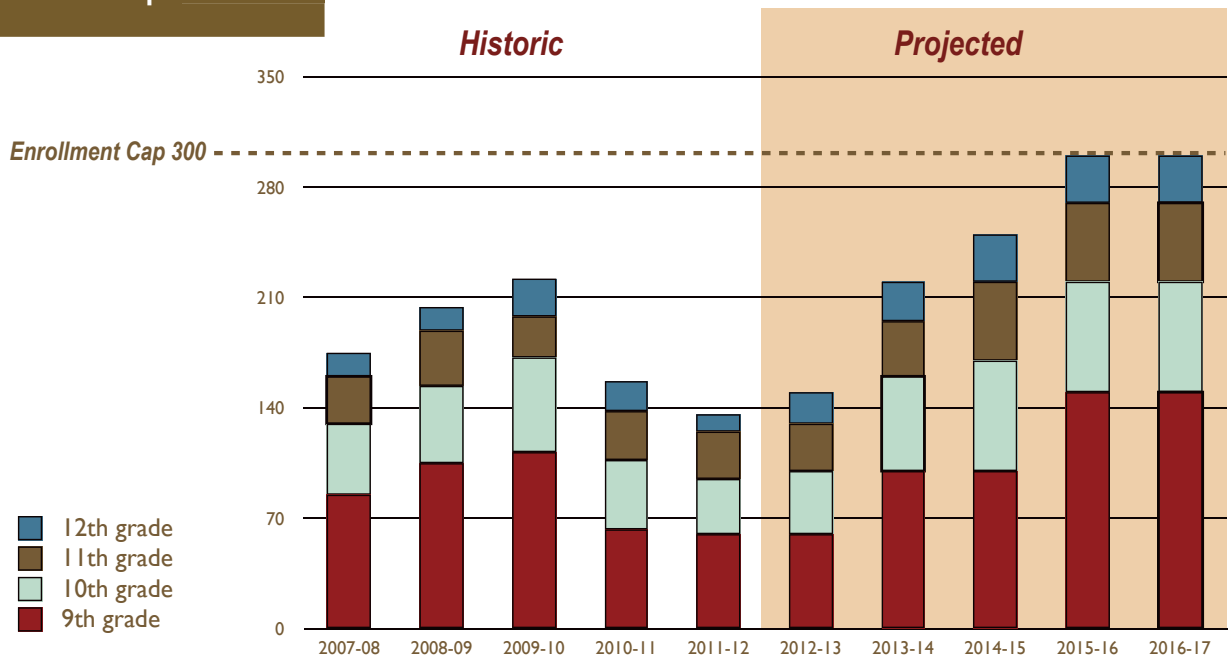
*New programs and marketing campaign attract students not at-risk*

*Reach maximum enrollment*

**Exhibit 2-1**  
Historic and Projected Enrollment Table

Source: ATTHS

**Exhibit 2-2**  
Historic and Projected Enrollment Graph



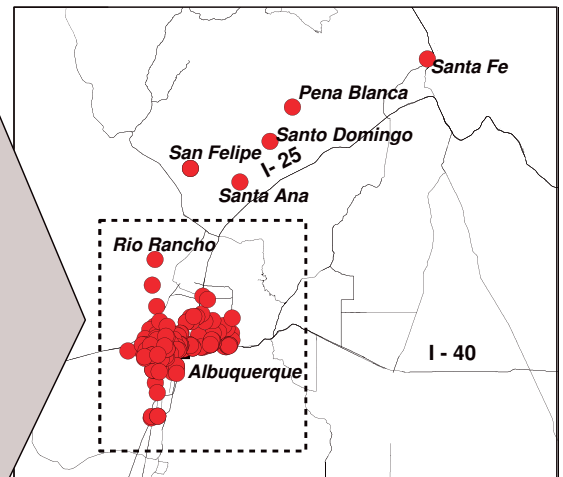
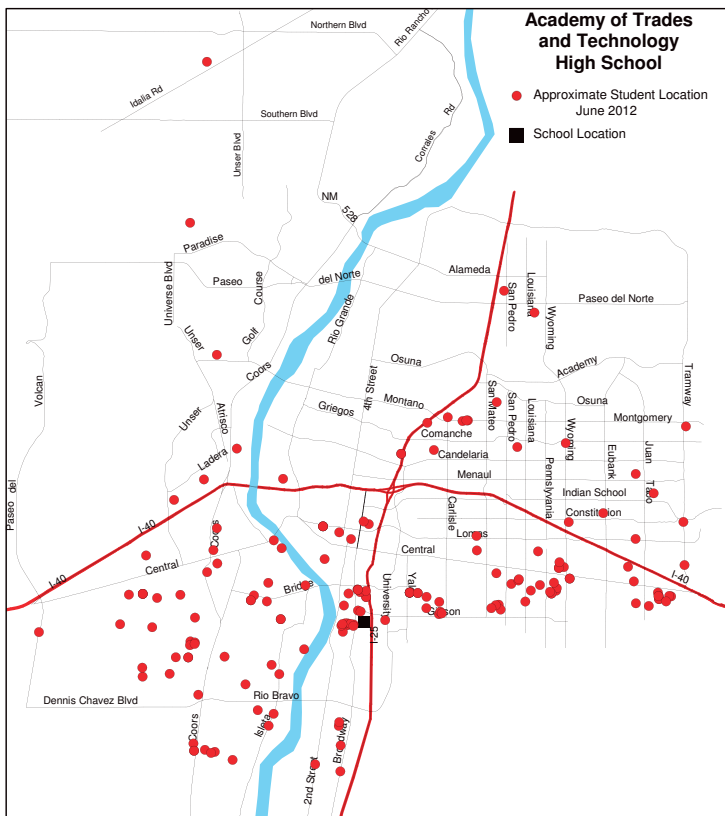
## Student Origination

ATTHS serves at-risk students from around the metropolitan area, as well as surrounding communities as far away as Santa Fe. Of the student body attending school in fall 2011, 49% were from southwest Albuquerque and 6% were from outside the metropolitan area. See Exhibit 2-3 for student home locations.

## Classroom Loading Policy

ATTHS's charter renewal application states that a desirable pupil/teacher ratio (PTR) will be 20:1. With one teacher in each classroom for most courses, the classroom loading maximum would be 20 students. An exception is the team-taught group projects which will allow up to 40 students. Due to the difficulties of retaining this student population, calculations of classroom need used a classroom loading factor of 25.

**Exhibit 2-3**  
**Student Locations**  
**Scatter Map**



Source: ATTHS, Map by ARC



## Classroom Needs

ARC projected classroom needs based on a growing enrollment. Since the enrollment may not reach the projected levels at the assumed school year, this classroom needs table provides only a guideline for accommodating potential growth. The table shown in Exhibit 2-4 lists the number of general classrooms and group project labs needed for proposed future enrollments.

### Exhibit 2-4 Classroom Needs

#### Classroom Need for Projected Enrollment

				Enrollment				
				150	220	250	270	300
				2012-13	2013-14	2014-15	2015-16	2016-17
Classroom Type	Current CR Count	CR Need	CR Need					
			Rounded Calc	Rounded Calc	Rounded Calc	Rounded Calc	Rounded Calc	
Regular Classroom Periods	<b>General Classroom</b>							
	Social Studies	16.67%	1.0	1.0	1.5	1.75	1.8	2.0
	English	16.67%	1.0	1.0	1.5	1.75	1.8	2.0
	Math	16.67%	1.0	1.0	1.5	1.75	1.8	2.0
	Science	16.67%	1.0	1.0	1.5	1.75	1.8	2.0
	<b>Total Core CR Needed</b>			4.0	6.0	7.0	7.2	8.0
	<b>Specialized CR</b>							
	Technology Lab	8.34%	1.0	1.0	1.0	1.0	1.0	1.0
	Construction Lab	8.34%	1.0	1.0	1.0	1.0	1.0	1.0
	PE/Weight Rm	8.30%	1.0	1.0	1.0	1.0	1.0	1.0
	Read 180	8.34%	1.0	1.0	1.0	1.0	1.0	1.0
	SpEd CR		1.0	1.0	1.0	1.0	1.0	1.0
	<b>Total Elective CR Needed</b>			5.0	5.0	5.0	5.0	5.0
<b>Sign-up Labs</b>								
Computer Lab	As Needed	1.0	1.0	1.0	1.0	1.0	1.0	
<b>Total General CR Needed</b>			10.0	12.0	13.0	13.2	14.0	
Project-Based Periods	<b>Project Labs (based on Staff FTE)</b>		<b>Staff FTE</b>	<b>6</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>10</b>
	Combined rooms 309A/309B			1.0	1.0	1.0	1.0	1.0
	Combined Technology/Computer lab			1.0	1.0	1.0	1.0	1.0
	Existing Cafeteria			1.0				
	New Cafeteria				1.0	1.0	1.0	1.0
	Combined rooms 117A/117B				1.0	1.0	1.0	1.0
	New classrooms							1.0
<b>Total Project Labs Needed</b>			3.0	4.0	4.0	4.0	5.0	

Future need exceeds current supply

Source: ARC

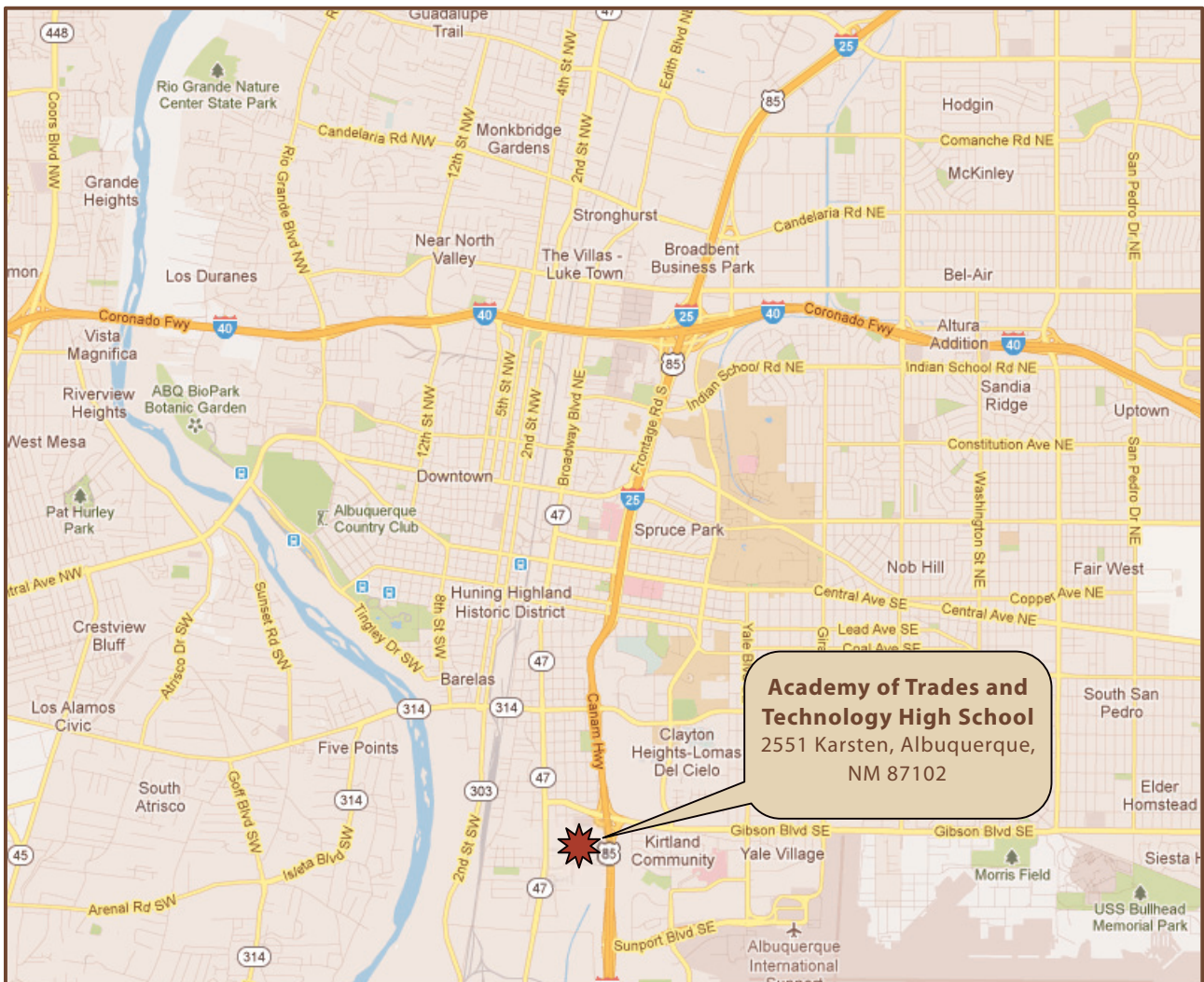


## 2.3 Site and Facilities

### Location

ATTHS is located on the border of the southwest and southeast quadrants of Albuquerque, in the San Jose neighborhood. The school currently occupies two facilities. It holds a lease/purchase agreement for its main facility at 2551 Karsten SE, Albuquerque, NM 87102. It leases an auxiliary facility located a block to the south at 2611 Karsten SE. See Exhibit 2-5 for a location map.

**Exhibit 2-5**  
**Location Map**



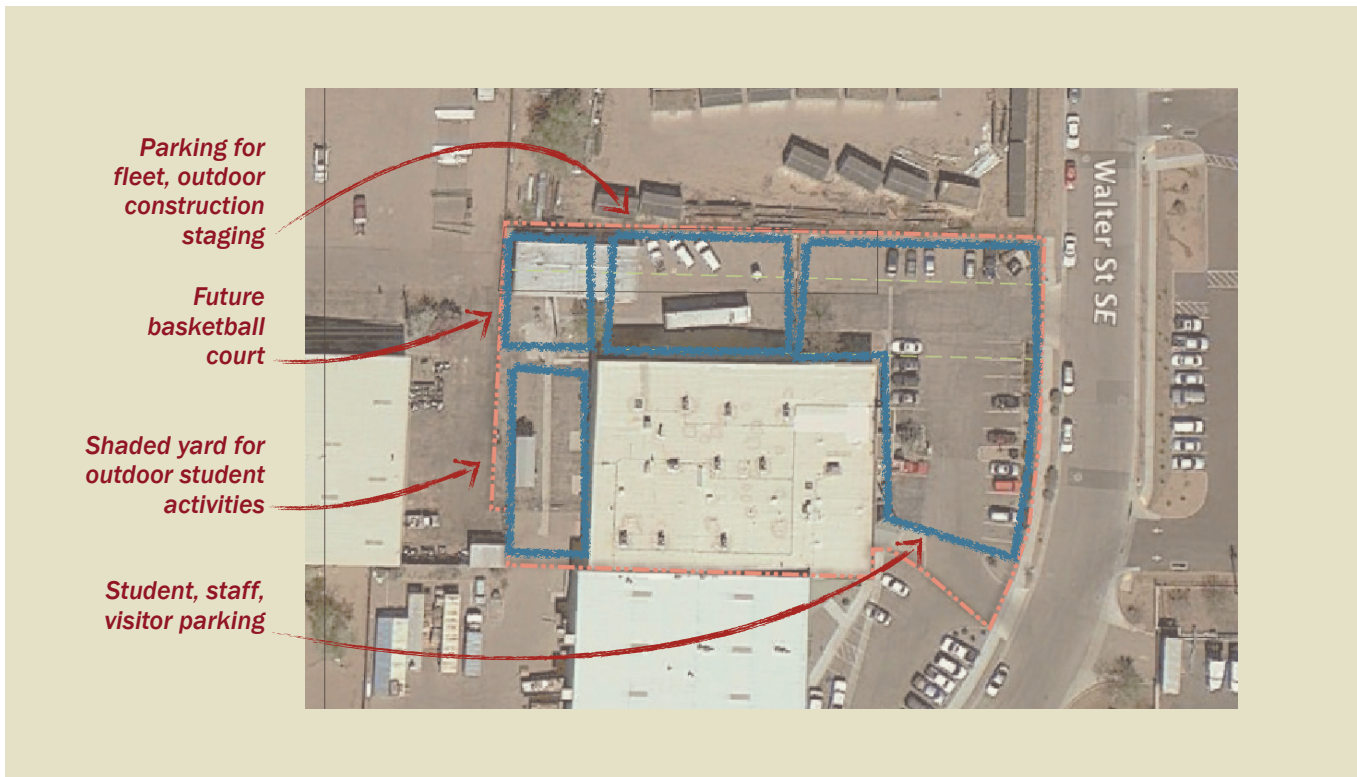
## Sites

### Main Campus

The Main Campus property is bounded to the east by Karsten Court SE, to the west and north by commercial property, and to the south by commercial property with which the building shares a common wall.

The 1.24-acre site includes about 14,600 square feet of student, staff, and visitor parking; about 9,000 square feet of fleet parking, maneuvering and construction program staging; about 9,800 square feet of outdoor areas for student use; and a building footprint of about 21,000 square feet. The site contains a 40'-wide easement, which is a vacated public right-of-way. This area contains underground utilities which first would require rerouting outside the site before building construction could take place. See Exhibit 2-6 for an aerial view of the site.

**Exhibit 2-6**  
**Aerial of Owned Facility**  
**at 2551 Karsten SE**





### Auxiliary Campus

The leased facility and property are part of a multi-tenant industrial facility, is bounded to the north by San Jose Avenue, to the east by Karsten Court, to south by commercial property, and to the west by other tenants. The school leases this facility on a year-by-year basis. See Exhibit 2-7 for an aerial view of this property.

**Exhibit 2-7**  
Aerial of Leased Facility  
at 2611 Karsten SE



## Facilities

### Main Facility

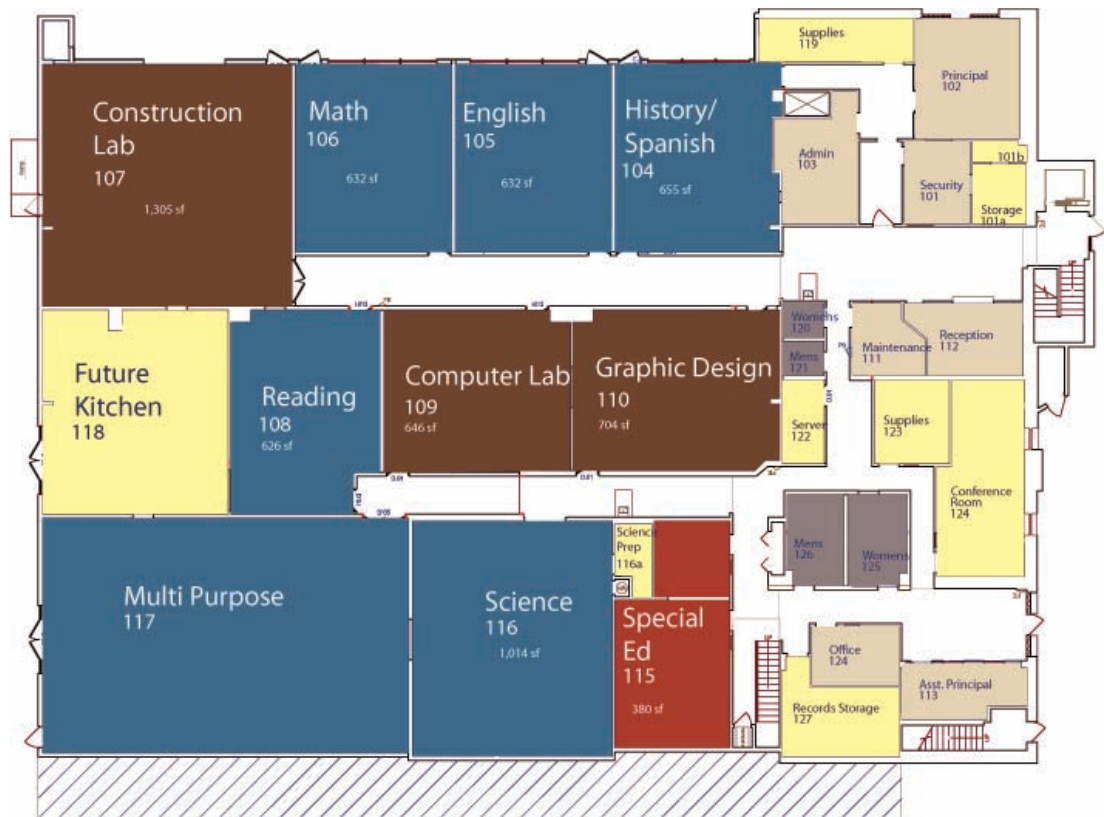
The facility is a metal building — the date of original construction is not precisely known. It previously served industrial purposes, including as an airplane hangar. The school foundation purchased the building under a lease/purchase agreement in 2010 and renovated it in 2011. The easterly portion is two stories and includes an elevator and two stairwells. The westerly portion is one story. The first floor is 11,437 net square feet. The second floor is 3,120 net square feet.

The majority of the school's activities and personnel are located in this facility. See Exhibit 2-8 for current floor plan uses. For an inventory of spaces and a facility adequacy database (FAD) update, see Section 5 - Master Plan Supporting Documents.

### Auxiliary Facility

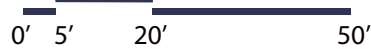
This leased facility occupies three structural bays of a metal warehouse-type of building. The easternmost bay is currently storage. The middle and westernmost bays contain administrative spaces for the Business Manager and his assistant, and the weight-lifting gym. See Exhibit 2-9 for current floor plan uses.





**First Floor**

- Office
- Support
- Core Classroom
- Elective Classroom
- Special Education
- Tare



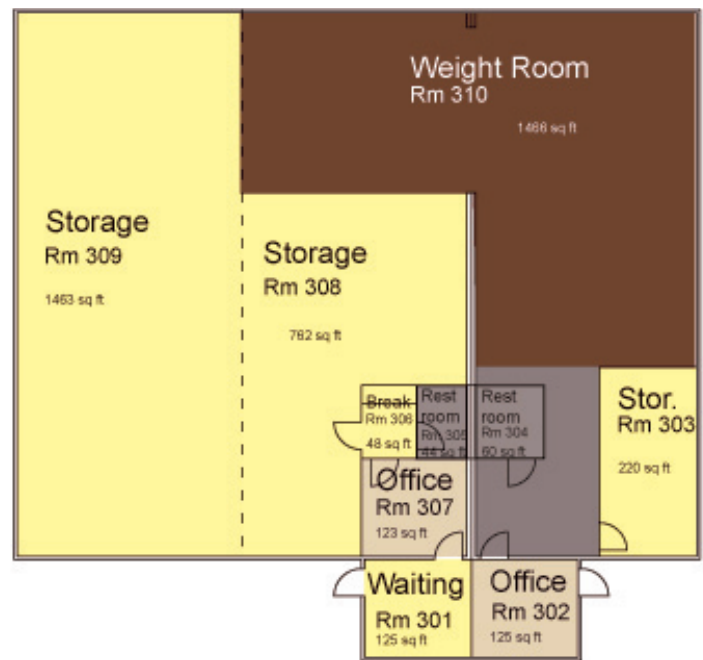
**Second Floor**

**Exhibit 2-8**  
**Floor Plan of Owned Facility**



**Exhibit 2-9**  
**Floor Plan of Leased**  
**Facility**

- Office
- Support
- Core Classroom
- Elective Classroom
- Special Education
- Tare



## Facility Evaluation

ARC evaluated the property at Central Avenue to update information entered by PSFA in the Facility Assessment Database.

### Summary of Adequacy of Physical Plant

*Site issues:*

- Irrigation system needs repairs
- An outdoor basketball court is desirable for outdoor student activities
- Site paving needs recoating, and unpaved parts of the site need paving
- A monument sign to improve wayfinding is desirable
- The school needs a carport structure to protect school-owned vehicles

*Building Issues:*

- The interior door needs upgrades to comply with fire rating requirements
- Signage needs upgrades to comply with Americans with Disabilities Act (ADA) requirements
- Mechanical units at the two-story portion are past usable



life and need replacement

- The construction lab needs electrical improvements
- The construction program space is too small to deliver both academic and hands-on training, and needs additional space
- The construction program needs a storage shed for equipment
- Classroom furniture needs replacement
- Electrical service and distribution will require upgrades to meet increased demand
- Additional security system cameras are desirable
- The school needs additional exterior wall-mounted security lighting
- The roof is in poor condition and needs replacement
- Classroom lighting is energy-inefficient and should be replaced with more efficient fixtures and lamps
- A retrofit of the future kitchen room is desirable to improve food service

### **FAD Update**

A copy of the full FAD update is in Section 5 - Master Plan Supporting Documents.

## **Statewide Adequacy Standards**

New Mexico's statewide adequacy standards for primary and secondary educational facilities (NMAC 6.27.30) are the guidelines for public school districts to "... provide and sustain the environment to meet the needs of public schools." The guidelines are a minimum facility standard to establish equity among all educational facilities that serve New Mexico public school students. Alternative and charter schools may seek a variance for facilities, since they do not necessarily conform to the standard's programs, delivery methods, and facility needs and budgets. In such cases, schools meet the intent of the facility requirements through "alternative methods." However, alternative and charter schools must provide the minimum square footage allowances for general classroom spaces identified in the adequacy standards. Section 3.2.5 Space Needs indicates conformance with adequacy standards for minimum square footage per student.

The implementation of space needs for ATTHS will meet the following required standards, listed below with statute section citations in parentheses:

### **6.27.30.8 General Requirements**

- Building structural soundness (A.1)
- Weather-tight exterior envelope (A.2)



- Interior surface condition (A.3)
- Interior finish harmful elements (A.4)
- Building system integrity (B.1)
- Plumbing type / accessibility (B.2)
- Adequate fire alarm system (B.3)
- Adequate two-way communication system (B.4)

#### **6.27.30.10 Site**

- Student drop-off pedestrian pathway (A)
- Protection of building structural integrity (C)
- Potential of flooding, ponding, or erosion (C)

#### **6.27.30.12 Academic Classroom**

- Appropriate size (A)
- Lighting (C )
- Temperature range (D)
- Acoustics (E)
- Air quality (CO<sub>2</sub> PPM) (F)



## 2.4 Utilization and Capacity

### Utilization

Utilization analysis identifies existing classroom use and the number of classrooms that accommodate current student enrollment. An analysis based on the master schedule of academic year 2011-12 is in Section 5 - Master Plan Supporting Documents. The average utilization rate of all instructional spaces at the school is 85%. The average classroom utilization rate is 93%.

### Capacity

A school's stated delivery methods, usually expressed in terms of classroom loading and PTR, determine the capacity of a charter school facility. The New Mexico Public School Facility Adequacy Standards require a minimum of 25 square feet per student for high school classrooms. The capacity analysis compares the capacity considering the minimum amount of square footage required per student by New Mexico Adequacy Standards versus the allowable classroom loading capacity according to state statute. The reported capacity is the lesser (more stringent) of the two numbers. The maximum functional capacity of both the current main facility and the leased facility together is 191, as illustrated in Exhibit 2-10. The maximum functional capacity of the main building alone is 170. The capacity of the leased facility will increase if the storage areas are converted to classrooms.



**Exhibit 2-10  
Capacity Analysis**

*Based on  
Square Footage  
Requirements*

*Based  
on PTR  
Statute*

Room Number	Room Name	Educational Classification	Sq Feet	General			Project Based		
				Capacity per Adequacy	Capacity per CR Loading	Reported Capacity Gen CR	Capacity per Adequacy	Capacity per CR Loading	Reported Capacity Project Based
104	History/Spanish	Classroom	655	26	25	25	23	50	23
105	English	Classroom	632	25	25	25	23	50	23
106	Math	Classroom	632	25	25	25	23	50	23
107	Construction Lab	Specialized Classroom	1305	52	25	25	47	50	47
108	Reading	Classroom	626	25	25	25			
109	Computer Lab	Specialized Classroom	646	26	25	25	23	50	23
110	Graphic Design	Classroom	704	28	25	25	25	50	25
116	Science	Classroom	1014	41	25	25	36	50	36
310	Weight room	Specialized Classroom	1466	59	25	25			

**Total Capacity =**

**307      225      225      200      350      200**

with 85% efficiency

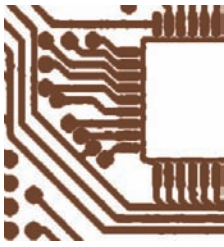
**191**

*Capacity with  
general  
classroom  
use*

Source: ARC







## 2.5 Technology

ATTHS has used its Technology Plan to apply for E-Rate funding and to guide technology investment and implementation at the school. A summary of the ATTHS Technology Plan is below.

*ATTHS will use technology funds to improve the academic achievement of students as measured against NM Content Standards, Benchmarks and Performance Standards, including technology literacy of all students.*

### Strategies for Improving Academic Achievement and Teacher Effectiveness

Our goal is to build students' digital literacy by teaching the knowledge and skills necessary to adapt to changing technologies, and providing the opportunity to master core subjects to ensure student success in future education endeavors and careers, thereby becoming responsible and productive citizens. Toward this end, we will endeavor to make every classroom a computer lab and integrate technology into the curriculum to reach and engage students with varied learning styles, and to regularly assess the gains made in student learning.

### Goals

#### Goal 1

Students will acquire the knowledge and skills to be ready to work and communicate in the ever-changing global technological society. We will strategically increase student use of technology tools and Internet resources to master New Mexico Content Standards, Benchmarks, and Performance Standards.

#### Goal 2:

Teachers and administrators will use technology to support teaching and learning across the curriculum. Educators will develop the skill and knowledge necessary to effectively use technology to assist students achieve the NM Content Standards, Benchmarks, and Performance Standards.



### Goal 3

Students and educators will have access to hardware and supporting infrastructure that meets or exceeds NMPED Technology Adequacy Standards. We will provide adequate network infrastructure to support high-speed universal technology access. In order to effectively plan for future technology support needs, the school needs to obtain an accurate assessment of technology including basic infrastructure, classroom equipment and software.

### Goal 4

Funding through E Rate and other sources will support the school's technology plan.

### **The Academy of Trades and Technology is committed to specifically provide:**

- Network-ready, multimedia computers in most every classroom
- The necessary peripheral devices in those classrooms to enable multimedia presentations
- Curriculum that emphasizes research skills, manipulation of data, and presentation of information using technological tools
- Methodology to teach students to use sound judgment and critical thinking when using information from the World Wide Web
- Emphasis on Internet resources and basic computer skills in career development and job placement programs
- System of ongoing assessment and evaluation to measure the gains in student learning, and effectiveness of the integration of technology into the curriculum

### **EETT Goals**

The following goals also have been incorporated by the Academy of Trades and Technology which follow guidelines recommended by the Enhancing Education Through Technology (EETT) for the effective use of technology in the classroom to improve student academic achievement.

- Students will acquire the knowledge and skills to be ready to work and communicate in the 21st century
- Teachers and administrators use technology to support teaching and learning across the curriculum
- All students and educators have universal access to hardware and electronic infrastructure that meets or exceeds New Mexico adequacy standards
- All high school students will have access to at least one distance-learning course before graduating from high school (required by Senate Bill 561)



## Steps to increased accessibility

Steps to increased accessibility: we will publicize and disseminate the results of the local annual review required by Section 1116 of Title I to parents, teachers, principals, schools and the community so that the teachers, principals, other staff, and schools can continually refine, in an useful manner, the program of instruction to help all students as stipulated by law.

To meet the educational needs of students, we will use advanced technology to support differentiated instruction that allows teachers to pursue vigorously student learning within the guidelines of New Mexico's standards and curriculum. We will create a high level of expectation for technology access and application in the classroom, specifically technology provided to students. We will endeavor to develop educational technology skills in teachers that allow them to support and coach students in the applications of technology. Currently, we are evaluating advanced technologies to identify, manage, assess and report student achievement.

We will continue to monitor instruction and academic performance to meet Annual Measurable Objectives (AMOG) designated by AYP targets in order to meet full proficiency.

## Promotion of curricula and strategies that promote technology integration

Our curriculum framework is aligned to the State of New Mexico Technology Content Standards and meets New Mexico Public Education Standards for Education Rule NMAC (6.29.3.I) NMAC-N 6-30-2009 reflecting research-based effectiveness studies. The instructional materials utilized meet the 'best price' guarantee for instructional materials over a six-year cycle.

## Technology Curriculum

The Academy of Trades and Technology will create a collaborative climate that fosters instructional collaboration, trust, mutual respect, empathy and an appreciation for diversity. ATTHS is implementing a curriculum with lessons aligned to the current curriculum benchmarks and grade-level-appropriate expectations.

Regarding professional development, we will provide access to online training and school-based professional development for technology applications. We currently use qualified technology coaches and demonstrators in the classroom. We are committed to enhancing



and promoting participation in developmental workshops such as the webinars offered by the Regional Educational Technology Assistance (RETA) from New Mexico State University. We will develop advanced placement and distance learning courses through Innovative Digital Education and Learning (Ideal-NM) at the appropriate interval.

## **Parental involvement**

School administrators are meeting with local leaders and community members to develop additional educational opportunities and events supported by the community. Administrators are considering monthly or as-needed newsletters to community members and the media, along with other innovative media activities. State and nationally recognized sports figures and other minor celebrities have offered assistance to the school.

## **Accountability measures**

We will broaden our review process, increase discussion levels, and critique and revise the current technology expectations of our instructional staff related to student performance. We will reevaluated and improved self-assessments and ongoing surveys that measure technology competence. We will conduct surveys of all stakeholders to assess and measure the status of our technology. We will continue to investigate and implement new tools, strategies and instructional options to enhance the technology competence of instructional personnel.



## 2.6 Energy Management

### Energy Management Plan



*Studies show that school buildings that are comfortable, well ventilated, well lit and safe, and that make use of the latest information and learning technologies, are more conducive to academic achievement than buildings without such features.*

#### Vision Statement

Recognizing that building system energy usage impacts the school's ability to meet educational missions and be fiscally responsible, Academy of Trades and Technology High School (ATTHS) will minimize our energy consumption at our owned and leased facilities, while maintaining a comfortable and effective learning environment. By employing common-sense conservation guidelines and implementing behavioral solutions in both classrooms and operations, and through facility capital investments in energy efficiency in our owned facility, we will measurably demonstrate continuous improvement in energy-use reduction and energy conservation awareness.

#### Policy

The governing council of ATTHS is committed to the efficient use of energy resources, protection of the environment, and responsible employment of financial resources which are devoted to our energy-related budget. We expect all employees, students and facility users to contribute to energy efficiency by developing their own awareness of the need to conserve energy and by being "energy savers" through their judicious use of energy. Through energy-efficient behaviors and capital improvements, the school will reduce energy consumption and greenhouse gas production.

#### Goals

##### Behavior Modification Programs

1. Implement behavior modification programs such as turning off lights in unoccupied rooms, shutting down all electronic devices at the end of every day, keeping thermostats at an agreed-upon level during the school day, and lowering temperature settings when the school is unoccupied.



2. Establish an energy-awareness program to train personnel and educate students.

### **Capital Investment Programs**

1. Determine where the school can most effectively and affordably realize energy savings through an energy audit of the owned facility, and establish exact energy reduction targets.
2. Establish a capital plan to affordably implement identified capital projects to meet energy reduction targets.
3. Capitalize on future renovation projects to create a more energy-efficient building through a better insulated roof, windows and doors, and more energy-efficient equipment.



## 3 FACILITY REQUIREMENTS

# Planning for the Future

### 3.1 Facility Goals and Concepts

#### Goals and Concepts

The steering committee established the following goals and concepts to guide future improvements to ATTHS facilities:

#### Function

- Provide adequate space for all programs
  - » Construction programs
- Provide adequate storage for all needs
  - » Flammable materials for construction classes
  - » Garage space for fleet
- Provide access to all program spaces
  - » Make library more accessible to students
- Provide for future programs
  - » Additional construction programs
  - » Kitchen for food preparation
  - » After-school programs - tutoring, classroom activities, art and music, kickboxing instruction
  - » Physical education indoors on site
- Provide for technology needs
  - » Establish standard classroom tech inventory and work out capital plan for implementation

#### Safety and Security

- Ensure adequate facility safety and security
  - » Install alarms at all exits
  - » Upgrade security camera coverage
  - » Separate student and faculty restrooms
  - » Provide intercom and bell system access to all classrooms
  - » Improve electrical service/distribution/energy efficiency to provide adequate access to electricity in classrooms



*Long-range planning asks questions: "Where do we want to be?" and "How do we get there?" Big picture goals answer the first question. Concepts provide more detail to answer the second question.*

## Image

- Improve appearance of building and grounds
  - » Enhance landscaping in parking area
  - » Improve quality of parking lot paving
  - » Create attractive and comfortable outdoor areas for student use
- Improve wayfinding for students and visitors
  - » Install monument signage on Broadway to direct traffic to school



## Academy of Trades and Technology High School

Facilities Master Plan / Educational Specifications 2013 - 2017  
Architectural Research Consultants, Incorporated



## 3.2 Space Requirements

The planning team identified space requirements to accommodate the programs offered at ATTHS, based on enrollment growth targets. The team then matched space needs with existing facilities to determine the most appropriate and cost-effective fit using all current and potential future properties. Planners analyzed the space needs for projected enrollment growth. The primary goal for accommodating space needs is to do so within currently owned space or by acquiring additional space in the future. Priority is given to construction program needs. In the long term, when ATTHS reaches full enrollment, the school would like to consolidate all facilities on a single site.

### Space Summary

#### Overall Space Summary

As enrollment at ATTHS grows toward the enrollment cap of 300, space needs will grow primarily for instructional program space, along with some additional administrative space needs. Exhibit 3-1 shows the summary of space needs with growing enrollment. The middle growth period, which will take the school beyond the capacity of its current facilities, will require additional space to accommodate growth almost to the maximum anticipated enrollment.

**Exhibit 3-1**  
**Space Needs Summary**  
**With Growth**

	150 Students			220 - 270 Students			300 Students		
	NASF	GSF	% of Total	NASF	GSF	% of Total	NASF	GSF	% of Total
1.0 Instructional Program Spaces	6,405	9,418	52%	9,515	13,995	61%	10,190	14,990	55%
2.0 Instructional Support	1,575	2,318	13%	1,575	2,315	10%	3,100	4,560	17%
3.0 Administration and Support Areas	4,335	6,379	35%	4,485	6,595	29%	5,235	7,695	28%
<b>Totals</b>	<b>12,315</b>	<b>18,115</b>		<b>15,575</b>	<b>22,905</b>		<b>18,525</b>	<b>27,245</b>	

Source: ARC



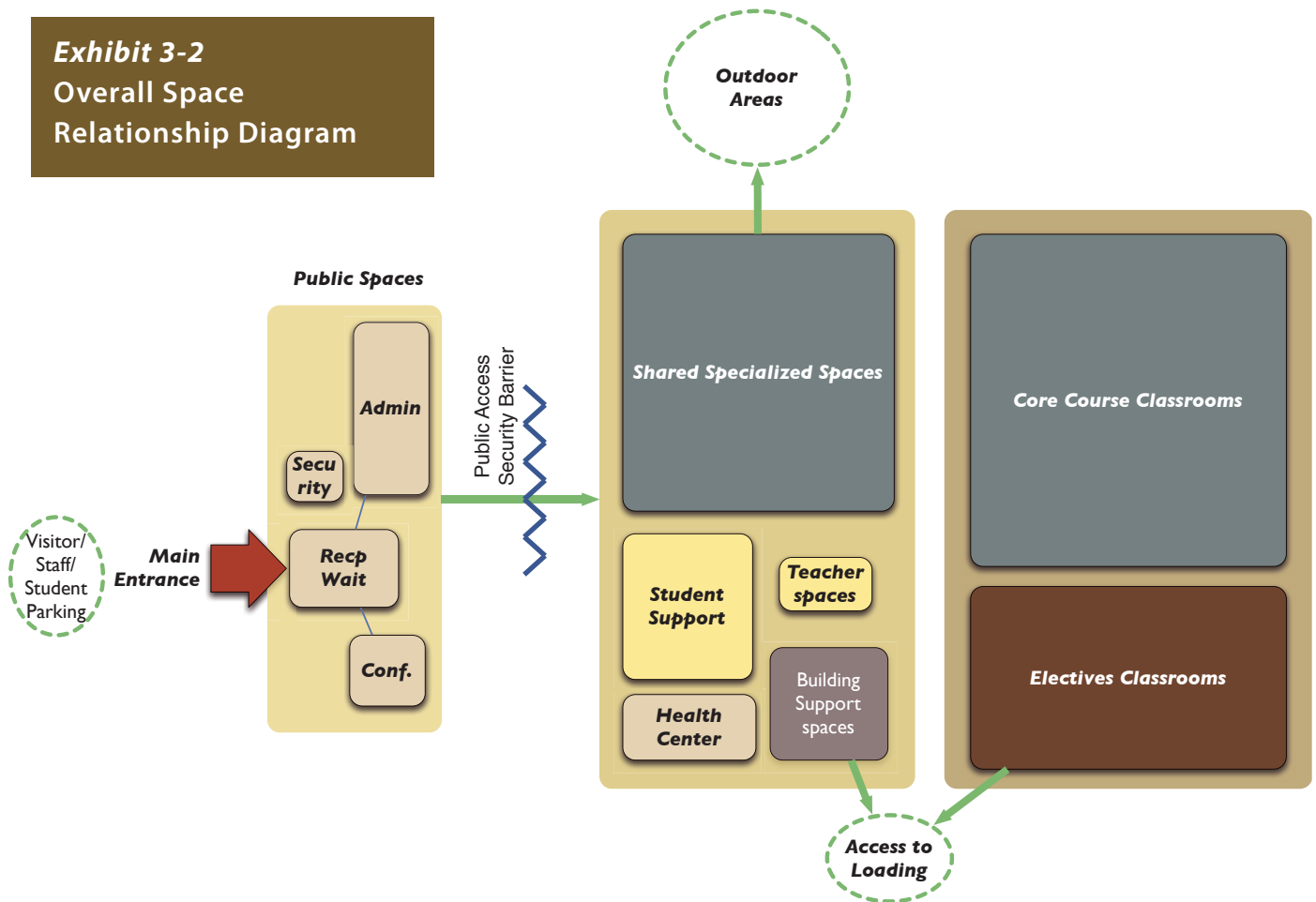
## Overall Relationship Diagram

The overall relationship diagram below (Exhibit 3-2) shows the organization of the basic site functions, building access, and outdoor spaces at the school facilities.

Everyone must enter the school at the main entrance where the reception and security offices are located. Security cameras and a security officer tightly monitor access to and from the school building.

The public (non-students) has access to administration and conference areas at the front of the school. All other areas require an escort. Although the school's highly personal and supportive environment makes students feel welcome and secure, the school closely monitors the potential for untoward behavior and activities.

**Exhibit 3-2**  
Overall Space  
Relationship Diagram



## Site requirements

### Transportation Accommodation

Students or their parents are responsible for transportation to and from school, which includes personal vehicles and public transportation. The nearest bus stop is 1/3 mile away on Broadway Boulevard. The school is out of sight of the main road and the route to the school is not obvious. A monument sign on the corner of Broadway and San Jose Avenue, the closest intersection, would improve wayfinding. Staff, visitor and student parking is available on the site or at the curb in front of the school.

The school owns two Suburbans to transport students to programs that are delivered off site and to community service activities associated with the construction career path program.

### Recreation Facilities

Outdoor physical education currently takes place at the Herman Sanchez Community Center and San Jose Park, 1/2 mile from the school campus. Lunch recess and outdoor instructional programs take place in outdoor areas on site. The school intends to construct a basketball court for use during lunch recess.

#### Exhibit 3-3 Total Site Requirements

The table below (Exhibit 3-3) summarizes total site requirements described above.

Site Requirements	#	Unit Size	Total GSF	Acres
Permanent Buildings	1	29,700	29,700	0.68
Student/Staff/Visitor Parking	39	350	13,650	0.31
Outdoor activity area	1	5,000	5,000	0.11
Fleet parking	4	350	1,400	0.03
Construction program staging	1	4,000	4,000	0.09
Basketball court	1	3,500	3,500	0.08
		Net	57,250	1.31
	TARE** at	25%	19,083	0.44
	<b>Total school area needed</b>		<b>76,333</b>	<b>1.75</b>

\* Assumes single story construction

\*\* TARE = roads, landscaping, unuseable area

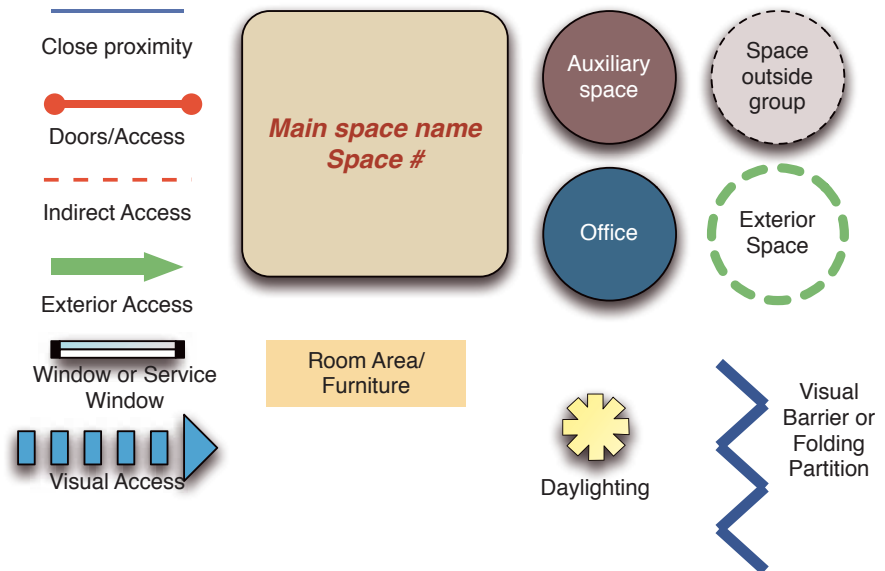
Source: ARC



## Descriptions and Diagrams of Required Spaces

This section contains narrative descriptions and functional diagrams that describe the needs of each program area. Relationship diagrams illustrate the relationships between spaces, such as adjacency, visibility, and access. Exhibit 3-4 shows a legend of symbols used in the space relationship diagrams.

**Exhibit 3-4**  
**Space Relationship**  
**Diagrams Legend**



### Category 1.0 - Instructional Program Spaces

#### General Classrooms / Group Project Rooms

General classrooms at ATTHS accommodate two types of class structure:

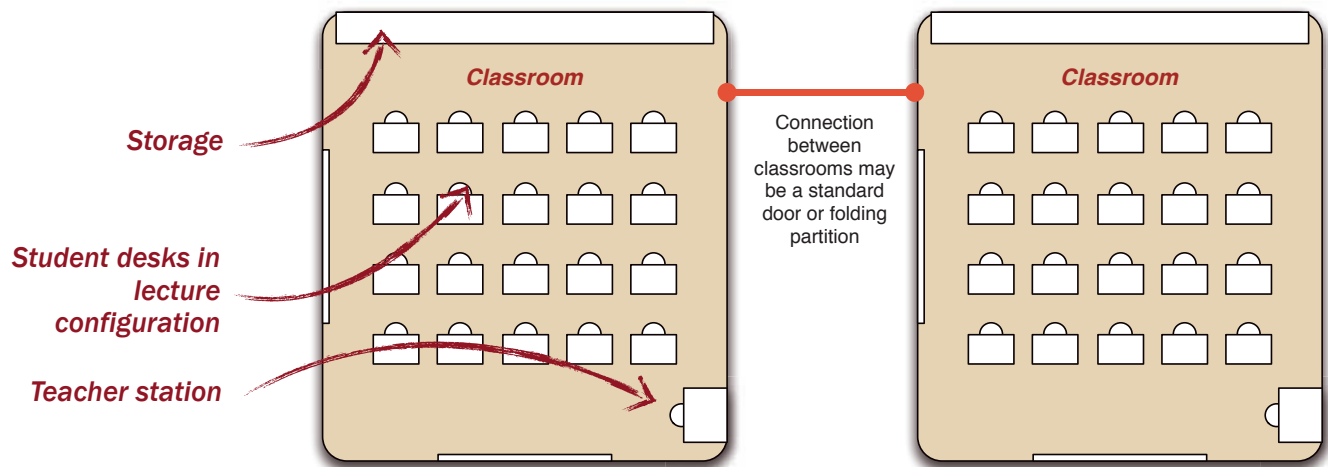
- *Core course classes* for all grades for mathematics, English, history, Spanish, and science. Delivery is through lectures:
  - » Science as delivered does not require specialized lab space
  - » All classrooms require student desks, computer station desks, a teacher station and storage
  - » Square footage per student follows the minimum required by adequacy standards
- *Group project* (project-based course)
  - » Two instructors team-teach, allows for larger enrollment than lecture courses



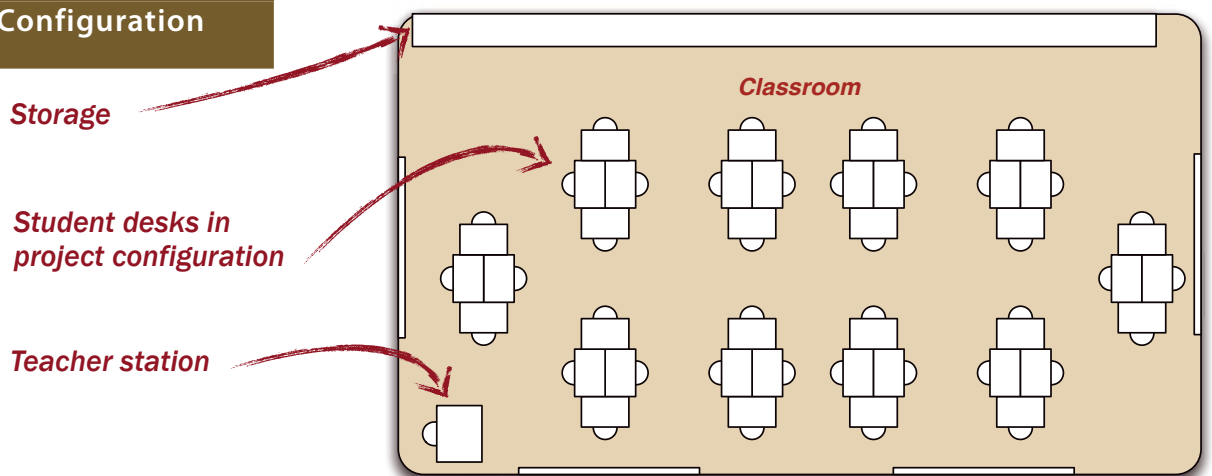
- » Student stations are movable for grouping and hands-on activities
- » Project activities require more space per student (30sf)
- » Will need communication (via movable partitions, double doors in common wall, etc.) between two classrooms to allow for group work

Exhibits 3-5 and 3-6 show space relationships.

**Exhibit 3-5**  
General Classroom -  
Lecture Configuration



**Exhibit 3-6**  
General Classroom -  
Project Configuration



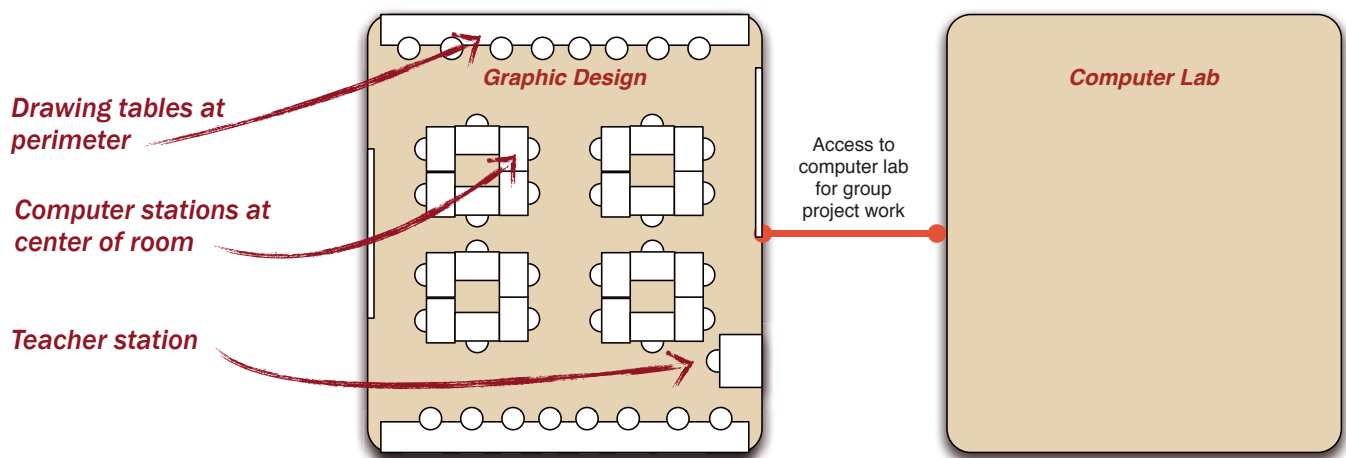
## Specialized Classrooms

Electives courses that require delivery in specialized labs are graphic design, construction, and Read 180.

- Graphic Design
  - » Delivery requires a computer station, a drafting table for each student and a teacher station
  - » This lab is technology-rich since students learn a computer-based trade with electronic media. Instruction and production rely on technology hardware, software, and Internet access.
- Construction
  - » Lectures take place in a general classroom-type of space
  - » The hands-on instruction portion requires a specialized lab with fixed equipment, utilities and extra room for indoor staging
- Read 180
  - » Delivery is through a variety of reading and listening, individual and group formats including:
    - Students in groups with a teacher at a table
    - Students individually at a computer station
    - Students individually and in groups in comfortable reading chairs

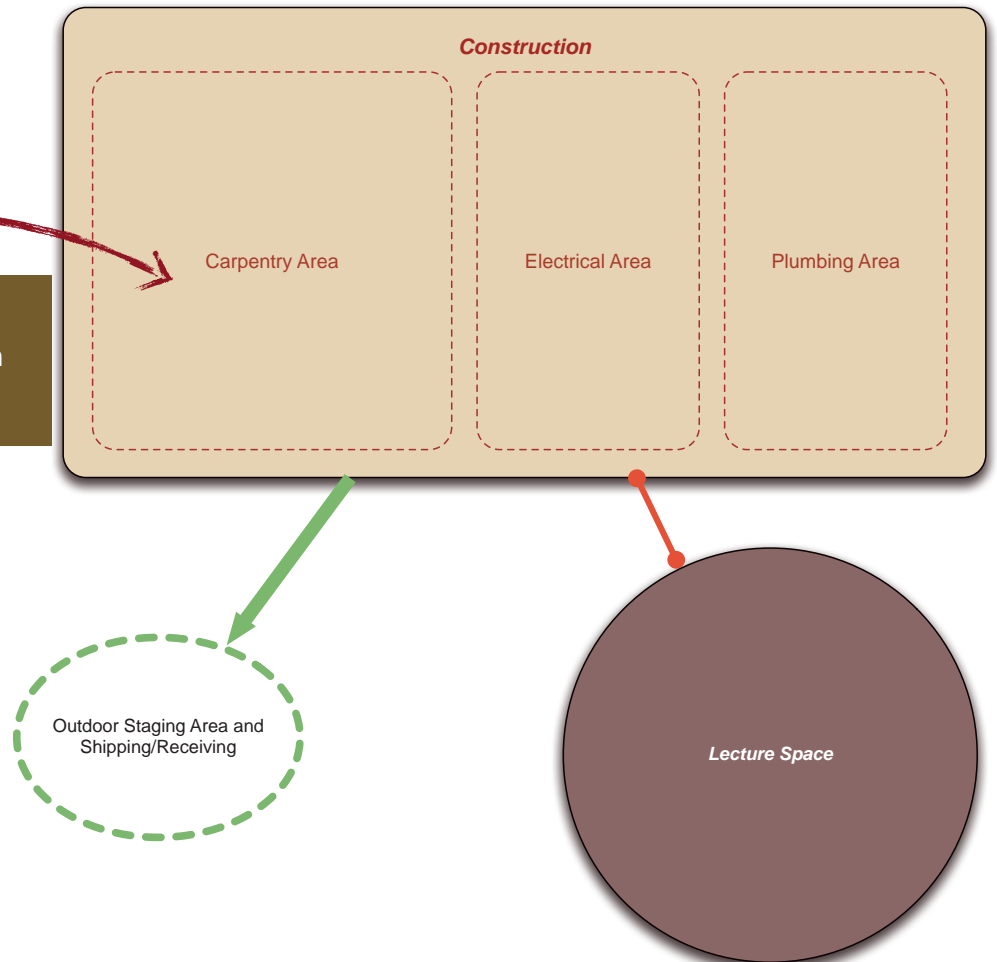
### Exhibit 3-7 Graphic Design Classroom

Exhibits 3-7 through 3-9 show space relationships.



*Separate hands-on learning areas for 3 disciplines*

**Exhibit 3-8**  
**Construction Classroom**



**Exhibit 3-9**  
**Read 180 Classroom**

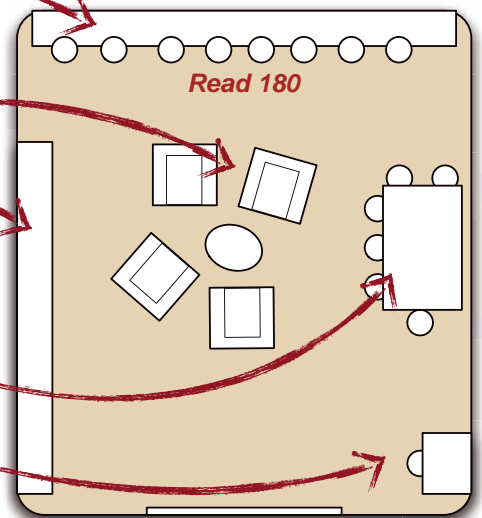
**Computer stations**

**Comfortable seating for individual reading**

**Storage**

**Table for group reading and writing**

**Teacher station**



## Special Education

The school delivers most Special Education programs in general classrooms through full inclusion. It delivers additional periodic special instruction to an unspecified number of students in the Special Education computer lab. The school also uses the lab for Internet access to A+, a credit recovery courseware program.

ATT intends to provide a room for English language learner programs. It currently has no space dedicated to this program.

## Category 2.0 - Instructional Support Spaces

### Physical Education

- PE programs include weightlifting and basketball
- Weightlifting
  - » Program delivery is in a gym-type space with weightlifting stations for individual student use
- Basketball
  - » Basketball program delivery is through "alternative methods," at the Herman Sanchez Community Center



### Multipurpose

- The school serves lunch in the multipurpose room
  - » Current facilities can accommodate the entire student body at one seating. If the enrollment grows and/or the multipurpose room is relocated, lunch periods will increase to two or more.
- The multipurpose room also houses lectures, either live or electronic, to large groups of students
- The room has warming equipment for pre-prepared food from a food vendor
  - » The school would like to outfit a currently vacant room as a full kitchen for preparation of healthy, tasty meals on site





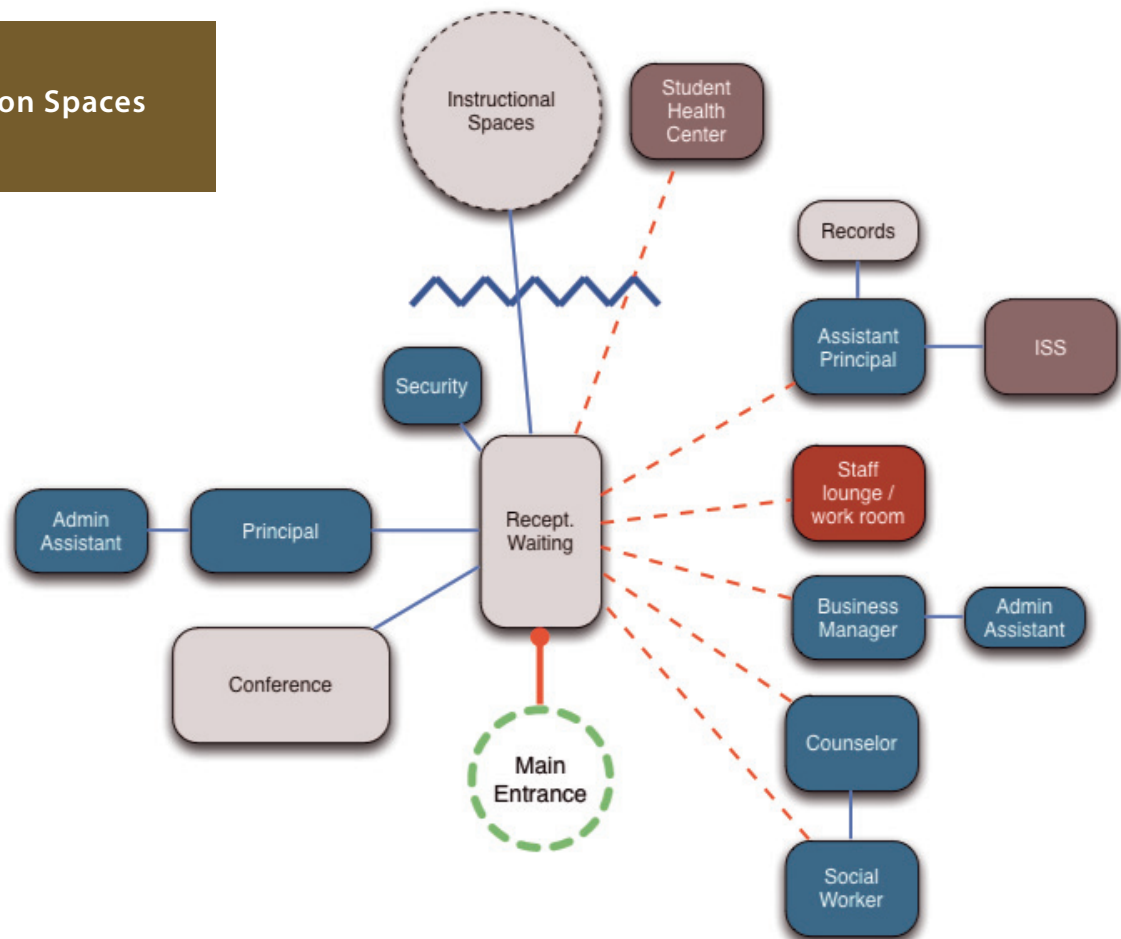
### Category 3.0 - Administration and Support Spaces

Administration areas include the following spaces in two facilities. If the school locates at a single facility, some administrative support functions may not be necessary.

Exhibit 3-10 illustrates the relationships between the administrative spaces.

- Reception/waiting area for visitors
- Security station/office/storage
- Offices for:
  - » Principal
  - » Assistant principal
  - » Business manager
  - » Administrative assistants

**Exhibit 3-10**  
**Administration Spaces**



- » Counselor
- » Social worker
- Conference room (also used for IEP)
- Records
- Staff lounge/work room
- Student health center including:
  - » Clinic office
  - » 2 exam rooms
  - » Pharmacy
- Maintenance room
- In-school suspension (future)

### **Facility Support**

Facility support areas include the following spaces: building storage, server room and janitor storage. Storage areas are location-neutral. The main computer server is in a centralized space.

### **Alternative Methods**

All program delivery is on campus, except for the PE basketball program, which takes place at the Herman Sanchez Community Center nearby. Internships and other community service work take place off site at community businesses or residences.

### **Space Needs**

The tables in Exhibits 3-11 through 3-13 itemize space needs for each type of space. Because space needs change over time as the enrollment grows, the tables itemize these space needs for anticipated growth at 150 students, 220 to 270 students, and 300 students.



**Exhibit 3-11**  
**Space Needs - 150 to 190**  
**Students**

Room Description	# of Spaces	# of Persons	Area / Person	Other Space Criteria	Total Area	Total Assignable	Sub-total (NASF)
<b>1.0 Instructional Program Spaces</b>	<b>Total Classrooms = 10</b>						<b>6,405</b>
<b>1.1 Classrooms</b>							<b>2,835</b>
1.1.1 General Classrooms	3	25	25	50	675	2,025	
1.1.2 Science Lab	1	25	30	60	810	810	
<b>1.2 Specialized Classrooms</b>							<b>2,930</b>
1.2.1 Special Education resource room	1	15	25	75	450	450	
1.2.2 Read 180	1	20	25	40	540	540	
1.2.3 Construction lab	1	20	50	300	1,300	1,300	
1.2.4 Graphic design lab	1	20	30	40	640	640	
<b>1.3 Shared Classrooms</b>							<b>640</b>
1.3.1 Computer lab	1	20	30	40	640	640	
<b>2.0 Instructional Support</b>							<b>1,575</b>
<b>2.1 Gym</b>							<b>1,125</b>
2.1.1 Weight room (PE)	1	20	30	800	1,400	1,400	
<b>2.2 Multipurpose</b>							<b>1,125</b>
2.2.1 Multipurpose room	1	75	15		1,125	1,125	
<b>2.3 Media Center</b>							<b>450</b>
2.3.1 Library	1	10	25	200	450	450	
<b>3.0 Administration and Support Areas</b>							<b>4,335</b>
<b>3.1 Administration</b>							<b>2,330</b>
3.1.1 Waiting 1		4	100		400	400	
3.1.2 Reception	1	1	100		100	100	
3.1.3 Admin assistant	2	1	100		100	200	
3.1.4 Principal 1		1	200		200	200	
3.1.5 Assistant principal	1	1	150		150	150	
3.1.6 Business manager	1	1	150		150	150	
3.1.7 Security	1	1	100	50	150	150	
3.1.8 Counselor	1	1	100	50	150	150	
3.1.9 Social Worker	1	1	100	50	150	150	
3.1.10 Conference	1	15	22	50	380	380	
3.1.11 Records	1			200	200	200	
3.1.12 Maintenance	1	1	100		100	100	
<b>3.2 Faculty Spaces</b>							<b>300</b>
3.2.1 Lounge / Work room	1			300	300	300	
<b>3.3 Student Health Spaces</b>							<b>650</b>
3.3.1 Clinic	1			250	250	250	
3.3.2 Exam room	2			150	150	300	
3.3.3 Pharmacy	1			100	100	100	
<b>3.4 Storage</b>							<b>1,055</b>
3.4.1 Building storage	3			300	300	900	
3.4.2 Server room	1			75	75	75	
3.4.3 Janitor closet	2			40	40	80	
<b>NET ASSIGNABLE</b>							<b>12,315</b>
<b>TARE</b>	Efficiency at 68%						<b>5,800</b>
<b>GROSS SQUARE FEET</b>							<b>18,115</b>

TARE = the % value divided into the Net Assignable (NASF/0.70 - NASF)



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**Exhibit 3-12**  
**Space Needs - 220 to 270**  
**Students**

Room Description	# of Spaces	# of Persons	Area / Person	Other Space Criteria	Total Area	Total Assignable	Sub-total (NASF)
<b>1.0 Instructional Program Spaces</b>	Total Classrooms = 14						9,515
<b>1.1 Classrooms</b>							4,995
1.1.1 General Classrooms	5	25	25	50	675	3,375	
1.1.2 Science Lab	2	25	30	60	810	1,620	
<b>1.2 Specialized Classrooms</b>							3,880
1.2.1 Special Education resource room	1	15	25	75	450	450	
1.2.2 ELL classroom	1	15	25	75	450	450	
1.2.3 Read 180	1	20	25	40	540	540	
1.2.4 Construction lab	1	20	50	800	1,800	1,800	
1.2.5 Graphic design lab	1	20	30	40	640	640	
<b>1.3 Shared Classrooms</b>							640
1.3.1 Computer lab	1	20	30	40	640	640	
<b>2.0 Instructional Support</b>							1,575
<b>2.1 Gym</b>							0
2.1.1 Weight room (PE)	1	20	30	800	1,400	1,400	
<b>2.2 Multipurpose</b>							1,125
2.2.1 Multipurpose room	1	75	15		1,125	1,125	
<b>2.3 Media Center</b>							450
2.3.1 Library	1	10	25	200	450	450	
<b>3.0 Administration and Support Areas</b>							4,485
<b>3.1 Administration</b>							2,480
3.1.1 Waiting 1		4	100		400	400	
3.1.2 Reception	1	1	100		100	100	
3.1.3 Admin assistant	2	1	100		100	200	
3.1.4 Principal 1		1	200		200	200	
3.1.5 Assistant principal	1	1	150		150	150	
3.1.6 Business manager	1	1	150		150	150	
3.1.7 Security	1	1	100	50	150	150	
3.1.8 Counselor	1	1	100	50	150	150	
3.1.9 Social Worker	1	1	100	50	150	150	
3.1.10 Conference	1	15	22	50	380	380	
3.1.11 Records	1			200	200	200	
3.1.12 Maintenance	1	1	100		100	100	
3.1.13 In-School suspension	1	5	30		150	150	
<b>3.2 Faculty Spaces</b>							300
3.2.1 Lounge / Work room	1			300	300	300	
<b>3.3 Student Health Spaces</b>							650
3.3.1 Clinic	1			250	250	250	
3.3.2 Exam room	2			150	150	300	
3.3.3 Pharmacy	1			100	100	100	
<b>3.4 Storage</b>							1,055
3.4.1 Building storage	3			300	300	900	
3.4.2 Server room	1			75	75	75	
3.4.3 Janitor closet	2			40	40	80	
NET ASSIGNABLE							15,575
TARE	Efficiency at 68%						7,330
<b>GROSS SQUARE FEET</b>							<b>22,905</b>

TARE = the % value divided into the Net Assignable (NASF/0.70 - NASF)



**Exhibit 3-13**  
**Space Needs - 300**  
**Students**

Room Description	# of Spaces	# of Persons	Area / Person	Other Space Criteria	Total Area	Total Assignable	Sub-total (NASF)
<b>1.0 Instructional Program Spaces</b>	Total Classrooms = 14						10,190
<b>1.1 General Classrooms</b>							5,670
1.1.1 General Classrooms	6	25	25	50	675	4,050	
1.1.2 Science Lab	2	25	30	60	810	1,620	
<b>1.2 Specialized Classrooms</b>							3,880
1.2.1 Special Education resource room	1	15	25	75	450	450	
1.2.2 ELL classroom	1	15	25	75	450	450	
1.2.3 Read 180	1	20	25	40	540	540	
1.2.4 Construction lab	1	20	50	800	1,800	1,800	
1.2.5 Graphic design lab	1	20	30	40	640	640	
<b>1.3 Shared Classrooms</b>							640
1.3.1 Computer lab	1	20	30	40	640	640	
<b>2.0 Instructional Support</b>							3,100
<b>2.1 Gym</b>							1,125
2.1.1 Weight room (PE)	1	20	30	800	1,400	1,400	
2.1.2 Basketball gym	1	20	30	800	1,400	1,400	
<b>2.2 Multipurpose</b>							1,525
2.2.1 Multipurpose room	1	75	15		1,125	1,125	
2.2.2 Warming kitchen	1			400	400	400	
<b>2.3 Media Center</b>							450
2.3.1 Library	1	10	25	200	450	450	
<b>3.0 Administration and Support Areas</b>							5,235
<b>3.1 Administration</b>							3,230
3.1.1 Waiting 2		4	100		400	800	
3.1.2 Reception	2	1	100		100	200	
3.1.3 Admin assistant	3	1	100		100	300	
3.1.4 Principal 1		1	200		200	200	
3.1.5 Assistant principal	2	1	150		150	300	
3.1.6 Business manager	1	1	150		150	150	
3.1.7 Security	1	1	100	50	150	150	
3.1.8 Counselor	1	1	100	50	150	150	
3.1.9 Social Worker	1	1	100	50	150	150	
3.1.10 Conference	1	15	22	50	380	380	
3.1.11 Records	1			200	200	200	
3.1.12 Maintenance	1	1	100		100	100	
3.1.13 In-School suspension	1	5	30		150	150	
<b>3.2 Faculty Spaces</b>							300
3.2.1 Lounge / Work room	1			300	300	300	
<b>3.3 Student Health Spaces</b>							650
3.3.1 Clinic	1			250	250	250	
3.3.2 Exam room	2			150	150	300	
3.3.3 Pharmacy	1			100	100	100	
<b>3.4 Facility Support</b>							1,055
4.1.1 Building storage	3			300	300	900	
4.1.2 Server room	1			75	75	75	
4.1.3 Janitor closet	2			40	40	80	
NET ASSIGNABLE							18,525
TARE	Efficiency at 68%						8,720
<b>GROSS SQUARE FEET</b>							<b>27,245</b>

TARE = the % value divided into the Net Assignable (NASF/0.70 - NASF)



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# Detailed Space and Room Recommendations for New Construction

## Technology and Communications Criteria

### Network

- Network - Classrooms
  - » 6 CAT 6 hard-wired drops. 2 drops on each of 3 walls (4th wall is the front of the classroom presentation area)
  - » CAT 6 drop or port available for wireless access point (WAP) [IDEAL: 18 inches from the ceiling on the far corner from the doorway with one 110 VAC/power outlet]
  - » Wireless network capacity to support 25 computers at 100 Mbps in each room
  - » Coaxial wiring to support cable broadcasts
- Network - Administration spaces
  - » 2 CAT 6 drops and a minimum of 2 110 VAC/power duplex outlets at each worker-occupied desk/workstation
  - » Conference room wireless network capacity to support 10 machines at 100 Mbps

### Devices

- Computers and network devices - classrooms
  - » Students - shared desktop computers, minimum of 5 per classroom
- Computers and network devices - Teachers and staff
  - » One device per teacher/instructional staff
- Peripheral devices
  - » Workroom - 1 each of shared devices such as printers, copiers, scanners, etc.
- Projection capability - classrooms
  - » Each classroom will have a media hub to channel all electronic interface devices to the LCD projector
  - » Each classroom will have ceiling mounted LCD projector, connect to media hub
  - » Each classroom will be equipped with one A/V screen

### Communications -Voice

- Each instructional space, office and support space will have two voice jacks with connection for multiple phone lines

### Intercom

- Each instructional space will have an intercom connection



## **Power Criteria**

### **Classrooms**

- Minimum of 3 duplex outlets on every wall
- Outlet for wall clock
- Center ceiling outlet for future ceiling-mounted devices
- Surge suppression

### **Offices and support spaces**

- Meet code for outlet distribution

## **Lighting Criteria**

### **Classroom lighting**

- Each instructional space requires a light level of at least 50 foot candles, measured at a work surface in the approximate center of the classroom between clean light fixtures
- All fixtures will have 2-level switching

## **Environmental Conditioning Criteria**

### **Classroom temperature**

- Each instructional space shall have a heating, ventilation, and air conditioning (HVAC) system capable of maintaining a temperature between 68°F and 75°F with full occupancy
- Temperature measurement shall be at a work surface in the approximate center of the classroom

### **Classroom air quality**

- Each instructional space shall have an HVAC system that continually moves air and maintains a CO<sub>2</sub> level of not more than 1,200 parts per million
- The air quality measurement shall be at a work surface in the approximate center of the classroom

### **Classroom Acoustics Criteria**

- The sound level in each general and specialty classroom shall be a one-hour, A-weighted noise criteria of less than 55 decibels
- The sound level shall be measured at a work surface in the approximate center of the classroom
- Reverberation times in classrooms shall be within a range of 0.4 to 0.6 seconds
- All other occupied spaces shall maintain a background sound level of less than 55 decibels



## **Plumbing Criteria**

### **Classrooms**

- Kindergarten and art classrooms shall have one lavatory with goose-neck faucet, built-in drinking fountain, and hot and cold water

## **Furnishing / Finishes / Fixtures / Equipment Criteria**

### **Movable Furniture**

#### **General Classrooms**

- Accommodate up to 24 students with chairs and work surfaces (some work surfaces may accommodate more than one student). Work surfaces should be mobile for grouping with other work surfaces.

#### **Offices**

Each office shall have the following modular office furniture:

- Desk and credenza work surfaces
- Drawer stack, four file drawers, overhead storage

#### **Media Center**

To be determined





## 3.3 Implementation of Space Needs

### Scenarios for Implementation

The planning team examined the implementation of space needs for ATTHS as it grows to full enrollment and evaluated strategies to maximize use of existing owned and leased spaces, and provide space for programs that are most in need.

Exhibits 3-14, 3-15, and 3-16 show the strategy for phased implementation of space needs accommodation.

#### Phase 1 - Immediate Needs, Enrollment to 190 Students

The school can continue to use the current owned and leased facilities without adding classrooms or project labs, as long as enrollment does not exceed 190 students. However, the school should resolve some facility renewal projects immediately. They include:

- Replace student furniture in two classrooms
- Provide storage for the construction program
- Conduct upgrades to meet ADA requirements and correct building code issues
- Retrofit the construction classroom

#### Phase 2 - Short-Term Needs, Enrollment to 270 Students

##### Earliest implementation year - 2013-14

The short-term needs include additional classroom and lab space for a growing enrollment:

- Erect a building to house the construction program's hands-on activities (classroom activities will continue to take place in the existing facility)
- Repurpose the existing construction program lab as a multipurpose room
- Repurpose the existing multipurpose room as two general classrooms (with the flexibility to combine as one project lab)

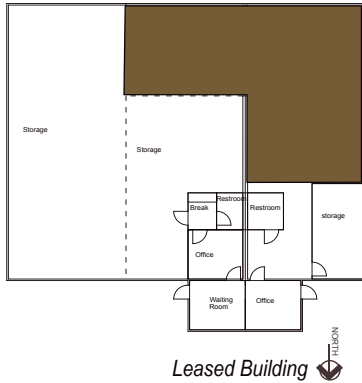
In addition, the school will require further building renewal projects. For the near-term (earliest implementation year is 2013-14):

- Refit some classrooms with energy-efficient lighting
- Repair the irrigation system
- Expand electrical service to accommodate new spaces and uses and improve distribution within the existing owned facility
- Pave and repave parking and drive areas
- Upgrade the building-mounted lighting
- Install a monument sign on Broadway to improve wayfinding to campus



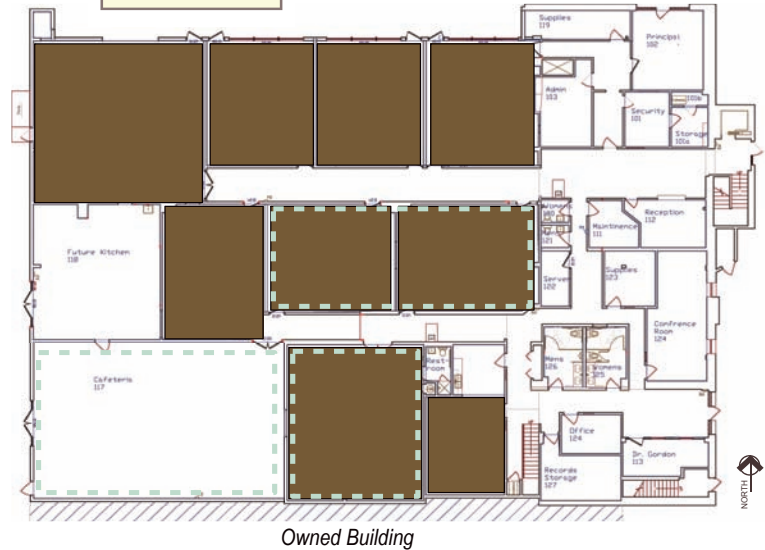
**Exhibit 3-14**  
**Immediate Needs**  
**Implementation**

- **Enrollment to 190**
  - ▶ **Classrooms - 10**
  - ▶ **Project labs - 3**
  - ▶ **Earliest implementation year - 2012/13**



Leased Building

This can be accomplished with existing facilities



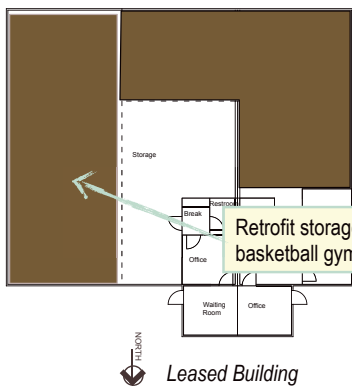
Owned Building

**LEGEND**

- Classroom
- Project lab

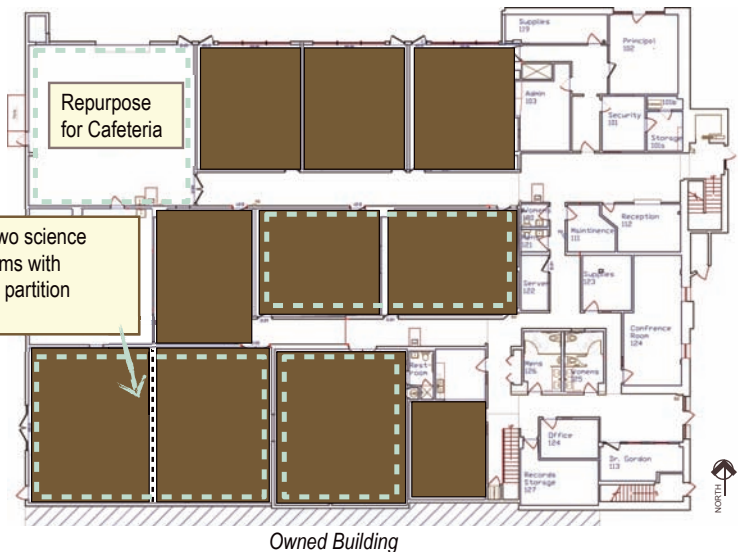
**Exhibit 3-15**  
**Short-Term Needs**  
**Implementation**

- **Enrollment to 270**
  - ▶ **Classrooms - 13**
  - ▶ **Project labs - 4**
  - ▶ **Earliest implementation year - 2013/14**



Leased Building

Install metal building to house Construction program - ~1,800 GSF



Owned Building



- Enrollment to 300

- ▶ Classrooms - 14
- ▶ Project labs - 5

Purchase all or part of property to the north



**Exhibit 3-16**  
Long-term Needs Implementation

For the mid-term (earliest implementation year is 2014-15):

- Retrofit the remaining classrooms with energy-efficient lighting
- Replace four aged HVAC units
- Upgrade the security system
- Retrofit a space for an on-site kitchen
- Reroof the main building
- Install a car-port for the Suburban fleet
- Renovate the storage area in the leased space for a basketball gym

### Phase 3 - Long-Term Needs, Enrollment to 300 Students

Enrollment growth to 300 is unlikely at ATTHS because the school finds that the administration of more than 225 at-risk students diminishes the staff's ability to serve special needs students. However, since the school's charter does allow enrollment growth to 300, the planning team examined the feasibility of providing space for the needs of 300



students.

Long-term projects to accommodate 300 students include:

- Purchase property to the north of the currently owned facility (1.458 acres)
- Construct a facility that includes required classrooms and labs, administrative functions, and relocated PE equipment (approximately 8,000 gsf)

See the matrix in Exhibit 3-17 that shows the costs and implementation time frame for these phases. The detailed cost estimates for these improvements are in the capital improvements project descriptions in Section 5.

**Exhibit 3-17**  
**Project Implementation**  
**Matrix**

<b>Building Renewal Projects</b>						
#	Description of work	Implement year	Description	Cost (2012 \$)	Total Cost by Implementation Year	
0.1	Furniture replacement (2 classroom annually)	Annually	50 trapezoid desks, 50 stackable chairs, 6 white boards	\$ 14,000		
12.1	Storage for Construction courses	2012-13	Storage shed or chain-link cage in leased area	\$ -	<b>\$38,600</b>	
12.2	ADA upgrades	2012-13	Braille signs, wall protectors at DF	\$ 4,500		
12.3	Code issue correction	2012-13	Relocate furnace to code compliant location	\$ 15,500		
12.4	Retrofits to Construction Classroom	2012-13	Compressed air & electrical accessed from middle of room	\$ 4,600		
13.1	Install Construction Classroom metal building	2013-14	Replace T12 lamps with T8 and electronic ballasts (1/2 project)	\$ 320,000	<b>\$571,200</b>	
13.2	Create 2 classrooms in former Multi-purpose room	2013-14		\$ 90,000		
13.3	Retrofit classroom lighting	2013-14		\$ 27,000		
13.4	Irrigation repairs	2013-14		\$ 4,200		
13.5	Improve electrical service and distribution	2013-14		\$ 80,000		
13.6	Repave parking	2013-14		Pave / stripe gravel lot, repair / recoat paved area ( 25% of actual cost, balance paid by DOT grant)		\$ 24,000
13.7	Upgrade building mounted lighting	2013-14		\$ 12,000		
13.8	Install monument sign on Broadway	2013-14		Design and install with in-house resources		\$ -
14.1	Retrofit classroom lighting	2014-15	Replace T12 lamps with T8 and electronic ballasts (1/2 project)	\$ 27,000	<b>\$878,500</b>	
14.2	Replace 4 HVAC units	2014-15	Service roughly 2,500 sf of two story space each	\$ 240,000		
14.3	Security upgrades	2014-15	Additional cameras	\$ 18,500		
14.4	Retrofit for kitchen	2014-15	804 SF, plumbing, electricity, vent hood	\$ 200,000		
14.5	Reroof main building	2014-15	Demo existing, install standing seam metal roofing	\$ 220,000		
14.6	Car Port for fleet	2014-15	Steel truss structure, 20 x 20, 2 each	\$ 9,000		
14.7	Renovate leased space for basketball gym	2014-15		\$ 150,000		
16.2	Purchase property to north of school	2016-17	1.458 acres	\$ 300,000	<b>\$2,300,000</b>	
16.3	Build new facility	2016-17	3 classrooms, project labs, gym for weights/basketball, offices, support, storage - total 8000 gsf	\$ 2,000,000		

Source: ARC



## 4 CAPITAL PLAN

# Funding Recommendations

### 4.1 Capital Funding

#### Historic and Current Funding

The history of funding for ATTHS has fluctuated, due to unpredictable enrollment and retention of at-risk students. In academic year 2012-13, the school will receive \$124,670 for lease reimbursement from PSCOC.

ATTHS receives a portion of the SB9 and HB33 mill levy revenues, administered by the county. SB9 funds received in 2010-11 and 2011-12 were \$4,702 annually. HB33 funds received in 2010-11 were \$137,595 and in 2011-12, were \$92,835.

#### Current and Estimated Future Capital Expenses

In April 2011, ATTHS signed a lease-purchase agreement for the property that it now calls main campus. The school renovated the facility to meet its space needs. The school pays approximately \$200,000 annually to lease-purchase the main facility and rent the auxiliary facility.

The plan assumes these costs will remain constant for the purpose of assessing cash flow.

#### Potential Future Sources of Revenue

The planning team based cash flow projections on an assumed enrollment growth to 250 students with a retention rate of 75%.

At that point, the school can anticipate the following sources of funding for facilities capital projects:

- ~\$137,438 from PSCOC for lease reimbursement
- ~\$154,985 from mill levy funds
- ATTHS is eligible to access PSCOC capital outlay, a



competitive process (see section below) since it has already been through charter renewal

- Legislative appropriation
- Federal grants
- Private fundraising (gifts and grants)

ATTHS can anticipate a total cash flow of approximately \$292,422, based on PSCOC lease reimbursement and mill levy funds. The school may also supplement some funds from operational money to fill a small funding gap. Exhibit 4-1 illustrates the expected cash flow based on projected enrollment growth and current facility expenses.

**Exhibit 4-1**  
**Cash Flow Analysis**

**Cash Flow Analysis**

Per MEM \$ 733.00 \$ 826.00

AY	40 day Students	AVG 80/120 day Students*	PSCOC Lease Cash Flow	From APS Mill Levy	Total Anticipated Cash Flow	Lease Payments	Net Cash Flow
2010-11	157	170					
2011-12	136	118	\$ 124,610	\$ 97,537	\$ 222,147	\$ 200,000	\$ 22,147
2012-13	150	113	\$ 86,494	\$ 92,991	\$ 179,485	\$ 200,000	\$ (20,515)
2013-14	220	165	\$ 82,463	\$ 136,386	\$ 218,849	\$ 200,000	\$ 18,849
2014-15	250	188	\$ 120,945	\$ 154,985	\$ 275,930	\$ 200,000	\$ 75,930
2015-16	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2016-17	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2017-18	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2018-19	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2019-20	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2020-21	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2021-22	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2022-23	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2023-24	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2024-25	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422
2025-26	250	188	\$ 137,438	\$ 154,985	\$ 292,422	\$ 200,000	\$ 92,422

\*Assume 75% retention

Source: ARC



## PSCOC Capital Outlay Funding

The New Mexico legislature provides capital funding for public schools through direct allocation or capital outlay from the PSCOC, for renewal or new construction projects. PSFA ranks each school facility compared to all other facilities in the state, and assigns a condition index value which describes physical and programmatic deficiencies. The ranking system is called the New Mexico Condition Index (NMCI).

Charter schools are eligible for funding after successful operation for six consecutive years (first year for planning in advance of opening, second through fifth years for operations, and sixth year for charter renewal). ATTHS is currently eligible.

Funding from the PSCOC follows a matching formula that varies by district. State-chartered schools follow the formula of their districts. ATTHS would follow the APS matching formula (in 2012, the state share equals 54% and requires a 46% local match).

PSCOC satisfies facility funding needs statewide by meeting the greatest needs first. The PSCOC funds projects at the top of the ranked list of public school facilities needs in each funding cycle (according to the amount of funds available).

PSCOC funding is primarily to correct deficiencies in a facility. The priority of deficiencies is based on a statute that outlines the prioritization criteria for deficiencies correction (6.27.41 of NMAC).<sup>1</sup> ATTHS currently ranks 548 out of 722 schools on the NMCI. Its condition is better than the statewide average and it will be a number of years before the school ranks in the upper limit of the funding range.

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<sup>1</sup> "Deficiencies" means conditions in public school buildings and grounds that may adversely affect the health or safety of students and school personnel, including: (1) health and safety/building code compliance such as fire code compliance, fire resistance and fire control capability, emergency lighting, and compliance with the Americans with Disabilities Act; (2) building structural stability such as foundation/structure, exterior walls, roof, exterior, windows/doors, interior floors, walls and ceilings, and fixed equipment; (3) mechanical/electrical systems defects such as plumbing, HVAC-combination heat/cool, insulation, and electrical/lighting.



## 4.2 Capital Needs and Capitalization Analysis

### Projects

#### Phase 1 - Immediate Needs

The projected cost of building renewal projects that comprise the immediate needs project list is ~\$38,600.

#### Phase 2 - Short Term Needs

Short-term needs related to enrollment growth include additional classroom space and renovation of existing space to accommodate additional classrooms. Needs also include building renewal projects. The total of all new construction, renovation and renewal projects is ~\$1.45 million.

Exhibit 4-2 illustrates the potential to capitalize these costs based on the cash flow analysis in Section 4.1 Potential Future Sources of Revenue. This analysis assumes that the same source funds all projects for a total cost (in 2012 dollars) of \$1.488 million, with a 20-year payback period and equivalent of 6.5% annual interest. The annual payment would be ~\$135,000. Net cash flow after current expenses would not cover the debt, but operational funds can fill the funding gap.

#### Phase 3 - Long Term Needs

If ATTHS implements all the immediate and short-term needs projects, the facilities will accommodate up to 270 students with current programs. Enrollment growth beyond that will require additional space. As described in Section 3.3 Implementation of Space Needs, the school could purchase property for sale to the north of the existing campus and construct a facility to meet this need. Since it is not feasible to capitalize the costs of these long-term projects, the school will need to keep enrollment within 270 students, or the school foundation will need to seek supplemental funding through other private or public sources.





**Exhibit 4-2**  
**Capitalization Analysis**

AY	Total Anticipated Cash Flow	Lease Payments	Net Cash Flow	Projected Capital Projects	Funding Gap
2010-11					
2011-12	\$ 222,147	\$ 200,000	\$ 22,147		
2012-13	\$ 179,485	\$ 200,000	\$ (20,515)	\$ 38,600	
2013-14	\$ 218,849	\$ 200,000	\$ 18,849	\$ 571,200	
2014-15	\$ 275,930	\$ 200,000	\$ 75,930	\$ 878,500	
2015-16	\$ 292,422	\$ 200,000	\$ 92,422		\$ 92,422
2016-17	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2017-18	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2018-19	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2019-20	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2020-21	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2021-22	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2022-23	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2023-24	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2024-25	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)
2025-26	\$ 292,422	\$ 200,000	\$ 92,422		\$ (42,651)

**Total debt = \$1,488,300**

**Funding gap can be filled with operating funds**

Source: ARC



## 4.3 Implementation Strategy

### Project Prioritization

First-priority projects in the capital plan rectify health and safety, code compliance, and adequacy deficiencies. They are included in the immediate needs phase.

Second-priority projects accommodate planned enrollment growth, implemented in the short-term phase. They are of secondary importance to rectifying deficiencies, but are needed to accommodate the growth which will satisfy the school's mission of maximizing services to a larger number of at-risk youth to help achieve success in education and employment.

Third-priority projects expand enrollment beyond 270 students to 300 students, a long-term goal. Since the administration and governing board do not consider this goal to be achievable within the five-year planning period, the update of this FMP/EdSpec can consider these projects.

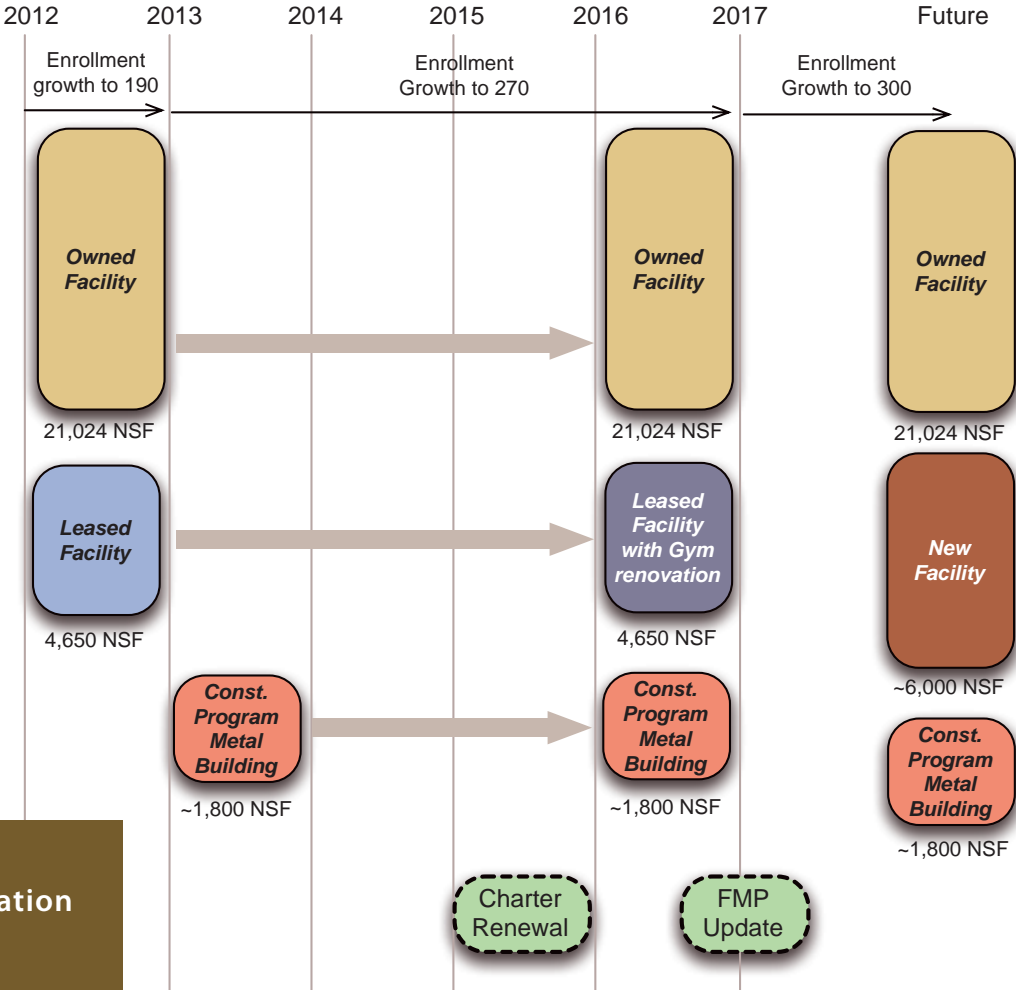
### Capital Plan

Exhibit 4-3 shows the project phasing schedule to implement immediate, short-term, and long-term needs. Exhibit 4-4 is a time line graphic that shows how facility needs will be met as enrollment grows.



**Exhibit 4-3  
Project Phasing Schedule**

	Facilities	Enrollment	Classrooms Needed	Project Labs Needed	Projects	Total Cost	Earliest Implementation Date
Immediate Needs	Existing Owned and Leased Facilities	150 - 190	10	3	Building renewal, Code compliance	\$ 38,600	2012-13
Short-term Needs	Existing Owned and Leased Facilities plus Expansion "A"	220 - 270	12	4	New construction, Renovations, Building Renewal	\$ 1,449,700	2013-14
Long-term Needs	Existing Owned Facilities (incl. Expansion "A") With Expansion "B"	300	14	5	Site acquisition, New construction	\$ 2,323,000	Future



**Exhibit 4-4  
Project Implementation  
Time Line**



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**Academy of Trades and Technology  
High School**

Facilities Master Plan / Educational Specifications 2013 - 2017  
Architectural Research Consultants, Incorporated

# 5 MASTER PLAN SUPPORT MATERIAL

## Facility Detail

This section provides details about the facility condition and other supporting documents, and includes the following information:

- 5.1 Sites and facilities data tables
- 5.2 Plans and inventories
  - » 5.2.1 Main campus site
  - » 5.2.2 Floor plans
  - » 5.2.3 Space inventory
- 5.3 Facility evaluation - main campus facility
- 5.4 Facility photographs
- 5.5 FAD update - main campus
- 5.6 Utilization analysis
- 5.7 Capital improvement projects (CIPs)



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## 5.1 Sites and Facilities Data Tables

### Site 1 - Main Campus

- Name of facility – owned property, Academy of Trades and Technology High School Charter School
- State identification number - 523001
- Physical address – 2551 Karsten SE, Albuquerque, NM 87102
- Date of opening – 2010
- Dates of major additions and renovations – 2011
- Weighted N.M. Facility Condition Index (NMCI) – 9.04%, ranked 548
- Site owned or leased – owned
- Total building area gross sq. ft. - 21,024
- Site acreage - 1.24
- Total number of permanent general classrooms – 5
- Total number of permanent specialty classrooms – 4
- Total number of portable classrooms – 0
- Total number of classrooms – 9
- Percentage of portable classrooms compared to total number of permanent classrooms – 0%

### Site 2 - Auxiliary Campus

- Name of facility – leased facility
- State identification number - none
- Physical address – 2611 Karsten SE, Albuquerque, NM 87102
- Date of opening – 2010
- Dates of major additions and renovations – NA
- Facility Condition Index (FCI) and N.M. Facility Condition Index (NMCI) – NA
- Site owned or leased – leased
- Total building area gross sq/ft – 4,650
- Site acreage – NA
- Total number of permanent general classrooms – 0
- Total number of permanent specialty classrooms – 1



- Total number of portable classrooms – 0
- Total number of classrooms – 1
- Percentage of portable classrooms compared to total number of permanent classrooms – 0%

### **Total Square Footage**

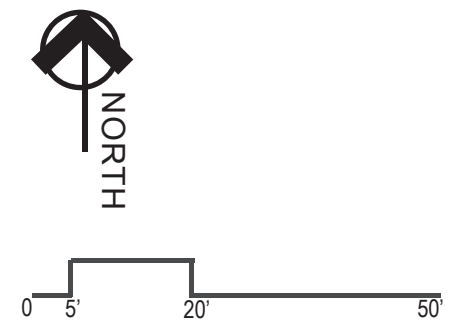
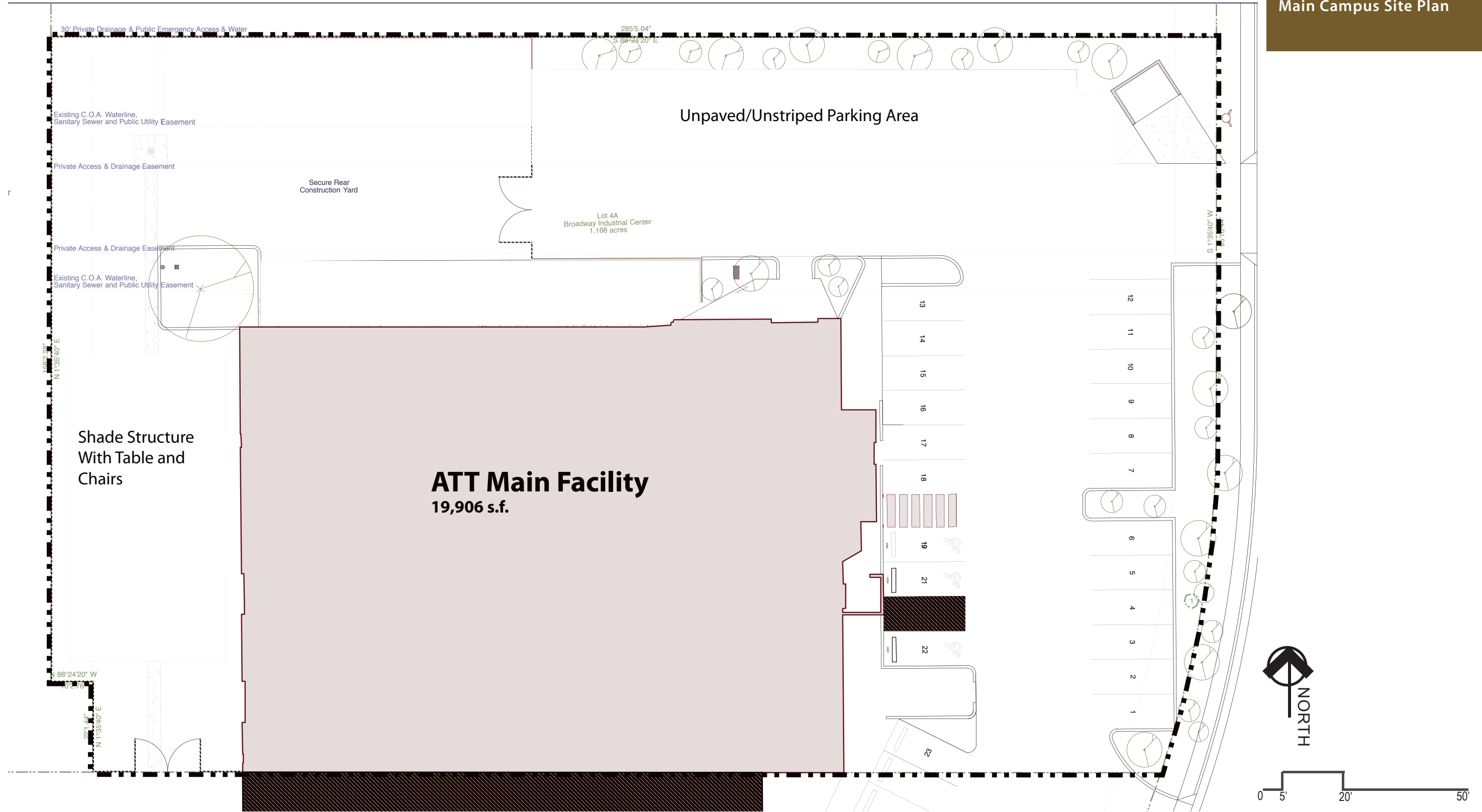
- Total gross square footage – 25,675
- Total enrollment current year (40th day count) – 136
- Number of gross sq. ft. per student – 188.78 (AY 2011-12)





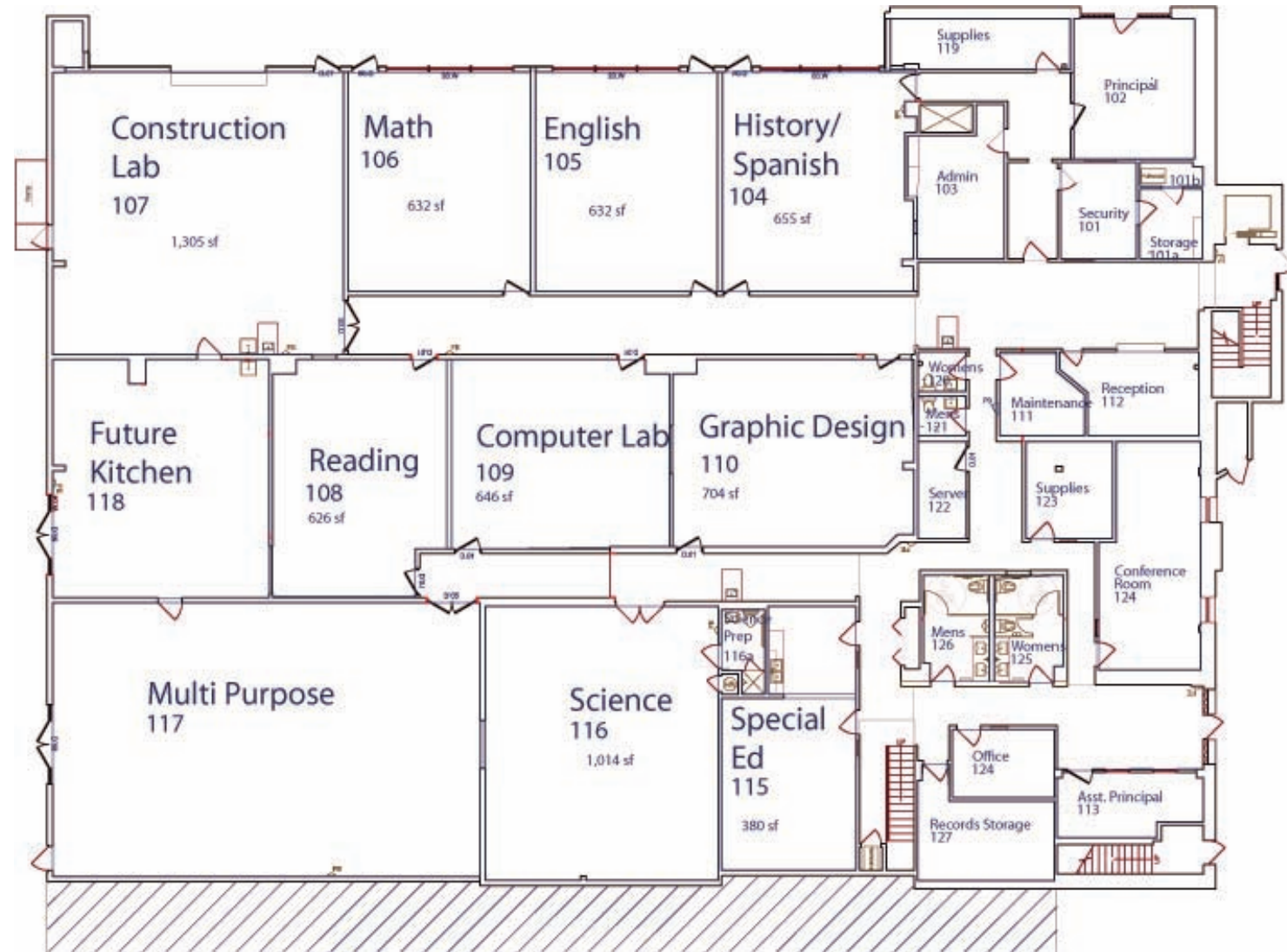
# 5.2.1 Site Plan - Main Campus

Exhibit 5-1  
Main Campus Site Plan



## 5.2.2 Floor Plans

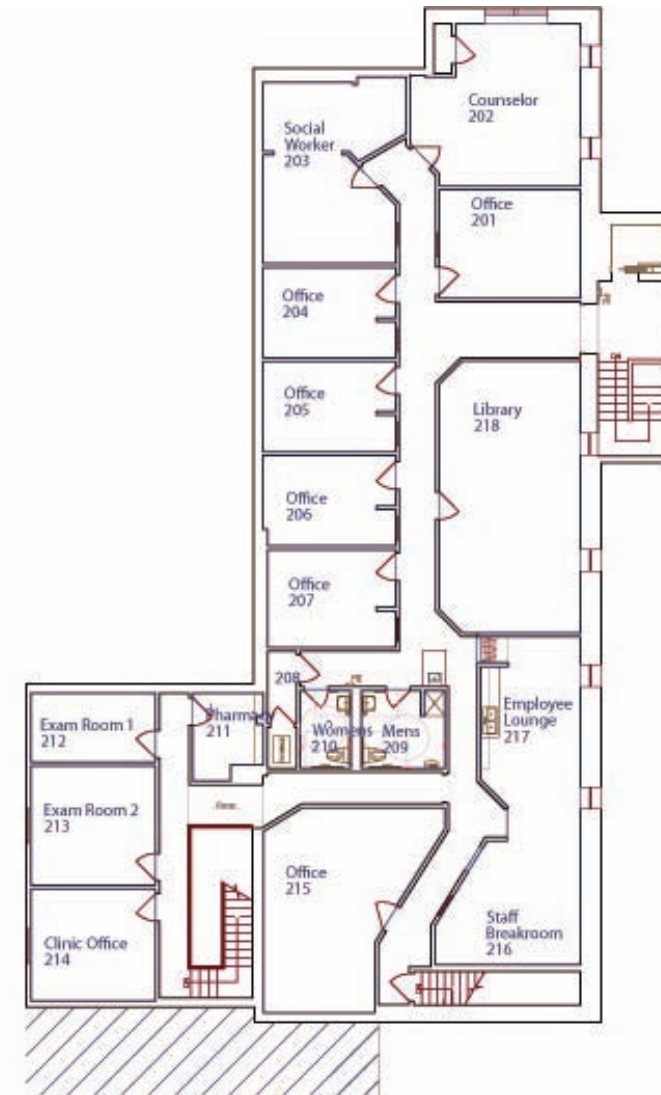
**Exhibit 5-2**  
Floor Plans



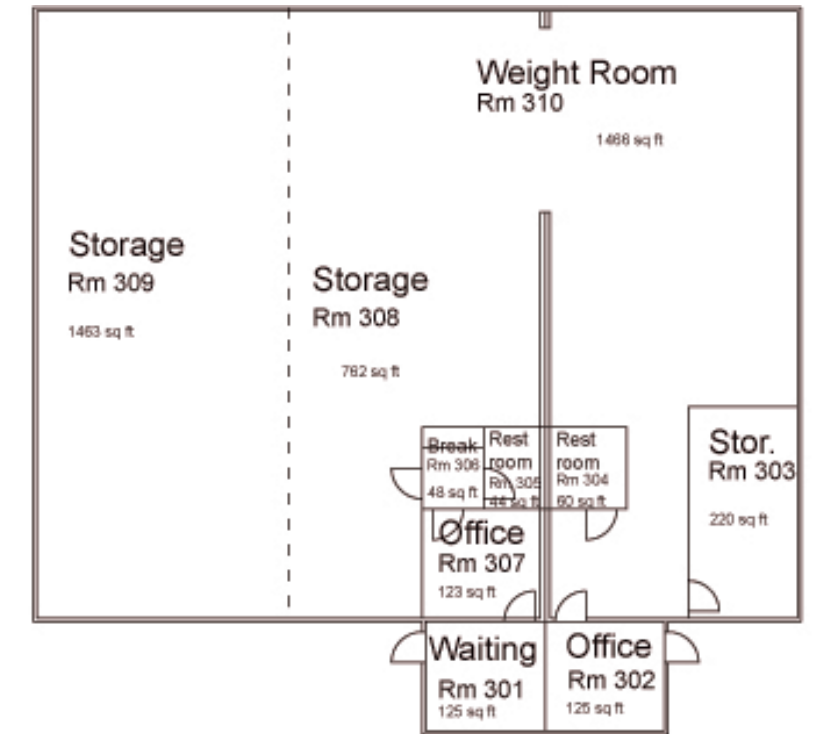
First Floor



Main Campus



Second Floor



Auxiliary Campus



## 5.2.3 Space Inventory

Building	Room Number	Room Name	Educational Classification	Sq Feet	Tare Sq Feet
Main	101	Security	Admin	116	
Main	101a	Storage	Support	70	
Main	101b	Storage	Support	23	
Main	102	Principal	Admin	270	
Main	103	Admin	Admin	227	
Main	104	History/Spanish	Classroom	655	
Main	105	English	Classroom	632	
Main	106	Math	Classroom	632	
Main	107	Construction Lab	Specialized Classroom	1305	
Main	108	Reading	Classroom	626	
Main	109	Computer Lab	Specialized Classroom	646	
Main	110	Graphic Design	Classroom	704	
Main	111	Maintenance	Admin	97	
Main	112	Reception	Admin	160	
Main	113	Dr. Gordon	Admin	143	
Main	114	Office	Admin	110	
Main	115	Special Ed	Special Education	493	
Main	116	Science	Classroom	1014	
Main	117	Cafeteria	Support	1858	
Main	118	Future Kitchen	Support	804	
Main	119	Supplies	Support	144	
Main	120	Female Restroom	Tare		30
Main	121	Male Restroom	Tare		30
Main	122	Server Room	Support	73	
Main	123	Supplies	Support	113	
Main	124	Conference Room	Support	335	
Main	125	Female Restroom	Tare		112
Main	126	Male Restroom	Tare		112
Main	127	Records Storage	Support	187	
Main	201	Office	Admin	184	
Main	202	Counselor	Admin	304	
Main	203	Social Worker	Admin	282	
Main	204	Office	Admin	143	
Main	205	Office	Admin	143	
Main	206	Office	Admin	142	
Main	207	Office	Admin	150	
Main	208	Furnace Closet	Support	41	
Main	209	Male Restroom	Tare		77
Main	210	Female Restroom	Tare		47
Main	211	Pharmacy	Support	76	
Main	212	Exam Room1	Admin	103	
Main	213	Exam Room 2	Admin	178	
Main	214	Clinic Office	Admin	168	
Main	215	Read 180 Office	Admin	334	
Main	216	Faculty/Employee Lounge	Support	418	
Main	217	Library	Support	454	
Auxiliary	301	Waiting	Support	125	
Auxiliary	302	Office	Admin	125	
Auxiliary	303	Storage	Support	220	
Auxiliary	304	Restroom	Tare	60	
Auxiliary	305	Restroom	Tare	44	
Auxiliary	306	Coffee bar	Support	48	
Auxiliary	307	Office	Admin	123	
Auxiliary	308	Storage	Support	762	
Auxiliary	309	Storage	Support	1463	
Auxiliary	310	Weight room	Specialized Classroom	1466	
<b>Subtotal owned NSF</b>				<b>14,682</b>	<b>225</b>
<b>Subtotal leased NSF</b>				<b>4,436</b>	
<b>Total NSF=</b>				<b>19,118</b>	<b>200</b>



# 5.3 Facility Evaluation - Main Campus Facility

Academy of Trades and Technology High School: School Data and Summary

## Academy of Trades and Technology High School

2551 Karsten Court, SE  
Albuquerque, NM 87102

Permanent building area: 25674 GSF  
Modular building area: 0 GSF  
Modular buildings are 0.0% of the facility area  
Site acres: 0.00

Grade Levels: 9-12  
Student Enrollment: 136  
GSF/Student: 189.00

Scoring Category	Possible Points	Total Earned	%
The Site	241	191.0	79.3
Physical Plant Assessment	354	282.0	79.7
Adequacy and Environment for Education	405	325.0	80.2
<b>Total</b>	<b>1000</b>	<b>798.0</b>	<b>79.8</b>

Excellent=90-100% Satisfactory=70-89% Borderline=50-69% Poor=30-49% Very Inadequate <= 29%



**Participants:**  
Sayre Gerhart, Facility Evaluator

**Date: 07-18-2012**



## Notes from Principal's Meeting and Questionnaire

none

### Summary Notes and Comments

#### School Site:

The Academy of Trades and Technology High School (ATTHS) is located at two sites; the primary school facility is at 2551 Karsten Court, SE in Albuquerque, NM. The school leases additional space at 2611 Karsten Court, SE, within walking distance and down the street. ATTHS is located on cul de sac streets surrounded by industrial properties and yards, and is one block off of Broadway Boulevard, SE near the intersection with Gibson Street, SE. Vehicular access to the sites is by paved roads. The school name, in large letters mounted on the facade of the main building at 2551 Karsten Ct., identifies the school location. The leased site is has no exterior signage. There are no school signs at the road or a posted school zone, but there is not much traffic and no through traffic on San Jose Avenue and Karsten Court. Sidewalks are available, and city bus service is provided on Broadway Boulevard.

The 2551 Karsten Ct. site includes one building, 21,024 GSF, centered on the south property line and sharing a fire wall with an adjoining structure to the south. There is one portable currently on this site at the northwest corner, but this building has been sold and is scheduled to be removed. Most of the site is paved, and there is some landscaping at the east side of the property and near the building. The site slopes for a fall of 8 feet from southeast to northwest corner, creating a need to direct stormwater and roof runoff to drainage grates and channels. There is a 38 foot easement across the north end of the site for a former continuation of Wheeler Road. The road is no longer used or needed, but utilities still occupy the easement.

The parking lot at 2551 Karsten Court is accessed by two entrances and exits, and includes 16 striped parking spaces and two spaces for the handicapped. Unpaved parking is also available along the north side of the property, adding about 12 additional spaces. Two building entrances are available from the parking lot. Lighting at the building entrance is provided by a single exterior wall fixture at each door opening. There is no lighting at the parking lot, and no street lighting was observed. One dumpster enclosure is located at the north east corner of the lot. There are two fire hydrants at the curb at each street corner of the site.

The two handicap parking spaces are well marked, with painted asphalt and signs attached to the building wall. The access aisle for the handicapped spaces does not have a curb cut to the sidewalk, requiring access to the front door by way of the vehicular lane behind the parking spaces.

The 2551 Karsten Court site provides xeric landscaping, including some mature shrubs and trees with gravel ground cover at the front of the building and parking area. The custodian reports that the irrigation system to the landscaping does not work properly. There are no exterior hose faucets at the east front of the building to irrigate. One tree has died, and the trunk requires removal.

Fencing is provided at the property boundary along the north and west, securing the exterior areas for outdoor recreation for the students. The fencing is a 4 foot chain link fence, typically with razor wire at the top, and includes a locked pedestrian gate and large vehicular/portable gate at the north parking lot. The fencing provides security for the property and directs access onto the property through the building entrances.



The west side of the property is a recreational area, and includes two shade structures and fixed tables and seating. The sloped ground is covered by asphalt, which is in poor repair. A tree provides shade at the northwest corner of the building for additional table and seating. Site lighting is provided by two wall mounted fixtures to the west side of the building, and one wall mounted fixture on the north side of the building.

The gas meter is located at the northwest corner of the building. The water meter and sewer cap are at the north side of the property. A telephone pole is also at the northwest corner, and all utilities go underground at this location. A cable box is located near the telephone pole.

The site has security cameras at the exterior on all sides.

The off-site leased space is accessed directly off San Jose Avenue into a parking area with 4 parking spaces, including 2 handicapped spaces. The building is attached warehouse space and offices, comprising about 4,650 GSF. The corner site includes a fenced yard at the rear which is dirt and unimproved.

#### School Plant:

2551 Karsten Court SE:

The main facility for the Academy of Trades and Technology is located at 2551 Karsten Court in a partial two story building, a reuse of an old airplane hanger. The 21,024 GSF building is a slab on grade, large metal frame structure with CMU and frame construction for the front area and the infill walls. It shares a common wall with the neighbor to the south, although the buildings were not constructed at the same time. The front of the building has two stories and a small addition at the front for an elevator and stair. Classroom spaces in the former airplane hanger area enjoy high ceilings. Exterior wall surfaces include stucco and metal siding, all in good condition. This facility is owned by the charter school.

The building is generally fully accessible and compliant with ADA requirements. The front door provides an automatic opener and low threshold. Doors throughout are adequate width and include lever type hardware. Restrooms are ADA compliant. However, Braille room identification signage is lacking throughout, and drinking fountains protrude into the circulation paths / corridors and require sidewall protectors. The elevator is ADA compliant.

The primary entrance to the facility is located at the elevator and stair tower, but is not apparent due to the two entrances facing east to the parking area. Both entrances are protected by a metal awning with decorative structure. Offices near each entrance have windows to monitor the doors, including a mirror at the north entrance to assist visibility.

Corridors at the ground level are vinyl tile with gypsum walls and hung acoustical tile ceilings. At the second floor level, corridors are carpeted. Corridors are the path of egress travel and require a one- hour rating in this non-sprinklered facility. There are three stairs and an elevator providing access to the second floor. The two main stairways are carpeted, open and well lit. The third stair is not used for general circulation and provides direct egress to the outside.

The single interior doors are typically wooden and hung in a metal frame. Ganged interior doors are typically metal. Most first floor doors are rated 20 minutes and include closers and latching lever hardware. Second floor doors have no rating and include a thin wood panel in the lower door, possibly replacing a louvered vent. No smoke seals are provided. Doors



typically swing into the rooms, not in the direction of egress.

Exterior doors are metal with visibility lites and closers. Large aluminum storefront windows and doors at the cafeteria and the future kitchen bring light into these spaces and provide direct access to the recreational area. An overhead security door drops to secure these openings. Corridor exit doors include panic hardware. Weather sealing and thresholds at all exterior doors are in good condition.

Windows throughout are double glazed and in good condition with good caulking. Some operable windows at the second floor have torn or missing screens. Blinds are provided at all windows throughout.

Restrooms are located mostly in the east section of the building. All restrooms are ADA compliant, and the number of fixtures is adequate. Student restrooms were not separately assigned from faculty restrooms. The science classroom has an adjacent unisex restroom and shower.

Washing sinks located in the future kitchen and the construction classroom do not have ADA compliant faucets. Drinking fountains are well distributed and provided in each of the corridors, but protrude into circulation paths.

The school facility provides a large cafeteria for eating and recreation, and vacant adjoining space for the future installation of a kitchen. The cafeteria currently provides an indoor serving and dining area for the school. The large room includes collapsable tables and benches, stainless steel serving counters on wheels, and assorted recreational equipment along the walls. An adjacent outdoor dining area is provided with fixed tables under shade canopies.

A library/media center is located at the second floor level, and includes shelving for books and two computer stations. There is no seating area, and daylight from the two small windows is limited.

Interior floor finishes include vinyl tile or carpeting, except at the construction shop, future kitchen and cafeteria spaces which have a painted concrete floor. Wall surfaces are typically gypsum wall board with a textured finish and are painted. Walls at the exterior and along the science and cafeteria hallway are of CMU up to about 8 feet and GWB above. The ceilings are of varying heights, ranging from about 7 feet at the south east side of the building to above 20 feet at the high open space in the construction lab. Some ceilings are acoustical ceiling tile, with integrated fluorescent lighting, and other ceilings are gypsum board with surface mounted fluorescent lighting. All finishes are generally in good condition, with some staining and wear showing in the carpeting.

The roof is in poor condition, yet no leaks are reported. The roof is a corrugated metal roof with sprayed polyurethane foam coating and sealant. The roof is a pitched roof with a gentle pitch, draining to gutters on the east and west ends of the building. The roofing surface is in very poor condition, with cracks, holes and bubbles. Water is getting below the sealant, and areas of the roof are spongy and holding water. The two small flat roofs over the elevator and stair addition are a built up roof with a gravel aggregate and are in good condition. They both drain through a canale to the main roof.

HVAC is a forced air system. The classrooms are heated and cooled by new gas fired heating



and cooling roof top units (RTUs) located on the roof. The construction lab has a gas fired heater hung from the ceiling, and a swamp cooler for cooling. The future kitchen area also will use a swamp cooler for cooling. The ground and second level of the two story building section are heated and cooled by three older gas fired furnaces with compressor coils. Two compressors for the refrigerated air are located on the roof, and the third is located at ground level on the east sidewalk between the front entrances. One of the furnaces is located under a stair and should be relocated. All mechanical closets require improvements to the wall board enclosure to meet the required fire rating.

Ventilation is adequate throughout. Bathroom fans turn on with the light switch. Air supply vents are distributed away from return vents to ensure good air circulation. There were no complaints by staff when asked about the HVAC system.

Plumbing systems and fixtures appear in good condition. Hot water is provided from two electric water tanks and from an on demand heater.

Electrical panels are typically locked and could not be inspected. Outlets in classrooms are typically inadequate for the room needs, providing typically only one outlet per wall. Classrooms set up with multiple computer stations were running off multiple extension cords. The science classroom does not provide any outlets on three walls, and none at the work counter. GFI protected circuits were not provided near the sinks, including at the teacher lounge and in the construction lab, and outlets should be checked for all wet areas.

Lighting levels are generally good throughout. The restrooms at the second floor level are dimly lit. Daylight is available at about half the classroom spaces, but interior classrooms have no natural lighting. Several of the surface mounted fluorescent fixtures are near the end of their useful life and buzzing.

The fire protection systems for the building are adequate, and include lit exit directional signs, emergency lighting, strobes and annunciators, smoke detectors and fire extinguishers. The building does not have a sprinkler system.

There is an eye wash station in the construction lab, but no wash station in the science lab (although the adjacent restroom has a sink and a shower). No hoods are provided in the science or construction spaces.

A partial clock and PA system is provided at the ground floor, including call buttons, and PA speakers in the second floor corridors. Telephones are not provided throughout, but are included at the front offices and the counselor, the construction lab, and some other offices. A phone was not observed in the nurse's office. There is a security system on site with cameras and motion sensors to activate the cameras.

2611 Karsten Court, SE:

The leased space at 2611 Karsten Court, SE is a one story slab on grade metal frame warehouse structure with corrugated metal siding and roofing. The office space at the front and at restrooms is frame construction. This facility provides a waiting room, two offices, two ADA compliant uni-sex restrooms, a kitchenette, storage and a large PE space for a weight room. The business office is located at this site. The two offices are provided with a computer and a telephone. The weight room provides several workout areas and the floors





are provided with mats. No changing room, lockers or showers are provided.

The layout of the facility with mats and equipment does not provide access and suitability for physically impaired persons.

Heating for the warehouse is provided by ceiling-hung, gas fired space heaters, and cooling is by roof-mounted, evaporative coolers. The offices have refrigerated air. Air pressure in the summer builds up due to the blowers of the coolers, and causes a wind at the doors as air escapes.

Adequacy and Environment for Education:

Note: Statements of adequacy are based on standards established by the New Mexico Public School Facilities Authority in the Adequacy Planning Guide, July 15, 2010.

Overall, the facilities for ATTHS provide a pleasant environment for learning. Academic activities are held at the main building at 2551 Karsten Court SE, and PE activities are held at off-site facilities.

The layout of the main building at 2551 Karsten Court SE provides good control of the entrances and the campus, with offices by the entrance doors, a fenced campus securing the back of the building and a camera security system. Circulation flow through the building is not ideal, and corridors include dead ends at classroom or offices rather than an egress door. The single means of egress from the science classroom is a concern.

The number of restroom fixtures is adequate, but there is additional need for separate restroom facilities for faculty and for the health center. Administrative offices do not provide a staff restroom. The nurse office and health center need adjacent restroom facilities. The location of the health center offices away from the administrative offices provides some supervision challenges for the facility.

Storage for books and for supplies is adequate and well organized. Storage for chemicals in the science room and the janitor closet is not provided. Additional storage for the construction lab appears to be needed for large materials required for this class.

The site provides a teacher lounge and workroom, and adequate office space for a counselor. A parent workroom is not provided.

General classrooms are large in size, 632 SF- 1014 SF, and provide flexibility for arrangement of the space. Desks provide storage for backpacks and materials, and chairs are stackable. Built in cabinetry for storage is not provided except in the science classroom, and storage shelves and cabinets is limited and varied. New tables for computer stations is needed to replace the plastic picnic tables currently in use. Rooms with high ceilings and vinyl tile flooring are provided with acoustical wall panels to dampen noise.

The science classroom provides lab tables and multiple computer stations. The adequacy standards state that the space shall have science fixtures and equipment necessary to meet the educational requirements of the public education department. The science classroom does not have plumbing for water and gas required for lab classes. No ventilation system is provided for storage or labs. There is no prep area, and existing cabinetry requires locks to secure equipment and materials. The science classroom lacks OSHA requirements for eyewash stations, although the curriculum at this time does not include the use of chemicals.



There is provision for “virtual” lab experiments, although electrical power and outlets to the space is inadequate, causing overuse of extension cords and overloading of circuits.

The library/media center is small, providing less than the minimum 3600 SF (the minimum for schools with less than 600 students, per the Standards for New Mexico School Libraries). The second floor location provides a quiet space, but it is not centrally or conveniently located for the students. The library/media center provides stacks with books and two computer stations. There is no seating area, circulation counter, librarian office and workroom, or storage. The arrangement of the shelving does not provide good visibility for monitoring the space, and the shelving is mis-aligned with the ceiling lighting, creating dark rows and corners.

The PE program offers basketball off-site at a community center, and weightlifting off-site at the leased building down the road. The large weight room meets adequacy for its size and storage. It lacks changing and showering facilities. There are no facilities for providing emergency first aid. There is no outdoor facility connected with the indoor facility. Unisex restrooms provide equal facilities for the men and women. As currently configured, the PE space is not providing flexibility so that the facility can be used for a variety of purposes.

The removal of the portable from the 2551 Karsten Court SE site provides an opportunity for an on-site hard court surface for basketball. The portable occupied the most level corner of the site, and improvements to the drainage and hard surface will enhance the PE and recreational opportunities at the facility.

The cafeteria is adequate and pleasant. Acoustical tile panels are located at the walls to dampen noise. The future kitchen area, approximately 810 SF, will provide adequate area for a serving and warming kitchen but falls below the minimum size required for a food preparation kitchen.

Classroom spaces for computer, vocational and technical education are of adequate size. The adequacy standards acknowledge that the character and design of the spaces depend on the nature of the instruction program. Space requirements will include classrooms which have the ability to incorporate extensive technology, especially computers with moveable furnishings and equipment, and fabrication areas which can be rearranged easily depending on the curriculum and the instructor. The limitation in the existing classroom spaces is the lack of power outlets and computer ports. Additional white boards will allow for reorientation of the classroom. Lighting is generally on one switch, which restricts the ability to raise or lower light levels for projection and screen viewing.

The special education classroom is a half classroom size. It provides two work environments, at a table or at a computer station, and provides two switches for lighting, one for wall-mounted incandescent lighting and the other for the overhead fluorescent lighting.

The school should consider a plan to replace fluorescent lighting fixtures, especially in the reading classroom and other classrooms without daylight, and to develop a plan to bring daylight to the interior spaces, through skylights and solar tubes. Many studies correlate the levels of natural light to educational achievement. In contrast, fluorescent light contributes to one or more of these symptoms: eye-strain, discomfort with extreme conditions of bright/dark contrast (i.e. backlighting), discomfort or difficulty reading (reading involves busy patterns, particularly stripes, text that appears to move (rise, fall, swirl, shake, etc.), and



more. Several of the surface mounted lighting fixtures buzzed, creating a noise nuisance.

The custodian currently has an office and a separate storage closet, both near or in the administration suite. No mop sink is provided. A cabinet for the storage of chemicals is needed.

The Main Capital Investment Areas:

- Retrofit for Kitchen
- Renovate for New Project Lab
- Interior Door Upgrades for Fire Rating
- ADA Upgrades
- Mechanical Improvements
- Retrofits for Construction Lab
- Storage Shed for Construction
- Irrigation System Repairs
- Furniture Replacement - Annual
- Renovate Lab for Classroom Space
- Electrical Upgrades
- Security System Upgrades
- Install Hardcourt
- Pave Parking
- Exterior Lighting
- School Monument Sign
- Replace Roof
- HVAC Upgrades
- Classroom Lighting
- Install Car Port
- Construct New Construction Lab Building
- Renovations for New Classrooms
- Site Acquisition
- Construct New Classroom and Gymnasium Facility



## 5.4 Facility Photographs



**Front Entry Facade**



**Back Yard**



**General Classroom**



**Science Classroom**





**Construction Lab**



**Graphic Design Lab**



**Read 180 Lab**



**Student Health Center**





**Multipurpose Room**



**Weight-Lifting Gym**



# 5.5 FAD Update - Main Campus



**State Chartered Schools**      **Academy of Trades and Technology Charter School**      **School ID: 523001**

## High Level Overview

### General Information

**Location:** Albuquerque, NM 87102      **Ed. Adequacy Model:** Charter School Educational Adequacy  
**School Type:** High      **Ed. Adequacy CCI:** 100.00%  
**School Category:** Charter      **School CCI City:** RSMEANS2012:US\_NM\_ALBUQUERQ, UE

### NMCI Statistics

**Number of Students:** 136      **Number of Buildings:** 2  
**Growth Factor:** 1.00      **Number of Portables:** 0  
**Total Gross Square Feet:** 25,629      **Building Square Feet:** 25,629  
**Site Size (Acres):** 0.00      **Portable Square Feet:** 0

### NMCI School Metrics

**Replacement Cost:** \$4,441,592      **Unweighted Repair Cost:** \$1,551,250  
**Weighted Repair Cost:** \$399,276      **Unweighted Educational Adequacy Cost:** \$55,539  
**Weighted Educational Adequacy Cost:** \$166,616      **Total Unweighted Cost:** \$1,606,788  
**Total Weighted Cost:** \$565,891      **Unweighted NMCI Score:** 36.18  
**Weighted NMCI Score:** 12.74

### NMCI Facility History

**Last Assessment Date:** 09-06-2011      **Previous Award, Yes or No, Year if Yes:** No  
**Closed:** No





**Academy of Trades and Technology Charter School**

**State Chartered Schools**

School ID: 523001

**Facility Description**

Formerly Youth Build Trade & Tech High

State Charter Effective 7/1/10

Current Grades 9th-12th

Summary Notes and Comments

School Site:

The Academy of Trades and Technology High School (ATTHS) is located at two sites; the primary school facility is at 2551 Karsten Court, SE in Albuquerque, NM. The school leases additional space at 2611 Karsten Court, SE, within walking distance and down the street. ATTHS is located on cul de sac streets surrounded by industrial properties and yards, and is one block off of Broadway Boulevard, SE near the intersection with Gibson Street, SE.

Vehicular access to the sites is by paved roads. The school name, in large letters mounted on the facade of the main building at 2551 Karsten Ct., identifies the school location. The leased site is has no exterior signage. There are no school signs at the road or a posted school zone, but there is not much traffic and no through traffic on San Jose Avenue and Karsten Court.

Sidewalks are available, and city bus service is provided on Broadway Boulevard. The 2551 Karsten Ct. site includes one building, 21,024 GSF, centered on the south property line and sharing a fire wall with an adjoining structure to the south. There is one portable currently on this site at the northwest corner, but this building has been sold and is scheduled to be removed. Most of the site is paved, and there is some landscaping at the east side of the property and near the building. The site slopes for a fall of 8 feet from southeast to northwest corner, creating a need to direct stormwater and roof runoff to drainage grates and channels. There is a 38 foot easement across the north end of the site for a former continuation of Wheeler Road. The road is no longer used or needed, but utilities still occupy the easement.

The parking lot at 2551 Karsten Court is accessed by two entrances and exits, and includes 16 striped parking spaces and two spaces for the handicapped. Unpaved parking is also available along the north side of the property, adding about 12 additional spaces. Two building entrances are available from the parking lot. Lighting at the building entrance is provided by a single exterior wall fixture at each door opening. There is no lighting at the parking lot, and no street lighting was observed. One dumpster enclosure is located at the north east corner of the lot. There are two fire hydrants at the curb at each street corner of the site. The two handicap parking spaces are well marked, with painted asphalt and signs attached to the building wall. The access aisle for the handicapped spaces does not have a curb cut to the sidewalk, requiring access to the front door by way of the vehicular lane behind the parking spaces.

The 2551 Karsten Court site provides xeric landscaping, including some mature shrubs and trees with gravel ground cover at the front of the building and parking area. The custodian reports that the irrigation system to the landscaping does not work properly. There are no exterior hose faucets at the east front of the building to irrigate. One tree has died, and the trunk requires removal. Fencing is provided at the property boundary along the north and west, securing the exterior areas for outdoor recreation for the students. The fencing is a 4 foot chain link fence, typically with razor wire at the top, and includes a locked pedestrian gate and large vehicular/portable gate at the north parking lot. The fencing provides security for the property and directs access onto the property through the building entrances. The west side of the property is a recreational area, and includes two shade structures and fixed tables and seating. The sloped ground is covered by asphalt, which is in poor repair. A tree provides shade at the northwest corner of the building for additional table and seating. Site lighting is provided by two wall mounted fixtures to the west side of the building, and one wall mounted fixture on the north side of the building. The gas meter is located at the northwest corner of the building. The water meter and sewer cap are at the north side of the property. A telephone pole is also at the northwest corner, and all utilities go underground at this location. A cable box is located near the telephone pole. The site has security cameras at the exterior on all sides. The off-site leased space is accessed directly off San Jose Avenue into a parking area with 4 parking spaces, including 2 handicapped spaces. The building is attached warehouse space and offices, comprising about 4,650 GSF. The corner site includes a fenced yard at the rear which is dirt and unimproved.







# Academy of Trades and Technology High School

Facilities Master Plan / Educational Specifications 2013 - 2017  
Architectural Research Consultants, Incorporated

5-21



## Executive Summary Report

### School Plant:

2551 Karsten Court SE: The main facility for the Academy of Trades and Technology is located at 2551 Karsten Court in a partial two story building, a reuse of an old airplane hanger. The 21,024 GSF building is a slab on grade, large metal frame structure with CMU and frame construction for the front area and the infill walls. It shares a common wall with the neighbor to the south, although the buildings were not constructed at the same time. The front of the building has two stories and a small addition at the front for an elevator and stair. Classroom spaces in the former airplane hanger area enjoy high ceilings. Exterior wall surfaces include stucco and metal siding, all in good condition. This facility is owned by the charter school. The building is generally fully accessible and compliant with ADA requirements. The front door provides an automatic opener and low threshold. Doors throughout are adequate width and include lever type hardware. Restrooms are ADA compliant. However, Braille room identification signage is lacking throughout, and drinking fountains protrude into the circulation paths / corridors and require sidewall protectors. The elevator is ADA compliant. The primary entrance to the facility is located at the elevator and stair tower, but is not apparent due to the two entrances facing east to the parking area. Both entrances are protected by a metal awning with decorative structure. Offices near each entrance have windows to monitor the doors, including a mirror at the north entrance to assist visibility.

Corridors at the ground level are vinyl tile with gypsum walls and hung acoustical tile ceilings. At the second floor level, corridors are carpeted. Corridors are the path of egress travel and require a one-hour rating in this non-sprinklered facility. There are three stairs and an elevator providing access to the second floor. The two main stairways are carpeted, open and well lit. The third stair is not used for general circulation and provides direct egress

to the outside. The single interior doors are typically wooden and hung in a metal frame. Ganged interior doors are typically metal. Most first floor doors are rated 20 minutes and include closers and latching lever hardware. Second floor doors have no rating and include a thin wood panel in the lower door, possibly replacing a louvered vent. No smoke seals are provided. Doors typically swing into the rooms, not in the direction of egress. Exterior doors are metal with visibility lites and closers. Large aluminum storefront windows and doors at the cafeteria and the future kitchen bring light into these spaces and provide direct access to the recreational area. An overhead security door drops to secure these openings. Corridor exit doors include panic hardware. Weather sealing and thresholds at all exterior doors are in good condition. Windows throughout are double glazed and in good condition with good caulking. Some operable windows at the second floor have torn or missing screens. Blinds are provided at all windows throughout. Restrooms are located mostly in the east section of the building. All restrooms are ADA compliant, and the number of fixtures is adequate. Student restrooms were not separately assigned from faculty restrooms. The science classroom has an adjacent unisex restroom and shower. Washing sinks located in the future kitchen and the construction classroom do not have ADA compliant faucets. Drinking fountains are well distributed and provided in each of the corridors, but protrude into circulation paths. The school facility provides a large cafeteria for eating and recreation, and vacant adjoining space for the future installation of a kitchen. The cafeteria currently provides an indoor serving and dining area for the school. The large room includes collapsible tables and benches, stainless steel serving counters on wheels, and assorted recreational equipment along the walls. An adjacent outdoor dining area is provided with fixed tables under shade canopies.

A library/media center is located at the second floor level, and includes shelving for books and two computer stations. There is no seating area, and daylight from the two small windows is limited. Interior floor finishes include vinyl tile or carpeting, except at the construction shop, future kitchen and cafeteria spaces which have a painted concrete floor. Wall surfaces are typically gypsum wall board with a textured finish and are painted. Walls at the exterior and along the science and cafeteria hallway are of CMU up to about 8 feet and GVB above. The ceilings are of varying heights, ranging from about 7 feet at the south east side of the building to above 20 feet at the high open space in the construction lab. Some ceilings are acoustical ceiling tile, with integrated fluorescent lighting, and other ceilings are gypsum board with surface mounted fluorescent lighting. All finishes are generally in good condition, with some staining and wear showing on the carpeting. The roof is in poor condition, yet no leaks are reported. The roof is a corrugated metal roof with sprayed polyurethane foam coating and sealant. The roof is a pitched roof with a gentle pitch, draining to gutters on the east and west ends of the building. The roofing surface is in very poor condition, with cracks, holes and bubbles. Water is getting below the sealant, and areas of the roof are spongy and holding water. The two small flat roofs over the elevator and stair addition are a built up roof with a gravel aggregate and are in good condition. They

both drain through a canale to the main roof. HVAC is a forced air system. The classrooms are heated and cooled by new gas fired heating and cooling roof top units (RTUs) located on the roof. The construction lab has a gas fired heater hung from the ceiling, and a swamp cooler for cooling. The future kitchen area also will use a swamp cooler for cooling. The ground and second level of the two story building section are heated and cooled by three older gas fired furnaces with compressor coils. Two compressors for the refrigerated air are located on the roof, and the third is located at ground level on the east sidewalk between the front entrances. One of the furnaces is located under a stair and should be relocated. All mechanical closets require improvements to the wall board enclosure to meet the required fire rating. Ventilation is adequate throughout. Bathroom fans turn on with the light switch. Air supply vents are distributed away from return vents to ensure good air circulation. There were no complaints by staff when asked about the HVAC system.

Plumbing systems and fixtures appear in good condition. Hot water is provided from two electric water tanks and from an on demand heater. Electrical panels are typically locked and could not be inspected. Outlets in classrooms are typically inadequate for the room needs, providing typically only one outlet per wall. Classrooms set up with multiple computer stations were running off multiple extension cords. The science classroom does not provide any outlets on three walls, and none at the work counter. GFI protected circuits were not provided near the sinks, including at the teacher lounge and in the construction lab, and outlets should be checked for all wet areas. Lighting levels are generally good throughout. The restrooms at the second floor level are dimly lit. Daylight is available at about half the classroom spaces, but interior classrooms have no natural lighting. Several of the surface mounted fluorescent fixtures are near the end of their useful life and buzzing.



## *Executive Summary Report*

The fire protection systems for the building are adequate, and include lit exit directional signs, emergency lighting, strobes and annunciators, smoke detectors and fire extinguishers. The building does not have a sprinkler system.

There is an eye wash station in the construction lab, but no wash station in the science lab (although the adjacent restroom has a sink and a shower). No hoods are provided in the science or construction spaces. A partial clock and PA system is provided at the ground floor, including call buttons, and PA speakers in the second floor corridors. Telephones are not provided throughout, but are included at the front offices and the counselor, the construction lab, and some other offices. A phone was not observed in the nurse's office. There is a security system on site with cameras and motion sensors to activate the cameras.





**Academy of Trades and Technology Charter School**

District: **Schools** School: **Academy of Trades and Technology Charter School** School ID: **523001**

**Asset Level Summary**

Building Name	Cost Model	Repair Cost (Unweighted)	Repair Cost (Weighted)	Year Built	Size Type	Use
Leased Building (2000)	High School Building	\$131,858	\$32,965	2000	4,605 Building	Educational
Main Building (1990)	High School Building	\$1,197,712	\$303,332	1990	21,024 Building	Educational
Site	High School Site	\$221,679	\$62,979	1990	25,629 Building	Site
<b>Building Totals</b>		<b>\$1,551,250</b>	<b>\$399,276</b>			
<b>Educational Adequacy Need</b>	Charter School Educational Adequacy	\$55,539	\$166,616			
<b>School Totals</b>		<b>\$1,606,788</b>	<b>\$565,891</b>			





**State Chartered**      **Academy of Trades and**  
**Schools**      **School**      **Technology Charter**  
 District:      School:      School ID:      **523001**

**Asset Detail**

Building Name:		Leased Building (2000)		Cost Model:		High School Building		Size: 4,605				
Name	Cost SF	Life	Renewal Percent	Last Reno.	Next Reno.	Degrade Adj. Percent	Factor	Repair Cost (Unweighted)	Category Number	Weight	Repair Cost (Weighted)	Comments
Air/Ventilation Equipment	\$2.95	20	110%	2000	2020	36%	33.25%	\$5,386	9	.25	\$1,347	
Ceiling Finishes	\$6.05	30	110%	2000	2030	16%	33.25%	\$4,903	9	.25	\$1,226	
Communications/Security	\$1.85	15	90%	2000	2015	64%	33.25%	\$4,897	9	.25	\$1,224	
Exterior Walls	\$13.95	100	100%	2000	2100	1%	33.25%	\$925	9	.25	\$231	
Exterior Windows and Doors	\$5.57	30	110%	2000	2030	16%	33.25%	\$4,516	9	.25	\$1,129	
Fire Detection/Alarm	\$1.90	15	90%	2000	2015	64%	33.25%	\$5,047	9	.25	\$1,262	
Fire Sprinkler	\$2.95	50	130%	2000	2050	6%	33.25%	\$1,018	9	.25	\$254	
Floor Finishes	\$6.23	12	110%	2000	2012	100%	33.25%	\$31,546	4	.25	\$7,887	
Foundation/Slab/Structure	\$27.47	100	100%	2000	2100	1%	33.25%	\$1,822	9	.25	\$455	
HVAC	\$24.52	30	100%	2000	2030	16%	33.25%	\$18,068	9	.25	\$4,517	
Institutional Equipment	\$3.77	30	100%	2000	2030	16%	33.25%	\$2,779	9	.25	\$695	
Interior Doors, Partitions, Stairs, Elevator	\$10.89	50	90%	2000	2050	6%	33.25%	\$2,599	9	.25	\$650	
Interior Walls	\$6.64	60	90%	2000	2060	4%	33.25%	\$1,101	9	.25	\$275	
Lighting/Branch Circuits	\$10.81	30	90%	2000	2030	16%	33.25%	\$7,167	9	.25	\$1,792	
Main Power/Emergency	\$1.76	30	90%	2000	2030	16%	33.25%	\$1,170	9	.25	\$293	
Other Electrical Systems	\$0.67	20	90%	2000	2020	36%	33.25%	\$1,000	9	.25	\$250	
Other Equipment	\$10.06	60	110%	2000	2060	4%	33.25%	\$2,039	9	.25	\$510	
Plumbing	\$10.78	30	100%	2000	2030	16%	33.25%	\$7,939	9	.25	\$1,985	
Roof	\$7.30	20	120%	2000	2020	36%	33.25%	\$14,532	9	.25	\$3,633	
Technology	\$0.14	10	90%	2000	2010	100%	33.25%	\$592	4	.25	\$148	
Wall Finishes	\$2.78	12	100%	2000	2012	100%	33.25%	\$12,812	4	.25	\$3,203	
<b>Total:</b>								<b>\$131,858</b>			<b>\$32,965</b>	





**Academy of Trades and Technology Charter**

**State Chartered Schools**

**School: School**

**School ID: 523001**

**Asset Detail**

**Building Name:** Main Building (1990) **Cost Model:** High School Building **Size:** 21,024

Name	Cost SF	Life	Renewal Percent	Last Reno.	Next Reno.	Degrade Adj. Percent	Factor	Repair Cost (Unweighted)	Category Number	Category Weight	Repair Cost (Weighted)	Comments
Air/Ventilation Equipment	\$2.95	20	110%	1990	2010	100%	33.25%	\$68,307	4	.25	\$17,077	Update 11/26/12 Per FMP Vendor ARC AM: New Classroom RTU's, 3 old furnaces and compressors.
Ceiling Finishes	\$6.05	30	110%	2010	2040	0%	33.25%	\$622	9	.25	\$155	
Communications/Security	\$1.85	15	90%	2010	2025	2%	33.25%	\$621	9	.25	\$155	
Exterior Walls	\$13.95	100	100%	1990	2090	5%	33.25%	\$14,199	9	.25	\$3,550	
Exterior Windows and Doors	\$5.57	30	110%	1990	2020	54%	33.25%	\$69,293	9	.25	\$17,323	
Fire Detection/Alarm	\$1.90	15	90%	2010	2025	2%	33.25%	\$640	9	.25	\$160	
Fire Sprinkler	\$2.95	50	130%	1990	2040	19%	33.25%	\$15,617	5	.5	\$7,809	Update 11/26/12 Per FMP Vendor ARC AM: Not sprinkled. Category override 5 applied.
Floor Finishes	\$6.23	12	110%	1990	2002	100%	33.25%	\$144,024	4	.25	\$36,006	
Foundation/Slab/Structure	\$27.47	100	100%	1990	2090	5%	33.25%	\$27,955	9	.25	\$6,989	
HVAC	\$24.52	30	100%	1990	2020	54%	33.25%	\$277,249	9	.25	\$69,312	9/20/2011 CJA Assessment Notes: 9 Combo Units
Institutional Equipment	\$3.77	30	100%	1990	2020	54%	33.25%	\$42,644	9	.25	\$10,661	
Interior Doors, Partitions, Stairs, Elevator	\$10.89	50	90%	1990	2040	19%	33.25%	\$39,879	9	.25	\$9,970	
Interior Walls	\$6.64	60	90%	1990	2050	13%	33.25%	\$16,900	9	.25	\$4,225	
Lighting/Branch Circuits	\$10.81	30	90%	1990	2020	54%	33.25%	\$109,977	9	.25	\$27,494	
Main Power/Emergency	\$1.76	30	90%	1990	2020	54%	33.25%	\$17,957	9	.25	\$4,489	Update 11/26/12 Per FMP Vendor ARC AM: An assessment should be done to determine if an upgrade is needed.
Other Electrical Systems	\$0.67	20	90%	1990	2010	100%	33.25%	\$12,687	4	.25	\$3,172	Update 11/26/12 Per FMP Vendor ARC AM: Outlets and computer parts deficient.
Other Equipment	\$10.06	60	110%	1990	2050	13%	33.25%	\$31,287	9	.25	\$7,822	
Plumbing	\$10.78	30	100%	1990	2020	54%	33.25%	\$121,825	9	.25	\$30,456	
Roof	\$7.30	20	120%	1990	2010	100%	33.25%	\$184,295	4	.25	\$46,074	





*Executive Summary Report*

Name	Cost SF	Life	Renewal Percent	Last Reno.	Next Reno.	Degrade Adj. Percent	Factor	Repair Cost (Unweighted)	Category Number	Category Weight	Repair Cost (Weighted)	Comments
Technology	\$0.14	10	90%	2010	2020	4%	33.25%	\$108	9	.25	\$27	
Wall Finishes	\$2.78	12	100%	2010	2022	3%	33.25%	\$1,625	9	.25	\$406	
<b>Total:</b>								<b>\$1,197,712</b>			<b>\$303,332</b>	





**Academy of Trades and Technology Charter School**

District: **State Chartered Schools**

School ID: **523001**

**Asset Detail**

Building Name:	Site	Cost Model:	High School Site	Size:								
				25,629								
Name	Cost SF	Life	Renewal Percent	Last Reno.	Next Reno.	Degrade Percent	Adj. Factor	Repair Cost (Unweighted)	Category Number	Category Weight	Repair Cost (Weighted)	Comments
Athletic Fields	\$0.34	30	90%	1990	2020	54%	33.25%	\$4,273	9	.25	\$1,068	Update 11/26/12 Per FMP Vendor ARC AM: None
Fencing	\$0.40	100	110%	1990	2090	5%	33.25%	\$546	9	.25	\$136	
Landscaping	\$1.78	30	110%	1990	2020	54%	33.25%	\$27,014	9	.25	\$6,754	
Parking Lots	\$6.50	20	80%	1990	2010	100%	33.25%	\$133,271	4	.25	\$33,318	
Playground Equipment	\$0.13	15	100%	1990	2005	100%	33.25%	\$3,332	4	.25	\$833	
Site Lighting	\$1.30	40	100%	1990	2030	30%	33.25%	\$10,079	6	1	\$10,079	Update 11/26/12 Per FMP Vendor ARC AM: Site lighting is needed. Category override 6 override applied.
Site Specialties	\$0.11	40	100%	1990	2030	30%	33.25%	\$653	9	.25	\$213	
Site Utilities	\$1.46	50	120%	1990	2040	19%	33.25%	\$8,683	9	.25	\$2,171	
Walkways	\$2.22	30	110%	1990	2020	54%	33.25%	\$33,630	9	.25	\$8,407	
<b>Total:</b>								<b>\$221,679</b>			<b>\$62,979</b>	



**Academy of Trades and Technology High School**

Facilities Master Plan / Educational Specifications 2013 - 2017  
Architectural Research Consultants, Incorporated



**Academy of Trades and Technology Charter School**

District: **State Chartered Schools** School: **Academy of Trades and Technology Charter School** School ID: **523001**

**Educational Adequacy Detail**

<b>Population</b>			
Growth Factor:	1	Number of Kindergarten Students:	0
Number of Staff:	23	Number of 1-5 Students:	0
Number of Students:	136	Number of 6-8 Students:	0
Number of Special Education Students:	0	Number of 9-12 Students:	136
<b>Square Footage</b>			
Permanent GSF:	25,674	General Storage NSF:	520
Portable GSF:	0	Maintenance or Janitorial Space NSF:	241
Admin NSF:	3,166	Media Center NSF:	454
Art/Music NSF:	0	Parent Work Space NSF:	0
Assembly NSF:	1,858	Physical Ed NSF:	1,466
Career Ed NSF:	2,009	Science Classroom NSF:	1,014
Computer Lab NSF:	646	Science Storage NSF:	0
Faculty Work Area NSF:	209	Special Education Classroom NSF:	493
Food Service NSF:	2,662	Student Health NSF:	449
General Classroom NSF:	2,879		
<b>Classrooms</b>			
Number of Classrooms:	8	Number of Special Education Classrooms:	1
<b>Parking</b>			
Number of Paved Parking Spaces:	18	Number of Bus Drop Offs:	0
Number of Handicap Parking Spaces:	2	Number of Student Drop Offs:	0
Number of Gravel Parking Spaces:	12		
<b>Miscellaneous</b>			
Number of Chemical Storage Rooms:	0	Number of Multi-Use Playgrounds:	0
Playground Equipment:	N/A		







Academy of Trades and Technology Charter School

School ID: 523001

District: State Chartered Schools

School:

EA Deficiencies

EA Cost Model: Charter School Educational Adequacy

Name	Actual Value	Required Value	Unit Cost	CCI Adj Unit Cost	Repair Cost (Unweighted)	Category Number	Category Weight	Repair Cost (Weighted)
Insufficient General Classroom Square Footage	2,879	3,400	\$80	\$80.00	\$55,539	7	3	\$166,616
Missing or Inadequate Multi-use Play Area	0	0	\$11,436	\$11,436.30	\$0	8	.5	\$0
Insufficient Total Parking	30	0	\$1,322	\$1,321.66	\$0	6	1	\$0
Insufficient Student Health Square Footage	449	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Student Drop Off	0	0	\$21,000	\$21,000.00	\$0	6	1	\$0
Insufficient Special Education Square Footage	493	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Science Storage Square Footage	0	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Science Square Footage	1,014	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Physical Education Square Footage	1,466	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Parent Work Space	0	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Media Center Square Footage	454	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Janitorial Square Footage	241	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient General Storage	520	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Food Service Square Footage	2,662	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Faculty Workspace	209	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Computer Lab Square Footage	646	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Career Ed Square Footage	2,009	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Bus Drop Off	0	0	\$20,800	\$20,799.69	\$0	6	1	\$0
Insufficient Administrative Square Footage	3,166	0	\$80	\$80.00	\$0	7	3	\$0
Insufficient Art and Music Square Footage	0	0	\$80	\$80.00	\$0	7	3	\$0
Inadequate Number of Handicap Spaces	2	0	\$144	\$143.52	\$0	6	1	\$0
Inadequate Number of Chemical Storage Units	0	0	\$1,464	\$1,464.30	\$0	8	.5	\$0
<b>Total</b>					<b>\$55,539</b>			<b>\$166,616</b>



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# 5.6 Utilization Analysis

## Utilization Analysis - Academy of Trades and Technology Charter School

Based on School year 2011-12, Spring semester

25

Rm #	Clrm NSF	Max # of St./Sq Ft	PED MAX PTR/Clm	A. S. Y/N	1		2		3		PERIOD 1		PERIOD 2		PERIOD 3		PERIOD 4		PERIOD 5		PERIOD 6		4	5	6	7	8						
					# of St.	% Rm Occ.	# of St.	% Rm Occ.	# of St.	% Rm Occ.	# of St.	% Rm Occ.	# of St.	% Rm Occ.	# of St.	% Rm Occ.	# of St.	% Rm Occ.	# of St.	% Rm Occ.	# of St.	% Rm Occ.						Tot. St.	PED Max. PTR/Day	Tot. % Rm Occ. / Day	Occ # of Pd.'s / Day	% Pd. / Day	
					Grade	Teacher Name	Subject	Grade	Teacher Name	Subject	Grade	Teacher Name	Subject	Grade	Teacher Name	Subject	Grade	Teacher Name	Subject	Grade	Teacher Name	Subject						Grade	Teacher Name	Subject	Grade	Teacher Name	Subject
104	655	26	30	Y	18	69%	Herera	Spanish	32	122%	Herera	US History	25	95%	Herera	Government	27	103%	Herera	NM History	31	118%	Herera	World History	0	0%	Herera	Prep	133		85%	5	83%
105	632	25	30	Y	16	63%	Whitcomb	English 9	19	75%	Whitcomb	English 12	21	83%	Whitcomb	English 11	5	20%	Whitcomb	English 9	30	119%	Whitcomb	English 10	14	55%	Whitcomb	English 9	105		69%	6	100%
106	632	25	30	Y	11	44%	Sanchez	Algebra 2	12	47%	Sanchez	Algebra 1	18	71%	Sanchez	Algebra 1	13	51%	Sanchez	Geometry	6	24%	Sanchez	Geometry	28	111%	Sanchez	Geometry	88		58%	6	100%
107	1,305	20	30	Y		0%	Ortiz	Prep	7	35%	Ortiz	Construction 1	7	35%	Ortiz	Construction 1	5	25%	Ortiz	Construction 2		0%	Ortiz	Field		0%	Ortiz	Field	19		16%	3	50%
108	626	25	30	Y	2	8%	Potts	Read 180	3	12%	Potts	Read 180	5	20%	Potts	Read 180	7	28%	Potts	Read 180	2	8%	Potts	Read 180	5	20%	Potts	Read 180	24		16%	6	100%
110	704	28	30	Y	4	14%	Bautista	Photo lab	5	18%	Bautista	Design	8	28%	Bautista	Design	9	32%	Bautista	Design	15	53%	Bautista	PPL1	13	46%	Bautista	A+	54		32%	6	100%
116	1,014	41	30	Y	22	73%	Archuleta	Earth Science	18	60%	Archuleta	Earth Science		0%	Archuleta	Prep	18	60%	Archuleta	Chemistry	24	80%	Archuleta	Biology	14	47%	Archuleta	Biology	96		53%	5	83%
310	1,466	59	30	Y	26	87%	Coaches	Basketball		0%	Coaches	A+	20	67%	Coaches	Weight lifting	10	33%	Coaches	A+	4	13%	Coaches	Other		0%	Coaches	Other	60		33%	4	67%
	7,034					45%					46%				50%							52%							35%				85%

- 1) Max # of St./Sq. Ft.= The maximum number of students allowed per the Statewide Adequacy Standards square feet.
- 2) PED Max PTR/Clm = PED's maximum pupil / teacher ratio per class period.
- 3) % Rm Occ. = The number of students column divided by either the PED Max./PTR/Clm column or the Max #of St./Sq ft column, which ever column is the smaller maximum allowed by A.S. or PED.
- 4) Tot. St. = The total number of students in the specific instructional space throughout the day.
- 5) PED Max. PTR/Day = The maximum pupil teacher ratio allowed by PED for specific teacher per day allowed.
- 6) Tot. % Rm Occ. / Day = Total average percentage room is occupied throughout the day. (count all periods in average)
- 7) Occ. # of Pd.'s / Day = Occupied number of periods occupied per day. (Prep period may be counted as utilized if teacher does not have a separate office from classroom)
- 8) % Pd. / Day = The average percent of occupied periods (occupied number of periods divided by the number of periods available per day).

average all rooms 85%  
average classrooms 93%

GRADE LEVEL	CURRENT STUDENT 40TH DAY COUNT	NUMBER OF / SPECIAL NEEDS STUDENTS PER GRADE	CURRENT NUMBER OF TEACHERS	NUMBER OF TEACHING SPACES
9th Grade	60			
10th Grade	35			
11th Grade	30			
12th Grade	11			
TOTALS	136			

Each teacher sees students from all grades

Number of Lunch Turns Per Day	1
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**Academy of Trades and Technology  
High School**

Facilities Master Plan / Educational Specifications 2013 - 2017  
Architectural Research Consultants, Incorporated

## 5.7 Capital Improvement Projects (CIPs)

### CIP List of Projects for Academy of Trades and Technology High School

Project No.	Code	Project Name	MACC	Project Budget
100.1	2.04.F07.1.	Retrofit for Kitchen	\$150,051	\$201,068
100.2	2.04.C01.1.	Renovate for New Project Lab	\$4,023	\$5,391
100.3	6.05.C06.1.1.	Interior Door Upgrades for Fire Rating	\$25,085	\$33,615
100.4	6.04.B03.1.	ADA Upgrades	\$4,928	\$6,604
100.5	6.04.A03.1.1.	Mechanical Improvements	\$11,577	\$15,513
100.6	4.04.C10.1.	Retrofits for Construction Lab	\$3,440	\$4,610
100.7	2.06.E09.1.	Storage Shed for Construction	\$2,000	\$2,550
100.8	5.06.E02.1.	Irrigation System Repairs and Hose Bibb	\$3,274	\$4,174
100.9	2.08.C07.1.	Furniture Replacement - Annual Renewal	\$11,000	\$14,025
100.10	2.04.C03.2.	Renovate Lab for Classroom Space	\$89,172	\$119,491
100.11	4.04.A03.2.2.	Electrical Upgrades	\$61,739	\$75,760
100.12	4.05.A05.2.	Security System Upgrades	\$13,813	\$18,510
100.13	2.06.E03.2.	Install Hardcourt for Basketball	\$57,368	\$73,144
100.14	5.06.E03.2.	Pave Gravel Parking	\$73,885	\$94,203
100.15	5.06.D05.2.	Exterior Lighting	\$16,350	\$20,846
100.16	5.06.E09.2.	School Monument Sign	\$0	\$0
100.17	4.08.D04.2.	Replace Roof	\$169,609	\$216,251
100.18	4.08.A03.1.2.	HVAC Upgrades	\$188,100	\$239,828
100.19	4.04.C04.2.2.	Classroom Lighting	\$40,485	\$54,250
100.20	5.06.D03.3.	Install Car Port	\$7,000	\$8,925
100.21	2.02.F05.3.	Construct New Construction Lab Building	\$245,084	\$335,764
100.22	2.04.C03.3.	Renovations for New Classrooms	\$66,928	\$89,684
100.23	2.11.E01.3.	Site Acquisition	\$681,000	\$689,104
100.24	2.01.F02.3.	Construct New Classroom and Gymnasium Facility	\$1,581,440	\$2,166,573
<b>Total of Project Budgets</b>				<b>\$4,489,882</b>



---

**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

The facility has an 804 SF vacant space reserved for a kitchen. Installation will include design, utility rough-ins, and all new equipment, counters for food prep and for serving, dry and cold storage, dishwashing and finishes. Kitchen space typically includes office space for the head cook, a utility room with mop sink, and a staff restroom.

---

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Install New Kitchen	4.310	804.0	SF	1.00	\$186.63	\$150,051
Maximum Allowable Construction Cost						\$150,051
<b>Total Project Cost</b>						<b>\$201,068</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Create project lab from storage area in leased space. Renovations include minimal fitting out of space to fit needs for lab space. Install drywall at north, east and south walls. Paint concrete floors.

---

<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Install drywall to 8 FT, taped and finished	4.511	1,463.0	SF	1.00	\$2.00	\$2,926
2 Paint concrete floor	4.562	1,463.0	SF	1.00	\$0.75	\$1,097
Maximum Allowable Construction Cost						\$4,023
<b>Total Project Cost</b>						<b>\$5,391</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Interior corridors are required to provide a one-hour rating in this facility. Upgrade existing non-rated doors, which include all doors at the second level and several administration doors on the first level. Replace doors with new wood 20 minute rated doors, closers, ADA compliant hardware, and smoke seals. Install smoke seal at all doors throughout. Repair or install door closers where missing.

---

<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Replace non-rated doors with new wood 20 minute doors. Reuse existing hardware	4.730	19.0	Per door	0.90	\$1,420.73	\$24,294
2 Install smoke seal at all doors	4.784	50.0	Each	1.00	\$15.82	\$791
Maximum Allowable Construction Cost						\$25,085
<b>Total Project Cost</b>						<b>\$33,615</b>





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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

The facility is generally fully accessible and compliant with ADA requirements. At the exterior, the existing spaces and access aisle are not accessible to the entrance. Relocate the handicap spaces to the spaces near the front entrance. Two handicap spaces are adequate. Re-striping and relocating the signage. At the interior, Braille room identification signage is required throughout. Drinking fountains protrude into the circulation paths and require sidewall protectors.

---

<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Re-stripe two handicap parking spaces and relocate signs	10.003	10.0	Space	1.00	\$34.68	\$347
2 Install Braille room identification signs	10.867	50.0	Each	1.00	\$74.10	\$3,705
3 Install side wall protectors at drinking fountains	10.860	3.0		1.00	\$0.00	\$0
3 Install side wall protectors at drinking fountains	10.674	3.0	Location	1.00	\$292.14	\$876
Maximum Allowable Construction Cost						\$4,928
<b>Total Project Cost</b>						<b>\$6,604</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

There are three gas-fired furnaces at the ground level in mechanical closets. One is located under a staircase and needs to be relocated. The other mechanical closets require repairs to wallboard to provide fire rating of the closet enclosure.

---

<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Relocate furnace, ducting and plumbing	6.200	1,400.0	SF	0.50	\$14.69	\$10,283
2 Repair GWB at mechanical closets	4.544	200.0	SF	1.00	\$6.47	\$1,294
Maximum Allowable Construction Cost						\$11,577
<b>Total Project Cost</b>						<b>\$15,513</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Existing construction classroom has problems with layout do to access to electrical outlets and to compress air. Install steel unistrut system at the ceiling to provide structure to bring wiring and hoses overhead to the middle of the space. Install J boxes with pull-down retractable cords for lab equipment. Provide new hoses for compressed air. Coordinate with electrical upgrades project.

---

<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Install 2 @ 36 Ft each, 16" Unistrut joists overhead using masonry walls for support	0.000	72.0	LF	1.50	\$15.65	\$1,690
2 Install retractable J-boxes	0.000	4.0		1.00	\$250.00	\$1,000
3 Extend hoses for compressed air	0.000	150.0	LF	1.00	\$5.00	\$750
Maximum Allowable Construction Cost						\$3,440
<b>Total Project Cost</b>						<b>\$4,610</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Construction courses require storage facilities for large materials, such as wood. Storage of these materials in the classroom takes needed space from instructional area. Install at portable wood storage shed on site for storage.

---

<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Portable wood storage shed	0.000	1.0	Shed	1.00	\$2,000.00	\$2,000
Maximum Allowable Construction Cost						\$2,000
<b>Total Project Cost</b>						<b>\$2,550</b>



Facility

ID

Project Number

Category

Type 1

Type 2

P/T

Green Building  Energy Conservation  Deferred Maintenance

### Project Name

### Project Description

Existing irrigation system is not working properly and requires repairs. A hose bibb is not available at the east side of the building. Install hose bibb near the existing mechanical closet and repair irrigation.

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Irrigation repairs	1.330	500.0	SF	1.00	\$1.61	\$805
2 Plumb and install new hose bibb for exterior east side of building	6.372	50.0	LF	1.00	\$49.37	\$2,469
Maximum Allowable Construction Cost						\$3,274
<b>Total Project Cost</b>						<b>\$4,174</b>



**Facility** 
**ID** 
**Project Number**

**Category** 
**Type 1** 
**Type 2** 
**P/T**

**Green Building**
 **Energy Conservation**
 **Deferred Maintenance**

**Project Name**

**Project Description**

Include funding for furniture replacement at 2 classrooms annually. Cost estimate includes 50 trapezoid desks, 50 stackable chairs, and 6 whiteboards.

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Annual furniture replacement	0.000	1.0	Annual	1.00	\$11,000.00	\$11,000
Maximum Allowable Construction Cost						\$11,000
<b>Total Project Cost</b>						<b>\$14,025</b>



---

**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

At leased facility, enclose spaces to create two classrooms with moveable partition between. Project to include new partition walls, doors, flooring, hung ceiling, electrical upgrades for lighting and outlets, and HVAC upgrades.

---

<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Renovate lab space for new classroom space	4.300	1,463.0	SF	0.75	\$79.51	\$87,242
2 Install moveable partition wall between classrooms	0.000	20.0		1.00	\$96.50	\$1,930
Maximum Allowable Construction Cost						\$89,172
<b>Total Project Cost</b>						<b>\$119,491</b>



**Facility** 
**ID** 
**Project Number**

**Category** 
**Type 1** 
**Type 2** 
**P/T** 
**MP CIP** 
**C.A.P.**

**Project Name**

**Project Description**

Outlets in classrooms and in the construction lab are typically inadequate for the room needs. Inspect electrical panels to determine additional capacity of existing service for needed upgrades. Assume a service upgrade is required. Interior electrical work includes upgrading outlets at classrooms and offices to meet technology and classroom needs and current code. Provide an electrical design for the new kitchen and for the construction lab, and provide new panels, outlets and 220 Amp service as required for these spaces. Coordinate upgrade with retrofit construction lab project.

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 New electrical service, from pole to new distribution box	0.003	1.0	Job	1.00	\$20,500.00	\$20,500
2 Rewire electrical to provide additional outlets at classrooms and offices	5.200	5,200.0	SF	1.00	\$3.37	\$17,524
3 Upgrade electrical service and outlets at kitchen and construction lab	5.300	2,100.0	SF	1.00	\$7.65	\$16,065
4 Upgrade GFI circuits and outlets at all wet areas	5.300	1,000.0	SF	1.00	\$7.65	\$7,650
Maximum Allowable Construction Cost						\$61,739
<b>Total Project Cost</b>						<b>\$61,739</b>





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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Provide additional cameras and buzzer system at front doors for additional security. Install security system at leased space.

---

<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Install additional cameras	11.206	3.0	EA	1.00	\$3,554.41	\$10,663
2 Install security buzzer system at 2 doors	0.000	2.0	EA	1.50	\$1,050.00	\$3,150
Maximum Allowable Construction Cost						\$13,813
<b>Total Project Cost</b>						<b>\$18,510</b>



Facility

ID

Project Number

Category

Type 1

Type 2

P/T

Green Building  Energy Conservation  Deferred Maintenance

### Project Name

### Project Description

The removal of the portable provides an opportunity for an on-site hard court play area for basketball. The installation will include site grading to provide and level area for the court, and to redirect drainage from the court surface. The storm water inlet may need to be relocated. Estimate the half court dimensions to be 50 FT width x 42 FT half length, with 10 FT extra at the sides = 4340 SF hard court surface.

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Grading to prepare level site for court	1.260	320.0	SY	1.00	\$3.52	\$1,126
2 Drainage improvements (correct ponding area)	1.420	4,500.0	SF	1.00	\$5.60	\$25,200
3 Install new hard court	1.910	1.0	Each	0.50	\$62,082.66	\$31,041
Maximum Allowable Construction Cost						\$57,368
<b>Total Project Cost</b>						<b>\$73,144</b>



---

**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

The parking lot includes a gravel section on the north for about 12 spaces. Pave the gravel section. Include crack seal and improvements to existing paved parking area.

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<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Paving, curbs, and striping at parking lot at gravel area	1.210	7,500.0	SF	1.00	\$9.74	\$73,050
2 Crack fill and maintenance at existing parking lot	1.237	500.0	LF	1.00	\$1.67	\$835
Maximum Allowable Construction Cost						\$73,885
<b>Total Project Cost</b>						<b>\$94,203</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Parking lot lacks site lighting. Install new poles at east and north parking areas. Estimate lighting at one pole to cover 8 parking spaces.

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<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Install poles for parking, minimum illumination	1.281	15,000.0	SF	1.00	\$1.09	\$16,350
Maximum Allowable Construction Cost						\$16,350
<b>Total Project Cost</b>						<b>\$20,846</b>



**Facility** 
**ID** 
**Project Number**

**Category** 
**Type 1** 
**Type 2** 
**P/T**

**Green Building**
 **Energy Conservation**
 **Deferred Maintenance**

**Project Name**

**Project Description**

School monument should be provided at Broadway and San Jose, SE to identify and give direction to the facility. Install at city property a school monument sign per suggested design, to include 4 FT x 4 FT concrete solid base, glue laminated board and school logo graphic. Cost estimate is based on manufacturer estimate.

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Provide and install school monument	0.000	1.0		1.00	\$0.00	\$0
Maximum Allowable Construction Cost						\$0
<b>Total Project Cost</b>						<b>\$0</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Existing roof is in poor condition, yet no leaks are reported. Plan for roof replacement. Existing roof is corrugated metal with a sprayed polyurethane foam coating and sealant. The roofing surface is in very poor condition, with cracks, holes and bubbles, and areas of the roof are spongy and holding water. Remove spray-on foam with coating and inspect deck and flashing. Estimate assumes the need for a replacement of the metal roof as well. Install new standing seam metal roof with minimum 20 year roof warranty.

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<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Remove spray-on foam with coating	7.105	15,690.0	SF	1.00	\$3.31	\$51,934
2 Install new steel roofing panels, flat profile with standing seams	7.208	15,690.0	SF	1.00	\$7.50	\$117,675
Maximum Allowable Construction Cost						\$169,609
<b>Total Project Cost</b>						<b>\$216,251</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Replace 4 HVAC units with new package RTUs for heating and cooling, serving area of approximately 2500 SF each.

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Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Replace 4 HVAC units	6.100	10,000.0	SF	0.50	\$37.62	\$188,100
Maximum Allowable Construction Cost						\$188,100
<b>Total Project Cost</b>						<b>\$239,828</b>



Facility

ID

Project Number

Category

Type 1

Type 2

P/T

Green Building  Energy Conservation  Deferred Maintenance

### Project Name

### Project Description

The school should consider a plan to replace surface mounted fluorescent lighting fixtures, especially in the reading classroom and other interior classrooms without daylight. Also consider a plan to bring daylight to interior spaces using solar tubes. Many studies correlate the levels of natural light to educational achievement. Existing surface mounted fluorescent fixtures are at the end of their useful light and buzz. Replace fluorescent lighting with indirect pendant lighting. Rewire and provide two switches so that lights can be adjusted for projector use.

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Upgrade lighting and switches, replace surface mounted fluorescent with indirect pendant lighting	5.300	4,900.0	SF	1.00	\$7.65	\$37,485
2 Install new solar tube skylights and ceiling light diffusers at interior classrooms. Estimate 2 skylights per classroom and \$300 per skylight.	0.000	8.0	each	1.25	\$300.00	\$3,000
Maximum Allowable Construction Cost						\$40,485
<b>Total Project Cost</b>						<b>\$54,250</b>





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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Install new car port at site for vehicle fleet. Provide 2 steel truss structures, 20 FT x 20 FT. Install at north parking lot inside security fencing.

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<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 Install steel car port structures, 20 FT x 20 FT	0.000	2.0	Each	1.00	\$3,500.00	\$7,000
Maximum Allowable Construction Cost						\$7,000
<b>Total Project Cost</b>						<b>\$8,925</b>



Facility

ID

Project Number

Category

Type 1

Type 2

P/T

Green Building  Energy Conservation  Deferred Maintenance

### Project Name

### Project Description

Install new metal building at the north of the property to house the construction program. Construct a slab on grad metal building in the northwest corner of the site. Regrade the site at the building location and extend utilities (electrical, plumbing, waste, data and communications). This new facility will include lab space of approximately 1300 SF, storage of 300, office space of 170 SF and one unisex restroom of 30 SF for approximately 1800 GSF. Facility to include electrical service for shop equipment and outlets for flexible arrangement of spaces, overhead space heaters and cooling by swamp coolers. Include separate washing sinks and hand sinks, eye wash stations, hazardous waste storage, vented hood for painting and shop dust removal system.

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Site prep for new building	1.260	300.0	SY	1.00	\$3.52	\$1,056
2 Utilities extension and infrastructure	2.510	1.0	Per portab	1.00	\$14,543.55	\$14,544
3 Install new metal building	0.000	1,800.0	SF	1.00	\$121.38	\$218,484
4 Equipment allotment for new facility (5% of construction cost)	0.000	1.0	allotment	1.00	\$11,000.00	\$11,000
Maximum Allowable Construction Cost						\$245,084
<b>Total Project Cost</b>						<b>\$335,764</b>



Facility

ID

Project Number

Category

Type 1

Type 2

P/T

Green Building  Energy Conservation  Deferred Maintenance

### Project Name

### Project Description

Repurpose spaces in the main facility to provide two new classrooms. Relocate cafeteria to northwest lab space. Work will include minor refurbishing of walls and floors, including installation of acoustical sound panels. Create two new science classrooms at old cafeteria space. Install new movable partition between rooms. Include new furnishings, outlet and computer port upgrades, and technology.

Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Refurbish lab room for new cafeteria	4.100	1,305.0	SF	1.00	\$18.03	\$23,529
2 Install new movable accordion partition wall	0.000	36.0	SF	1.00	\$96.50	\$3,474
3 New Furnishing and white boards	0.000	2.0	Classrooms	1.00	\$5,000.00	\$10,000
4 Electrical and data wiring extensions to new classrooms	11.004	1.0	Lab	1.00	\$7,125.00	\$7,125
5 New computers and overhead technology for classrooms	11.021	30.0	Computer	1.00	\$760.00	\$22,800
Maximum Allowable Construction Cost						\$66,928
<b>Total Project Cost</b>						<b>\$89,684</b>



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**Facility**  **ID**  **Project Number**

**Category**  **Type 1**  **Type 2**  **P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

Purchase adjoining property for school expansion.

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Description	Cost Code	Quantity	Unit	Severity	Cost	Subtotal Cost
1 Site acquisition	0.000	1.0	Project	1.00	\$681,000.00	\$681,000
Maximum Allowable Construction Cost						\$681,000
<b>Total Project Cost</b>						<b>\$689,104</b>



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**Facility**

**ID**

**Project Number**

**Category**

**Type 1**

**Type 2**

**P/T**

**Green Building**  **Energy Conservation**  **Deferred Maintenance**

**Project Name**

**Project Description**

At new site, construct new building for gymnasium and three new classrooms. New facility to include full basketball court (3,000 SF) + 3 classrooms (750 SF each = 2250 SF) + storage (50 SF per classroom = 150 SF) + offices (2 @ 150 each = 300 SF) + restrooms (2 @ 100 SF each + 2 @ 30 each = 260 SF) = 5960 SF / .75 = approximately 8,000 GSF.

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<b>Description</b>	<b>Cost Code</b>	<b>Quantity</b>	<b>Unit</b>	<b>Severity</b>	<b>Cost</b>	<b>Subtotal Cost</b>
1 New Gymnasium and Classroom Facility	3.220	8,000.0	SF	1.00	\$197.68	\$1,581,440
Maximum Allowable Construction Cost						\$1,581,440
<b>Total Project Cost</b>						<b>\$2,166,573</b>



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# Facilities Master Plan and Educational Specifications

## 2013 - 2017

December, 2012

ARC/21218

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