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GREATER ALBANY PUBLIC SCHOOLS



APPLIED LEARNING (V.T.E.)

Program Development

 DLR Group



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1.0 GENERAL MISSION

1.1 WHAT WE'VE HEARD

District's Goals

To expose a broad spectrum of students to *applied learning* (vocational technical education, VTE) throughout the secondary education level, both with wide reaching critical-thinking, and collaborative working environments and, at the higher level, through career-centered training both for post-secondary education and vocational training.

Preparedness at Two Levels

At the middle school level, the goal is to provide a soft skill set that prepares the individual for the rigors of high school level study focusing on problem-solving, communication, critical thinking, collaborative learning, and open mindedness as it applies to many varied fields of study.

At the high school level, students will be exposed to higher-level problem solving courses to prepare them for further training in post-secondary institutions and/or career-ready job-site training with future employers while not duplicating training programs or facilities at Linn-Benton Community College.

Who are we educating?

The students tend to fall into three groups, all of which need to be reached out to and engaged with:

- Students who want an immediate career / trade skill
- Students who want to go to college and desire strong preparatory training
- Students who are energized and engaged in their learning through an avenue of their interest or passion.



Marysville Getchell High School

2.0 APPLIED LEARNING TRENDS

2.1 NATIONAL TRENDS

APPLIED LEARNING

WHAT IS IT?

Applied Learning, including STEM, STEAM and Career and Technical Education (CTE), prepares students for the future by connecting secondary education, both with college expectations and labor market demands. Programs included specialize in teaching applied sciences, modern technologies, career preparation and trade skills, offering students the unique opportunity to create pathways for future professional success.

The transformation of teaching and learning to a balanced curriculum of both theoretical and applied learning is fostering everything from the “maker movement” to STEM to STEAM to CTE. These programs are growing in popularity, and their ability to engage and connect students is helping redefine how space is designed. A robust co-design process empowers teachers, students, school leaders, architects and others to co-create transformational learning spaces, including the incorporation of flexible, adaptive, personalized, learner-centered spaces.

Applied Learning looks beyond secondary school, encouraging students to become lifelong learners. It benefits students by giving them:

- Industry accreditation
- Real-world relevance in curriculum
- Leadership development through student organizations
- Dual enrollment
- Peer-to-peer and student-to-teacher collaborative environments
- Lab spaces to translate from theoretical to practical application

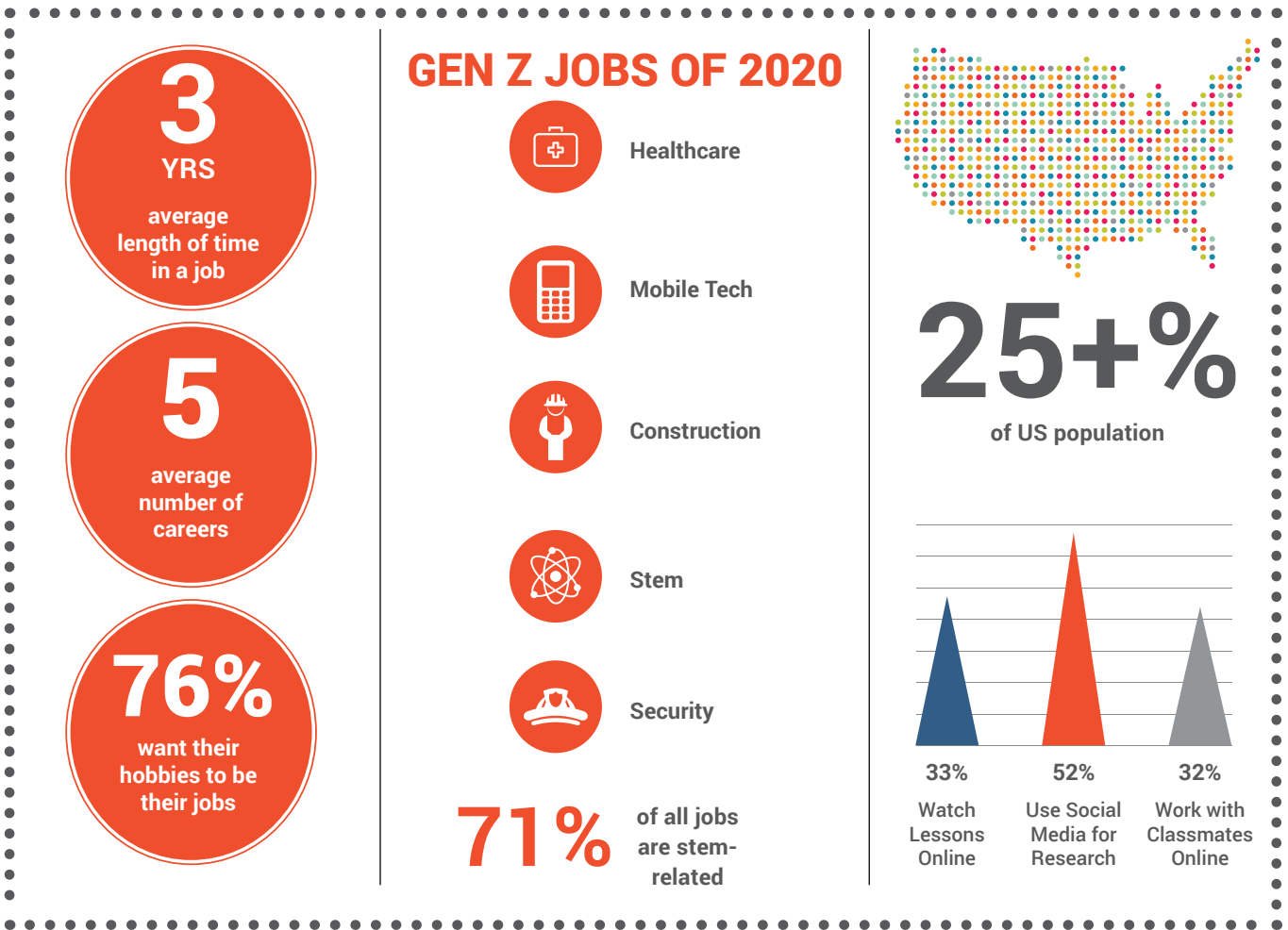
WHY DOES IT MATTER?

Students of the creative economy will have an average of seven careers over their lifetime. As the **pull** of an ever-changing economy connects with a **push** from students striving to create their own pathway toward advancement, school districts of all shapes and sizes are experiencing a cultural transformation. The one-size-fits-all mindset that once permeated our education system is steadily being replaced with personalized learning programs, allowing for a more student-centric approach that supports success and encourages engagement.

A NEW GENERATION

THE PUSH OF "Z"

Generation Z, those born from 2004 to the present, will enter a workforce increasingly integrated with many disciplines and skill set requirements. To meet these expansive demands, a growing number of students are seeking out high school programs that allow them to carve a clear pathway to certificates and degrees.

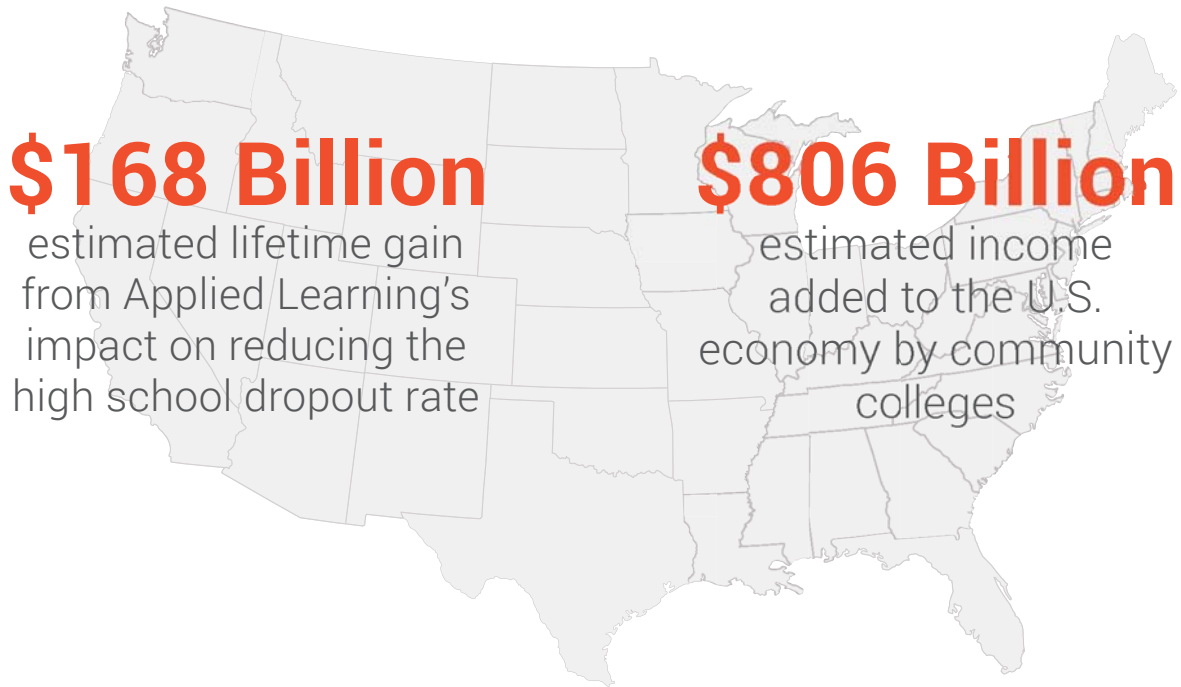


RETURN ON INVESTMENT

APPLIED LEARNING AS AN ECONOMIC DRIVER

For nearly a century, Applied Learning programs across the United States have focused on equipping students with technical and life skills to help them become productive citizens. Now more than ever, Applied Learning curriculum, internships and dual enrollment programs are needed to help ensure the strength and economic viability of our workforce, global competitiveness and the economic health of our nation.

NATIONAL COST SAVINGS AND PROFITS



JOBS OF THE FUTURE

UNIQUE OPPORTUNITIES FOR 21ST CENTURY STUDENTS

Applied Learning, be it CTE, STEM or STEAM, addresses the needs of high-growth industries and helps close skills gaps. Skilled trades are the hardest jobs to fill in the U.S., with recent data citing 1,019,000 jobs open in the trade, transportation and utilities sector and 315,000 jobs open in manufacturing. Healthcare occupations, many of which require an associates degree or less, make up 12 of the 20 fastest growing occupations. STEM occupations such as environmental engineering technicians require an associate degree and will experience faster than average job growth. Of the 55 million job openings created by 2020, 30% will require some college or a two-year associate degree.

Source: CareerTech.org

SKILL SETS AND DECISIONS MAKING



Communication & Collaboration



Critical Thinking & Problem Solving



Creativity & Innovation



Media Literacy



Information Literacy



Technology Literacy

2.2 PARTNERSHIPS

Overview

On February 3, 2017 the Applied Learning Study Team and District staff met with several area business leaders. Discussion centered on proposed facility improvements at GAPS secondary schools to support Applied Learning programs and opportunities to partner with local industries. An excellent dialogue ensued, providing insight as to the qualities and skills local industries need from future employees as well as brainstorming ideas how businesses can support applied learning programs.

School District goals for applied learning programs are three-fold:

- *Provide students opportunities and skills to either enter the work force or continue their technical education for specific training for local wage-earning jobs.*
- *Deepen and enrich rigorous academic experiences with active learning opportunities for students to successfully matriculate on to university studies.*
- *Energize students in areas of interest or passion that might otherwise disengage from high school education and subsequent graduation.*

Business leaders shared what they require from future employees and what they hope school districts would be able to instill in students. While they want students to get exposure to using equipment, it is the development of the soft skills that are most needed. Employers can teach new employees the hard skills of specific tasks and equipment usage, but need young adults to know how to problem-solve, pay attention to detail, have a strong work ethic (work hard, be at work on time, dedication), think critically, and work in a team. Businesses are looking for passion, ability and career commitment. Industry relies on school districts to train their future work force in these areas. They encouraged district leaders to align with local businesses to benefit from the resources they can provide the district

in people, maintenance and equipment. Their desire is to be strong advocates for the work that the District is doing and would like to do in the future.

From a design perspective, the collective group encouraged a strong infrastructure (including technology), flexibility and variety of space to adapt to changing industries, and environment to develop technology skills.



Western Maricopa Education Center



American River College Culinary Arts Center

Discussions on the ways in which businesses can partner with GAPS include the following ideas:

- Provide job shadowing and mentoring opportunities.
- Augment district resources with materials and equipment to support various programs.
- Provide professional development opportunities for teachers.
- Provide Insight on real-world relevancy of curriculum/programs.

The group concluded with a desire to include more partners in industry and higher education for a more seamless and streamlined student experience, to meet again to further develop channels of support and engagement, and to advocate the need of such programs to the broader community.

Partners Already in the Conversation:

- Wood Castle Furniture
- OFD Foods
- Mike's Heating and Air
- National Frozen Foods
- Selmet, Inc.
- Linn-Benton Community College (LBCC)
- Doctor of Osteopathic Medicine (DO) Northwest

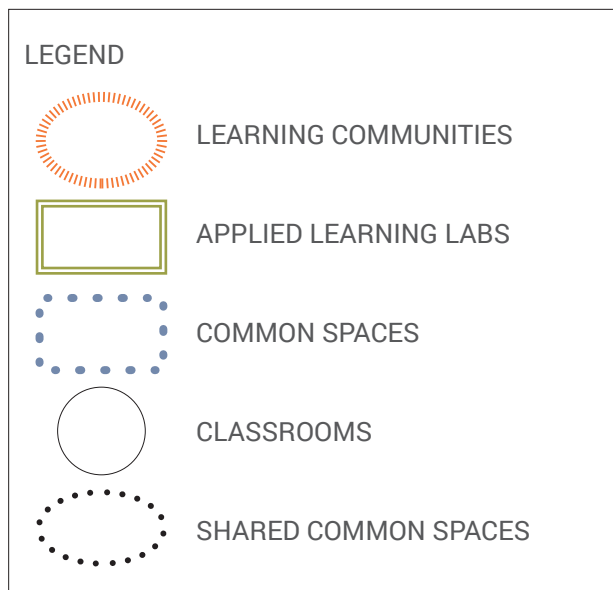
3.0 EVALUATION & TRANSLATING THE VISION

3.1 ARENA STYLE CONFIGURATION

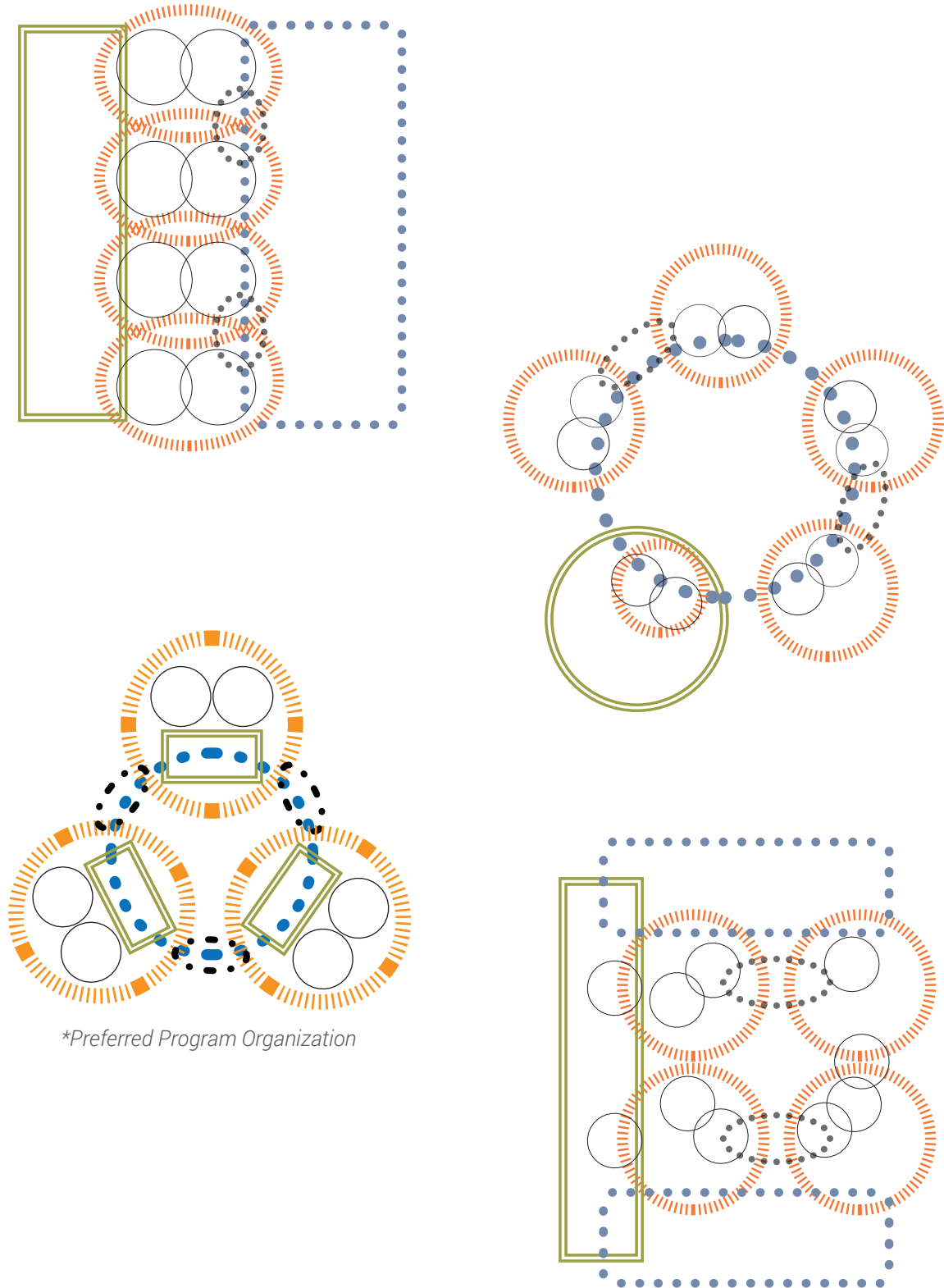
The expressed desire is to have integrated Applied Learning spaces within core content areas rather than as isolated vocational “wings”. In a remodel or new construction, an “Arena”-style configuration creates the necessary connection between these spaces.

This allows for:

- Symbiotic Classrooms to support each other and share the Arena (Common Space).
- Small Group Spaces that connect to Classrooms and the Common Spaces fostering focused content work and collaboration.
- Common Spaces promoting applied learning, large group presentations, and team building.



PROGRAM ORGANIZATIONAL MODELS



**Preferred Program Organization*

3.3 SOUTH ALBANY HIGH SCHOOL (SAHS)

Existing Conditions

The offerings are perceived as limited now. There are two large spaces in the VTE building housing antiquated woods and metals shops, and an automotive shop. Currently both automotive and architectural/engineering programs are suspended due to retired staffing and no new applicants currently available. The change out from automotive will likely be to small engine and “turf mechanics” to support the LBCC automotive program. The welding/machine shop has a small classroom upstairs while also serving various construction trades resulting in crowded spaces. This is compounded by a multitude of small rooms that if removed would capture needed student space. The electronics lab in Building 3 is antiquated and only used halftime. Health Occupations are something being experiment with, but there is a strong desire by students and local industry to expand those offerings and thus currently strategic plan to do so.

Long Term Wants / Vision:

“South Albany High School has a rich tradition of providing a wide variety of Career and Technical Education opportunities. Current offerings include Fine Woodworking, Construction Trades, Emergency Services, Mechanics, Welding, Machine Tool, Electronics, Child Development, Culinary Arts, Horticulture, and Business Administration courses. In the past, we have offered drafting and auto mechanics. In recent years it has become increasingly difficult to find qualified teachers for the traditional Vocational Education programs. As we look to the future, we will need to be increasingly innovative to put the right people, the right technology/equipment, and the right experiences in front of our students.

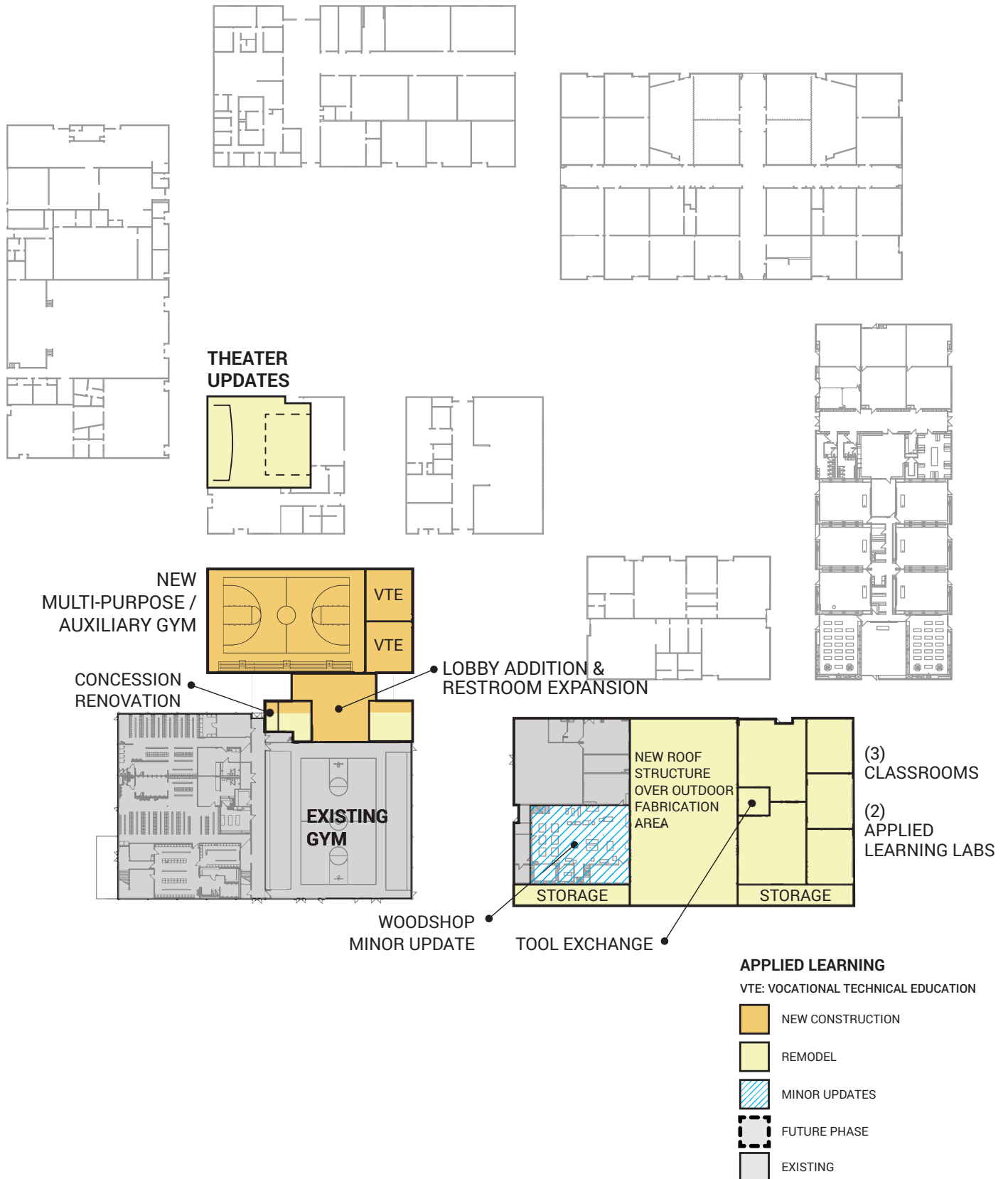
As we ask our community for help to modernize our auto and metal shop areas, remodel additional buildings, and consider building additional STEAM classroom space, it is important that we are current with the specific needs of our local industry as well as national trends. It is important that we are efficient and align with existing programs at Linn Benton Community College, our universities, and other training programs so that we are not duplicating programs.

STEAM education becomes a blending of hands on skills training we are familiar with in the traditional “Vocational Education” classrooms with higher level skills bringing in Science, Technology, Engineering, Arts, and Math content to mesh with the practical skills. We envision utilizing traditional vocational experiences with “Virtual Learning Technology”, local industry expertise infused in our classrooms, career exploration and mentorships, and staff training to offer our kids the very best opportunity to be ready for their own next steps. Our goals include expanding the STEAM learning opportunities to every student in our school rather than a small group of students who choose our traditional vocational education classes as electives. We want every student to have the content knowledge and the practical skills to become problem solvers, innovators, and quality leaders in the future.

We must re-define the Vocational classroom into classrooms that offer the ability to stretch beyond the traditional skill development and extends that development into the model of “Design Thinking”. Design Thinking combines skills and knowledge from engineering, product design, arts, social sciences, and business. Students learn by doing. Conceptually, students help to determine a need or determine a question – brainstorm as many solutions as possible – develop prototypes of the solution and in the best scenario, repeats the entire process with the final outcome being much more evolved than the first attempt.”

-Brent Belveal, South Albany High Principal

OVERALL FLOOR PLAN DIAGRAM



Costing Items - ELECTRICAL

- Auxiliary Gym and CTE addition; Provide a 200A, 277/480V panel board with 75kVA step-down transformer and 200A 120/208V panel board. Provide fire alarm detection and annunciation, AV and data distribution.
 - Remodel/reconfiguration of Wood shop, Fab-Labs, Applied Learning Labs and the addition of (3) classrooms; Provide new LED lighting, receptacles, and power distribution. Provide new fire alarm detection and annunciation. Provide AV and data distribution.
 - Theater Expansion; Provide a 600A, 277/480V panel board with 150kVA step-down transformer and (2) 200A 120/208V panel boards. Provide new fire alarm detection and annunciation, AV and data distribution. Provide stage lighting, stage lighting control and sound system.
- **EXISTING SYSTEMS; REFER TO PAE 2014 ASSESSMENT REPORT FOR ADDITIONAL DETAILS:**
 - Provide local occupancy sensor control to occupied rooms and support spaces.
 - Provide astronomical time clock controls for corridors and common areas, and exterior lighting.
 - Exterior surface fixtures, replace with new LED fixtures
 - Wood Shop: Provide new cable drops for work tables and reconfigured equipment locations. Provide emergency push button(s) and contractors above panels serving wood shop equipment.
 - Replace existing Siemens Fire Alarm Control Panel which is aged out.

Costing Items - MECHANICAL

- Replace existing fiberglass ductwork where damaged or leaking air.
- Upgrade pneumatic controls to DDC where new equipment is installed or old equipment is upgraded.

Current and Planned Future Programs

Arts, AV Tech and Communication

- Graphic Design
- Sound/Lighting Engineering
- Stagecraft
- Video Production (sound and lighting principals)

Architecture and Construction

- Architecture
- Construction Trades
- Electrical Trades
- Heating and Air Conditioning Trades

Finance

- Business Administration
- Entrepreneurship

Hospitality and Tourism

- Culinary Arts

Human Services

- Emergency Services (EMT, Fire Fighting, Police)
- Health Careers (broad-spectrum medical careers as well as all health related careers)
- Child Development and Education

Information Technology

- Robotics
- Coding
- Programming
- Technology

Manufacturing

- Fine Woods (utilizing the most current technology and equipment)
- Welding and Machine Tool Trades
- Turf Mechanics (leading to LBCC Automotive Mechanics)

Science, Technology, Engineering and Math

- Mechanical
- Civil
- Electrical
- Chemical
- Environmental
- Horticulture

Numerical Space Program

	GROSS Square Footage
Phase 1 (NEW)	
New Gym-Multi-Purpose Building	7,300
New Lobby & Restrooms-Multi-Purpose Building	2,500
Renovated Restrooms & Concessions	1,060
Renovated CTE building	5,400
New VTE classrooms at Multi-Purpose Building	3,750
Enclosed courtyard (cover, lights, gates, power)	8,000
Drama classroom building renovated for theater	8,370
NEW TOTAL SQUARE FOOTAGE	41,580

3.4 WEST ALBANY HIGH SCHOOL (WAHS)

Existing Conditions:

There is a strong emphasis on STEAM – integrating arts as an equal component to the other core curriculum areas. VTE and vocational training at WAHS has been eliminated over the years while strong content instruction has remained in the Sciences and Health Occupations, though applied labs/studios have not materialized or remained. The Culinary program is strong though not reflected in its current facilities. Students believe in the strength of their program educators but not in their physical spaces.

Long Term Wants / Vision:

With Performing Arts and Events Technology being a high priority at WAHS, VTE programs should integrate into these program areas in addition to all other STEAM programs concentrations.

All content areas should additionally include space to promote strong entrepreneurial components.

Current and Planned Future Programs

Arts, AV Tech and Communication

- Journalism
- Graphic Art and Info Graphic Design
- Broadcasting
- Video Production
- Photography and Print Technology
- CAD and 3D Printing
- Computer Aided Production
- Sound Technology
- Digital Audio Recording
- Sound Reinforcement
- Theater Sound Design
- Theater Lighting Design
- Event Management
- Lighting Design
- Set Design
- Theater Rigging

Architecture and Construction

- Construction
- Cabinet Making
- Auto Technician

- Electrical
- Industrial Design
- Stage Crafting

Finance

- Accounting
- Business Finance/Wealth Management

Government and Public Education

- Cadet Teaching

Health Science

- Health Occupations

Hospitality and Tourism

- Culinary/Hospitality and Tourism

Human Services

- Child Development

Information Technology

- Web Design and Coding

Manufacturing

- CNC Routing/Manufacturing

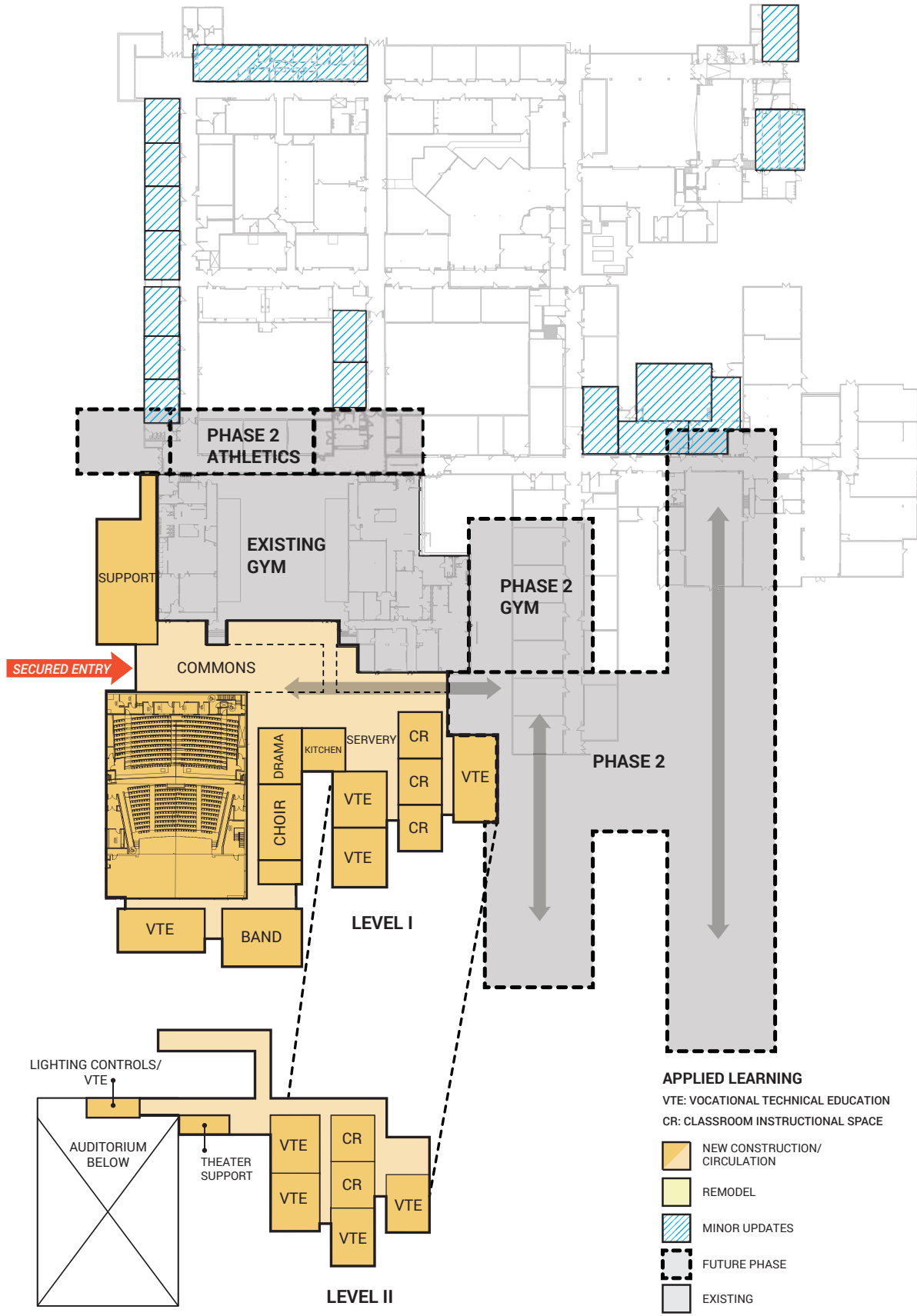
Marketing, Sales and Service

- Marketing
- Entrepreneurship/Shark Tank

Science, Technology, Engineering and Math

- STEM/Engineering

OVERALL FLOOR PLAN DIAGRAM



- APPLIED LEARNING**
- VTE: VOCATIONAL TECHNICAL EDUCATION
 - CR: CLASSROOM INSTRUCTIONAL SPACE
 - NEW CONSTRUCTION/ CIRCULATION
 - REMODEL
 - MINOR UPDATES
 - FUTURE PHASE
 - EXISTING

Costing Items - ELECTRICAL

- Commons, Admin and CTE addition; Provide a new 1200A, 120/208V service for the addition. The new service will originate from a new exterior utility transformer in a location to be determined on the site. Provide (2) 200A, 277/480V panel boards extended from existing service. Provide (4) 200A 120/208V panel boards.
- Auditorium Addition: Provide a 200A, 277/480V panel board served from the existing building service. Provide (2) 200A, 120/208V panel boards from the new 1200A, 120/208V switchboard. Provide new fire alarm detection and annunciation, AV and data distribution. Provide stage lighting, stage lighting control and sound system.
 - **EXISTING SYSTEMS; REFER TO PAE 2014 ASSESSMENT REPORT FOR ADDITIONAL DETAILS:**
 - Main 277/480V, 2000A Switchboard: Cycle distribution circuit breakers and replace failed as needed. Torque check of feeder terminations. Test (Megger) feeder conductors to panel boards. Visually inspect internal bussing for signs of corrosion. De-energize and clean interior of dust and debris.
 - Doghouse on roof above electrical room, repair severed $\frac{3}{4}$ " trade size conduit and exposed conductors at exterior wall of doghouse. Provide door or other type of protection for NEMA 1 rated equipment located inside and exposed to the elements. Cycle, test and inspect overcurrent protection of equipment located at doghouse interior and exterior and replace failed components where occurring.
 - Intercom System: Remove non-functional system and replace with new.
 - Add security camera system throughout the building.
 - Provide astronomical time clock controls for corridors and common areas, and exterior lighting.
 - Exterior surface fixtures, replace with new LED fixtures.
 - Replace lighting in existing restrooms and add occupancy sensors.
 - Replace existing Siemens Fire Alarm Control Panel which is aged out.

Costing Items – MECHANICAL

- Replace Tunnel Fan system with new packaged rooftop air handler or other system to ensure proper heating and ventilation where feasible.
- Upgrade pneumatic controls to DDC where new equipment is installed or old equipment is upgraded.

Numerical Space Program

New		NET
Instruction	*Current Adjusted Program	Square Footage
3	Auditorium & Support (provides 3 lecture spaces)	13,370
1	Drama Classroom (1)	1,200
2	Music (Band (2200) & Choir (1800)) w/storage and practice rooms	4,500
	Student Services / Commons & Kitchen	12,000
	Administrative Support at New Secured Entry	2,600
1	Digital Audio Lab	1,500
1	Video Production Lab	1,500
1	Lighting and Audio Design (in auditorium booth)	0
1	Stagecraft	1,200
1	Graphic Design & Print Shop	1,200
1	Health Occupations	1,800
	Culinary (in existing kitchen)	0
	Wood working (remains in same location)	0
1	Business Lab	1,200
1	Fine Arts (2D)	1,350
1	Fine Arts (3D)	1,350
5	General Education Classrooms (5 @ 960 sf)	4,800
	Sub-Total NEW	49,570
	Restrooms and Infrastructure (~47%)	23,235
	TOTAL NEW (20 instructional spaces)	72,805
	Renovated Labs / Gen Ed Classrooms (7-10 instructional spaces)	13,000
	TOTAL INVESTMENT (SF)	85,805

3.2 MIDDLE SCHOOLS - WHAT WE'VE HEARD

WHAT WE'VE HEARD

- \$2.1 million currently targeted to make minor modifications at all four sites.
- The course descriptions should be designed as adaptable and steered toward developing broader skill sets.
- Industry statement: keep them engaged and socially interactive through hands on instruction.
- This is about general employability, not a deep-dive into a single content area.
- They should understand there is more than one solution or more than one way to a solution through a variety of media and modalities
- They should understand the world requires them to work collaboratively, not in isolation.

WHAT DOES THIS LOOK LIKE FOR GAPS MIDDLE SCHOOLS?

Long Term Wants / Vision:

Create programs and provide applied learning spaces, such as Maker Spaces and 3D labs distributed within the current framework of the existing schools to supplement the core-curriculum with the desired outcome to create students prepared for high school programs that possess the following skill set:

- Problem Solving
- Critical Thinking
- Social Interaction
- Group Dynamics / Teaming
- Presentation



3.2.1 MEMORIAL MIDDLE SCHOOL

Feeder to West Albany High School

Current Conditions

Currently the school has a strong Environmental Science and Farm-to-Table program, including an undersized culinary arts classroom adjacent to the small gym and large garden space located in the south courtyard.

Solutions

Capture general classrooms C-6 and C-4 and convert to large Foods/Culinary classroom to house a greater number of students (35 max.) and to create an improved adjacency to the garden. To provide improved access and transparency between the new culinary room and courtyard garden on the east side, provide exit/entry doors at the corridor, provide additional windows, and provide roll-up style garage door at the culinary lab with vision glass.

Convert rooms W-2 and W-3 on the west side to an Applied Learning suite. Renovate into four teaching spaces including a Digital Lab, Maker Spaces, and Science classroom with movable walls separating the spaces. Provide new interior windows from the renovated spaces to the corridors and new entry doors where needed. At the corridor, provide new roll-up style garage door between the renovated classrooms and garden courtyard.

Challenges

- ACT tile is present in the existing Home Ec. room which may require addressing with any alteration to this room.
- Radiant heating may be in conflict with new window/door locations and may need to be relocated.
- Relocating other impacted classrooms/programs.
- Structural considerations at exterior load-bearing walls where windows/doors/garage doors are suggested.
- Improving ventilation system to ensure acceptable indoor air quality while keeping energy costs low.

Costing Items - ARCHITECTURAL

- Infrastructure, equipment, and renovation cost to new culinary lab.
- New interior and exterior windows at multiple locations.
- (2) roll-up garage doors; one at culinary lab, one at corridor.
- New exterior doors; (5) locations.
- Infrastructure, equipment, and renovation to W-2/W-3 wing, including interior windows to corridor, interior finishes, power & ventilation, and movable walls.

Costing Items - ELECTRICAL

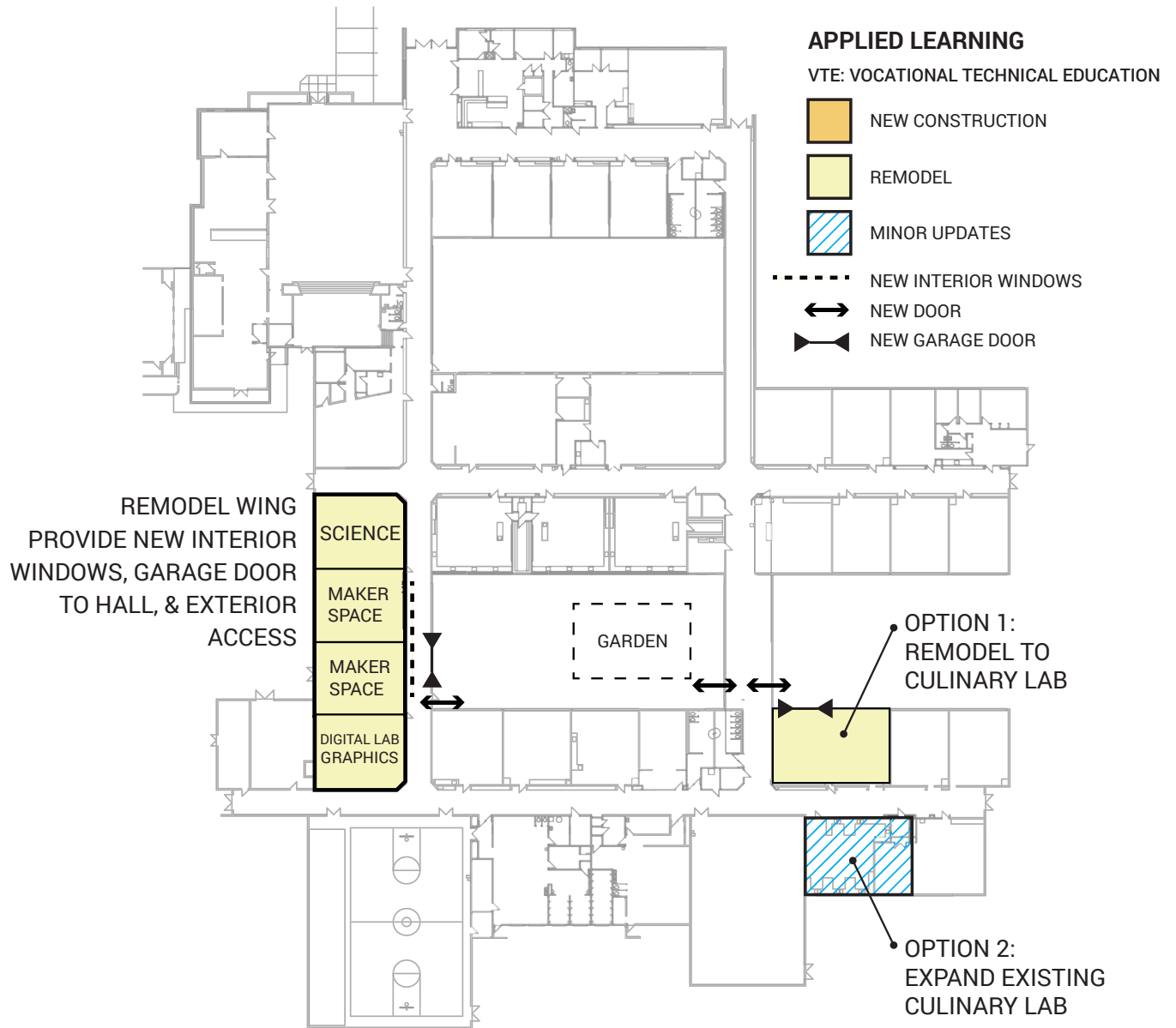
- Replace utility: incoming utility CT section and meter/main located at building exterior with concrete pad and NEMA 3R rated gear.
- Replace transformers at Boiler Room and utility tunnel. Provide new elevated base and seismic anchorage.
- Add and/or relocate existing lighting in modified classroom, as needed.
- Add or modify existing receptacle, data, and AV locations, as needed, to accommodate classroom changes.

- Add occupancy sensors to occupied rooms and support spaces.
- Replace exterior lighting with new LED.
- Add Lighting Control panel to control lobby, corridors and common areas.
- Replace existing Siemens FACP with new panel.

Costing Items - MECHANICAL

- Replace Tunnel Fan system with new packaged rooftop air handler or other system to ensure proper heating and ventilation where feasible
- Upgrade pneumatic controls to DDC

OVERALL FLOOR PLAN DIAGRAM



NORTH ALBANY MIDDLE SCHOOL

Feeder to West Albany High School

Current Conditions

North Albany MS currently no longer has an Arts program and thus no 3D maker spaces, but does have a strong Choir program improperly housed on the cafetorium stage. There are ample computer labs throughout that result in underutilized lab space.

Solutions

Create one large lab from the (2) spaces with a hybrid computer lab space within. Create transparency by adding additional windows at the west wall located across from Science rooms 31 & 31. As an additional option, Computer Lab 24 could be converted to a Maker Studio.

Challenges

- Structural considerations at exterior load-bearing wall where windows / doors are suggested.
- Relocation of existing classroom programs.
- Improving ventilation system to ensure acceptable indoor air quality while keeping energy costs low.

Costing Items - ARCHITECTURAL

- Infrastructure, equipment, and renovation costs to new Applied Learning lab, including interior finishes, as needed, and structural improvements.
- Renovation of old art wing.

Costing Items - ELECTRICAL

- New LED Pendant lighting in recaptured classrooms, applied learning lab and science spaces.
- Add or modify existing receptacle, data ,and AV locations, as needed, to accommodate classroom changes.
- Add electrical connections and receptacles, as needed, for new equipment.
- Add egress lighting and exit sign for exit door to courtyard.
- Replace exterior lighting with new LED lighting.
- Add lighting control panel to control lobby, corridors, and common areas.
- Replace existing Siemens FACP with new panel.

Costing Items - MECHANICAL

- Replace the Multi-zone air handling unit with new energy efficient air handling unit.
- Provide new digital controls for new mechanical equipment.

OVERALL FLOOR PLAN DIAGRAM

APPLIED LEARNING

VTE: VOCATIONAL TECHNICAL EDUCATION

 NEW CONSTRUCTION

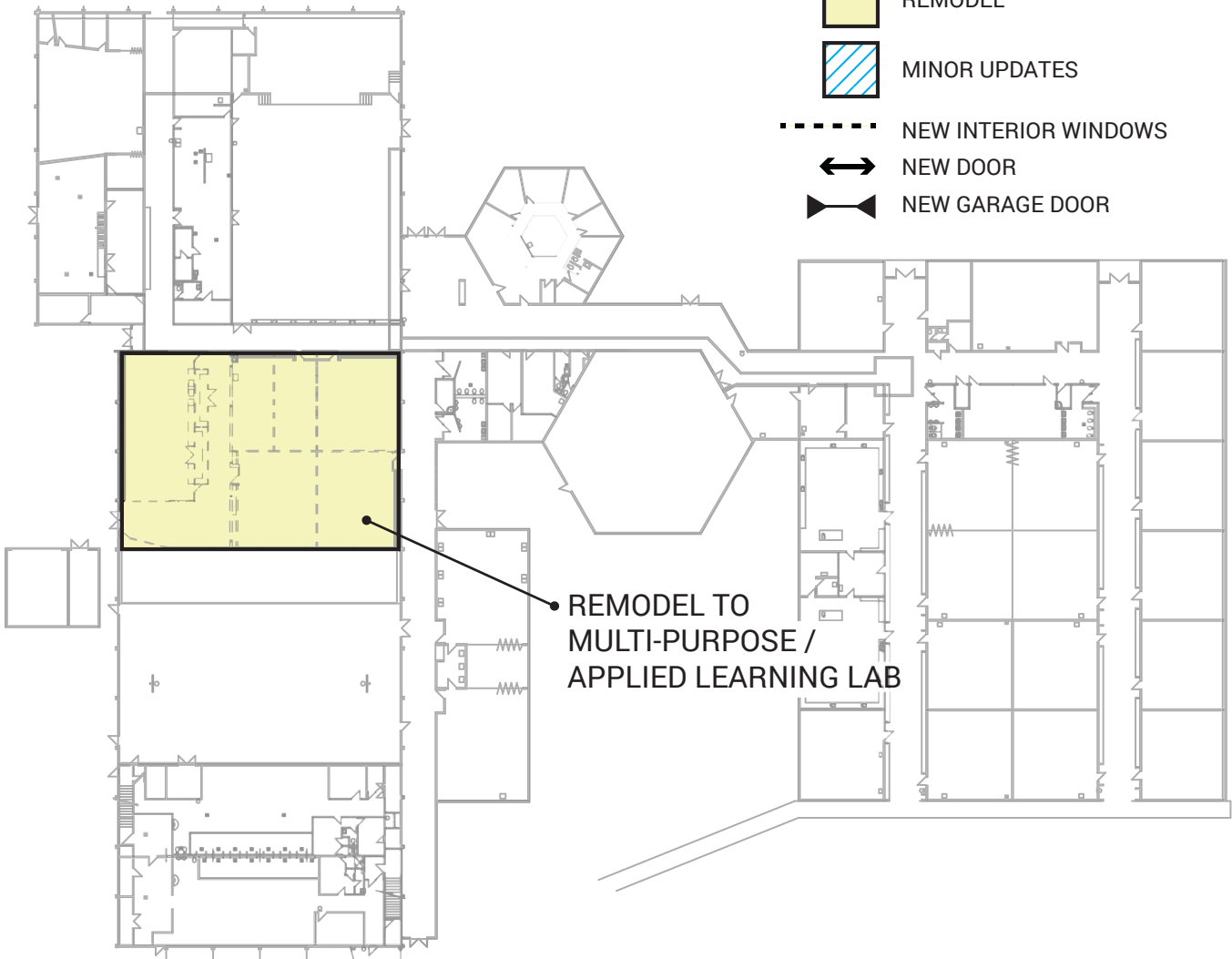
 REMODEL

 MINOR UPDATES

 NEW INTERIOR WINDOWS

 NEW DOOR

 NEW GARAGE DOOR



CALAPOOIA MIDDLE SCHOOL

Feeder to South Albany High School

Current Conditions

Currently the school has a very large (over 4,000 SQF) wood shop housing only (1) section for staffing purposes, multiple computer labs on campus, and two unassigned classroom spaces. The school has a strong hands-on program with ample room to grow with little investment.

Solutions

With minor investment, recapture the classroom and science room adjacent to the shop space, and perform minor interior renovations to modernize and create cohesive identity between the new spaces and internal transparency to foster greater connection. Upgrades to equipment and dust collection systems should be done at this time, as needed, to support multiple sections.

Recapture classroom 14 (currently Language Arts) and classroom 13 (unassigned) and convert to centrally located Applied Learning Lab / Maker Studio. Relocate the lockers on the corridor side of the new lab and provide internal windows to foster increased transparency to the lab. Provide exit door to courtyard.

During this time, it is suggested to reorganize overall programmatic distribution to either support a cohesive departmental or distributed learning organization.

Challenges

- Providing any additional utility as needed for conversion of typical classrooms to applied learning lab needs.
- Structural alterations at exterior walls where windows / doors are suggested
- Coordination of relocation for existing / classroom programs
- Improving ventilation system to ensure acceptable indoor air quality while keeping energy costs low.

Costing Items - ARCHITECTURAL

- Infrastructure, equipment, & renovation cost to new applied learning lab(s) including interior finishes, as needed, and removal of interior partition wall
- Light renovation to existing shop wing, including removal of interior partition walls

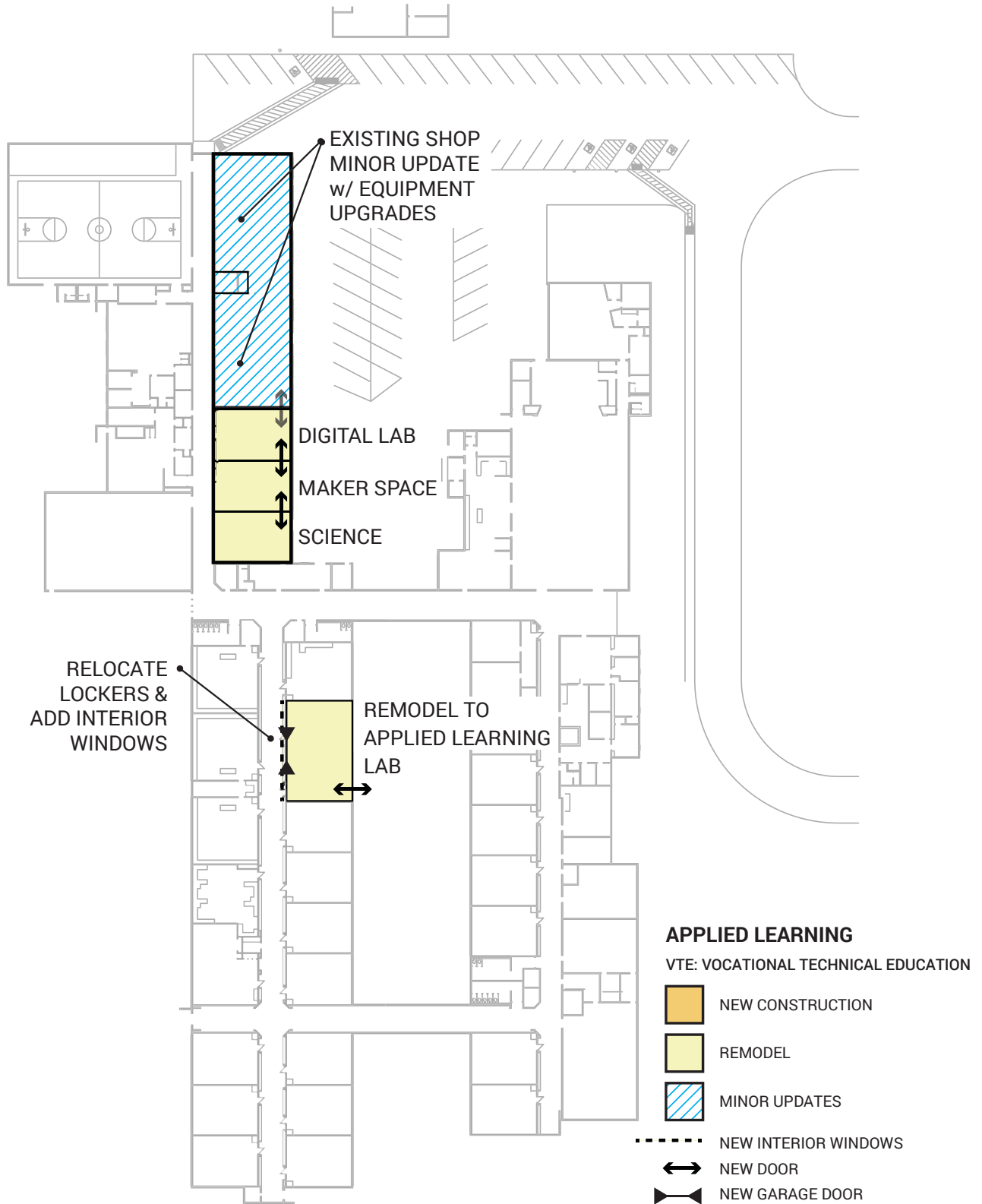
Costing Items - ELECTRICAL

- Relocate and/or revise existing lighting in recaptured classrooms, applied learning lab and science spaces.
- Add electrical connections and receptacles as needed for new equipment.
- Add or modify existing receptacle, data and AV locations as needed to accommodate classroom changes.
- Add egress lighting and exit sign for exit door to courtyard.
- Replace exterior lighting with new LED.
- Add Lighting Control panel to control lobby, corridors and common areas.
- Replace existing Siemens FACP with new panel.

Costing Items - MECHANICAL

- Replace Tunnel Fan system with new packaged rooftop air handler or other system to ensure proper heating and ventilation where feasible
- Upgrade pneumatic controls to DDC

OVERALL FLOOR PLAN DIAGRAM



TIMBER RIDGE MIDDLE SCHOOL

Feeder to South Albany High School

Current Conditions

This campus is relatively new with a strong Natural Resources / Environmental Sciences program and should require only light to moderate renovation to provide a centrally located Applied Learning lab.

Solutions

Combine the two classrooms adjacent to the east side of the Media Center to form a single Applied Learning lab. Provide exterior exiting doors to the courtyard and new concrete patio.

Challenges

- Structural considerations at exterior load-bearing wall where windows/doors/ garage doors are suggested
- Relocation of existing / classroom programs

Costing Items - ARCHITECTURAL

- Infrastructure, equipment, and renovation costs to new applied learning lab(s), including interior finishes, as needed, and structural improvements.
- New interior windows to corridor.
- New exiting door and concrete landing pad.

Costing Items - ELECTRICAL

- Add or modify existing receptacle, data and AV locations as needed to accommodate an applied learning lab.







Costing Items - MECHANICAL

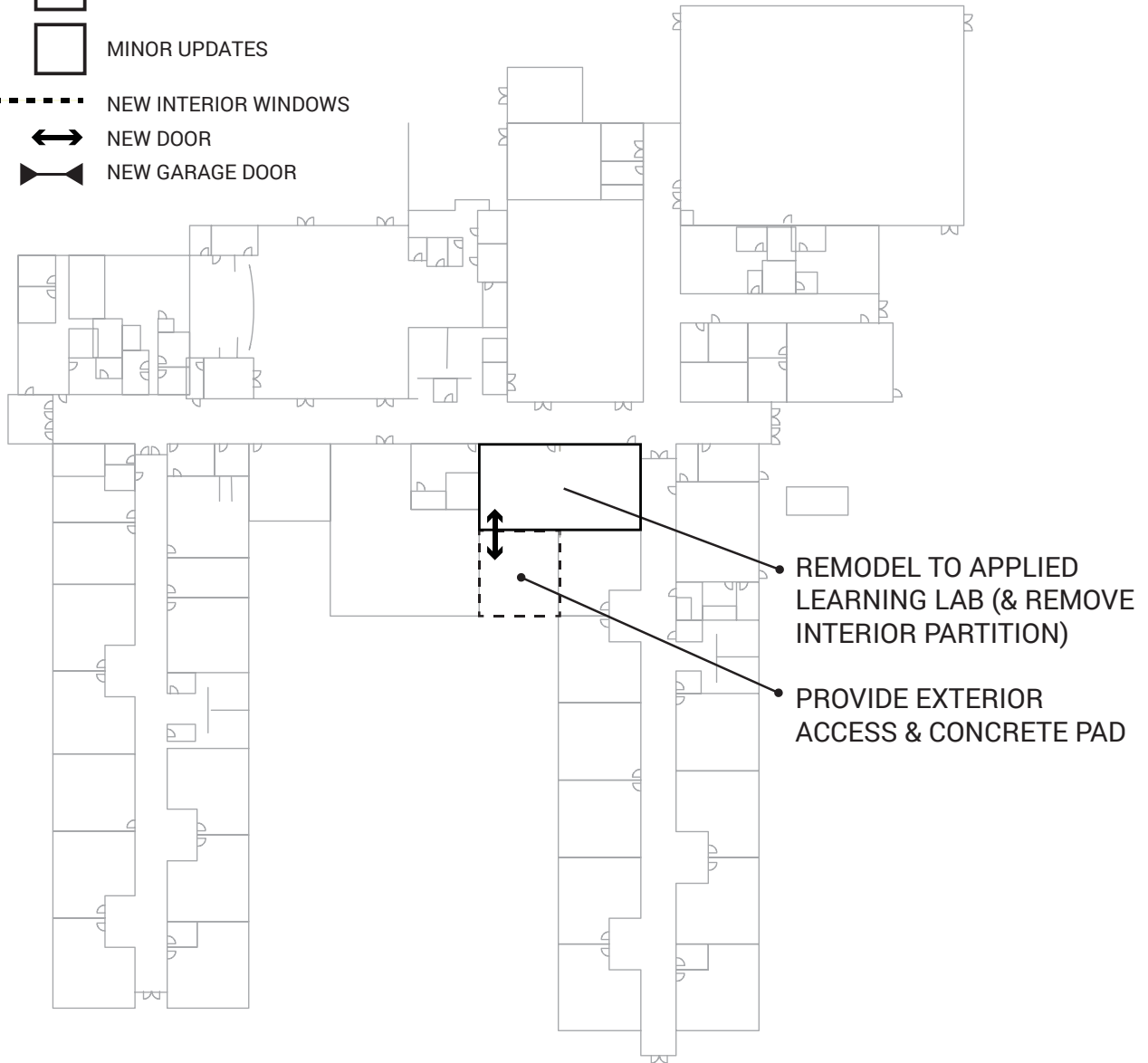
- None.

OVERALL FLOOR PLAN DIAGRAM

APPLIED LEARNING

VTE: VOCATIONAL TECHNICAL EDUCATION

-  NEW CONSTRUCTION
-  REMODEL
-  MINOR UPDATES
-  NEW INTERIOR WINDOWS
-  NEW DOOR
-  NEW GARAGE DOOR





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