

Andover High School Building Committee



April 6, 2023

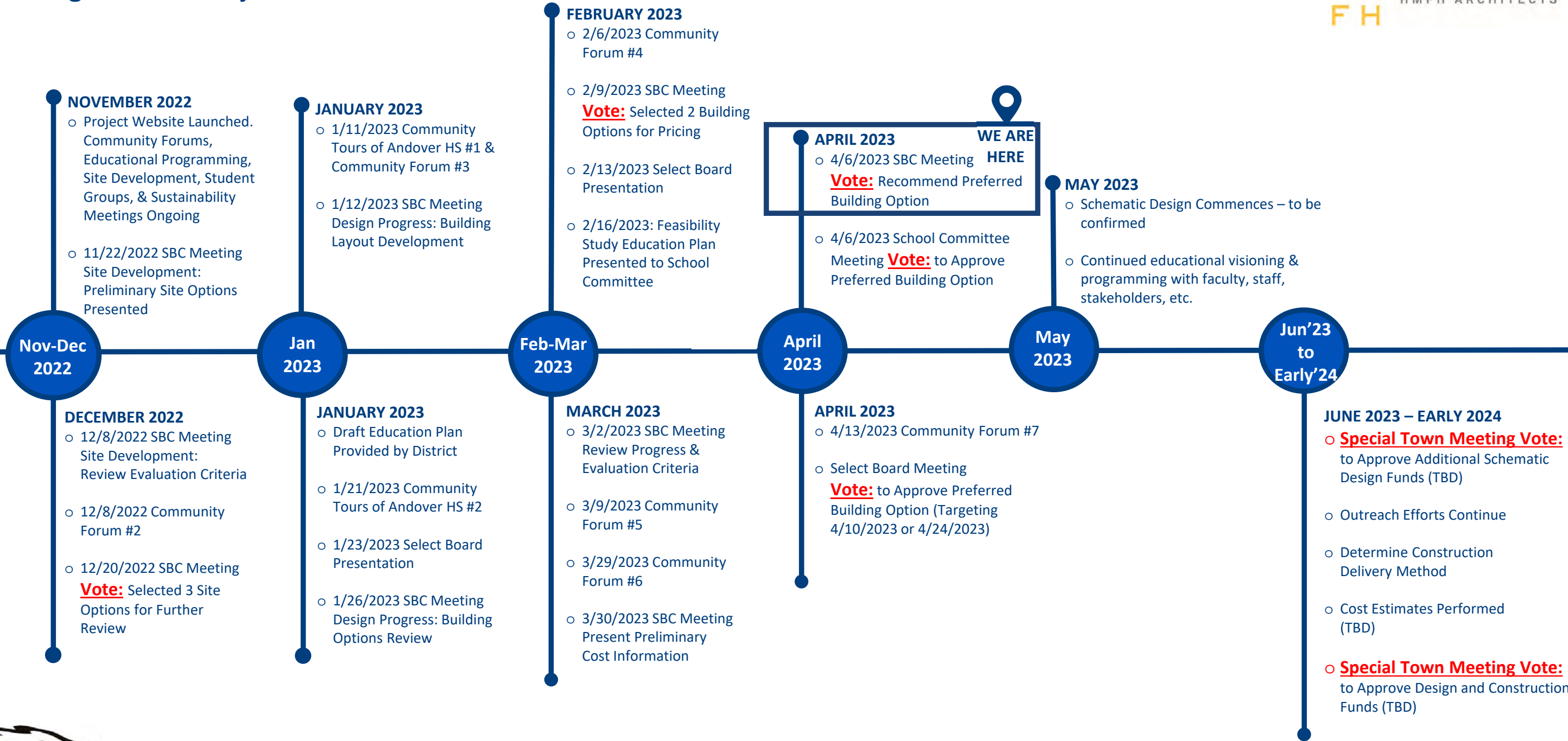
HM
FH

HMFH ARCHITECTS

DRAFT FEASIBILITY STUDY & SCHEMATIC DESIGN TIMELINE



Andover High School Project



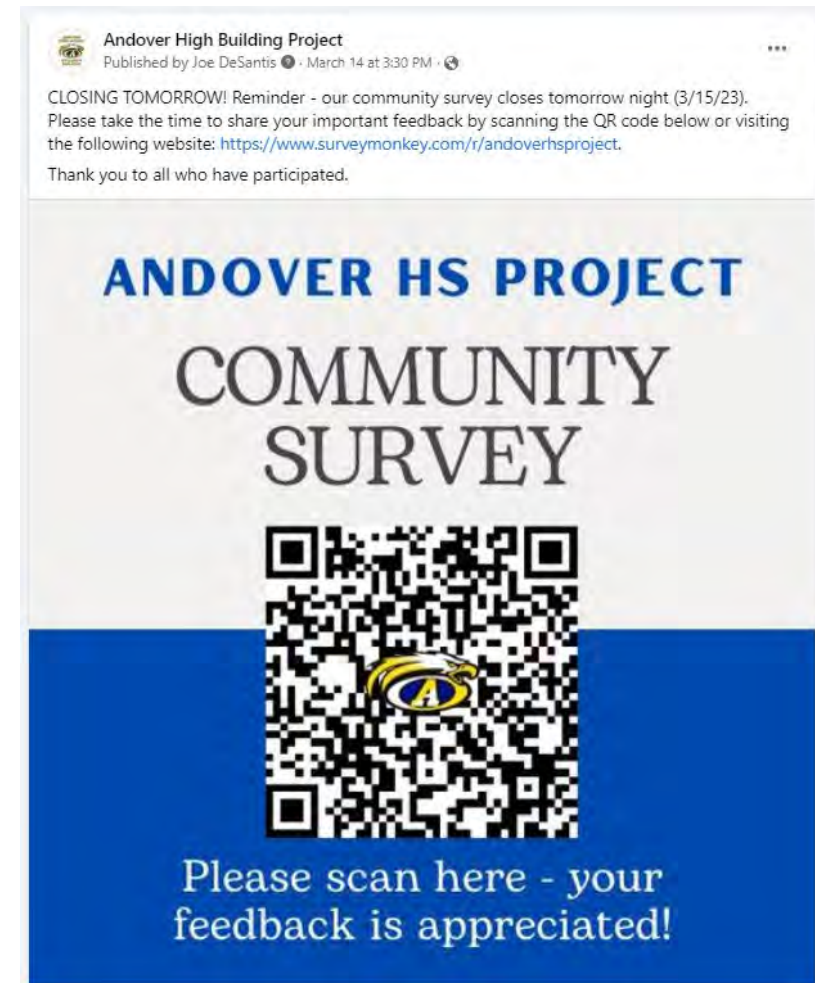
THE BIG PICTURE

Feasibility Study **Schematic Design**
 September 2022 – April 2023 May 2023 – January 2024

Note: Preliminary timeline, under review by Town of Andover Last updated 3.30.2023

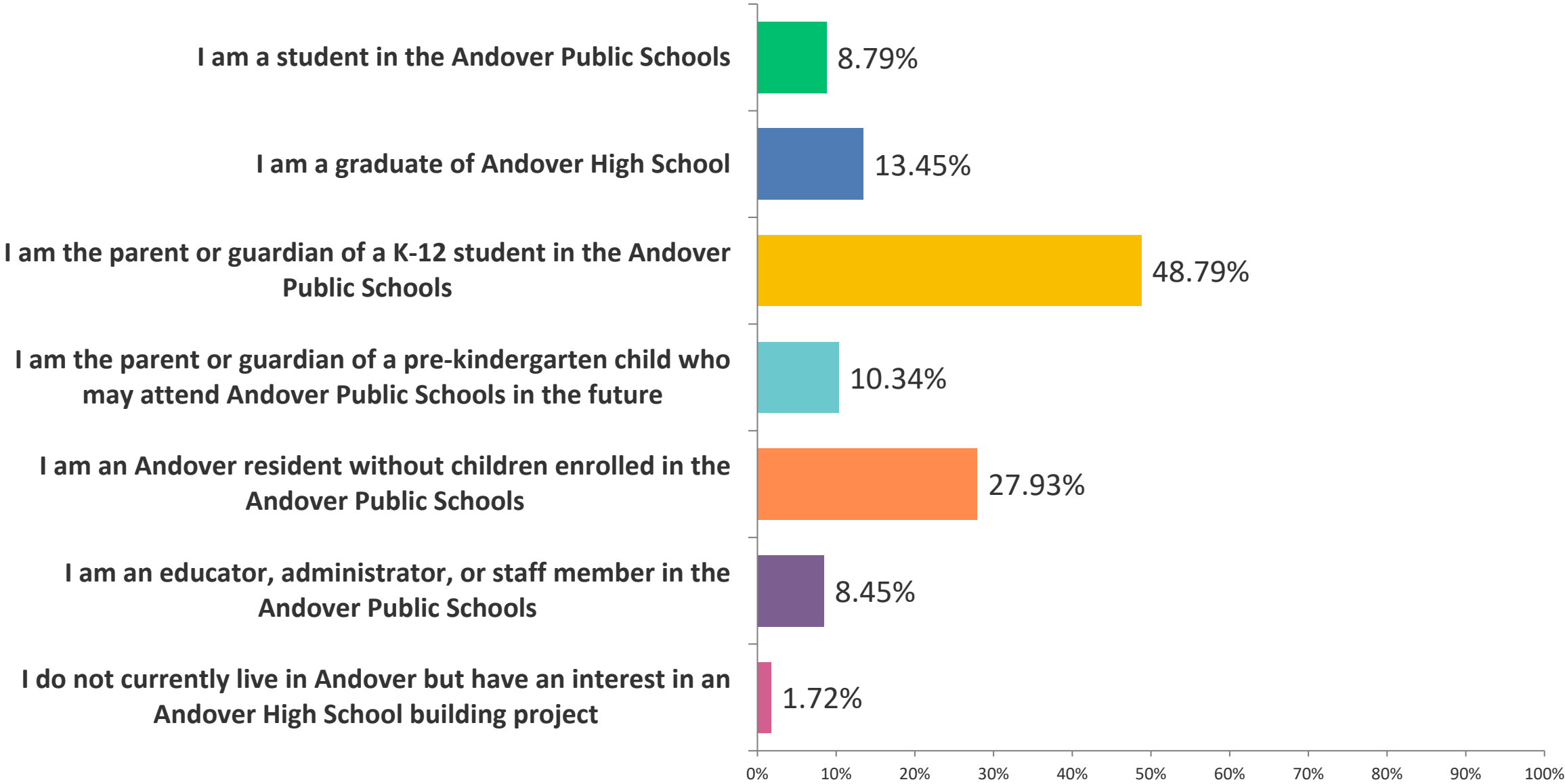
Community Survey - Overview

- A community survey was conducted from 3/1 – 3/15.
- Survey involved up to 13 questions (depending on responses)
- Goal of the survey was to understand the community's priorities for the project. Survey involved questions of multiple format (multiple choice, ranking, open-ended, etc.)
- 583 total responses were received, and 103 new people shared email addresses to subscribe to project mailing list



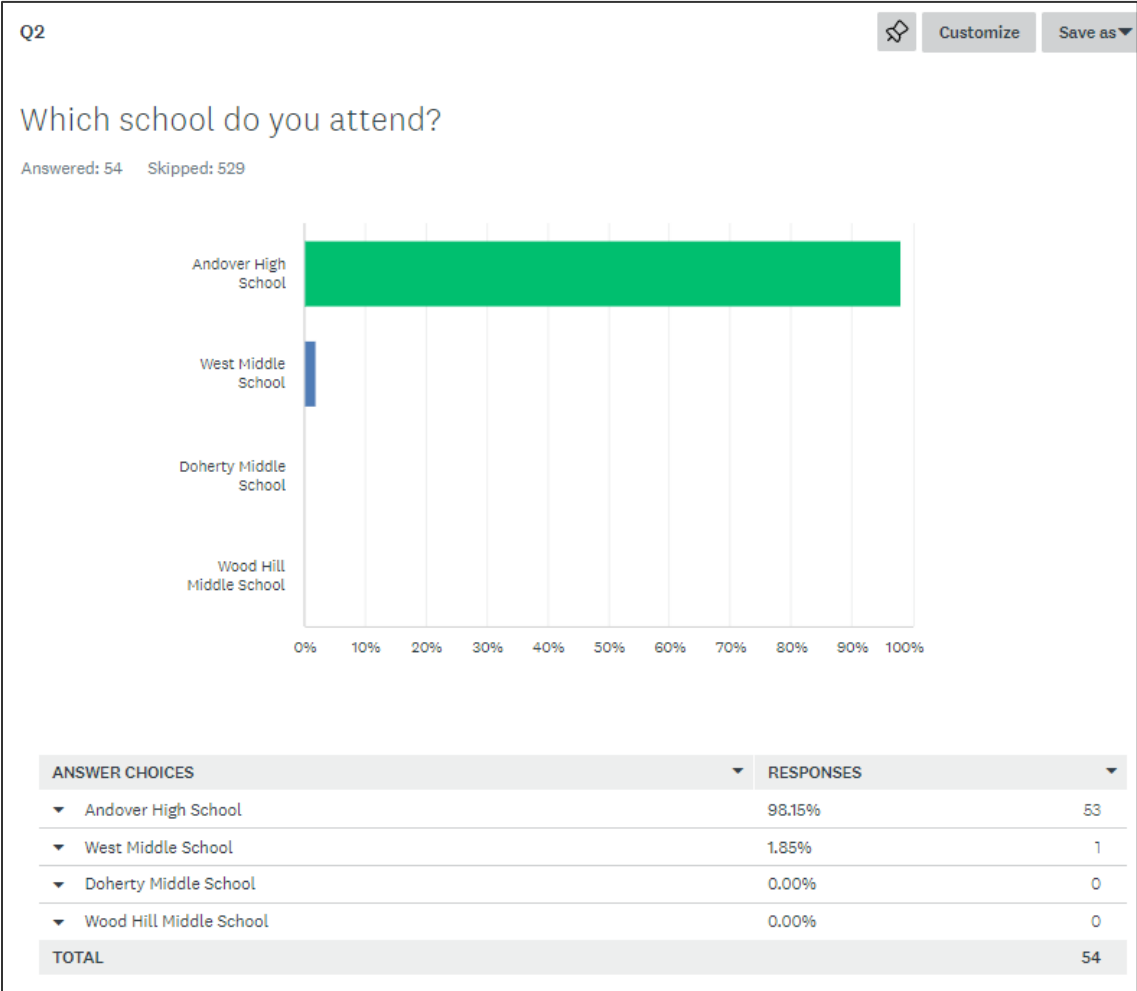
Q1: What is your relationship to Andover High School?

Answered: 580 Skipped: 3

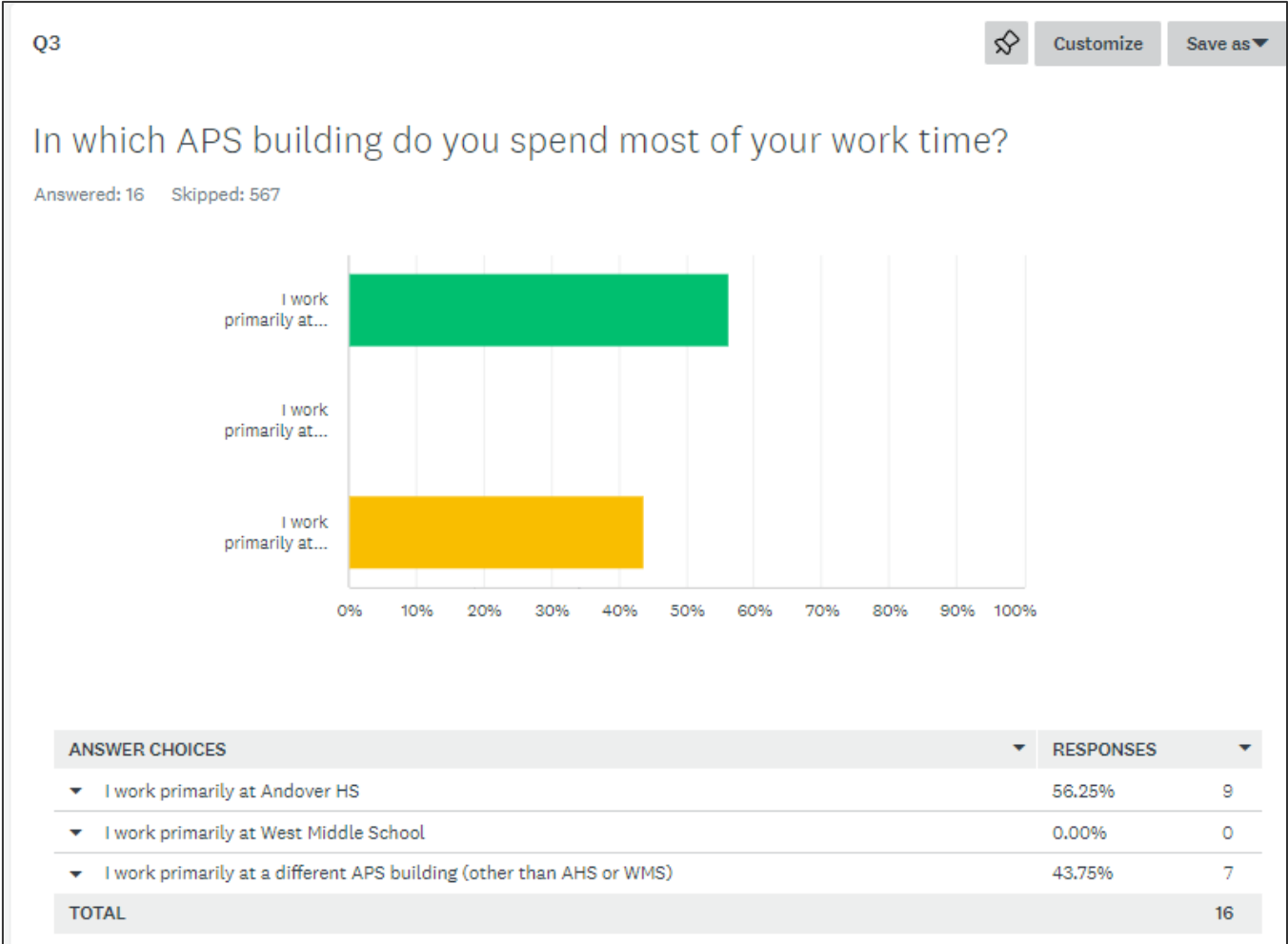


Q2 and Q3 (Optional, based on response to Q1)

For students:

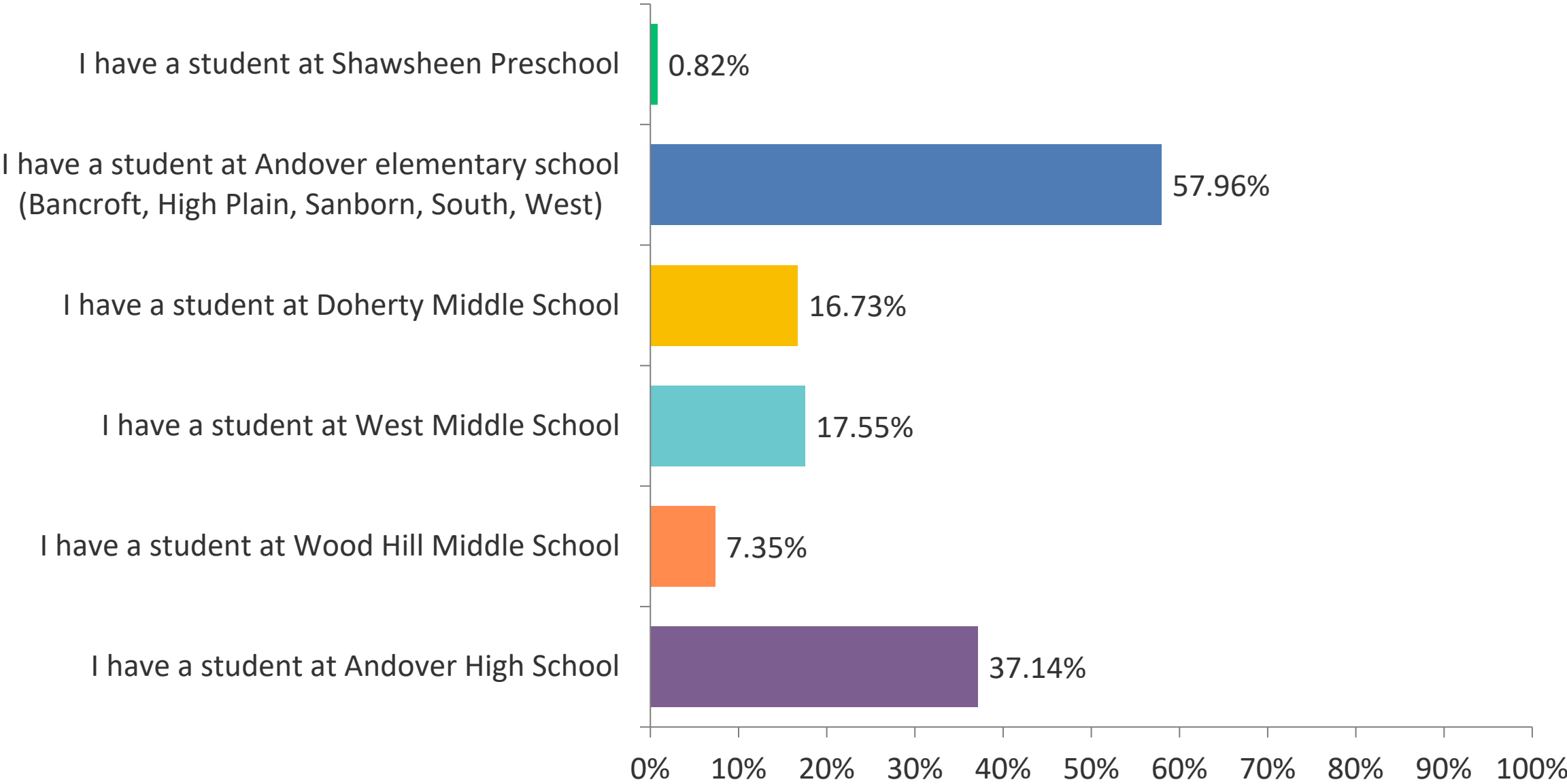


For staff:



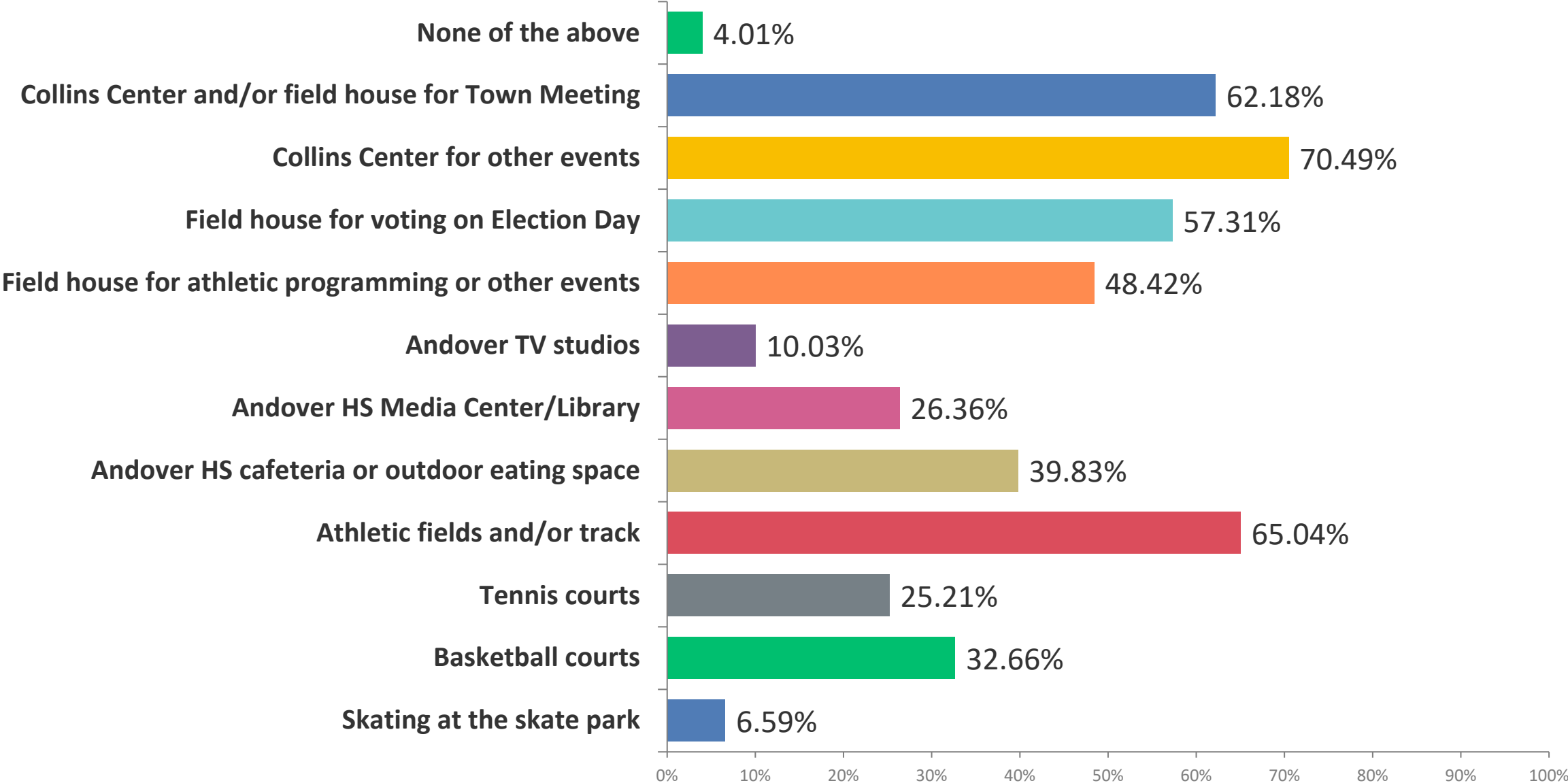
Q4: Please check all that apply.

Answered: 245 Skipped: 338



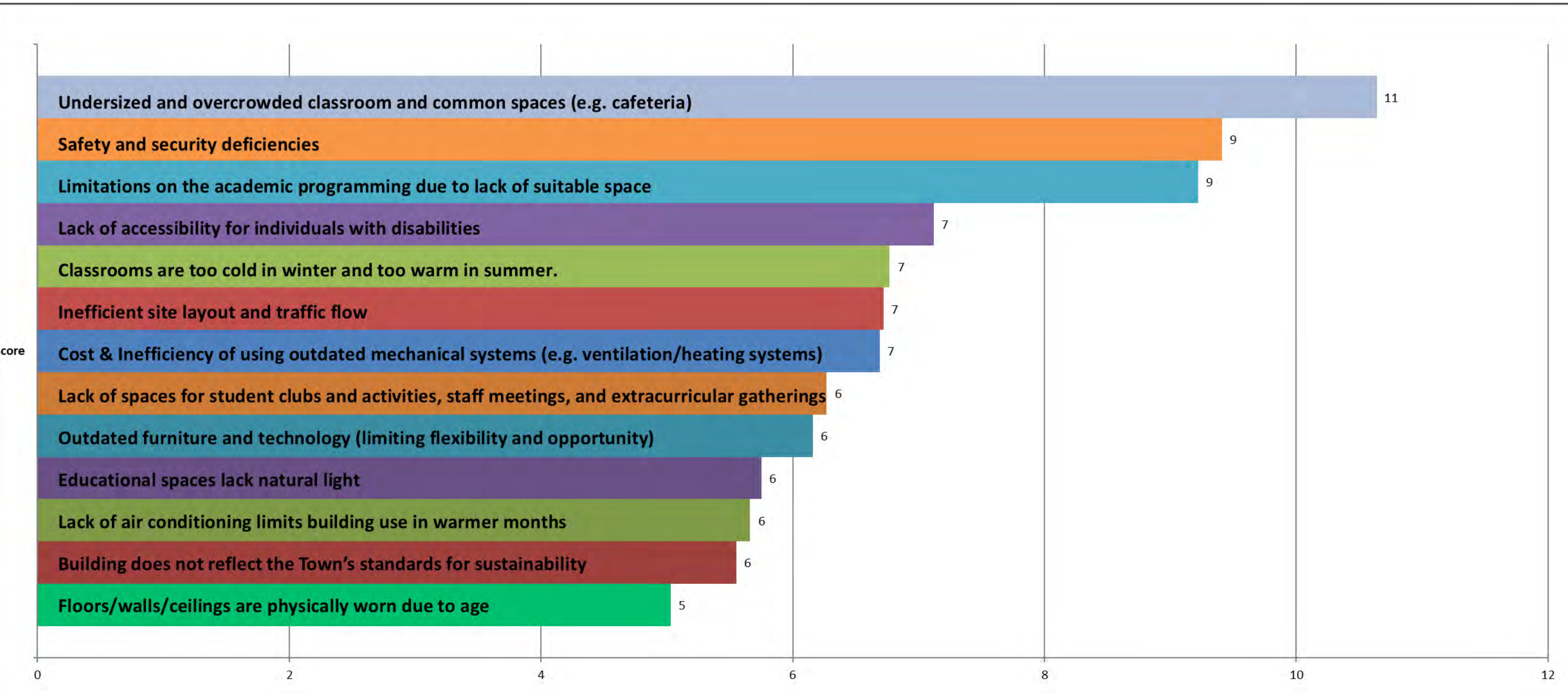
Q5: The Andover High School site is home to many community uses throughout the year. Please check any elements of the Andover High School site that you have visited or used in the last five years.

Answered: 349 Skipped: 234



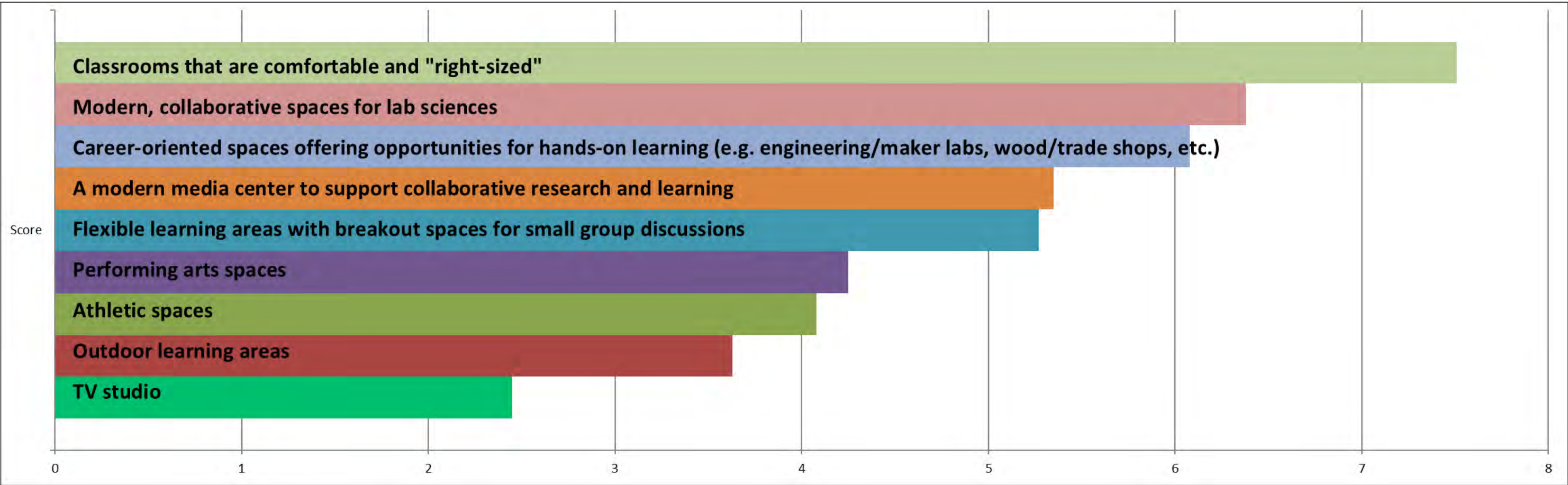
Q6: Which of the following issues with the existing AHS are most concerning to you?

Answered: 373 Skipped: 210



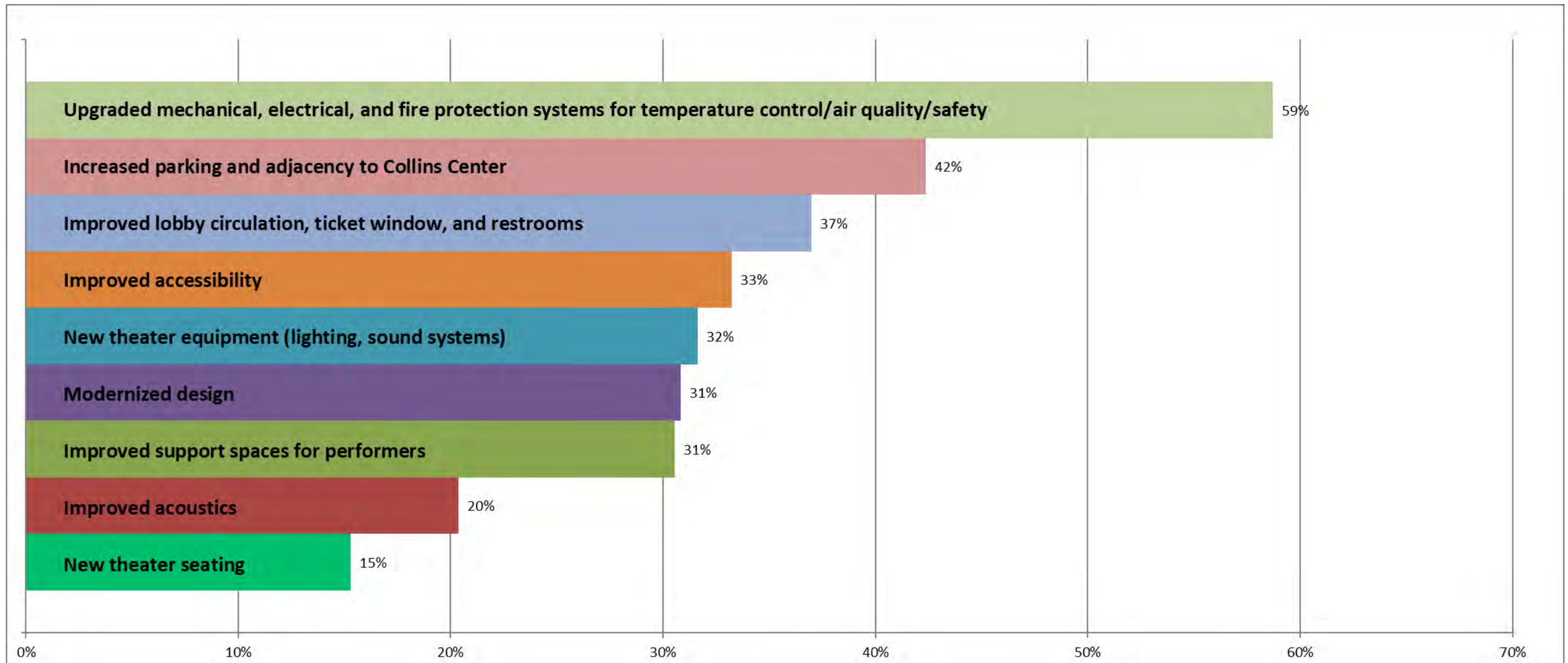
Q7: Which of the following potential spaces within a new or renovated Andover High School are most important to you? (Rank)

Answered: 373 Skipped: 210



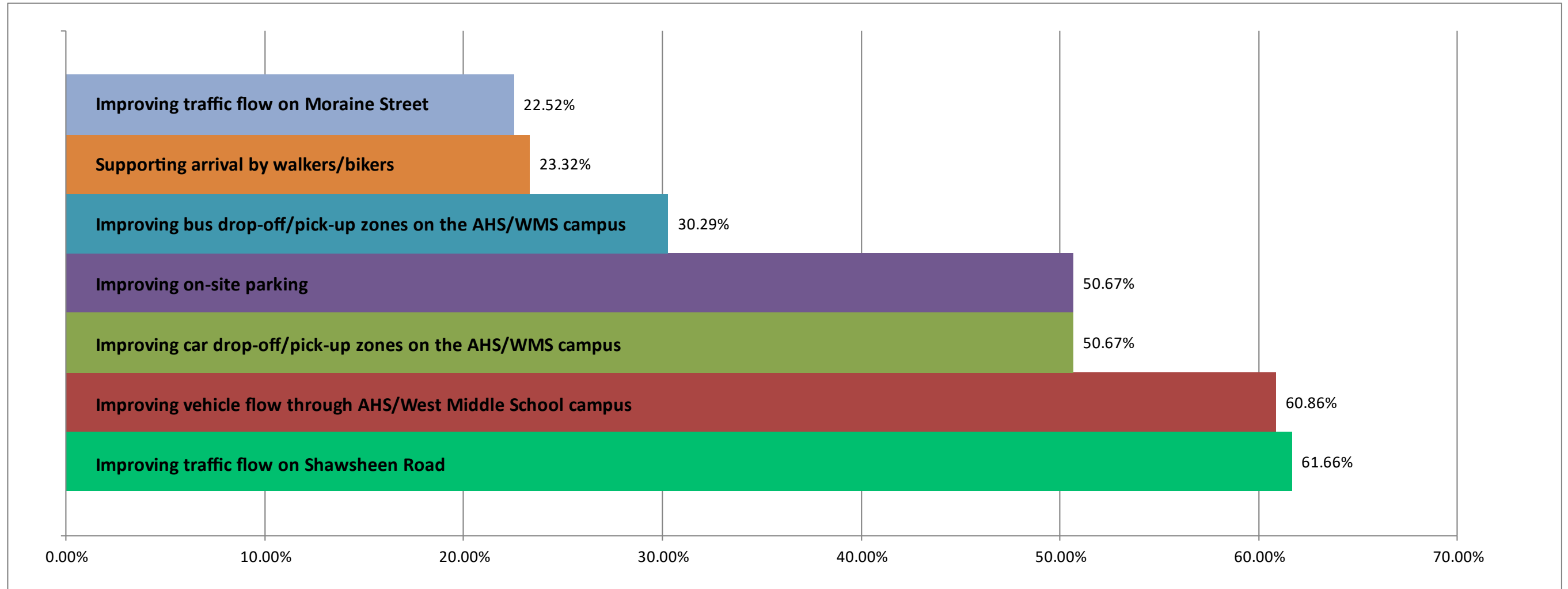
Q8: Which three features in a potentially new or renovated Collins Center would you be the most excited about?

Answered: 373 Skipped: 210



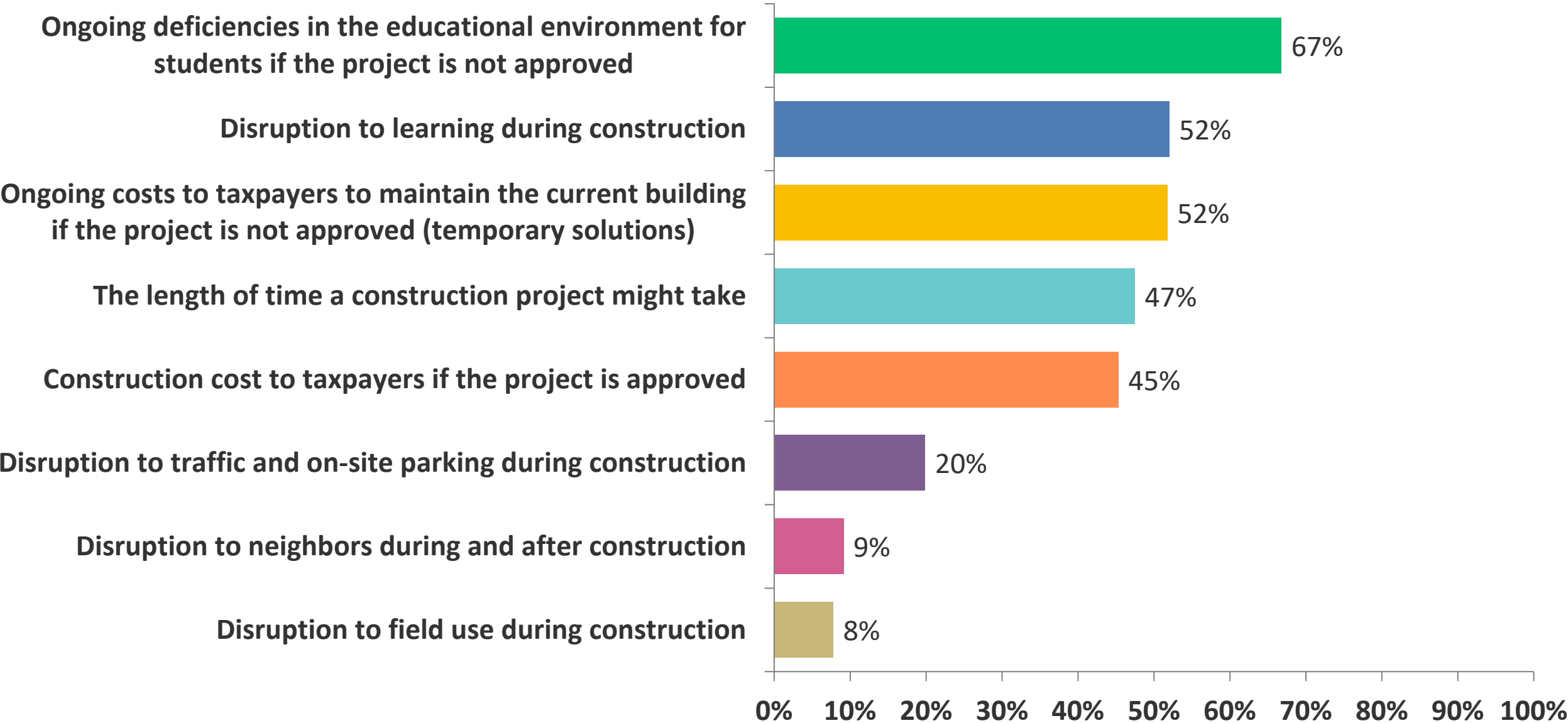
Q9: Of the following choices, which do you think are the three most important priorities for improving the flow of vehicles and people around the AHS/West Middle School campus?

Answered: 373 Skipped: 210



Q10: Of the following choices, what are your three biggest concerns regarding a potential Andover High School building project?

Answered: 373 Skipped: 210



Q11: Open-ended: Is there anything else you'd like to share with the Building Committee?

Answered: 135 Skipped: 448

| Category | Count |
|---------------------------------|-------|
| Supportive | 64 |
| Negative | 20 |
| Neutral | 10 |
| Specific Considerations | 34 |
| Irrelevant/Unable to Categorize | 7 |

Q12: Open-ended: Is there a community group that you'd like us to meet with to share information and collect feedback? If so, please provide as much of the following information as you can so that we can be in touch.

Answered: 25 Skipped: 558

[Walk-Bike Andover](#), [Bancroft/Doherty/Woodhill Parents](#), [Andover Pollinator Pathway](#), [Local Churches](#), [Music Honors Society](#), [Andover Mum Facebook Page](#), [Andover Vocal Music Association](#), [Andover Arts & Culture Alliance](#), [Senior Center](#), [Rotary Club](#), [Local Pre-Schools and Daycares](#), [Booster Clubs \(drama, show choir, robotics\)](#), [Andover Trails Group](#), [Andover Cultural Council](#), [Andover News](#),

Q13: Would you like to share your email address to receive news about the project?

Emails Provided: 103

Options

Add/Reno

Courtyard



New Building

Campus 2



Campus 2 w/ Auditorium



Surface parking or parking garage can be considered for any option



Cost analysis process - Feasibility Phase

Preliminary Construction Cost Analysis

- High level construction cost information for comparison and decision-making purposes (ex: New vs. Add/Reno, Collins Ctr, parking garage)
- At this phase, costs estimated on cost SF basis plus industry standard multipliers for escalation, design contingency for undefined scope
- Two independent construction cost analysis of initial concept drawings, reconciled to verify understanding of scope and associated cost assumptions
 - PM&C (estimate of record) and Ellana Construction Cost Consultants reconciled estimates were within approx. 3% for add/reno and 1% for new

Estimated Project Cost Analysis

- Team will use industry standard multipliers to translate preliminary construction cost analysis to rough total project costs

Project costs

| | Add/Reno Courtyard | | New- Campus 2 | | New Campus 2 w/ Aud |
|---|-----------------------|--|----------------------|--|------------------------|
| Trade Costs | | | | | |
| Building Costs | \$219,636,000 | | \$216,244,000 | | \$208,601,000 |
| Demo and HAZMAT | \$3,520,000 | | \$5,203,000 | | \$5,764,000 |
| Site w/ Surface Parking | \$45,248,000 | | \$40,504,328 | | \$40,553,000 |
| Design and Pricing Contingency | \$32,208,000 | | \$31,434,000 | | \$30,590,000 |
| SUBTOTAL Building & Site Trade costs | \$300,612,000 | | \$293,385,000 | | \$285,508,000 |
| Escalation, Phasing, & Logistics | \$60,504,000 | | \$41,597,000 | | \$36,551,000 |
| General Conditions and Requirements | \$34,945,000 | | \$29,649,000 | | \$27,132,000 |
| Bonds and Insurance | \$8,125,000 | | \$7,537,000 | | \$7,246,000 |
| CM Fee and Contingency | \$18,390,000 | | \$16,934,000 | | \$16,218,000 |
| Estimated TOTAL Construction Cost | \$422,576,000 | | \$389,102,000 | | \$372,655,000 |
| Cost/ Square Foot | \$844 | | \$812 | | \$810 |
| Construction Contingency | \$50,710,000 | | \$27,230,000 | | \$24,220,000 |
| Owner's Contingency | \$5,350,000 | | \$4,950,000 | | \$4,750,000 |
| All Other Soft Costs (Fees, Testing, etc.) | \$89,228,000 | | \$82,539,000 | | \$79,222,000 |
| Estimated TOTAL Project Cost | \$567,864,000 | | \$503,821,000 | | \$480,847,000 |

Construction costs include:

MARKUPS

- Construction Costs Include:
- Construction Manager Fee
- Bonds & Insurance
- Construction Cost Escalation
- Design & Pricing Contingency
- Construction Manager's Contingency

Division 1 - General Conditions/Requirements

Division 2 - Demolition & Abatement

Division 3 - Concrete

Division 4 - Masonry

Division 5 - Metals (Structural & Misc. Metals)

Division 6 - Millwork & Casework

Division 7 - Roofing, Insulation, Waterproofing

Division 8 - Doors & Windows

Division 9 - Finishes

Division 10 - Partitions, Signage, Accessories

Division 11 - Equipment

Division 12 - Furnishings

Division 14 - Elevators

BUILDING

SYSTEMS

Division 21 - Fire Suppression

Division 22 - Plumbing

Division 23 - HVAC

Division 26 - Electrical

Division 27 - Communications

Division 28 - Electronic Safety/Security

SITE

Division 31 - Site

Enabling Site Work

Division 32 - Exterior Improvements

Division 33 - Utilities

Project costs include

Construction costs, and

Soft costs:

- Construction Contingency
- Owner's Contingency
- Architecture & Engineering Costs
- Owner's Project Manager Costs
- Construction Testing
- Legal Fees
- Utility Company Fees & Temporary Utility Work
- Furniture, Fixtures, and Equipment (FF&E)
- Technology
- Moving Costs
- Construction Manager Pre-construction Services

Soft costs include

| Item | Description |
|---|--|
| Construction Contingency | 6.5-12% of construction cost, varies by option (increases with renovation) |
| Owner's Contingency | 6% of soft costs below |
| Architecture & Engineering Costs | ~21% of construction costs (Rough order of magnitude) |
| Owner's Project Manager Costs | |
| Utility Company Fees & Temporary Utility Work | |
| Furniture, Fixtures, and Equipment (FF&E) | |
| Technology | |
| Moving Costs | |
| Construction Testing | |
| Legal Fees | |
| Construction Manager Preconstruction Services | |

Draft program - recent revisions to Net SF

Net Floor Area for the base program is shown below. This chart does not include Collins Center/ Auditorium and Field House. It also does not include gross area, for corridors, bathrooms, storage, and service spaces.

As estimated, the total project Gross Square Feet ranges from 460,711 to 501,130 depending upon option (add/reno, new, or new w/ auditorium).

| ANDOVER HIGH SCHOOL | Proposed 1.11.2023 | Basis of estimate 3.10.2023 | Recent Reduction 4.1.2023 | MSBA Guidelines |
|---|-------------------------------|--|--|----------------------------|
| CORE ACADEMIC SPACES | 104,270 | 99,720 | 97,500 | 90,880 |
| SPECIAL EDUCATION | 29,840 | 27,190 | 25,740 | 19,130 |
| ART & MUSIC | 19,175 | 17,450 | 15,250 | 9,775 |
| CAREER & TECHNOLOGY | 19,175 | 19,200 | 18,720 | 18,720 |
| HEALTH & PHYSICAL EDUCATION | 35,400 | 34,990 | 30,650 | 26,840 |
| MEDIA CENTER | 11,775 | 11,775 | 11,475 | 11,775 |
| DINING & FOOD SERVICE | 18,700 | 18,700 | 17,350 | 14,650 |
| MEDICAL | 1,720 | 1,720 | 1,720 | 1,510 |
| ADMINISTRATION & GUIDANCE | 8,658 | 8,658 | 8,658 | 6,658 |
| CUSTODIAL & MAINTENANCE | 3,800 | 3,800 | 3,800 | 3,050 |
| OTHER - Andover TV | 2,970 | 2,970 | 2,970 | 0 |
| SUB-TOTAL HIGH SCHOOL (not including Collins Center & Field House) | 255,483 | 246,173 | 233,833 | 202,988 |

Note: Since the start of this project, the MSBA has revised their guidelines for Core Academic Spaces and Career&Technology. These revisions are reflected above.

Draft program - Proposed vs. MSBA Net SF

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|---|------------------------------|----------------------------|---------------|
| CORE ACADEMIC SPACES | 97,500 | 90,880 | 6,620 |
| SPECIAL EDUCATION | 25,740 | 19,130 | 6,610 |
| ART & MUSIC | 15,250 | 9,775 | 5,475 |
| CAREER & TECHNOLOGY | 18,720 | 18,720 | 0 |
| HEALTH & PHYSICAL EDUCATION | 30,650 | 26,840 | 3,810 |
| MEDIA CENTER | 11,475 | 11,775 | -300 |
| DINING & FOOD SERVICE | 17,350 | 14,650 | 2,700 |
| MEDICAL | 1,720 | 1,510 | 210 |
| ADMINISTRATION & GUIDANCE | 8,658 | 6,658 | 2,000 |
| CUSTODIAL & MAINTENANCE | 3,800 | 3,050 | 750 |
| OTHER - Andover TV | 2,970 | 0 | 2,970 |
| SUB-TOTAL HIGH SCHOOL (not including Collins Center & Field House) | 233,833 | 202,988 | 30,845 |

| | | | |
|-----------------------------------|---|--------|---|
| Collins Center - Auditorium/Drama | Add/Reno - 23,570 New - 28,950 New w/Aud - 20,000 | 10,400 | Add/Reno - 13,170 New - 18,550 New w/Aud - 9,600 |
| Field House | Add/Reno - 28,300 New - 32,300 New w/Aud - 32,300 | 0 | Add/Reno - 28,300 New - 32,300 New w/Aud - 32,300 |

| | | | |
|--|----------------|----------------|---------------|
| TOTAL HIGH SCHOOL - Add/Reno - Courtyard | 285,703 | | 72,315 |
| TOTAL HIGH SCHOOL - New Campus 2 | 295,083 | 213,388 | 81,695 |
| TOTAL HIGH SCHOOL - New - Campus 2 w Aud. | 286,133 | | 72,745 |

Note:
 ~ 40% is Field House
 ~ 17% is CC/Auditorium
 ~ 4% is Andover TV

Draft program - Proposed vs. MSBA Net SF

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|-----------------------------|------------------------------|----------------------------|--------------|
| CORE ACADEMIC SPACES | 97,500 | 90,880 | 6,620 |

Proposed Core Academic space exceeds the MSBA Space Summary template in order to be responsive to current programming. The additional square footage includes:

- three (3) larger than typical classrooms for program flexibility
- seven (7) program coordinators offices (for existing staff)
- three (3) science classrooms and prep rooms (to meet the program offerings)
- four (4) science storage spaces

Draft program - Proposed vs. MSBA Net SF

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|----------------------------|------------------------------|----------------------------|--------------|
| SPECIAL EDUCATION | 25,740 | 19,130 | 6,610 |

Proposed Special Education space exceeds MSBA Space Summary template to be responsive to current programming, including:

- Bridge Program
- Excel Program
- Life Skills Program
- Vocational Program
- Sail Program
- Tier 3 Program
- Transitions Program
- Special Education classrooms
- Special Education offices - coordinator, social workers, speech & language pathologists, reading specialists
- Unified PE space

District specific Special Education programs are reviewed/approved by Department of Elementary and Secondary Education at the end of Schematic Design. MSBA participates in all space increases from their guidelines that have been approved by DESE.

Draft program - Proposed vs. MSBA Net SF

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|----------------------------|------------------------------|----------------------------|--------------|
| ART & MUSIC | 15,250 | 9,775 | 5,475 |

Proposed Art & Music space exceeds MSBA Space Summary template in order to be responsive to current programming. The additional square footage includes:

- two (2) art classroom/storage (to match the existing)
- a larger band room (larger than MSBA by 500 SF, and smaller than existing by 660 SF)
- a Black Box Theater/Studio Classroom at 2,500 SF

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|--------------------------------|------------------------------|----------------------------|--------------|
| CAREER & TECHNOLOGY | 18,720 | 18,720 | 0 |

Proposed Career and Technology space meets the MSBA Space Summary guideline.

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|--|------------------------------|----------------------------|--------------|
| HEALTH & PHYSICAL EDUCATION | 30,650 | 26,840 | 3,810 |

Proposed Health & Physical Education space exceeds MSBA Space Summary template in order to be responsive to current programming. The additional square footage includes:

- team rooms
- training/equipment room
- PE Instructor's offices/showers
- coach/referee rooms/showers
- office for AD, Assist. AD and conferencing
- office for PE coordinator

Draft program - Proposed vs. MSBA Net SF

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|----------------------------|------------------------------|----------------------------|--------------|
| MEDIA CENTER | 11,475 | 11,775 | -300 |

Proposed Media Center space is slightly under the MSBA Space Summary template.

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|----------------------------------|------------------------------|----------------------------|--------------|
| DINING & FOOD SERVICE | 17,350 | 14,650 | 2,700 |

Proposed Dining & Food Service space exceeds the MSBA Space Summary template. The additional square footage includes:

- larger kitchen by 650 SF (this is smaller than existing by 1,560 SF)
- larger servery by 1,900 SF (required to meet the districts goals and improve existing conditions)
- district freezer storage

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|----------------------------|------------------------------|----------------------------|--------------|
| MEDICAL | 1,720 | 1,510 | 210 |

Proposed Medical space exceeds the MSBA Space Summary template. The additional square footage includes:

- mothers' room
- medical storage

Draft program - Proposed vs. MSBA Net SF

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|--------------------------------------|------------------------------|----------------------------|--------------|
| ADMINISTRATION & GUIDANCE | 8,658 | 6,658 | 2,000 |

Proposed Administration & Guidance space exceeds the MSBA Space Summary template. The additional square footage includes:

- seven (7) guidance offices (for a total of 17 offices to serve the students)
- one (1) career counselor's office
- one (1) student support space

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|------------------------------------|------------------------------|----------------------------|--------------|
| CUSTODIAL & MAINTENANCE | 3,800 | 3,050 | 750 |

Proposed Custodial & Maintenance space exceeds the MSBA Space Summary template. The additional square footage includes:

- additional storage (for Senior Safari, Town voting equipment, etc.)

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|----------------------------|------------------------------|----------------------------|--------------|
| OTHER - Andover TV | 2,970 | 0 | 2,970 |

Proposed Other space is intended for programs outside of the MSBA Space Summary template. The additional square footage includes space for Andover TV.

Draft program - Proposed vs. MSBA Net SF

The Auditorium and Field House serve both educational and community needs.

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|-----------------------------------|---|--------------------|--|
| Collins Center - Auditorium/Drama | Add/Reno - 23,570 New - 28,950 New w/Aud - 20,000 | 10,400 | Add/Reno - 13,170 New - 18,550 New w/Aud - 9,600 |

Whether at a renovated Collins Center or in a new auditorium, the proposed Auditorium/Drama space exceeds the MSBA Space Summary template. The additional square footage includes:

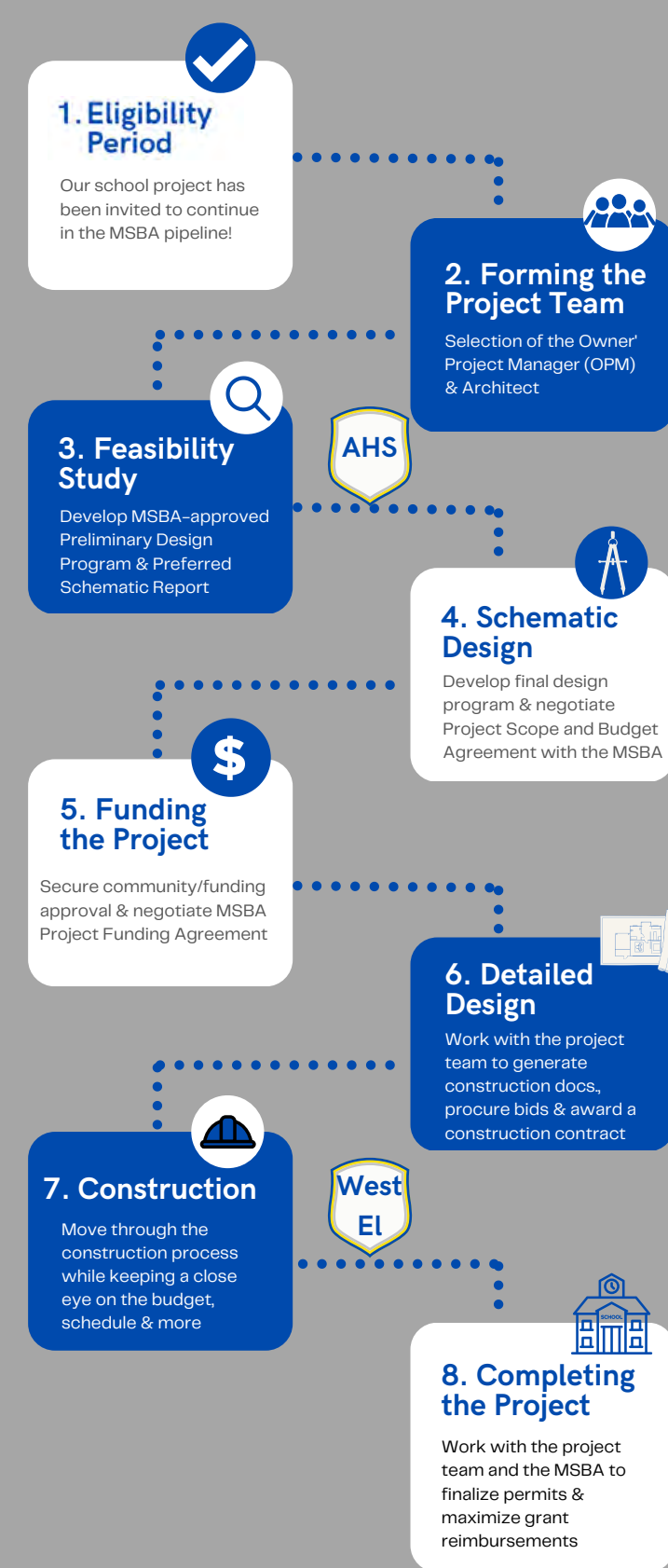
- larger auditorium (either as exists or for 1,000 seats, MSBA guideline is for 750 seats)
- larger stage (either as exists or as required for current programming)
- additional cast dressing rooms and green rooms (as required for current programming)
- scene shop (either as exists or as required for current programming)
- Director's Office
- Ticket Office

| ANDOVER HIGH SCHOOL | Proposed 4.1.2023 | MSBA Guidelines | Delta |
|---------------------|---|--------------------|---|
| Field House | Add/Reno - 28,300 New - 32,300 New w/Aud - 32,300 | 0 | Add/Reno - 28,300 New - 32,300 New w/Aud - 32,300 |

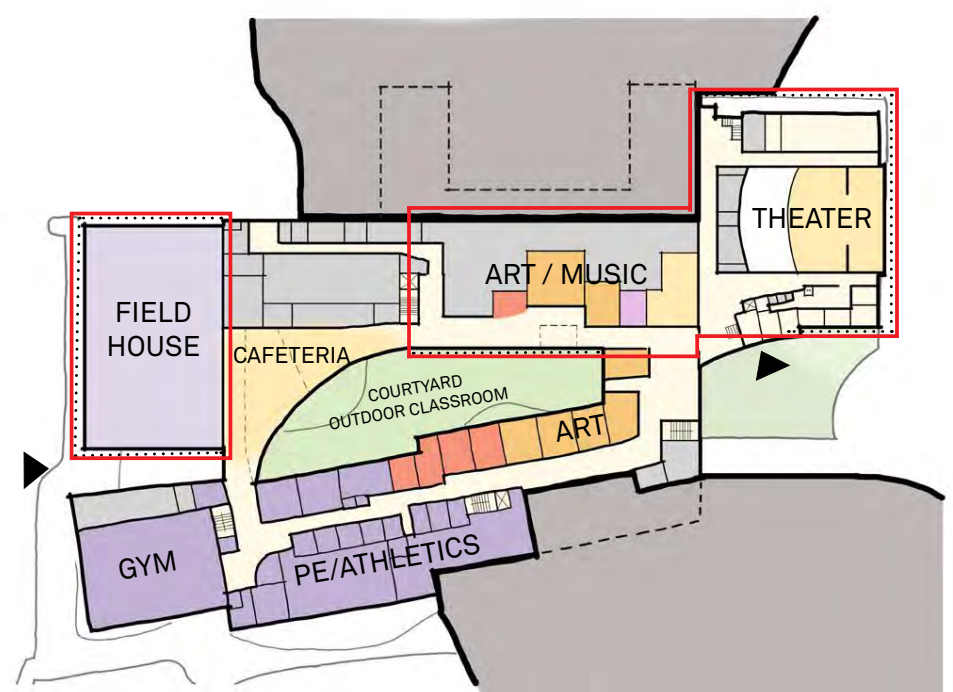
The existing Field House and proposed additions are entirely outside of the MSBA Space Summary template. The MSBA does not include space for field houses.

Following MSBA process

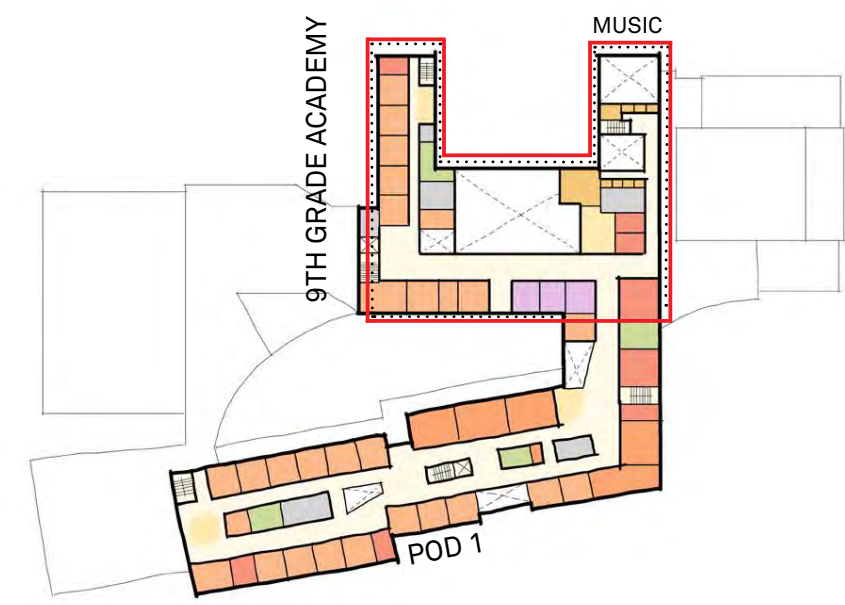
- **Module 1: Eligibility Period - February - September 2022**
 - Form Andover High School Building Committee
 - Demographic Studies & Design Enrollment
- **Module 2 – Forming the Project Team - September - October 2022**
 - HMFH Architects re-selected as Project Designer
 - PMA Consultants selected as Owners Project Manager
- **Module 3 – Feasibility Study Begins - October 2022 - April 2023**
 - Educational Visioning & Programming with faculty, students, Town Departments, stakeholders, community, etc.
 - Community Outreach (forums, tours, Town events, presentations, board meetings etc.)
 - 11 site approaches defined and presented to AHS Building Committee
 - 3 site approaches selected for continued exploration
 - Community tours of existing AHS, AHS Building Committee tours of Arlington High School and Danvers High School
 - Project update/presentation to Select Board
 - 2 site approaches selected for further exploration and pricing
 - Courtyard (Addition/Renovation)
 - Campus 2 & Campus 2 w/ New Theater (New Building)
 - Project update/presentation to Select Board
 - Project update/presentation to School Committee & School Committee vote to approve Educational Plan
 - Cost information presented to AHS Building Committee
 - AHS Building Committee votes to recommend preferred building option
 - School Committee and Select Board vote to approve building option
- **Module 4 – Schematic Design Begins - May 2023**



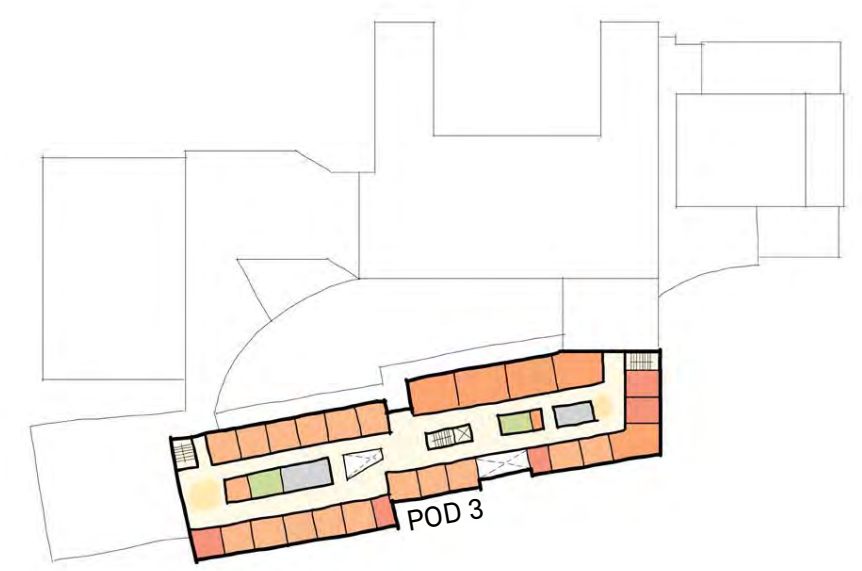
Add/reno - Courtyard - Floor plans



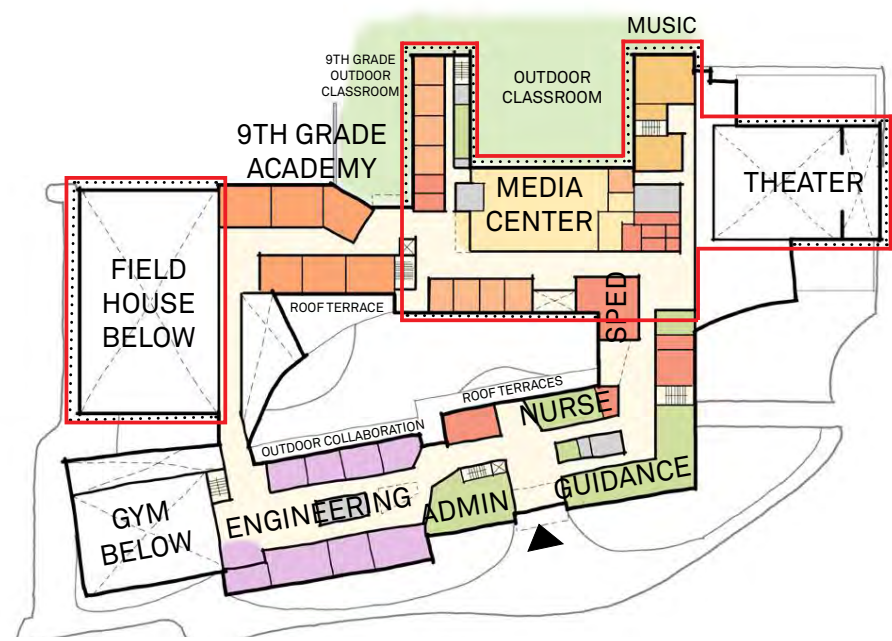
GROUND FLOOR



SECOND FLOOR



FOURTH FLOOR



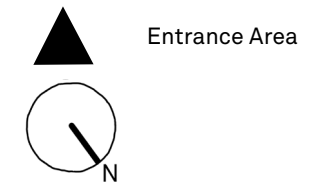
FIRST FLOOR



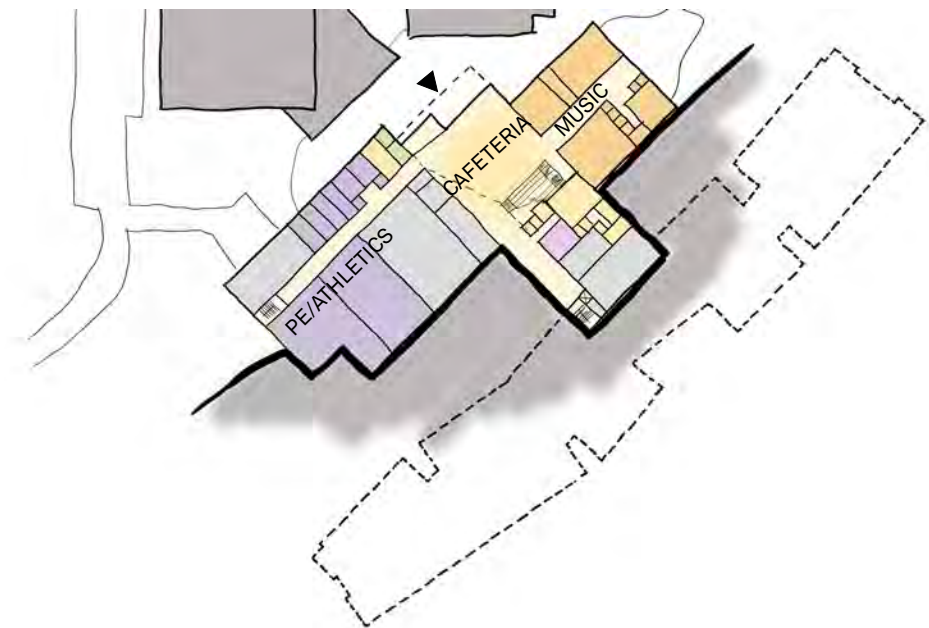
THIRD FLOOR

Color Key:

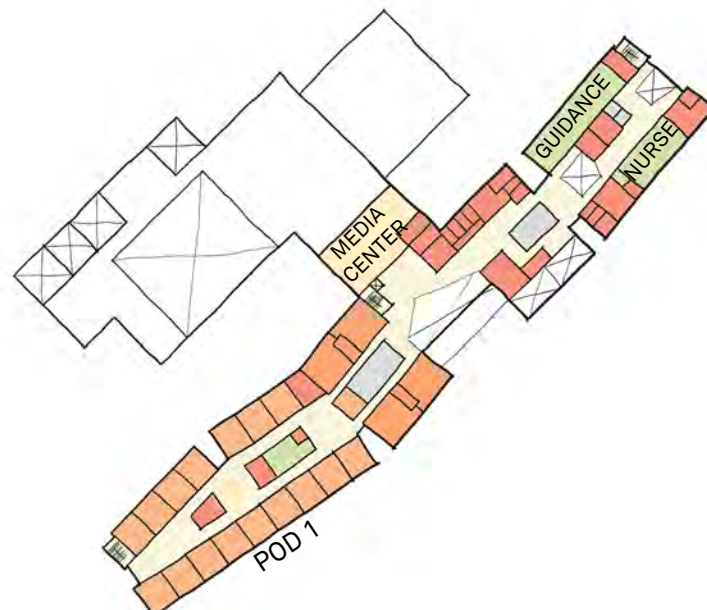
| | |
|-------------------|--------------------|
| Athletics | Vocations |
| Academics | Support Spaces |
| Arts | Renovated Facade |
| Administration | Renovation Scope |
| Public Spaces | Ground Below Grade |
| Special Education | |



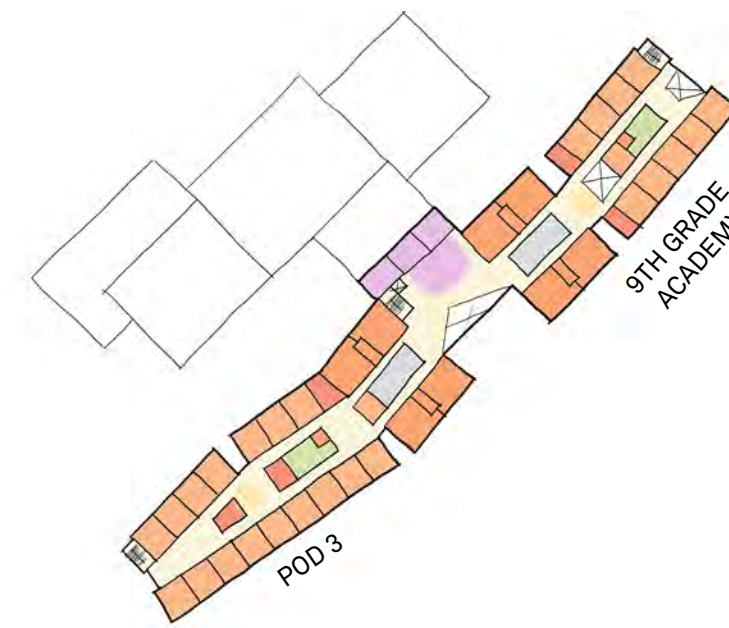
New-Campus 2 - Floor plans



GROUND FLOOR



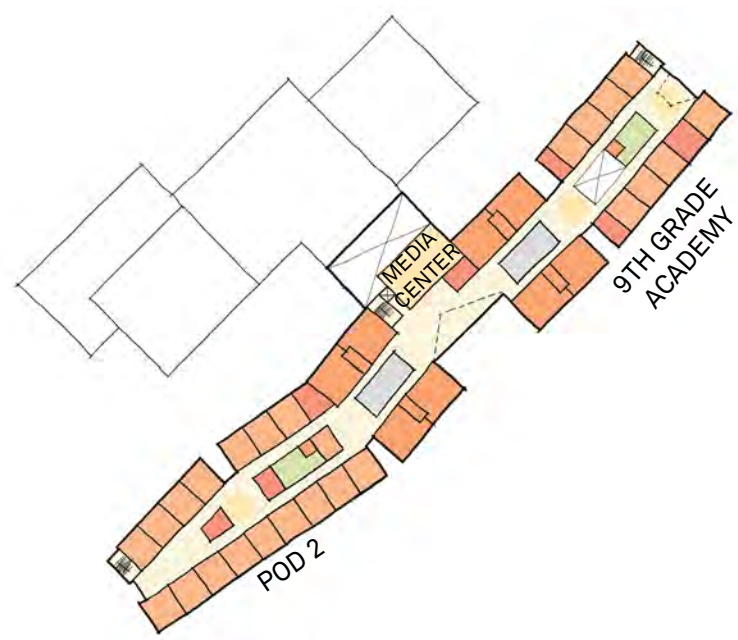
SECOND FLOOR



FOURTH FLOOR



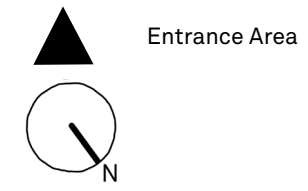
FIRST FLOOR



THIRD FLOOR

Color Key:

- Athletics
- Academics
- Arts
- Administration
- Public Spaces
- Special Education
- Vocations
- Support Spaces
- Renovated Facade
- Renovation Scope
- Ground Below Grade



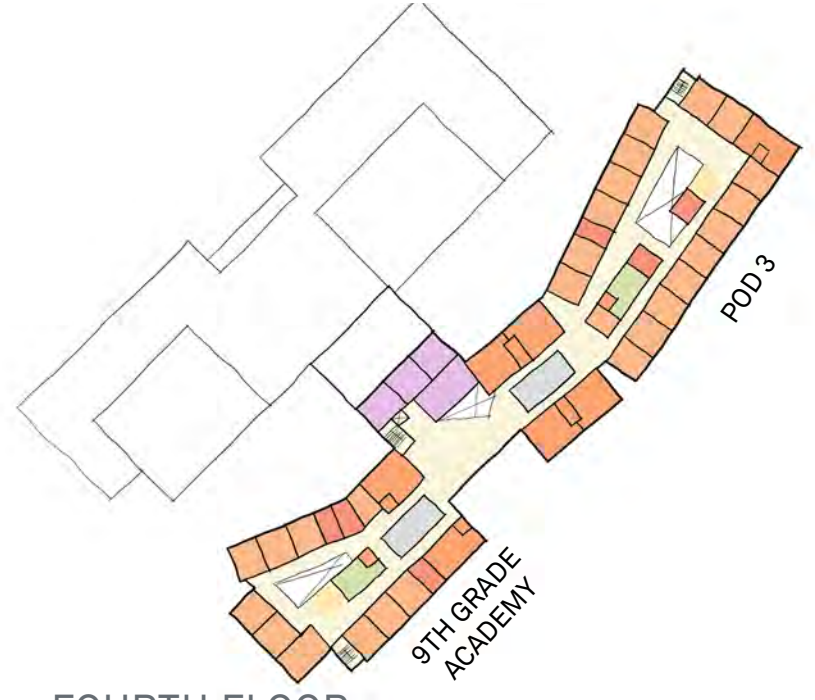
New-Campus 2 + theater - Floor plans



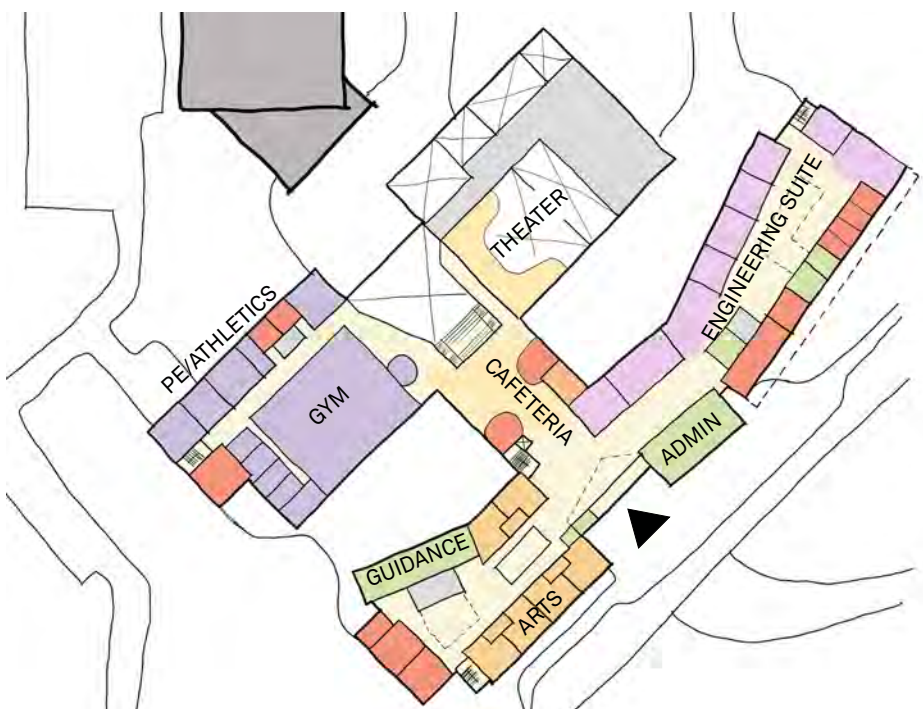
GROUND FLOOR



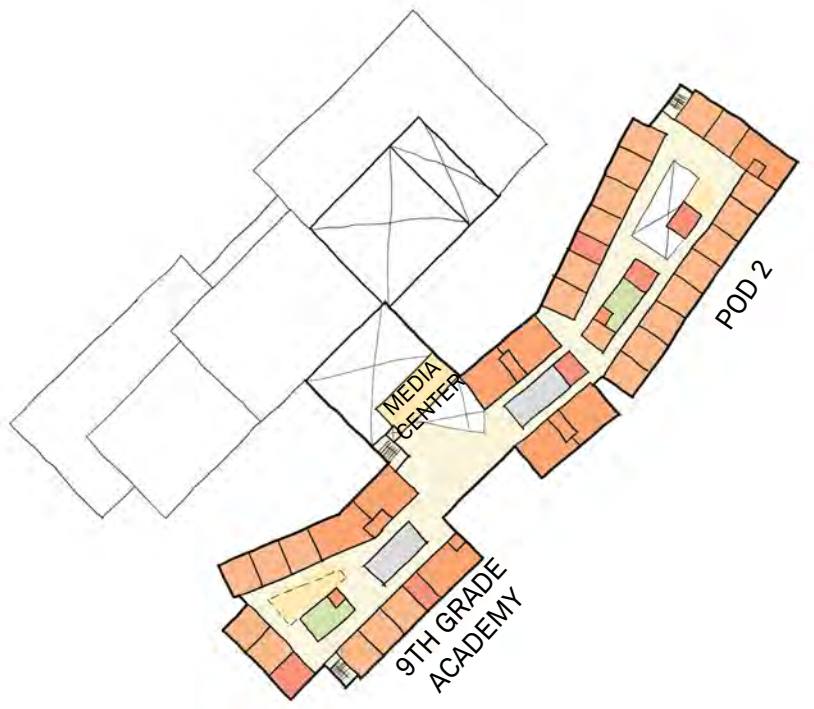
SECOND FLOOR



FOURTH FLOOR



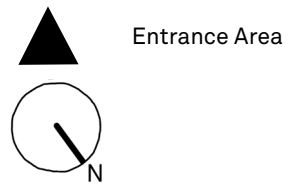
FIRST FLOOR



THIRD FLOOR

Color Key:

- Athletics
- Academics
- Arts
- Administration
- Vocations
- Support Spaces
- Renovated Facade
- Renovation Scope
- Ground Below Grade



Potential adds

| | Add/Reno Courtyard | | New- Campus 2 | | New Campus 2 w/ Aud |
|--|---|--|---------------------|--|---------------------|
| Sustainability Features: | | | | | |
| Add on-site photovoltaic | | | | | |
| On the ground | \$12,217,000 | | \$12,465,000 | | \$9,755,000 |
| Power production: | 1.8 megawatts | | 2.0 megawatts | | 1.6 megawatts |
| On the roof | \$8,691,000 | | \$6,592,000 | | \$7,491,000 |
| Power production: | 2.0 megawatts | | 1.6 megawatts | | 1.9 megawatts |
| Upgrade mechanical plant | | | | | |
| Air source heat pump | \$20,990,000 | | \$18,368,000 | | \$17,341,000 |
| OR | Note: Selecting air source heat pump will increase utility incentives by \$480,000, and will reduce operating costs by about \$45,000 - \$50,000 annually. | | | | |
| Geothermal ground source | \$48,243,000 | | \$43,281,000 | | \$41,832,000 |
| | Note: Selecting geothermal will increase utility incentives by \$5,160,000, and will reduce operating costs by about \$230,000 - \$250,000 annually. | | | | |
| Provide heavy timber structure | \$5,891,000 | | \$7,092,000 | | \$7,556,000 |
| floors, beams and roofs at public areas | | | | | |
| Provide sustainable irrigation | | | | | |
| Provide rainwater harvesting system | \$1,321,000 | | \$1,207,000 | | \$1,187,000 |
| OR | | | | | |
| Provide groundwater wells | \$346,000 | | \$316,000 | | \$311,000 |
| Provide porous pavement @ parking | | | | | |
| w/ Parking Garage | \$1,960,000 | | \$2,635,000 | | \$2,487,000 |
| OR | | | | | |
| w/ all Surface Parking | \$6,918,000 | | \$6,429,000 | | \$6,320,000 |
| Other site and building adds | | | | | |
| Provide new artificial turf field at plateau | \$2,710,000 | | \$2,477,000 | | \$2,435,000 |
| Provide new skate park | \$5,241,000 | | \$4,791,000 | | \$4,710,000 |
| Provide parking garage | \$43,422,000 | | \$42,612,000 | | \$43,060,000 |
| Provide enclosed walkway | \$0 | | \$5,867,000 | | \$2,884,000 |
| Provide sports lighting | \$5,660,000 | | \$5,174,000 | | \$5,086,000 |

Cost comparisons - recent construction

| | Approx. GMP Date | Construction Cost \$ | CONSTRUCTION COST PER SQUARE FOOT | | |
|----------------------|------------------|----------------------|-----------------------------------|--------------------------------|-----------------------------|
| | | | Base Project \$/SF | Max Project w/out garage \$/SF | Max Project w/ garage \$/SF |
| Andover HS Project | | | | | |
| Add/Reno - Courtyard | Dec-25 | \$422,577,145 | \$844 | \$988 | \$1,053 |
| New - Campus | Dec-25 | \$389,101,719 | \$812 | \$966 | \$1,034 |
| New - Campus w/Aud. | Dec-25 | \$372,656,818 | \$810 | \$960 | \$1,032 |

| Projects | GMP/ Bid Date OR Estimated Costs | Costruction \$ | Construction Cost \$/SF | Escalated to Dec-25 \$/SF |
|--------------------------------|----------------------------------|----------------------|-------------------------|---------------------------|
| Bristol Plymouth Regional HS | Aug-23 | \$240,885,538 | \$574 | \$628 |
| Diman Regional HS | Feb-24 | \$244,437,794 | \$619 | \$659 |
| NE Metro VTHS | Dec-23 | \$244,041,092 | \$630 | \$674 |
| Nauset Regional HS | Oct-23 | \$256,298,790 | \$627 | \$730 |
| Arlington HS | Dec-20 | \$234,069,813 | \$573 | \$768 |
| Prouty HS | Nov-23 | \$91,367,674 | \$720 | \$770 |
| Watertown HS | Apr-23 | \$144,091,401 | \$720 | \$804 |
| Andover West Elementary | Dec-22 | \$136,158,907 | \$715 | \$815 |
| Wakefield memorial HS | Jun-24 | \$224,237,739 | \$863 | \$902 |
| Waltham HS | Dec-21 | \$298,906,818 | \$721 | \$930 |
| Nashoba Regional HS | Oct-25 | \$183,965,304 | \$912 | \$939 |
| Stoneham HS | Jan-23 | \$176,247,188 | \$868 | \$990 |
| Revere HS | Aug-24 | \$416,993,562 | \$961 | \$1,002 |

The **construction cost per square foot** are based on gross floor area (GFA).

Gross floor area is the total square footage of a building including occupied spaces, corridors, mechanical rooms, toilet rooms, and wall thicknesses.

The construction cost per square foot of each project listed in this chart is escalated from its GMP/bid date to December 2025, the approximate GMP date for an Andover High School project. The estimates use the same rate assumptions for escalation as for the Andover HS cost analysis.

Andover HS : FS Comparative Phasing

DRAFT

Phasing details and durations are approximate, and will be reviewed and refined by the Construction Manager when they are engaged by the town.

Key - Educational Impact:

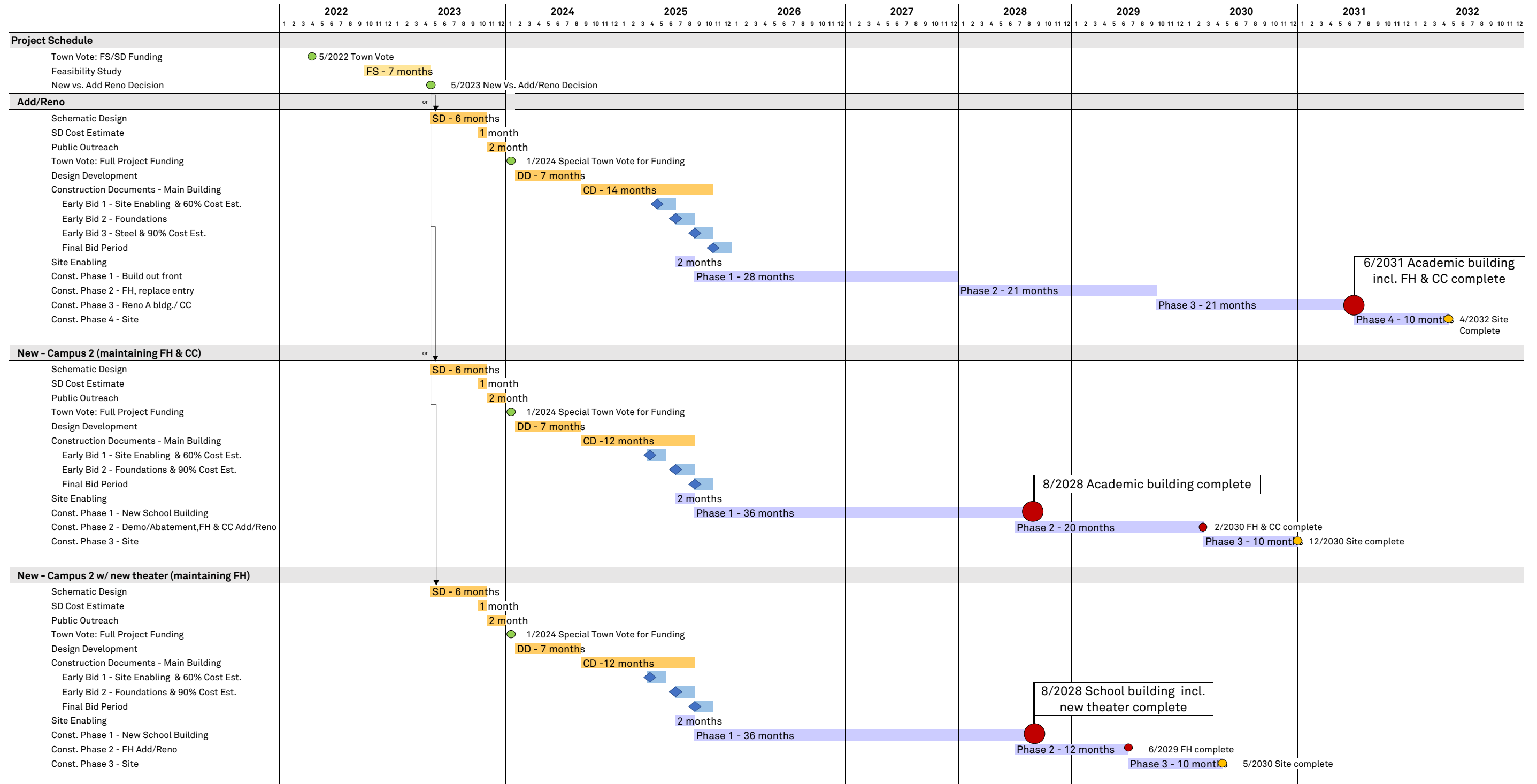
Low impact
 High impact
 Months Academic spaces complete

| Add/Reno: Courtyard | Mo. | Tot. | Educ. Impact |
|---|-----|-----------|--------------|
| Site Enabling | 2 | 2 | Medium |
| Phase 1: Build new in front | 28 | 30 | High |
| Phase 2: Replace Entry Reno FH | 21 | 51 | Very High |
| Phase 3: Reno A building & CC, add to connect | 21 | 72 | Very High |
| Phase 4: Site | 10 | 82 | Medium |

| New: Campus 2 | Mo. | Tot. | Educ. Impact |
|--|-----|-----------|--------------|
| Site Enabling | 2 | 2 | Medium |
| Phase 1: Build new academic building | 36 | 38 | Medium |
| Phase 2: Demo & Abate all, Reno and Add to FH & CC | 20 | 58 | Medium |
| Phase 3: Site | 10 | 68 | Medium |

| New: Campus 2 w/theater | Mo. | Tot. | Educ. Impact |
|---|-----|-----------|--------------|
| Site Enabling | 2 | 2 | Medium |
| Phase 1: Build new academic building | 36 | 38 | Medium |
| Phase 2: Demo & Abate all, Reno and Add to FH | 12 | 50 | Medium |
| Phase 3: Site | 10 | 60 | Medium |

Preliminary comparative schedules



Evaluation criteria

Andover High School Project Goals

- Supports educational program & delivery
- Enhances safety & security
- Eliminates overcrowding
- Accommodates enrollment growth
- Improved physical environment
- Improve site use & campus circulation

Andover High School Project Priorities

ADD/RENO - COURTYARD
w/ surface parking

NEW - CAMPUS 2
w/ Surface Parking

NEW - CAMPUS 2
w/ Surface Parking
& Auditorium

EDUCATION/BUILDING:

| | ADD/RENO - COURTYARD w/ surface parking | NEW - CAMPUS 2 w/ Surface Parking | NEW - CAMPUS 2 w/ Surface Parking & Auditorium |
|--|--|--------------------------------------|--|
| meets educational program requirements | 1 | 1 | 1 |
| efficient layout | 0 | 1 | 2 |
| provides needed program adjacencies | 1 | 1 | 2 |
| provides natural light to all teaching spaces | 1 | 1 | 1 |
| provides access to views | 1 | 1 | 1 |
| provides full access to all academic spaces | 2 | 1 | 2 |
| provides accommodations beyond MAAB/ADA requirements | 2 | 2 | 2 |

BUILDING: construction impacts

| | ADD/RENO - COURTYARD w/ surface parking | NEW - CAMPUS 2 w/ Surface Parking | NEW - CAMPUS 2 w/ Surface Parking & Auditorium |
|--|--|--------------------------------------|--|
| minimizes construction disturbance to HS educational delivery | 0 | 1 | 1 |
| minimizes construction disturbance to MS educational delivery | 1 | 1 | 1 |
| minimizes construction disturbance to neighbors | 1 | 1 | 1 |
| minimize construction disturbance due to duration | 0 | 1 | 1 |
| minimize construction disturbance to parking | 0 | 0 | 0 |
| minimize construction disturbance to athletic fields | 0 | 0 | 0 |

Evaluation criteria - continued

Andover High School Project Priorities

ADD/RENO - COURTYARD
w/ surface parking

NEW - CAMPUS 2
w/ Surface Parking

NEW - CAMPUS 2
w/ Surface Parking
& Auditorium

SITE: circulation

| | ADD/RENO - COURTYARD w/ surface parking | NEW - CAMPUS 2 w/ Surface Parking | NEW - CAMPUS 2 w/ Surface Parking & Auditorium |
|---|--|--------------------------------------|--|
| provides clear pedestrian circulation | 1 | 1 | 2 |
| provides clear circulation/drop off/pick up | 1 | 1 | 2 |
| improves delivery/loading sequence | 1 | 1 | 1 |
| accommodates parking requirements | 1 | 1 | 1 |
| proximity of parking to Collins Center | 0 | 1 | 1 |

SITE: sustainable

| | ADD/RENO - COURTYARD w/ surface parking | NEW - CAMPUS 2 w/ Surface Parking | NEW - CAMPUS 2 w/ Surface Parking & Auditorium |
|--|--|--------------------------------------|--|
| enhances access to views - green space | 1 | 1 | 1 |
| maximizes green space | 1 | 1 | 1 |
| provides ideal solar orientation | 0 | 1 | 1 |

Evaluation criteria - continued

Andover High School Project Priorities

ADD/RENO - COURTYARD
w/ surface parking

NEW - CAMPUS 2
w/ Surface Parking

NEW - CAMPUS 2
w/ Surface Parking
& Auditorium

SITE: amenities

| | ADD/RENO - COURTYARD w/ surface parking | NEW - CAMPUS 2 w/ Surface Parking | NEW - CAMPUS 2 w/ Surface Parking & Auditorium |
|---|--|--------------------------------------|--|
| provides improved sports fields | 1 | 1 | 1 |
| meets site program quantity of sports fields | 1 | 0 | 1 |
| retains or provides tennis courts | 1 | 1 | 1 |
| provides outdoor learning spaces | 1 | 1 | 1 |

SITE: adjacencies

| | ADD/RENO - COURTYARD w/ surface parking | NEW - CAMPUS 2 w/ Surface Parking | NEW - CAMPUS 2 w/ Surface Parking & Auditorium |
|--|--|--------------------------------------|--|
| reuses Field House | 1 | 1 | 1 |
| proximity to Field House | 2 | 1 | 1 |
| reuses Collins Center | 1 | 1 | 1 |
| proximity to Collins Center | 2 | 1 | 1 |
| creates efficient site layout/building adjacencies | 1 | 1 | 2 |
| creates clear community use separation zones | 0 | 1 | 1 |

Evaluation criteria - continued

Andover High School Project Priorities

ADD/RENO - COURTYARD
w/ surface parking

NEW - CAMPUS 2
w/ Surface Parking

NEW - CAMPUS 2
w/ Surface Parking
& Auditorium

SITE: other

creates street/civic presence

1

1

1

ease of future expansion

0

1

1

COST:

0

1

2

\$422,577,145

\$389,101,719

\$372,656,818

TOTAL SCORE

28

32

40

KEY (RANKING/TALLY):

0 = a negative, does not meet program

10

3

2

1 = meets the priority, not better or worse

20

30

24

2 = a plus, a betterment

4

1

8

Options - Courtyard

Add/Reno

Courtyard



Pros:

- Provides full access to all academic spaces
- Provides accommodations beyond MAAB/ADA
- Proximity to Field House
- Proximity to Collins Center

Cons:

- Least efficient layout
- Most construction disruption to HS educational delivery
- Most disruption due to construction duration
- Construction disruption to parking and athletic fields
- Least proximity of parking to Collins Center
- Least ideal solar orientation
- Less clear community use separation
- Most difficult for future expansion
- Most expensive option



Options - Campus 2

New Building

Campus 2



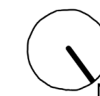
Pros:

Provides accommodations beyond MAAB/ADA

Cons:

Construction disruption to parking and athletic fields

Does not meet the site program # of fields



Options - Campus 2 w/ Auditorium

New Building

Campus 2 w/ Auditorium

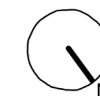


Pros:

- Most efficient layout
- Maximizes desired program adjacencies
- Provides full access to all academic spaces
- Provides accommodations beyond MAAB/ADA
- Provides clearest pedestrian site circulation
- Provides clearest drop off/ pick up circulation
- Creates most efficient site layout/building adjacencies
- Least expensive

Cons:

- Construction disruption to parking and athletic fields



Options

Add/Reno

Courtyard



New Building

Campus 2



Campus 2 w/ Auditorium



Surface parking or parking garage can be considered for any option



How people can get involved

COME TO A COMMITTEE MEETING

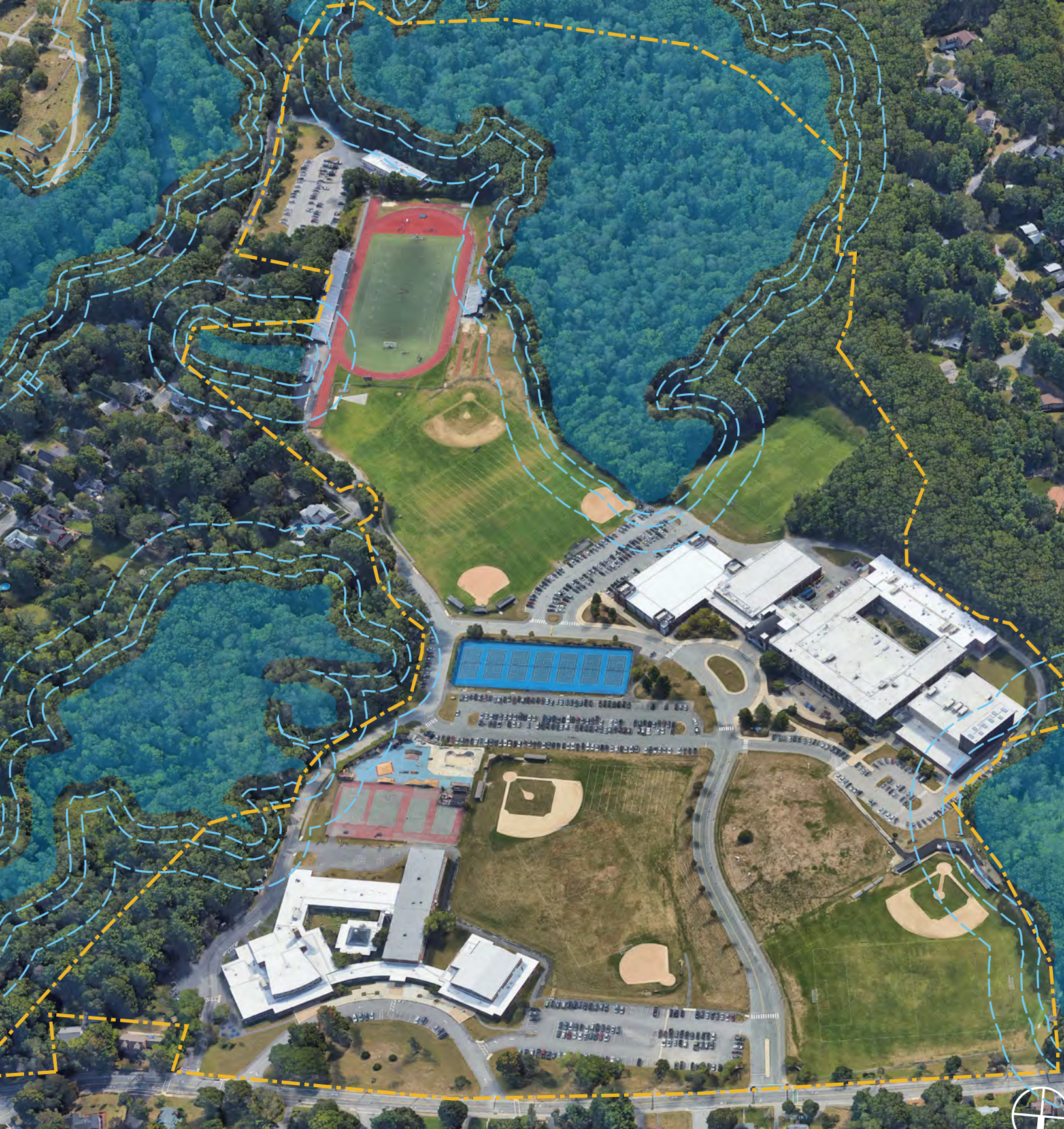
Web site: andoverhighbuildingproject.org

Email: andoverhighbuildingproject@andoverma.us

Facebook: www.facebook.com/AndoverHighBuildingProject

Watch past meetings at:

www.andovertv.org/andover-high-school-building-committee



THANK YOU



HM
FH

HMFH ARCHITECTS