

Build BPS

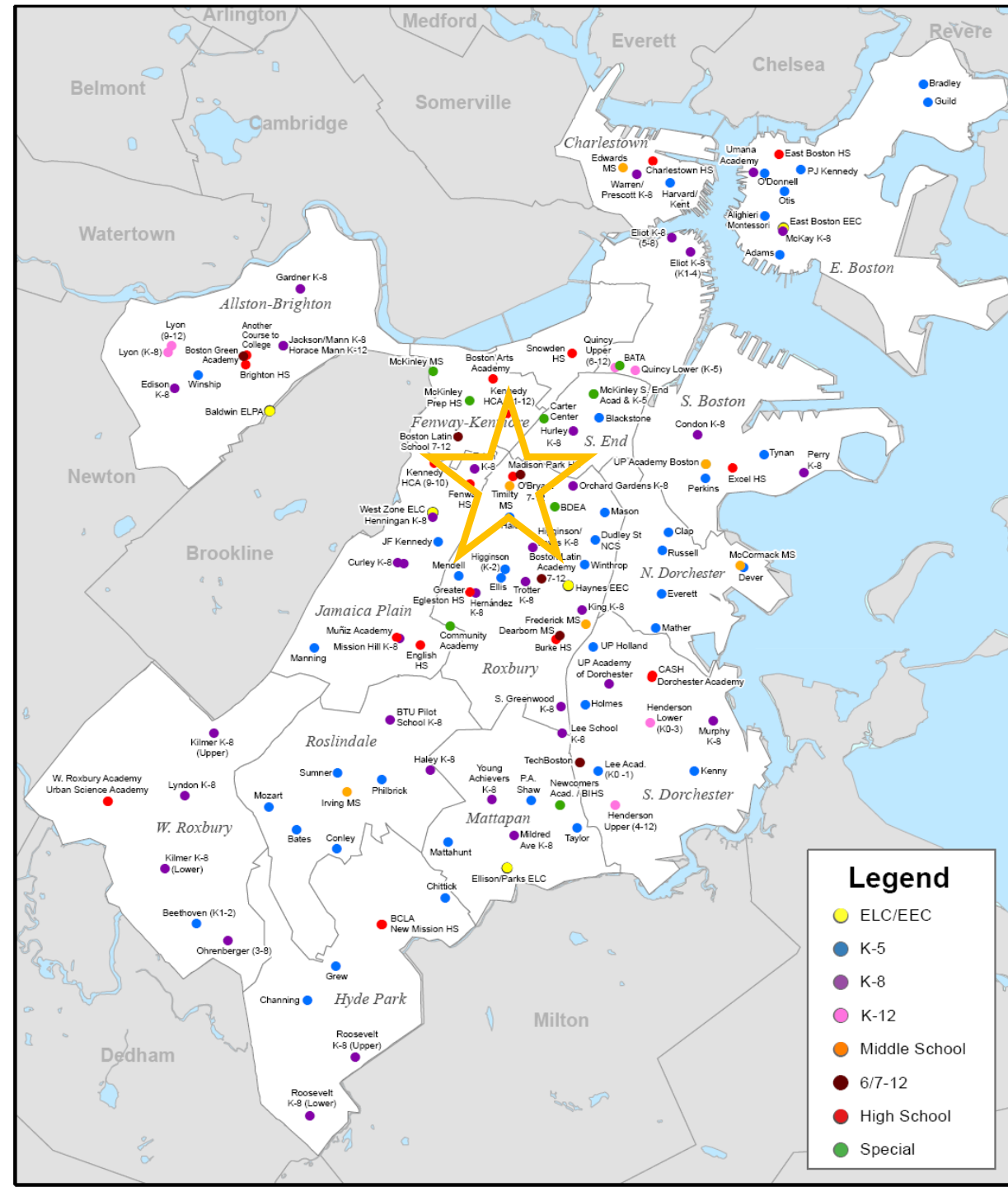
Welcome to the
James P. Timilty
Middle School

March 10, 2016



District Map

BOSTON
PUBLIC
SCHOOLS
SY 2015 - 2016



Agenda



Introductions

10 Year Facility and Educational Masterplan

Phase II Process

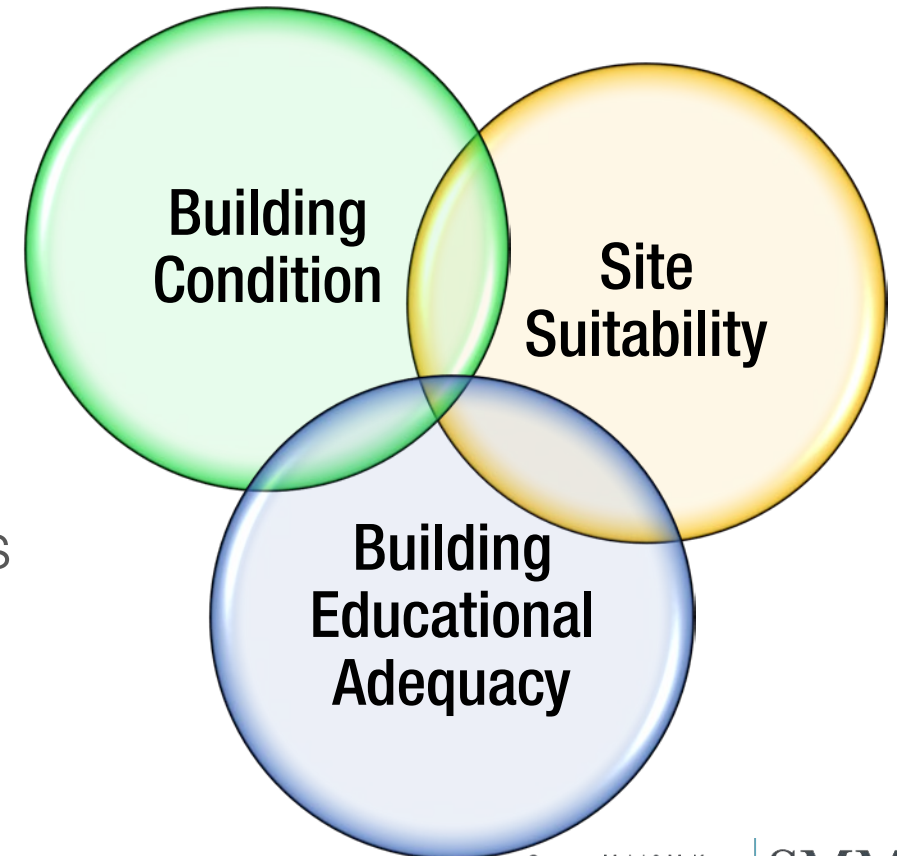
Physical Analysis Report

Educational Program Assessment Report

21st Century Educational Concepts & Spaces

Site and Neighborhood Discussion

Next Steps and Q&A



What's in the study?



- Demographics
- Facility Assessments
- Educational Adequacy Assessments
- Community Engagement
- Financial Planning

Community Outreach



- Survey
 - Parents
 - Teachers
 - Staff
 - Students
- Tool Kit for Each School
- Neighborhood Discussion
- Community wide Engagement (by “Type”)
 - Elementary School
 - Middle School
 - High School
- August: Superintendent’s City Wide Event

What Assessments are ***NOT*** for



NOT rating the educational programs

NOT rating the educational performance of the schools

NOT rating the teachers of the school

NOT a “project” (but we use projects as tools for assessing)

NOT rating the community or neighborhood “*value*”

Facility Physical Assessment



Building and site investigations by professionals:

- Architect (Educational designer)

- Structural Engineer

- MEP Engineer

- Civil Engineer

10 Year Facility and Educational Masterplan

BPS Educational Vision



- Engaged Learning
- Differentiated and Personalized Learning
- Cognitively Demanding Tasks/Programs
- Equitable Access to Rigorous Curriculum
- Vision of 21st Century Digital Learning

Phase II Team Educational Assessment



Philip J. Poinelli, SMMA

Alex C. Pitkin, SMMA











Susan C. Zoller, MGT of America

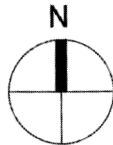
Joe Clark, MGT of America

David Stephen, New Vista Design

Michael van Hamel, SMMA



- | | | | |
|---|--|---|------------------------------------|
|  | ADMINISTRATION / GUIDANCE / STUDENT SERVICES / NURSE |  | CUSTODIAL / MAINTENANCE / STORAGE |
|  | ART & MUSIC |  | KITCHEN / SERVERY |
|  | BUILDING EQUIPMENT |  | PHYSICAL EDUCATION & SPORT SUPPORT |
|  | CAFETERIA & CIRCULATION |  | VERTICAL CIRCULATION |
|  | CLASSROOM & GENERAL EDUCATION SUPPORT |  | VOCATIONS & TECHNOLOGY |

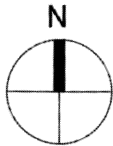


Existing Conditions



PROGRAM PLAN LEGEND

ADMINISTRATION / GUIDANCE / STUDENT SERVICES / NURSE	PHYSICAL EDUCATION & SPORT SUPPORT
AUDITORIUM / PERFORMING ARTS & DRAMA	SCIENCE CLASSROOM & SUPPORT
CAFETERIA & CIRCULATION	SPECIAL EDUCATION
CLASSROOM & GENERAL EDUCATION SUPPORT	TEACHER PLANNING & SUPPORT
CUSTODIAL / MAINTENANCE / STORAGE	VERTICAL CIRCULATION

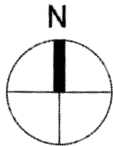


Existing Conditions



PROGRAM PLAN LEGEND

ADMINISTRATION / GUIDANCE / STUDENT SERVICES / NURSE	CUSTODIAL / MAINTENANCE / STORAGE
BUILDING EQUIPMENT	MEDIA CENTER
CAFETERIA & CIRCULATION	SPECIAL EDUCATION
CLASSROOM & GENERAL EDUCATION SUPPORT	VERTICAL CIRCULATION
	VOCATIONS & TECHNOLOGY



3 | Educational Analysis

Building originally designed as ☐ HS ☐ JHS ☐ MS ☐ K-8 ☐ ES ☐ EEC

The grade configuration this school is best suited to:

• Pre-K to 1	<input type="checkbox"/> YES	<input type="checkbox"/> NO	• 7 to 8	<input type="checkbox"/> YES	<input type="checkbox"/> NO
• Pre-K to 3	<input type="checkbox"/> YES	<input type="checkbox"/> NO	• 6 to 12	<input type="checkbox"/> YES	<input type="checkbox"/> NO
• Pre-K to 5	<input type="checkbox"/> YES	<input type="checkbox"/> NO	• 7 to 12	<input type="checkbox"/> YES	<input type="checkbox"/> NO
• Pre-K to 6	<input type="checkbox"/> YES	<input type="checkbox"/> NO	• 9 to 12	<input type="checkbox"/> YES	<input type="checkbox"/> NO
• 4 to 6	<input type="checkbox"/> YES	<input type="checkbox"/> NO	COMMENT: _____		
• 6 to 8	<input type="checkbox"/> YES	<input type="checkbox"/> NO	_____		

Educational Building Analysis:

Ventilation	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Natural Daylighting	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Air Quality	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Acoustical	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Technology:					
• Power	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
• Wireless	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
• Interactive	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Furniture	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Finishes	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Environment (inviting/stimulating/comfortable):	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Adjacencies of Learning Environments:	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Outdoor Classrooms	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing
Overall Building Rating	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Failing

COMMENT: _____

The site includes:

• Play Grounds/Areas	<input type="checkbox"/> YES	<input type="checkbox"/> NO	COMMENT: _____
• Accessible	<input type="checkbox"/> YES	<input type="checkbox"/> NO	COMMENT: _____
• Play Fields	<input type="checkbox"/> YES	<input type="checkbox"/> NO	COMMENT: _____
• Outdoor Classrooms	<input type="checkbox"/> YES	<input type="checkbox"/> NO	COMMENT: _____

Can the building change typology easily? ☐ YES ☐ NO COMMENT: _____

Can the building be transformed educationally to serve 21st C needs? ☐ YES ☐ NO COMMENT: _____

Can the building serve as swing space? ☐ YES ☐ NO COMMENT: _____

Is the building between 85% to 115% utilization rate? ☐ YES ☐ NO COMMENT: _____



Criteria Evaluation Form

SCHOOL NAME: TIMILTY MIDDLE

ID: 00350485

4 | Middle Schools: 6 to 8 or 7 to 8

Room Type:	Quantity	MSBA Area	Actual Area	Adequacy		
Classroom (General Education)	<u>32</u>	950	<u>675</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Science	<u>1</u>	1200	<u>675</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Special Education	<u>3</u>					
• Self Contained	<u>3</u>	950	<u>400</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
• Resource of Small Group		500	<u>0</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Art Classroom	<u>1</u>	1200	<u>925</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Music Classroom		1500	<u>0</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Vocation and Technology	<u>4</u>	varies	<u>1215, 870, 670, 1350</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Gymnasium	<u>1</u>	6000	<u>4301</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Media Center	<u>1</u>	<u>3612</u>	<u>934</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Dining	<u>1</u>	<u>4215</u>	<u>5340</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
• Stage	<u>1</u>	1000	<u>855</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Medical	<u>1</u>	<u>610</u>	<u>300</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Administration & Guidance		<u>3212</u>	<u>4287</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Custodial/Maintenance		<u>2031</u>	<u>178</u>	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
• AC Tech Network Room		200		<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Other						
• Computer Lab		0		<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
• Community Space				<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor

AUDITORIUM 4206

Narrative on:

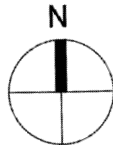
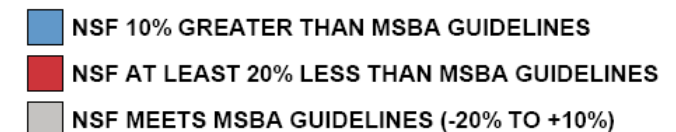
- Engaged Learning
- Differentiated Learning
- Cognitively demanding tasks/programs
- Equitable access to a rigorous curriculum
- Vision of 21st Century digital learning

Comments:

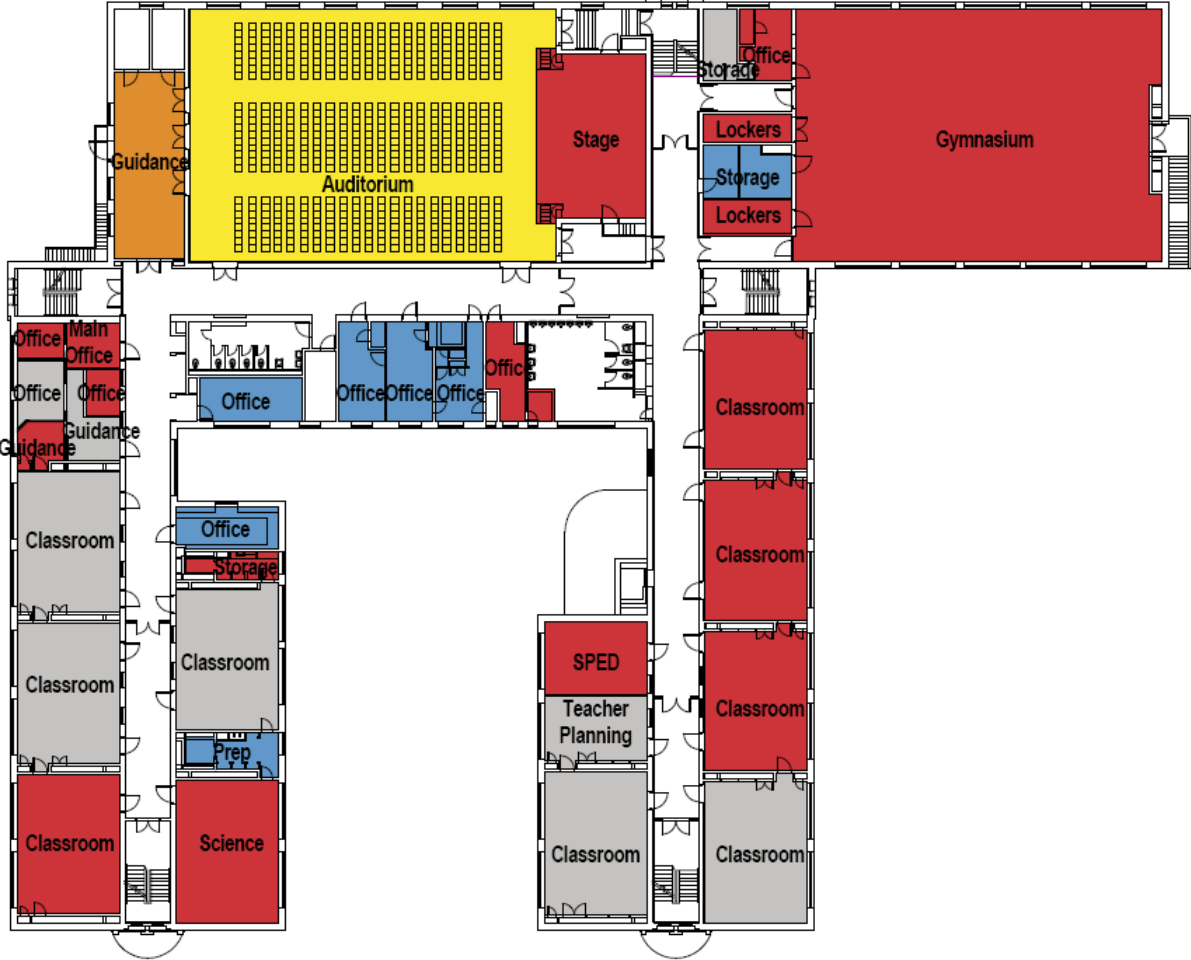


MSBA Space Summary

Timilty Middle	Existing Conditions		MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)	
ROOM TYPE	area totals	% Deficient/ Undersized	area totals	Comments
<u>CORE ACADEMIC SPACES</u>	22,080	-12%	24,950	
<u>SPECIAL EDUCATION</u>	1,446	-76%	6,040	
<u>ART & MUSIC</u>	926	-70%	3,050	
<u>VOCATIONS & TECHNOLOGY</u>	4,098	-36%	6,400	
<u>HEALTH & PHYSICAL EDUCATION</u>	5,195	-38%	8,400	
<u>MEDIA CENTER</u>	934	-74%	3,612	
<u>DINING & FOOD SERVICE</u>	6,530	-21%	8,305	
<u>MEDICAL</u>	300	-51%	610	
<u>ADMINISTRATION & GUIDANCE</u>	4,287	33%	3,212	
<u>CUSTODIAL & MAINTENANCE</u>	178	-91%	2,037	
<u>OTHER</u>	0		0	
Total Building Net Floor Area (NFA)	45,974	-31%	66,615	
Proposed Student Capacity / Enrollment	387	-31%	562	(2015/2016 Enrollment)
Total Building Gross Floor Area (GFA) ²	83,120	-16%	98,976	
Grossing factor (GFA/NFA)	1.81	22%	1.49	

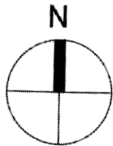


Existing Conditions

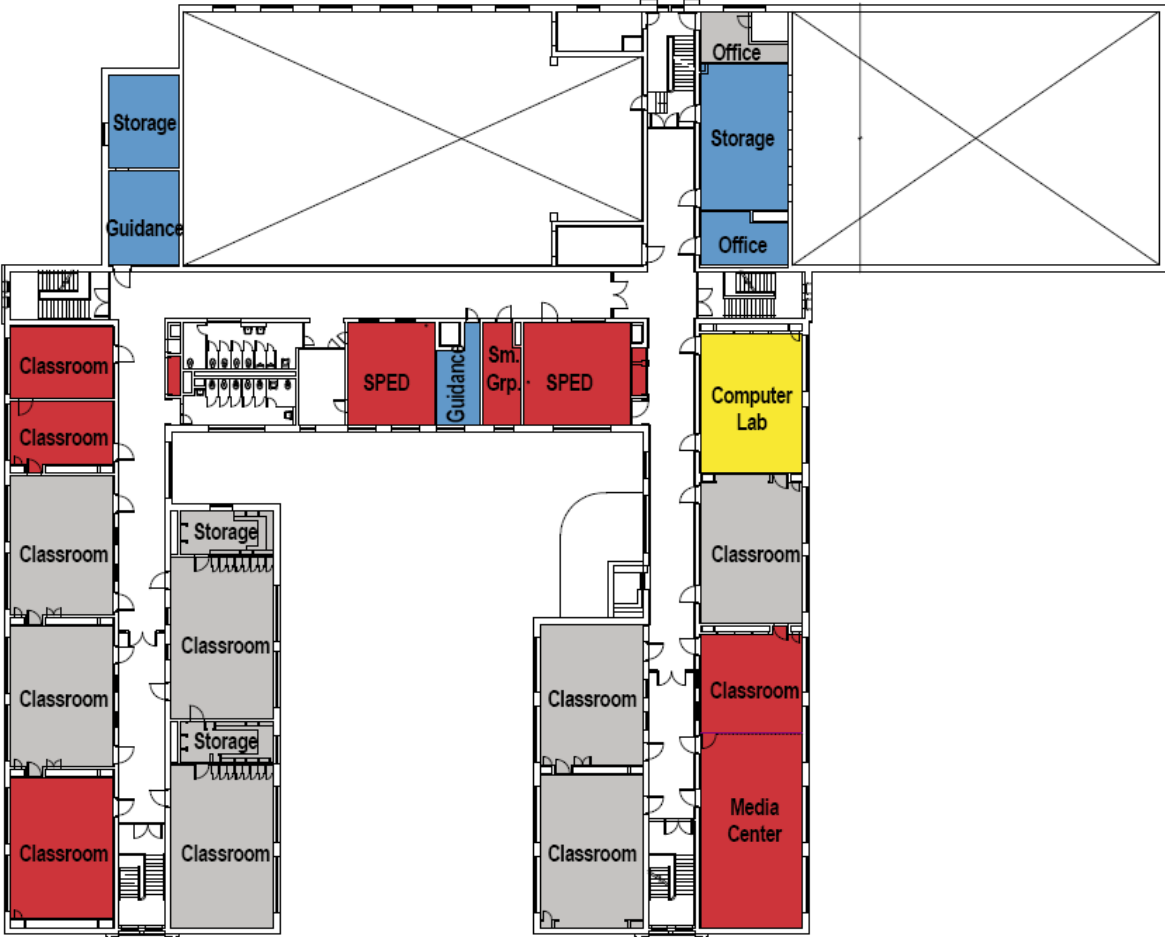


MSBA DEFICIENCY PLAN

- INAPPROPRIATE LOCATION OR ADJACENCY
- NOT INCLUDED IN A TYPICAL MSBA PROJECT
- NSF 10% GREATER THAN MSBA GUIDELINES
- NSF AT LEAST 20% LESS THAN MSBA GUIDELINES
- NSF MEETS MSBA GUIDELINES (-20% TO +10%)

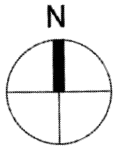


Existing Conditions



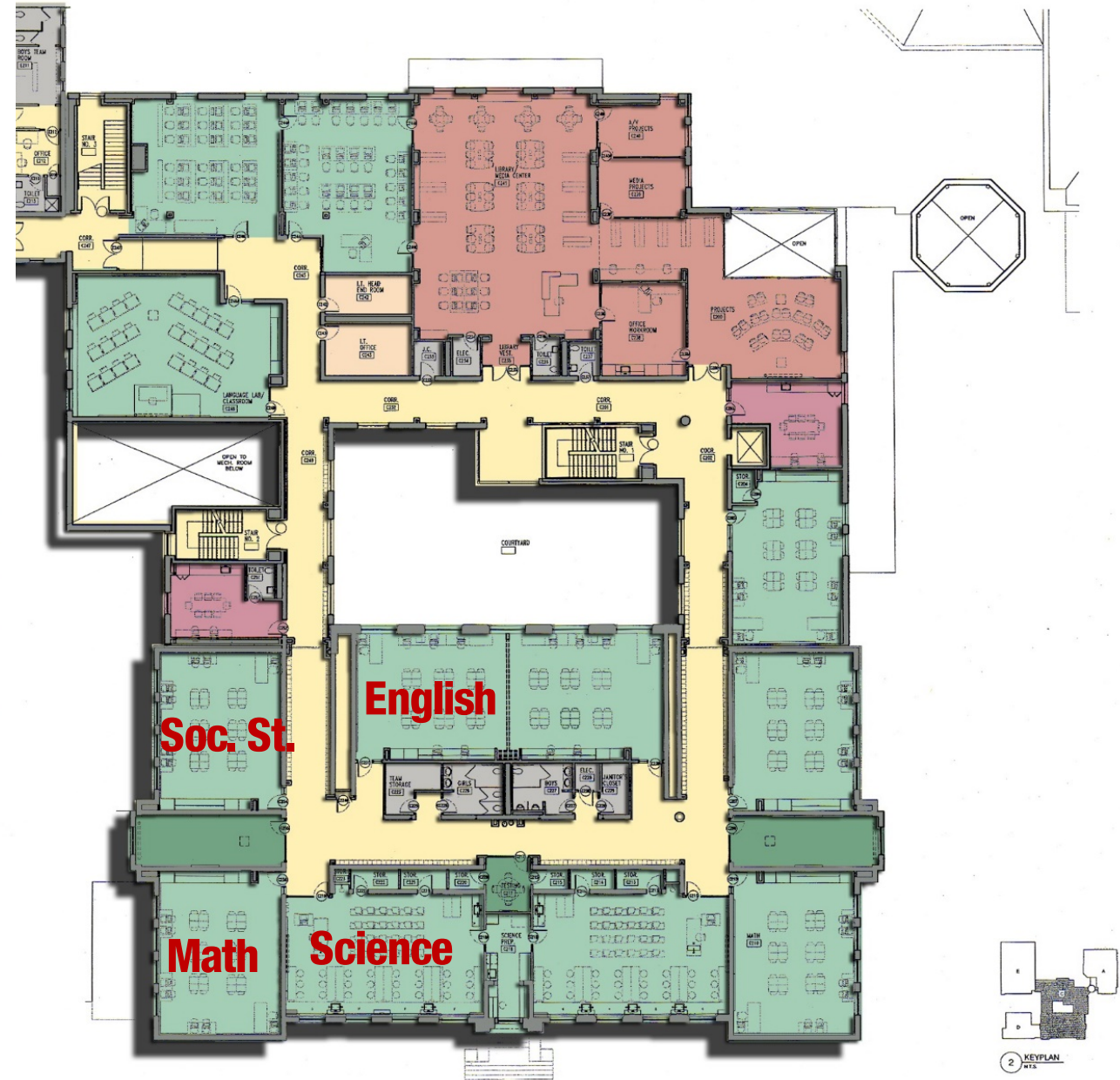
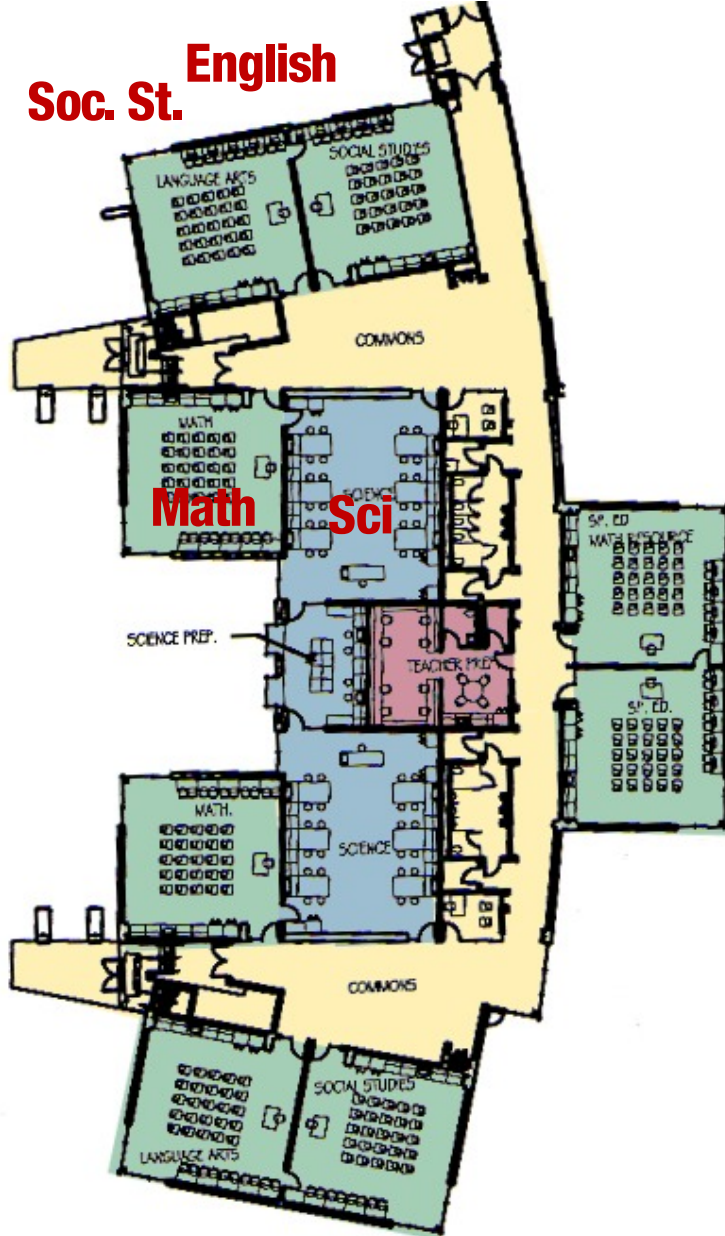
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Team Teaching:

MIDDLE
SCHOOL



MIDDLE SCHOOL

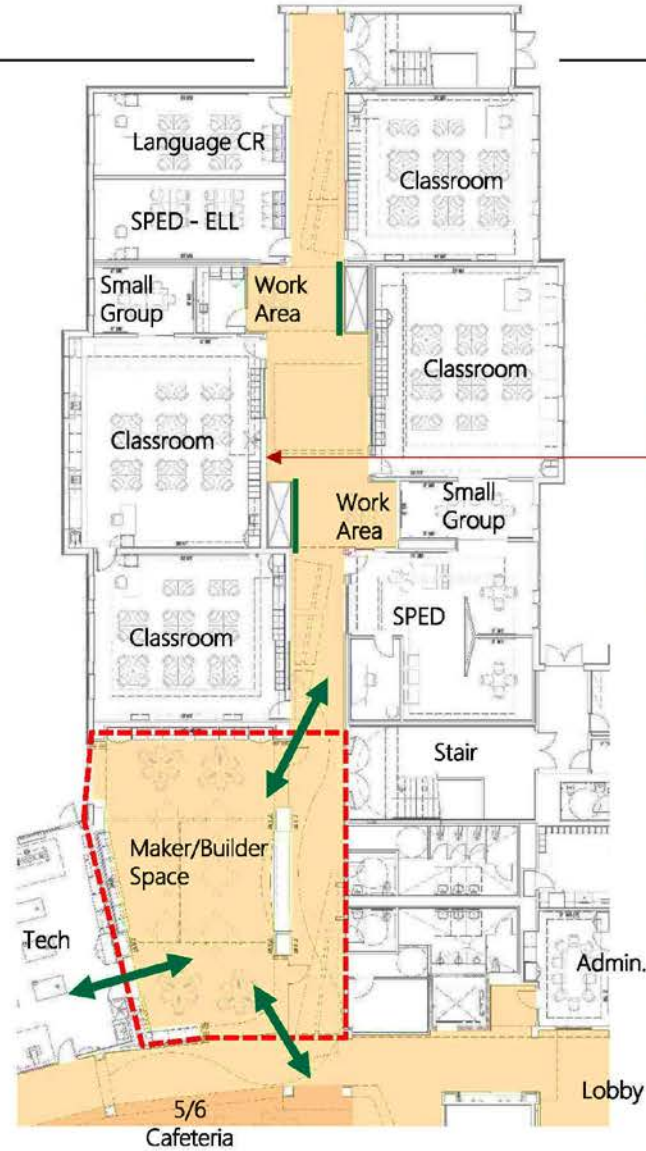


FLOOR 1

Beverly Middle School - Beverly, MA

February 10, 2016

MIDDLE SCHOOL



Academic Neighborhood



PORCELAIN WALL TILE: 4'-6" AFF

- Flexible & Adaptable Spaces (Maker/Builder Space)
- Integration of Arts/Tech (STEAM)
- Branding (Makerspace as gateway to Neighborhood)
- Display space for material/student work
- Transparency (visible connection / inspiration)
- Distributed Leadership
- Differentiated Instruction

Learning Commons

MIDDLE
SCHOOL

FOCUS ON
DISTRICT GOALS

USE POWERFUL
TOOLS

ENGAGE THE
COMMUNITY

21st Century Teaching & Learning



The 6 Rs

Reading Rigor
Writing Relevance
Arithmetic Relationship

The 4 Cs

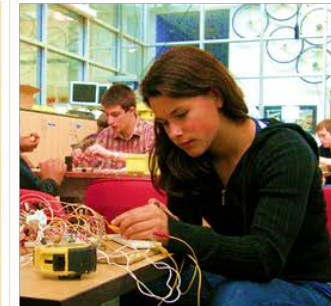
- Critical Thinking
- Communication
- Collaboration
- Creativity

plus Citizenship

Head & Hand

Growth Mindset

- Student-Centered
- Interdisciplinary
- Technology-Infused
- Community Connected
- Problem- and Project-Based
- Process and Product Oriented



21st Century Spaces for Learning



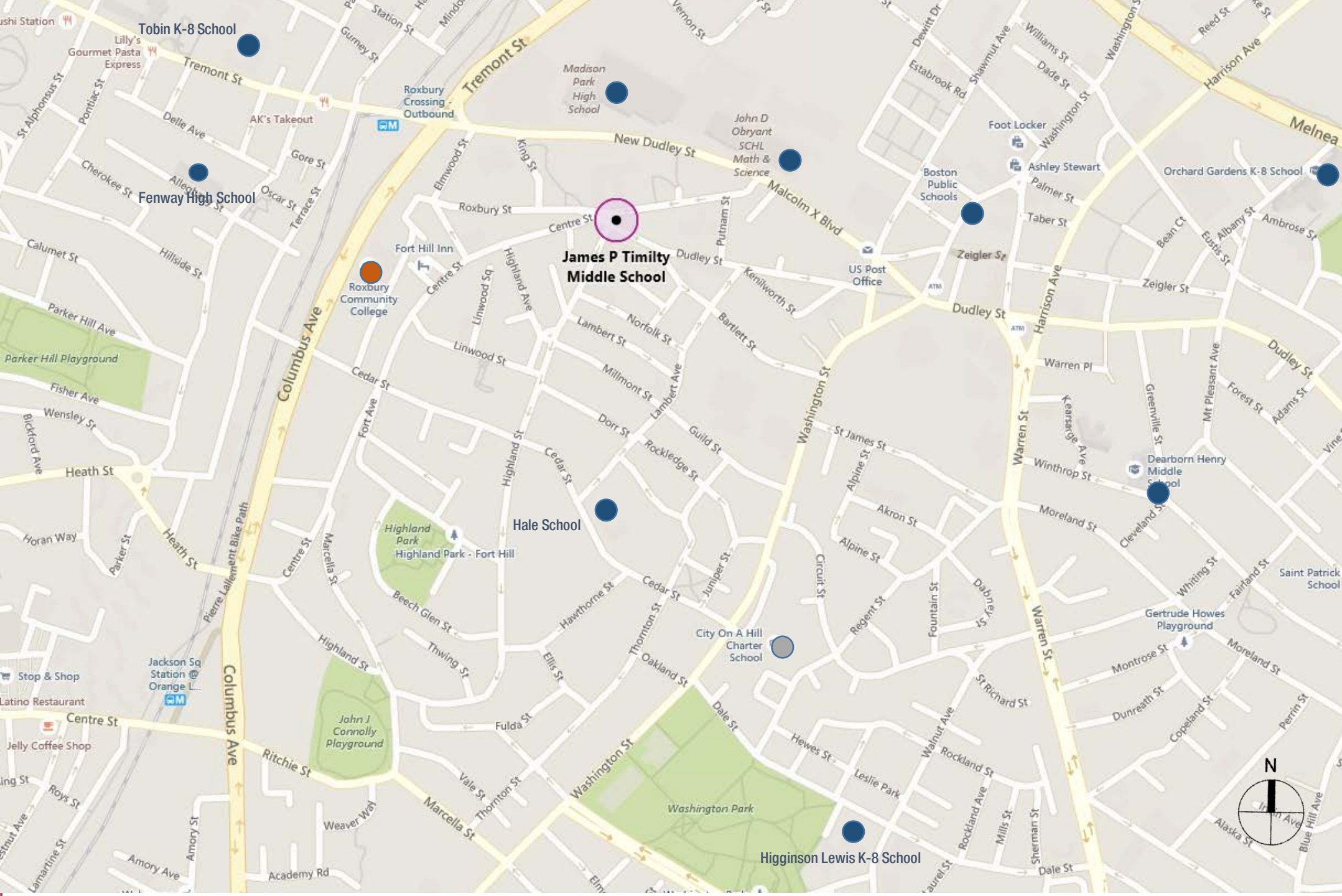
- Changing Demographics
- School Organization
- Improved Science and Technology Spaces
- Incorporate Teacher Collaboration Areas
- 21st Century Teaching and Learning Methodologies
- Differentiated and Personalized Learning

School Environments

- Required
 - Learning Environments types and sized (using MSBA criteria)
 - Enrichment Spaces
 - Support Spaces
- Strongly Recommended
 - Spaces and appointments that support: PBL; Differentiated and Personalized Learning; other delivery models
- Nice to Have
 - Maker Spaces

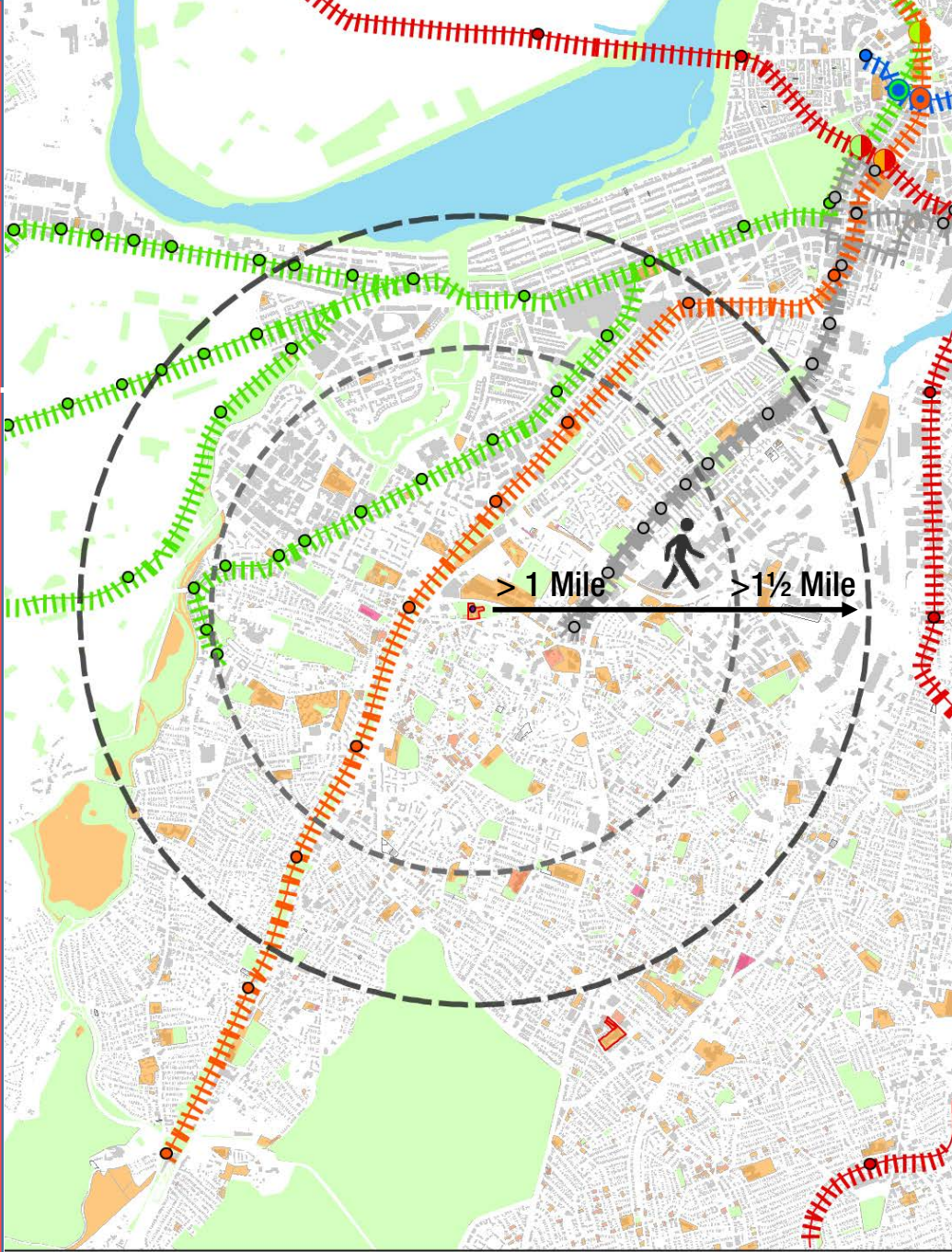
Neighborhood
Roxbury

James P. Timilty
Middle School



Neighborhood
Roxbury

James P. Timilty
Middle School



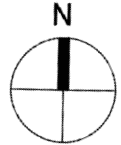
City Owned Parcels

Busing Policy Key

- >2mi High School T-Pass
- >1 1/2 mi 6th Grade & Below
- >K-8 up to 8th Grade
- >1mi Grades K-5

Transportation

- T Stops
- Bike Routes



SITE PLAN

Roxbury

James P. Timilty
Middle School



Small Groups and Discussion



Facility:

What are your impressions of the Building's physical state based on what you heard today?

Community:

How does the Timilty school support its neighborhood?

How does the Timilty support its wider district area?

Educational program “fit”:

Does the Timilty school have the spaces it needs to serve its teachers and students?

What changes would you recommend for the physical building?



Thank You

Middle Schools

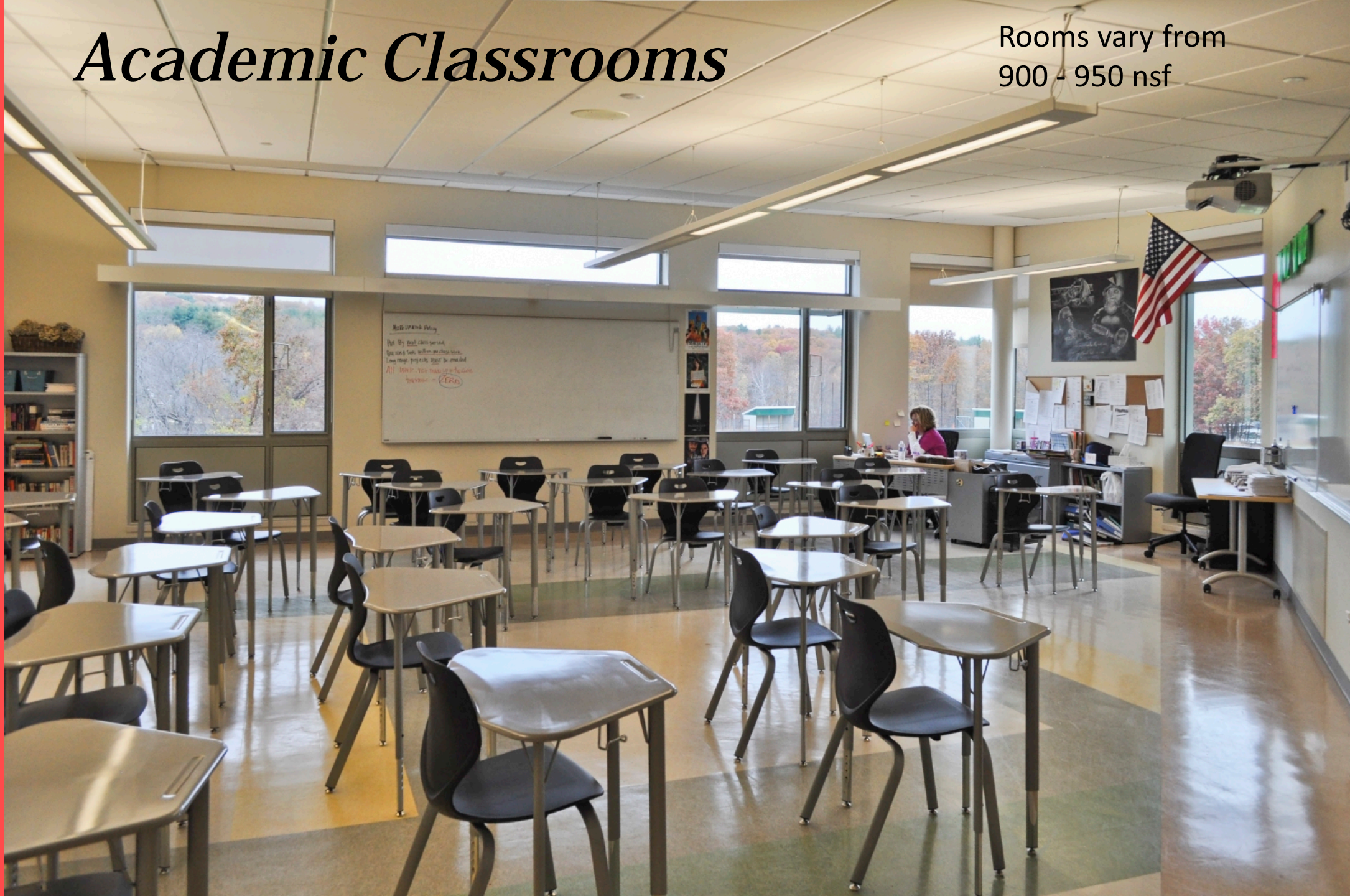
MIDDLE
SCHOOL



Academic Classrooms

Rooms vary from
900 - 950 nsf

MIDDLE
SCHOOL



Academic Classrooms:

ELEMENTARY
MIDDLE
HIGH SCHOOL



MIDDLE
SCHOOL

Anytime/Anywhere Learning

Cafeteria Commons

MIDDLE
SCHOOL



MIDDLE
SCHOOL

Science

1,200 SF

Directly connected through
team to academic programs



MIDDLE
SCHOOL

Enrichment: Technology

1,200 SF

Directly connected to
academic programs



Academic Classrooms:

ELEMENTARY
MIDDLE
HIGH SCHOOL



Enrichment: Maker Space

ELEMENTARY
MIDDLE
HIGH SCHOOL



Gymnasium:

MIDDLE
SCHOOL

6,000 sf
Separate from cafeteria

MIDDLE
SCHOOL

Media Center / Learning Commons



Informal Gathering and teaching spaces

MIDDLE
SCHOOL



MIDDLE
SCHOOL

Transparency – Informal Environments



MIDDLE
SCHOOL

Special Education: OT/PT



MIDDLE
SCHOOL

Teacher Planning / Collaboration

MIDDLE
SCHOOL

Secure Entry / Administration

FOCUS ON
DISTRICT GOALS

USE POWERFUL
TOOLS

ENGAGE THE
COMMUNITY



MIDDLE
SCHOOL

Outdoor Learning Environments:



Questions for the BuildBPS team



Next Steps



5 | Facility Operational Criteria

Provided by BPS (Fiscal Year)	2011		2012		2013		2014		2015	
Energy Usage										
• Annual Electric Usage	\$	KWH	\$	KWH	\$	KWH	\$	KWH	\$	KWH
• Annual Gas Usage	\$	MBTU	\$	BTU	\$	BTU	\$	BTU	\$	BTU
• Annual Steam Usage	\$	BTU	\$	BTU	\$	BTU	\$	BTU	\$	BTU
• Annual Water Usage	\$	GAL	\$	GAL	\$	GAL	\$	GAL	\$	GAL

Cost/Pupil	\$		\$		\$		\$		\$	
------------	----	--	----	--	----	--	----	--	----	--

Cost Pupil
Count

Staff/Pupil			=		=		=		=	
-------------	--	--	---	--	---	--	---	--	---	--

Staff Pupil
Count Count

Annual Maintenance Cost	\$		\$		\$		\$		\$	
-------------------------	----	--	----	--	----	--	----	--	----	--

Annual Transportation Cost	\$		\$		\$		\$		\$	
----------------------------	----	--	----	--	----	--	----	--	----	--

Co-Generation Facility/Site? ☐ YES ☐ NO COMMENT: _____

Condition: NEEDS ☐ Minor ☐ Moderate ☐ Major ☐ Replace ☐ N/A

Overall Operational Rating ☐ Excellent ☐ Good ☐ Fair ☐ Poor ☐ Failing

Average kBTU/sf of this building: _____

National K-12 Schools:	114 kBTU/sf
Northeast and Mid-Atlantic K-12 Schools:	66 kBTU/sf
Massachusetts Schools:	67 kBTU/sf