

Ipswich Elementary School Building Project

Board of Selectman - April 2016

MSBA Building Process

Steps primarily for:



Summary of School Building Process to Date

2012-2014

Statements of Interest

(SOI) – Document outlining building deficiencies which are inhibiting educational goals.

2012, 2013, 2014

Winthrop SOI submitted to MSBA

2013, 2014

Doyon SOI submitted to MSBA

2014

June 2014

Winthrop SOI accepted to MSBA Core Program – Building Renovation, Addition or Reconstruction

July / Aug 2014

School Building Committee (SBC) formed by BOS

Oct 2014

Town votes to fund \$945,000 Feasibility Study/ Schematic Design Phase

2015

March 2015

MSBA recommends enrollment studies:

K-5 (420 students)

K-2 (355 Students)

K-3 (490 Students)

K-5 (775 Students)

July 2015

Owners Project Manager (OPM) interviews

September 2015

Hire PMA Consultants

November 2015

Architect Request for Services submitted, reviewed

December 2015

MSBA – Designer Selection Panel – Perkins Eastman selected

2016

January 2016

Hired Perkins Eastman – **Feasibility Study Begins**

February - April 2016

Research period:

- Educational Teams
- Community Forums
- Site research
- Existing Conditions both Winthrop and Doyon
- Faculty Meeting

April 2016 –

School Committee Vote Educational Model / Site Selection

June 2016 –

Preferred Design Plan

MSBA Recommended Configuration Options – March 2015

**K-5 School
New K-5 Facility
775 Students + PK**

**K-2/3-5 Schools
Winthrop:
K-2 355 Students + PK
Doyon: 420 Students**

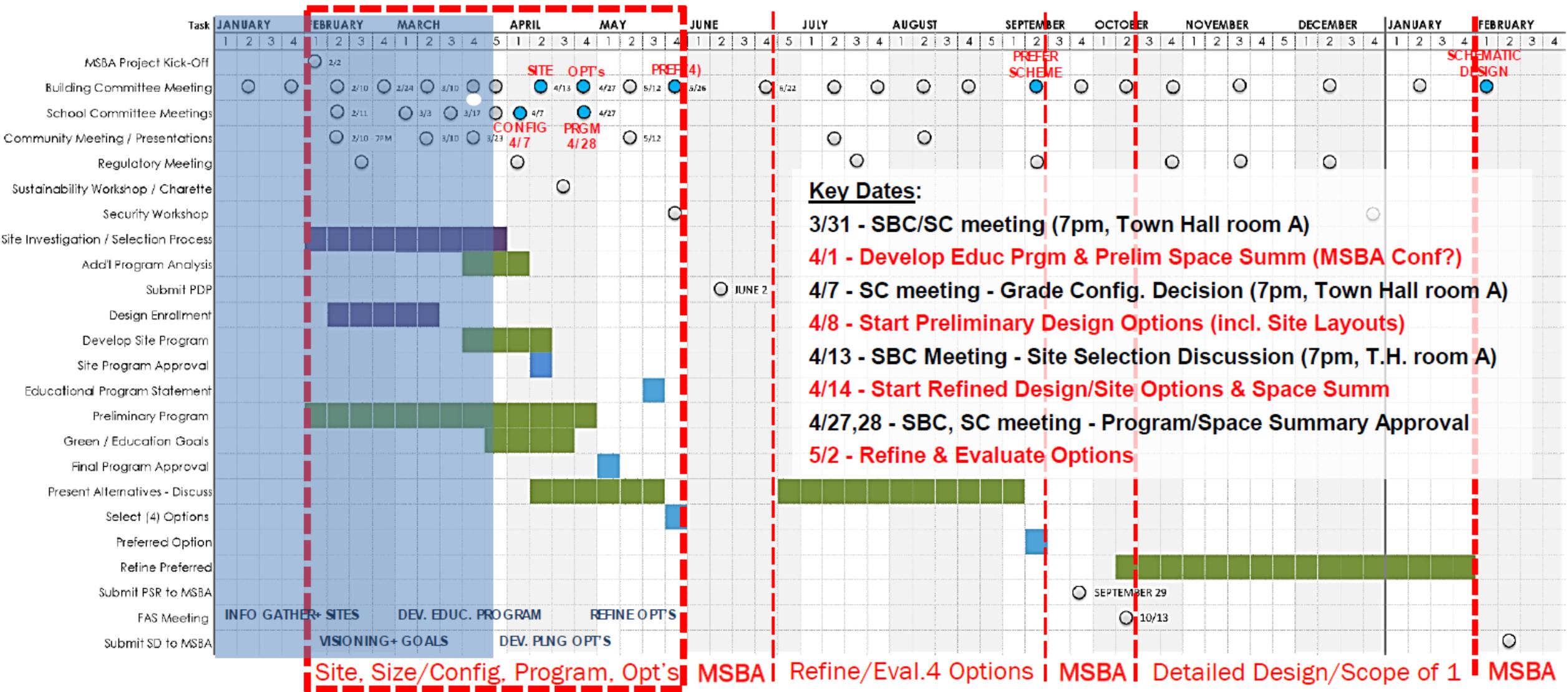
**K-3/4-5 Schools
Winthrop:
K-3 490 Students + PK
Doyon: 285 Students**

**K-5 Schools
Winthrop:
K-5 420 Students + PK
Doyon: K-5 355 Students**

MSBA/IPSWICH PROCESS

FEASIBILITY & SCHEMATIC DESIGN

Many Key Decisions April-May



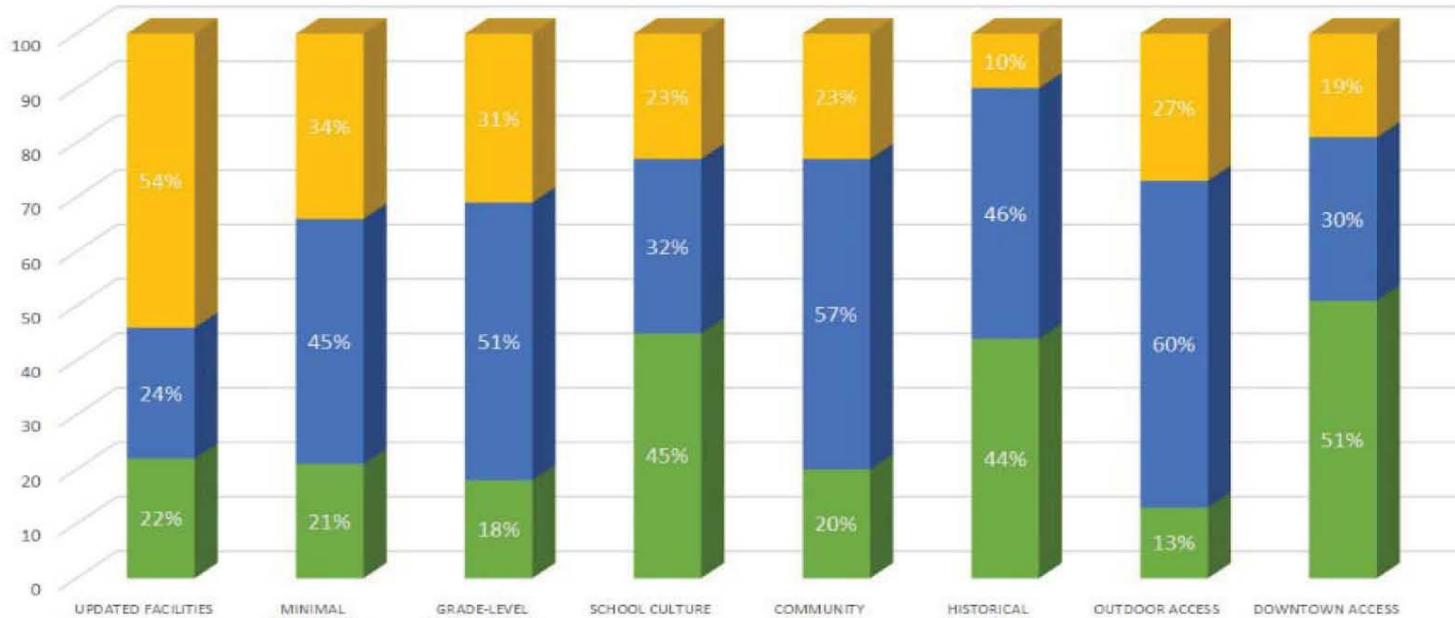
Information Gathering and Analysis – February thru April 2016

2016 FEBRUARY						
SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

2016 MARCH						
SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

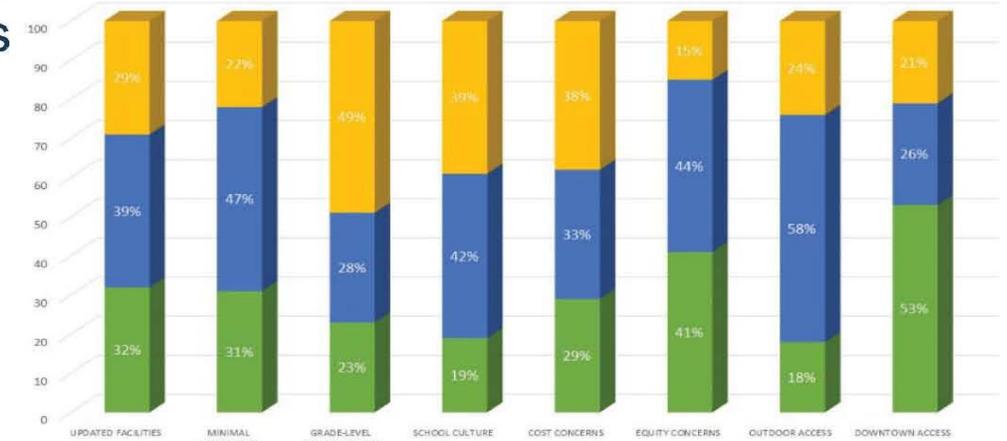
2016 APRIL						
SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- Educational Leadership Team Kick Off 1/19, (2) Meetings January, (2) February, (1) March
- Educational Working Group Working Session February 29th and March 14th
- Faculty Meeting Joint Winthrop / Doyon Faculty Meeting, March 17th
- Community Forum (3) Community Forums - February 10th, March 10th, March 23rd
- School Committee Bi-Weekly Meetings, oint SC/SBC Meeting March 23rd, March 23rd - Vote April 7th
- School Building Committee Bi-Weekly Meetings, Special Joint SC/SBC Meeting March 23rd, March 23rd



SURVEY RESULTS- PARENTS OF STUDENTS IN IPSWICH SCHOOLS

■ LESS IMPORTANT ■ SOMEWHAT IMPORTANT ■ IMPORTANT



SURVEY RESULTS- ELEMENTARY SCHOOL TEACHERS

BAR GRAPHS OF SURVEY RESULTS, IPSWICH, MA

DATE: 03/31/2016

WINTHROP SCHOOL

Perkins Eastman | DPC

Guiding Principles

- **Vibrant and Joyful Learning Community**

- Joy of learning through play
- Comfortable environment
- Emphasis on whole child
- Compassion and empathy
- Self-expression and confidence
- Social decision making
- Habits of mind

- **Outdoor Connections and Stewardship**

- Natural environments
- Sustainability

- **Small Learning Communities**

- Academic neighborhoods
- Small school feel, Large school pride
- Civic engagement and leadership
- Civic responsibility (being proactive)

- **Inquiry-based cooperative learning**

- Student centered
- Relevance and applicability of learning
- Focused and visible learning
- Project-based learning
- Collaboration
- SHOMs

Guiding Principles

- **Flexibility and adaptability**
 - For teaching and learning Today and Tomorrow
 - Flexible learning communities
- **School as community resource**
 - Ability to provide varied community use
 - Whole community collaboration
- **Embodies rich history of Ipswich**
 - A building that is aesthetically appropriate
 - Supportive of town values
 - Town is the foundation
 - Welcoming

Design Patterns

- **Agile & Flexible Space/Classrooms**

- Varied spaces
- Areas of interaction, performance, plays, small and large group work
- Right-sized spaces
- Flexible and ergonomic furniture
- Pull out spaces
- Zoned

- **Clusters of Learning**

- Classroom neighborhoods
- Small school feel
- Learning hubs
- Pods

- **Outdoor Connections**

- Natural light
- Indoor/outdoor connections
- Sustainability
- Bring the outdoors in

- **Common Spaces**

- Community learning spaces
- Gathering spaces
- Media space and library

Design Patterns

- **Visible Learning**
 - Display & Exhibition of student work
 - Giving students independence
 - Storytelling
- **Teacher Teaming**
 - Professional work and collaboration space
 - With distributed resources
- **Distributed Resources**
 - Student and teacher
 - Distributed dining
- **Greeting and Gatekeeping**
- **Distributed resources**
- **Building as teacher**
- **Cafetorium**
- **Full sized gym**
- **Maker spaces**
- **Storage and lockers outside classrooms**
- **Wayfinding and digital bulletin board**
- **Natural light**
- **Noise mitigation**

School Program Considerations		(2) K-5 Schools:	K-2/3-5 Schools:	K-3/4-5 Schools:	(1) K-5 School:	
Consideration	Description	Winthrop K-5 at 420 Students + PreK, Doyon K-5 at 355 Students	Winthrop K-2 at 355 Students + PreK, Doyon 3-5 at 420 students	Winthrop K-3 at 490 Students + PreK, Doyon 4-5 at 285 Students	New K-5 for all 775 Students + PreK	
1	Facilities Equity	High quality classrooms, specialty and support spaces	54% of students benefit from new facility	46% of students benefit from new facility	63% of students benefit from new facility	100% of students benefit from new facility
1b	ADA Compliance and Universal Design	Access and environment that can be used by all students and teachers, to the greatest extent possible.	54% of students benefit from full ADA compliance and universal design focus	46% of students benefit from full ADA compliance and universal design focus	63% of students benefit from full ADA compliance and universal design focus	100% of students benefit from full ADA compliance and universal design focus
2	Program Equity	Equitable access to programs and extracurricular offerings	Equitable at each grade with special consideration given to support equitable Doyon programming	Equitable at each grade	Equitable at each grade	Equitable for all students
3a	Grade Level Program Alignment	Grade level alignment of educational programming	Existing level of alignment maintained. Natural differentiation between schools	Fully aligned	Fully aligned	Fully aligned
3b	K-5 Program Alignment	K-5 alignment of educational programming	Existing level of alignment maintained. Natural differentiation between schools	Potential for full alignment	Potential for full alignment	Fully aligned
4	Continuity of Relationships	The continuity of relationships and familiarity within the pre K-5 educational experience	Existing level of continuity of relationships maintained within small school K-5 experience	Continuity of relationships within separate K-2/3-5 schools. Grade three transition with student cohorts remaining constant	Continuity of relationships within separate K-3/4-5 schools. Grade four transition with student cohorts remaining constant	Continuity of relationships maintained within larger school K-5 experience. Possible academic and physical cohorting to preserve smaller school experience
5	Shared Resources	The ability to easily share and access specialty staff, programs & resources	Existing level of (potentially limited) access to part-time specialists. Grade level resources maintained at present level	Potential limitations in access to part-time specialists. Grade level resources all together	Potential limitations in access to part-time specialists. Grade level resources all together	Increased access to part-time specialists and grade level resources
6a	Grade Level Collaboration	The opportunity for inter-grade partnerships among staff/students	Existing level of collaboration maintained. Limited collaboration between schools	Potential for increased district-wide collaboration	Potential for increased district-wide collaboration	Potential for increased district-wide collaboration
6b	PreK-5 Collaboration	The opportunity for cross-grade partnerships among staff/students	Existing level of collaboration maintained. Limited collaboration between schools	Potential for increased district-wide collaboration	Potential for increased district-wide collaboration	Potential for increased district-wide collaboration
7	Sm School Experience/ Culture & Community	A common sense of both intimate (classroom) and broader (small school) community.	Existing level of small school experience maintained	Larger grade level K-2/3-5 cohorts within small school environment	Larger grade level K-3/4-5 cohorts within small school environment	Larger school K-5 experience with possible academic and physical cohorting of students to create smaller school experience
8	Sibling Experience	Siblings spanning multiple grades in the same building	Existing level of sibling colocation maintained	K-2/3-5 sibling split	K-3/4-5 sibling split	Sibling colocation maintained
9	Population Demographics	Ability to balance the District's diverse student backgrounds and needs	No change in ability to balance students backgrounds and needs within classroom and specialized settings	Improved ability to balance students backgrounds and needs within classroom and specialized settings	Improved ability to balance students backgrounds and needs within classroom and specialized settings	Improved ability to balance students backgrounds and needs within classroom and specialized settings
10	Transitions	Ability to minimize transitions that can negatively impact learning	No transitions in K-5 student/family experience, but 46% new cohort at 6th	One transition in K-5 student/family experience at third grade. Student cohorts remain constant	One transition in K-5 student/family experience at fourth grade. Student cohorts remain constant	No transitions in K-5 student/family experience
11	Technology	The access to reliable technology tools and internet access	54% of students benefit from new technology infrastructure	46% of students benefit from new technology infrastructure	63% of students benefit from new technology infrastructure	100% of students benefit from new technology infrastructure
12	Security	Design/planning for modern day passive and active safety/security	54% of students benefit from modern day passive and active security	46% of students benefit from modern day passive and active security	63% of students benefit from modern day passive and active security	100% of students benefit from modern day passive and active security

13	Alignment to the IPS district education plan	Access to learning environments that promote the teaching and practice of IPS's 21st Century learning expectations (Successful Habits of Mind)	54% of students benefit from access to 21st century learning environments. Equitable at each grade only if funds are expended to support the extensive renovation of the Doyon facility	46% of students benefit from access to 21st century learning environments	63% of students benefit from access to 21st century learning environments	100% of students benefit from access to 21st century learning environments
14	Food Services and Facilities	Facilities and services needed to provide healthy meals	Current facilities maintained at Doyon. 54% of students benefit from new services and enhanced facilities	Current facilities maintained at Doyon. 46% of students benefit from new services and enhanced facilities	Current services maintained at Doyon. 63% of students benefit from new services and enhanced facilities	100% of students benefit from new services and enhanced facilities
15	Compliance (MSBA)	The ability to meet and/or exceed established regulations.	54% of Pre-K/K students in right sized CRs 54% of students would benefit from Art, Music, Gym, Kitchen, Admin & support spaces sized per MSBA standards	100% of Pre-K/K students in right size CRs 54% of students would benefit from Art, Music, Gym, Kitchen, Admin & support spaces sized per MSBA standards	100% of Pre-K/K students in right size CRs 54% of students would benefit from Art, Music, Gym, Kitchen, Admin & support spaces sized per MSBA standards	100% of Pre-K/K students in right size CRs 100% of students would benefit from Art, Music, Gym, Kitchen, Admin & support spaces sized per MSBA standards
16	Special Education	Delivery of Special Education services and programming within a co-teaching model	Resources remain between two schools. 54% of students benefit from spaces purpose-built for co-teaching, varied groupings and differentiated learning	Resources all together for each grade. 46% of students benefit from spaces purpose-built for co-teaching, varied groupings and differentiated learning	Resources all together for each grade. 63% of students benefit from spaces purpose-built for co-teaching, varied groupings and differentiated learning	Resources all together, full elementary. 100% of students benefit from spaces purpose-built for co-teaching, varied groupings and differentiated learning
17	Adjacencies	The ability to create adjacencies that maximize the potential for teacher teaming and differentiated instruction	54% of students benefit from planned ideal adjacencies and connectivity	46% of students benefit from planned ideal adjacencies and connectivity	63% of students benefit from planned ideal adjacencies and connectivity	100% of students benefit from planned ideal adjacencies and connectivity
18	Class Sizes	The ability to balance and maintain equitable average class sizes	Flex-zone allows balanced enrollments between schools, but fluctuations within a grade level may occur school to school	Balanced at each grade	Balanced at each grade	Balanced at each grade

Broader Community/Financial Considerations

Consideration	Description	(2) K-5 Schools:	K-2 / 3-5 Schools:	K-3 / 4-5 Schools:	(1) K-5 School:
19	Perceived Town wide Support of Option	Likelihood of gaining final town approval	Less cost now / more cost later	Added transition and splitting siblings. Equitable educational experience/grade Less cost now / more cost later	Added transition and splitting siblings. Equitable educational experience/grade Less cost now / more cost later
20	Enhancement of town culture	Influence on the future shape and feel of Ipswich	Likely (same as now)	Not as likely	Not as likely
21	Community Resource	The ability to interact, develop and sustain community connections and partnerships through use of the school facilities	Separate schools would offer dispersed spaces for more, smaller functions; Useage may be site dependant	Separate schools would offer smaller dispersed spaces for separate functions; Useage may be site dependant	Separate schools would offer smaller dispersed spaces for separate functions; Useage may be site dependant
22	School Community Learning Spaces	Characteristics of shared spaces such as gymnasium, food service space(s), art room(s), music, maker space(s), etc.	Separate schools would offer dispersed spaces for more, smaller functions; Useage may be site dependant	Separate schools would offer smaller dispersed spaces for separate functions; Useage may be site dependant	Separate schools would offer smaller dispersed spaces for separate functions; Useage may be site dependant
23a	Building Costs	Cost of constructing and outfitting the building	Currently being estimated	Currently being estimated	Currently being estimated
23b	Deferred Project(s)	Cost of completing the elementary schools and/or replicating fields	Currently being estimated	Currently being estimated	Currently being estimated
24	Operational Costs	Costs of maintaining building including utilities, custodial, preventive maintenance, etc.	Currently being estimated	Currently being estimated	Currently being estimated

ELEMENTARY SCHOOL RESEARCH

GRADE CONFIGURATION

RESEARCH ON GRADE CONFIGURATION*

No Definitive Answer on Most Effective Grade Configuration

Each Community Considers Different Factors in the Determination

Most Studies Identify More Significant Factors Being:

- Quality of School, Leadership and Instruction
- Degree of Parent & Community Involvement
- Transitions Can Have An Impact Learning
- Longer Span in One School (helps builds relationships, stronger support)

Advantages of K-2 and 3-5

More Grade Specific Resources
More Classrooms per Grade
Students Feel Safe with Similar Age Groups
More Opportunities Among Grades

Advantages of K-5

More Convenient for Families/Involvement
Builds Familiarity & Communication Spans
Less Transitions Between Schools
More Opportunities Between Grades

*Cache County Utah summary on grade configuration studies

Building Comparisons

MSBA 2008-2014 Elementary Schools					
Core Building Program New Building or Add/Reno					
Town	School	Students	Building Size	Type	Grade
Andover	Bancroft	680	106,904	new	K-5
Brookline	Devotion	1,010	227,087	Add	K-8
Carver	Carver ES	750	112,350	new	K-8
Carlisle	Carlisle	700	140,107	Add	K-8
Georgetown	Penn Brook	770	98,000	new	K-5
Milford	Woodland	985	132,539	new	Gr 3-5
Revere	Hill	700	103,650	New	K-5
Sturbridge	Burgess	860	131,630	Add	K-5
Webster	Park Avenue	720	109,067	new	K-5
Whitman Hanson	Maquan	800	132,841	new	Pk-2
Newburyport	Breshnaham	660	112,517	Add	Pk1-3
Repair Projects					
Town		Students	building size	type	
Marblehead	Village	734	123,000	Repair	Gr 4-6
Needham	Newman	754	119,264	Repair	K-5
Marsfield	Gov Winslow	1,310	208,000	Repair	K-5

Elementary Schools Student sizes 2008-2014				
700 or more students		26.00%		50
500 to 699 students		50.00%		Total ES projects
400 to 499 students		12.77%		
250 to 399 students		14.00%		

Potential Building Sites

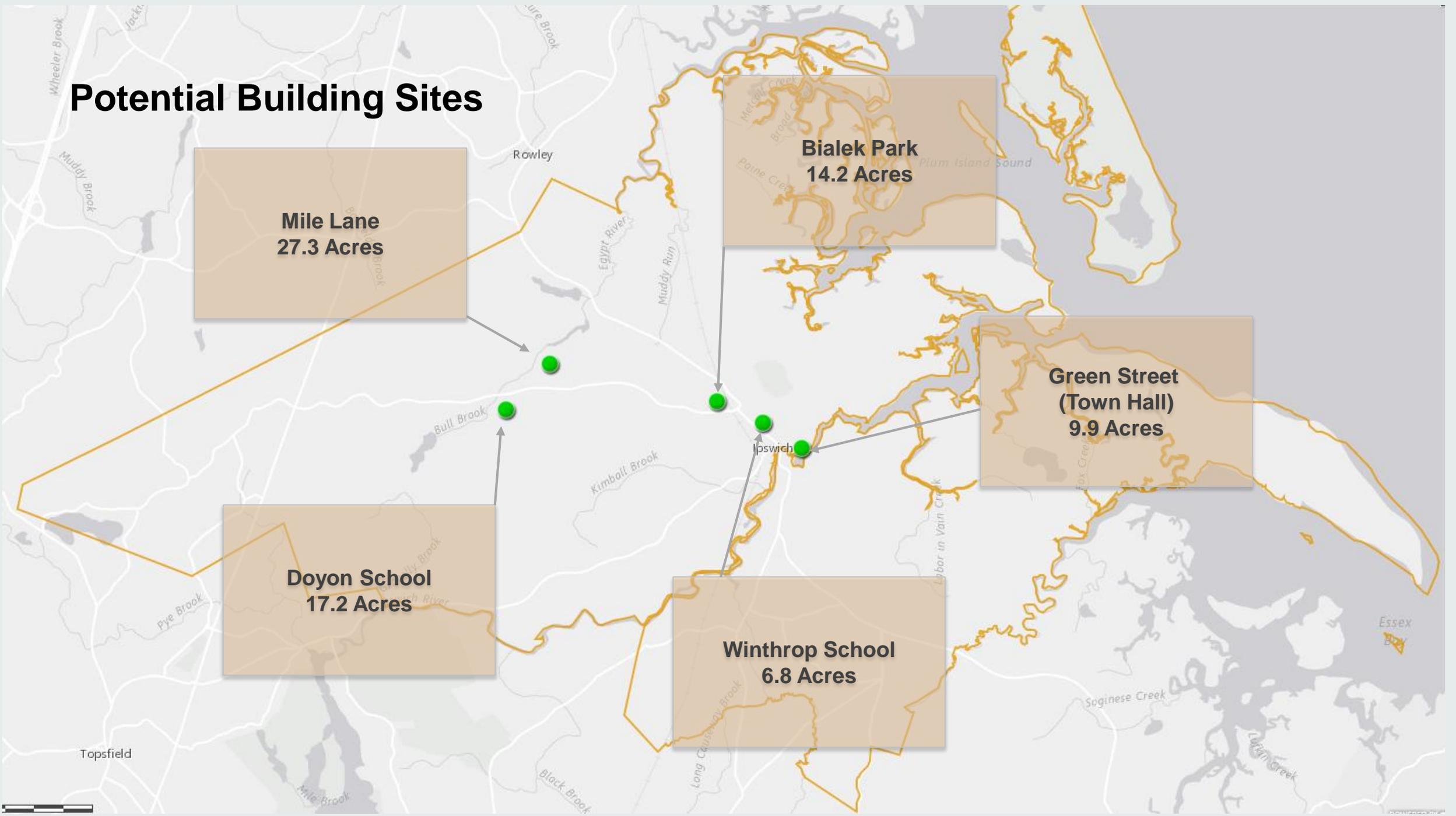
**Mile Lane
27.3 Acres**

**Bialek Park
14.2 Acres**

**Green Street
(Town Hall)
9.9 Acres**

**Doyon School
17.2 Acres**

**Winthrop School
6.8 Acres**



Site Considerations – Winthrop – 6.8 acres

Pros

- **Neighborhood, walkable site**
- **Been a school site for over 100 years**
- **Water, sewer, gas and electric/communication utilities on Central Street**

Cons

- **Some environmental issues – Manning School debris, potential ash burial, asbestos**
- **Small site with fire station located at only site entrance**
- **Construction issues with active school on site.**
- **All options require a three story building along Central Street**
- **Current traffic issue**
- **High ground water**

Site Considerations – Doyon (775 K-5 only) – 17.2 acres

Pros

- **Been a school site for over 50 years**
- **Water, and electric/communication utilities on Linebrook**
- **Large site**

Cons

- **No sewer or gas utilities**
- **Some environmental issues – Septic system, asbestos**
- **Construction issues with active school on site**
- **Loss of athletic fields**
- **Narrow site**

Site Considerations – Bialek Park – 14.2 acres

Pros

- **Neighborhood, walkable site**
- **Water, sewer, gas and electric/communication utilities on Linebrook**
- **Large site**
- **Opens Winthrop site for a future Public Safety Building**

Cons

- **Replace athletic fields**
- **Possible Ch 97 Park compliance**
- **High ground water**

Site Considerations – Mile Lane (775 K-5 only) – 27.3 acres

Pros

- **Water, and electric/communication utilities on Mile Lane**
- **Large site**

Cons

- **No sewer or gas utilities**
- **Loss of the primary athletic fields for school and town use**
- **Wetlands**
- **Building septic system within drinking water conservation area**

- **Same Pros as Doyon but Athletic field loss and proximity Town water source issues**

Site Pros and Considerations – Green Street/Town Hall – 9.9 acres

Pros

- **Neighborhood, walkable site**
- **Been a school site in the past**
- **Water, sewer, gas and electric/communication utilities on Green Street**
- **River front property**

Cons

- **River front property – setbacks greatly reduce buildable site area**
- **Potential site traffic issues with Town Hall and secondary streets**
- **Environmental issues – Buried former town dump, and jail building debris, unknown other buried containments**

Estimated Project Costs

Options	K-3 490 at Winthrop	K-5 420 at Winthrop	K-5 775 at Winthrop	K-3 490 at Bialek	K-5 420 at Bialek	K-5 775 at Bialek
Est. Total Project Costs	\$ 43,687,314	\$ 40,060,855	\$ 61,626,922	\$ 43,512,042	\$ 39,897,857	\$59,711,923
MSBA Grant	\$ 17,030,210	\$ 15,635,707	\$ 24,632,979	\$ 16,750,653	\$ 15,277,001	\$ 24,962,816
Town Share	\$ 26,657,104	\$ 24,425,148	\$ 36,993,943	\$ 26,761,389	\$ 24,620,856	\$ 34,749,107

Estimated Tax Impact

	K-3 490 at Winthrop	K-5 420 at Winthrop	K-5 775 at Winthrop	K-3 490 at Bialek	K-5 420 at Bialek	K-5 775 at Bialek
MAXIMUM DISTRICT SHARE Estimated	\$ 26,657,104	\$ 24,425,148	\$ 36,993,943	\$ 26,761,389	\$ 24,620,856	\$ 34,749,107
TAX IMPACT Estimated	\$0.67 per 1000	\$0.62 per 1000	\$0.94 per 1000	\$0.67 per 1000	\$0.63 per 1000	\$0.88 per 1000
ANNUAL IMPACT FY2021 Estimated	\$306.19	283.34	\$429.58	\$306.19	\$287.91	\$402.16

Based on a \$457,000 median home value

Tax Impact over existing bond

	K-3 490 at Winthrop	K-5 420 at Winthrop	K-5 775 at Winthrop	K-3 490 at Bialek	K-5 420 at Bialek	K-5 775 at Bialek
MAXIMUM DISTRICT SHARE Estimated	\$ 26,657,104	\$ 24,425,148	\$ 36,993,943	\$ 26,761,389	\$ 24,620,856	\$ 34,749,107
TAX IMPACT Estimated	\$0.67/1000 Minus <u>\$0.45/1000</u> \$0.22/1000	\$0.62/1000 Minus <u>\$0.45/1000</u> \$0.17/1000	\$0.94 /000 Minus <u>\$0.45/1000</u> \$0.49/1000	\$0.67/1000 Minus <u>\$0.45/1000</u> \$0.22/1000	\$0.63/1000 Minus <u>\$0.45/1000</u> \$0.18/1000	\$0.88/1000 Minus <u>\$0.45/1000</u> \$0.43/1000
ANNUAL IMPACT FY2021 Estimated	\$100.54	77.69	\$223.93	\$100.54	\$82.56	\$196.51

HS/MS Bond retires in FY20. Based on \$457,000 median home value

DOYON - Options

- **MSBA – Three Programs**

- **Core Building – Renovating or replacing buildings that do not meet the City/Town’s educational program**

Or

- **Base Repair – For existing buildings that meet the City/Town’s educational program but the base building systems require upgrade to extend building life.**

Or

- **Accelerated Repair - Streamlined program to repair roofs, windows and boilers. One system at a time**

- **MSBA reimbursement available**

- **Must select one program. One building cannot participate in more than one program**

- **If Base Repair is selected, MSBA then determines building meets Educational program**

- **If a second MSBA project replaces equipment MSBA funded within 20 years, MSBA will reduce funding**

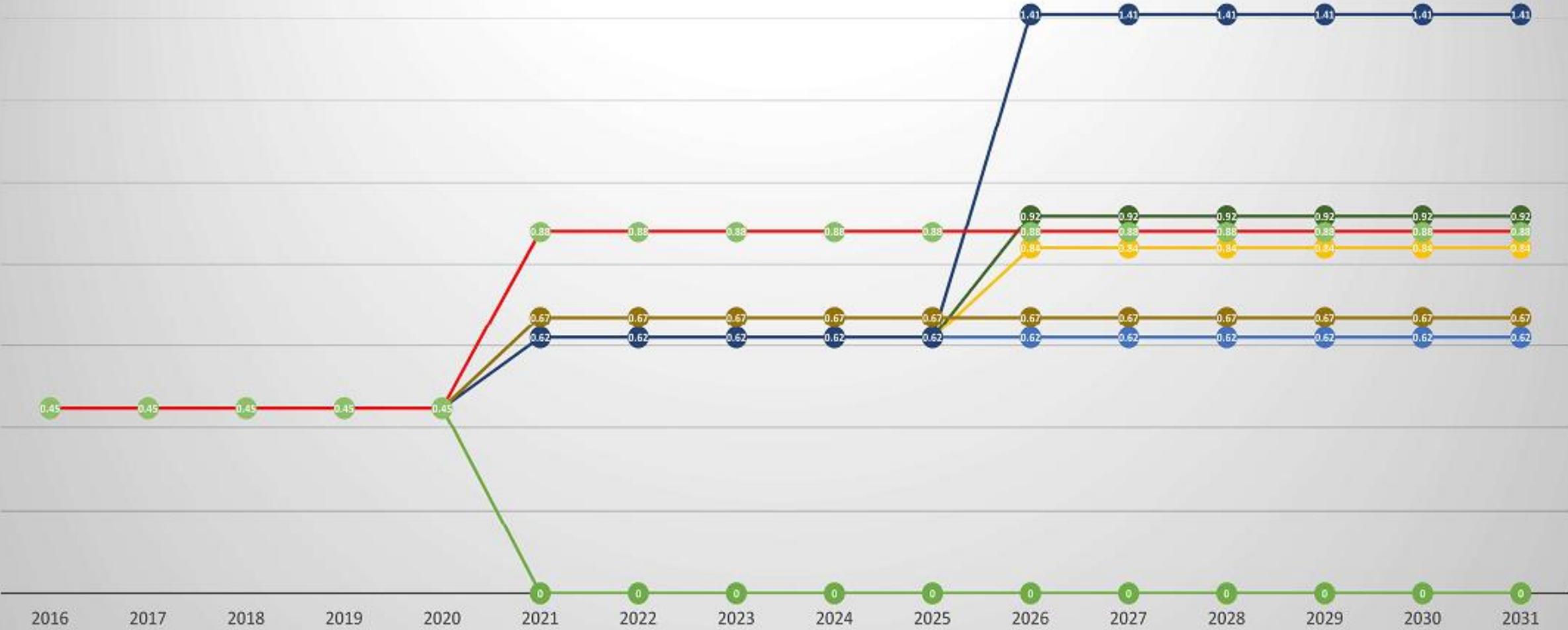
Doyon – Tax Impact

	BASE REPAIR No Education Program In 10 years	BASE REPAIR W/ Education Program Addition In 10 years	NEW DOYON K-5 (355) In 10 Years
ESTIMATED TOTAL PROJECT COSTS	\$15,420,000	\$20,800,000	\$49,000,000
MAXIMUM DISTRICT SHARE Estimated	\$8,877,600	\$11,729,000	\$31,361,000
TAX IMPACT Estimated	\$0.22 per 1000	\$0.30 per 1000	\$0.79 per 1000
ANNUAL IMPACT FY2026 Estimated	\$100.54	\$137.10	\$361.03

Ipswich - Total Potential Costs

Options	WINTHROP K-5 Plus DOYON BASE RENO	WINTHROP K-5 Plus DOYON RENO w/ 8,700 SF ADD	WINTHROP K-5 Plus NEW DOYON	K-5 775 BUILDING
TOWN SHARE Estimated	\$24,620,856	\$24,620,856	\$24,620,856	\$34,749,107
DOYON TOWN SHARE in 10 years Estimated	\$8,877,600	\$11,729,000	\$31,361,000	
POTENTIAL TOTAL TOWN SHARE Estimated	\$33,498,456	\$36,349,856	\$55,981,856	\$34,749,107

Levy Rate /\$1000 Different School Project Options



● No School Project
 ● Winthrop K-5 (420)
 ● Winthrop K-5 (420) + DR 2025
 ● Winthrop K-5(420) + DR W 2025
 ● Winthrop K-5 (420) + DR R 2025
 ● Winthrop K-3
 ● Winthrop K-5 (775)

Doyon – What Does \$700,000 buy?

- **Doyon value \$2,482,000 – AAB value \$744,780. Spending over this limit in any three year period requires ADA and seismic structural compliance.**
- **Adding or relocating walls would trigger Building Code Ch. 34 compliance for upgrading systems to meet present day codes.**
- **Base renovation estimates:**
 - **New Flooring – \$800,000 (includes Hazmat removal)**
 - **New Electrical System – \$1,300,000**
 - **New Fire Alarm System - \$200,000**
 - **New Sprinkler System - \$325,000**
 - **Replace 30 HVAC UVs - \$250,000**
 - **New Plumbing - \$900,000 (includes new ADA toilet rooms with HVAC, electrical)**
 - **New Kitchen Equipment - \$350,000 (includes HVAC, Fire Alarm, Electrical, Ansul System)**
 - **Clean, repair and repoint exterior brick - \$300,000**
 - **8,700 SF Educational space addition - \$4,000,000**