



**Tecton**  
ARCHITECTS

# IMAGINING POSSIBILITIES

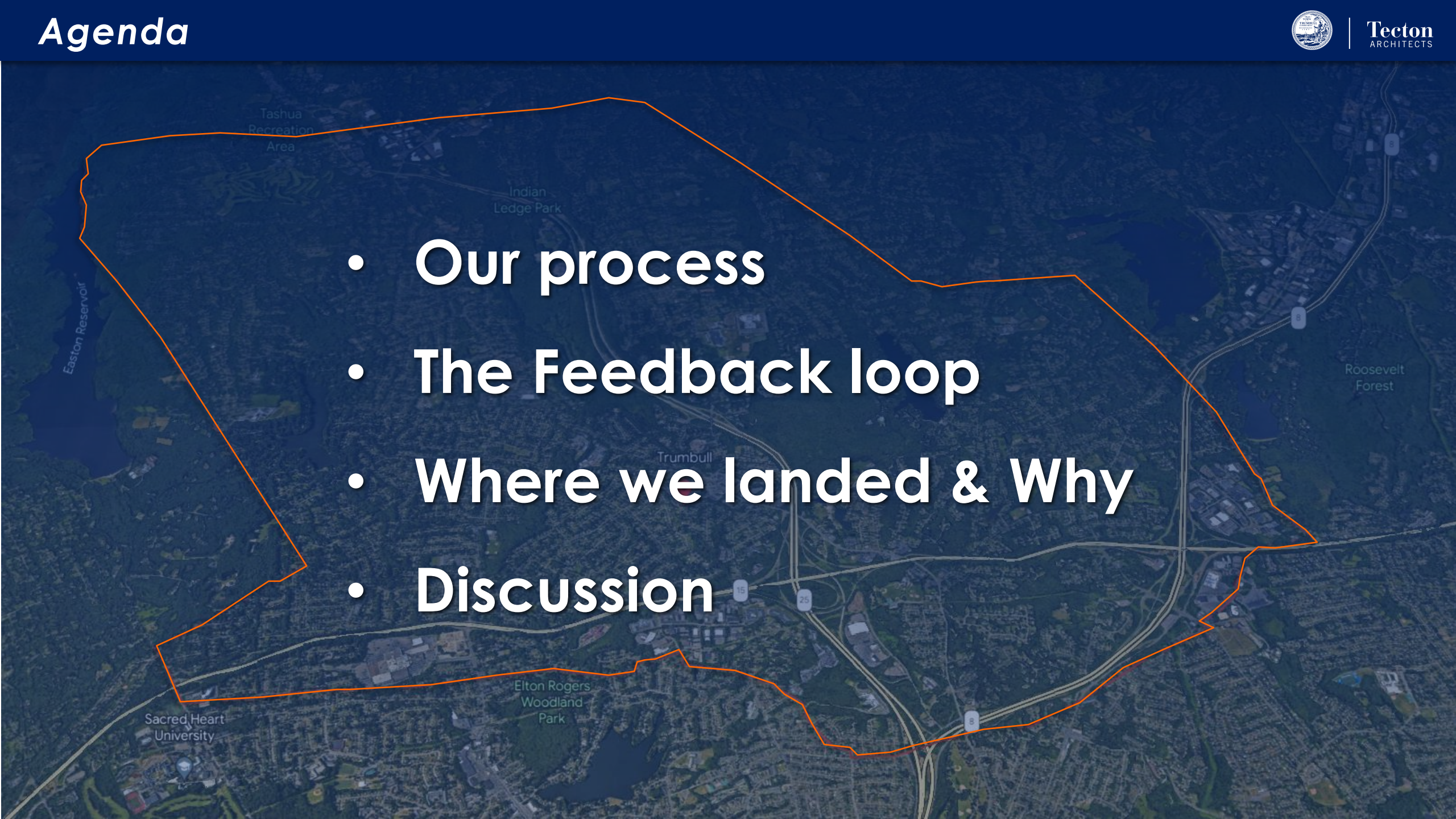
FOR TRUMBULL'S SCHOOL FACILITIES

TRUMBULL, CT

## **BOE Retreat #2**

Cooperative Educational Services

July 26, 2023

- 
- Our process
  - The Feedback loop
  - Where we landed & Why
  - Discussion

## UTILIZATION & PROGRAMMING



**EDWARD  
WIDOFSKY**

AIA, LEED AP BD+C

*Project Manager  
Tecton*

## OVERSIGHT & DAY-TO-DAY CONTACT



**JEFF  
WYSZYNSKI**

AIA

*Principal-in-Charge  
Tecton*

## COMMUNITY ENGAGEMENT

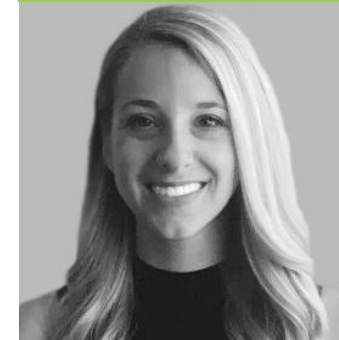


**ANTONIA  
CIAVERELLA**

EDAC, LEED AP BD+C,  
WELL AP, FITWEL

*Architectural Designer  
Tecton*

## BUILDING CONDITION ASSESSMENT



**ALISON FROST**

*Project Architect  
Tecton*

## CONSULTANT EXPERTISE



**BRAD  
PARK**

*MEP Engineer, Associate  
CES*

**CONSULTING ENGINEERING SERVICES**  
MEP Engineering

**MCKIBBEN DEMOGRAPHIC RESEARCH**  
Enrollment Projections & Demographics Study

## Central Office

**Dr. Martin Semmel**  
Superintendent

**Dr. Susan C. Iwanicki**  
Assistant Superintendent

**David Cote**  
Director of Operations

**Christina Hefele**  
Director of Digital Learning

**Lauren Butler**  
Secretary to the Superintendent

**Maria Vaz**  
Registration and Residency

**Dawn Perkins**  
Transportation Coordinator

## Board of Education

**Lucinda Timpanelli**  
Board Chair

**Tim Gallo**

**Jackie Norcel**

**Alison Squicciarro**

**Marie Petitti**

**Christopher Bandecchi**

**Julia McNamee**

**Lisa Nuland**

## Administration

**Dana Pierce**  
Principal, Booth Hill

**Gary Kunschaff**  
Principal, Daniels Farm

**Gina Prisco**  
Principal, Frenchtown

**Pat Horan**  
Principal, Jane Ryan

## Administration, ctd.

**Debra Ponte**  
Principal, Middlebrook

**Bryan Rickert**  
Principal, Hillcrest

**Katie Laird**  
Assistant Principal, Hillcrest

**Peter Sullivan**  
Principal, Madison

**Paul Coppola**  
Assistant Principal, Madison

**Marc Guarino**  
Principal, Trumbull High School

**Dr. Linda Paslov**  
Director, Agriscience &  
Biotechnology Center

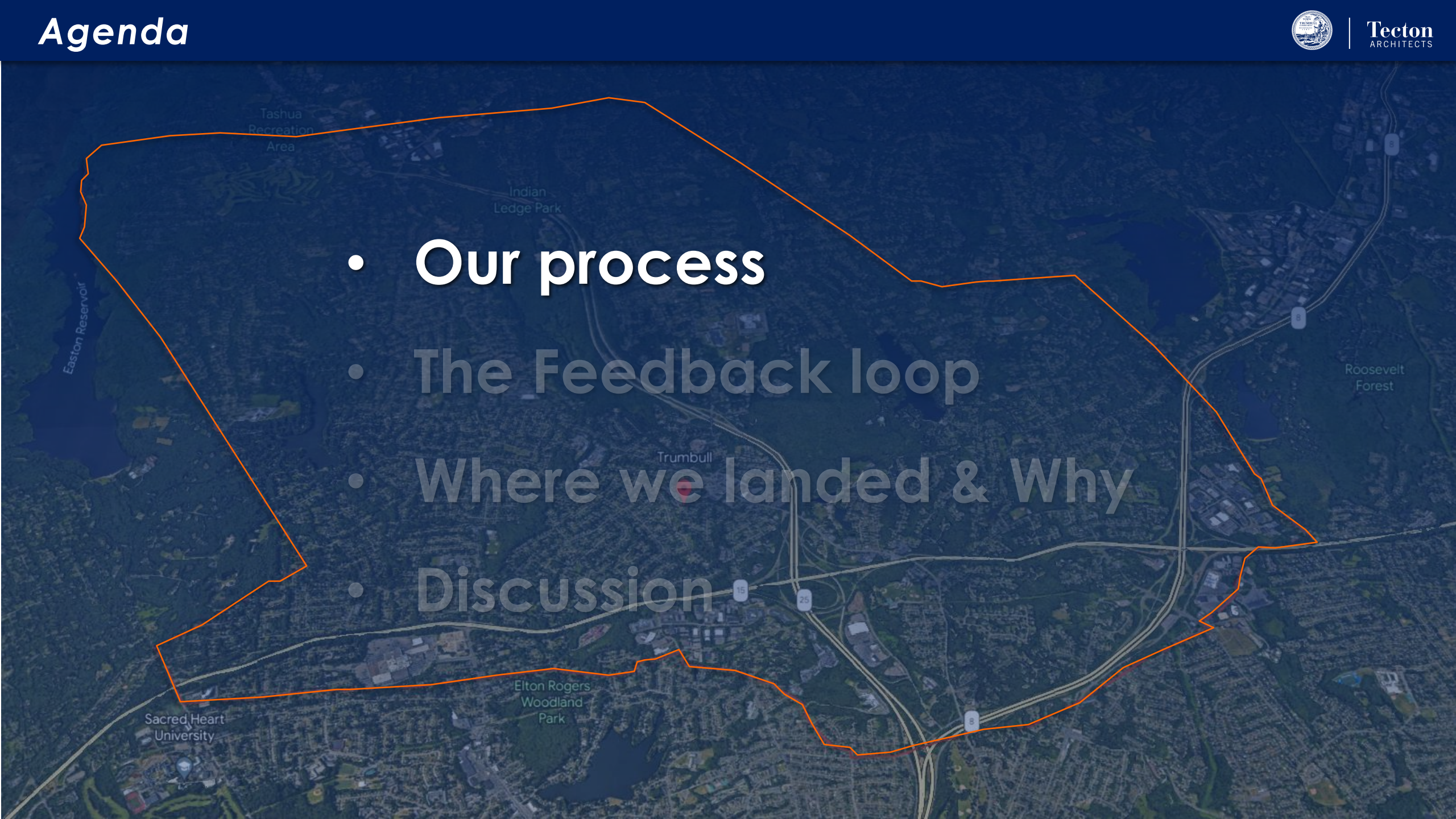
**Deborah McGrath**  
Director, REACH

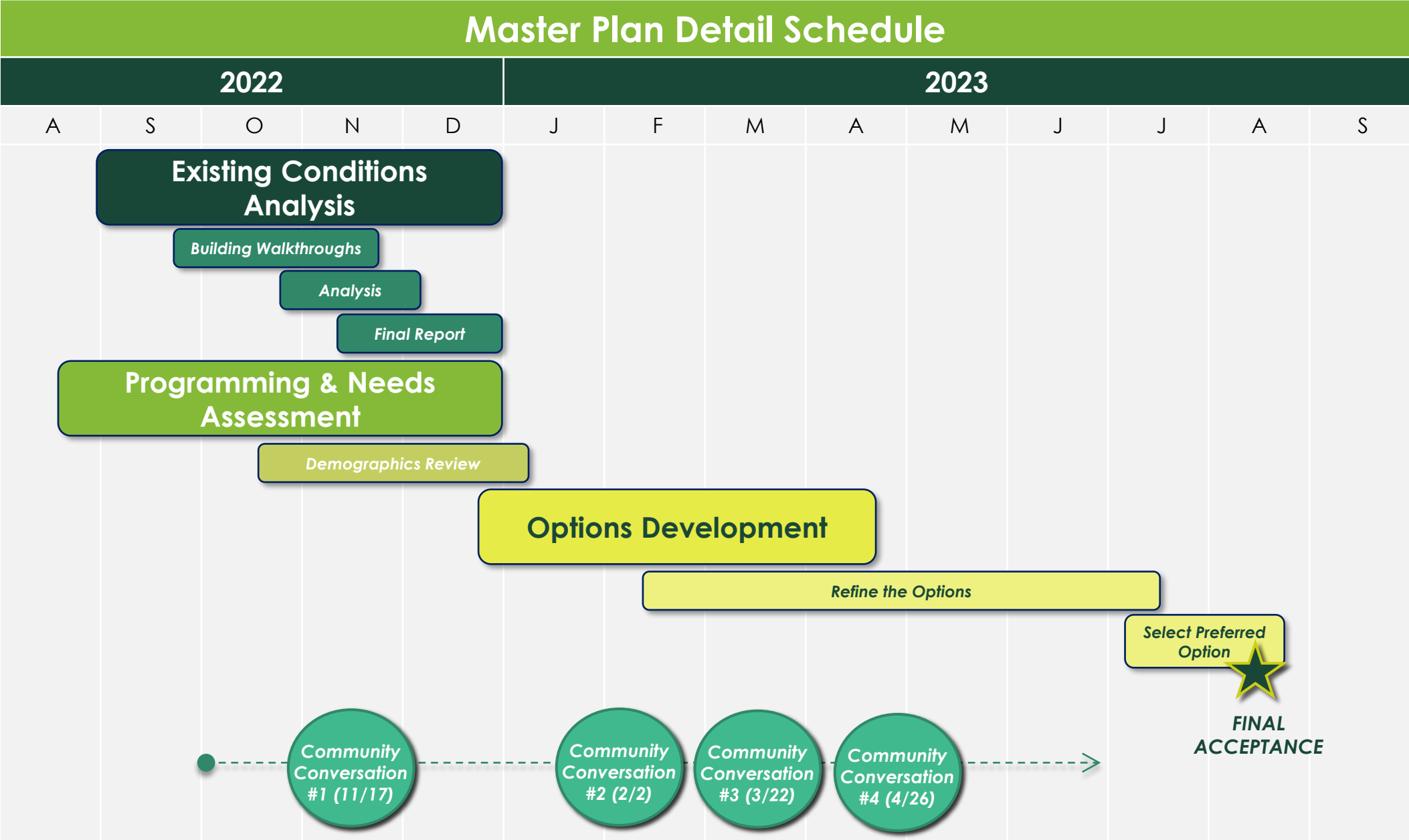
**Dr. Matthew Wheeler**  
Principal, TECEC

## Others

**Trumbull PTA Council**

**Public Works Administration**

- 
- **Our process**
  - The Feedback loop
  - Where we landed & Why
  - Discussion



## Existing Conditions

- 1 Physical condition** of building exterior, interior, systems and site
- 2 Code and life safety** systems analysis
- 3 Programmatic needs** and concerns based on condition
- 4 Prioritization ranking system** as a tool for long-term planning

## Demographics & Utilization

- 1 Highest projected enrollment** per building over the next 10 years
- 2 Allowable SF** per the State of Connecticut
- 3 Useable space** versus unassignable space per building
- 4 Benchmarking of core spaces** (gym, cafeteria, media) against state standard, per building

## Options & Final Plan

- 1 Available “swing space”** within the building, (if any)
- 2 Capacity and condition of the site** for a new building or addition
- 3 Best strategic first step**, followed by a long-term plan
- 4 Other opportunities** or variations on the long-term plan

## The Scope.

Analyze the existing facilities for **age/condition, program needs, capacity & utilization**.

Conduct a demographic study for enrollment projections, **develop a population forecast**.

Identify a planning strategy for future educational delivery and building use to serve the Town for the next **10-15 years and beyond**.

## The Goal.

Prioritize the need across the district based upon **objective analysis (Program, condition, capacity)**.

Develop a plan to alleviate **capacity concerns and build in flexibility** (elementary and middle schools).

Provide a consistent, transparent, and interactive process to engage the community to develop the best plan overall for **Trumbull**.

# Buildings Summary

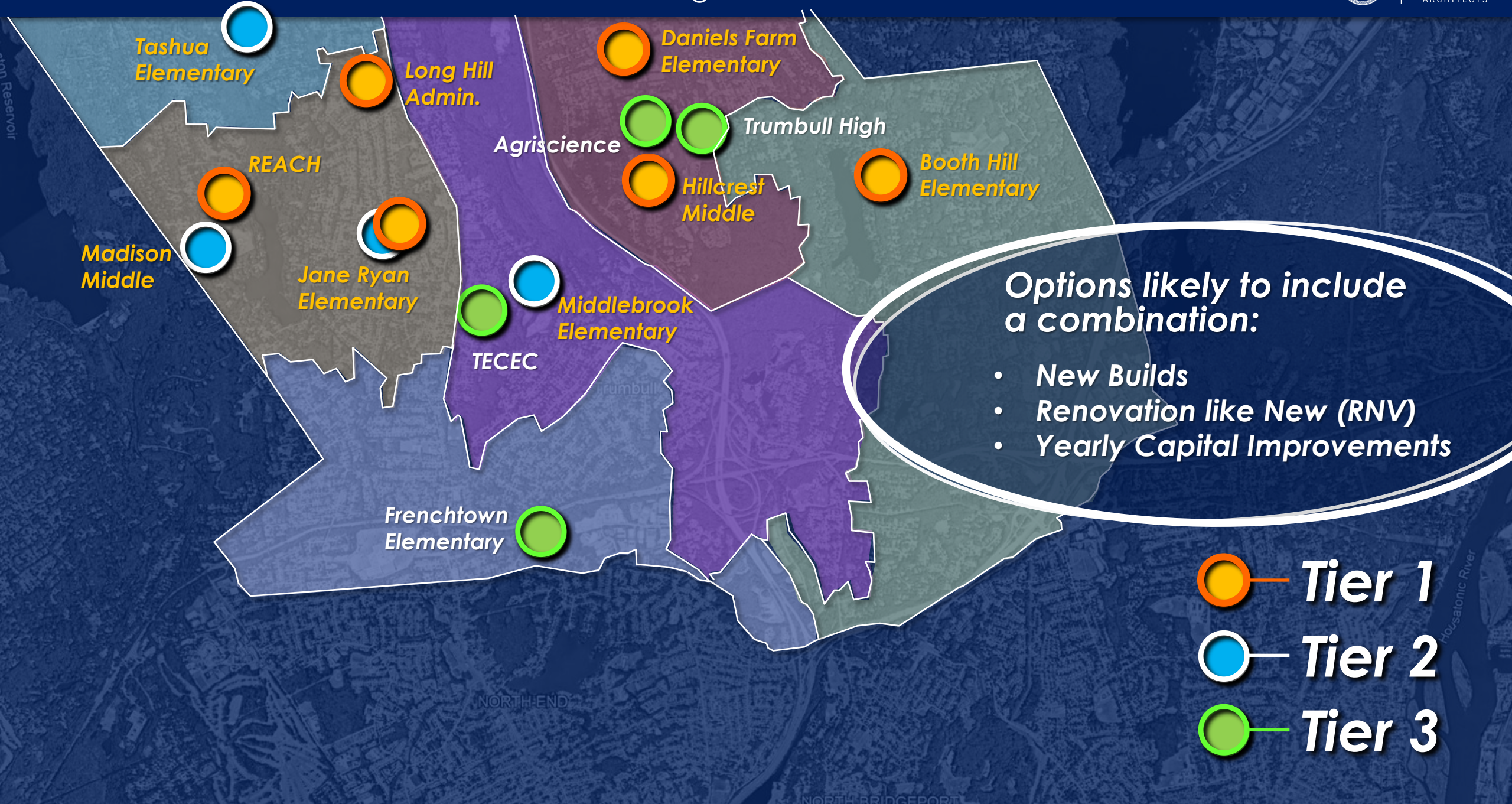


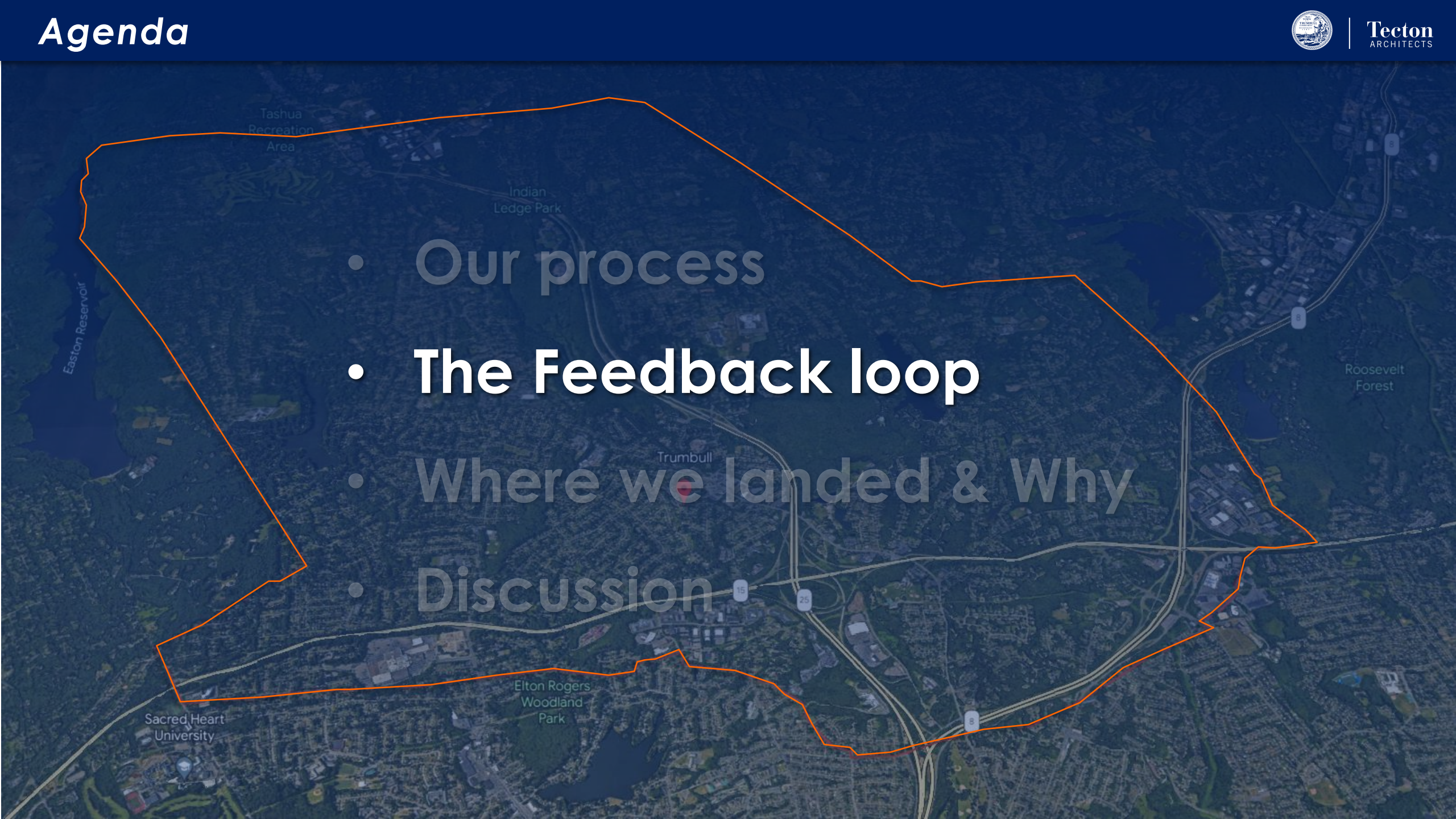
## Area Summary Table

Building Name		GSF	% of total town bldgs	Orig. Const.	Age
<b>PK</b>	Trumbull Early Childhood	26,350	2.4%	2005	18
<b>K-5</b>	Booth Hill Elementary	53,660	4.8%	1955	68
	Daniels Farm Elementary	61,480	5.5%	1962	61
	Frenchtown Elementary	89,960	8.1%	2003	20
	Jane Ryan Elementary	46,430	4.2%	1955	68
	Middlebrook Elementary	65,690	5.9%	1953	70
	Tashua Elementary	59,660	5.4%	1965	58
<b>6-8</b>	Hillcrest Middle	117,000	10.5%	1967	56
	Madison Middle School	154,970	13.9%	1960	63
<b>9-12</b>	Regional Agriscience Center	38,200	3.4%	2001	22
	Trumbull High School	369,350	33.2%	1971	52
<b>6-8/9-12</b>	REACH	8,700	0.8%	1970	53
<b>Admin</b>	Long Hill Administration	21,950	2.0%	1920	103
	<b>Subtotal</b>	<b>1,113,400</b>	<b>Average Age</b>	<b>55</b>	



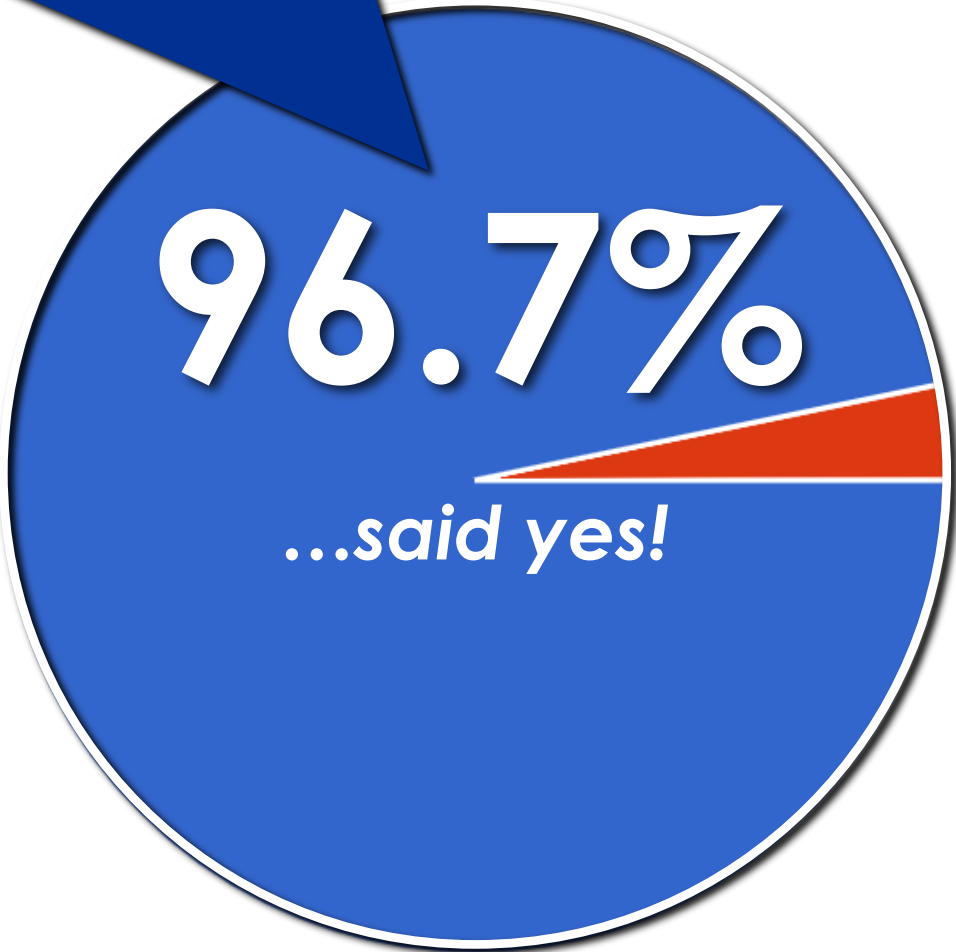
# PLANNING OPTIONS ~ Initial Thoughts



- 
- Our process
  - **The Feedback loop**
  - Where we landed & Why
  - Discussion

*Do you believe there is a need to improve the physical condition of Trumbull’s public schools?*

- Yes
- No



390+  
Responses!



# Where We've Been – Community Conversation #1 (11/17/22)



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- Internet access at THS is so bad
  - Pool on campus. Although, I know there are bigger priorities. But if we can get a pool, it should be at the high school. Kids should have the priority. I don't know why anyone other than the students/kids have any say in this. They are not the priority!
- from someone with large kid existing school system.*

Outdoor Program use Shade / electrical

Community Access

## What are your priorities?

Town of Trumbull  
Board of Education  
District-Wide Master Plan



### 21st Century Environment



### Sustainability & Efficiency



### Safety & Security



### Vehicular Circulation & Parking



### Outdoor Learning & Play



### Alignment & Equity District-Wide



### Fiscally Responsible



### Community Use After Hours



### Others? Write them here:

Pool - ON CAMPUS!  
planatorium - ramparts  
sunlight  
platform seating

Maker Space

## Air Conditioning!!

Booth Hill Teacher

(Written by a teacher 😊)  
We are very focused on student achievement. Our air quality in the buildings is very poor. There are unbearable working and learning conditions. It is over 100 degrees in my classroom very often during the summer.

months (May, June, Sept., Oct.). I have parents @ students complain often. Several students as keep each year are sweating un-engaged. Specials rooms terrible for learning.

I have students who have bad asthma in these conditions. Please, this needs to change!

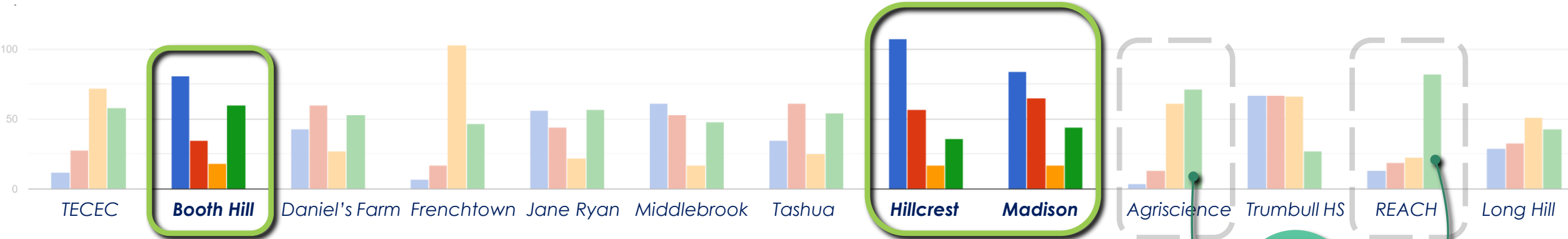
Ventilation  
Particularly air conditioning  
Specials rooms



## Comments from the BOE Workshop on 9/20/2022

## Your feedback...greatest need *(Booth Hill, Hillcrest & Madison)*

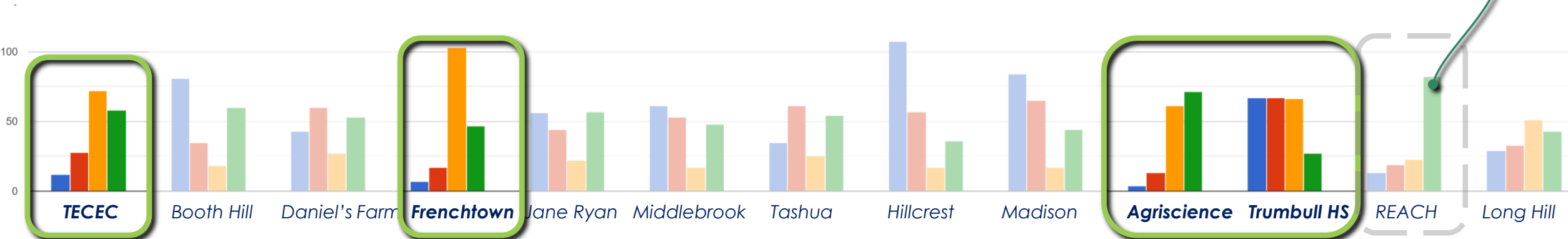
Greatest Need Moderate Need Lowest Need Unsure

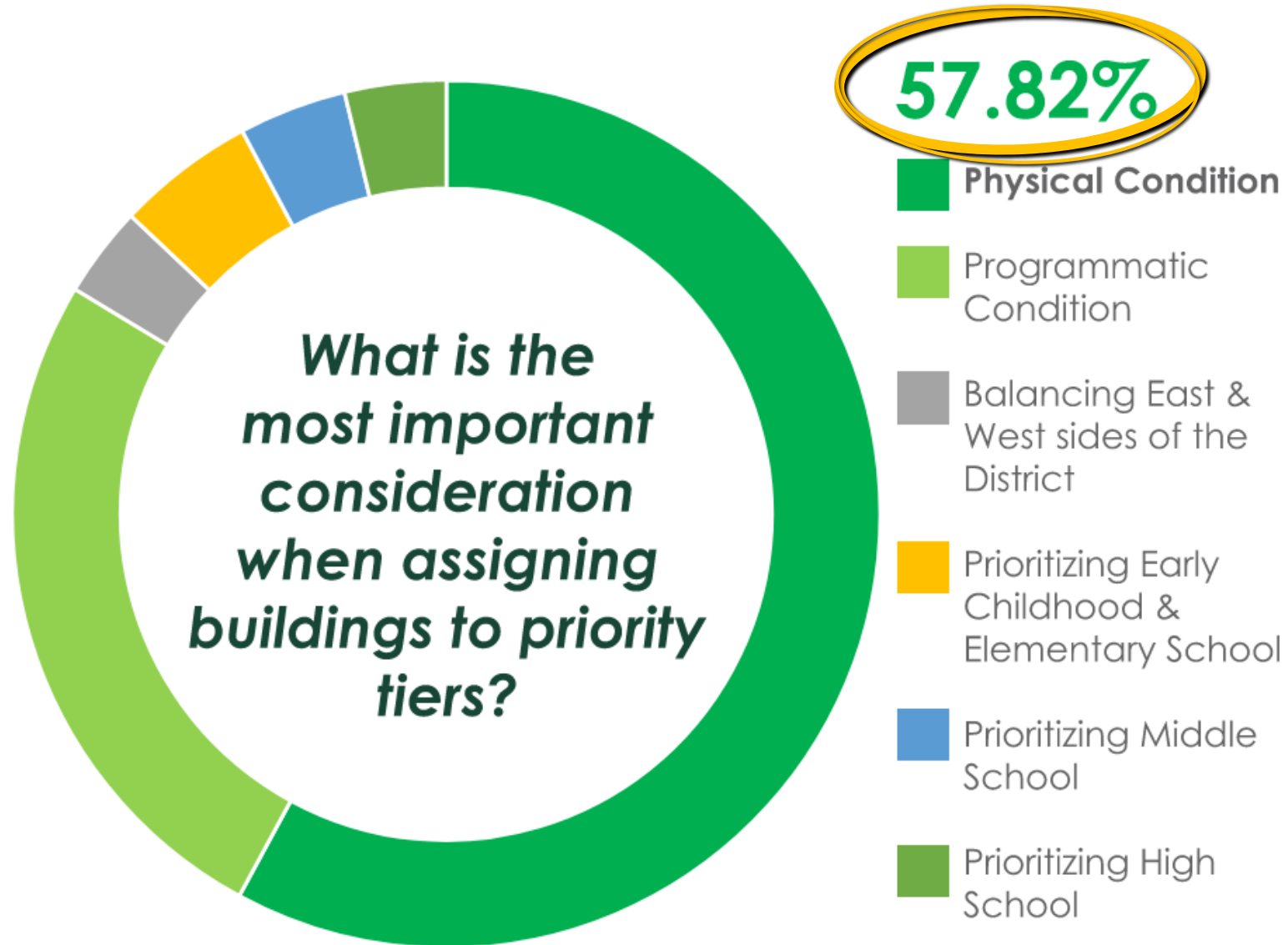


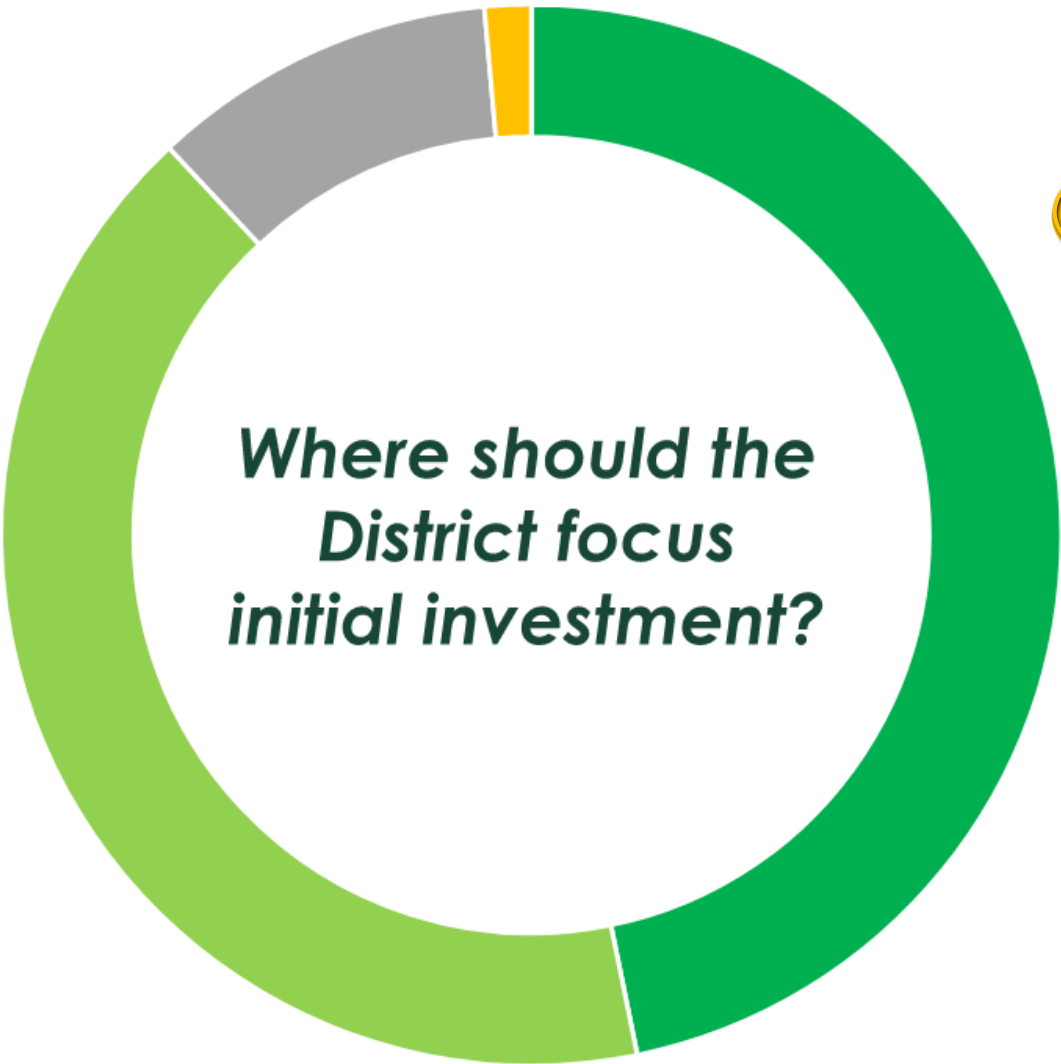
Unsure?

## Your feedback...lowest need *(TECEC, Frenchtown, Agriscience, Trumbull HS)*

Greatest Need Moderate Need Lowest Need Unsure







46.81%

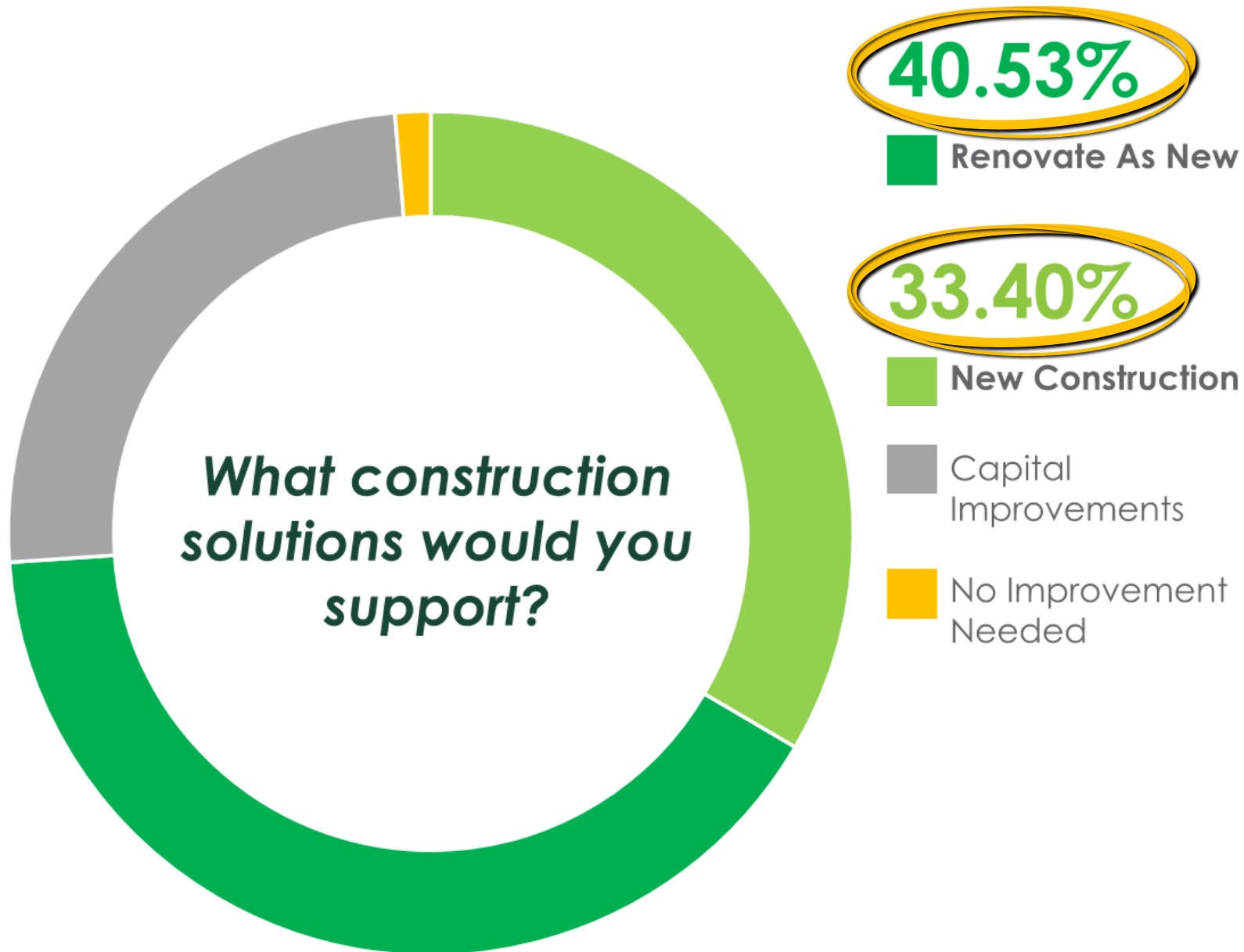
Elementary Schools

41.25%

Middle Schools

High School

No Improvement Needed

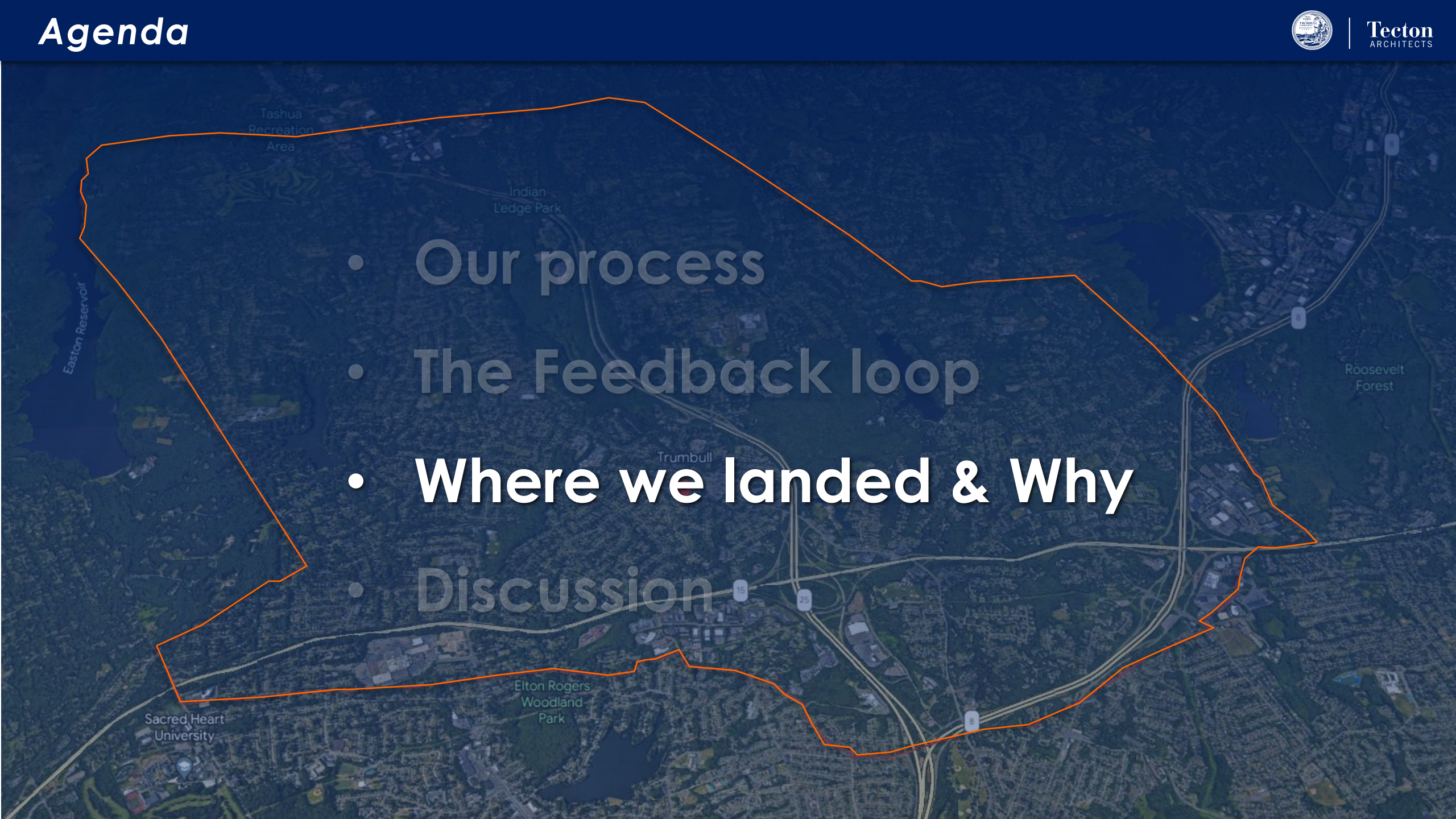


**Considerations:** (based on final data. 817 survey responses. Survey closed on 7/10/2023.)

- **Most agree with current Tiers rankings**, except for Long Hill which is viewed as having a lower need
- **Hillcrest, Madison and Trumbull High School** had more than 20% say that while they agree with the Tier ranking, there is greater need at these locations
- **Physical condition is the most important consideration** when assigning buildings to priority tiers (58%)
- **Keeping the current grade configuration** received the most support (44%)
- **Keeping the current number of transitions** received the most support (46%)
- **Start by investing in the elementary schools (47%)** but middle schools was close behind at (41%)
- Most would like to see **Renovate As New (41%)** or New (33%). Capital Improvements was at (25%), and no improvement (1%)

## Other Factors:

- Based on capacity analysis, **Jane Ryan will see the greatest increase in enrollment (+31)** followed by Middlebrook (+18), Booth Hill (+14), and Daniels Farm (+11)
- **Both Hill and Jane Ryan are least capable of accommodating this growth** (based on capacity analysis) but Middlebrook and Daniels Farm are also at capacity
- Based on a benchmark with the allowable area by the state, **Hillcrest can grow by 16%, Booth Hill by 25% and Jane Ryan by 31%** to meet the needs of forecasted enrollment

- 
- Our process
  - The Feedback loop
  - **Where we landed & Why**
  - Discussion

- 1** **Addresses priority buildings in first step** (directly responds to community input)
- 2** **Provides New Hillcrest Middle school, allows opportunity to improve campus, & provides possible swing space.**
- 3** **Forward thinking approach to Reach** (Regionalize, optimize with H.M.S., creates possible revenue, reuse of former building as central storage)
- 4** **Relocation of Central Administration to M.M.S. and H.M.S.;** (optimizes use of existing space & frees up Long Hill site for future use)

# Sequence of the Work

Assumes the design process has overlapped with prior project construction



	BUILDINGS (in sequential order of the work)				METHODOLOGY		TIMELINE (address with CIP until Start Year)		
	Highest Enrollment	Tier	Grade Configuration	School Name	Construction Solution	Location	Used as Swing Space?	Year of Construction Start	Year of Construction End
STEP 1	826	1	6-8	Hillcrest Middle School	NEW	Current site	YES <i>(Booth Hill)</i>	2025	2027
Possible Step 1 Add-ons	~30-40	1	6-8, 9-12	REACH	NEW	Hillcrest site	NO		
	~24	1	-	Long Hill Admin. & Madison M.S. <i>(Superintendent &amp; Staff, Dir. SPED...)</i>	NEW/RNV	Hillcrest / Madison	NO		
STEP 2	528	1	K-5	Booth Hill Elementary School	NEW/RNV	Current site	NO	2027	2029
STEP 3	479	2	K-5	Jane Ryan Elementary School	NEW/RNV	Current site	NO	2029	2032
STEP 4	506	1	K-5	Daniels Farm Elementary School	NEW/RNV	Current site	NO	2032	2034
STEP 5	834	2	6-8	Madison Middle School	NEW/RNV	Current site	If New <i>(Middlebrook)</i>	2034	2036
STEP 6	537	2	K-5	Middlebrook Elementary School	RNV	Current site	NO	2036	2039
STEP 7	452	2	K-5	Tashua Elementary School	RNV	Current site	NO	2039	2042
STEP 8	2,268	3	9-12	Trumbull High School	RNV	Current site	NO	2042	2045
STEP 9	518	3	K-5	Frenchtown Elementary School	RNV	Current site	NO	2045	2048
STEP 10	243	3	Pre-K	TECEC	RNV	Current site	NO	2048	2050/51
	(part of H.S. #)	3	9-12	Agriscience	RNV	Current site	NO		

Step 1: **\$149.2 M**  
(\$115.4 M)



Step 2: **\$64.3 M**  
(\$49.5 M)  
(or 3)



Step 3: **\$58.5 M**  
(\$39.9 M)  
(or 2)

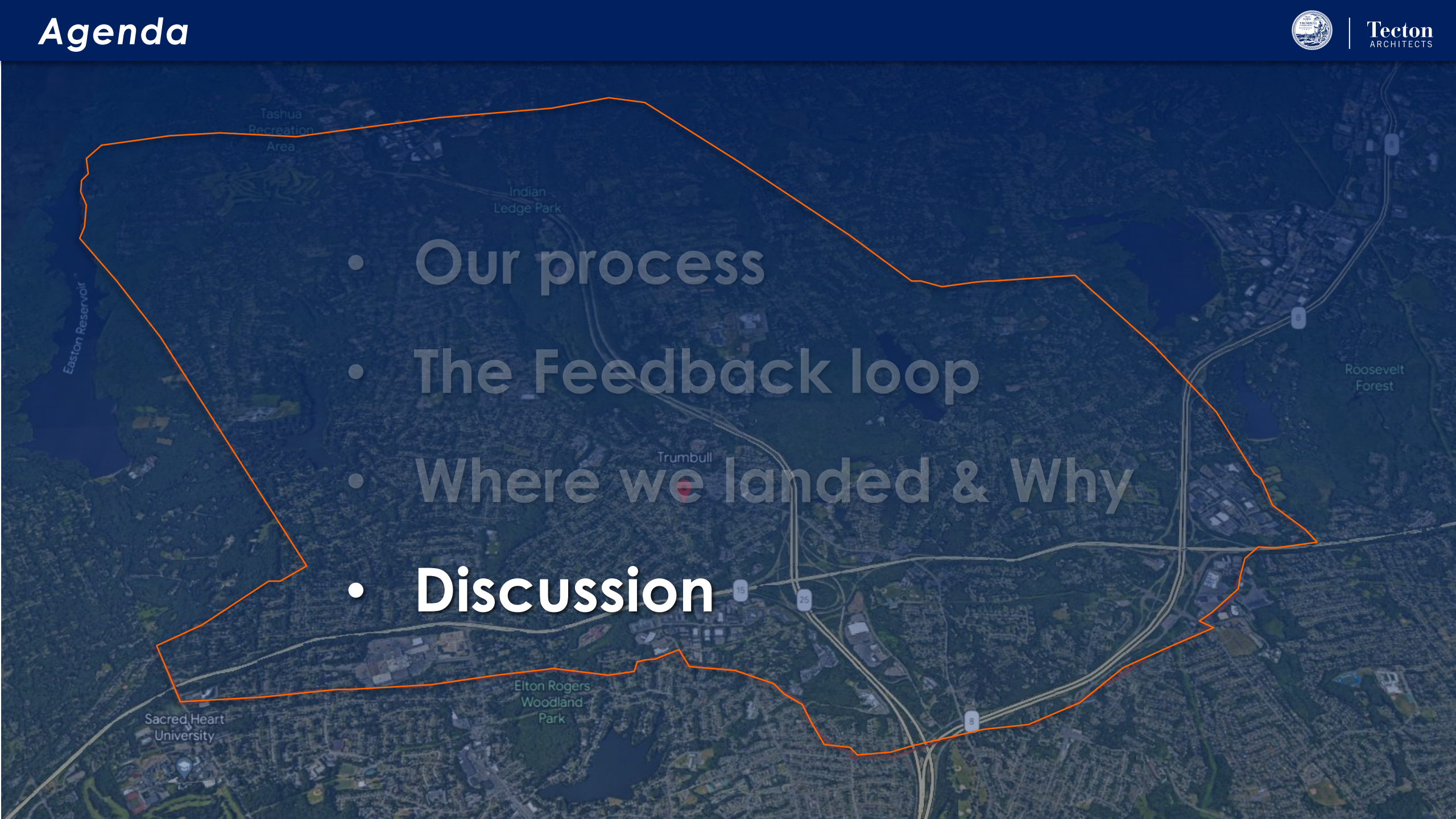


Steps 1-3 Total:

**\$272 M**  
(\$204.8 M)

Total Project Costs

Cost to Trumbull

- 
- Our process
  - The Feedback loop
  - Where we landed & Why
  - **Discussion**



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# APPENDIX MATERIALS

FOR TRUMBULL'S SCHOOL FACILITIES

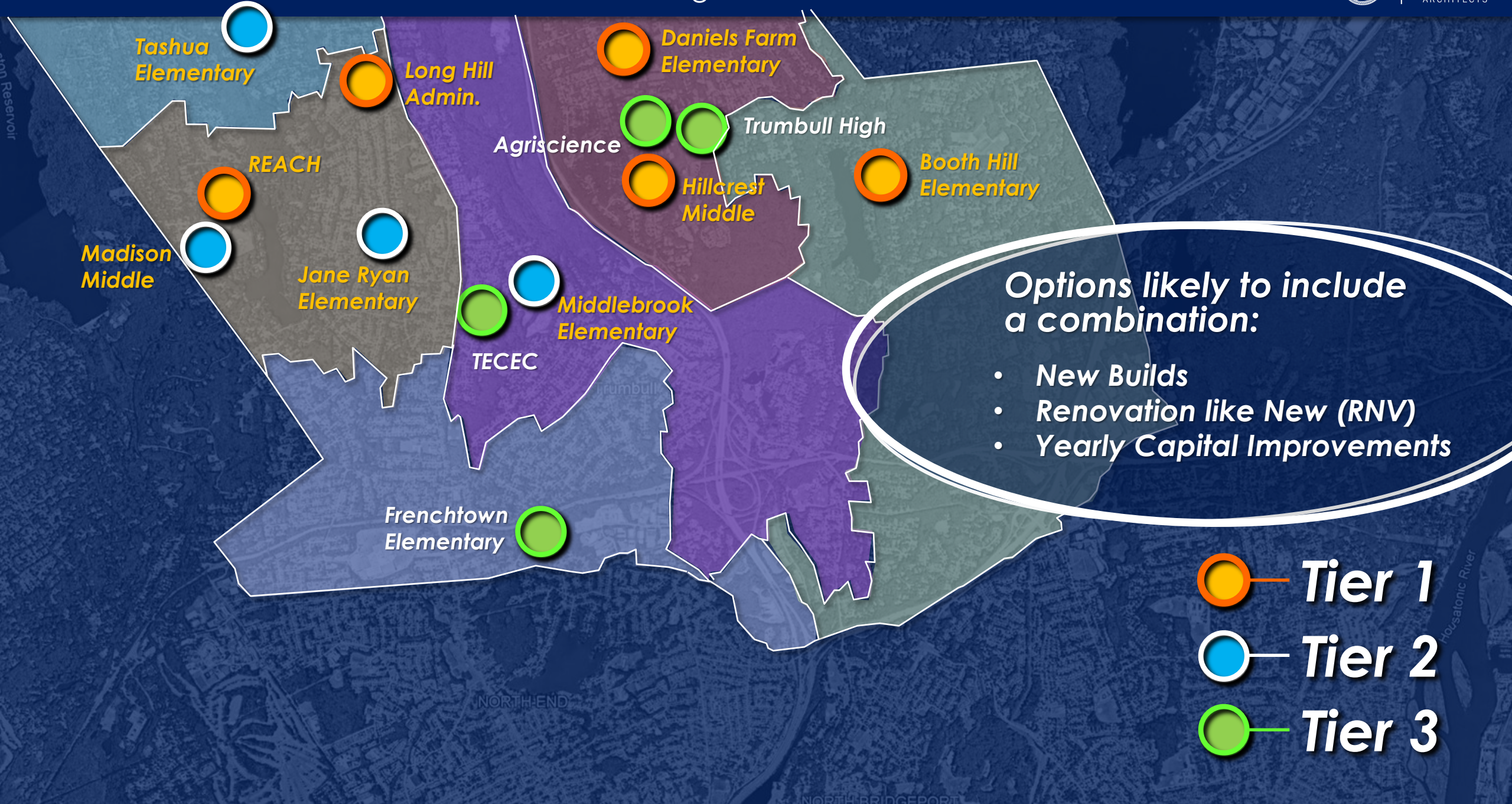
TRUMBULL, CT

## BOE Retreat #2

Cooperative Educational Services

July 26, 2023

# PLANNING OPTIONS ~ Initial Thoughts



Options likely to include a combination:

- New Builds
- Renovation like New (RNV)
- Yearly Capital Improvements

-  Tier 1
-  Tier 2
-  Tier 3

# DEFINING THE TYPES OF PROJECTS




































TOPIC AREAS	NEW CONSTRUCTION	RENOVATE LIKE NEW	CAPITAL IMPROVEMENTS
<b>Project Scope</b>	<p>Brand new construction to accommodate the forecasted enrollment projections and accommodate future growth.</p> <p>Built to last 30 – 50 + years (30 year systems)</p>	<p>Comprehensive renovation (sometimes phased) of the entire building to a “like new” condition to accommodate forecasted enrollment and future growth.</p> <p>Built to last 30 – 50 + years (30 year systems)</p>	<p>Updating individual systems and/or structures in kind on an as-needed basis. Not a comprehensive renovation. Does not take forecasted enrollment projections or future growth into account.</p> <p>Isolated impact on longevity</p>
<b>Reimbursement</b>	<p>Reimbursable by the State of Connecticut at <b>24.29%</b></p> <p>(Note: Possible increase 10% based upon RNV cost analysis &amp; state approval)</p>	<p>Reimbursable by the State of Connecticut at <b>34.29%</b></p>	<p>Most projects have limited to no eligibility for reimbursement by the State of Connecticut, meaning that the total cost burden falls on Trumbull taxpayers</p>
<b>Energy Efficiency</b>	<p>Built to exceed current energy code to meet any sustainability / net-zero goals</p>	<p>Due to comprehensive nature of the renovation, can exceed current energy code to meet any sustainability / net-zero goals</p>	<p>Updates to systems will meet current energy code, and could decide to exceed those codes, but likely will not reach net-zero due to existing building envelope, windows, and overall massing</p>
<b>Educational Environment</b>	<p>Built to support modern 21<sup>st</sup> Century Learning environments</p>	<p>A complete reinvention of the existing building –built to support modern 21<sup>st</sup> Century Learning environments, with some sacrifices</p>	<p>No change to the educational environment – what you have today, stays</p>

# IMPACT OF THE OPTIONS

LEGEND:  NOT DESIRABLE  ACCEPTABLE  IDEAL



CRITERIA	NEW CONSTRUCTION	RENOVATE LIKE NEW	CAPITAL IMPROVEMENTS
Program Improvement <i>(21<sup>st</sup> Century)</i>	 State-of-the-art	 Total Reinvention	 No change
Operational Improvement <i>(Energy/Maint.)</i>	 Efficient	 Efficient	 No change
Construction Cost	 Highest Upfront	 High/Moderate	 Moderate
Reimbursement Rate	 24.29% (34.29%?)	 34.29%	 0 - 10% (for many)
Probability of Unforeseen Conditions	 Minimal	 Likely	 Highly Likely
Site Related Costs	 Moderate	 Moderate	 Low to None
Number of Construction Phases	 ~1-2 Phases	 ~2-4 Phases	 Continual
Availability of Swing Space	 Better	 Some Possibility	 None Likely
Disruption to Students	 Minimal	 Greater	 Greatest
Safety & Security Improvements	 Fully Implement	 Mostly Implement	 Minimally Imp.
Overall Project Timeline	 ~ 18 - 20 Months	 ~ 30 - 48 Months	 Annually for Life
Impact to Neighbors	Moderate	Moderate	No real change

# SQUARE FOOTAGE SUMMARY ~ Tier 1 Projects



BUILDINGS			Existing SF	State Standard	Allowable Area	Gross Building SF
Enrollment		School Name	Existing Gross Building SF	Based on highest enrollment	Includes a 1% mechanical increase	Includes a 5-7% gross up factor
Current	Highest					
514	528	Booth Hill Elem. (K-5)	53,660	66,176	66,838	71,516
448	479	Jane Ryan Elem. (K-5)	46,430	60,035	60,635	64,879
495	506	Daniels Farm Elem. (K-5)	61,480	63,419	64,053	68,537
767	826	Hillcrest Middle (6-8)	117,000	134,363	135,706	145,206
~20	~20 (~30-40 if Regional)	REACH (6-8, 9-12)	9,500 (state standard not applicable) (19,000 SF if a Regional program is implemented)			
~50	~50	Long Hill Admin.	21,950 (state standard not applicable)			

Using these  
for costs

# COSTS SUMMARY

BUILDINGS			NEW CONSTRUCTION <i>(24.29% State Reimbursement)</i>		RENOVATE LIKE NEW (RNV) <i>(34.29% State Reimbursement)</i>		DELTA OF NEW vs. RNV
Enrollment		School Name	Total Project Cost	Cost to Trumbull	Total Project Cost	Cost to Trumbull	Cost to Trumbull
Current	Highest						
514 <i>(53,660 GSF)</i>	528 <i>(71,516 GSF)</i>	Booth Hill Elem. (K-5)	\$64.3 M	<b>\$49.5 M</b>	\$60.3 M	<b>\$41.1 M</b>	<b>\$8.4 M</b>
448 <i>(46,430 GSF)</i>	479 <i>(64,879 GSF)</i>	Jane Ryan Elem. (K-5)	\$62.0 M	<b>\$47.7 M</b>	\$58.5 M	<b>\$39.9 M</b>	<b>\$7.8 M</b>
495 <i>(61,480 GSF)</i>	506 <i>(68,537 GSF)</i>	Daniels Farm Elem (K-5)	\$63.1 M	<b>\$48.6 M</b>	\$59.3 M	<b>\$40.5 M</b>	<b>\$8.1 M</b>
767 <i>(117,000 GSF)</i>	826 <i>(145,206 GSF)</i>	Hillcrest Middle (6-8)	\$134.9 M	<b>\$103.8 M</b>	\$126.9 M	<b>\$86.6 M</b>	<b>\$17.2 M</b>
~20 <i>(8,700 GSF)</i>	~20 <i>(9,500 GSF)</i>	<div>REGIONAL ~30-40 <i>(19,000 GSF)</i></div> REACH (6-8, 9-12)	\$7.6 M <i>(Regional: \$13.5 M)</i>	<b>\$5.9 M</b> <i>(Regional: \$2.9 M)</i>	<i>(USE COSTS FOR NEW)</i>	<i>(USE COSTS FOR NEW)</i>	-
~50 <i>(21,950 GSF)</i>	~50 <i>(21,950 GSF)</i>	Long Hill Admin.	\$13.5 M <i>(Hillcrest: \$5.43 M)</i>	<b>\$11.4 M</b> <i>(Hillcrest: \$4.56M)</i>	<i>(USE COSTS FOR NEW) (Madison: \$5.39M)</i>	<i>(USE COSTS FOR NEW) (Madison: \$4.53M)</i>	-
TOTALS			\$283.4 M	<b>\$219.2 M</b>	\$267.6 M	<b>\$185.5 M</b>	<b>\$33.7 M</b>

**CIP for all buildings**  
*(Annually over recurring 30-YR timeframe)*

**\$10.2 - \$14.2 M EVERY YEAR**  
*(Nearly 100% of cost carried by taxpayer: ~ 0% – 10% State Reimbursement)*  
Note: Reimbursement based upon published rates for 2023 from the DEPARTMENT OF ADMINISTRATIVE SERVICES (DAS) - Office of School Construction Grants & Review (OSCG&R). School Construction Reimbursement Rates FORM SCG-1060 - Does not include special legislation

Elev. 200'

Parking  
(60-75)

Virtually unusable change  
in grade over 100 feet

# BOOTH HILL ELEMENTARY

COSTS FOR NEW & RNV

New Building  
(One Story)

Consider a new one-story  
building at top of slope  
(footprint approximately  
75,000 sq ft)

## Booth Hill Elem.

Elev. 200'

Virtually unusable, change  
in grade of over 100 feet!

Elev. 316'

## New Build One Story

### Booth Hill Elementary

Grade Configuration: K-5  
Student Population: 528 Students  
Total Building Area: 71,516 GSF  
Total Project Cost: \$64.3 M

(Cost to Trumbull after reimbursement: \$49.5 M)

Parking  
(60-75)

Outdoor  
Play & CRs

New Building  
(One Story)

Consider a new one-story  
building at top of slope  
(footprint approximately  
70,000 gsf)

## Booth Hill Elem.

Elev. 200'

Virtually unusable, change  
in grade of over 100 feet!

Outdoor  
Play & CRs

Parking  
(60-75)

Elev. 316'

New Building  
(Two Story)

Consider a new two-story  
building at top of slope  
(1<sup>st</sup> ~ 50K SF, 2<sup>nd</sup> ~ 20K SF)

## New Build Two Story

### Booth Hill Elementary

Grade Configuration: K-5  
Student Population: 528 Students  
Total Building Area: 71,516 GSF  
Total Project Cost: \$64.3 M

(Cost to Trumbull after reimbursement: \$49.5 M)

# Order of Magnitude Project Costs ~ New Construction



New K-5 ~ Booth Hill				
Grade Levels	Proj. Enr.	OSCG Standard.		
		2024-25 (Highest Enrollment)		
K	84	66,176		
Grade 1	81			
Grade 2	81			
Grade 3	89			
Grade 4	97			
Grade 5	96			
Total	528			
Max. Area Allowed	66,838	* with 1% mech increase		
New Building	71,516	GSF (5-7% gross up)		
Existing Building	53,660			
Project Cost Summary				
Scope of work	Amt.	Unit	Cost/Unit	Cost
Site Improvements	6.70	Acres	\$625,000	\$4,187,859
Parking Lot & Vehicular Circ. (2.25/1000)	120	spaces	\$9,250	\$1,110,000
Whole Building Haz. Mat. Abatement	53,660	sf	\$22.50	\$1,207,350
Whole Building Demolition	53,660	sf	\$17.50	\$939,050
New Construction	71,516	sf	\$525.00	\$37,546,112
Geothermal Bore Field	71,516	sf	\$18.50	\$1,323,053
Carbon Neutral & Netzero Premium	71,516	sf	\$15.00	\$1,072,746
Subtotal		Avg/sf	\$662.59	\$47,386,170
Soft Costs	19.5%			\$9,240,303
Cost Escalation (Mid point of const. 2026)	12.5%	4%/year		\$7,078,309
Phasing & Logistics Costs for Occupied Site	1.25%			\$592,327
Portable Lease Costs	0	mth/CR	\$1,500	\$0
Total Project Costs			\$899.05	\$64,297,109
State Reimbursement			24.29%	(\$15,617,768)
Ineligibles**			1.25%	\$803,714
Estimated Total Cost to Trumbull				\$49,483,055

## Booth Hill Elementary School

**New**

**Total Population: 528P**  
**Allowable Area: 66,838 SF**

**Site Improvements:** 120 parking spaces, play fields, outdoor educational space, age-appropriate play, bus/parent drop off

**Building:** Whole building demolition and abatement, new construction and Netzero/Carbon neutral premiums

**Total Project Costs: \$64,297,109**  
**Cost to Trumbull: \$49,483,055**

# Order of Magnitude Project Costs ~ Renovate as New



RNV K-5 ~ Booth Hill				
Grade Levels	Proj. Enr.	OSCG Standard.		
		2024-25 (Highest Enrollment)		
K	84	66,176		
Grade 1	81			
Grade 2	81			
Grade 3	89			
Grade 4	97			
Grade 5	96			
Total	528			
Max. Area Allowed	66,838	* with 1% mech increase		
Total Gross Building Area	71,516	GSF (5-7% gross up)		
RNV Building	39,334	Approximate 55% of total footprint		
Existing Building	53,660			
Project Cost Summary				
Scope of work	Amt.	Unit	Cost/Unit	Cost
Site Improvements	6.70	Acres	\$625,000	\$4,187,859
Parking Lot & Vehicular Circ. (2.25/1000)	120	spaces	\$9,250	\$1,110,000
Selective Building Haz. Mat. Abatement	39,334	sf	\$26.50	\$1,042,352
Whole Building Demolition with HazMat	14,326	sf	\$35.00	\$501,409
New Construction	32,182	sf	\$525.00	\$16,895,750
Existing Building Renovation	39,334	sf	\$450.00	\$17,700,310
Geothermal Bore Field	71,516	sf	\$18.50	\$1,323,053
Carbon Neutral & Netzero Premium	71,516	sf	\$15.00	\$1,072,746
Subtotal		Avg/sf	\$612.92	\$43,833,479
Phased Moving Costs	5	phase	\$125,000	\$625,000
Premium for Phased Work	1.5%			\$621,565
Soft Costs	19.5%			\$8,547,528
Cost Escalation (Mid point of const. Mar. 2026)	12.5%	4%/year		\$6,703,447
Portable Lease Costs	0	mth/CR	\$1,500	\$0
Total Project Costs			\$843.60	\$60,331,019
State Reimbursement			34.29%	(\$20,687,507)
Ineligibles**			2.50%	\$1,508,275
Estimated Total Cost to Trumbull				\$41,151,788

## Booth Hill Elementary School

**RNV**

**Total Population: 528P**  
**Allowable Area: 66,838 SF**

**Site Improvements:** 120 parking spaces, play fields, outdoor recreational and educational space, bus/parent drop off

**Building:** Addition (45%) and Renovation (55%), abatement, phasing & logistics and Netzero/Carbon neutral premiums

**Total Project Costs: \$60,331,019**  
**Cost to Trumbull: \$41,151,788**

Total Acreage ~ 16.96, nearly half (8.41 acres) is inaccessible or not buildable

Wetlands soils, likely unusable and not passable, grade change is also substantial

# DANIELS FARM ELEMENTARY

COSTS FOR NEW & RNV

# Site Capacity & Analysis ~ Phased Implementation of New on Existing Site



## Daniels Farm Elem.

Total Acreage ~ 16.96, nearly half (8.41 acres) is inaccessible or not buildable

Wetlands soils, likely unusable and not passable, grade change is also substantial

Elev. 480'

Parking  
(100-120)

Outdoor  
Play & CRs

Elev. 440'

Outdoor  
Education

Consider a new two-story building at top of slope  
(1<sup>st</sup> ~ 40K SF, 2<sup>nd</sup> ~ 25K SF)

## New Build Two Story

### Daniels Farm Elementary

Grade Configuration:	K-5
Student Population:	506 Students
Total Building Area:	68,537 GSF
Total Project Cost:	\$63.1 M

(Cost to Trumbull after reimbursement: \$48.6 M)

# Order of Magnitude Project Costs ~ New Construction



New K-5 ~ Daniels Farm				
Grade Levels	Proj. Enr.	OSCG Standard.		
		2032-33 (Highest Enrollment)		
K	76	63,419		
Grade 1	84			
Grade 2	85			
Grade 3	86			
Grade 4	87			
Grade 5	88			
Total	506			
Max. Area Allowed	64,053	* with 1% mech increase		
New Building	68,537	GSF (5-7% gross up)		
Existing Building	61,480			
Project Cost Summary				
Scope of work	Amt.	Unit	Cost/Unit	Cost
Site Improvements	7.51	Acres	\$625,000	\$4,695,434
Parking Lot & Vehicular Circ. (2.25/1000)	120	spaces	\$9,250	\$1,110,000
Whole Building Haz. Mat. Abatement	61,480	sf	\$22.50	\$1,383,300
Whole Building Demolition	61,480	sf	\$17.50	\$1,075,900
New Construction	68,537	sf	\$525.00	\$35,981,690
Geothermal Bore Field	68,537	sf	\$18.50	\$1,267,926
Carbon Neutral & Netzero Premium	68,537	sf	\$15.00	\$1,028,048
Subtotal		Avg/sf	\$679.09	\$46,542,299
Soft Costs	19.5%			\$9,075,748
Cost Escalation (Mid point of const. 2026)	12.5%	4%/year		\$6,952,256
Phasing & Logistics Costs for Occupied Site	1.25%			\$581,779
Portable Lease Costs	0	mth/CR	\$1,500	\$0
Total Project Costs			\$921.44	\$63,152,082
State Reimbursement			24.29%	(\$15,339,641
Ineligibles**			1.25%	\$789,401
Estimated Total Cost to Trumbull				\$48,601,843

## Daniels Farm Elementary

**New**

**Total Population: 506P**  
**Allowable Area: 64,053 SF**

**Site Improvements:** 120 parking spaces, play fields, outdoor educational space, age-appropriate play, bus/parent drop off

**Building:** Whole building demolition and abatement, new construction and Netzero/Carbon neutral premiums

**Total Project Costs: \$63,152,082**  
**Cost to Trumbull: \$48,601,843**

# Order of Magnitude Project Costs ~ Renovate as New



RNV K-5 ~ Daniels Farm				
Grade Levels	Proj. Enr.	OSCG Standard.		
		2032-33 (Highest Enrollment)		
K	76	63,419		
Grade 1	84			
Grade 2	85			
Grade 3	86			
Grade 4	87			
Grade 5	88			
Total	506			
Max. Area Allowed	64,053	* with 1% mech increase		
Total Gross Building Area	68,537	GSF (5-7% gross up)		
RNV Building	37,695	Approximate 55% of total footprint		
Existing Building	61,480			
Project Cost Summary				
Scope of work	Amt.	Unit	Cost/Unit	Cost
Site Improvements	7.51	Acres	\$625,000	\$4,695,434
Parking Lot & Vehicular Circ. (2.25/1000)	120	spaces	\$9,250	\$1,110,000
Selective Building Haz. Mat. Abatement	37,695	sf	\$26.50	\$998,920
Whole Building Demolition with HazMat	23,785	sf	\$35.00	\$832,471
New Construction	30,841	sf	\$525.00	\$16,191,761
Existing Building Renovation	37,695	sf	\$450.00	\$16,962,797
Geothermal Bore Field	68,537	sf	\$18.50	\$1,267,926
Carbon Neutral & Netzero Premium	68,537	sf	\$15.00	\$1,028,048
Subtotal		Avg/sf	\$628.68	\$43,087,358
Phased Moving Costs	5	phase	\$125,000	\$625,000
Premium for Phased Work	1.5%			\$611,871
Soft Costs	19.5%			\$8,402,035
Cost Escalation (Mid point of const. Mar. 2026)	12.5%	4%/year		\$6,590,783
Portable Lease Costs	0	mth/CR	\$1,500	\$0
Total Project Costs			\$865.48	\$59,317,047
State Reimbursement			34.29%	(\$20,339,815)
Ineligibles**			2.50%	\$1,482,926
Estimated Total Cost to Trumbull				\$40,460,158

## Daniels Farm Elementary

**RNV**

**Total Population: 506P**  
**Allowable Area: 64,053 SF**

**Site Improvements:** 120 parking spaces, play fields, outdoor recreational and educational space, bus/parent drop off

**Building:** Addition (45%) and Renovation (55%), abatement, phasing & logistics and Netzero/Carbon neutral premiums

**Total Project Costs: \$59,317,047**  
**Cost to Trumbull: \$40,460,158**



**JANE RYAN ELEMENTARY**  
COSTS FOR NEW & RNV

*Elev. 450'*

*Virtually unusable, change in grade of over 40 feet!*

*Elev. 408'*

*Possible bus drop off location*

*Keep Play Area*

*Parking (60-75)*

*Maintain buffer and create outdoor education & recreation/break*

*Elev. 399' (Two Story)*

# Site Capacity & Analysis ~ New Concept



Tecton  
ARCHITECTS

*Jane Ryan Elem.*



*New Build One Story*

*Jane Ryan Elementary*

Grade Configuration:	K-5
Student Population:	479 Students
Total Building Area:	64,879 GSF
Total Project Cost:	\$62.0 M

(Cost to Trumbull after reimbursement: \$47.7 M)

# Site Capacity & Analysis ~ New Concept



Tecton  
ARCHITECTS

*Jane Ryan Elem.*



*New Build Two Story*

*Jane Ryan Elementary*

Grade Configuration:	K-5
Student Population:	479 Students
Total Building Area:	64,879 GSF
Total Project Cost:	\$62.0 M

(Cost to Trumbull after reimbursement: \$47.7 M)

# Order of Magnitude Project Costs ~ New Construction



New K-5 ~ Jane Ryan				
Grade Levels	Proj. Enr.	OSCG Standard.		
		2029-30 (Highest Enrollment)		
K	76	60,035		
Grade 1	77			
Grade 2	78			
Grade 3	79			
Grade 4	82			
Grade 5	87			
Total	479			
Max. Area Allowed	60,635	* with 1% mech increase		
New Building	64,879	GSF (5-7% gross up)		
Existing Building	46,430			
Project Cost Summary				
Scope of work	Amt.	Unit	Cost/Unit	Cost
Site Improvements	10.34	Acres	\$625,000	\$6,459,409
Parking Lot & Vehicular Circ. (2.25/1000)	120	spaces	\$9,250	\$1,110,000
Whole Building Haz. Mat. Abatement	46,430	sf	\$22.50	\$1,044,675
Whole Building Demolition	46,430	sf	\$17.50	\$812,525
New Construction	64,879	sf	\$525.00	\$34,061,719
Geothermal Bore Field	64,879	sf	\$18.50	\$1,200,270
Carbon Neutral & Netzero Premium	64,879	sf	\$15.00	\$973,192
Subtotal		Avg/sf	\$703.79	\$45,661,790
Soft Costs	19.5%			\$8,904,049
Cost Escalation (Mid point of const. 2026)	12.5%	4%/year		\$6,820,730
Phasing & Logistics Costs for Occupied Site	1.25%			\$570,772
Portable Lease Costs	0	mth/CR	\$1,500	\$0
Total Project Costs			\$954.96	\$61,957,342
State Reimbursement			24.29%	(\$15,049,438)
Ineligibles**			1.25%	\$774,467
Estimated Total Cost to Trumbull				\$47,682,370

## Jane Ryan Elementary

**New**

**Total Population: 479P**  
**Allowable Area: 60,635 SF**

**Site Improvements:** 120 parking spaces, play fields, outdoor educational space, age-appropriate play, bus/parent drop off

**Building:** Whole building demolition and abatement, new construction and Netzero/Carbon neutral premiums

**Total Project Costs: \$61,957,342**  
**Cost to Trumbull: \$47,682,370**

# Order of Magnitude Project Costs ~ Renovate as New



RNV K-5 ~ Jane Ryan				
Grade Levels	Proj. Enr.	OSCG Standard.		
		2029-30 (Highest Enrollment)		
K	76	60,035		
Grade 1	77			
Grade 2	78			
Grade 3	79			
Grade 4	82			
Grade 5	87			
Total	479			
Max. Area Allowed	60,635	* with 1% mech increase		
Total Gross Building Area	64,879	GSF (5-7% gross up)		
RNV Building	35,684	Approximate 55% of total footprint		
Existing Building	46,430			
Project Cost Summary				
Scope of work	Amt.	Unit	Cost/Unit	Cost
Site Improvements	10.34	Acres	\$625,000	\$6,459,409
Parking Lot & Vehicular Circ. (2.25/1000)	120	spaces	\$9,250	\$1,110,000
Selective Building Haz. Mat. Abatement	35,684	sf	\$26.50	\$945,618
Whole Building Demolition with HazMat	10,746	sf	\$35.00	\$376,120
New Construction	29,196	sf	\$525.00	\$15,327,773
Existing Building Renovation	35,684	sf	\$450.00	\$16,057,667
Geothermal Bore Field	64,879	sf	\$18.50	\$1,200,270
Carbon Neutral & Netzero Premium	64,879	sf	\$15.00	\$973,192
Subtotal		Avg/sf	\$654.29	\$42,450,051
Phased Moving Costs	5	phase	\$125,000	\$625,000
Premium for Phased Work	1.5%			\$604,149
Soft Costs	19.5%			\$8,277,760
Cost Escalation (Mid point of const. Mar. 2026)	12.5%	4%/year		\$6,494,620
Portable Lease Costs	0	mth/CR	\$1,500	\$0
Total Project Costs			\$900.93	\$58,451,580
State Reimbursement			34.29%	(\$20,043,047)
Ineligibles**			2.50%	\$1,461,289
Estimated Total Cost to Trumbull				\$39,869,822

## Jane Ryan Elementary

**RNV**

**Total Population:** 479P  
**Allowable Area:** 60,635 SF

**Site Improvements:** 120 parking spaces, play fields, outdoor recreational and educational space, bus/parent drop off

**Building:** Addition (45%) and Renovation (55%), abatement, phasing & logistics and Netzero/Carbon neutral premiums

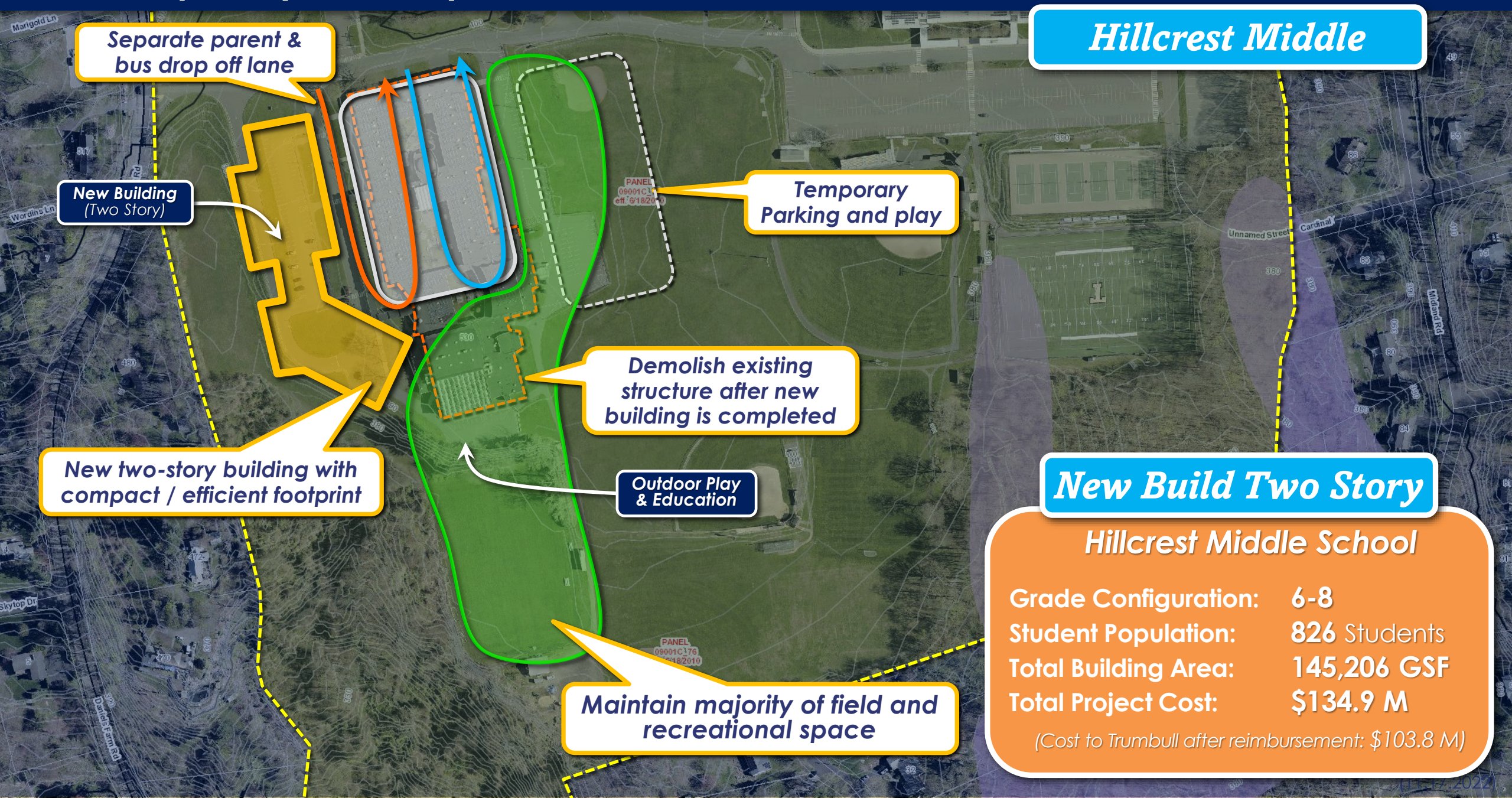
**Total Project Costs:** \$58,451,580  
**Cost to Trumbull:** \$39,869,822



# HILLCREST MIDDLE SCHOOL

*COSTS FOR NEW & RNV*

# Site Capacity & Analysis ~ New Build Option



## Hillcrest Middle

## New Build Two Story

### Hillcrest Middle School

Grade Configuration:	6-8
Student Population:	826 Students
Total Building Area:	145,206 GSF
Total Project Cost:	\$134.9 M

(Cost to Trumbull after reimbursement: \$103.8 M)

Separate parent & bus drop off lane

New Building  
(Two Story)

New two-story building with compact / efficient footprint

Temporary  
Parking and play

Demolish existing  
structure after new  
building is completed

Outdoor Play  
& Education

Maintain majority of field and recreational space

# Order of Magnitude Project Costs ~ New Construction



## New 6-8 ~ Hillcrest Middle School

Grade Levels	Proj. Enr.	OSCG Standard.		
		2024-25 (Highest Enrollment)		
Grade 6	271	134,363		
Grade 7	264			
Grade 8	291			
Total	826			
Max. Area Allowed	135,706	* with 1% mech increase		
New Building	145,206	GSF (5-7% gross up)		
Existing Building	117,000			
Project Cost Summary				
Scope of work	Amt.	Unit	Cost/Unit	Cost
Site Improvements	21.97	Acres	\$425,000	\$9,337,541
Parking Lot & Vehicular Circ. (2.25/1000)	150	spaces	\$9,250	\$1,387,500
Whole Building Haz. Mat. Abatement	117,000	sf	\$22.50	\$2,632,500
Whole Building Demolition	117,000	sf	\$17.50	\$2,047,500
New Construction	145,206	sf	\$545.00	\$79,137,125
Geothermal Bore Field	145,206	sf	\$18.50	\$2,686,306
Carbon Neutral & Netzero Premium	145,206	sf	\$15.00	\$2,178,086
Subtotal		Avg/sf	\$684.59	\$99,406,558
Soft Costs	19.5%			\$19,384,279
Cost Escalation (Mid point of const. 2026)	12.5%	4%/year		\$14,848,855
Phasing & Logistics Costs for Occupied Site	1.25%			\$1,242,582
Portable Lease Costs	0	mth/CR	\$1,500	\$0
Total Project Costs			\$928.90	\$134,882,273
State Reimbursement			24.29%	(\$32,762,904)
Ineligibles**			1.25%	\$1,686,028
Estimated Total Cost to Trumbull				\$103,805,397

## Hillcrest Middle School

**New**

**Total Population: 826P**

**Allowable Area: 135,706 SF**

**Site Improvements:** 150 parking spaces, play fields, outdoor recreational and educational space, bus/parent drop off

**Building:** Whole building demolition and abatement, new construction and Netzero/Carbon neutral premiums

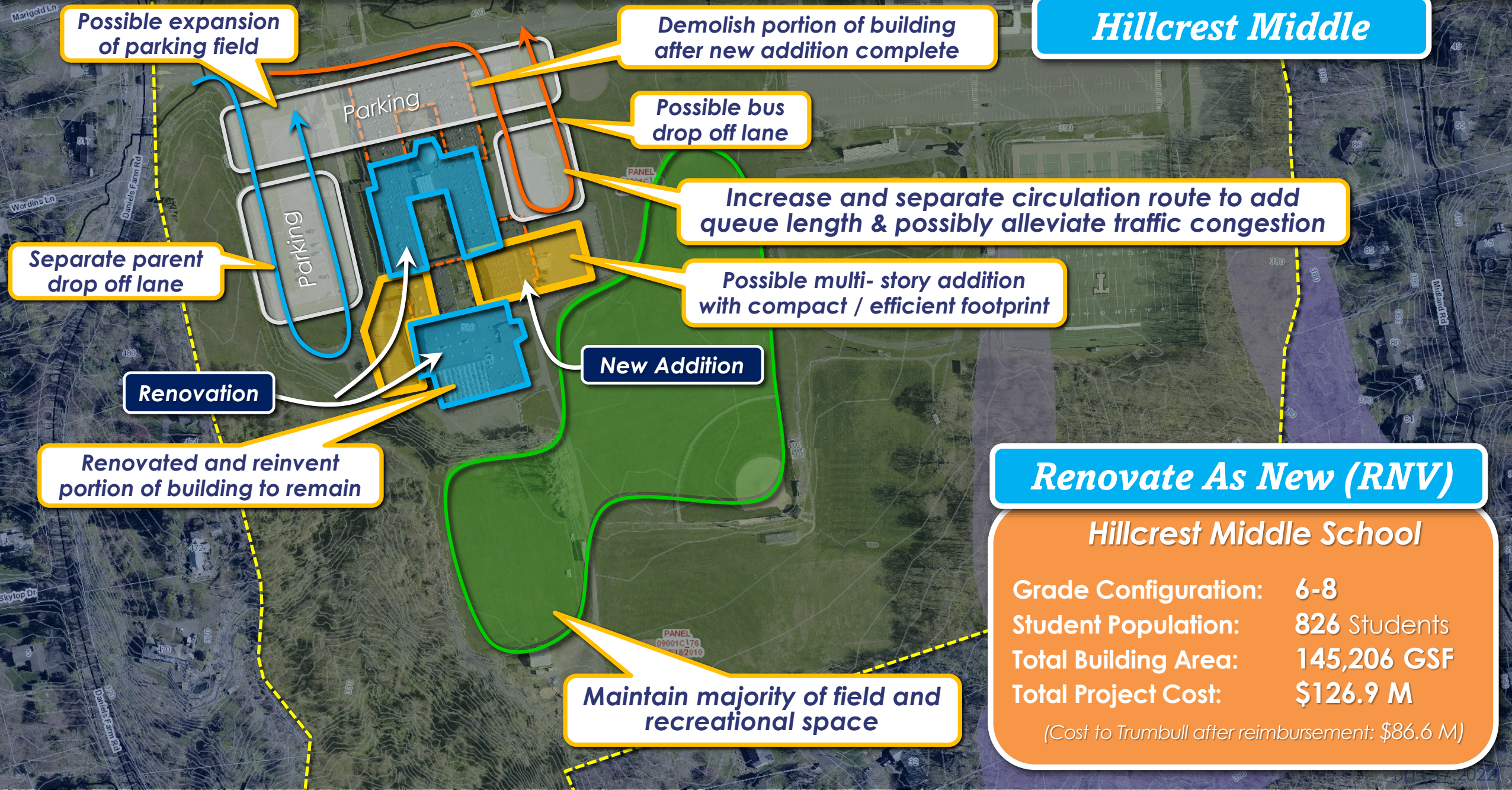
**Total Project Costs: \$134,882,273**  
**Cost to Trumbull: \$103,805,397**

# Site Capacity & Analysis ~ Renovation as New Concept



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## Hillcrest Middle



## Renovate As New (RNV)

### Hillcrest Middle School

Grade Configuration:	6-8
Student Population:	826 Students
Total Building Area:	145,206 GSF
Total Project Cost:	\$126.9 M

(Cost to Trumbull after reimbursement: \$86.6 M)

# Order of Magnitude Project Costs ~ Renovate as New



RNV 6-8 ~ Hillcrest Middle School (Occupied)				
Grade Levels	Proj. Enr.	OSCG Standard.		
		2024-25 (Highest Enrollment)		
Grade 6	271	134,363		
Grade 7	264			
Grade 8	291			
Total	826			
Max. Area Allowed	135,706	* with 1% mech increase		
Total Gross Building Area	145,206	GSF (5-7% gross up)		
RNV Building	79,863	Approximate 55% of total footprint		
Existing Building	117,000			
Project Cost Summary				
Scope of work	Amt.	Unit	Cost/Unit	Cost
Site Improvements	21.97	Acres	\$525,000	\$11,534,609
Parking Lot & Vehicular Circ. (2.25/1000)	150	spaces	\$9,250	\$1,387,500
Selective Building Haz. Mat. Abatement	79,863	sf	\$26.50	\$2,116,374
Whole Building Demolition with HazMat	37,137	sf	\$35.00	\$1,299,790
New Construction	65,343	sf	\$545.00	\$35,611,706
Existing Building Renovation	79,863	sf	\$450.00	\$35,938,419
Geothermal Bore Field	145,206	sf	\$18.50	\$2,686,306
Carbon Neutral & Netzero Premium	145,206	sf	\$15.00	\$2,178,086
Subtotal		Avg/sf	\$638.77	\$92,752,790
Phased Moving Costs	5	phase	\$125,000	\$625,000
Premium for Phased Work	1.5%			\$1,318,326
Soft Costs	19.5%			\$18,086,794
Cost Escalation (Mid point of const. Mar. 2026)	12.5%	4%/year		\$14,097,864
Portable Lease Costs	0	mth/CR	\$1,500	\$0
Total Project Costs			\$873.80	\$126,880,774
State Reimbursement			34.29%	(\$43,507,417)
Ineligibles**			2.50%	\$3,172,019
Estimated Total Cost to Trumbull				\$86,545,376

## Hillcrest Middle School

**RNV**

**Total Population: 826P**

**Allowable Area: 135,706 SF**

**Site Improvements:** 150 parking spaces, play fields, outdoor recreational and educational space, bus/parent drop off

**Building:** Addition (45%) and Renovation (55%), abatement, phasing & logistics and Netzero/Carbon neutral premiums

**Total Project Costs: \$126,880,774**  
**Cost to Trumbull: \$86,545,376**

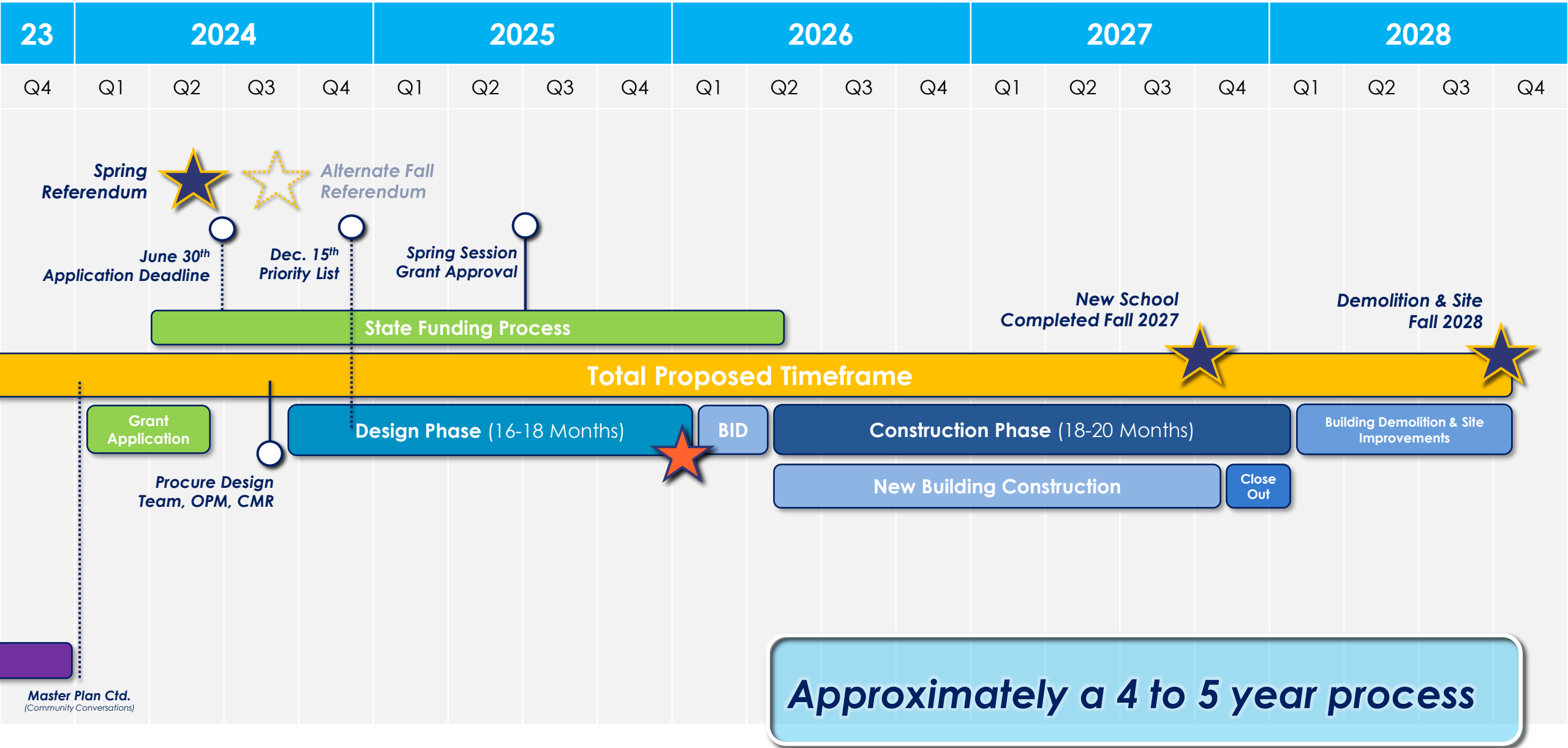
23	2024				2025				2026				2027				2028			
Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4



SCHEDULES  
FOR NEW & RNV

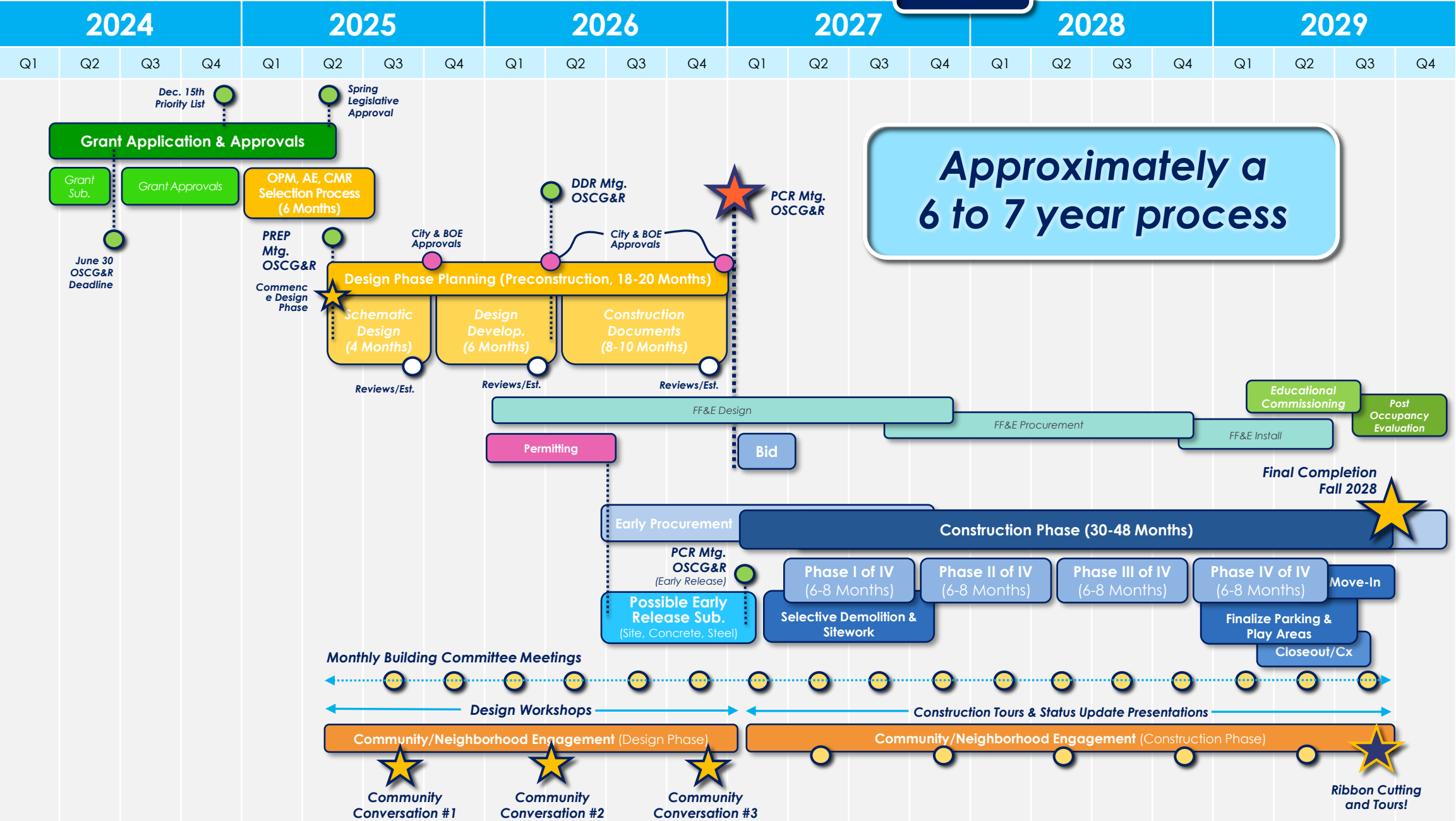
# Putting It Into Perspective ~ Milestone Schedule

New



# Putting It Into Perspective ~ Milestone Schedule

RNV



## Chapter 173, Sec. 10-285a. Percentage determination for school building project grants. ....

for grants approved pursuant to section 10-283 for which application is made on and after June 1, 2022, (i) each town shall be ranked in descending order from one to one hundred sixty-nine according to the adjusted equalized net grand list per capita, as defined in section 10-261, of the town two, three and four years prior to the fiscal year in which application is made, and (ii) based upon such ranking, (I) a percentage of not less than ten nor more than seventy shall be determined for new construction or replacement of a school building for each town on a continuous scale, and **(II) a percentage of not less than twenty nor more than eighty shall be determined for renovations, extensions, code violations, roof replacements and major alterations of an existing school building and the new construction or replacement of a school building when a town or regional school district can demonstrate that a new construction or replacement is less expensive than a renovation, extension or major alteration of an existing school building for each town on a continuous scale.**

***If costs between New and RNV are similar....consider requesting higher reimbursement rate for New (34.29%)***

# Costs Analysis New vs. Renovate Like New

**Hillcrest Middle School**

826 +/- Students



**Tecton**  
ARCHITECTS

Topic for Consideration	Value Delta	Renovate Like New With Addition	New Building
<b>Construction Costs</b>	<b>\$6,704,015</b>	<b>\$108,793,979</b>	<b>\$115,497,994</b>
Possibility of unforeseen conditions, conflicts, and cost increases	<b>-\$2,041,799</b>	Somewhat Likely, est. 3-5% of const. <b>\$4,351,759</b>	Somewhat limited, est. 1-3% of const. <b>\$2,309,960</b>
<b>General Conditions Analysis</b> (Typically range between 5-10% of construction)	<b>-\$2,928,619</b>	48 Months (uses 8%) <b>\$8,703,518</b>	24 Months (uses 5%) <b>\$5,774,900</b>
<b>Temp. Facilities, Field Off., Admin. exp.</b> (Typically between \$25,000 ~ \$35,000 per/month)	<b>-\$720,000</b>	48 Months <b>\$1,440,000</b>	24 Months <b>\$720,000</b>
<b>Temporary Modulares &amp; Swing Space</b>	<b>-\$1,176,000</b>	(8 Modular Classrooms) <b>\$24,500/mth x 48 mths.</b>	<b>\$0</b>
<b>Multiple Move Costs</b>	<b>-\$328,750</b>	(6 Total phased moves) <b>6 @ 65,750 each</b>	<b>1 Move @ 65,750</b>
<b>Subtotal of Value Lost</b>	<b>-\$7,195,168</b>	<b>+7,195,168</b>	<b>Less than or equal to!</b>
<b>Delta in Resultant Value</b>	<b>(\$491,153)</b>	<b>\$115,989,147</b>	<b>115,497,994</b>



**Tecton**  
ARCHITECTS

# IMAGINING POSSIBILITIES

*FOR TRUMBULL'S SCHOOL FACILITIES*

TRUMBULL, CT

## **BOE Retreat #2**

Cooperative Educational Services

July 26, 2023