“Rational Basis” Decision Making Overview

Decision Statement

"How do we eliminate portable classrooms at Hadley? "

Mandatory Criteria

- Definition: Outcomes which MUST be satisfied by the final solution

Mandatory Criteria

Examples:

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Examples:

- Portable Classrooms must disappear

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- Portable Classrooms must disappear
- Solution must fit within current site

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- Solution must be fit within current site
- Attendance boundaries will not change

Mandatory Criteria

Examples:

- Portable Classrooms must disappear
- Solution must be fit within current site
- Attendance boundaries will not change
- No reduction in program capacity

Relevant Objectives

- Definition – Criteria that establish the relevant parameters of the solution

Relevant Objectives

Examples:

Relevant Objectives

Examples:

- Impact on Green Space

Relevant Objectives

Examples:

- Impact on Green Space
- Impact on Existing Building

Relevant Objectives

Examples:

- Impact on Green Space
- Impact on Existing Building
- Implementation Timeline

Relevant Objectives

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- Impact on Green Space
- Impact on Existing Building
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- First Cost Impact

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- Operating Cost Impacts – Energy, Maintenance, Capital

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- Building Disruption during Implementation

Relevant Objectives

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- Impact on Green Space
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- First Cost Impact
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- Aesthetics
- Building Disruption during Implementation
- Property Tax Impacts

Relevant Objectives

Examples:

- Impact on Green Space
- Impact on Existing Building
- Implementation Timeline
- First Cost Impact
- Operating Cost Impacts – Energy, Maintenance, Capital
- Aesthetics
- Building Disruption during Implementation
- Property Tax Impacts
- Student Access During Construction

Relevant Objectives

Examples:

- Impact on Green Space
- Impact on Existing Building
- Implementation Timeline
- First Cost Impact
- Operating Cost Impacts – Energy, Maintenance, Capital
- Aesthetics
- Building Disruption during Implementation
- Property Tax Impacts
- Student Access During Construction
- Future Program Flexibility

Relevant Objectives

Examples:

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- Impact on Existing Building
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- First Cost Impact
- Operating Cost Impacts – Energy, Maintenance, Capital
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- Building Disruption during Implementation
- Property Tax Impacts
- Student Access During Construction
- Future Program Flexibility
- Constructability

Relevant Objectives

Examples:

- Impact on Green Space
- Impact on Existing Building
- Implementation Timeline
- First Cost Impact
- Operating Cost Impacts – Energy, Maintenance, Capital
- Aesthetics
- Building Disruption during Implementation
- Property Tax Impacts
- Student Access During Construction
- Future Program Flexibility
- Constructability
- Operational Disruption

Solutions

Examples:

Solutions

Examples:

- Maintain Status Quo – Do Nothing

Solutions

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- Build 10 New Classrooms on Grade

Solutions

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- Build 10 New Classrooms above existing Classrooms

Solutions

Examples:

- Maintain Status Quo – Do Nothing
- Build 10 New Classrooms on Grade
- Build 10 New Classrooms above existing Classrooms
- Reconfigure existing space to add 10 new classrooms

Analysis

- Measure proposed solutions v. mandatory criteria

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- Solution must satisfy ALL mandatory criteria

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- Measure proposed solutions v. mandatory criteria
- Solution must satisfy ALL mandatory criteria
- Solution does not satisfy mandatory criteria = DOA

Analysis

MANDATORY CRITERIA DECISION MATRIX					
PROPOSED SOLUTION	ELIMINATES PORTABLES	FITS ON CURRENT SITE	ATTENDANCE BOUNDARIES	EDUCATION PROGRAM CAPACITY UNCHANGED	GO/NO GO
Maintain Status Quo - Do Nothing	No	Yes	Yes	Yes	NO GO
Build 10 Classrooms on Grade	Yes	Yes	Yes	Yes	GO
Build 10 Classrooms above Existing	Yes	Yes	Yes	Yes	GO
Re-work Interior Space	Yes	Yes	Yes	Yes	GO

Analysis

- Measure proposed solutions v. mandatory criteria
- Solution must satisfy ALL mandatory criteria
- Solution does not satisfy mandatory criteria = DOA
- Solutions that satisfy mandatory criteria move to the next step

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- Analyze solutions v. relevant objectives
- Move on to Scoring Analysis

Scoring Analysis

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Scoring Analysis

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- “Weighting factor” assigns the relative importance of each objective
- Each solution is analyzed and rated from 1 – 10 versus objectives
- “Weighting Factor” times rating = Final Score
- Final scores added to give Total score

Scoring Analysis

RELEVANT OBJECTIVES EVALUATION MATRIX				
RELEVANT OBJECTIVES	WEIGHTING FACTOR	PROPOSED SOLUTIONS		
		BUILD 10 CLASSROOMS ON GRADE	BUILD 10 CLASSROOMS ABOVE EXISTING	REWORK INTERIOR SPACE
Green Space Impact	3	3	10	10
		9	**30**	**30**
Existing Building Impact	3	9	5	2
		27	**15**	**6**
Implementation Timeline	2	3	5	8
		6	**10**	**16**
First cost Impact	4	6	7	8
		24	**28**	**32**
Operating cost Impact	7	5	7	9
		35	**49**	**63**
Aesthetics	2	8	8	10
		16	**16**	**20**
Building Disruption	5	9	5	2
		45	**25**	**10**
Property Tax Impact	8	5	7	9
		40	**56**	**72**
Student Access	5	10	5	2
		50	**25**	**10**
Future Program Flexibilty	8	10	10	7
		80	**80**	**56**
ConstructabIlity	3	9	5	7
		27	**15**	**21**
Operational Disruption	5	9	7	5
		45	**35**	**25**
TOTAL SCORE		**404**	**384**	**361**

Risk Assessment

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  Major enrollment swings

Risk Assessment

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- “What can go wrong?”
- Solutions rated on a scale of “low, medium or high” in each category
- Example
  - Referendum fails
  - Major enrollment swings
  - Zoning Modification

Risk Assessment

RISK ASSESSMENT MATRIX				
PROPOSED SOLUTION		FAILED REFERENDUM	MAJOR ENROLLMENT CHANGE	ZONING MODIFICATION
Build 10 Classrooms on Grade	PROBABILITY	High	Low	Low
	SERIOUSNESS	High	Low	High
Build 10 Classrooms above Existing	PROBABILITY	High	Low	Low
	SERIOUSNESS	High	Low	Medium
Rework Interior Space	PROBABILITY	Low	Low	Low
	SERIOUSNESS	Low	Low	Low

Final Recommendation

- At the conclusion of the process, the committee presents their final recommendation solution to the Board of Education