

**JACOBS**



# Jacobs

# *Recommendations*

## FOR CONSIDERATION

SEPTEMBER  
**2017**

Presentation for:

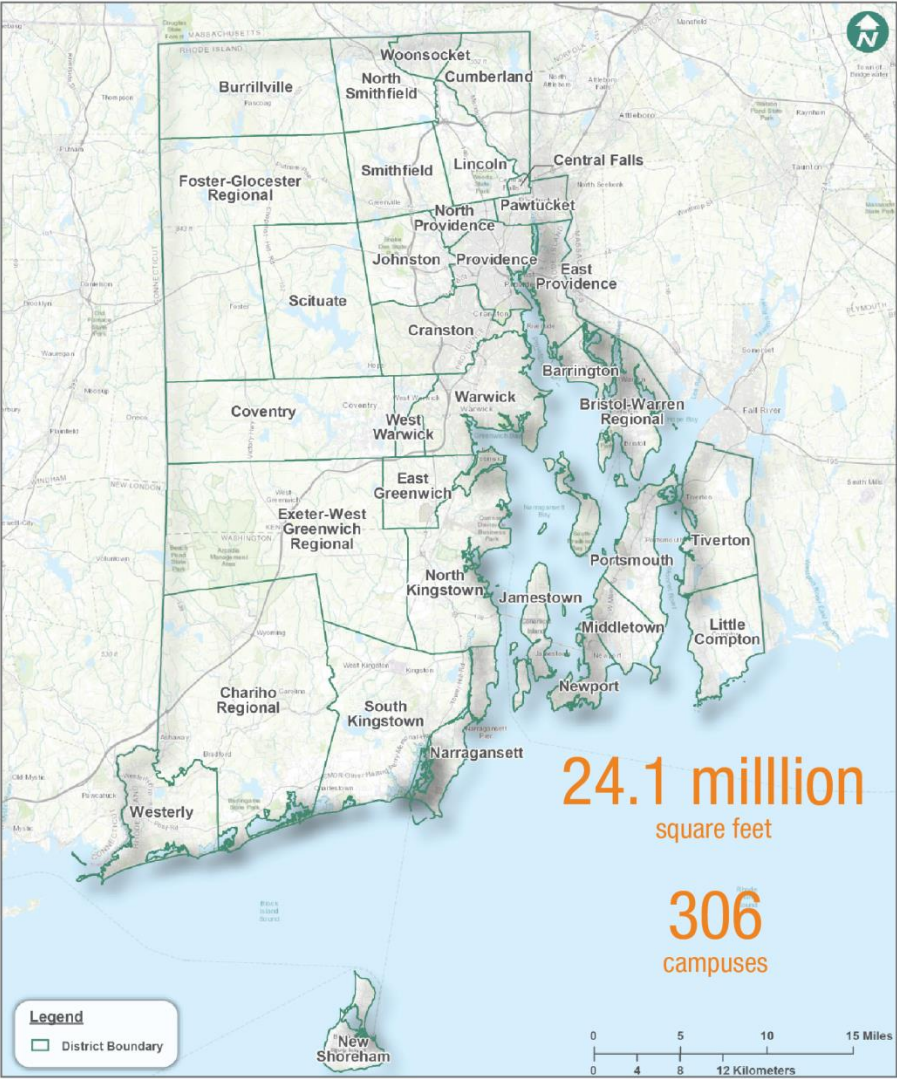
**Statewide Facilities Assessment & Planning Services**  
**Governor Task Force Session – September 29, 2017**

School Building Authority  
at the Rhode Island Department of Education



## Purpose

- Introduce the Process
- Facility Condition Assessment Findings
  - Statewide Need
- Current Funding Programs



# Facility Condition Assessment



- Multi Disciplined Assessment Teams
  - Facility Condition
  - Technology
  - Hazardous Materials
  - Traffic Analysis
  - Acoustics Assessment
  - Energy Analysis
- Educational Program Space Assessment
- Capacity/Utilization Analysis

STATEWIDE CONDITION  
SUMMARY

50,500  
DEFICIENCIES FOUND

24,800  
TOTAL LIFE CYCLE COST ITEMS

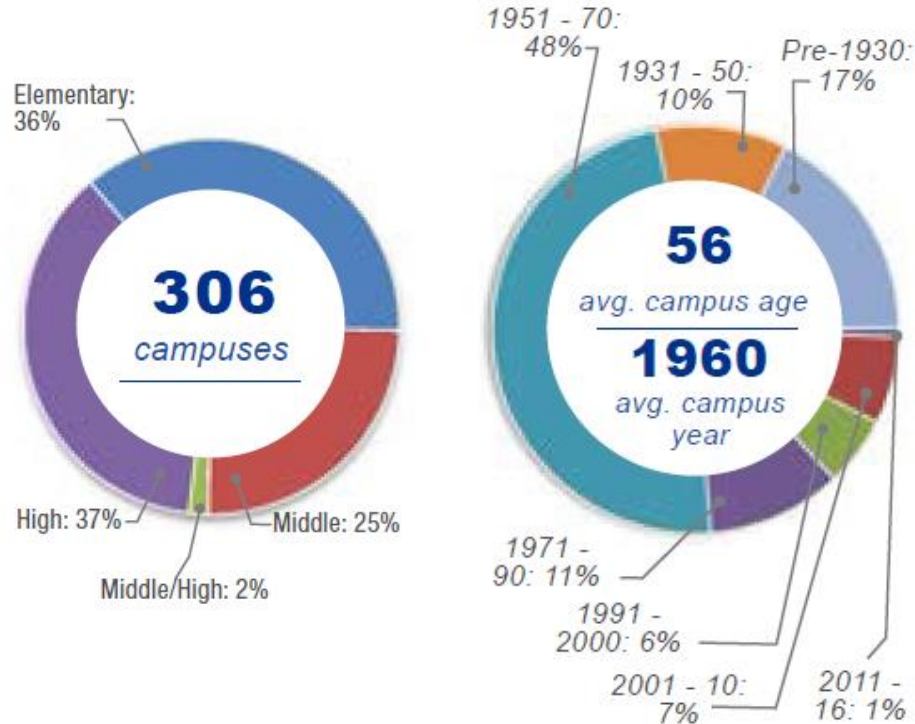


Corroded steel windows  
*East Providence High School*

## Facility Condition Assessment

- Facility condition assessment **evaluates the general health** of physical facilities
- Condition assessment data:
  - Prioritize deficiencies and life cycle costs based on impact to facility/learning environment
  - Calculate Facility Condition Index





| School Type                  | Campuses   | Building SF       |
|------------------------------|------------|-------------------|
| Preschool                    | 6          | 175,047           |
| Kindergarten - Eighth Grade  | 5          | 197,912           |
| Kindergarten - Twelfth Grade | 4          | 265,036           |
| Elementary Schools           | 177        | 8,574,661         |
| Middle Schools               | 50         | 5,809,766         |
| Middle / High Schools        | 4          | 399,144           |
| High Schools                 | 60         | 8,691,125         |
| <b>Total</b>                 | <b>306</b> | <b>24,112,691</b> |



## Facility Condition Assessment

| CONDITION ASSESSMENT FINDINGS                              |                         |
|--|-------------------------|
| PRIORITY 1 & 2 FACILITY DEFICIENCIES<br>(WARM, SAFE & DRY) | + \$ 627.6<br>Million   |
| PRIORITY 3, 4 & 5 FACILITY DEFICIENCIES                    | + \$ 1,595.1<br>Million |
| FACILITY DEFICIENCY COST                                   | \$ 2,222.7<br>Million   |

- **Priority 1 – Mission Critical Concerns:** may directly affect the school's ability to remain open or deliver the educational curriculum.
  - Building safety, code compliance, severely damaged or failing building components
  - Fire alarm system replacement.
- **Priority 2 – Indirect Impact to Educational Mission:** Items that may progress to Priority 1 if not addressed in the near term.
  - Inadequate roofing and window replacements.

## Combined Five Year Need

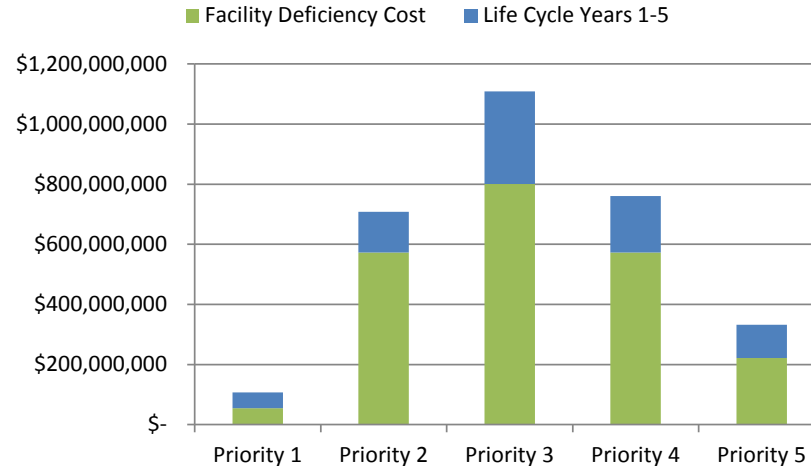
### CONDITION ASSESSMENT FINDINGS

**\$2,222.7 MILLION**  
FACILITY DEFICIENCY  
COST

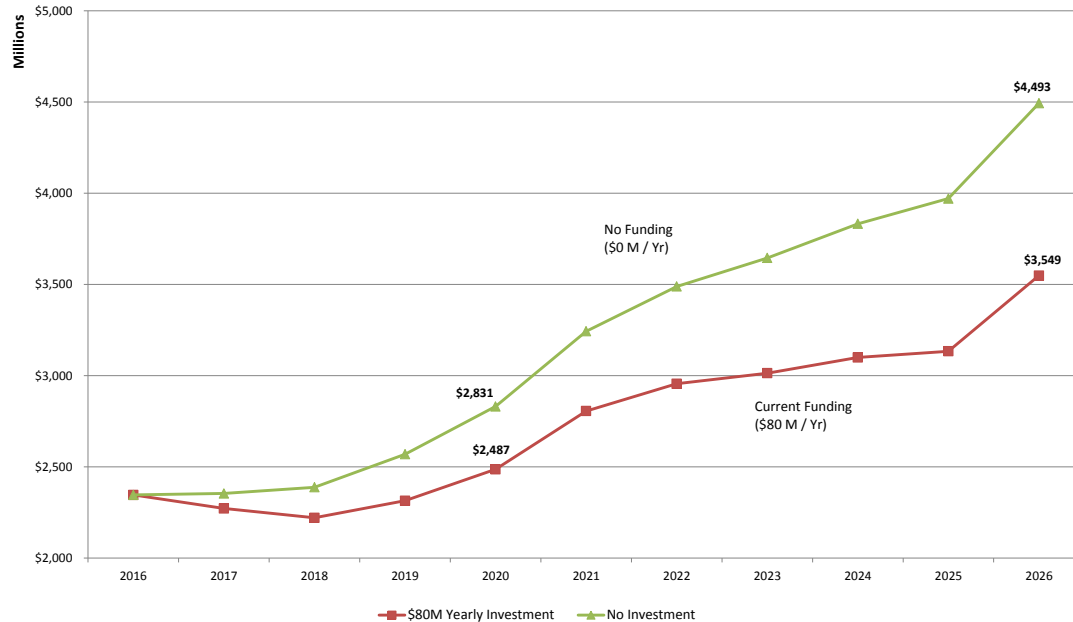
**\$793 MILLION**  
5-YR LIFE CYCLE  
FORECAST

**\$3,016.2 MILLION**  
COMBINED 5-YR  
NEED

- Combines current deficiencies costs and five year life cycle renewal costs
- Provides a more comprehensive analysis of the facility needs statewide



# Funding Based on Condition Need Only



## Current Funding

- Inadequately addresses
  - Warm, Safe, Dry Environments
  - Educationally appropriate spaces
    - Technology, FF&E
    - Suitable lighting
    - Appropriate acoustics
- Not improving overall conditions

## Moratorium on Funding

- Amplifies issues



## Statewide Deficiencies by Priority

● P1\_Cost 
 ● P2\_Cost 
 ● P3\_Cost 
 ● P4\_Cost 
 ● P5\_Cost

\$400M

\$350M

\$300M

\$250M

\$200M

\$150M

\$100M

\$50M

\$0M



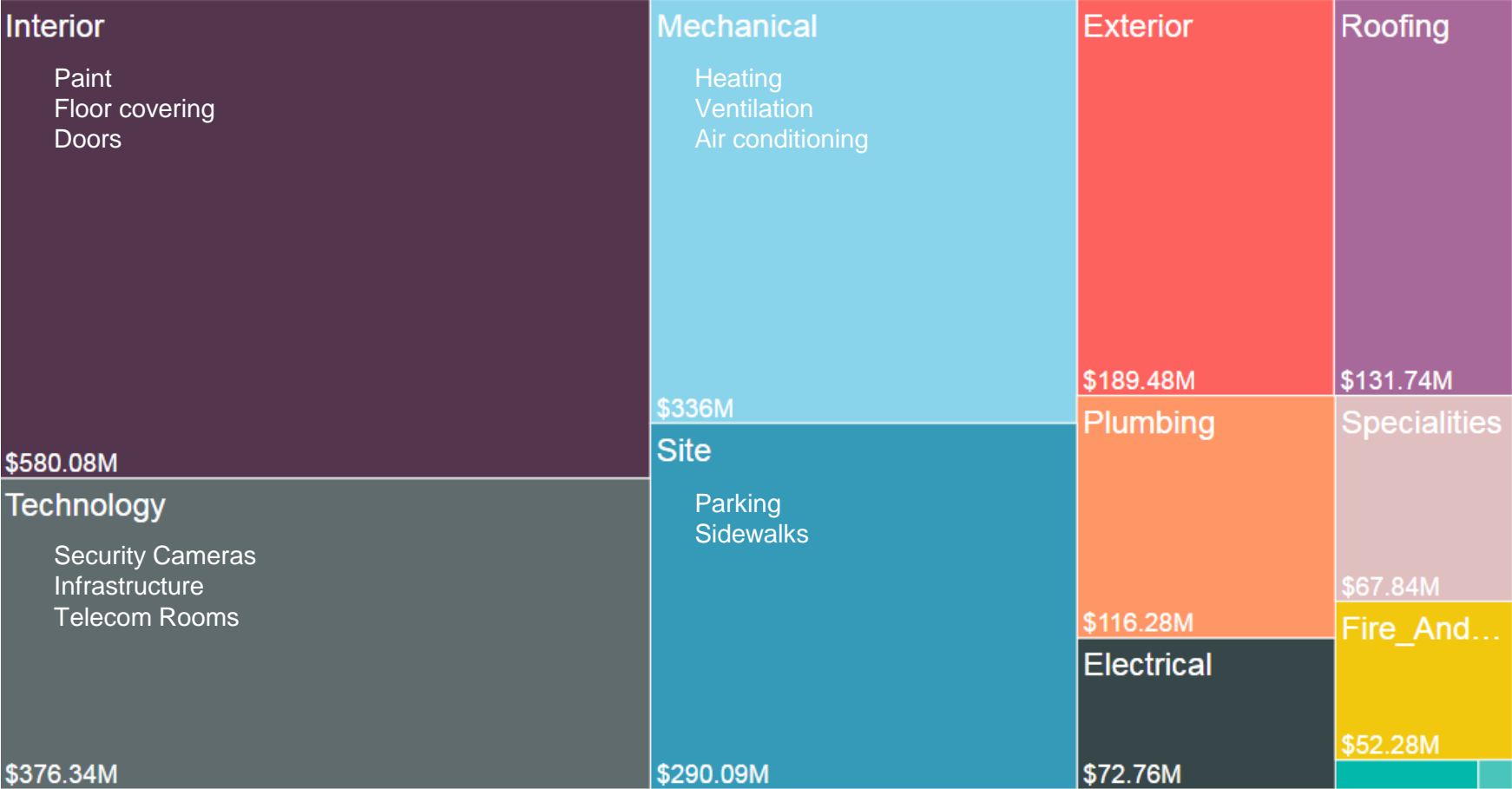
### Highest cost districts:

Providence - \$372.4 M

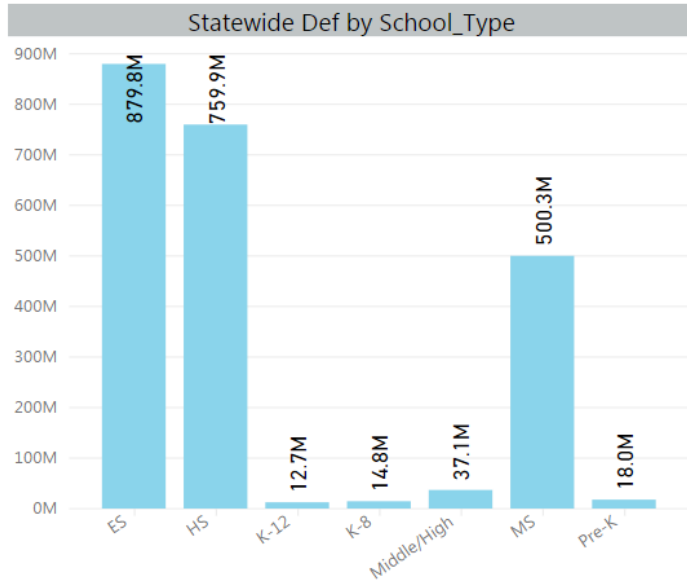
Warwick - \$190.0M

Pawtucket - \$176.6M

# Statewide Deficiencies by System



## Deficiency Statewide



- Elementary Schools and High Schools have the largest need
- Elementary and High Schools each make up a third of the building space statewide
- High schools have the most Priority 1 need (\$22M)
- Elementary schools the most Priority 2 need (\$232M)



Concrete delamination to the cast in place concrete beams and slabs.  
*East Providence High School*



Original Simplex fire alarm system annunciator.  
*Toll Gate High School*



Plaster at columns dissolving due to water damage.

*Academic Success Academy*



Retaining wall at parking lot is cracking and deteriorating.

*William E. Tolman Senior High School*

## Warm, Safe & Dry | Priority 2



Mold on slate shingle roofing.  
*Peace Dale Elementary School*



Weathered roofing with significant debris and  
ponding.  
*Tiverton High School*



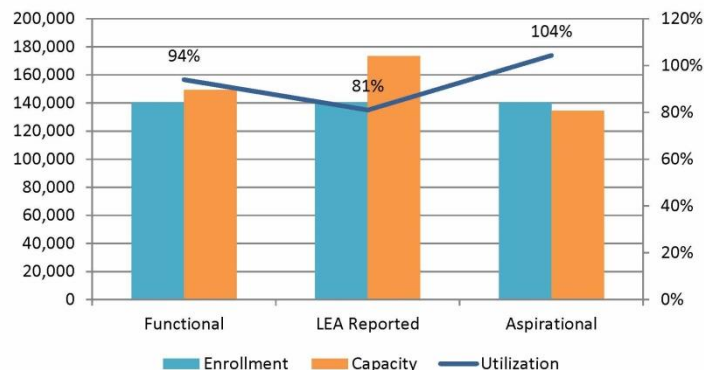
## Warm, Safe & Dry | Priority 2



Original boiler  
*Steere Farm Elementary School*



Aged and rusted condensing unit.  
*John F. Deering Middle School*



- Utilization calculated by dividing enrollment into capacity

- 2015-16 enrollment

- **Ideal Utilization**

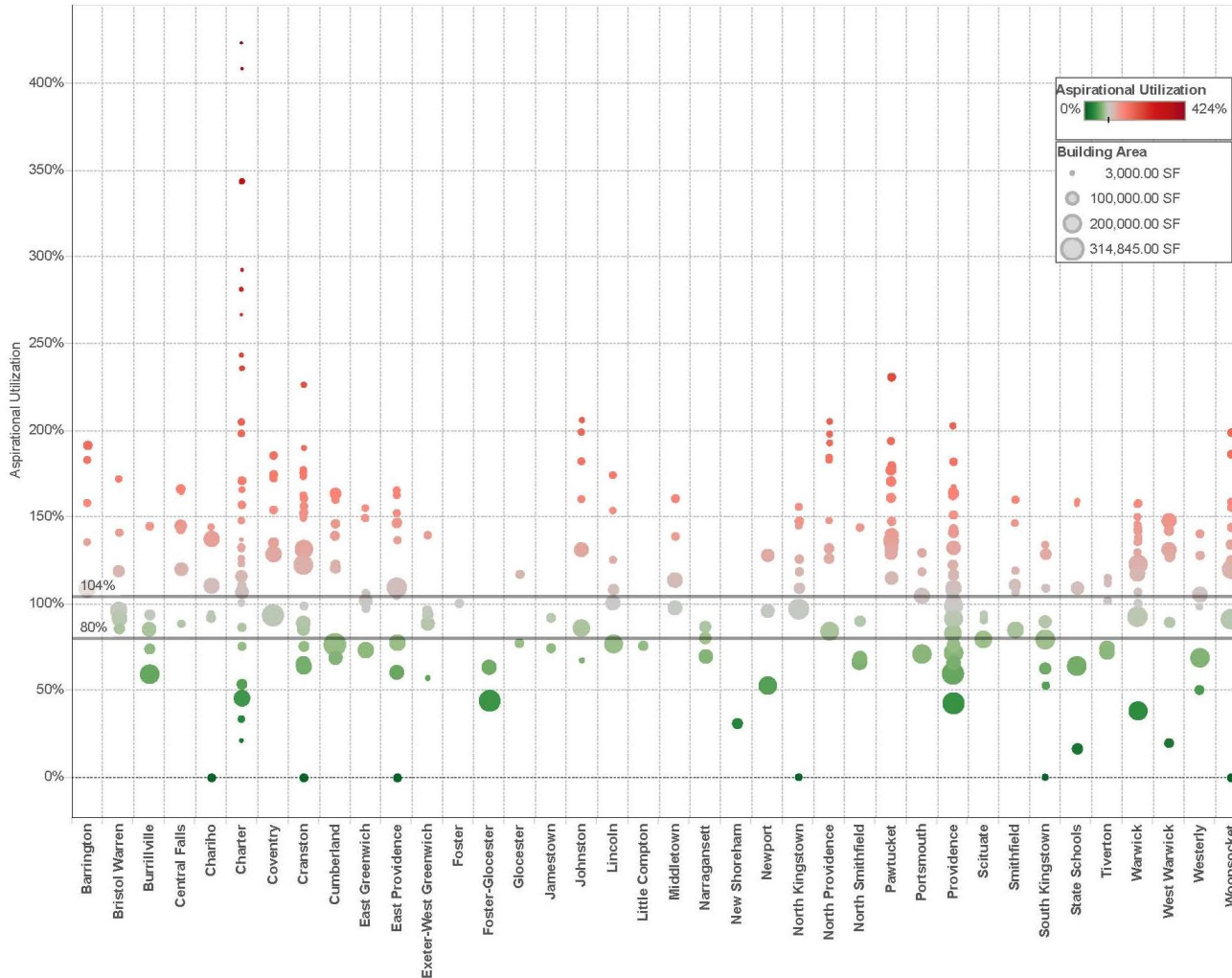
- Elementary Schools – 90%
  - Middle Schools & High Schools – 75 to 85%

- **Average Statewide Aspirational utilization = 104%**

- **Functional utilization = 94%**

- **LEA Reported utilization = 81%**

## Utilization



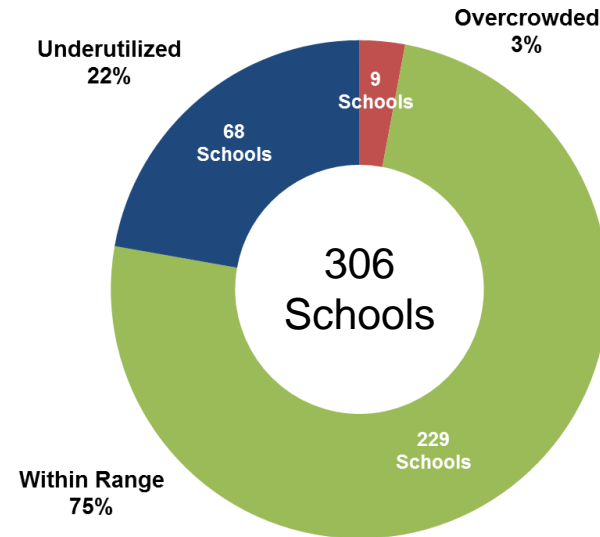
- Statewide Avg. 104%
  - 192 Schools above
- Ideal Avg. 80%
  - 47 Schools below

## LEA-Reported Utilization

### Underutilized

| LEA                   | Campus Name                         | LEA-Reported Utilization |
|-----------------------|-------------------------------------|--------------------------|
| Cumberland            | Joseph L. McCourt Middle School     | 60.1%                    |
| North Providence      | North Providence High School        | 59.9%                    |
| East Providence       | Edward R. Martin Middle School      | 59.3%                    |
| Newport               | Rogers High School                  | 59.0%                    |
| South Kingstown       | South Kingstown High School         | 59.0%                    |
| Exeter-West Greenwich | Metcalf School                      | 58.8%                    |
| Scituate              | Clayville Elementary School         | 58.0%                    |
| Scituate              | Hope Elementary School              | 57.3%                    |
| Scituate              | North Scituate Elementary School    | 57.0%                    |
| East Providence       | Agnes B. Hennessey School           | 56.7%                    |
| New Shoreham          | Block Island School                 | 56.0%                    |
| East Providence       | Riverside Middle School             | 54.3%                    |
| Burrillville          | Burrillville High School            | 53.8%                    |
| Smithfield            | Smithfield Senior High School       | 53.0%                    |
| Warwick               | Drum Rock Early Childhood Center    | 52.9%                    |
| Burrillville          | Burrillville Middle School          | 52.5%                    |
| North Kingstown       | North Kingstown Senior High School  | 51.1%                    |
| South Kingstown       | Matunuck School                     | 50.5%                    |
| Exeter-West Greenwich | Mildred E. Lineham School           | 47.5%                    |
| East Providence       | James R. D. Oldham School           | 41.8%                    |
| Foster-Glocester      | Ponaganset Middle School            | 40.7%                    |
| Warwick               | Warwick Veterans Memorial Junior HS | 21.0%                    |
| West Warwick          | Maisie E. Quinn Elementary School   | 13.6%                    |

- LEA-reported utilization below 70% underutilized
- LEA-reported utilization above 130% overcrowded



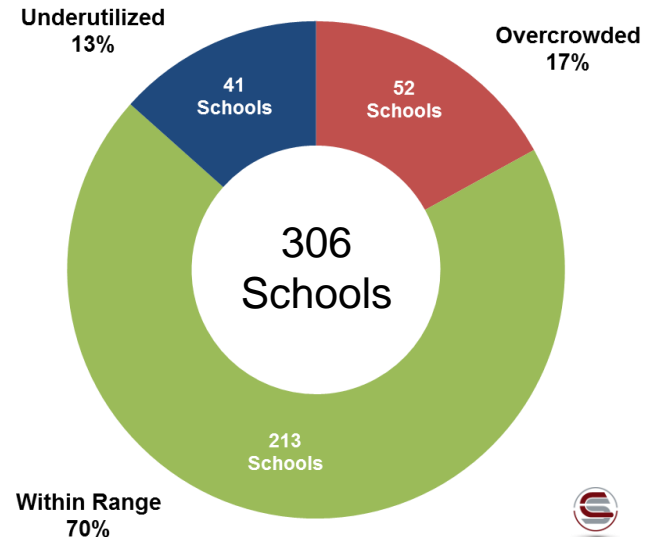
Note: Includes 23 most underutilized schools in traditional LEAs

## Functional Utilization

### Underutilized

| LEA              | Campus Name                            | Functional Utilization |
|------------------|--|------------------------|
| Cranston         | Western Hills Middle School            | 67.1%                  |
| South Kingstown  | Matunuck School                        | 67.1%                  |
| Lincoln          | Lincoln Senior High School             | 66.4%                  |
| Lincoln          | Lincoln Middle School                  | 65.5%                  |
| Tiverton         | Tiverton High School                   | 64.4%                  |
| Glocester        | West Glocester Elementary              | 64.3%                  |
| East Providence  | Edward R. Martin Middle School         | 64.1%                  |
| Jamestown        | Jamestown School-Lawn                  | 64.0%                  |
| North Smithfield | North Smithfield Middle School         | 63.8%                  |
| Woonsocket       | Woonsocket Middle School - Hamlet/Nova | 61.8%                  |
| Cranston         | Hugh B. Bain Middle School             | 61.0%                  |
| North Smithfield | North Smithfield High School           | 61.0%                  |
| Tiverton         | Tiverton Middle School                 | 58.7%                  |
| Narragansett     | Narragansett High School               | 58.1%                  |
| South Kingstown  | South Kingstown Inclusionary Preschool | 55.6%                  |
| Foster-Glocester | Ponaganset High School                 | 52.9%                  |
| Narragansett     | Narragansett Pier Middle School        | 52.8%                  |
| East Providence  | Riverside Middle School                | 46.9%                  |
| Foster-Glocester | Ponaganset Middle School               | 45.4%                  |
| Chariho          | R.Y.S.E. School                        | 44.4%                  |
| Warwick          | Warwick Veterans Memorial Junior HS    | 35.0%                  |
| New Shoreham     | Block Island School                    | 33.1%                  |
| West Warwick     | Maisie E. Quinn Elementary School      | 14.1%                  |

- LEA-reported utilization below 70% underutilized
- LEA-reported utilization above 130% overcrowded



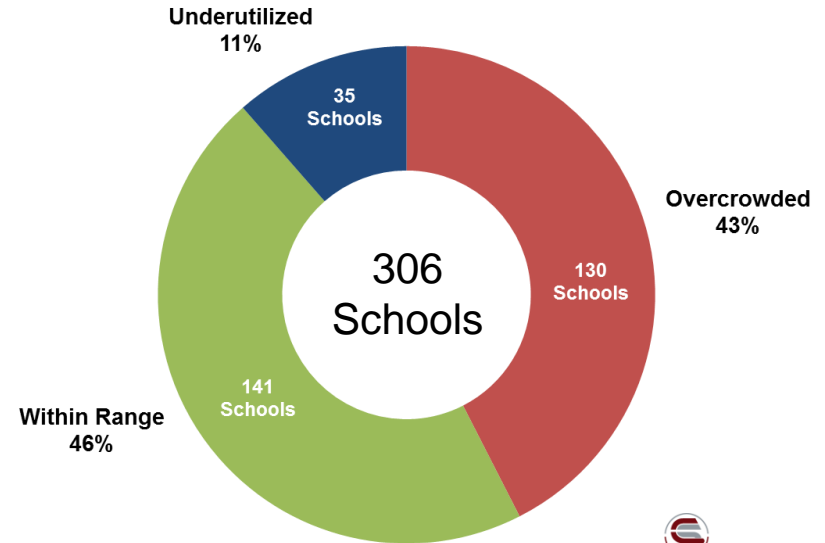
Note: Includes 23 most underutilized schools in traditional LEAs

## Aspirational Utilization

### Underutilized

| LEA                   | Campus Name                                | Aspirational Utilization |
|-----------------------|--|--------------------------|
| Narragansett          | Narragansett High School                   | 69.7%                    |
| North Smithfield      | North Smithfield Middle School             | 69.4%                    |
| Cumberland            | Community School                           | 69.1%                    |
| Westerly              | Westerly High School                       | 69.1%                    |
| Johnston              | Graniteville School                        | 67.6%                    |
| North Smithfield      | North Smithfield High School               | 66.4%                    |
| Providence            | Asa Messer Elementary School               | 65.8%                    |
| Cranston              | Hugh B. Bain Middle School                 | 65.3%                    |
| Cranston              | Park View Middle School                    | 63.9%                    |
| Foster-Glocester      | Ponaganset Middle School                   | 63.2%                    |
| South Kingstown       | Peace Dale Elementary School               | 62.7%                    |
| East Providence       | Riverside Middle School                    | 60.1%                    |
| Burrillville          | Burrillville High School                   | 59.6%                    |
| Providence            | Mount Pleasant High School / Evolutions HS | 59.6%                    |
| Exeter-West Greenwich | Mildred E. Lineham School                  | 57.6%                    |
| Newport               | Rogers High School                         | 53.2%                    |
| South Kingstown       | South Kingstown Inclusionary Preschool     | 52.9%                    |
| Westerly              | Dunn's Corners School                      | 49.8%                    |
| Foster-Glocester      | Ponaganset High School                     | 44.2%                    |
| Providence            | Providence Career and Technical Academy    | 42.8%                    |
| Warwick               | Warwick Veterans Memorial Junior HS        | 38.1%                    |
| New Shoreham          | Block Island School                        | 31.4%                    |
| West Warwick          | Maisie E. Quinn Elementary School          | 19.1%                    |

- Aspirational utilization below 70% underutilized
- Aspirational utilization above 130% overcrowded



Note: Includes only traditional LEAs



## FACILITY CONDITION INDEX

$$\text{Total Building Repair Cost} \div \text{Total Replacement Cost} = \text{Facility Condition Index (FCI)}$$

| LEA                                   | Campus Name                                | 5-Year FCI |
|---------------------------------------|--|------------|
| SouthSide Charter School              | SouthSide Elementary Charter School        | 131.2%     |
| Sheila Skip Nowell Leadership Academy | Nowell Leadership Academy - Capital Campus | 89.8%      |
| Pawtucket                             | Potter-Burns School                        | 87.3%      |
| North Providence                      | Marieville Elementary School               | 84.2%      |
| Greene School Charter                 | Greene School                              | 79.5%      |
| North Smithfield                      | Dr. Harry L. Halliwell Memorial School     | 77.5%      |
| North Kingstown                       | Forest Park Elementary School              | 77.4%      |
| Woonsocket                            | Bernon Heights School                      | 76.8%      |
| Hope Academy                          | Hope Academy                               | 74.5%      |
| Barrington                            | Nayatt School                              | 72.9%      |
| Paul Cuffee Charter School            | Paul Cuffee Charter School - Middle School | 72.6%      |
| Providence                            | Frank D. Spaziano Elementary School Annex  | 71.2%      |
| Providence                            | Academy for Career Exploration (ACE)       | 71.1%      |
| North Providence                      | Centredale School                          | 69.9%      |
| Newport                               | Rogers High School                         | 69.7%      |
| Warwick                               | Norwood School                             | 69.5%      |
| Blackstone Valley Prep                | Blackstone Valley Prep High School         | 66.8%      |
| Cranston                              | Woodridge School                           | 65.3%      |

## Replacement Candidates

- General Indicator of a facilities health
- Financial modeling suggests **FCIs of 65% or greater** are candidates for replacement
- FCI is **only one indicator** and is not the only factor



### ■ Early Childhood

- Based on the current enrollment of pre-kindergarten students and current space standards, there is a **shortfall in space** for early childhood programs.
  - Current PreK space – 133,731 SF
  - Needed PreK space – 188,400 SF
  - Shortfall – 50,000 SF

### ■ STEAM

- In Rhode Island there are **23 middle schools and 47 high schools without dedicated science classrooms**. STEAM programs have been shown to create critical thinkers, improve science literacy, and enable the next generation of innovators.

*Children in Rhode Island will be afforded better educational experiences through enhanced course offerings and better equipped facilities.*



- **Career and Technical Education**
  - Provide students with greater exposure to CTE curriculum by investing in renovating outdated CTE campuses
    - **Woonsocket Area CTE**
    - **East Providence CTE**

*Children in Rhode Island will be afforded better educational experiences through enhanced course offerings and better equipped facilities.*