

# Communication and Collaboration

## OFCC K-12 Portfolio

Presented by:

Joseph Macneil - Planning Manager

Ohio Facilities Construction Commission

[joseph.macneil@ofcc.gov.ohio](mailto:joseph.macneil@ofcc.gov.ohio)

# 21 Years of Successful Master Planning

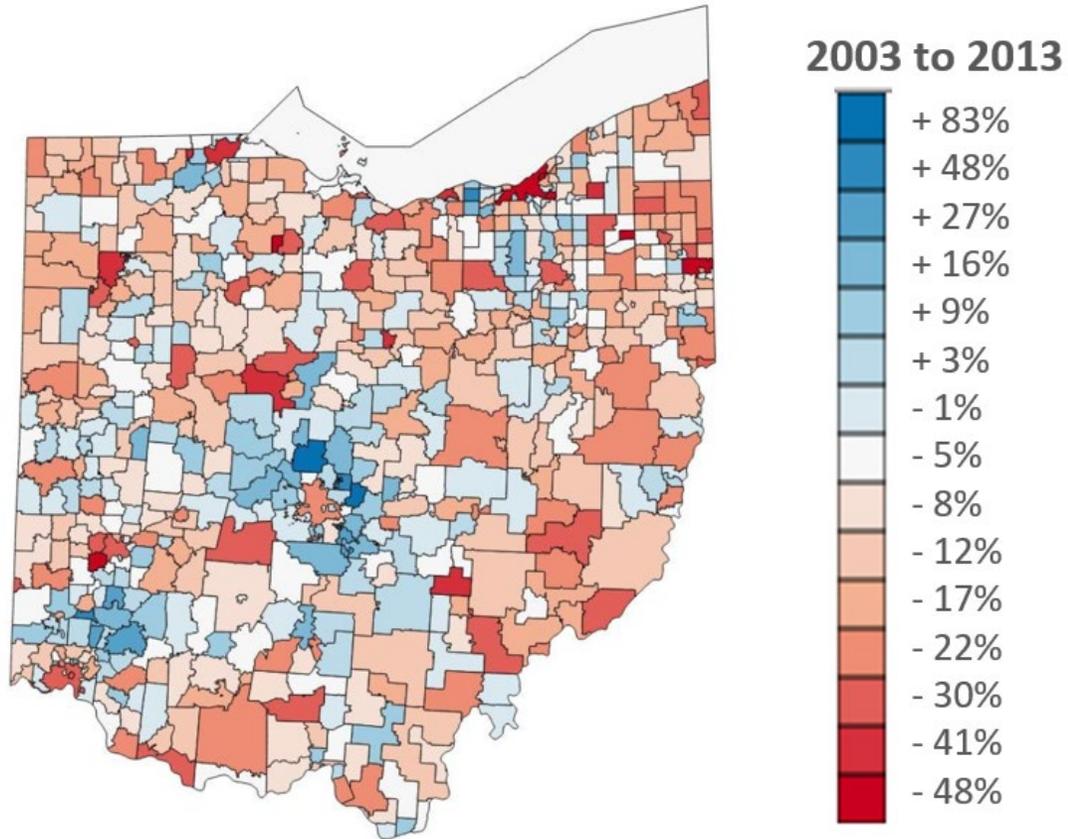


- **+40% of all public K-12 students attend OFCC built schools**
- **\$12.1 billion spent on school projects**
- **1,193 school buildings built = 1 school/week for 21 years**

# Ohio 1<sup>st</sup> in the Nation for LEED Schools



# OFCC Masterplan Process



Historical 10 Year Enrollment Changes

## 1. Enrollment Projection

To ensure the right size and amount of schools are built it is necessary to predict student enrollment ten years out.

## 2. Facility Condition Assessment

3rd party licensed architects and engineers report in a prescribed format.

## 3. Approved Masterplan

Programmatic and strategic review to custom the plan to the District.

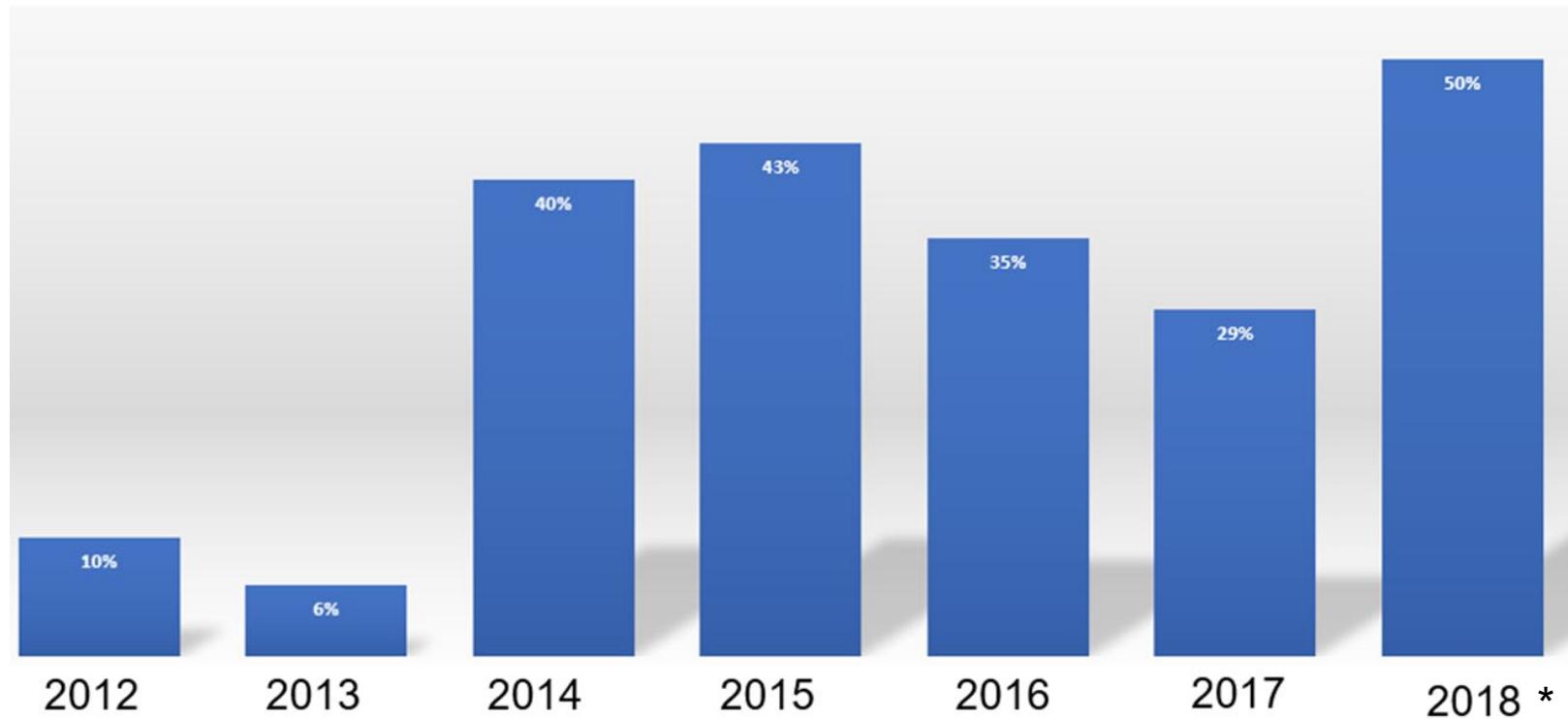
## 4. Ohio School Design Manual (OSDM)

Masterplan required renovations and new construction must follow the OSDM.

# Observable Trends in School Planning

## 2012-2018

35% of all OFCC built schools were in part or entirely 21<sup>st</sup> century educational facilities.  
65% of all OFCC built schools were entirely traditional educational facilities.



**Percentage adoption of 21<sup>st</sup> Century Education in new school facilities**

\* 2018 partial year - data incomplete

# Workplace Changes Impact Schools

“Increase Access to Technology and a 21st Century Education”

“Modernize technology in Ohio’s classrooms”



<https://www.mikedewine.com/education/>

**JOBS ARE RAPIDLY CHANGING AND REQUIRE DIFFERENT SKILL SETS**

“Future workers are expected to change jobs more frequently, interact with technology more regularly, and learn new and more sophisticated skills to advance careers or keep up with change. Future conditions will favor entrepreneurship and innovation as more commercial activity is customized.”



- Ohio Strategic Plan For Education: 2019-2024



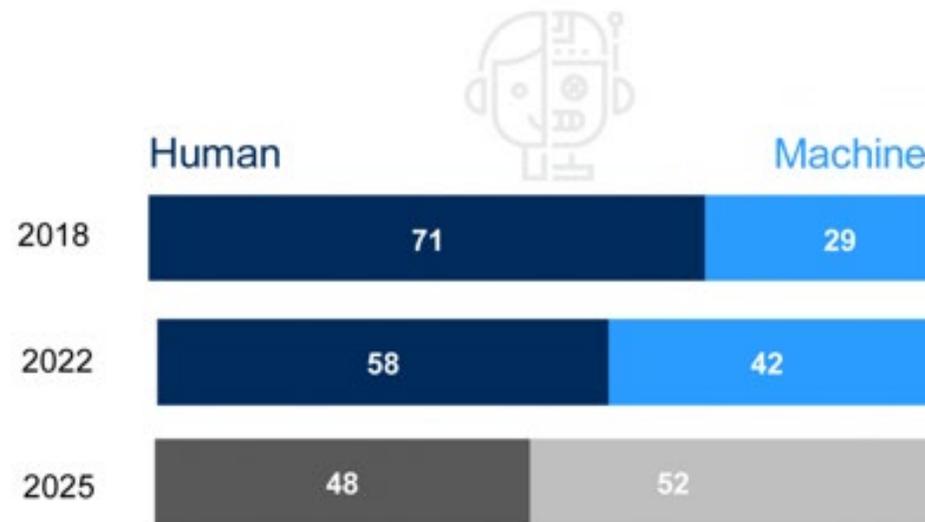
# Automation Continues to Increase

## Rate of automation

Division of labour as share of hours spent (%)

WORLD  
ECONOMIC  
FORUM

COMMITTED TO  
IMPROVING THE STATE  
OF THE WORLD



Source: Future of Jobs Report 2018, World Economic Forum

# Jobs are Emerging and Declining

## The Jobs Landscape in 2022



emerging  
roles,  
global  
change  
by 2022



### Top 10 Emerging

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

declining  
roles,  
global  
change  
by 2022



### Top 10 Declining

1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

Source: Future of Jobs Report 2018, World Economic Forum

# 2022 Skills Outlook

## Growing

- 1 Analytical thinking and innovation
- 2 Active learning and learning strategies
- 3 Creativity, originality and initiative
- 4 Technology design and programming
- 5 Critical thinking and analysis
- 6 Complex problem-solving
- 7 Leadership and social influence
- 8 Emotional intelligence
- 9 Reasoning, problem-solving and ideation
- 10 Systems analysis and evaluation

## Declining

- 1 Manual dexterity, endurance and precision
- 2 Memory, verbal, auditory and spatial abilities
- 3 Management of financial, material resources
- 4 Technology installation and maintenance
- 5 Reading, writing, math and active listening
- 6 Management of personnel
- 7 Quality control and safety awareness
- 8 Coordination and time management
- 9 Visual, auditory and speech abilities
- 10 Technology use, monitoring and control

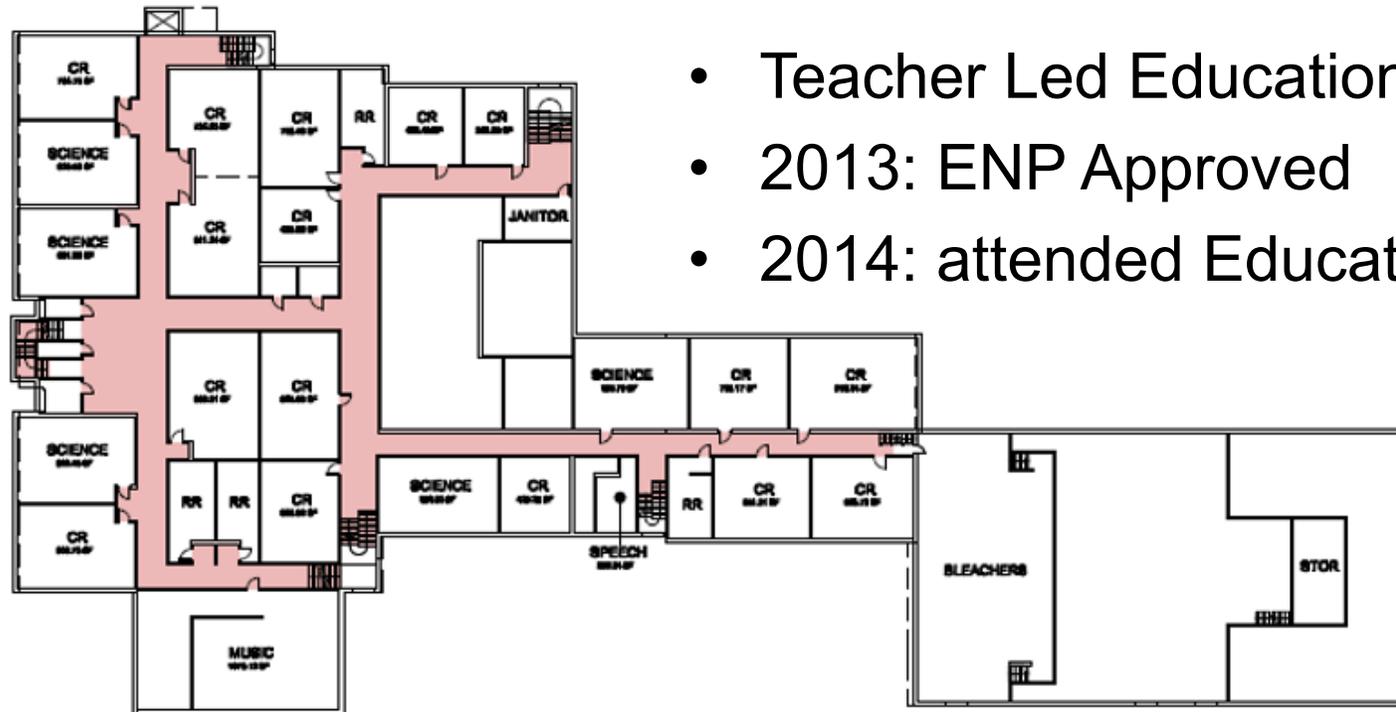
# Google Wants Problem Solvers





# Case Study: North Ridgeville Middle School (2013)

ThenDesign Architecture

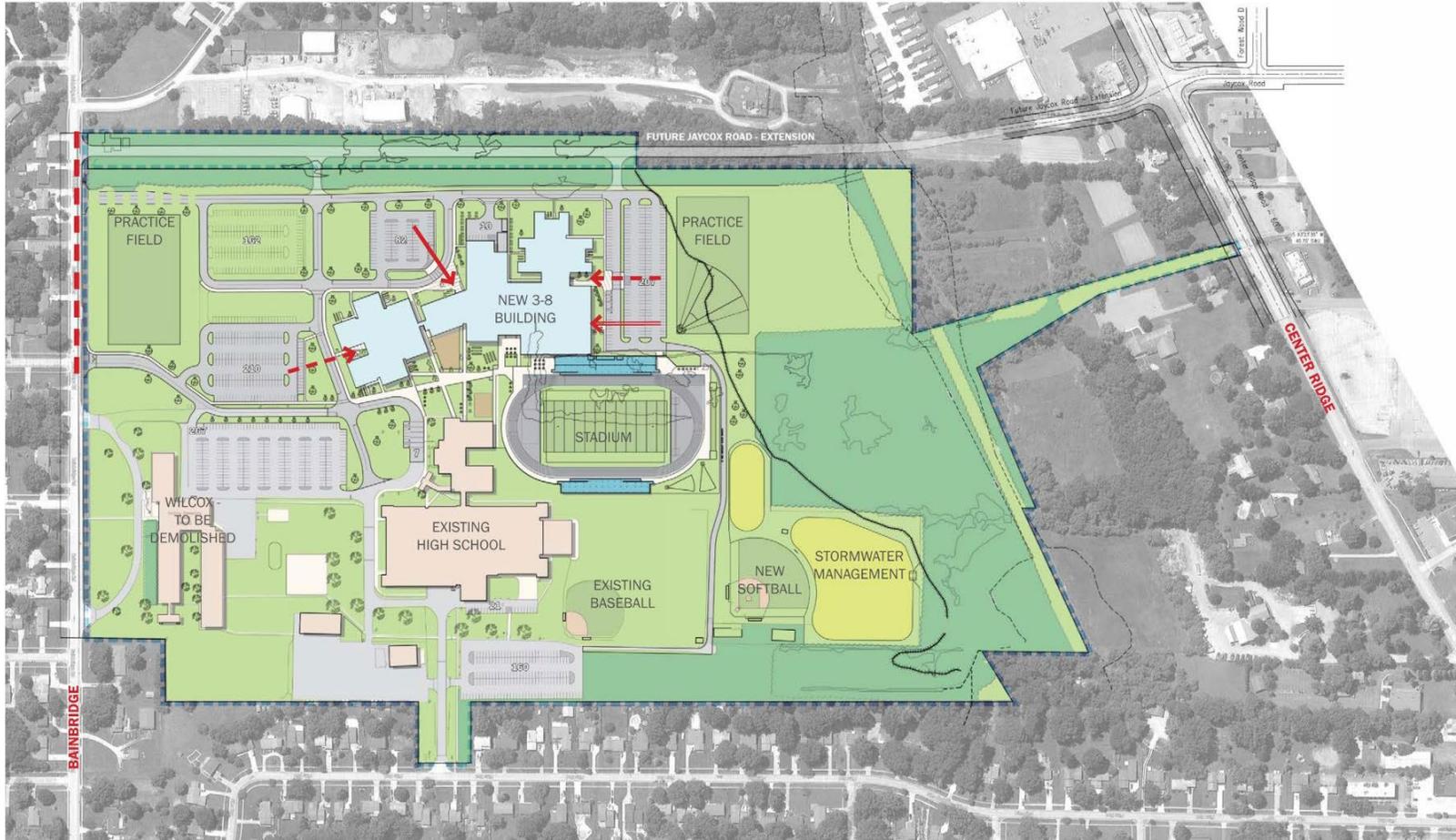


- Teacher Led Educational Delivery
- 2013: ENP Approved
- 2014: attended Educational Visioning

**NORTH RIDGEVILLE MIDDLE SCHOOL  
FIRST FLOOR PLAN – NOW DEMOLISHED**

# Case Study: North Ridgeville 3-8 Academic Center

ThenDesign Architecture



**NORTH RIDGEVILLE ACADEMIC CENTER  
SITE PLAN**

**LEGEND:**

- COMMUNITY ENTRY
- MAIN ENTRY
- - - STUDENT ENTRY

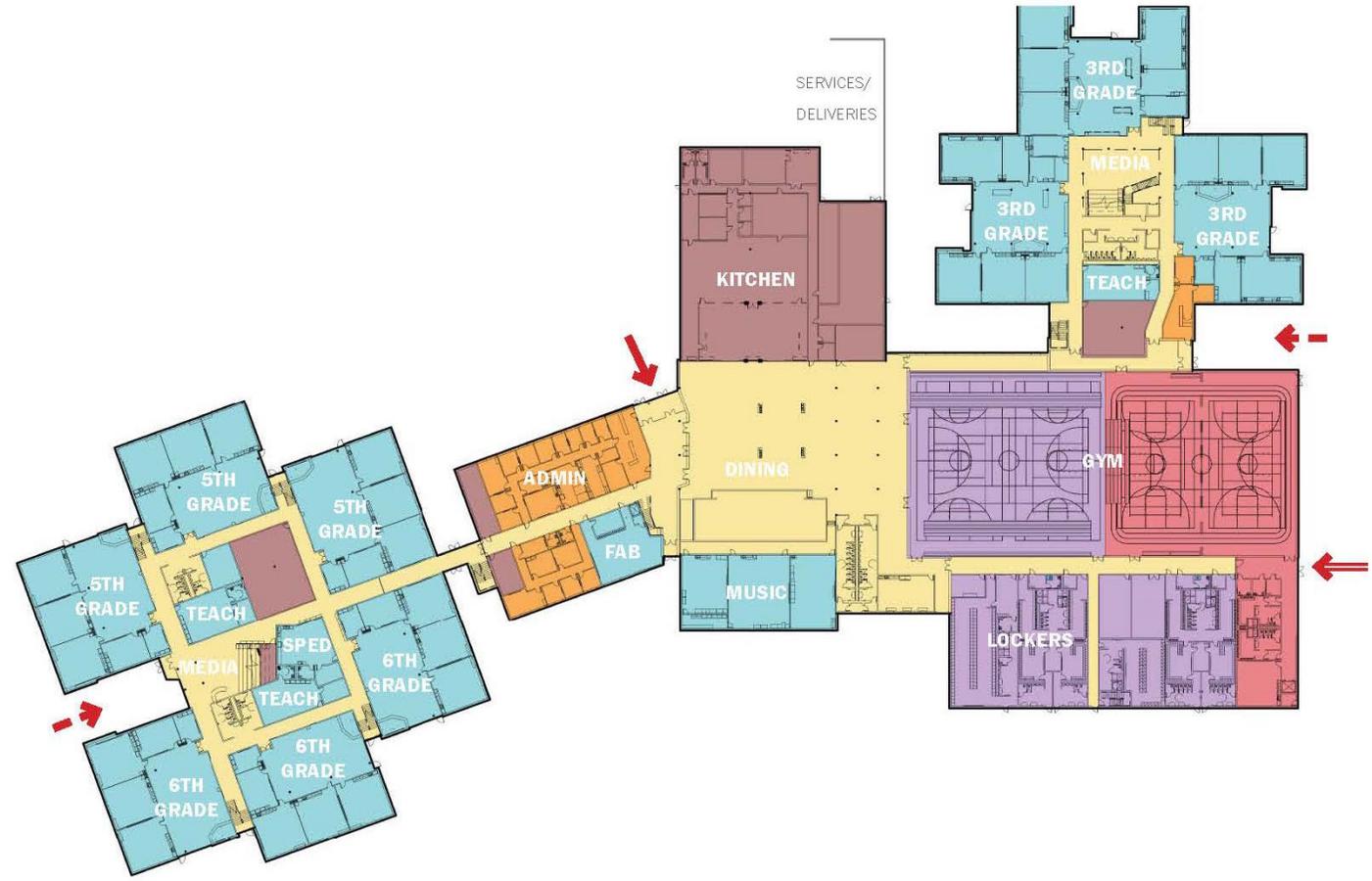


# Case Study: North Ridgeville 3-8 Academic Center

ThenDesign Architecture

## LEGEND:

	ACADEMIC
	STUDENT DINING/STAGE
	ADMINISTRATION
	PE/ATHLETICS
	FOOD/BUILDING SERVICES
	COMMUNITY GYMNASIUM
	COMMUNITY ENTRY
	MAIN ENTRY
	STUDENT ENTRY



**NORTH RIDGEVILLE ACADEMIC CENTER  
FIRST FLOOR PLAN**

# Case Study: North Ridgeville 3-8 Academic Center

ThenDesign Architecture

## LEGEND:

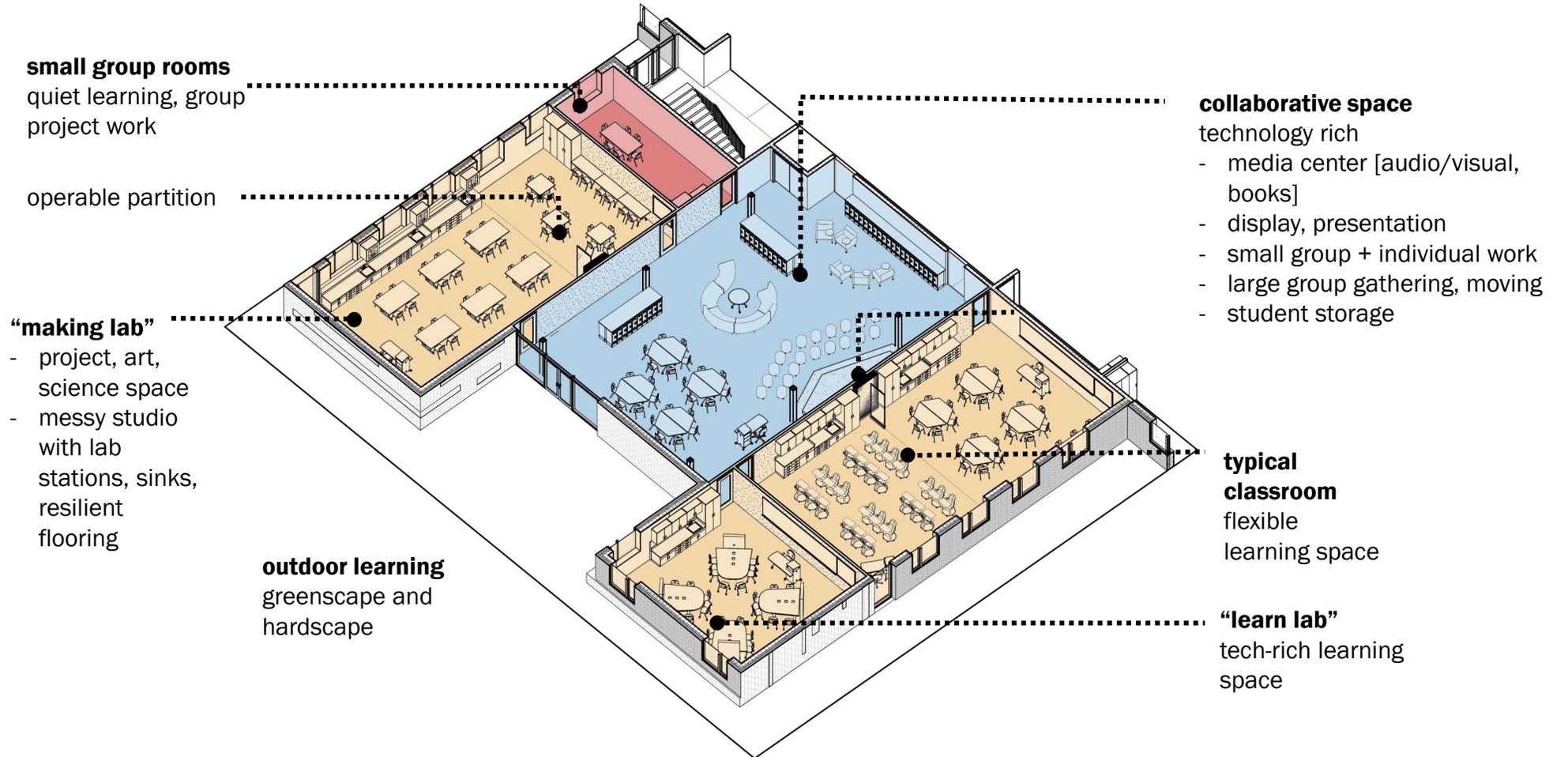
	COLLABORATIVE
	LEARNING LAB
	SMALL GROUP
	MEDIA
	TEACHERS
	SPEC ED
	BUILDING SERVICES
	BUILDING SERVICES
	MAIN ENTRY
	STUDENT ENTRY



- New Construction
- 2070 students
- Grades 3-4-5 + 6-7-8
- 18 Small Learning Communities
- 232,802 SF
- \$52.8M Co-funded Budget
- July 2017 Occupancy

## NORTH RIDGEVILLE ACADEMIC CENTER 3-4 WING: FIRST FLOOR PLAN

# Case Study: North Ridgeville 3-8 Academic Center



**NORTH RIDGEVILLE ACADEMIC CENTER  
ELEMENTARY LEARNING COMMUNITY**















ELABORATE  
SCHOOL DESIGN  
CENTER OF  
INTEGRATED  
OCCUPANCY

EXPLORE  
THE WORLD  
OF BOOKS





MAIN ENTRY



INTERMEDIATE & MIDDLE

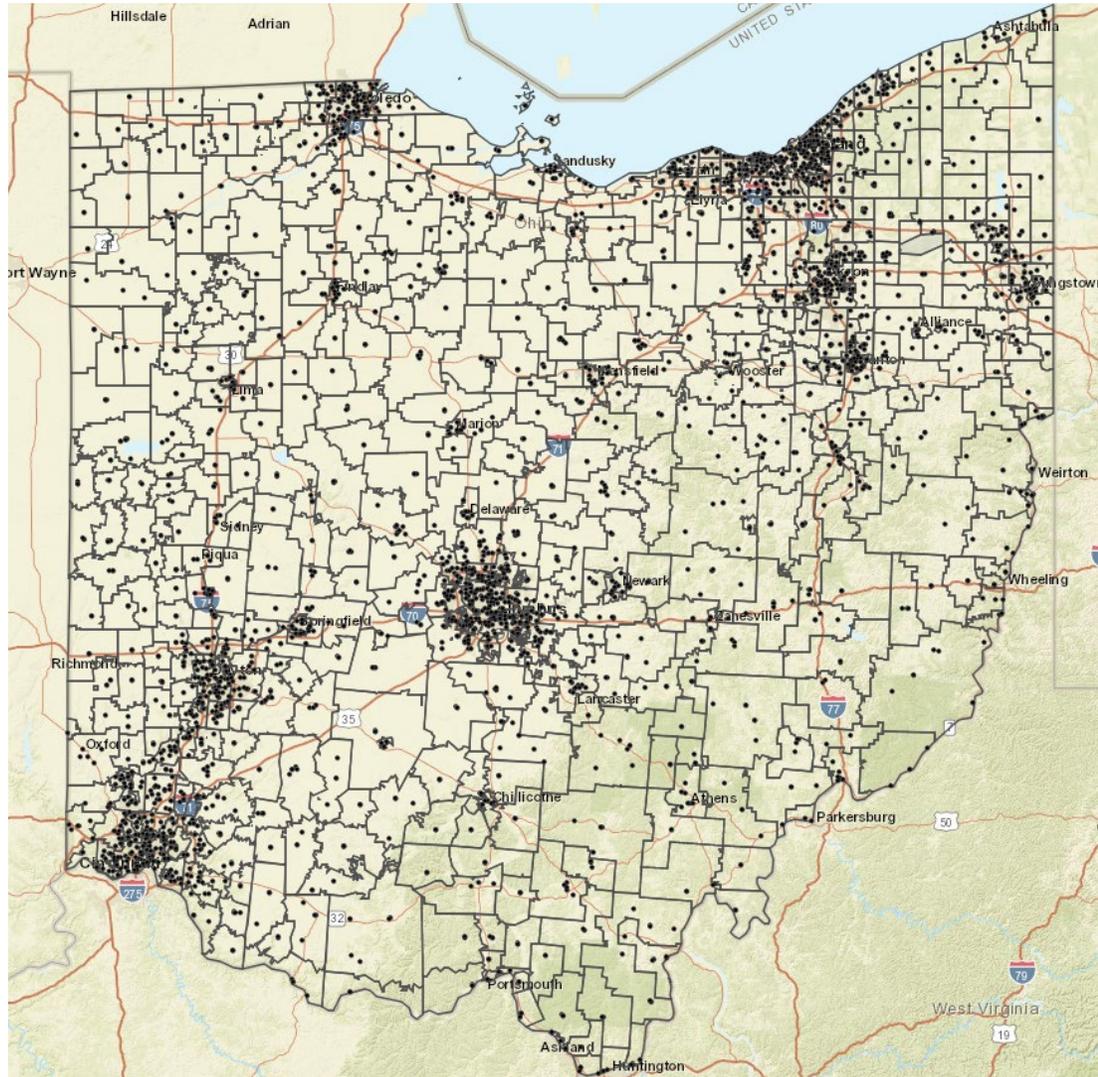


# Case Study: North Ridgeville 3-8 Academic Center

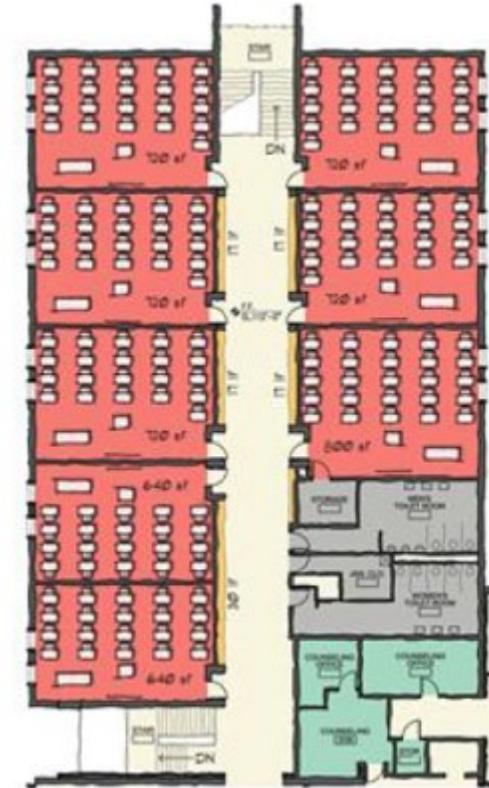
- 2014 Educational Visioning led to educational practice changes and concepts for the new building
- After one year of building occupancy, the district reports:
  - Performance up one letter full letter grade
  - 4% increase in performance index over prior year
  - Gifted students improved grade from a C to an A; twice expected rate of growth
  - Lowest 20% in achievement increased letter grade from a D to a C
  - Gap Closing school received its highest score ever; going from an F to a B
- Other contributing factors
  - 20 minutes more instructional time per day due to fewer or no class changes
  - Teachers are able to flex their time with students - no longer a bell schedule
  - Students are in class more as office referrals are down approximately 60%.



# 659 School Districts with 3214 Schools



All Public Schools and K-12 Districts



Typical School

# School District Facilities Planning Tool



Learning about other schools required site visits

# OFCC K-12 Portfolio

**OFCC School Facilities Portfolio**

All Elementary Middle High Elementary/Middle Middle/High K-12 JVS <500 500-749 750-999 1000+ 21 C Mixed Traditional Gold Silver

1 Bellevue Elementary School	2 Bellevue Middle School	3 Bloom-Carroll Middle School	4 Botkins Local Schools
5 Boyd E Smith Elementary School	6 Brown Local Schools	7 Bryan Elementary School	8 Bryan Middle/High School
9 Buchtel Community Learning Center	10 Carey Exempted Village Schools	11 Hatton Community Learning Center	12 Cedar Cliff Local Schools
13 Cedarwood Elementary School	14 Chardon Hills Magnet School	15 Charles L Seipeit Elementary School	16 Circleville Elementary School
17	18	19	20

<https://ofcc.ohio.gov/>

# More Schools to Showcase

## **K-12 Portfolio**

- 2019: Phase II - Increase published database of current 169 to 377 schools.
- Following phase to add remaining 816 schools so entire portfolio is online.

## **OSDM**

- Public Comment open annually for Ohio School Design Manual
- Overhaul of OSDM Volume 1 scheduled

## **Survey**

- 2019: Post Occupancy Survey

## **Preview of “OFCC Studio”**

- Still in planning

# Transfer of Information

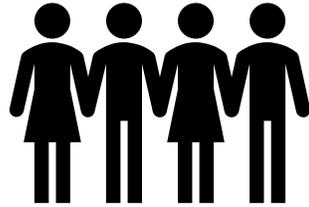
Administration



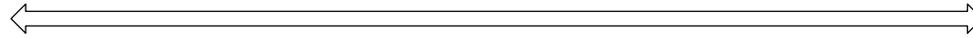
Research/Learn



Educate/Appeal



Information



Parents/Residents/Public



OSDM



Building Plans

## Break Out

- Increases space for learning
- More efficient use of space/funding
- Allows for students to learn at different rates
- Allows for teachers more flexibility
- Promotes student led inquiry

## Furniture

- Can be used in different ways
- Promoted group activity
- Allows for different postures

## Break Out Furniture

Hillard Middle School  
Hillard CSD

Fanning Howey

Fact Sheet  
Gallery  
OFCC K-12 Portfolio



## Extended Learning Area

Increases space for learning  
More efficient use of space  
Allows for students to learn at different rates  
Allows for teachers more flexibility  
Promotes student led inquiry

## Extended Learning Area

Hillard Middle School  
Hillard CSD

Fanning Howey

Fact Sheet  
Gallery  
OFCC K-12  
Portfolio



**Ohio has built 1,193 New School Buildings  
Increasingly, new schools are different**

**Check them out at <https://ofcc.ohio.gov/>**

Presented by:

joseph.macneil@ofcc.gov.ohio