



Ohio Higher Education Facilities

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INTRODUCTION

Campus Types

ODHE collects the facility data which describes the conditions of buildings and rooms from 14 "University Main Campuses," 23 "Regional Campuses," and 24 "Community Campuses." The "colocation campuses" mean more than one campus share the same room or the same building. 7 out of 24 community colleges and 6 out of 23 regional campuses are collocated.

Methodology

Data Source

- o St. Louis FED
- o Consumer Price Index: Total of All Items for the United States, Index 2015=100, Quarterly, Seasonally Adjusted
- o Copy of facilities OS exp 2011_2021
- o Facility Conditions Enrollment – 6282022
- o Full-Time Equivalent enrollment, FY 2011 TO FY 2021
- o POM exp by inst and campus 2013_2021

Analysis and Visualization Tools

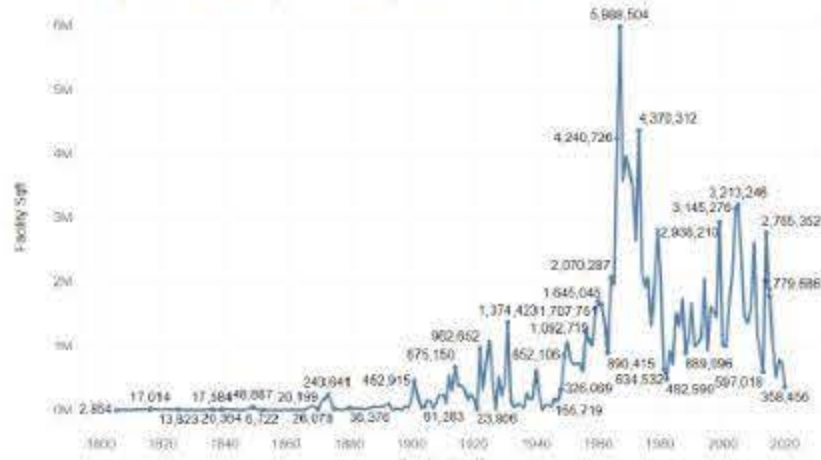
- o Stata, Tableau, Microsoft Excel

Cost Analysis

- o Cost is adjusted for inflation to 2015 dollars

The Development of Facilities

The Development of Facility in Ohio Higher Education



The trend of sum of Facility Sq Ft for Construction Year

- o Construction Peak: 75 buildings and around 6 million facility square feet built in 1967
- o The facility area expands significantly from the 1960s to the 1980s. The second facility expansion is in the 2000s.

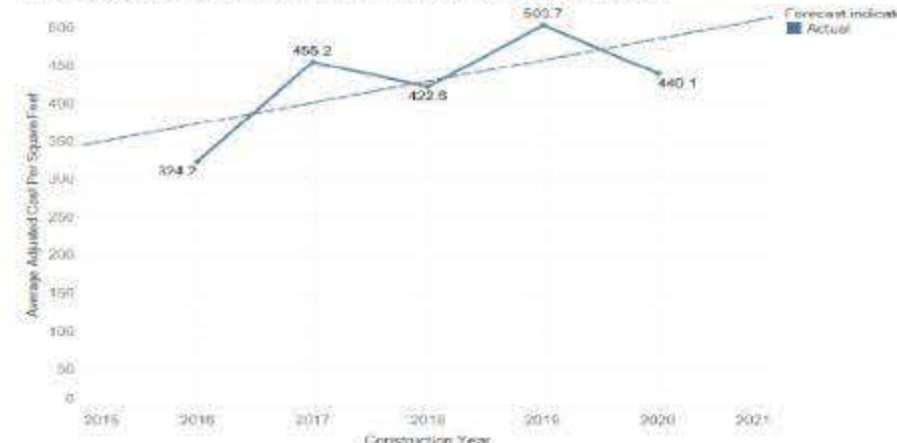
- o Ohio University has the oldest facilities: the average facility age is 63.1 years
- o Marion Technical College has the youngest facilities: the average facility age is 11.2 years
- o The Facility Type "Medical Center" across all the institutions has the youngest facilities whose average age is 38.2

The Cost of New Constructions from 2016 to 2021

- o The Ohio State University has the greatest area of new construction
- o "Non-Colocation" campuses have a greater variety in new construction function compared to "Colocation campuses"

TYPE	Frequency	Percentage (%)
Community College	12	14.46
University Main Campuses	62	74.7
University Regional Campuses	9	10.84
Total:	83	100

The Average Cost of New Construction Adjusted by CPI



The trend of average of Adjusted Awecost (actual & forecast) for Construction Year. Color shows double group Forecast indicator.

- o The New Construction cost includes the equipment value besides the construction cost
- o The Average Growth Rate of new Construction costs after CPI adjusted is 8.94%

* The cost is adjusted by CPI. The base year is 2015

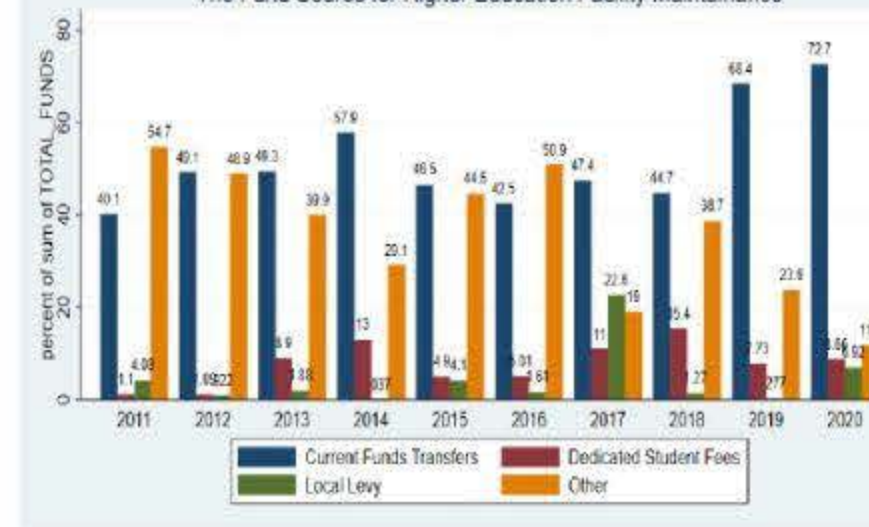
"Instruction and Instructional support" Facilities

Campus Type	Enrollment Share (%)	"Instructional" Area Share (%)
University Main Campuses	74.02	72.45
Community College	19.90	17.62
University Regional Campuses	6.08	9.93

- o 567 buildings statewide have the "Instruction and Instructional Support" facility type
- o The average age for "Instruction and Instructional Support" buildings is 50.8 years
- o The square footage per enrollment for bachelor's, master's, and doctoral level courses is 243.0, 352.9, 419.2

Maintenance Cost from 2011 to 2020

The Fund Source for Higher Education Facility Maintenance



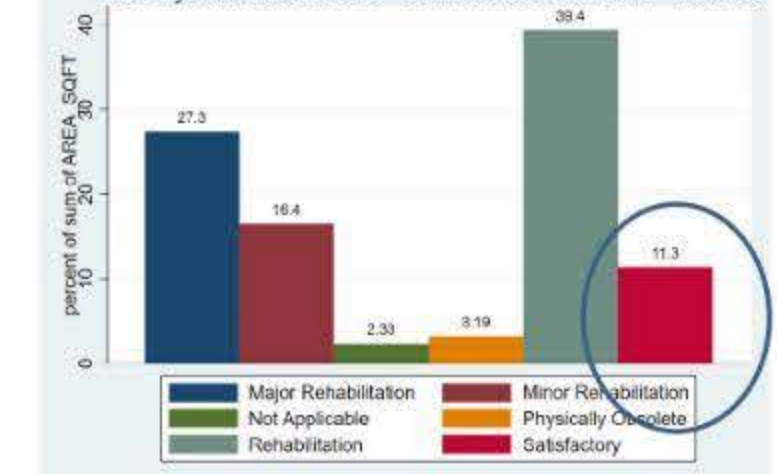
- o "General Auxiliary Services" buildings make up 24.13% of total funds
- o "Instruction and Instructional Support" buildings receive 17.6% of total funds
- o "Unfinished/Inactive" buildings receive 3.4% of total funds

* ODHE recorded 5198 buildings' maintenance funds.

* Some data are missing for all years.

"Unfinished/Inactive" Facilities

The Physical Condition of "Unfinished or Inactive" Facilities



- o The average age for "Unfinished or Inactive" buildings is 66.5 years
- o 11.3 percent of the "Unfinished/Inactive" facilities are in "Satisfactory" condition

Conclusions

- o Ohio higher education had a facility boom from 1960 to 1980
- o There is a usage inefficiency in higher education facilities
- o The main source of facility maintenance is "current funds transfer"
- o University Main Campuses have the greatest new construction area in recent years

Suggestions

- o Complete the facility data: maintenance cost data and restoration cost
- o Compare the cost of inactive building restoration and the cost of new constructions
- o Learn about the history through the data:
 - o Research the social factors and policy related to the facility boom
- o Explore how to make facility decisions based on the present facility condition and demand

ACKNOWLEDGEMENTS

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