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ABSTRACT

The construction proposed in the Cincinnati Public Schools' Facilities Master Plan will have a significant impact on the greater Cincinnati, Ohio, economy. Highlights include: (1) the Facilities Master Plan of the Cincinnati Public Schools envisions a 10-year program with \$985 million in construction spending. The funding of this program includes \$211 million from the State of Ohio, which increases the purchasing power of the \$774 million local funding commitment; (2) the Facilities Master Plan will generate a total of \$2.35 billion in economic impact, including \$718 million in local household wages and salaries, meaning an average annual impact of the Facilities Master Plan for the next 10 years of \$232 million, and household earnings totaling \$71 million and 2,339 jobs will be generated for area residents each year; (3) the return of \$718 million in wages and salaries for \$774 million in local dollars is important, meaning that every \$100 in local funding ultimately returns \$93 in wages and salaries to the pockets of local workers; (4) business activity will especially be stimulated in the construction, business services, real estate, and retail sectors; and (5) economic benefits may result from improvements in educational quality, quality of life, and physical conditions of neighborhoods, but are not measured here. (Author/SM)

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The Economic Impact of Implementing The Cincinnati Public Schools' Facilities Master Plan on Greater Cincinnati

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April 2003

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**The Economic Impact of Implementing
The Cincinnati Public Schools'
Facilities Master Plan
on Greater Cincinnati**

prepared for

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April 2003

**THE ECONOMIC IMPACT OF IMPLEMENTING
THE CINCINNATI PUBLIC SCHOOLS'
FACILITIES MASTER PLAN
ON GREATER CINCINNATI**

Jeff Rexhausen, Project Director

April 2003

This report was prepared by the
Economics Center for Education and Research,
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Executive Summary

The construction proposed in the Cincinnati Public Schools' Facilities Master Plan will have a significant impact on the Greater Cincinnati economy. Notable highlights include:

- The Facilities Master Plan of the Cincinnati Public Schools envisions a **ten-year program with \$985 million in construction** spending. The funding of this program includes \$211 million from the State of Ohio, which increases the purchasing power of the \$774 million local funding commitment.
- The Facilities Master Plan will generate **a total of \$2.35 billion in economic impact**, including **\$718 million in local household wages and salaries**. This means an **average annual impact** of the Facilities Master Plan for the next ten years of \$232 million. Household earnings totaling \$71 million and 2,339 jobs will be generated for area residents each year.
- The return of \$718 million in wages and salaries for \$774 million in local dollars is important. It means that **every \$100 in local funding ultimately returns \$93 in wages and salaries to the pockets of local workers**.
- Business activity will especially be stimulated in the construction, business services, real estate, and retail sectors.
- Economic benefits may result from improvements in educational quality, quality of life, and physical conditions of neighborhoods, but are not measured here.

Section I

Introduction

Major construction programs such as the Facilities Master Plan are one way in which Cincinnati Public Schools produces an impact on the local economy. Such large projects involve use of local contractors in building and related trades, and the purchases of large quantities of material from local businesses. Long-term construction programs, like the Facilities Master Plan, can be particularly important.

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Purpose of the Study

The Facilities Master Plan of the Cincinnati Public Schools envisions a ten-year construction program that will include \$985 million in expenditures.

This report will measure the economic impact of the implementation of the CPS Facilities Master Plan on the region's economy. This study measures the potential economic impact of the CPS Facilities Master Plan by studying two major areas:

1. Economic Impact from Construction Expenditures, and
2. Fiscal Impact from Earnings and Sales Taxes.

Definitions

The economic impact of any business includes three elements, as defined here: the direct impact, the indirect impact, and the induced impact.

- The direct impact of the Facilities Master Plan construction comprises the purchases of local construction resources (labor, goods, and services) needed to complete the actual construction program.
- The indirect impact is the purchases of local resources made by local businesses (suppliers) in order to produce the goods and services purchased by Cincinnati Public Schools and its construction team, along with consequent purchases by other businesses that supply the first group of suppliers.
- The induced impact is the local household spending of the earnings of employees of the construction firms and their suppliers.

In assessing the CPS Facilities Master Plan's economic impact on the Greater Cincinnati economy, the study area is defined as the 13-county Cincinnati Consolidated Metropolitan Statistical Area (CMSA) as defined by the Bureau of the Census. Using this definition, the Cincinnati area is a 13-county region including Hamilton, Butler, Warren, Clermont, and Brown Counties in southwestern Ohio; Boone, Kenton, Campbell, Gallatin, Grant, and Pendleton Counties in northern Kentucky; and Dearborn and Ohio Counties in southeastern Indiana.

In measuring the fiscal impact of the Master Plan, only the sales and earnings taxes generated by households for Hamilton County and all jurisdictions within the county are considered.

Section II

Economic Impact of the Construction Program

Based on the proposed expenditures for CPS Facilities Master Plan construction, the total one-time economic impact of the CPS Facilities Master Plan may be estimated. A direct investment of \$985 million will generate an additional \$1.36 billion in business activity in the region. The total economic impact of the CPS Facilities Master Plan construction is \$2.35 billion. Of this \$2.35 billion, \$718 million will directly enter local households as wages and salaries.

Impact Summary	
Construction Spending	\$985,197,149
Indirect Expenditures	\$1,362,527,657
Total Economic Impact	\$2,347,724,806
Impact on Wages & Salaries	\$717,913,162

Sources of Funding

Not all of the funding for the Facilities Master Plan will come from local sources. Of the \$985 million in expenditures, \$916 million (more than 90%) is eligible for "co-funding" by the State of Ohio because the Facilities Master Plan is a comprehensive program that addresses the needs to improve school facilities across Ohio. Because this program meets Ohio's requirement that plans address the needs of all students in the district, Cincinnati Public Schools will receive State matching funds if it passes a local bond issue to ensure the total funding of the program. For this portion, this State will match \$705 million in local funds with \$211 million in State funds. This means the State will provide roughly \$3 million for every \$10 million in local spending on "co-funded" projects.

Sources of Funding	
Total Project	\$985,197,149
Co-Funded Portion	\$915,945,589
State Funded	\$210,667,485
Locally Funded	\$705,278,104
Other Local	\$69,251,560

The remaining \$69 million in expenditures will also come from local sources, principally CPS itself, although other sources may supply a small amount.

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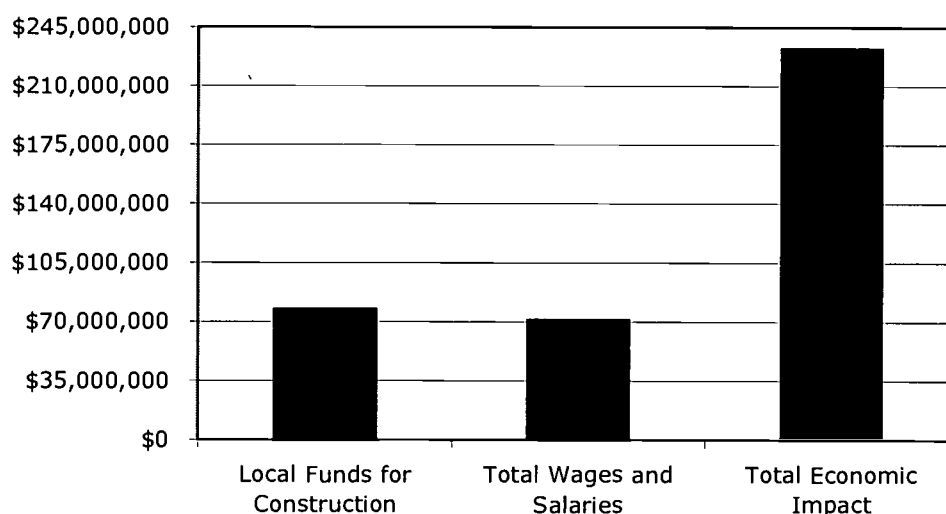
Annual Economic Impact

The Facilities Master Plan is an unusual construction program. In contrast to most construction activities, which generally last only a year or two, this CPS construction program will produce substantial economic activity for an extended period of time, promoting steady growth in the local economy. Consequently, it is appropriate to consider its economic impact on an annual basis, the way most on-going economic activities are usually assessed.

While the entire school construction project will require slightly more than ten years to complete, approximately 99% of this activity will occur in the next ten years. While some fluctuations in actual construction activity will occur from year to year, the overall level of economic activity will even out these variations, making it possible to use 10-year averages to calculate the annual economic impact on the Cincinnati area.

Spending on the Cincinnati Public Schools' Facilities Master Plan will have substantial impacts both on wages and salaries for local workers and on total economic activity in the Cincinnati area. For the next ten years, CPS anticipates spending an annual average of \$77 million in local funds on school facilities. This spending will generate a total annual economic impact of \$232 million and support 2,339 jobs with a total of \$71 million in household income.

Average Annual Spending and Impact



The following table, which presents additional impact figures, helps to show how these large economic impacts are produced. As stated above, Cincinnati

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Public Schools will spend about \$77 million in local funds each year over the next ten years. This spending will have impacts beyond the payment of \$24 million in wages and salaries for 709 workers and the purchases of goods and services with the remaining \$53 million.

10-Year Average Annual Economic Impact			
	Total Spending	Jobs	Wages & Salaries
Direct (Construction)			
Locally Funded	\$77,241,178	709	\$24,159,003
State Funded	\$20,185,547	185	\$6,313,507
Construction Total	\$97,426,725	894	\$30,472,510
Resulting Indirect	\$134,741,160	1,445	\$40,522,344
Total Economic Output	\$232,167,885	2,339	\$70,994,854
Economic Multiplier (Total Output ÷ Locally Funded)	3.01	3.30	2.94

The economic impact of locally funded construction is immediately enlarged by the inclusion of \$20 million a year from the state for the “co-funded” projects, which constitute the majority of construction. Next, all of this construction indirectly produces additional economic activity as other businesses spend money in order to provide goods and services to the construction businesses. Finally, more economic activity is induced by the spending of wages and salaries earned by workers in these other businesses. Consequently, the **total annual economic impact** of CPS’ \$77 million outlay is \$232 million, which is slightly more than **3.0 times the base number**.

For jobs, the economic multiplier is even larger, with local spending on the Facilities Master Plan **directly supporting 709 jobs** and generating **total employment of 2,339**, or **3.3 times the base number**. Note that the total amount of wages and salaries for local workers almost equals the annual CPS outlay, so every local dollar spent actually returns nearly a dollar in household income

Sources of Economic Impact

Implementing the entire Facilities Master Plan will result in a total outlay of \$985 million. Because most of the plan qualifies for matching funds from the State of Ohio, more than 20 percent of the costs will be paid by the State.

A large portion of the \$985 million in expenditures comes from local sources that do not stimulate economic growth as much as non-local funds. But State matching funds represent **new** dollars for the local economy that **do**

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produce substantial economic impact. This means that the \$502 million in total economic impact from State funds, including \$154 million in local wages and salaries (see following table), constitutes a measurable increase in economic benefits for the Cincinnati area.

Impact of the CPS Facilities Master Plan Construction			
	Construction Spending	Total Economic Impact	Impact on Wages & Salaries
Total Project	\$985,197,149	\$2,347,724,806	\$717,913,162
Co-Funded Portion	\$915,945,589	\$2,182,698,339	\$667,449,550
State Funded	\$210,667,485	\$502,020,617	\$153,513,396
Locally Funded	\$705,278,104	\$1,680,677,722	\$513,936,154
Other Local	\$69,251,560	\$165,026,467	\$50,463,612

Spending on construction creates a somewhat larger economic impact than spending on most other goods and services because more money circulates in the local economy for a longer period.¹ Thus, even the expenditure of local funds on Facilities Master Plan construction will benefit Cincinnati area households and the local economy.

For Every \$100 ...

On the individual taxpayer level, the Facilities Master Plan means: For every \$100 a local resident pays in property taxes, Cincinnati Public Schools can use this to obtain an additional \$27 in state funding.

Combined, these moneys will generate a total of \$303 in economic activity for the Cincinnati area, including \$93 in wages and salaries for local workers. **This means that local workers will receive \$93 in income for every \$100 generated by the school levy.**

Major Categories of Economic Impact

Construction is, understandably, the industry receiving the largest share of the economic activity associated with the Facilities Master Plan, receiving 43 percent (\$1.00 billion) of the total economic impact. But numerous other

¹ On average, the economic impact of construction is about 15 percent greater than the impact generated by other industries, and the impact on earnings is about 30 percent greater, mainly due to the fact that construction generates more employment than most industries. Applying these figures to the locally funded portion of the total project produces rough estimates of \$240 million in additional economic activity, including \$130 million in additional earnings.

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industries will also receive a considerable amount of business, as business expenditures ripple through the local economy.

Other industries that will benefit significantly from the construction program business services (\$243 million), real estate and insurance (\$167 million), retail trade, including eating and drinking places (\$147 million), and primary and fabricated metal (\$104 million). The following table reports the distribution of the economic impact by industry.

Business Impact, by Industry		
Construction	\$1,004,309,974	42.8%
Business Services	\$243,245,176	10.4%
Real Estate & Insurance	\$166,695,358	7.1%
Retail, incl. Eating & Drinking	\$146,991,415	6.3%
Primary & Fabricated Metal	\$103,839,780	4.4%
Wholesale	\$91,327,776	3.9%
Health Services	\$84,923,994	3.6%
Miscellaneous Services	\$62,461,499	2.7%
Transportation	\$59,505,908	2.5%
Communications & Utilities	\$57,634,033	2.5%
Finance	\$50,343,574	2.1%
Wood, Stone, & Glass	\$48,176,141	2.1%
Others	\$228,270,179	9.7%

Section III

Fiscal Impact of the Construction Program

The fiscal impact of the CPS Facilities Master Plan is generated in two ways: earnings taxes on wages and salaries, and sales taxes on purchases made with those earnings. Altogether, Facilities Master Plan construction will generate \$11.7 million in earnings and sales taxes for Hamilton County jurisdictions.

Fiscal Impacts in Hamilton County			
	Earnings Taxes		Sales Taxes
	Cincinnati	Other Places	Hamilton Co.
Direct	\$6,276,887	\$95,216	\$739,545
Indirect	\$1,879,903	\$1,844,095	\$892,019
Total	\$8,156,790	\$1,939,311	\$1,631,564

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The table above shows that the City of Cincinnati will receive the largest proportion of these revenues. Other cities and villages also will receive earnings taxes, and Hamilton County will receive the rest in the form of sales taxes. Other fiscal impacts that will occur, but are not measured in this analysis, are sales taxes on certain goods and services purchased by local businesses, and property taxes from local households.

Section IV

Other Potential Benefits

The proposed CPS Facilities Master Plan may also bring other types of benefits to residents of the Cincinnati area. This analysis does not include assessment of the economic benefits of any non-economic impacts that may accrue from the construction, nor does it cover certain fiscal benefits that are more indirectly generated.

Education

The goal of the CPS Facilities Master Plan is “to replace inadequate, deteriorating learning spaces with first-class school buildings for every CPS student” because better learning environments are supportive of increased instructional quality and academic achievement. These educational outcomes, which are causally connected to better workforce skills and higher incomes, can produce long-term economic benefits, but any such potential benefits are not assessed in this analysis.

Quality of Life and Economic Development

When companies consider sites for the expansion of their plants and relocation of their businesses and employees, one of the most important considerations is the quality of life of the area. Quality of life is defined as factors leading to overall health, well-being and satisfaction of residents of a geographical region. For many corporate decision-makers, quality of life issues are among the most important factors for site location. The proposed CPS Facilities Master Plan will contribute to an improvement of the quality of life for Cincinnati area residents. Although this may have subsequent ramifications for the area’s economic growth as more businesses chose Cincinnati, such benefits, which are more long-term and speculative in nature, are not included in this analysis.

Neighborhood Revitalization

With the construction of 35 new schools and the complete renovation of 31 others, the CPS Facilities Master Plan can have a positive influence on the city's neighborhood revitalization efforts. Because of their highly visible, stable and valuable presence, they promote the attractiveness of their neighborhoods for other investment and as a place to live and work. While neighborhood revitalization clearly has economic benefits, it is not practical to assess the size of any future benefits that may occur.

Property Taxes

New construction and major redevelopment often increase property values in the surrounding area. It is to be expected that the investment proposed in the Facilities Master Plan will produce such effects, but quantifying the property tax impact of such changes is beyond the scope of this analysis.

Section V **Neighborhood Impact: The Rockdale Academy Example**

What kind of impact can the construction of a single school have on the community? Rockdale Academy in Avondale, one of the first schools to be developed in the CPS Facilities Master Plan, offers an example of what the overall program can mean.

Cincinnati Public Schools will invest \$12,635,700 in the construction of this new school. In turn, the State of Ohio will supply an additional \$3,717,065 to help cover the total estimated cost of nearly \$16.4 million. (This figure does not include the anticipated additional spending for the inclusion of an expanded health center, to be built in partnership with Children's Hospital Medical Center.)

Most of these funds will be spent within a two-year construction period, with \$5.1 million going into wages and salaries for local construction workers. This work will support the equivalent of 113 full-time jobs for 16 months. (The reality is that the work will involve a larger number of jobs, not all of them for the full 16-month period.)

This construction activity will generate a total of almost \$39.0 million in economic activity, including \$11.9 million in wages and salaries for 295 full-time equivalent positions during the 16-month period.

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Rockdale Academy Economic Impact			
	Total Spending	Jobs	Wages & Salaries
Direct (Construction)			
Locally Funded	\$12,635,700		
State Funded	\$ 3,717,065		
Construction Total	\$16,352,765	113	\$ 5,114,714
Resulting Indirect	\$22,615,874	182	\$ 6,801,546
Total Economic Output	\$38,968,639	295	\$11,916,260

Naturally, the economic impact of this construction is more strongly concentrated within the City of Cincinnati than in any other part of the region. This impact comes from businesses whose goods and services are purchased, either as part of the construction process or through indirect spending, and from Cincinnati residents who are employed by these businesses.

Businesses benefiting from this project will range from construction firms to manufacturers of building materials to neighborhood fast food and other retail businesses serving on-site workers.

Distribution of Rockdale Impact, per 1,000 Residents		
	Total Impact	Wages & Salaries
City of Cincinnati	\$37,641	\$7,626
Balance of Hamilton County	\$36,390	\$7,372
Balance of Cincinnati Region	\$ 6,873	\$4,939

Finally, the construction of Rockdale Academy can serve as a foundation for stimulating redevelopment in the surrounding area. Because such development may or may not occur, no economic impact is calculated for it.

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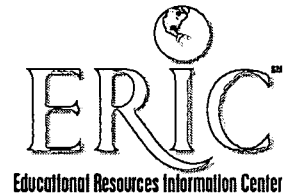
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Appendix: Facilities Master Plan School Configuration

Area	New Construction	Renovation
Center City	Hays	Bloom
	Hays / Porter	Rothenberg
	Washington Park	Taft
East	Bramble	Hyde Park
	Parker	Kilgour
	Sands (@ Eastern Hills)	Mt. Washington
Far North		Hartwell
Far West	Covedale	Cheviot
	Midway	Dater Montessori
		Gamble
		Westwood
Mid-City	Burton	North Avondale
	Fairview (@ Clifton)	
	Rockdale	
Mill Creek	South Avondale	
	Millvale	Central Fairmount
	Roll Hill	
North	Bond Hill	Crest Hills
	Losantiville	Roselawn Condon
	Pleasant Ridge	Woodford
North Central	Silverton	
	Mt. Airy	Chase
	Pleasant Hill	College Hill
Walnut Hills/Evanston	Schwab	Jacobs
	Winton Terrace	
	Academy of World Languages	Douglass
West	Hoffman / Windsor	Parham
	Carson	Oyler
	New Price Hill (@ Considine)	Sayler Park
High Schools	Quebec Heights	
	Roberts	
	Whittier	
	New East End (pk-12)	Aiken
	New Military Academy	Clark
	SCPA / Schiel	Dater (@ West High)
	Shroder (@ Eastwood)	Hughes
	Westside Montessori (@ Heinold)	Taft High
	Woodward	Walnut Hills
		Western Hills
		Withrow



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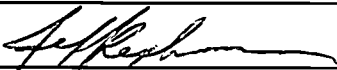


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