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# **Economic Impact Study: United Methodist Community House Expansion**

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# Economic Impact Study United Methodist Community House Expansion

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8/25/2020

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#### **EXECUTIVE SUMMARY**

#### Scope of work

In 2019, United Methodist Community House (UMCH) commissioned IFF, a real estate consulting firm, to perform a strategic facility plan. This strategic plan's needs assessment included the following: A new senior center, expanded child development center, and relocation of administrative offices.

Seidman Research Office at Grand Valley State University was retained by UMCH to perform an economic assessment of the IFF strategic facility plan. This economic assessment will:

- (A) evaluate the economic impact of construction of proposed senior center;
- (B) evaluate the economic impact of UMCH operations;
- (C) evaluate the economic impact of expanded child development center; and
- (D) quantify the economic impact of the new senior center (magnet effect).

For the purpose of this report, the local region is defined as Kent County.

COVID-19 Disclaimer: This economic impact study does not factor in the economic or social impact of the COVID-19 pandemic.

# Methodology

#### Introduction

This report focuses on the economic impact of the new senior center, expanded child development center, and UMCH operations. Economic impact is the amount of economic activity that these areas generate within a defined region. For the purpose of this report, the local region is defined as Kent County. Displacement spending is excluded from all impact figures.

The economic impact is estimated using the Regional Input-Output Modeling System (RIMS II). The U.S. Department of Commerce's Bureau of Economic Analysis (BEA) developed the Regional Input-Output Modeling System or RIMS II for estimating regional economic impacts, widely used in evaluating public and private sector projects. A major reason why the use of RIMS II has become an accepted academic methodology is that the BEA has developed different multipliers for 406 detailed industries and for Metropolitan Statistical Areas, Metropolitan Divisions, Micropolitan Statistical Areas, and Combined Statistical Areas across all 50 U.S. States and the District of Columbia, allowing for economic impact studies to be tailored to precise needs. The RIMS II multipliers measure two economic effects:

*Indirect Effects*: The increase in sales by businesses that are suppliers to restaurants, hotels, retail stores, etc.

*Induced Effects*: The increased economic activity by individuals in the area who receive extra income due to the increase in direct spending.

The indirect and induced effects are reported in three ways:

**Gross Output** Gross output is the total economic activity, including the sum of intermediate inputs and the value they add to the final good or service. The intermediate inputs are the resources used in the production of final goods and services. It should be noted that gross output can be over stated if the intermediate inputs are used multiple times in the production of other goods and services.

**Earnings** Earnings measures the increases in wages, salaries and proprietors' income as a result of the initial change in demand. This can also be stated as an increase in household income for every \$1 change in demand.

**Employment** Employment is the increase in jobs (full-time and part-time) for every \$1 million change in demand. This measurement does not distinguish between a full-time or part-time employee. It also does not account for employees who moved from one job to another within the defined economic region. Thus it does have a tendency to overstate the number of jobs created.

This report relied on information provided by UMCH and a 2019 AARP survey. For specific methodology, see A-4 AARP Survey on page 15.

#### Summary of Economic Impact

- Expanded child development center increases household purchasing power by \$3.3 million.
- Construction of the new facilities generates \$39 million in economic activity during the construction phase.
- The expanded child development center, the new senior center, and UMCH operations generate \$7 million in annual economic activity, which supports 55 jobs.
- The health and fitness impact will reduce medical costs approximately \$935,000

#### BACKGROUND

UMCH was founded in 1902 as an organization dedicated to creating opportunities to support the success of children, youths, adults, and seniors in the Grand Rapids community. The organization currently operates out of a 28,000 square foot facility, which includes an operational bakery, childcare center, warehouse, office and storage space. UMCH recently purchased a 52,000 square foot warehouse on a 2.2-acre site that will be demolished and replaced with its new facility.

In 2019, UMCH commissioned IFF, a real estate consulting firm, to perform a strategic facility plan. This strategic plan's needs assessment included the following:

- A new senior center that will expand UMCH programming to include recreational, educational, and social engagement opportunities. This expanded center will include a two-court gymnasium, full locker room, aquatics center, commercial kitchen, game room, arts studio, and multiple purpose rooms.
- Expanding the child development center to 200 children (an increase of 100) ages 0-5. The expansion will include additional classroom and support space. <sup>1</sup>
- Relocating the administration offices to the new development facilities.

Total facility square-footage will be 85,120 (+33,120 square feet) with an estimated construction cost of \$35 million (\$416 per square foot).<sup>2</sup> Total construction costs include soft costs (\$8.5M) and project contingency costs (\$4.3M).

Additional details can be found in the 2019 IFF Strategic Facilities Plan.

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<sup>&</sup>lt;sup>1</sup> Pre-COVID plans called for an increase to 240 children. As a result of COVID-19, the increase in capacity was reduced to 200 children.

<sup>&</sup>lt;sup>2</sup> As a result of COVID-19, the expansion was reduced from 112,515 square feet to 85,120 square feet. Construction costs decreased from \$47 million to \$35 million. It should be noted that the \$35 million is a projected figure based on the original cost of \$416 per square foot.

#### **ECONOMIC EFFECTS**

This section will estimate the economic impact of the construction phase, expanded child development center, UMCH operations, and new senior center.

# **Economic Impact of Construction**

Estimated construction costs are \$35 million. For the purpose of this analysis we assume 72% of construction costs are spent locally and 90% of the construction is new.<sup>3</sup> Applying appropriate RIMS II multipliers, the full effect on Kent County economy is shown in Table 1. It should be noted that this impact occurs during the construction phase only, which is projected to last from 2021 through 2022.

Table 1: Economic impact during the construction phase

Estimated construction costs <sup>4</sup>	\$23M
Indirect and induced impact	\$16M
Total economic output	\$39M
Total earnings	\$10M
Total employment	197

<sup>&</sup>lt;sup>3</sup> This percentage was taken from a recent comparable study. (cite) Discounting the cost by 10% accounts for displacement spending, that is, construction that would have occurred regardless of UMCH expansion.

<sup>&</sup>lt;sup>4</sup> See <u>A-1: UMCH Construction Spending</u> on page 10 for specific methodology

#### Economic Impact of Expanded Child Development Center

UMCH will increase the child development center capacity from 100 children to 200 children (ages 0-5). The expanded facility will include twenty classrooms, three dedicated gross motor rooms, family support space, a resource room, in-class restrooms, and additional office space.

Per Census.gov, the per capita income in Kent County is \$32,634<sup>5</sup>. If we assume the increase in capacity is consumed by one child per family and the parent was not working prior to the increase in capacity, the resulting increase in purchasing power is estimated at \$3.2 million. The increase in purchasing power also assumes full enrollment. The estimated economic impact from this increase in purchasing power is shown in Table 2. Due to lack of detailed information, these impact figures may be overstated. Additional surveying would need to occur to arrive at a more accurate figure.

Included in Table 2 is the 10-year present value (PV) of economic output and earnings. The PV assumes full enrollment and an annual increase in median income of 2%.

Table 2: Annual economic impact from the child development center expansion

Increase in purchasing power	\$3.26M	10-Year PV <sup>6</sup>
Total economic output <sup>7</sup>	\$2.66M	\$21M
Total earnings	\$666,000	\$6.7M
Total employment	18	

# Economic Impact of UMCH Operational Spending

<sup>&</sup>lt;sup>5</sup> Census reports median income at \$31,005 in 2018 dollars. This was adjusted to 2022 dollars using the actual inflation rate for 2019 and 2020 and using an assumed inflation rate of 2% for 2021.

<sup>&</sup>lt;sup>6</sup> The discount rate of 5% is based on the 10-year treasury as of 2/2020 (1.5%) plus a 3.5% risk premium.

<sup>&</sup>lt;sup>7</sup> See A-2: UMCH Operations on page 10 for specific methodology

The IFF Strategic Facilities Plan included pro-forma financial statements that showed child development center operating expenses of \$2.7 million and senior center operating expenses of \$1.7 million. These expenses are based on opening day of the new facilities (FY 2022). We assume 90% of this spending remains within the local region.<sup>8</sup> Table 3 shows the economic effect after applying the appropriate RIMS II multipliers.

The IFF Strategic Facilities Plan included 10-year financial projections for the child development center and the senior center. Using these projections, we estimate a 10-year present value (PV) for economic output and earnings. The PV figures are included in Table 3.

Table 3: Annual economic impact from UMCH operational spending

Operational Expenses <sup>9</sup>	\$3.9M	10-Year PV <sup>10</sup>
Total economic output	\$3.7M	\$33.3M
Total earnings	\$1.0M	\$11.9M
Total employment	31	

# Economic Impact of the Senior Center

For this report, economic impact of the proposed senior center is measured by the projected magnet effect, defined as induced spending in a community by the senior center's members, visitors, and employees.

Determining the economic impact of the senior center required the use of the benefit transfer method. This method was selected for two reasons: first, statistically reliable survey data was not available. Second, data from existing studies is easily transferred.

<sup>&</sup>lt;sup>8</sup> The 90% was taken from a comparable study (cite)

<sup>&</sup>lt;sup>9</sup> See A-2: UMCH Operations on page 10 for specific methodology

The discount rate of 5% is based on the 10-year treasury as of 2/2020 (1.5%) plus a 3.5% risk premium.

For the purpose of this report, we used the Wyoming Senior Center 2018 Economic Impact Report and the 2015 Salvation Army Ray & Joan Kroc Corps Community Center report.<sup>11</sup> Table 4 shows the annual economic impact using these two studies. <sup>12</sup>

Table 4: Annual economic impact from new senior center

10-Year PV13

Total economic output	\$541,000	\$4.8M
Total earnings	\$144,000	\$1.3M
Total employment	6	

#### Health and Fitness Effect of the Senior Center

The health and fitness impact was calculated using the AARP survey and the benefit transfer method. We used the Senior Neighbors 2019 Impact Report to determine the number of annual members (861)<sup>14</sup>.

The AARP survey asked respondents which activities they would likely participate in; five of these could be categorized as a "fitness activity." We measured the percentage of survey participants who chose at least one of these activities, which is 77%. Multiplying the projected number of members by the percentage exercising yields 663 members exercising.

One of the main benefits for seniors who engage in fitness is the prevention of falls. We used CDC information on the medical costs associated with falls, <sup>16</sup> which provides an added cost savings (benefit) to the community. These benefits amount to \$934,677 annually.

<sup>&</sup>lt;sup>11</sup> Reports available upon request

<sup>&</sup>lt;sup>12</sup> See A-3: Economic impact of senior center on page 12 for specific methodology

<sup>&</sup>lt;sup>13</sup> The discount rate of 5% is based on the 10-year treasury as of 2/2020 (1.5%) plus a 3.5% risk premium. An annual 2% inflation rate was used for per person/per visit spending

<sup>14</sup> https://seniorneighbors.org/about-us/financials/

<sup>&</sup>lt;sup>15</sup> Activities classified as exercise include: aqua therapy pools, pickle ball courts, basketball courts, walking track, and fitness classes.

<sup>&</sup>lt;sup>16</sup> https://www.cdc.gov/homeandrecreationalsafety/falls/data/index.html

## **SUMMARY OF FINDINGS**

The estimates given in Tables 1 through 4 reflect separate impacts on the West Michigan economy. The economic impact of construction (Table 1) is \$39 million in output, supporting 197 jobs. Household income is projected to increase by \$10 million. This is a one-time impact, rather than the annual impacts shown in Tables 2. The annual impact of the child development center expansion, senior center, and UMCH personnel expenses is shown in Table 5. Also included in Table 5 is the cumulative 10-year present value (PV) of the economic impact.

Table 5: Estimated annual economic impact of the expanded child development center and UMCH operational spending

Category	Impact	10-Year PV
<b>Total Output</b>	\$7 million	\$59 million
<b>Total Earnings</b>	\$1.8 million	\$19.8 million
<b>Total Employment</b>	55	

#### **APPENDIX**

## A-1: UMCH Construction Spending

Using 72% as the percentage of construction workers from Kent County was taken from a comparable study. Discounting the construction costs by 10% accounts for displacement spending, spending that would have occurred regardless of UMCH expansion plans. RIMS II "Construction" multipliers were used to estimate the economic impact shown in Table 1 on page 5.

Table A-1: Net construction costs

Estimated construction costs	\$35,421,985
Construction workers from Kent County	72%
Local construction costs	\$25,503,829
Construction costs considered 'new'	90%
Net local construction costs	\$22,953,446

# A-2: UMCH Operational Spending

Projected operating expenses were taken from the IFF Strategic Facilities Plan.

Child Development Center operations

Personnel expenses are assumed to be 85% of total operating expenses. RIMS II "Household" multipliers were used for personnel expense and "Child Care" multipliers were used for other operating expenses.

Table A-2a: Child development center projected operating expenses

FY 2022		Adjusted 90%
Projected personnel expenses <sup>17</sup>	\$2,281,873	\$2,053,686
Projected other operating expenses	\$402,684	\$362,415
Total projected operating expenses	\$2,684,557	\$2,416,102

Senior center operations

Personnel expenses are assumed at 78% of total operating expenses. RIMS II "Household" multipliers were used for personnel expense and "Nursing/Community Care" multipliers were used for other operating expenses.

Table A-2b: Senior center projected operating expenses

FY 2022		Adjusted 90%
Projected personnel expenses	\$1,313,417	\$1,182,075
Projected other operating expenses	\$370,4521	\$333,406
Total projected operating expenses	\$1,683,868	\$1,515,481

<sup>&</sup>lt;sup>17</sup> Based on UMCH data

<sup>&</sup>lt;sup>18</sup> Based on UMCH data

#### Combined operations

The combined operating expenses shown below were used to calculate the economic impact of operations, as shown in Table 3.

Table A-2c: Combined operating expenses

FY 2022 Adjusted 90		Adjusted 90%
Total child development center operating expenses	\$2,684,557	\$2,416,102
Total senior center operating expenses	\$1,683,868	\$1,515,481
Total combined operating expenses	\$4,368,425	\$3,931,583

# A-3: Economic Impact of the Senior Center

The Wyoming Senior Center 2018 Economic Impact Report reported 55,045 visits in 2018. The 2015 Salvation Army Ray & Joan Kroc Corps Community Center report estimated per-person, per-visit spending of \$5.30. This amount, adjusted for inflation using the Bureau of Labor Statistics inflation calculator, is \$5.87. Table A-3 below shows how direct spending was calculated. When this amount is multiplied against the appropriate RIMS II multipliers we arrive at the impact figures shown in Table 4.

Table A-3: Direct spending

Spending per-person, per visit (2020 dollars)	\$5.87
Total visits	55,045
Total direct spending	\$323,114

14

<sup>&</sup>lt;sup>19</sup> https://www.bls.gov/data/inflation\_calculator.htm

#### A-4: AARP Survey

A survey was distributed via email by the American Association of Retired Persons (AARP), on behalf of UMCH, during the summer of 2020. The goal of the survey was to gather information from Grand Rapids residents on their level of interest in a new senior center in the city. AARP sent out an email with the survey link to 7814 randomly-selected AARP members living in the city of Grand Rapids, ages 50 and over. The result was one hundred and seventy-eight completed surveys, for a response rate of 2%.

Data from question 11 of the AARP survey was used in this report. The full survey results are viewable at this link, https://www.surveymonkey.com/results/SM-CC5J2LYT7/.

#### Research Team:

Christian Glupker, MBA, is a Clinical Affiliate in Economics at Grand Valley State University. His research and teaching interests include economic impact studies, money & banking, macroeconomics, corporate finance, and sports economics. Prior to academia, Christian spent over 12 years in banking, serving as Senior Vice President of corporate banking.

Dr. Leslie Muller is an Associate Professor of Economics at Grand Valley State University. She earned her Ph.D. in Economics from Michigan State University in 2000. Before coming to Grand Valley in 2011, she worked as a senior pension economist for the Social Security Administration in Washington D.C. and taught economics at Calvin University and Hope College. Her research interests include health and retiree public policy, employer-sponsored pension plans, and financial education. Her teaching interests include health economics & public policy.

Julie M. Cowie has worked with the Seidman Research Office of Grand Valley State University since 2014. In her capacity as project manager she manages the logistics of research studies and edits the resulting reports. She holds degrees from the University of Michigan and Princeton Theological Seminary.