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## McCamly Plaza Economic Impact Report

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Prepared for  
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W.E. UPJOHN  
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## Executive Summary

In August of 2020, leadership at Battle Creek Unlimited (BCU) requested that the Regional and Economic Planning Services Team at the W.E. Upjohn Institute for Employment Research (Upjohn) create a set of estimates for the renovation and operation of the McCamly Plaza Hotel and Plaza located in downtown Battle Creek.

Michigan.org describes the McCamly Plaza Hotel as “a hotel in the heart of Downtown Battle Creek, MI, with 239 recently renovated guest rooms and suites, indoor swimming pool, valet and self-parking, and event space for up to 500 guests.” Other amenities include nearby dining options in the adjacent McCamly Plaza and proximity to the Kellogg Arena.

Due to the property being in transition, actual proforma data were not available for estimating the impacts of the operations. To create reliable estimates for the economic impacts, the Regional Team used data supplied by BCU. Using these data, the team was able to create a set of estimates based on the costs for completing renovations, as well as the value of operations and estimated patron spending behavior due to the availability of the complex. Aside from information provided directly by BCU, BCU was also able to provide data from the Sports Facilities Advisory (SFA) and the Calhoun County Convention and Visitors Bureau.

# Estimating Impacts

## Inputs

The estimates of economic impacts from the renovation and operation of the McCamly Plaza complex rely on three sets of data, including renovation costs, hotel operations, and visitor spending, which were supplied by Battle Creek Unlimited (BCU) staff. The data inputs into the REMI model were \$12.5 million, including \$10 million for the hotel renovations and \$2.5 million for renovations of the plaza, which includes office and conference space. REMI is an annualized model. For purposes of creating the estimates of impacts from renovations, the \$12.5 million investment was assumed to occur in 2021.

Table 1 contains the inputs into the REMI model for operating the hotel. A series of assumptions were made to convert the use of the hotel's 239 rooms into a set of sales estimates for use in REMI. Using trend data of hotel occupancy provided by the Calhoun County Convention and Visitor's Bureau (CVB) for the period 2017 to 2019, average or mean occupancy rates were estimated for each month of the year. Using the mean occupancy rate for each month, total room nights were estimated by applying the rate multiplied by the number of days in the month and then multiplied by 239, the number of available rooms in the hotel. Given the nature of the hotel being downtown and more likely oriented to business travelers and other professionals, the suggested rate of \$110 per night was considered a reasonable nightly room rate. Applying this methodology to room nights, the team at Upjohn estimated that, at trend occupancy levels, there would be 47,388 room nights consumed and that those rooms would generate just over \$5.2 million in revenue on the hotel side. Note that this revenue estimate is only for accommodations and does not include food, banquet, and meeting services. Those activities are discussed in the next section. Due to the nature of the hotel already existing in Battle Creek, it was assumed that operations would ramp up quickly in 2022 and there would be little lag in moving to operating at near-typical capacity.

The other inputs associated with patrons to the hotel, aside from room nights, centers around food service operations (bar, restaurant, meetings, and banquets) and other visitor spending, both on site and off site. The hotel had 30 staff (FTE) in the food service part of its operations, and discussion with BCU staff suggested that about two-thirds (or 20) of these staff were providing services to meetings and banquets. Those 20 employees were used as inputs into REMI for 2022.

Using average daily expenditure data for non-local overnight visitors (90+ minutes)<sup>1</sup> from the SFA and supplied by BCU, the Regional Team estimated visitor spending on dining, transportation, entertainment, and retail. While the SFA had several categories of data, Upjohn chose to use the SFA estimates for trade shows, conferences, meetings, and these

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<sup>1</sup> From the Sports Facilities Advisory presentation for Pure Michigan Sports in Calhoun County.

types of activities<sup>2</sup> because the team believes that this best represents the client base of a downtown hotel. The 10 food service people employed by the hotel, but not included with the meetings and banquet staff, are included here. Based on the average expenditure data from the SFA, it is not possible to split spending on dining into expenditures on site versus off site. As shown in Table 2, daily expenditures per visitor per day is just under \$48 for dining, about \$73 for transportation, just over \$9 for entertainment, and just under \$18 for retail. Note that while the other categories are used at full value, retail is discounted by about 66% due to accounting for the “margins.” In this case, there is a common assumption in economic impact modeling that most goods sold at the retail level are produced outside the study region and so the remaining 33% accounts for local costs such as rent, utilities, and labor. The REMI model assumes that only margins are used, and the factor is incorporated in the model.

Also included in Table 2 are three sets of inputs. The number of people visiting or occupying the rooms is unknown, so the Regional Team created the sets of estimates for visitor spending. As the team is working under an assumption that most visitors are at the hotel for business and professional reasons, the expectation is that the total visitors on an average night will be less than two. Given the unknown number of visitors, estimates were created, and results were reported for 1.5, 1.33, and 1.0 occupants per night.

## **Economic Impacts**

Tables 3, 4, and 5 contain both renovations, operations, and visitor spending. As noted earlier, the renovation phase is forecast to occur in 2021 and create about 90 jobs, with most of those being in the private and non-farm sectors. The construction phase adds just under an estimated \$4 million in personal income to the study area, which is Calhoun County.

Table 3 contains the estimates of operations and visitors assuming that there are 1.5 visitors per hotel night. This assumption of occupancy and associated spending adds just under 146 private sector jobs to the Calhoun County labor market and just over \$4 million in income for the year of 2022. It is important to note that unlike construction impacts, which will only occur in 2021, assuming the occupancy and spending estimates are maintained, these jobs are annual and would continue beyond 2022 and into the foreseeable future. Table 4 contains the estimates of impacts if the average occupancy per night is 1.33. This set of estimates yields just under 135 jobs in the county and just under \$4 million in personal income. Finally, Table 5 contains estimates when occupancy is just one guest per night. This set of estimates supports just under 115 annualized jobs and just over \$3.5 million in personal income.

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<sup>2</sup> From the Sports Facilities Advisory presentation for Pure Michigan Sports in Calhoun County.

**Table 1: Inputs into REMI—Annualized Revenues for 2022**

	Vacancy Rate			Typical Year	Number of Rooms	Days in Month	Occupied	Rack Rate
	2017	2018	2019	Mean 2017 to 2019	239	–	–	\$110.00
January	43.4	38.6	45.8	42.6%	102	31	3,156	\$347,185.74
February	52.7	49.2	50.3	50.7%	121	28	3,395	\$373,458.21
March	54.7	46.8	51.8	51.1%	122	31	3,786	\$416,459.89
April	54	52.8	55.5	54.1%	129	30	3,879	\$426,686.70
May	55.2	51.8	57.1	54.7%	131	31	4,053	\$445,799.53
June	64.2	58.8	58.9	60.6%	145	30	4,347	\$478,215.10
July	68.8	85	68.7	74.2%	177	31	5,495	\$604,450.92
August	61.3	63.1	58.8	61.1%	146	31	4,524	\$497,687.23
September	57.7	65.2	59.9	60.9%	146	30	4,369	\$480,581.20
October	58.3	63	57.3	59.5%	142	31	4,411	\$485,190.71
November	43.1	42.4	44.1	43.2%	103	30	3,097	\$340,718.40
December	35.5	36.1	44.8	38.8%	93	31	2,875	\$316,216.12
<b>Total</b>							47,388	\$5,212,649.75



**Table 2: Local Spending by Visitors**

Purchases	Base Rate	Visitor Per Night	Per Night Model Input	Nights
		<b>1.5 Visitors</b>		47,388
				<b>Total Spend</b>
Dining/Groceries	\$48	\$72	\$72	\$3,398,430
Transportation	\$7	\$11	\$11	\$497,574
Entertainment/Attractions	\$9	\$14	\$14	\$651,822
Retail	\$18	\$27	\$9	\$421,758
		<b>1.33 Visitors</b>		
Dining/Groceries	\$48	\$64	\$64	\$3,013,275
Transportation	\$7	\$9	\$9	\$409,669
Entertainment/Attractions	\$9	\$12	\$12	\$577,949
Retail	\$18	\$24	\$8	\$373,959
		<b>1.0 Visitors</b>		
Dining/Groceries	\$48	\$48	\$48	\$2,265,620
Transportation	\$7	\$7	\$7	\$308,022
Entertainment/Attractions	\$9	\$9	\$9	\$434,548
Retail	\$18	\$18	\$6	\$281,172

**Table 3: Estimates for 1.5 Visitors per Night**

	Year	
	2021	2022
Total Employment	90.44	152.37
Private Non-Farm Employment	86.48	145.51
Output	\$18,220,700	\$19,303,500
Value-Added	\$8,889,900	\$11,210,800
Personal Income	\$3,919,100	\$4,137,200

**Table 4: Estimates for 1.33 Visitors per Night**

	Year	
	2021	2022
<b>Total Employment</b>	90.44	141.29
<b>Private Non-Farm Employment</b>	86.48	134.73
<b>Output</b>	\$18,220,700	\$18,318,800
<b>Value-Added</b>	\$8,889,900	\$10,642,100
<b>Personal Income</b>	\$3,919,100	\$3,925,300

**Table 5: Estimates for 1.0 Visitor per Night**

	Year	
	2021	2022
<b>Total Employment</b>	90.44	120.55
<b>Private Non-Farm Employment</b>	86.48	114.54
<b>Output</b>	\$18,220,700	\$16,516,600
<b>Value-Added</b>	\$8,889,900	\$9,599,600
<b>Personal Income</b>	\$3,919,100	\$3,530,800

## The REMI Model

The Upjohn Institute uses a model to estimate economic impacts developed specifically for the study region by Regional Economic Models, Inc. (REMI, [www.REMI.com](http://www.REMI.com)). The team's project director has over 20 years of experience with REMI to estimate economic impacts across a wide range of economic activity including visitor/tourism activities, industrial development, mixed-use development, and forecasting future economic and labor conditions. The REMI model is the preeminent model of its type and is widely recognized to be at the forefront of modeling, with clients not only in North America but also in the European Union.

REMI is a dynamic model that creates estimates using equations rather than a simple input/output (I/O) table. This allows sensitivity in the analysis for both timing and scale/scope issues that are not found in other models. Features that are unique to REMI include:

- It is calibrated to local conditions using a relatively large amount of local data, which is likely to improve its performance, especially under conditions of structural economic change.
- It has an exceptionally strong theoretical foundation.
- It combines several different kinds of analytical tools (including economic-base, input-output, and econometric models), allowing it to take advantage of each specific method's strengths and compensate for its weaknesses.
- It allows users to manipulate an unusually large number of input variables and gives forecasts for an unusually large number of output variables.
- It allows the user to generate forecasts for any combination of future years, allowing the user special flexibility in analyzing the timing of economic impacts.
- It accounts for business cycles.
- It has been used by many users under diverse conditions and has proven to perform acceptably.

## Jobs Created or Retained

The estimated number of jobs created or retained by project activities are simply "jobs" as counted by the U.S. Bureau of Economic Analysis (BEA) and can be either full- or part-time positions. They are likely distributed across multiple industries. In any given industry, a "job" may represent a summation of positions across several industries in which each industry has less than one complete position. For example, the impact study may report one "job," but the spending patterns in the study may generate positions in three industries. However, each industry may require only one-third of a person. In this case, the three industries that employ one-third of a person each to meet demand would sum to one "job" in the REMI model.

Employment is composed of three elements:

- Direct – The employment created by actual investment, growth, or change
- Indirect – The employment created by the need of the new firm to purchase goods and services, essentially the local supply chain
- Induced – The household that supplies goods and services to the workers in the prior two elements. Examples include education, dry cleaners, accountants, gas stations, lawyers, and grocers.

## **Gross Domestic Product**

Gross domestic product is an economic measure of the value of goods and services produced within the United States. It is the broadest measure of economic activity within a region or country. It consists of compensation of employees; taxes on production and imports, less subsidies; and gross operating surplus. It does not include intermediate inputs; it is a measure of the value contributed by labor and capital to production.

## **Personal Income**

Income is the goods and services produced by citizens and residents in the study region, in this case for Calhoun County, (i.e., gross national product) minus the consumption of fixed capital (i.e., depreciation).

## **Output**

Gross output includes both GDP and expenditures on intermediate inputs. In that way, it is considered double counting, but it is an essential statistical tool to understand the interrelationships between industries. Gross output is principally a measure of an industry's sales or receipts.

## About the Upjohn Institute

The W.E. Upjohn Unemployment Trustee Corporation was incorporated on October 24, 1932, as a Michigan 501(c)(3) nonprofit corporation, and is doing business as the W.E. Upjohn Institute for Employment Research. The W.E. Upjohn Institute for Employment Research has been conducting economic research and consultation for 75 years, since its founding in 1945.

The Upjohn Institute is governed by a Board of Trustees, which employs a President who is responsible for the overall operation of the Institute. The President of the Upjohn Institute is Dr. Michael Horrigan.

The Upjohn Institute currently employs 104 individuals. Upjohn's research and consultation program is conducted by a resident staff of professional social scientists, 12 of whom are Ph.D.-level economists (senior staff). Senior staff is supported by a staff of research analysts and additional support staff. Upjohn also administers the federal and state employment programs for its four-county area through the local Workforce Investment Board. Upjohn also publishes books on economic development, workforce development, and other employment-related topics.

The Ph.D.-level economists have more than 175 years of collective experience, conducting research on a broad variety of economic and employment topics. Their experience includes, but is not limited to, employment program evaluation, labor market dynamics, labor-management relations, employment and training programs, economic and workforce development, income replacement policy, worker adjustment, the role of education in labor markets, employment and compensation, disability, international comparison of labor adjustment policies, site selection experience, and state, regional, and local economic analysis.

The Upjohn Institute also has a Regional Economic and Planning Services team of specialists who provide economic insights and analysis regionally and statewide in Michigan, in other individual states, and nationally. The team has experience in:

- Economic impact analysis
- Fiscal/cost-benefit impact analysis
- Labor market analysis
- Facilitating and conducting effective one-on-one interviews, focus groups, workshops, and charrette sessions in a diverse array of environments
- Economic and workforce development and education strategies
- GIS mapping abilities
- Rural and urban land use and economic development planning services
- Regional data analysis

For questions or information about this report, contact Jim Robey, Director of Regional and Planning Economic Services, 269-365-0450, or [jrobey@upjohn.org](mailto:jrobey@upjohn.org).