



# Memorandum

Date: November 26, 2013

To: Dr. Jeffrey R. Docking, President, Adrian College

From: Samantha Superstine, Senior Analyst, Anderson Economic Group

Re: Economic Scope Analysis for Adrian College

Cc: Robert LeFevre, President, AICUM

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## Purpose of Report

On behalf of Adrian College, the Association of Independent Colleges & Universities of Michigan (AICUM) commissioned Anderson Economic Group (AEG) to estimate the economic footprint of Adrian College in the State of Michigan.

## Overview

We define economic footprint as the total economic activity in the region (in this case, in Michigan) that is associated with or supported by an institution. The economic footprint analysis in this memorandum includes all spending, employment, and earnings associated with Adrian College operations and student spending. Adrian College and students at Adrian contribute to the Michigan economy in two ways:

- The direct spending that enters the Michigan economy in a variety of industries; and
- The indirect, additional economic activity that occurs as a result of the re-circulation of the direct spending in the Michigan economy.

We present the total spending, earnings, and jobs by taking the initial direct effects, and adding the indirect effects. See “Appendix A. Methodology” on page 6 for details of our estimation methods.

In this memo, we describe and calculate the components of Adrian College’s economic footprint in Michigan for fiscal year 2011 (FY 2011). The total economic footprint of Adrian College in terms of spending, earnings, and jobs is summarized in Table 1 on page 2.

**Table 1. Economic Footprint of Adrian College, FY 2011**

	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Spending (millions)	\$54.8	\$39.8	\$94.7
Earnings (millions)	\$18.1	\$12.8	\$30.9
Jobs	365	208	572

*Source: Adrian College, IPEDS, Consumer Expenditure Survey, College InSight, BEA RIMS  
II Multipliers*

*Analysis: Anderson Economic Group, LLC*

## **Spending by Adrian College and Students**

We began by estimating Adrian’s spending on payroll, goods, and services, as well as spending by Adrian’s students. The spending that goes to vendors and employees in Michigan contributes to Adrian’s economic footprint in the state, which is discussed in the following section.

### *Spending by Adrian College*

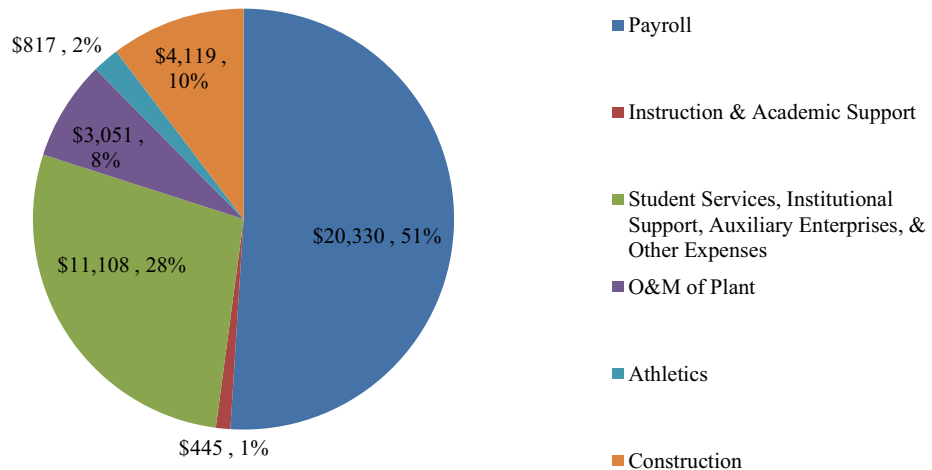
**Payroll Spending.** In fall 2010, Adrian College employed 370 employees. In FY 2011, Adrian spent over \$20 million on salaries, wages, and benefits for employees. Most of this spending remains in Michigan.

**Non-Payroll Spending.** Adrian College spent over \$19.5 million in FY 2011 on goods and services for the college. This includes spending on:

- Instruction;
- Academic Support;
- Student Services;
- Institutional Support;
- Auxiliary Enterprises;
- Athletics; and
- Construction.

Figure 1 on page 3 shows spending by Adrian College by function, highlighting that payroll expenditures account for the largest proportion, followed by student services, institutional support, auxiliary expenses, and other expenses.

**Figure 1. Adrian College Expenditures by Function, FY 2011 (thousands)**



Source: Adrian College, IPEDS  
 Analysis: Anderson Economic Group, LLC

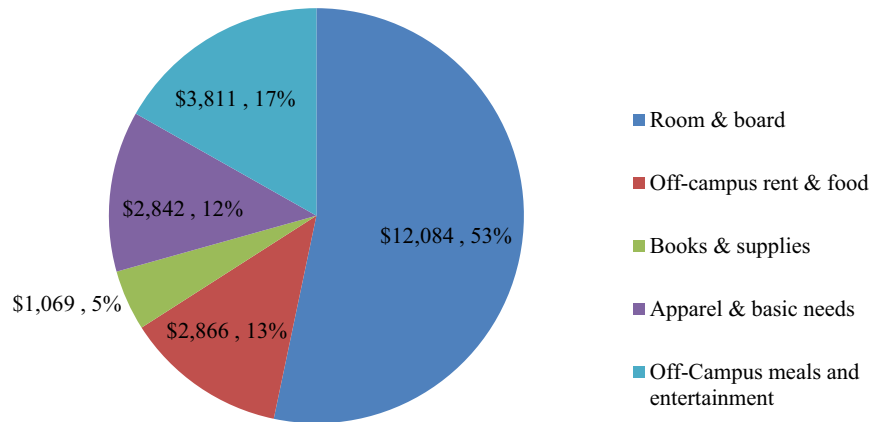
*Student Spending*

Adrian College enrolled 1,670 students for the 2010 fall semester. These students spent nearly \$23 million in FY 2011. This estimate includes spending on the following:

- Room and board;
- Off-campus rent and food;
- Books and supplies;
- Apparel and basic needs; and
- Off-campus meals and entertainment.

Figure 2 below shows student spending for Adrian College, highlighting that the majority of which is on room and board.

**Figure 2. Student Expenditures by Function, FY 2011 (thousands)**



Source: Adrian College, Consumer Expenditure Survey, College InSight  
 Analysis: Anderson Economic Group, LLC

## Adrian College's Economic Footprint in Michigan

Adrian College contributes to economic activity in the state by adding direct and indirect spending, earnings, and jobs in Michigan. Below, we provide an overview of the scope of these three components of Adrian's footprint.

### *Spending*

We quantify both the direct and indirect spending by Adrian College in Michigan. Many local vendors rely on spending by Adrian College for business. Additionally, local businesses rely on student and employee spending on goods and services in the area. Direct spending results from money spent in the Michigan economy by Adrian College and its students. Indirect spending is a secondary effect of this direct spending. As Adrian and its students pay Michigan vendors for goods and services, these vendors in turn spend more at local suppliers. Similarly, Adrian's Michigan-resident employees spend earnings on goods and services in the state, supporting additional spending to fill the need for those goods and services.

The direct portion of Adrian College's economic footprint includes three sources:

1. Payroll spending;
2. Non-payroll spending; and
3. Spending by students.

**Adrian Payroll Spending.** We estimate that \$18.1 million (89%) of the \$20.3 million in payroll spending remains in Michigan. These employees then purchase goods and services from local vendors, who in turn spend additional money in Michigan to support their businesses. We estimate that the additional indirect spending from Adrian's payroll expenditures is \$7.5 million.

**Adrian Non-Payroll Spending.** We estimate that \$14.5 million (74%) of the \$19.5 million spent by Adrian in FY 2011 was spent on goods and services from Michigan vendors. Once we consider the additional spending on goods and services that is supported by Adrian's non-payroll spending, we estimate that total Michigan spending associated with Adrian's purchases from Michigan vendors is \$31.2 million.

**Spending by Students.** Of the \$22.7 million that students spent in FY 2011, we estimate that \$22.2 million went to Michigan vendors. Once we account for the additional economic activity supported by student spending in the state, we estimate direct and indirect student spending totals \$38.0 million.

Table 2 on page 5 shows the spending footprint in Michigan for Adrian's payroll and non-payroll spending, as well as student spending.

**Table 2. Spending Footprint of Adrian College in Michigan, FY 2011 (millions)**

	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Payroll Spending	\$18.1	\$7.5	\$25.6
Non-payroll Spending	\$14.5	\$16.7	\$31.2
Student Spending	<u>\$22.3</u>	<u>\$15.7</u>	<u>\$37.9</u>
<b>Total</b>	<b>\$54.9</b>	<b>\$39.8</b>	<b>\$94.7</b>

*Source: Adrian College, IPEDS, Consumer Expenditure Survey, College InSight, BEA RIMS II Multipliers*

*Analysis: Anderson Economic Group, LLC*

### *Jobs and Earnings*

All of this spending in the state results in indirect job creation in addition to direct employment by the university. The footprint for Adrian College in Michigan is 572 jobs, and \$30.9 million in earnings. Table 3 below shows the direct and indirect jobs and earnings supported by Adrian College.

**Table 3. Jobs and Earnings Supported by Adrian College in Michigan, FY 2011**

	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Jobs	364	208	572
Earnings (millions)	\$18.1	\$12.8	\$20.9

*Source: Adrian College, IPEDS, Consumer Expenditure Survey, College InSight, BEA RIMS II Multipliers*

*Analysis: Anderson Economic Group, LLC*

## Appendix A. Methodology

We define economic footprint as the aggregate spending, jobs, and earnings in Michigan that are associated with Adrian College.

Direct economic activity includes spending and employment by the college, while indirect and induced impacts stem from the recirculation of dollars within the defined geographic region. As Adrian College makes expenditures, the money is then re-spent throughout the Michigan economy, resulting in a “multiplier” effect. These indirect effects are also a significant contributor to Michigan’s economy, and are thus included in the total footprint.

### *Direct Economic Footprint*

Direct spending includes the following categories.

**Payroll Spending.** In order to determine the amount of payroll spending in the State of Michigan, we relied on data from the Integrated Postsecondary Education Data System (IPEDS) for FY 2011. Adrian College provided us with payroll spending by zip code, which we used to determine the amount of payroll for Michigan residents.

**Non-payroll Spending.** We obtained data from IPEDS on spending by function for FY 2011. We then relied on data from Adrian College to inform what proportion of this spending went to Michigan vendors.

**Student Spending.** To estimate student spending in Michigan, we used data provided by Adrian College on the number of students that lived on- and off-campus at Adrian College. We then estimated the student spending for several categories of living expenses:

- Room and board;
- Off-campus rent and food;
- Books and supplies;
- Apparel and other basic needs; and
- Off-campus meals and entertainment.

For each category, we estimated total spending for the total number of students, with the exception of books and supplies, which we calculated on a FTE-basis. Data for books and supplies is from College InSight.<sup>1</sup>

We obtained room and board costs for on-campus students from Adrian College. Spending on apparel, basic needs, and off-campus meals and entertainment are taken from the 2011 Consumer Expenditure Survey (CES) on annual expenditures by educational attainment.<sup>2</sup> We multiplied each of these annual values by 75% include expenditures that occurred during the time that students spend on campus. For students living off-campus, we assumed that spending was 10% higher for rent and food, apparel, basic needs, and off-campus meals and entertainment.

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1. College InSight is an initiative of the Institute for College Access & Success, and provides data sourcing from IPEDS, Pell Grant files, Fiscal Operations Report and Application to Participate files, and Common Data Set files. Data can be found at [college-insight.org](http://college-insight.org).
  2. Spending for “all consumers” is lower than for those with a bachelor’s degree. We assume undergraduate students do not yet have a bachelor’s degree, and therefore used the value for all consumers.

We assumed all room and board spending was in Michigan. For the rest of the categories, we assumed that some spending took place outside of Michigan, allowing for vacations, trips, and online purchases. We assumed that 35% of books and supplies were purchased online, and therefore the spending related to these purchases would not remain in the state.

### *Indirect Economic Footprint*

We calculated the indirect economic effects of Adrian College expenditures by multiplying the direct expenditures listed above by final demand output multipliers based on those released by the U.S. Department of Commerce Department's Regional 2010 Multipliers (RIMS II) for the State of Michigan. We allocated spending to the following industries:

- Salaries and wages: Households;
- Employee benefits: Insurance carriers;
- Instruction & academic support: Educational services;
- Student services, institutional support, auxiliary enterprises, and other expenses: Junior colleges, colleges, universities, and professional schools;
- O&M of plant: Facilities support services;
- Athletics: Spectator sports;
- Construction: Construction
- Housing and food: Combination of accommodations and households;
- Books & supplies: Retail trade;
- Apparel & basic needs: Retail trade;
- Off-campus meals and entertainment: Food services and drinking places.