

ECONOMIC IMPACT OF THE MOUND ROAD CORRIDOR

SUBMITTED BY: EMSI

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PROJECT APPROACH

The purpose of this project is to provide an economic impact analysis assessing the impact of Mound Road businesses and their employees on the local and state economies. To accomplish this, the firm, EMSI, was retained to generate the economic impact of these businesses on overall local jobs, earnings, and sales and how that correlates to the state's overall economic base.

MODELING

The Bonner Advisory Group will provide the geographical area to be studied. EMSI will respond with the number of businesses and jobs in that area that are to be assessed for this impact study. Upon verification and agreement on the businesses and jobs, Emsi will produce a custom economic impact model to show for the local area (as defined by Bonner Advisory Group) and the state, the

- Direct, indirect, and induced spending jobs associated with Mound Road businesses
- Estimated wages and salaries
- Estimated tax revenues
- Sales revenue and associated impact to state's revenue base

The findings from this study will provide a better understanding of the economic importance the Mound Road corridor has on the region and statewide economies.

VALUE ADDS THAT EMSI BRINGS TO THE PROJECT

The economic model that will be produced for this project will utilize Emsi's proprietary multiregional social accounting matrix (MR-SAM). Emsi's MR-SAM represents the flow of all economic transactions in an economic area. This modeling system is the new industry standard for regional economic impact analysis, and improves on the older "comparative static" type model in the same general class as RIMS II (Bureau of Economic Analysis) and IMPLAN (Implan Group).

PROJECT DELIVERABLES

The results of this analysis will be presented in a brief summary report accompanied by detailed excel tables. The report will include a short description of the methodology used and a brief summary of the findings that effectively communicates the economic impact of the Mound Road Corridor businesses.

METHODOLOGY

The economic area (hereafter referred to as the area) for this report is defined as Mound Road between 8 Mile Road (southern border) and Highway 59 (northern border), plus Van Dyke with the same northern and southern borders. Van Dyke and Mound Road run parallel to each other and are neighboring roads.

To understand the economic impacts of business activity along Mound Road or Van Dyke, we first used multiple techniques to determine the types of businesses in this area. We used Macomb County's investment analysis tool to create a list of businesses with recent investment in the area. This mapping and data tool also provided information on type of business and number of employees.

(<http://gis.macombgov.org/portal1/apps/webappviewer/index.html?id=d3d02882e3fe4c2ba5fd183f161ad6ab>)

Next, we supplemented the above list by mapping all businesses in the area. The mapping tool is from the Emsi Developer dataset, and maps businesses by business name, industry, sales, and employment range. As a check, we used the Bureau of Labor (BLS) Quarterly Census (QCEW) to determine employment by industry for the county. From this effort, we developed a list of industries and the number of employees for the area.

Finally, the Mound Road Business Association provided a list of the largest employers on Mound Road. Reconciling and combining all the lists gave us the final list of business types and numbers of employees. This final list is the scenario that we modeled using Emsi’s economic impact model (MR-SAM), as described below.

To determine the economic impact of businesses located in the area, we used an economic impact model that is proprietary to Emsi. This is a multiregional social accounting matrix (MR-SAM), which is an economic impact model that is comparable to other ‘off-the-shelf’ economic impact models for the U.S. economy. Emsi’s MR-SAM represents the flow of all economic transactions in an economic area.

Emsi’s model is used to understand economic scenarios covering 1,000 industries (at the 6 digit NAICS level) 16 demographic cohorts, and 750 occupations. Emsi’s model follows the industry standard for regional economic impact analyses, and is in the same general class as IMPLAN (Implan Group) but uses the more sophisticated Stevens technique (which is also used by REMI) to calculate regional coefficients. The model estimates the direct effects and ripple effects of an economic activity on the defined economic area in terms of increased sales, jobs, earnings, and value-added (or gross regional product). The ripple effects calculated by the model take into account both supply-chain impacts (direct and indirect effects) and increases in household

Results for the comprehensive scenario, which includes Detroit 3 employment, present the economic impacts of area businesses on both Macomb County and for the state of Michigan. Unless otherwise specified, the state of Michigan results include Macomb County results.

RESULTS

ECONOMIC IMPACT OF MOUND ROAD BUSINESSES FOR MACOMB COUNTY AND ALL OF MICHIGAN

	INPUT JOBS	DOWNSTREAM JOBS	TOTAL JOBS	JOBS MULTIPLIER	CHANGE IN EARNINGS (WAGES AND SALARIES)	CHANGES IN TAXES ON PRODUCTION AND IMPORTS
MACOMB COUNTY	47,200	71,100	118,300	2.50	\$8,706,029,100	\$703,959,150
REST OF MICHIGAN	0	101,000	101,000	N/A	\$4,793,606,850	\$734,891,350
ALL OF MICHIGAN	47,200	172,100	219,300	4.70	\$13,499,635,950	\$1,447,850,500

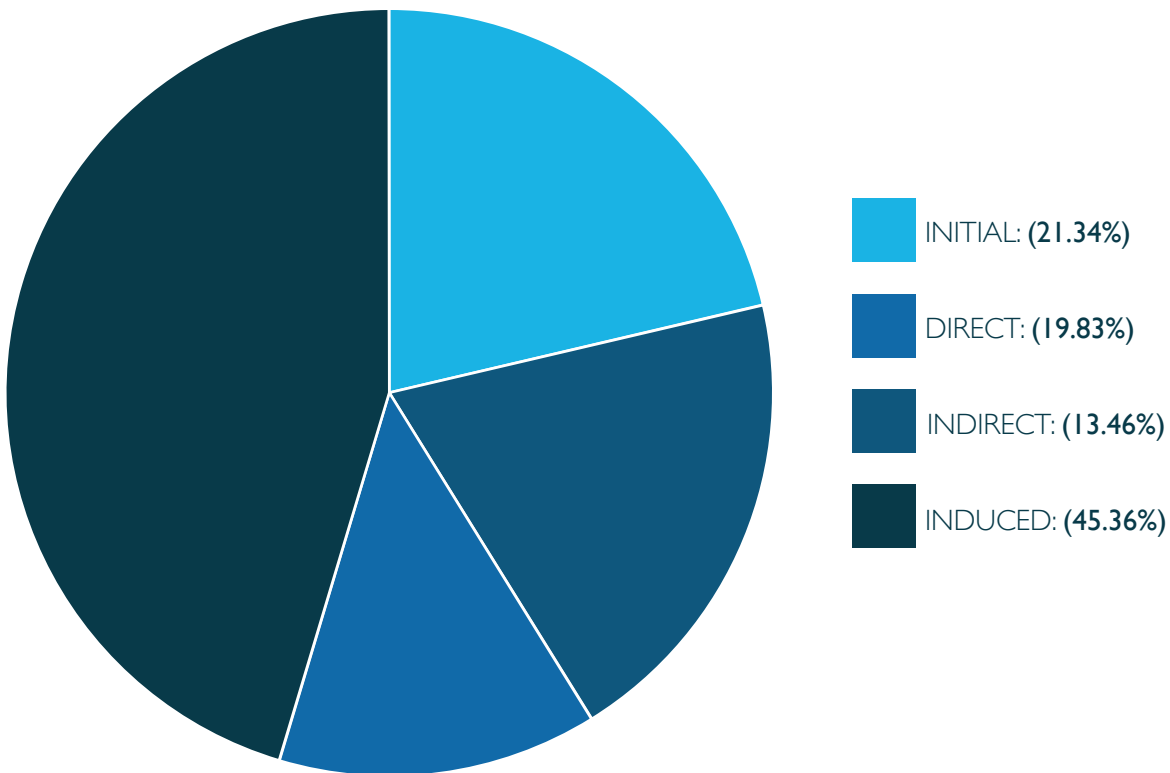
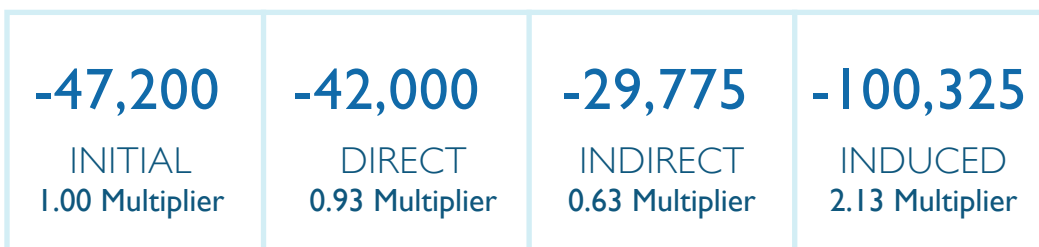
The above results show that there are a total of 47,200 people employed along Van Dyke or Mound Road. These jobs support another 71,100 jobs in Macomb County. Combined, \$8.7 billion is paid to these 118,300 employees in wages and benefits, and total taxes on production are more than \$700 million.

Additionally, the 47,200 jobs along Mound Road support another 101,000 jobs in the Michigan economy outside of Macomb County. These are supplier jobs to those businesses along Mound or Van Dyke or expenditure-induced jobs from employee spending.

Expenditure-induced jobs are defined as employment that is created or supported when the direct employees or supplier company employees spend their paychecks. Including the 47,200 direct jobs on Mound or Van Dyke, there are a total of 219,300 jobs in Michigan (because of the area's business activity), for a total jobs multiplier of 4.7. This means that for every job on Mound or Van Dyke, there are another 3.7 jobs in Michigan.

As can be seen in the chart below, the 172,100 jobs are:

- 47,200 initial jobs along Mound or Van Dyke
- 42,000 Tier 1 supply jobs (direct)
- 29,775 Tier 2 and lower supply jobs (indirect)
- 100,325 expenditure-induced jobs (induced)



The types of industries that employ these 219,300 jobs are shown in the following table.

INDUSTRY	MACOMB COUNTY JOBS	ALL JOBS OUTSIDE OF MACOMB COUNTY	ALL MICHIGAN JOBS (INCLUDING MACOMB CO.)
Manufacturing	54,051	7,574	61,625
Healthcare and Social Assistance	4,590	13,968	18,558
Retail Trade	6,029	11,612	17,641
Accommodation and Food Services	5,203	9,448	14,651
Wholesale Trade	5,050	5,433	10,483
Professional, Scientific, and Technical Services	7,482	9,048	16,530
Administrative and Support and Waste Management	4,918	6,734	11,652
Other Services (except Public Administration)	2,800	7,187	9,987
Management of Companies and Enterprises	4,090	2,835	6,925
Real Estate and Rental and Leasing	2,733	4,728	7,461
Finance and Insurance	1,404	5,418	6,822
Transportation and Warehousing	4,417	3,182	7,599
Construction	3,760	3,002	6,762
Government	9,743	2,469	12,212
Educational Services	534	3,031	3,565
Arts, Entertainment, and Recreation	830	2,516	3,346
Information	509	1,932	2,441
Utilities	58	493	551
Crop and Animal Production	67	275	342
Mining, Quarrying, and Oil and Gas Extraction	32	115	147
Total	118,300	101,000	219,300

The following table shows the occupations that comprise these 219,300 jobs.

OCCUPATION	MACOMB COUNTY JOBS	ALL JOBS OUTSIDE OF MACOMB COUNTY	ALL MICHIGAN JOBS (INCLUDING MACOMB CO.)
Production Occupations	32,072	6,393	38,465
Office and Administrative Support Occupations	11,683	13,982	25,665
Sales and Related Occupations	9,775	14,559	24,334
Management Occupations	8,469	6,413	14,882
Transportation and Material Moving Occupations	7,632	6,224	13,856
Food Preparation and Serving Related Occupations	5,198	8,881	14,079
Business and Financial Operations Occupations	7,041	5,508	12,549
Installation, Maintenance, and Repair Occupations	4,600	3,919	8,519
Architecture and Engineering Occupations	8,763	721	9,484
Personal Care and Service Occupations	1,933	5,684	7,617
Healthcare Practitioners and Technical Occupations	3,958	8,656	12,614
Building and Grounds Cleaning and Maintenance Occupations	2,728	3,753	6,481
Construction and Extraction Occupations	3,666	2,732	6,398
Arts, Design, Entertainment, Sports, and Media Occupations	2,270	3,476	5,746
Computer and Mathematical Occupations	2,330	2,983	5,313
All Other Occupations	2,105	283	2,388
Education, Training, and Library Occupations	1,716	2,440	4,156
Community and Social Service Occupations	457	1,451	1,908
Protective Service Occupations	830	1,088	1,918
Legal Occupations	672	769	1,441
Life, Physical, and Social Science Occupations	321	935	1,256
Farming, Fishing, and Forestry Occupations	81	150	231
Total	118,300	101,000	219,300