

The Economic Impact of Undocumented Workers in Minnesota

By James J. Kielkopf

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“We think people should be concerned about it; we don't want to tell communities how to feel about things, but people should ask themselves, ‘What's the impact of illegal immigration on things like schools, medical care, the shortage of low-income housing, the number of jail cells we need?’” Chuck Migby, Supervisory Agent, U.S. Immigration and Naturalization Service, quoted in the [Pioneer Press](#), Feb. 11, 2000

“While the pool of officially unemployed and those otherwise willing to work may continue to shrink, as it has persistently over the past seven years, there is an effective limit to new hiring, unless immigration is uncapped.” Alan Greenspan, Chairman of the Board of Governors of the U.S. Federal Reserve System, February 2000, testimony to Congress.

The two officials quoted above summarize the policy dilemma caused by current immigration law. The U.S. Immigration and Naturalization Service (INS) is charged with restricting immigration to protect Americans from the presumed costs that undesirable immigrants could impose. However, unless more immigrants are allowed to enter the country, economic prosperity is in jeopardy, according to the Federal Reserve Chairman, who is charged with maximizing employment and economic growth. Both points of view imply the empirical question: "What benefits do undocumented immigrants provide, and do they outweigh the costs?" Fortunately, economists have developed tools to help answer that question.

This study provides the most complete empirical estimate to date of the actual economic impact of undocumented workers on the State of Minnesota. It estimates the total value (in dollar terms and in numbers of jobs) of undocumented workers to the industries that employ them, to the rest of the state, and the impact on tax revenues.

Summary

Several Minnesota industries were examined to estimate the value that undocumented labor provides to those industries and to rest of the Minnesota economy. The selected industries were:

- Eating and Drinking
- Hotels and Lodging Places
- Building Services
- Roofing, Residential Maintenance and Repair
- Nursery, Landscaping, and Fruits and Vegetables (Selected labor-intensive agricultural industries)
- Meat and Poultry Processing.

These industries were selected because it was believed that undocumented immigrant workers provide much of their labor. People who either work in or represent the above industries estimated the number of jobs filled by undocumented workers. In order of preference, industry associations, labor and trade unions, business owners and managers, and individual workers were contacted to estimate the proportion of the workforce in their industries that were likely to be working with false immigration documents. Due to disparities in the reliability of the estimates given by the industry sources, two economic impact scenarios were generated -- a mid-range estimate given the consensus estimates for each industry, and a low-end estimate determined by the lowest estimates of undocumented workers given for each industry. Following are the summarized findings:

- The undocumented labor in the selected industries accounts for at least \$1.56 billion, and more likely \$3.8 billion, of value added in the Minnesota economy each year.
- If the undocumented workers were removed from Minnesota, economic growth would be suddenly reduced by 40%. The economic impact of undocumented labor accounts for as much as 2.4% of Minnesota's GDP.
- There are at least 18,000 and probably as many as 48,000 undocumented workers laboring in the selected industries in Minnesota.
- Up to 50,000 Minnesotans owe their jobs to the presence of the undocumented labor in the industries that were studied. On average, every undocumented worker that is removed from the economy causes another worker somewhere in Minnesota to lose his or her job.
- The presence of undocumented labor is estimated to result in the generation of \$1.02 billion in tax revenue. Of that amount, \$311 million goes to social security, and \$345.4 million is state and local taxes and fees. That means that unless government costs have increased by more than a billion dollars due to the undocumented labor presence, they provide a net gain, not loss, to Minnesota taxpayers.

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Introduction

This study attempts to quantify the value of undocumented labor in Minnesota. Undocumented workers are those immigrants who lack the official credentials required by federal law for employment in the United States. At the present, low unemployment rates,¹ if undocumented workers are removed from the labor pool, they cannot be replaced with legally available labor. In the absence of undocumented labor, some work would simply go undone, and economic activity would be reduced. This situation conveniently provides a means of measuring the value of undocumented labor through a standard econometric tool called input-output analysis. Using input-output analysis, an economist can forecast what would happen to the economy in Minnesota if a specified amount of non-replaceable labor were removed from the economy and the productive capacity of those industries that employ that labor is reduced proportionately.

For this study, individuals with working knowledge of a selection of labor-intensive industries in Minnesota were contacted. They were asked to provide their best estimates of the proportion of workers that they suspected were likely to be working without official residency credentials or with falsified credentials, a common practice in today's labor scarce economy. Using those estimates and a linear model of the Minnesota economy, the value of that labor in terms of dollars, jobs, and tax revenue was estimated.

Literature Review

The present study is the first, to the author's knowledge, to use input-output analysis to estimate the total value of an undocumented labor force to other workers, business owners, and taxpayers. However, a large and expanding body of scholarly literature exists on the topic of undocumented immigration, and its costs and benefits to society.

George Borjas, one of the leading immigration scholars, provides a useful survey (1994) of the research done on immigration's costs and benefits up to that time. Until the early 1980's the bulk of research demonstrated that immigration clearly benefits the countries that accept immigrants. Evidence did not show that immigration has a negative impact on the employment and wage opportunities of native workers, and the literature was generally optimistic about the impact that immigrants have on their adopted countries.

¹ May, 2000 unemployment statistics: 4.1% U.S. unemployment; 3.0% Minnesota unemployment. Source: Minnesota Department of Economic Security.

During the 1980's, however, the field of immigration economics expanded, and the research gave a less optimistic portrayal of the value of immigrants to their adopted societies. While much research tended to confirm that immigrants were generally good for the adopted countries, some of the post-1980 research finds reasons to doubt. increased immigration was found to depress the wages of other immigrants. More recent immigrants were found to less likely to increase their earnings over their lifetimes than earlier generations. And newer immigrants were using more resources in the form of social welfare programs than were earlier generations, when such programs did not exist. Although Borjas himself takes a more negative outlook toward the benefits of allowing more immigrants, the bulk of the post 1980's research he surveys shows that immigrants are at worst neutral, and at best beneficial to their adopted homelands.

Another researcher, Briggs (1976) addresses the difficulty in calculating the effects of undocumented immigration on the United States labor force. He discusses seven main barriers, which are the following:

- The difficulty in defining the true dimensions of the immigration flow.
- Some official figures may include undocumented entrants.
- The official labor market statistics might inaccurately state actual labor market conditions due to the undercount of undocumented workers.
- A significant amount of commuting may occur by undocumented workers in border regions.
- Research suggests that there are differences between undocumented workers from Mexico and those from other countries.
- Apprehension priorities used by the Immigration and Naturalization Service (INS) may distort the published apprehension figures from being a true measure of the actual numbers of undocumented workers.
- It is often difficult to study undocumented workers considering all the risks involved to both employers and workers.

Keeping these barriers in mind, the present study looks to organizations and representatives of industries to produce a reasonable estimate of undocumented workers within the various industries of Minnesota

According to Hondagneu-Sotelo (1997), undocumented women have few employment options in the local economy and often work in the informal sector of the economy in industries such as street vending and paid domestic work. Acknowledging that some undocumented women probably do work as domestic labor in Minnesota, they are not included in this study because of the difficulty in finding any credible estimate without also studying the size of the informal domestic help industry, which falls outside the scope of the present research.

A main theme related to undocumented workers and the economy is the creation of an underground economy, a "dual" labor market. Literature supporting the "dual" or "parallel" labor market in the United States discusses the difference between the dominant market and a modified secondary labor market that includes money transfers and exchanges between employers and undocumented workers. (Djajic, 1997; Donato, Durand, & Massey, 1992; Nguyen, 1989; and Papademetriou & DiMarzio, 1986; Briggs,

1976) Only a small portion of undocumented workers are actually in economic competition with legal U.S. workers (Reuben, 1978).

The underground economy has various benefits to employers; for example, the avoidance of paying payroll taxes and the possibility of paying by piece-rate. It usually exists in labor intensive work industries. (Djajić, 1997) Undocumented people are both an underground market phenomenon in response to price distortion in the legal labor market, and a rural-urban migration phenomenon in response to wage differentials across international borders (Nguyen, 1989). Legal and undocumented workers play an essential role in the smooth functioning and continuing profitability of capital (Papademetriou & DiMarzio, 1986).

Foreign workers who lack documentation usually obtain jobs that are toward the bottom of the social ladder. Undocumented workers commonly satisfy most requirements for inclusion in the lower segment of the population (Papademetriou & DiMarzio, 1986). Based on supply and demand conditions, these jobs tend to involve low wages, long-term instability, lack of mobility, and poor working conditions that are usually harsh, unpleasant, and often unsafe (Djajić, 1997; de Lourdes Villar, 1990).

According to the model presented by Djajić (1997), all native workers may benefit from undocumented immigration. Foreign workers, in their roles as consumers, contribute to the expansion of the market, stimulate investment spending, and further the process of employment creation. The skilled native workers benefit from the inflow of undocumented people because the cost of intermediate goods is reduced, and unskilled native workers benefit as the economy expands due to the goods produced by unskilled labor. Also, many employers claim that legal workers are not available to do the work, nor are they as good, reliable, or teachable as undocumented workers, especially for intermittent and laborious work (Reubens, 1978). Maria de Lourdes Villar (1990) stresses the gains that migrants with long-term experience make in the United States.

Industries in which undocumented workers are found in significant numbers include seasonal agricultural work, textiles, manufacturing, the personal service sector, janitorial services, hotel and restaurants, food service, and construction. (Vernez, 1999; Djajić, 1997; Nguyen, 1989; Papademetriou & DiMarzio, 1986) These industries, or segments of them, are used in the present study to compile the most accurate forecast possible of what would happen to the Minnesota economy if undocumented worker(s) were removed.

Input-output modeling and its use as an econometric tool for regional economic analysis is discussed by Hastings and Bruckner, 1993. Some of the important caveats and assumptions behind input-output analysis are well summarized by Henry and Johnson, 1993. They list six major assumptions that necessary for input-output analysis. Of those, two are noted for their particular relevance to the present study on undocumented labor:

- Input-output analysis assumes no substitution between inputs. In the present study this means that capital cannot be substituted for labor in any form. In the real world, in many industries, capital can be substituted for labor when

the cost of labor makes a capital investment worth it. In the six labor-intensive industries analyzed in this study, however, it is realistic to assume that capital cannot be substituted for labor. A restaurant, for example, cannot profitably substitute more machinery for much of its labor needs – people are needed to clean tables and cook and there is not.

- The amount of input is determined only by the amount of output. There are no price effects, or changes in productivity or economies of scale. In the present study, this means that removing workers from the economy assumes no increase in wages, which is probably unrealistic. In fact, the Bureau of Labor Statistics found that increases in low-skilled immigrant labor had a depressing effect on low-skill wages.² This would indicate that a removal of undocumented workers would result in an increase in wages for the affected jobs. However, in most of the industries in this study, a more plausible result of removing undocumented labor was closure of the affected businesses because it would be unprofitable to increase wages enough to attract workers in the absence of the supply of undocumented labor.

Methodology

Input-output analysis employs tables of every industry in the economy and all of the input and output commodities that are used and produced by each industry. Data on household and government expenditures are also used, as well as information about the amount of goods consumed locally and exported outside of the study area. Labor is one such input to each industry. Estimating the proportion of each industry's labor inputs that are undocumented allows the calculation of the value of that labor to the industry that employs them.

The value of a worker in each industry is calculated by determining the average value of each industry's output – or sales – per worker employed in that industry. By using an average this method unrealistically assumes that each worker's value is the same – a CEO contributes as much value as an assembly line employee. However, this level of unrealism was judged to be acceptable because workers cannot be replaced in the present, low-unemployment labor market. In the industries studied, if the undocumented laborers could not work, there would be no work for managers, owners, and other more highly paid employees to do either. In this case, using an average output per worker formula would actually under-estimate the value of each worker's labor to that industry because the model just assumes a proportional decrease in industry output, not the closure of entire businesses or, in some cases, industries. The value of output per worker used is given in Table 1.1, below.

² Bureau of Labor Statistics, *Report on the American Workforce*, page 41.

Table 1.1: Output per worker

Industry	Output (Sales) per worker
Eating and Drinking	\$ 32,525.90
Nursery, Landscaping, Fruits and Vegetables	\$ 46,769.70
Hotel and Lodging	\$ 43,137.20
Roofing and Residential Repair	\$ 87,129.70
Meat and Poultry Processing	\$ 208,785.10
Building Services	\$ 28,886.40

The analysis goes further by calculating the value of input commodities purchased by the industries that employ undocumented workers. The amount of inputs purchased is proportionate to the amount of labor reported for each industry. These inputs provide indirect economic impacts by employing people and making profits for other linked industries. Finally, a portion of wages paid to undocumented and other workers in all of the affected industries is spent in the local area, providing further economic activity, jobs, and value added income in the local economy.

The three levels of impacts are called the direct, indirect, and induced impacts. The three impacts are summed to yield the total impact on the Minnesota economy due to the presence of the undocumented labor in the selected industries. The analysis was performed using IMPLAN, the software provided for economic impact analysis by Minnesota Implan Group, Inc. (MIG)

Economists often employ a rule of thumb that about 70% of value added income in an economy is in the form of workers' compensation. Therefore, a quick way to get the value of a worker is to divide his wages and benefits by 0.7.³ Using the labor income tables on pages 24 and 30, one finds that the labor compensation is indeed about 68% of the value added by the affected industries.

Input-output analysis can be criticized for overestimating the impact due to the rigidity of the linear economic model assumed to exist. Specifically, it could be argued that a negative indirect impact would free up workers to replace those lost in the directly impacted industries, thus mitigating the impact of losing the undocumented workers. Practically, however, very few of the workers in the indirectly affected industries – some of whom are doctors, lawyers, and economists – will go to work in the industries where undocumented labor is employed. More likely they will leave the state, so in the short run, the assumptions required for input-output analysis appear to hold for the case of undocumented labor in Minnesota, and indirect effects can be expected.

Data

For this research, it was necessary to obtain credible figures (as credible as possible under the circumstances) of the numbers of undocumented workers employed in some specific

³ Art Rolnick, Federal Reserve Bank of Minneapolis

industries believed to be significant employers of such workers. The industries were chosen two ways:

- 1) They were believed *a priori* to employ large concentrations of undocumented workers.
- 2) It was believed that one or more sources from within those industries could and would provide a credible figure of the proportion of workers who are likely to be working with falsified residency documents.

Although it has become well known that many such workers are employed throughout Minnesota, admitting to employing such workers or to being such as worker is admitting to a civil violation. Since 1986, it has been in violation of civil law for U.S. firms to knowingly employ workers that do not carry the proper documents that verify their permission to work in the United States. Workers don't want to admit to researchers that they are undocumented, and employers don't admit to hiring them. Therefore, it was judged that both employers and employees would be biased in their responses if surveyed.

It was decided that the best sources of information would be industry association representatives. They were believed to be far enough away from day to day management of firms to be willing to provide ballpark estimates of the proportion of their industry's workforce that is likely to be working with false residency documents. To corroborate the estimates of industry association representatives, trade and labor union representatives were also asked for their estimates, where available. Additionally, in some cases, industry associations felt that they could not provide estimates. In those cases, the union estimates were used, or individual managers within the industry were contacted and asked to provide estimates not of their own firm, but of their industry in Minnesota as a whole. To avoid any possible identification of a specific association, firm, union, or individual, those who were contacted are referred to in this paper as "industry correspondents".

As was expected, in no case were any of the industry correspondents willing to either identify themselves or their organizations. Anonymity was guaranteed whether or not industry correspondents provided useful information. Table 1.2 provides a list of the industries studied, and the authors' estimate of the reliability of the figures given. An "A" means fairly reliable with little reason to believe that the estimate was biased in a particular direction. A "B" means somewhat reliable, but that the industry correspondents that were consulted relayed some hesitation about whether their estimate could really speak for the entire industry. A "C", which occurred only in two industries, means that figure is almost certainly wrong, but that it is in the middle of divergent estimates, at least one of which is biased. Where a bias or possibility for bias on the part of the industry correspondents could be identified, it is noted in the table.

The Eating and Drinking industry presented a special problem which led to the C rating of the estimates given by the several industry correspondents that were consulted. In that industry, some correspondents claimed that the industry works very closely with the INS

to prevent the accidental hiring of improperly documented workers. They would not accept that any more than 5% of the industry workforce could possibly be undocumented, because of the extra effort that managers have been taking to collaborate with the INS. Other correspondents, however, placed the proportion much higher -- some at 50% of all bar and restaurant employees in the Twin Cities. The higher estimating correspondents finally agreed that the number of undocumented workers in the industry might be as low as 30,000 to 35,000 statewide, but insisted that it was probably much higher than that. No other industry presented this kind of disagreement and disparity in the estimates given.

Table 1.2 Estimates of the industry correspondents

Industry	Reliability	Presumed bias	Estimated proportion of workforce that is undocumented	Number of workers estimated to be undocumented
Eating and Drinking	C	Downward bias	15% (5 % low-end estimate)	23,880 (7,690 assuming 5% low end estimate)
Nursery, Landscaping, Fruits and Vegetables	B	No bias determined	25% (15% low-end estimate)	3,822 (2,293 low-end estimate)
Hotel and Lodging	A	No bias determined	25% (10% low-end estimate)	8,176 (3,270 low end-estimate)
Roofing and Residential Repair	B	Possible upward bias	30% (15% low-end estimate)	3,949 (1,974 low-end estimate)
Meat and Poultry Processing	C	Downward bias	15% (5% low-end estimate)	3,643 (1,821 low-end estimate)
Building Services	B	Possible downward bias	25% (5% low-end estimate)	4,798 (960 low-end estimate)

The meat and poultry processing industry, which includes poultry, beef, and pork processing, also received a C reliability rating for the estimate. The rating was determined not because of divergent views within the industry, but because of the inability of any of the industry correspondents to estimate any more than what they observed in a particular geographic area. Estimates of 20%-30% of the workforce in these industries were common among correspondents, but most gave estimates for southern Minnesota only. In South Central Minnesota, according to statistics collected by the Equal Employment Opportunity Commission, 33% of workers in the meat and poultry products industry are Latino.⁴ While one cannot assume that Latinos in that area are undocumented, the recent presence of such a large Spanish-speaking population working in selected, labor-intensive industries such as meat processing is an indicator that some level of undocumented labor is likely. No industry correspondent could give

⁴ 1998 EEO-1 Survey, Equal Employment Opportunity Commission.

any information regarding the level of undocumented labor in Northern Minnesota, so it was assumed that such labor is not a significant there.

In general, most correspondents were hesitant to speak for their industry as whole, but they were willing to have their estimates quoted when assured that they and their organization would not be in any way identified. Typical among firm managers was the response that their particular firm employed a very low percentage of undocumented workers because of the extra effort they took to check documentation, but that competing firms were lax and employed high numbers of undocumented workers. In some industries, similar responses were given regarding union versus non-union shops.

The estimates of numbers of undocumented workers in Table 1.2 compare with a 1996 INS estimate of undocumented immigrants of 7,200 people in Minnesota and North and South Dakota. The INS's research division was contacted for an updated estimate of the total number of undocumented immigrants in Minnesota, but no such estimate has been made by the agency since 1996. Furthermore, the agency's research staff was unable (they were quite willing) to document or explain how the 1996 estimate was made.⁵

Impact Analysis

The results of the impact analysis are presented in the aggregated 1-digit Standard Industrial Code (SIC) format. Employment, Value Added, and Tax Impacts due to the presence of undocumented labor in the six industry categories are presented below.

Because of the difference in reliability of estimates among the industries, two impact assessments were made:

1. A "mid-range estimate" assessment, which was made from a consensus estimate of industry correspondents. This is the expected economic impact of the undocumented workforce of these industries in Minnesota
2. A "low-end" estimate, which was made using the lowest estimate that an industry correspondent gave for that industry. This impact assessment should be viewed as the minimum estimated impact.

Employment Impact

The presence of undocumented labor provides demands in the economy that create jobs for other workers in Minnesota. Tables 1.3 and 1.4 give the direct, indirect and induced employment impacts due to the presence of the undocumented labor in the proportions given in Table 1.2 above. Table 1.4 gives the minimum expected impact, while 1.3 gives the expected impact based on the mid-range estimates of undocumented labor given by industry correspondents.

The direct impact column gives the estimated numbers of undocumented workers in each industry group. The indirect column gives the number of workers employed in providing

⁵ These estimates and explanations were obtained during telephone conversations with INS research staff in March, 2000.

goods and services to those industries that directly employ undocumented labor. The induced column gives the additional number of workers employed in the Minnesota economy due to demands for goods and services by workers and proprietors in both the direct and indirectly affected industries.

Table 1.2 Expected Employment Impact of Due to Presence of Undocumented Labor

Aggregated Industry	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Agriculture (AGG)	3,822	4,479.2	378.2	8,679.4
Mining (AGG)	0	6.3	8.2	14.5
Construction (AGG)	3,949	539.6	2,553.8	7,042.4
Manufacturing (AGG)	3,643	1,662.1	1,859.6	7,164.7
TCPU (AGG)	0	1,059.3	966.0	2,025.3
Trade (AGG)	23,880	2,259.9	8,896.9	35,036.8
FIRE (AGG)	0	1,230.5	1,965.6	3,196.1
Services (AGG)	12,974	4,544.2	9,870.2	27,388.3
Government (AGG)	0	171.3	6,220.2	6,391.5
Other (AGG)	0	0.0	223.8	223.8
Totals	48,268	15,952.4	32,942.5	97,162.9

Table 1.3 Employment Impact Based on Low-End Estimates of Undocumented Labor

Aggregated Industry	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Agriculture (AGG)	2,293.0	2,226.4	156.2	4,675.6
Mining (AGG)	0.0	2.9	3.4	6.3
Construction (AGG)	1,974.0	228.0	1,054.0	3,256.0
Manufacturing (AGG)	1,821.0	727.3	769.5	3,317.8
TCPU (AGG)	0.0	453.1	398.9	852.0
Trade (AGG)	7,690.0	977.6	3,678.9	12,346.5
FIRE (AGG)	0.0	505.4	812.2	1,317.6
Services (AGG)	4,230.0	1,741.6	4,078.2	10,049.8
Government (AGG)	0.0	66.0	2,541.2	2,607.2
Other (AGG)	0.0	0.0	92.6	92.6
Totals	18,008.0	6,928.3	13,585.1	38,521.4

According to the tables, at least 20,500, and more likely 48,900, Minnesota workers owe their jobs to the presence of undocumented labor in the industries studied in this paper. Those figures provide an employment multiplier of between 1.01 and 1.13. This means that every undocumented worker produces enough to provide at least one more job to a citizen or legal resident in Minnesota. The corollary is *that for every undocumented worker removed from the Minnesota economy, at least one citizen or legal resident loses a job somewhere in Minnesota.*

Value Added Income Impact

Value added income refers to the value received by the final consumers of goods and services produced in the economy -- households, foreign importers, and governments. It is used to measure, among other things, the size of the economy. The amount of value

added income in the Minnesota economy due to the presence of undocumented labor in the industries that were studied in this paper is the estimated value of that undocumented labor force.

Tables 1.4 and 1.5 provide the mid-range estimate and the low-end estimate, respectively, of the value added to the Minnesota economy due to the presence of undocumented labor in the studied industries.

Table 1.4 Mid-range estimate of value added in the economy due to undocumented labor

Aggregated Industry	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Agriculture	\$ 119,533,912	\$ 114,917,080	\$ 10,979,843	\$ 245,430,832
Mining	\$ -	\$ 364,052	\$ 403,614	\$ 767,666
Construction	\$ 195,831,680	\$ 30,049,690	\$ 139,835,728	\$ 365,717,120
Manufacturing	\$ 146,838,688	\$ 100,731,432	\$ 123,340,376	\$ 370,910,528
TCPU	\$ -	\$ 91,516,040	\$ 99,958,208	\$ 191,474,240
Trade	\$ 442,240,160	\$ 148,457,856	\$ 338,708,768	\$ 929,406,784
FIRE	\$ -	\$ 128,008,504	\$ 343,632,992	\$ 471,641,504
Services	\$ 358,096,768	\$ 172,038,064	\$ 383,570,816	\$ 913,705,600
Government	\$ -	\$ 10,762,825	\$ 308,489,216	\$ 319,252,064
Other	\$ -	\$ -	\$ 5,395,476	\$ 5,395,476
Total	\$ 1,262,541,208	\$ 796,845,543	\$ 1,754,315,037	\$ 3,813,701,814

Table 1.5 Low-end estimate of value added in the economy due to undocumented labor

Aggregated Industry	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Agriculture (AGG)	\$ 71,714,096	\$ 56,832,848	\$ 4,534,129	\$ 133,081,072
Mining (AGG)	\$ -	\$ 169,866	\$ 166,375	\$ 336,241
Construction (AGG)	\$ 97,891,032	\$ 12,698,637	\$ 57,659,824	\$ 168,249,488
Manufacturing (AGG)	\$ 73,399,200	\$ 43,479,820	\$ 51,031,404	\$ 167,910,416
TCPU (AGG)	\$ -	\$ 38,392,832	\$ 41,266,360	\$ 79,659,192
Trade (AGG)	\$ 142,413,184	\$ 64,607,208	\$ 140,074,624	\$ 347,095,008
FIRE (AGG)	\$ -	\$ 52,501,384	\$ 142,046,608	\$ 194,547,984
Services (AGG)	\$ 125,290,840	\$ 66,491,396	\$ 158,478,800	\$ 350,261,024
Government (AGG)	\$ -	\$ 4,169,418	\$ 126,050,640	\$ 130,220,056
Other (AGG)	\$ -	\$ -	\$ 2,235,948	\$ 2,235,948
Total	\$ 510,708,352	\$ 339,343,409	\$ 723,544,711	\$ 1,573,596,429

According to Table 1.5, at the very least, undocumented labor in Minnesota is worth almost \$1.6 billion to the Minnesota economy. And, in Table 1.4, *the mid-range estimate of the value added income in the Minnesota economy due to undocumented labor is \$3.8 billion.* According to the U.S. Bureau of Economic Analysis (BEA), the Minnesota Gross State Product in 1997 was \$156 billion⁶. That means that *approximately 2.4% of Minnesota's Gross State Product is due to the presence of undocumented labor in the industries that were examined.*

⁶ \$149,394,000,000 in 1997 dollars times the 1997-2000 price deflator, 1.041. This deflator is used throughout this paper where necessary to adjust 1997 dollars to 2000 dollars. The source for the price deflator is Historical Tables of the *Budget of United States of America, Fiscal Year 2001*.

Also according to the BEA, Minnesota's economic growth in 1997 was 6.0%. That means that if the undocumented workforce were suddenly removed, Minnesota would suffer a 40% decrease in economic growth in the year the removal occurred: $2.4\%/6\% = 40\%$.

Without the work currently provided by undocumented labor, economic growth in Minnesota would be significantly reduced.

Tax Impact

Economic activity produces taxable income, property taxes, and fees -- all revenue sources for government that pay for public services provided to Minnesotans. More economic activity provides more such revenue for the government, and thus lower effective tax rates for individuals and businesses. The IMPLAN model of the Minnesota economy estimates the amount of taxes that are due to the presence of undocumented labor in the six industry categories studied in this paper by using tables of taxes and fees reported by those industries to the government. The taxes, detailed in Table 1.6, are paid by workers and employers in firms that employ undocumented labor, as well as by workers and employers that supply goods and services to those firms. The IMPLAN model produces tax impacts by multiplying average taxes and fees paid by businesses and employees in each industry by the output level of the change that would take place if the given number of undocumented workers were removed or added to the selected industries.

Note: These are not solely the taxes paid by undocumented workers themselves. Rather these are taxes and fees paid by both undocumented and documented workers, their employers, and by property owners due to the economic activity attributed to presence of the undocumented workers in the Minnesota economy.

Table 1.6 provides the estimated tax impacts due to the activity of undocumented labor. The results are presented in 2000 dollars and taken from the Tax Impact reports in the Appendix (which are presented in 1997 dollars)

Table 1.6: Tax Impacts (2000 dollars)

Model	Social Security	State and Local	Total (incl Federal)
Mid Range Estimate	\$311.8 million	\$345.4 million	\$1.017 billion
Low-end Estimate	\$127.9 million	\$140.1 million	\$417 million

For comparison, the Minnesota Department of Revenue has studied tax incidence per household thoroughly.⁷ That study measures which households pay what proportion of total state and local taxes in Minnesota. It finds that in 1996 households that earned between \$20,087 and \$31,749 paid an average of \$3,408 per household (\$3,609 in 2000 dollars). Households that earned less than \$20,087 paid an average of \$1,461 (\$1,548 in

⁷ 1999 Minnesota Tax Incidence Study, Minnesota Department of Revenue.

2000 dollars) in state and local taxes and fees. These figures compare to an average state and local tax burden per household predicted by the IMPLAN model of \$3,555.

The IMPLAN model thus predicts that, on average, the income level of households affected by undocumented labor is close to the median household income in the Minnesota Tax Incidence Study (\$29,510 in 2000 dollars).⁸ It has been suggested that the above figures overestimate the true tax impact because undocumented workers probably earn less than the median income.⁹ Table 1.7 below summarizes the state and local tax impact if the wages of the undocumented workers are assumed to be in the lowest income decile of the 1999 Tax Incidence Study (under \$21,272). The wages of indirectly affected workers are assumed to be the median.

Table 1.7 Alternative Tax Impact (2000 dollars)¹⁰

Industry	Number of Workers	Taxes per Household	Total State and Local Tax Impact
Directly Employs Undocumented Labor	48,268	\$ 1,548.00	\$ 74,718,864.00
Indirect Effects	48,895	\$ 3,609.00	\$176,462,055.00
Total	97,163	\$ 2,585.15	\$251,180,919.00

Using the alternative, tax incidence study method of measuring tax impacts results in a lower total tax impact than the IMPLAN model, but the difference is entirely explained by assuming a lower than \$21,272 household income for undocumented laborers. That alternative assumption, however, might not be realistic. The counter argument to that assumption is that a worker is usually worth much more than his or her compensation. Without enough line workers, a food processing factory would cease to employ anybody, documented or undocumented, laborer or manager. Therefore, it is more realistic when making an impact analysis to use the average output per worker estimates that input-output analysis employs and produce the results in Table 1.6 above.

Summary of Impacts

Tables 1.8 and 1.9 summarize the results of the impact analysis in order to compare the two scenarios: the mid-range estimate scenario and the low-end estimate. This table allows readers that are more or less skeptical of the two sets of estimates given by the industry correspondents to understand the economic impact of undocumented labor without needing to question the magnitude of the estimates themselves. If the estimate of the number of undocumented workers given in the "mid-range estimate" scenario seems

⁸ *Ibid.* p. 18. Note, In the tax incidence study, there are more households reported than in either U.S. Census estimates or the IMPLAN model, which use the census figures. These means that the Department of Revenue reports lower average incomes per household than other government figures because it divides the total income by more households. See pages 18-22 of the Tax Incidence Study.

⁹ Tom Stinson, Minnesota State Economist.

¹⁰ Taken from Table 6-6 of the 1999 Minnesota Tax Incidence Survey, adjusted to 2000 dollars.

reasonable to the reader, then use the impact results given for that scenario below. If that estimate seems too high, then use the results of the "low-end estimate" scenario instead.

Table 1.8 Summary of Impact Scenarios: Employment

Scenario	Direct Impact (Number of Undocumented Workers)	Indirect Impact	Induced Impact	Total Economic Impact	Total Other Jobs Supported by Un- documented Labor
Mid-range Estimate	48,268	15,952	32,942	97,163	48,895
Low-end Estimate	18,008	6,928	13,585	38,521	20,513

Table 1.9 Summary of Impact Scenarios: Value Added Income and Taxes (2000 dollars)

Scenario	Direct Impact	Indirect Impact	Induced Impact	Total Economic Impact	Total State, Local, and Federal Tax Impact
Mid-range Estimate	\$1,262,541,208	\$796,845,543	\$1,754,315,037	\$3,813,701,814	\$ 1,017,586,137
Low-end Estimate	\$510,708,352	\$339,343,409	\$723,544,711	\$1,573,596,429	\$ 416,977,858

Conclusions

Undocumented immigrants in Minnesota play a critical role in maintaining economic growth and employment opportunities for native Minnesotans. If the undocumented workers were suddenly removed, Minnesota would experience a 40% decline in economic growth. Even if one believes that the indirect effects of input-output analysis overestimate the value of undocumented workers, the direct effects alone still sum to almost \$1.3 billion.

The taxes paid by undocumented workers, the industries that employ them, and those who provide input products to those industry sums to over a \$1 billion a year. The bar for those who would argue that immigration is too costly to tolerate is thus quite high, according to the findings of this analysis. To address the INS agent's question in the opening quotation, evidence would have to be found that over a billion dollars of increased government expenditures in Minnesota is attributed to the presence of undocumented workers. If that evidence cannot be found, one must conclude that undocumented workers actually help reduce the tax burden for Minnesotans.

Literature

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Technical Report

Study Area

The study area included the State of Minnesota, using the state database, licensed from MIG. The population, income levels, and other statistics about the area are given on pages 17 and 18, in the reports titled *General Model Information and Output, VA, and Employment*.

Aggregation and Model Construction

The following industries were aggregated prior to constructing the model:

1. Nursery, Landscaping, Fruits, and Vegetables, made up of:
 - Fruits, IMPLAN industry # 16
 - Vegetables, #18
 - Greenhouse and Nursery Products, #23
 - Landscape and Horticultural Services, #27
2. Meat and Poultry Processing, made up of:
 - Meat Processing, #58
 - Sausages and Other Prepared Meats, #59
 - Poultry Processing, #60

The model was constructed using average regional purchase coefficients and the type SAM multiplier. The total number of industries in the model was 452, seven (above) having been aggregated into two.

Direct Impact

The direct impact was based upon the changes in demand for each industry's output per worker, times the number of undocumented workers estimated in each industry.

Pages 19 and 20 provide the project impact descriptions for the mid-range estimate and low-end estimate scenarios, respectively. The local purchase coefficient was set to 1.0 because the entire direct impact is assumed to occur in the Minnesota industries where the undocumented labor is supposed to be employed. Rather than changing the employment field for each industry, employment was set to one, and the group level was changed to reflect the estimated number of workers in each industry depending on the scenario -- mid-range or low-end.

Impact Results

The following IMPLAN-generated tables are included, in two sets. The first set of tables is for the mid-range estimate; the second set is for the low-end estimate. The tables are

listed in the following order. The mid-range impacts start on page 23; the low-end impacts begin on page 29.

- Total Value Added Income
- Employment Impact
- Labor Income
- Proprietor Income
- Total Industrial Output
- Tax Impact

The reports were generated using the year 2000 price deflator and using the standard 1-digit SIC aggregation template.



General Model Information

-
-
-

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Structure Matrix Name..... 97nat528.ims
 Year of Data..... 1997
 Data.....

State Name

County Name

Minnesota

State

State CodeCounty Code
 27 000

Population
 4,687,408

Area
 79,617

<u>Household Income[^]*</u>	<u>< 5K</u>	<u>5-10K</u>	<u>10-15K</u>	<u>15-20K</u>	<u>20-30K</u>	<u>30-40K</u>	<u>40-50K</u>	<u>50-70K</u>	<u>70K+</u>	<u>Total</u>
Households ^{^^}	3,963	77,555	14,216	167,953	23,242	151,728	32,331	154,054	45,861	305,062
	64,499	276,911	83,288	219,572	109,357	277,347	197,583	145,698	123,010,146,30	1,775,879

Total	<u>Area</u>	<u>Population</u>	<u>PI Total*</u>	<u>HH Total</u>
	79,617	4,687,408	123,010,146,304	1,775,879

* Dollars[^]Average Household Income per Category: note income range was used for PCE purchasing patterns, average income may exceed range, when controlled to REIS total Version: 2.0.1012 1 personal income - accounts for apparent underreporting of income to CES (30% upward revision)

^{^^}Total Number of Households per Category



Output, Value Added and Employment

June 18, 2000

Copyright MIG 2000 Base Year: 1997 MNdeport2.iap

<u>Industry</u>	<u>Industry Output*</u>	<u>Employment</u>	<u>Employee Compensation*</u>	<u>Proprietor Income*</u>	<u>Other Property Income*</u>	<u>Indirect Business Tax*</u>	<u>Total Value Added*</u>
1 Agriculture	9,698.368	124,766.780	584.624	849.141	1,228.439	219.438	2,881.643
28 Mining	1,674.695	9,088.731	433.246	35.177	50.132	78.228	596.782
48 Construction	16,353.164	172,990.052	5,371.941	1,585.093	386.515	122.630	7,466.180
58 Manufacturing	88,142.207	451,551.004	20,976.288	605.066	8,108.310	855.743	30,545.407
433 TCPU	19,160.786	140,093.866	5,510.756	615.813	3,926.126	1,057.164	11,109.859
447 Trade	38,091.413	693,458.092	15,260.657	1,072.602	4,945.581	5,477.294	26,756.134
456 FIRE	35,014.800	226,628.082	7,625.151	546.335	14,426.848	3,063.932	25,662.266
463 Services	50,476.773	953,882.991	22,812.706	3,365.701	3,071.138	725.806	29,975.351
510 Government	17,177.754	379,203.132	13,873.414	0.000	1,658.317	0.000	15,531.730
516 Other	329.007	13,468.000	122.667	0.000	206.340	0.000	329.007
Totals	276,118.967	3,165,130.729	92,571.451	8,674.929	38,007.746	11,600.234	150,854.360

*Millions of dollars



Project Impact Description

Base Year: 1997

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Project Name: **Minnesota Mid-range**
Project Level: **1.000**

Group Name	Group Level	Name	Sector	Basis	Value	Employment	LPC	Year	Def.	Level	Sector	Value	LPC	Def.	Margins (if used)
Building Services	960.000	Building Services	472	Ind	28,886.400	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Eating and Drinking	7,690.000	Restaurants and Bars	454	Ind	32,525.900	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Hotels	3,270.000	hotels	463	Ind	43,137.199	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Meat and Poultry	1,821.000	Meat and Poultry Processing	58	Ind	208,785.094	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Nursery, Landscaping, Fruits	2,293.000	Agriculture	16	Ind	46,769.699	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Roofing	1,974.000	Roofing	55	Ind	87,129.703	1.0	1.0000	2000	1.0000	1.000					
					Event										



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Project Name: **Minnesota Low Estimate**
Project Level: **1.000**

Base Year: 1997

Project Impact Description

Group Name	Group Level	Name	Sector	Basis	Value	Employment	LPC	Year	Def.	Level	Sector	Value	LPC	Def.	Margins (if used)
Building Services	960.000	Building Services	472	Ind	28,886.400	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Eating and Drinking	7,690.000	Restaurants and Bars	454	Ind	32,525.900	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Hotels	3,270.000	hotels	463	Ind	43,137.199	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Meat and Poultry	1,821.000	Meat and Poultry Processing	58	Ind	208,785.094	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Nursery, Landscaping, Fruits	2,293.000	Agriculture	16	Ind	46,769.699	1.0	1.0000	2000	1.0000	1.000					
Group Name	Group Level				Event										
Roofing	1,974.000	Roofing	55	Ind	87,129.703	1.0	1.0000	2000	1.0000	1.000					
					Event										



Total Value Added Impact

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IMPACT NAME: Mid-range Estimate MULTIPLIER: Type SAM

Aggregated Report

<u>Industry</u>	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>	<u>Deflator</u>
1 Agriculture (AGG)	119,533,912	114,917,080	10,979,843	245,430,832	1.00
28 Mining (AGG)	0	364,052	403,614	767,666	1.00
48 Construction (AGG)	195,831,680	30,049,690	139,835,728	365,717,120	1.00
58 Manufacturing (AGG)	146,838,688	100,731,432	123,340,376	370,910,528	1.00
433 TCPU (AGG)	0	91,516,040	99,958,208	191,474,240	1.00
447 Trade (AGG)	442,240,160	148,457,856	338,708,768	929,406,784	1.00
456 FIRE (AGG)	0	128,008,504	343,632,992	471,641,504	1.00
463 Services (AGG)	358,096,768	172,038,064	383,570,816	913,705,600	1.00
510 Government (AGG)	0	10,762,825	308,489,216	319,252,064	1.00
516 Other (AGG)	0	0	5,395,476	5,395,476	1.00
Total	1,262,541,208	796,845,543	1,754,315,037	3,813,701,814	

*2000 Dollars - if results are deflated and aggregated, then deflators displayed are set to 1.0 (results have been deflated)



Labor Income Impact

Copyright MIG 2000

IMPACT NAME: Mid-range Estimate MULTIPLIER: Type SAM

Aggregated Report

<u>Industry</u>	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>	<u>Deflator</u>
1 Agriculture (AGG)	79,277,488	74,373,864	7,150,406	160,801,760	1.00
28 Mining (AGG)	0	161,721	159,098	320,820	1.00
48 Construction (AGG)	183,419,952	28,362,322	130,166,696	341,948,960	1.00
58 Manufacturing (AGG)	118,626,432	71,508,848	85,824,384	275,959,648	1.00
433 TCPU (AGG)	0	50,480,916	48,122,884	98,603,800	1.00
447 Trade (AGG)	311,632,608	87,939,296	209,411,152	608,983,040	1.00
456 FIRE (AGG)	0	37,954,536	81,456,152	119,410,688	1.00
463 Services (AGG)	249,188,256	144,775,840	336,957,344	730,921,472	1.00
510 Government (AGG)	0	9,505,027	273,413,952	282,918,976	1.00
516 Other (AGG)	0	0	2,640,744	2,640,744	1.00
Total	942,144,736	505,062,370	1,175,302,812	2,622,509,908	

*2000 Dollars - if results are deflated and aggregated, then deflators displayed are set to 1.0 (results have been deflated)



Proprietors Income Impact

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IMPACT NAME: Mid-range Estimate MULTIPLIER: Type SAM

Aggregated Report

<u>Industry</u>	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>	<u>Deflator</u>
1 Agriculture (AGG)	24,102,052	40,590,916	3,447,971	68,140,936	1.00
28 Mining (AGG)	0	61,775	88,848	150,623	1.00
48 Construction (AGG)	42,453,492	6,534,169	29,554,432	78,542,088	1.00
58 Manufacturing (AGG)	1,031,640	2,749,352	2,384,636	6,165,627	1.00
433 TCPU (AGG)	0	6,954,532	5,846,851	12,801,383	1.00
447 Trade (AGG)	10,978,246	5,201,723	14,191,082	30,371,050	1.00
456 FIRE (AGG)	0	3,990,700	6,269,777	10,260,477	1.00
463 Services (AGG)	35,575,688	26,543,666	41,330,188	103,449,536	1.00
510 Government (AGG)	0	0	0	0	1.00
516 Other (AGG)	0	0	0	0	1.00
Total	114,141,118	92,626,831	103,113,784	309,881,720	

*2000 Dollars - if results are deflated and aggregated, then deflators displayed are set to 1.0 (results have been deflated)



Output Impact

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IMPACT NAME: Mid-range Estimate MULTIPLIER: Type SAM

Aggregated Report

<u>Industry</u>	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>	<u>Deflator</u>
1 Agriculture (AGG)	214,363,840	630,300,416	40,280,628	884,944,896	1.00
28 Mining (AGG)	0	565,194	649,161	1,214,356	1.00
48 Construction (AGG)	436,534,304	49,507,524	314,671,200	800,713,088	1.00
58 Manufacturing (AGG)	789,981,952	360,075,424	361,728,416	1,511,785,856	1.00
433 TCPU (AGG)	0	164,371,856	165,114,336	329,486,176	1.00
447 Trade (AGG)	913,326,080	212,175,104	483,419,232	1,608,920,448	1.00
456 FIRE (AGG)	0	178,714,688	464,013,504	642,728,192	1.00
463 Services (AGG)	632,945,536	287,970,528	648,724,096	1,569,640,192	1.00
510 Government (AGG)	0	20,671,246	331,640,992	352,312,224	1.00
516 Other (AGG)	0	0	5,395,476	5,395,476	1.00
Total	2,987,151,712	1,904,351,980	2,815,637,041	7,707,140,904	

*2000 Dollars - if results are deflated and aggregated, then deflators displayed are set to 1.0 (results have been deflated)



TAX IMPACT

IMPACT NAME: Mid range Estimate MULTIPLIER: Type SAM

Copyright MIG 2000

	Employee Comp	Prop income	HH expenditures	Corporations	Indirect Business	Total
Enterprises						
<i>(Corporations)</i>						
Transfers	1,554,162	0	0	0	0	1,554,162
Total	1,554,162	0	0	0	0	1,554,162
Corporate Profits Tax				63,628,506		63,628,506
Indirect Bus Tax: Custom Duty					7,990,752	7,990,752
Indirect Bus Tax: Excise Taxes					24,257,639	24,257,639
Indirect Bus Tax: Fed NonTaxes					5,952,295	5,952,295
Personal Tax: Estate and Gift Tax		4,249,038				4,249,038
Personal Tax: Income Tax		224,241,987				224,241,987
Personal Tax: NonTaxes (Fines- Fees		741,966				741,966
Social Ins Tax- Employee Contribution	118,311,219	13,520,490				131,831,709
Social Ins Tax- Employer Contribution	148,905,962					148,905,962
Total	267,217,181	13,520,490	229,232,991	63,628,506	38,200,687	611,799,855
Federal						
<i>Government</i>						
NonDefense						
Corporate Profits Tax				14,134,599		14,134,599
Dividends				5,901,121		5,901,121
Indirect Bus Tax: Motor Vehicle Lic					3,425,513	3,425,513
Indirect Bus Tax: Other Taxes					9,753,425	9,753,425
Indirect Bus Tax: Property Tax					90,576,752	90,576,752
Indirect Bus Tax: S/L NonTaxes					22,258,511	22,258,511
Indirect Bus Tax: Sales Tax					99,735,987	99,735,987
Indirect Bus Tax: Severance Tax					77,079	77,079
Personal Tax: Estate and Gift Tax			781,431			781,431
Personal Tax: Income Tax			71,608,869			71,608,869
Personal Tax: Motor Vehicle License			5,664,985			5,664,985
Personal Tax: NonTaxes (Fines- Fees			5,359,269			5,359,269
Personal Tax: Other Tax (Fish/Hunt)			1,431,399			1,431,399
Personal Tax: Property Taxes			1,130,253			1,130,253
Social Ins Tax- Employee Contribution	9,411,769					9,411,769
Social Ins Tax- Employer Contribution	22,903,317					22,903,317
Total	32,315,086	0	85,976,206	20,035,720	225,827,268	364,154,280
State/Local						
<i>Govt</i>						
NonEducation						
Total	301,086,429	13,520,490	315,209,198	83,664,226	264,027,954	977,508,297



Total Value Added Impact

Copyright MIG 2000

IMPACT NAME: Low-end Estimate MULTIPLIER: Type SAM

<u>Industry</u>				Aggregated Report	
	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>	<u>Deflator</u>
1 Agriculture (AGG)	71,714,096	56,832,848	4,534,129	133,081,072	1.00
28 Mining (AGG)	0	169,866	166,375	336,241	1.00
48 Construction (AGG)	97,891,032	12,698,637	57,659,824	168,249,488	1.00
58 Manufacturing (AGG)	73,399,200	43,479,820	51,031,404	167,910,416	1.00
433 TCPU (AGG)	0	38,392,832	41,266,360	79,659,192	1.00
447 Trade (AGG)	142,413,184	64,607,208	140,074,624	347,095,008	1.00
456 FIRE (AGG)	0	52,501,384	142,046,608	194,547,984	1.00
463 Services (AGG)	125,290,840	66,491,396	158,478,800	350,261,024	1.00
510 Government (AGG)	0	4,169,418	126,050,640	130,220,056	1.00
516 Other (AGG)	0	0	2,235,948	2,235,948	1.00
Total	510,708,352	339,343,409	723,544,711	1,573,596,429	

*2000 Dollars - if results are deflated and aggregated, then deflators displayed are set to 1.0 (results have been deflated)



Employment Impact

IMPACT NAME: Low-end Estimate MULTIPLIER: Type SAM
2000

Copyright MIG
Aggregated Report

<u>Industry</u>	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>
1 Agriculture (AGG)	2,293.0	2,226.4	156.2	4,675.6
28 Mining (AGG)	0.0	2.9	3.4	6.3
48 Construction (AGG)	1,974.0	228.0	1,054.0	3,256.0
58 Manufacturing (AGG)	1,821.0	727.3	769.5	3,317.8
433 TCPU (AGG)	0.0	453.1	398.9	852.0
447 Trade (AGG)	7,690.0	977.6	3,678.9	12,346.5
456 FIRE (AGG)	0.0	505.4	812.2	1,317.6
463 Services (AGG)	4,230.0	1,741.6	4,078.2	10,049.8
510 Government (AGG)	0.0	66.0	2,541.2	2,607.2
516 Other (AGG)	0.0	0.0	92.6	92.6
	18,008.0	6,928.3	13,585.1	38,521.4

*Number of Jobs

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Report IM020



Labor Income Impact

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IMPACT NAME: Low-end Estimate MULTIPLIER: Type SAM

Aggregated Report

<u>Industry</u>	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>	<u>Deflator</u>
1 Agriculture (AGG)	47,562,344	36,788,104	2,952,466	87,302,912	1.00
28 Mining (AGG)	0	76,441	65,566	142,007	1.00
48 Construction (AGG)	91,686,752	11,985,723	53,671,184	157,343,664	1.00
58 Manufacturing (AGG)	59,296,932	31,087,300	35,516,552	125,900,776	1.00
433 TCPU (AGG)	0	21,440,116	19,872,672	41,312,788	1.00
447 Trade (AGG)	100,354,048	38,243,788	86,601,728	225,199,568	1.00
456 FIRE (AGG)	0	15,765,575	33,658,004	49,423,580	1.00
463 Services (AGG)	84,848,992	55,857,580	139,221,472	279,928,032	1.00
510 Government (AGG)	0	3,642,096	111,701,584	115,343,680	1.00
516 Other (AGG)	0	0	1,091,983	1,091,983	1.00
Total	383,749,068	214,886,723	484,353,210	1,082,988,990	

*2000 Dollars - if results are deflated and aggregated, then deflators displayed are set to 1.0 (results have been deflated)



Proprietors Income Impact

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IMPACT NAME: Low-end Estimate MULTIPLIER: Type SAM

Aggregated Report

<u>Industry</u>	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>	<u>Deflator</u>
1 Agriculture (AGG)	14,459,970	19,960,688	1,423,908	35,844,564	1.00
28 Mining (AGG)	0	27,625	36,642	64,267	1.00
48 Construction (AGG)	21,221,370	2,761,366	12,184,527	36,167,260	1.00
58 Manufacturing (AGG)	515,679	1,296,455	986,668	2,798,802	1.00
433 TCPU (AGG)	0	2,983,399	2,414,421	5,397,820	1.00
447 Trade (AGG)	3,535,289	2,280,269	5,868,739	11,684,297	1.00
456 FIRE (AGG)	0	1,633,183	2,591,153	4,224,336	1.00
463 Services (AGG)	11,727,959	10,267,579	17,070,574	39,066,112	1.00
510 Government (AGG)	0	0	0	0	1.00
516 Other (AGG)	0	0	0	0	1.00
Total	51,460,267	41,210,563	42,576,633	135,247,457	

*2000 Dollars - if results are deflated and aggregated, then deflators displayed are set to 1.0 (results have been deflated)



Output Impact

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IMPACT NAME: Low-end Estimate MULTIPLIER: Type SAM

Aggregated Report

<u>Industry</u>	<u>Direct*</u>	<u>Indirect*</u>	<u>Induced*</u>	<u>Total*</u>	<u>Deflator</u>
1 Agriculture (AGG)	128,607,080	310,922,560	16,636,490	456,166,112	1.00
28 Mining (AGG)	0	263,002	267,588	530,590	1.00
48 Construction (AGG)	218,211,888	20,901,146	129,864,624	368,977,664	1.00
58 Manufacturing (AGG)	394,882,560	156,249,488	149,626,848	700,758,912	1.00
433 TCPU (AGG)	0	69,545,304	68,179,680	137,724,992	1.00
447 Trade (AGG)	294,115,456	91,958,608	199,915,904	585,989,952	1.00
456 FIRE (AGG)	0	73,320,720	191,803,504	265,124,224	1.00
463 Services (AGG)	221,004,512	111,148,264	268,046,512	600,199,296	1.00
510 Government (AGG)	0	8,090,011	135,609,472	143,699,472	1.00
516 Other (AGG)	0	0	2,235,948	2,235,948	1.00
Total	1,256,821,496	842,399,102	1,162,186,570	3,261,407,161	

*2000 Dollars - if results are deflated and aggregated, then deflators displayed are set to 1.0 (results have been deflated)



TAX IMPACT

IMPACT NAME: Low-end Estimate MULTIPLIER: Type SAM

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	Employee Comp	Prop income	HH expenditures	Corporations	Indirect Business	Total
Enterprises (Corporations)						
Transfers	637,386	0	0	0	0	637,386
Total	637,386	0	0	0	0	637,386
Corporate Profits Tax				26,475,882		26,475,882
Indirect Bus Tax: Custom Duty					3,207,838	3,207,838
Indirect Bus Tax: Excise Taxes					9,738,079	9,738,079
Indirect Bus Tax: Fed NonTaxes					2,389,512	2,389,512
Personal Tax: Estate and Gift Tax			1,757,498			1,757,498
Personal Tax: Income Tax			92,751,572			92,751,572
Personal Tax: NonTaxes (Fines- Fees			306,894			306,894
Social Ins Tax- Employee Contribution	48,521,262	5,902,464				54,423,727
Social Ins Tax- Employer Contribution	61,068,640					61,068,640
Total	109,589,903	5,902,464	94,815,965	26,475,882	15,335,429	252,119,642
Federal Government NonDefense						
Corporate Profits Tax				5,881,420		5,881,420
Dividends				2,455,462		2,455,462
Indirect Bus Tax: Motor Vehicle Lic					1,375,151	1,375,151
Indirect Bus Tax: Other Taxes					3,915,452	3,915,452
Indirect Bus Tax: Property Tax					36,361,476	36,361,476
Indirect Bus Tax: S/L NonTaxes					8,935,541	8,935,541
Indirect Bus Tax: Sales Tax					40,038,394	40,038,394
Indirect Bus Tax: Severance Tax					30,943	30,943
Personal Tax: Estate and Gift Tax			323,139			323,139
Personal Tax: Income Tax			29,611,861			29,611,861
Personal Tax: Motor Vehicle License			2,342,598			2,342,598
Personal Tax: NonTaxes (Fines- Fees			2,214,725			2,214,725
Personal Tax: Other Tax (Fish/Hunt)			591,915			591,915
Personal Tax: Property Taxes			467,079			467,079
Social Ins Tax- Employee Contribution	3,859,912					3,859,912
Social Ins Tax- Employer Contribution	9,393,005					9,393,005
Total	13,252,917	0	35,551,315	8,336,882	90,656,956	147,798,071
State/Local Govt NonEducation						
Total	123,480,205	5,902,464	130,367,280	34,812,764	105,992,385	400,555,099