

Economic Impact of A Visitor Information Center

Kevin C. Kaufhold
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Preamble

The following is an economic impact study performed by Kevin C. Kaufhold on a proposed visitor information center. The study was done as part of coursework in Public Finance at Southern Illinois University at Edwardsville, circa 2006, with Professor Tim Sullivan, instructor.

While the example is based on hypothetical and assumed economic facts, the study tracks an actual proposal for an information center. The study is meant to apply theoretical knowledge of economic impact studies as well as illustrating the capabilities of the IMPLAN software package.

The formal, written study is presented first, followed by a power point presentation. The power point slide show is designed for an oral presentation to an interested group, with the written study then being given to decision-makers.

Economic Impact of A Visitor Information Center

----- Formal Study -----

Executive Summary

This paper evaluates the economic impact of a visitor information center. The proposed location of the center is in a municipality in St. Clair County, Illinois, on city streets, and adjacent to entrance and exit ramps of an interstate highway.

The economic impact from the initial construction of the facility may be approximately \$1.7 Million. This includes not only the estimated \$1 Million direct construction costs, but also \$305,000 in indirect expenditures from contractors and material suppliers of the center and \$401,000 in consumer-type of induced expenses. 19.9 jobs should be created by the initial construction with a total labor income of \$756,000. \$57,000 in state and local taxes would also be generated by the initial construction phase of the visitor center.

The center would also have a continuing, on-going impact from both operational costs and retail activity. With an estimated annual operational budget of \$90,000, some \$147,000 in total economic impact would be generated, on an annual basis. \$527,000 in new annual retail expenditures would also result from travelers drawn to the urban area as a result of the visitor center. Over nine jobs and \$203,000 in labor income should be created through this new retail activity. \$37,500 in new state and local taxes will be generated through new retail sales. Aggregating these two streams of on-going expenditures produces a combined total of \$674,240 in economic impact occurring from the visitor center, with 11.7 full-time equivalent jobs created and a labor income of \$271,652. The combined state and local taxes, on an on-going basis, would be \$42,749.

Introduction -----

The Visitor Information Center (VIC) proposed for St. Clair County, Illinois has been eagerly sought by several municipalities. It would be located in an urban center, off of an interchange of an existing interstate highway coming to and from St. Louis, Mo. Currently, there are no information centers in the immediate area surrounding the Mississippi River to welcome travelers to and from the State. The closest center to Missouri along an interstate highway may be in Madison County on Interstate 70, around Pocahtonas, Illinois some 30 or more miles from state lines. Many municipalities and state-level public officials believe that the ability to announce and advertise numerous tourism sites in Illinois is being compromised, as a result.

There are several potential advantages to locating a visitor center in an urban area off of an interstate, but immediately adjacent to both east and west bound entrance and exit lanes. Only one information center would be needed to service both interstate lanes of travel, thereby resulting in a huge cost savings for the State, both in terms of construction and operations. It is also felt that once travelers would be in an urban environment with direct access to city streets and services, they would be more likely to explore and wander around the vicinity instead of immediately resuming their interstate travels. By locating the center in an aesthetically attractive environment with several nearby tourist types of attractions, it is also hoped that individuals would be more likely to stay longer in destination types of activities.

This paper evaluates the economic impact from new visitors to the urban area that arrive only as a result of the visitor center. The paper should be viewed as a “net” type of impact study, measuring the impact from tourists and visitors who come to the area only because of the visitor center. This method is opposed to studies measuring “gross activity”, which evaluates total economic activity. Travelers to the visitor center that would have stopped at the interchange anyway do not generate new dollars brought into the local economy, as they would be spending consumer dollars locally even without the center. The appropriate measure of impact therefore is “new” dollars generated as a result of the information center, not total dollars of activity spent by tourists and visitors stopping at the information center. This is an important distinction to make, and is a source of greatly inflated revenue projections in some studies that do not carefully separate gross economic activity from net economic impact.

Explanation of Potential Impacts -----

A visitor information center generates several potential economic impacts. The initial construction costs will produce economic impact in the local and regional economy. Such activity will be larger than the direct expenditure of the construction contract itself. Indirect impacts result from additional economic activity occurring as a result of the construction contract. An example of an indirect expenditure is the purchase by a sub-contractor of steel plates needed to manufacture steel frames and overhead joists for the construction project. Additional expenditures are also “induced” from the initial construction costs, primarily from consumption expenditures of the employees hired and the businesses involved in the center’s construction.

The direct, indirect, and induced expenditures from the construction contract will then set off further rounds of spending in the regional economy. For example, restaurants serving the employees of the construction project will have to hire employees, food and beverages, and other miscellaneous items in order to cater to the consumption patterns of the employees. This in turn generates additional consumer spending by the employees of the restaurant, producing yet another round of expenditures. This subsequent spending occurring far beyond the direct costs of the center’s construction multiplies the economic impact of the initial construction contract. Gradually, this multiplier effect will wear itself out, as producers and consumers alike will consume or make expenditures in such a manner that money is eventually taken out of the regional economy. Such expenditures include imports, the payment of taxes, and investment of assets.

Another potential economic impact occurs from the operational budget of the visitor center. These expenses include landscaping features, maintenance and repair to the facility, and payroll for staffing. The expenses will also run through the regional economy. For instance, plumbing supplies will occasionally have to be ordered to maintain or replace broken pipes and plumbing at the center. The purchase of the supplies will generate another economic chain reaction in the local economy, as employees will be hired to produce these plumbing supplies. Further, consumption by the employees of the landscaper as well as the plumbing supplier will generate an on-going demand for various consumption-related goods and services. A multiplier therefore also exists from the operational expenses of the center, with the initial expenditures generating additional dollars spent throughout the economy. The effect will gradually wear off, just as with construction expenses, due to the various “leakages” out of the local economy. Since the operational budget is an annualized item, these expenses will continue to impact the local economy over the course of the information center’s existence, unlike the one-time impact occurring from the initial construction costs.

Another important economic impact occurs from the retail sales and revenues generated from purchases made by tourists going to and from the visitor center. Since the visitor center will be surrounded by a fully developed and mature commercial zone of restaurants, gas stations, small retail outlets, and hotels, it is reasonable to believe that visitors to the center will make consumer-related purchases while driving to and from the

center. Just as with the operational expenses, these direct retail purchases will then be followed by subsequent purchases for various supplies and services used to make the retail products. Consumption expenses made by the employees of the retail businesses will also occur. The retail purchases of visitors to the information center will therefore have its own multiplied effect upon the regional economy. This multiplier will also gradually phase out, just as with the construction and operational expenses outlined above. Since retail expenses are ongoing over the life of the center, they also will regular occur. Such on-going expenses should be stated in either annual terms or as a present cash value of the future revenue stream. To keep things simple and not overstate the economic impact, both the operational expenses and the retail sales are stated in terms of annual economic impact to the regional economy.

Caution must be employed however when engaging calculations of economic impact from the retail purchases of visitors to the information center. We should not be interested in total economic activity but only in the net or new dollars brought into the local economy by people who only stopped in the urban area *because of* the visitor center. Otherwise, the distinction between gross economic activity versus net economic impact is not clearly identified and dealt with. This study does so by estimating the percentage of new visitors stopping only because of the center's existence. This is a critical percentage to estimate. If more time and resources were available, the percentage of new visitors could be estimated through consumer surveys and / or producer accounting analysis.

Another cautionary item in the exploration of potential impacts lies in the nature of the visitor center, itself. The information center is primarily intended to serve as a quick stop for motor vehicle travelers to use, with an information booth being placed inside the center. It is not designed as an interpretive center having numerous social and destination types of tourist events and attractions. A search of the professional literature suggests that centers at travel destinations may have a greater economic impact than centers with a simpler objective. A short summary of such literature is included in the endnotes for illustrative purposes.

Two potential activities are excluded from this study as either: 1) not producing a net economic impact (real estate purchases for the center); or 2) not being amenable to statistical measurement (the future impact of visitors returning to the area in other trips). Both of these excluded items are more fully detailed in the endnotes.

Data and Estimation Methodology -----

The estimation of economic impact from the information center can be stated as coming from three separate groupings of economic activity.

Construction costs of the visitor center were supplied by State of Illinois sources, and are the budgeted items related to construction expenses. They are as follows:

- 8,000 square foot building; \$100 square foot = \$800,000
- \$200,000 for the outside work, including side walks, landscaping, lighting, etc.
- \$1,000,000 total construction expense

Operational expenses are annual estimates of maintenance needs and staffing requirements at the center. Public employment is not expressly envisioned by the above figures. Instead, an estimated amount is provided for private contractual services of an equivalent operational nature. This procedure was largely done to allow for the simulation of economic impact in the IMPLAN modeling program. Also, contractual services were estimated in general recognition of market-level economics and efficiencies. To the extent that public employment is contemplated for operational expenses, employment figures would have to be developed, and then the economic impact from operational items could be reevaluated. Estimations include:

- \$20,000 per year for landscaping
- \$30,000 per year for general maintenance of building and out areas
- \$20,000 for supervising volunteers during holiday weekends & at other peak times
- \$20,000 for janitorial services

These figures are far lower than some of the studies in the literature search. For instance, \$600,000 was appropriated annually in Rhode Island for operational expenses of only one visitor center (Tyrrell, 2002). The differences may largely be the result of distinctions in objectives. A destination information center will likely be a focal point of tourist activity, necessitating full-time staffing. Conversely, an interstate type of visitor center will primarily serve as a rest stop for vehicular travelers, and is typically staffed with tourist aides only during peak weekends of the year, such as holidays. Even then, volunteers will often staff the information booths, generating a paid staffing need for only supervisors.

Retail sales and revenue figures are estimations made to determine the impact from new visitors coming to the interchange area as a result of the visitor center. The estimations assume that:

- A fully developed commercial zone around interchange already exists
 - o Four retail industries are in the immediate vicinity: food and beverages; gas stations; hotels; and miscellaneous retail

- 1,000 visitors a day will come to the center (40 visitors per hour for 24 hours, on average)
 - o 10% of visitors will stop at visitor center only because of the center
 - o Of those new visitors that do stop at the exit, 40% will make retail purchases in any one of four retail industries
 - o Could also be seen as 10% of new visitors making a purchase in all four retail industries.
- Of those that do make a retail purchase:
 - o Average meal = \$15.00 (7.50 * 2).
 - o Average gasoline charge = \$25.00.
 - o Average hotel charge is = \$40.00.
 - o Average miscellaneous retail = \$20.00.
- Economic impact per year from retail:
 - o Food: \$37,047 (15 * 10 * 365)
 - o Gas stations: \$91,250 (25*10*365)
 - o Hotel: \$146,000 (40*10*365)
 - o Misc. retail: \$73,000 (20*10*365)

These assumptions may seem to some individuals as being too conservative of an estimate for consumer spending, but they at least clearly focus on the new retail trade occurring only as a result of the information center. The question in essence becomes: how many visitors are stopping at this interchange solely because of the visitor center? Food, gasoline, and restrooms are all available at the interchange, with or without the visitor center. What services can a visitor center provide that are not already provided at an interstate exit? Information may be the primary type of unique “service” of a visitor center, but most information provided at a center will be limited to small brochures and flyers. Much of this type of tourist information amounts to advertising of various commercial endeavors in the area (such as brochures on riverboat gambling), which can be easily obtained on-line, in any event.

Net economic impact is calculated from these estimations and data inputs using a computer program developed by the IMPLAN Group, Inc. The methodology involves Input / Output Analysis, which is a professionally accepted type of modeling for purposes of estimating economic impact from various activities. The above data and assumptions are used as inputs. Multipliers are estimated for each industry being impacted in the regional economy of St. Clair County, Illinois. Direct, indirect, and induced economic output is then calculated. This generates a total economic impact for construction costs, operational expenses, and retail activities surrounding the visitor center. Technical details as to the industry and sector codes of IMPLAN are provided in the endnotes.

Estimation Results -----

As to construction expenses, the economic impact is as follows. Figures are in dollar terms, except for employment, which is in full-time equivalent terms.

Table I – Economic Impact from Construction Expenses -----

Construction	Direct	Indirect	Induced	Total
Output Impact	1,000,000	305,302	401,210	1,706,511
Total Value Added	424,560	197,123	233,228	854,911
Labor Income	481,089	140,099	135,184	756,372
Employment	11.0	4.1	4.8	19.9
S & L Taxes				57,506

As can be seen from the above table, initial construction costs of \$1 Million produces a total impact of \$1.7 Million, for a multiplier of approximately 1.7:1. 19.9 jobs would be created by the construction effort, having a total labor income of \$756,372. More than \$57,000 in state and local tax revenues would be generated in the construction. These figures represent the total economic impact of construction-related costs, including not only the direct costs of construction (e.g. \$1 Million), but also the indirect impact from the raw material suppliers, and the induced impact from miscellaneous retail consumption of the employees involved in the construction project.

On the operational expenses, the economic impact from the visitor center's annual operational budget is identified in the Table II. The figures represent on-going, annual impacts to the economy, unlike the one-time effect from the initial construction.

Table II – Economic Impact from Operational Expenses -----

Operational Group	Direct	Indirect	Induced	Total
Output Impact	90,000	21,194	36,008	147,202
Total Value Added	51,255	13,344	20,932	85,531
Labor Income	47,082	9,083	12,133	68,298
Employment	1.9	0.3	0.4	2.6
S & L Taxes				5,172

The public expenditure of \$90,000 per year in operational expenses for the visitor center produces a total economic impact of \$147,202. This is under a 2:1 multiplier (1.63:1, to be more precise) for all operational expenses. 2.6 full-time equivalent jobs would be generated by the operational expenditures, with a labor income of over \$68,000.

As to retail purchases, the economic impact of retail expenditures is summarized in Table III. The results are stated in terms of annual impact, since retail purchases would be continually made throughout the life of the visitor center.

Table III – Economic Impact from Retail Purchases -----

Retail Group	Direct	Indirect	Induced	Total
Output Impact	347,000	73,524	106,515	527,038
Total Value Added	198,774	46,173	61,918	306,865
Labor Income	137,919	29,545	35,889	203,354
Employment	6.8	1.0	1.3	9.1
S & L Taxes				37,587

The above table fully considers the new versus total economic spending distinction of a visitor center, and therefore captures only the new retail spending that occurs as a result of the center. With new visitors spending \$347,000 per year in retail purchases in the immediate vicinity, \$527,000 is generated per year. This represents a 1.67:1 multiplier of direct to total dollars. 9.1 new full-time jobs are generated, and an additional \$37,000 in state and local taxes occurs. While over \$500,000 in retail trade is significant, it is a much lower estimate of retail activity than in studies involving information centers at or near tourist and travel destinations. A summary of the literature involving such destination centers is provided in the endnotes.

As to a an aggregate, on-going impact, the two on-going streams can be combined for an aggregate impact occurring on an annual basis. The total output impact would then be \$672,240. The total value added would be \$392,240. Labor income would be \$271,652, with 11.7 full-time equivalent jobs created. \$42,759 would be generated in state and local taxes.

Endnotes -----

Excluded Items. Two items were excluded in the calculations of economic impact from the visitor information center. The first was the purchase of real estate for the visitor center. \$200,000 is budgeted for this purchase. The principal reason that real estate is excluded is because it merely represents a monetary transfer, instead of being indicative of economic activity. No new productive activity is generated in the exchange of money for land. A secondary reason for the exclusion is due to the lack of information regarding certain consumption preferences of the seller of the real estate. If the seller would use the money from the real estate transaction to make local consumption purchases, then conceivably, the newly found wealth of the seller could produce a ripple effect in the economy.

The following information from the seller would be needed before economic impact from the real estate transaction could be estimated: 1) the propensity to consume versus the propensity to invest; 2) the percentage of consumption expenses that will be local in nature versus non-local; 3) time frame for the intended consumption. If several pieces of real estate were being contemplated for purchase, these items might at least be able to be generalized or averaged together to produce estimated preference patterns. With only one particular seller of property however, and with the exact parcel of property still unknown, the variables needed to calculate impact are unavailable.

The second item that was excluded from the calculations was the expenditures of future return visits to the area from visitors who stopped at the information center. Some visitors may be impressed with what they see during a stop of the surrounding area and may make a mental note of returning at some future point in time. Such future tourist activity is considered too remote and speculative to be of much use in economic calculations. The exclusion of future tourist activity is also consistent with other visitor information center studies that only note future travel visits as a positive feature of the centers (see, Michigan study, 1998; Upchurch, unk. date).

Technical Notes Regarding IMPLAN. In developing the economic impact projections of the visitor center, certain procedures were used with the IMPLAN computer program. In particular, St. Clair County, Illinois data was used, social accounts and SAM multipliers were selected, and "all households" were designated for inclusion. While these items are largely pertinent to those who use IMPLAN, this information is important to note for purposes of eventual comparison to other economic impact studies.

Further, the calculations were based upon the identification of certain industries being impacted by construction costs, operational expenses, and retail purchases. The calculations could be dramatically affected by inclusion or exclusion of various industries, so a basic reference to the industries in these technical notes is appropriate. The industries follow industries codes developed by both the North American Industry Classification System (NAICS) and IMPLAN. The industries affected by information

center expenditures are grouped together, and then the economic impact is derived for each of the groups. This is demonstrated in the following tables.

Table IV – Visitor Information Center Groups and Codes -----

NAICS Description	NAICS	IMPLAN
Group - Construction		
- Construction, Commercial & Institutional	236220	38
Group - Operational		
- Landscaping Services	561730	458
- Janitorial Services	561720	458
- Visitor Bureaus	561591	456
- Plumbing, Heating, AC	238225	45
- Electrical Contractors	238210	45
- Carpenter Contractors	238350	45
Group - Retail		
- Food & Beverage Stores	445	405
- Gas Stations	447	407
- Hotels, without casinos	721110	479
- Miscellaneous Store Retailers	453	411

Since IMPLAN used the same codes for some of the operational industries, the operational group was simplified to the following IMNPLAN sectors. The corresponding dollar value inputs are also stated in Table V. A more detailed discussion of the monetary inputs is provided in Data and Estimation Methodology section of this paper.

Table V - Visitor Information Center IMPLAN Codes -----

Description	IMPLAN	\$ Thous.
<u>Group - Construction</u>		
- Construction Event	38	1,000
<u>Group - Operational</u>		
- Other Maintenance and Repair	45	40
- Travel Arrangements and Reservations	456	20
- Service to Buildings and dwellings	458	30
- Subtotal		90
<u>Group - Retail</u>		
- Food and Beverage Stores	405	37
- Gas Stations	407	91
- Misc. Retail	411	73
- Hotels	479	146
- Subtotal		347

Literature Search. Few, if any, economic impact studies are publicly available on interstate visitor centers. Summaries of impact studies are more commonly available for tourist centers at destination stops. Most of these studies and summaries are largely aimed at analyzing tourism at particular destinations, and do so through consumer surveys inquiring into additional money spent or additional days stayed as a result of the tourism center. For instance, the National Kayak Center in Minnesota operating from the Jay Cooke State Park at the St. Louis River was estimated to have generated \$3.235 million in economic impact, aggregated between 1989 and 2000 (MASC, unk. date).

The Rhode Island Economic Development Tourism Division and the University of Rhode Island indicated that a Rhode Island Welcome Center generated \$33 in visitor spending for every \$1 of operating expenses (Tyrrell, 2002). The operating expenses of the center were estimated at \$600,000 per year, and the gross economic impact was estimated to be \$20 Million or more. The study showed that tourists spend \$104 more per day, and stay approximately a half-day longer than planned in the state after receiving information from the Welcome center staff.

The Baltimore Visitor Center located at the Baltimore Area Convention Center generated an estimated \$3.5 Million between June 2004 and June 2005 (Temple University Study, 2005). Local travel parties were reported spending \$107 more per day and out-of-town guests reported spending an additional \$132.

Nine different Michigan Welcome Centers were believed to produce \$200 more per trip from those visitors who picked up travel information than those travelers who did

not seek out information (Michigan, 1998). The estimated impact on an annual basis was \$32 Million.

One study that focused on travel counseling training for visitor centers felt that strong evidence existed on the importance of providing travelers with timely and accurate information at visitor centers (Upchurch, unk. date). Another study showed that information from visitor centers may influence the places visited as well as the amount of time and money spent in a state, both currently and in the future (Roehl and Fesenmaier, 1995).

Note that these studies involving destination types of centers have vastly higher projections than estimates made for the interstate visitor center in St. Clair County, with operational expenses of \$90,000 per year, retail impact of more than \$500,00 per year, and new visitor per day spending of only \$15 to \$40.

References -----

Michigan State University, Economic Impact Study and Survey of Michigan Welcome Center, 1998.

Minnesota Amateur Sports Commission (MASC), Economic Impact Estimates of the National Kayak Center, Carlton, Minnesota.

Minnesota IMPLAN Group, Inc (MIG, Inc) (data sources and computer modeling).

North American Industry Classification System (NAICS), US Census Bureau (industry classifications).

W. S. Roehl and D.R. Fesenmaier, "Modeling the Influence of Information Obtained at State Welcome Centers on Visitor Expenditures," *Journal of Travel and Tourism Marketing*, no. 3 (1995): 19-28.

Temple University, Summary of Economic Impact Study of the Baltimore Visitor Center, 2005.

T. Tyrrell, "Effectiveness of the Rhode Island Welcome Center", University of Rhode Island, 2002.

R. S. Upchurch, "An Introduction to Visitor Centers," University of South Florida.

Economic Impact of A Visitor Information Center

----- Power Point Presentation -----

The following presentation is a slide show covering the major topics of the above economic impact study. It is intended to be orally presented to an interested audience in conjunction with the more formal written study, above.



The Economic Impact of a Visitor Information Center

Prepared for Municipality XYZ

Kevin C. Kaufhold



Housekeeping Items

- Presentation is an outline of a formal study
- Keyed to headings of the study
- Short questions OK during presentation
- Thoughtful comments hold until Open Forum



Executive Summary

- Proposed location of Visitor Information Center is in a municipality of St. Clair County, Illinois
- One-time impact from construction: \$1.7 Million
- Continuing economic impacts on an annual basis:
 - \$147,000 from operating budget of center
 - \$527,000 from retail sales
- Combined, on-going economic impact:
 - \$674,000 in annual impact to economy
 - 11.7 jobs; \$271,000 in labor income
 - \$42,000 in state and local taxes



Introduction

- Visitor Information Center to be located in urban area
 - On city streets, adjacent to interstate ramps
 - Designed for access to city and interstate
 - Hoped that interstate traffic will be drawn to a city

- To be located in St. Clair County, Illinois
 - Increase visibility of Illinois as interesting place to visit

- Will be a traditional highway information center
 - Not an interpretive center having social & cultural activities



Potential Economic Impacts

- Initial costs of construction (one-time only)
- Operational budget (on-going)
- Retail expenditures from visitors (on-going)

- Excluded as an economic impact:
 - Real estate transaction (considered only a transfer)
 - Future tourist visits to area (too speculative)



Data & Estimation Methodology

- IMPLAN used for modeling economic impact

- Construction Costs: \$1 Million
 - \$800,000 for building
 - \$200,000 for outside work

- Operational Budget: \$90,000 / Year
 - Contractual services assumed
 - \$20,000 for landscaping
 - \$30,000 for general maintenance
 - \$20,000 for supervision of volunteers
 - \$20,000 for Janitorial services



Data & Methodology, Continued

- Direct Retail Sales: \$347,000 / Year
 - Estimate for only new visitors coming to urban area
 - Economic Activity vs Economic Impact Distinction
 - Assumption that center has 1,000 visitors / day
 - Only 10% will stop because of center
 - Further Assumption that 40% of those will consume
 - 4 retail industries primarily enhanced by retail sales
 - Food & Beverage - \$15 average meal
 - Gas Stations - \$25 gas charge
 - Hotels - \$40 average cost for one night
 - Miscellaneous Retail - \$20 purchase, on average



Estimation Results

- Economic Impact from Construction Expenses -----

Construction	Direct	Indirect	Induced	Total
Output Impact	1,000,000	305,302	401,210	1,706,511
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S & L Taxes				57,506



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Operational Group	Direct	Indirect	Induced	Total
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Labor Income	47,082	9,083	12,133	68,298
Employment	1.9	0.3	0.4	2.6
S & L Taxes				5,172



Estimation Results

- Economic Impact from Retail Group -----

Retail Group	Direct	Indirect	Induced	Total
Output Impact	347,000	73,524	106,515	527,038
Total Value Added	198,774	46,173	61,918	306,865
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S & L Taxes				37,587



Estimation Results

- Combined Economic Impact, On-Going Basis -----

Combined, On-Going	Direct	Indirect	Induced	Total
Output Impact	437,000	94,718	142,523	674,240
Total Value Added	250,029	59,517	82,860	392,396
Labor Income	185,001	38,628	48,022	271,652
Employment	8.7	1.3	1.7	11.7
S & L Taxes				42,759



Endnotes

- Excluded Items
- Technical Notes Regarding IMPLAN
- Literature Search
- References



Open Forum

- Questions ?
- Comments
- Critique