



University of Nebraska at Omaha
DigitalCommons@UNO

Publications Archives, 1963-2000

Center for Public Affairs Research

3-1986

Economic Impact of Eppley and Millard Airfields on the Omaha Metropolitan Statistical Area

W.J. Corcoran

University of Nebraska at Omaha

Follow this and additional works at: <https://digitalcommons.unomaha.edu/cparpubarchives>

 Part of the [Demography, Population, and Ecology Commons](#), and the [Public Affairs Commons](#)

Recommended Citation

Corcoran, W. J., "Economic Impact of Eppley and Millard Airfields on the Omaha Metropolitan Statistical Area" (1986). *Publications Archives, 1963-2000*. 286.

<https://digitalcommons.unomaha.edu/cparpubarchives/286>

This Report is brought to you for free and open access by the Center for Public Affairs Research at DigitalCommons@UNO. It has been accepted for inclusion in Publications Archives, 1963-2000 by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.



ECONOMIC IMPACT
OF
EPPLEY AND MILLARD AIRFIELDS
ON THE
OMAHA METROPOLITAN STATISTICAL AREA

by

W. J. Corcoran, Ph.D.

March 1986



Center for Applied Urban Research
College of Public Affairs and Community Service
and
Department of Economics
College of Business Administration
University of Nebraska at Omaha



CONTENTS

	<u>Page</u>
SUMMARY	iii
INTRODUCTION AND METHODOLOGY	1
AIRFIELDS	2
RELATED ACTIVITIES	3
INDUCED INCOME	5
BENEFITS TO OMAHA TRAVELERS	5
COMBINED BENEFITS	6
LOCAL AND STATE GOVERNMENT REVENUES	7
CONSTRUCTION ACTIVITY	7
APPENDIX	9

SUMMARY

The total economic impact of Eppley and Millard Airfields on the Omaha Metropolitan Statistical Area (MSA) in 1984 is as follows:

	Employees (full-time equivalents) (number)	Personal income (millions)
Airport (airport authority, airlines, and other tenants):		
Direct	1,240	\$41.5
Indirect	540	14.1
Total	1,780	55.6
Related activities:		
Travel agents, taxicab drivers, and visitors (direct and indirect)	2,320	58.3
Induced income	2,960	77.5
Total	7,060	191.4
Benefits to Omaha MSA travelers (business and nonbusiness)		
	NA	37.1
Total	NA	\$228.5
	Direct airport employment (millions)	Direct, indirect, and induced employment (millions)
Government revenue:		
Local	\$4.8	\$22.1
State	3.4	15.7
Total	\$8.2	\$37.8
Personal income produced by construction activity:		
	Direct and indirect (millions)	Direct, indirect, and induced (millions)
1984	\$12.0	\$20.2
1984-87	45.2	76.2

- The \$191.4 million in personal income was 2.5 percent of the total buying power (\$7.72 billion) in the Omaha MSA in 1984.
- The 7,060 employees represent 2.5 percent of all employees (277,210) in the Omaha MSA in 1984.
- Collectively, the airport authority, the airlines, and the other airport tenants are the 24th largest employer in the Omaha MSA.
- Eppley and Millard Airfields represent an asset of \$20,300 per household in the Omaha MSA.

INTRODUCTION AND METHODOLOGY

This economic impact study concentrates on three components of economic value that Eppley and Millard Airfields create for the Omaha Metropolitan Statistical Area (MSA): incomes earned; benefits to residents, businesses, and nonbusinesses; and expenditures by visitors.

The economic impact of a regional facility is the value it creates for the region's residents, which, in turn, contributes to their well-being. A clear measure of the value created is the number of goods or services sold, multiplied by the price that consumers pay for the goods or services. Thus, total sales or expenditures for goods or services are a measure of economic value.

An equally valid measure of value is the income received by labor and the value of the inputs used in producing the goods or services. Total income equals total expenditures, if we consider the indirect labor used to produce inputs, such as energy and raw materials. In fact, measuring income is the preferred method for determining the economic impact of a regional facility because the value created by the region's labor force can be identified readily. In addition, it is easier to use the income method to gather statistics on the number of individuals within the region employed in creating the economic value of the facility, while the value created by all labor inputs (those inside and outside the region) is included in the total expenditure method.

The economic impact of an airport or the value it creates is, however, more than the value of incomes resulting from the facility. The distinction between basic and nonbasic industries is important to understanding this concept. Basic industries export goods and services outside the region, they bring in new income, and they raise the average level of wealth in the region. For example, an automobile plant that exports most of its products to the rest of the country is a basic industry. A nonbasic industry is one that produces goods and services for local consumption, for example, supermarkets and department stores. Nonbasic industries thrive when basic industries are exporting products to other regions and bringing in new money.

Most industries are a blend of basic and nonbasic. But, the extent to which industries are basic increases total expenditures through the regional economy. In contrast, changes in demand for nonbasic industries result from increased incomes in basic industries or from consumers substituting the product of one nonbasic industry for another within the region. Thus, economic impact results from increased incomes in basic industries that export goods and services to other regions.

Most of the revenue and income from Eppley Airfield is derived from selling goods and services to Omaha area residents and visitors. Travelers from Nebraska and Iowa drive to Omaha to fly to other areas, and they purchase their airline tickets in Omaha. Travelers who change planes at the airport buy goods and services there, and some visitors may purchase tickets for return flights in Omaha.

Expenditures made by Omaha residents at the airport can be treated as sales from basic industries. Instead of creating new expenditures from outside the region (basic industry expenditures), these expenditures are diverted from going outside the region to purchase goods and services and to create jobs in Omaha. The effect is the same as bringing an equal amount of money into the region by selling exports to non-Omahans. The airport is a basic industry in that it is an import replacing industry.

The primary transportation alternatives without the airport are the automobile or travel to another airport, such as Kansas City, for long-distance travel. Travelers would buy food, gas, other goods and services, and airline tickets elsewhere if the airport were not here. Because of the airport, most of this money remains in the area, becomes income for other residents, and increases the average level of wealth in Omaha.

Long-distance travel to Omaha, greater than 500 miles, is cheaper by air. Thus, the airport may increase the demand for visits to Omaha. Visitors bring in money from outside the region and spend it at local hotels, restaurants, and shops. Although the money is spent here, it comes from outside the region, and these exports can be attributed directly to the airport.

AIRFIELDS

The value of goods and services produced at Eppley and Millard Airfields have a direct effect on Omaha's economy. The airlines provide the air travel, the airport authority provides the airlines with landing facilities and terminal services, and other tenants provide consumer items, such as, food, haircuts, and cocktails. Within the Omaha MSA, the value created by the airport is equal to the income received by employees of the airport authority, the airlines, other tenants, their suppliers, and even those who supply the suppliers. Employees of the airport authority, airlines, and other tenants are direct employees, while employees of their suppliers are indirect employees.

In 1985, the airport authority, the airlines, and the other airport tenants employed 1,390 full- and part-time employees.¹ Collectively, they are the 24th largest employer in the Omaha MSA.² A survey of airport employees indicated that the average annual wage and salary per full-time employee was \$24,820.³ After making adjustments to include part-time employees, increases in wages and salaries from 1984 to 1985, and changes in employment from 1984 to 1985, we calculated that \$29.8 million in wages and salaries were paid to 1,240 direct full-time equivalent employees in 1984.⁴

The wages and salaries received by employees of the industries that supply the airport authority and its tenants must be included in the economic analysis also. These indirect employees rely on the airport for their jobs. We used a multiplier of 0.34 to determine the total wages and salaries for indirect employees.⁵ This indicates that for every \$100 of wages and salaries paid to direct employees, \$34 is paid to indirect employees in the Omaha MSA. As a result, indirect wages and salaries amounted to \$10.1 million in 1984.⁶ We estimated that the airfields supported 540 indirect employees, using the average wage and salary (\$18,800) paid in the Omaha MSA in 1984.⁷

Wages and salaries are only one component of the total incomes generated in the Omaha area, albeit the largest component. Other components include dividends, profits, and rents. The total of all incomes received is personal income. These incomes are also created by the airport authority and the airport tenants, and they are, in part, incomes received by Omaha residents. The latest figures available for the Omaha area indicate that wages and salaries account for 71.8 percent of personal income, thus, the airfields generate \$55.6 million in total personal income.⁸

	Employees (FTE) (number)	Wages/salaries (millions)	Personal income (millions)
Direct	1,240	\$29.8	\$41.5
Indirect	<u>540</u>	<u>10.2</u>	<u>14.1</u>
Total	1,780	\$40.0	\$55.6

Thus, if we assume that Eppley and Millard Airfields did not exist and that they were introduced into the Omaha MSA in 1984, the short-term impact would have been an increase of 1,780 jobs and \$55.6 million in personal incomes. In the long term, more jobs would be induced and personal incomes would increase accordingly.

RELATED ACTIVITIES

The activities of three additional groups are related directly to the airport--travel agents, taxicab drivers, and visitors.

Travel agencies can be considered extensions of the airlines, because most of their employees are related directly to airline travel. Travel agents sell tickets for the airlines and they receive a percentage of the ticket price as payment for their services. Travel agents can be considered direct employees of the airlines for the purposes of this study.

Taxicab drivers provide a complementary good for airline passengers, that is, the traveler purchases the airline trip and taxi trip as one commodity. Thus, the airport produces income and employment for taxicab drivers.

Finally, the airport reduces the cost of traveling to Omaha, especially for long-distance travelers, and, as a result, increases the number of visitors to Omaha. This increase in the number of visitors results in new expenditures in Omaha for lodging, food, and entertainment. These expenditures would not occur without the airport.

Travel Agents

In 1983, local travel agencies employed 251 individuals, 173 of which were concerned with air travel.⁹ We determined that the number of agents concerned with air travel increased to 186 in 1984.¹⁰ The estimated average annual wage paid to travel agents in 1984 was \$9,900.¹¹ Combining these two figures indicates that airline ticket sales accounted for \$1.84 million in wages and salaries paid to employees of travel agencies.

To determine the wages and salaries of indirect employees we used a multiplier of 0.53.¹² Thus, the airport created another 52 jobs for indirect employees who collected \$1.0 million in wages and salaries. Based on wages and salaries paid to direct and indirect employees, we estimated personal incomes to be \$4.0 million.¹³

	Employees (number)	Wages/salaries (millions)	Personal income (millions)
Direct	186	\$1.8	\$2.6
Indirect	<u>52</u>	<u>1.0</u>	<u>1.4</u>
Total	238	\$2.8	\$4.0

Taxicab Drivers

An airport survey, conducted during summer 1985, indicates that 4.46 percent of all airport arrivals and departures are transported by taxicab. Therefore, in 1984, the 2.08 million passengers at Eppley Airfield generated 92,700 taxicab trips. Assuming the price of each trip was \$8.50, airline passengers provided \$790,000 in total receipts for taxicab drivers in Omaha.

Taxicab drivers and supporting employees received \$355,000 of this amount as income, which supported an average of 25 employees in the taxicab industry.¹⁴ The total indirect payroll, \$189,000, represents income for another 10 employees.¹⁵ The personal income created, based on the total payroll, is \$756,000.¹⁶

	Employees (number)	Wages/salaries (millions)	Personal income (millions)
Direct	25	\$0.4	\$0.5
Indirect	<u>10</u>	<u>0.2</u>	<u>0.3</u>
Total	35	\$0.6	\$0.8

Visitors

An estimate of the number of visitors, business and nonbusiness, who travel to the Omaha MSA by air is 182,000.¹⁷ If the airports were not in Omaha, we estimate that the number of visitors coming by air (through Kansas City) would decline by 110,000.¹⁸ This loss of visitors would reduce expenditures in Omaha by \$66 million annually.¹⁹

This \$66 million represents \$25.1 million of wages and salaries for direct employees (employees of the service industries) and \$13.3 million of wages and salaries for indirect employees (employees of the industries that supply the service industries).²⁰ These wages and salaries support 1,340 employees in the service industries and 710 employees in industries that supply the service industries.²¹

	Employees (number)	Wages/salaries (millions)	Personal income (millions)
Direct	1,340	\$25.1	\$35.0
Indirect	<u>710</u>	<u>13.3</u>	<u>18.5</u>
Total	2,050	\$38.4	\$53.5

INDUCED INCOME

The direct and indirect incomes generated by the airport and airport-related activities will be spent. The money purchases goods and services, which, in turn, provides incomes for employees in Omaha. This creation of value is induced by the new money that is brought into the region by the airfields. Again, the value created is measured by the incomes received for producing goods and services. Most of this income will be spent through successive purchases, and, with each purchase, the amount spent is a fraction of the previous amount. The total of these incomes is induced income. Researchers have determined that each \$100 of direct and indirect income that comes into the Omaha MSA generates \$68 of induced income within the area.²²

	Employees ²³ (number)	Direct and indirect personal income ²⁴ (millions)
Airport	1,780	\$ 55.6
Related activities	<u>2,320</u>	<u>58.3</u>
Total	4,100	\$113.9
		x <u>0.68</u>
Induced	2,960	77.5
Total income (direct, indirect, and induced)		\$191.4

BENEFITS TO OMAHA TRAVELERS

The airports provide residents of the Omaha area the opportunity to travel by air. Air is the less expensive mode of traveling the greater the distance to be covered and the smaller the number of individuals traveling. For example, it is less expensive for a group of six to travel 200 miles by automobile than by airplane, but it is less expensive for two individuals to travel 1,800 miles by air than by automobile.

The money saved by residents and businesses in Omaha because of the availability of less expensive travel is equivalent to an increase in income. The money saved is an economic benefit to residents of the Omaha area, although it does not show up in employment and wage and salary statistics. Some of the money that is saved on travel is spent in the Omaha area and results in greater employment. The increase in the number of Omahans

who travel by air because of the reduced cost of long-distance travel is also a benefit to these members of the community.²⁵

To measure the savings generated by the airport, we made several assumptions about the alternatives that are available at a higher cost. If the airfields were not available in Omaha, Kansas City, which is 200 miles away, would be the likely point of departure for long-distance air travel. We assumed that travelers would go from Omaha to Kansas City by automobile, and then make a 500 mile trip by air. The assumption of 500 miles or 1,000 miles round trip, is less than the actual average round trip by air (1,921 miles). Use of the lower figure is warranted because Omaha is near the geographic center of the United States.²⁶

In 1984, there were 220,825 households in Omaha.²⁷ The average number of trips per household per year was 5.8, implying that Omaha residents took 1.3 million trips and 220,000 (17 percent) were by air.²⁸ Given that each flight includes a departure and an arrival, residents of Omaha accounted for 21.6 percent of the travel at Eppley Airfield in 1984.²⁹

We assumed that the average cost of a 500-mile trip by air from Omaha was \$186. A drive by automobile to Kansas City to take an equivalent air trip would increase the cost on average by \$242, bringing the total cost to \$428.³⁰ Given estimates of demand for air travel, this increase in cost would reduce the number of trips to about 87,000.³¹ We can estimate the benefits of air travel through Eppley Airfield to Omahans as the savings of \$242 for each of the original 220,000 round-trip flights. This would result in an overestimate because many passengers would not make the trip at the higher price. Another measure would be the additional savings of \$242 to each of the 87,000 travelers who would pay the higher price and still make the trip. This amount is clearly an underestimate. Standard practice is to use the midpoint of the number of travelers (153,500), which produces an economic benefit to Omahans of \$37.1 million.

COMBINED BENEFITS

The total personal incomes created directly by the airport, indirectly by the airport suppliers, and induced by expenditures of these incomes amounts to \$191.4 million annually. This is a measure of the value created and, in turn, benefits received by Omahans from airport activities. In addition, Omahans benefit from the reduced cost of air travel, estimated to be \$37.1 million annually. Combining the total benefits received results in benefits of \$228.5 million annually to Omahans.

To fully appreciate these benefits we might ask, what investment could be made now to obtain these benefits year after year? Or, what would be the value of these benefits if we could assign a monetary value for the current year? Assuming a 30-year depreciation rate and a long-term interest rate of 3 percent, the \$228.5 million annually translates into a capital asset or value to the Omaha MSA of \$4.5 billion.³² In simpler terms, Eppley and Millard Airfields represent an asset of \$20,300 per household in Omaha.³³

LOCAL AND STATE GOVERNMENT REVENUES

Local and state tax revenues are highly correlated with income, even though they are not all based on income. Sales tax is a percentage of expenditures, which are correlated with income; property tax is based on the value of a house, which, in turn, is also correlated with income. Finally, the Nebraska state income tax itself is based on income. Thus, local and state revenues tend to be a stable percentage of personal income and can, therefore, be estimated from personal income data.

The general revenues for both state and local government agencies per \$1,000 of personal income is \$197.25 or 19.72 percent. Of that amount, \$81.66 or 41.4 percent is state revenue and \$115.59 or 58.6 percent is local government revenue.³⁴ These figures (\$81.66 and \$115.59) can be applied to personal income figures to determine the state and local government revenues that are derived from the airfields and related industries.

	Local government revenues (millions)	State government revenues (millions)	Total government revenues (millions)
Airport employment:			
Direct	\$4.8	\$3.4	\$8.2
Indirect	1.6	1.2	2.8
Total	\$6.4	\$4.6	\$11.0
Related activities	6.7	4.8	11.5
Induced income	<u>9.0</u>	<u>6.3</u>	<u>15.3</u>
Total	\$22.1	\$15.7	\$37.8

CONSTRUCTION ACTIVITY

The airport authority began its recent expansion of Eppley Airfield in 1984. This construction project is expected to be completed in 1987. The expanded facility will increase the volume of air traffic into Omaha, and it will increase incomes, reduce the cost of air travel (convenience and time), and increase the number of visitors to Omaha. It is difficult to estimate the full value of the expanded facility at this time.

In addition, there is a one-time benefit to the Omaha MSA because of the increased construction activity. In 1984, construction by the airport authority totaled \$14.1 million. The airlines and the airport tenants also made capital investments in 1984, increasing the value of new construction to well over \$17.8 million.³⁵

This construction creates direct, indirect, and induced incomes. Unlike the incomes generated by employment at the airports, travel agencies, and other related industries, which are sustained year after year, income from construction at the airport is a one-time boost to the economy that will decline after 1987.

Of the \$14.1 million invested by the airport authority in 1984, \$3.6 million went to wages and salaries for direct employees and \$3.2 million went to wages and salaries for indirect employees. Adding the effects of other investments at the airport yields a total of \$8.6 million in wages and salaries for direct and indirect employees and \$12.0 million in total personal income.³⁶

The expenditures of construction workers also create employment and income--an additional \$5.9 million of induced wages and salaries and \$8.2 million of induced personal income.

	Wages/salaries (millions)	Personal income (millions)
Direct	\$4.5	\$ 6.3
Indirect	4.1	5.7
Induced	<u>5.9</u>	<u>8.2</u>
Total	\$14.5	\$20.2

Direct and indirect personal income related to new construction expenditures in 1984, generated \$1.4 million in local taxes and \$1.0 million in state taxes.³⁷ If induced income is included these amounts increase to \$2.3 million in local taxes and \$1.6 million in state taxes.

The total expenditure of \$67.46 million for airport construction from 1984 to 1987, will result in \$76.2 million in direct, indirect, and induced personal incomes, \$8.8 million in local tax revenues, and \$6.2 million in state tax revenues.

APPENDIX

Airfields

1. The number of full- and part-time employees was determined by a survey of airport employers and employees conducted by researchers at the Center for Applied Urban Research (CAUR) in December 1985.
2. The largest employers in the Omaha MSA were determined by using the Greater Omaha Chamber of Commerce's Major Employer Information Sheet, dated January 11, 1985, and by telephoning selected employers.
3. The survey revealed that the average annual wages and salaries for these employees in 1985, were as follows:

Airlines	\$26,520
Other tenants	21,930
Airport authority	25,970
Combined weighted average	24,820

4. The survey also indicated that 319 employees accounted for 296.45 full-time equivalents (FTEs), giving a ratio of 0.93 FTE/full- and part-time employee.

We assumed that the number of employees/passengers remained constant and that the wages and salaries of airfield employees increased by 2.9 percent between 1984 and 1985. Sources: Omaha Airport Authority, Traffic Statistics; and U.S. Bureau of Labor Statistics, Monthly Labor Review.

5. The multiplier used to estimate indirect wages and salaries from direct wages and salaries (0.34) was obtained from An Input Output Study for the Omaha SMSA, J. D. Stolen and P. C. Chang, October 1969, p. 22.

6. Total wages and salaries disbursed to indirect employees, 1984 = Total wages and salaries disbursed to direct employees, 1984 x Indirect income multiplier

\$10,140,000	=	\$29,810,000	x	0.34
--------------	---	--------------	---	------

7. To estimate the average wage and salary paid in the Omaha MSA in 1984, we obtained the following parameters:

(a) Ratio of personal income in Omaha, 1983/Personal income in Nebraska, 1983 = 0.358.

(b) Personal income in Nebraska, 1984 = \$19,962 x 10⁶.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business.

(c) Average number of employees in the Omaha MSA, 1984 = 272,362.

Source: Nebraska Department of Labor, Office of Research and Statistics, Nebraska Work Trends.

(d) Wages and salaries/Personal incomes in Omaha MSA, 1980-82 = 0.718.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Information System, computer printouts.

8. See note 7(d).

Related Activities

Travel Agents

9. The number of employees of travel agencies (251) was obtained from County Business Patterns, 1983, Nebraska, U.S. Department of Commerce, Bureau of the Census. This is an underestimate for the Omaha MSA because it was impossible to isolate the number of travel agents in Pottawattamie County, Iowa, part of the Omaha MSA.
10. A telephone survey conducted by CAUR researchers indicated that 69 percent of travel agencies sales are for airline tickets.
11. A telephone survey of travel agencies indicated that the average annual wage paid in 1985 was \$10,200. We assumed that the increase from 1984 would equal the increase in the transportation industry generally, that is, 2.9 percent (see note 4), Therefore, the figure was deflated to \$9,900 for 1984.
12. We assumed the indirect employment effects would be typical of those found in the service industry, that is, an indirect income multiplier of 0.53. Thus, for every \$1.00 of direct income, \$0.53 of indirect income is paid. Source: An Input Output Study for the Omaha SMSA, J. D. Stolen and P. C. Chang, October 1969, p. 22.
13. See note 7(d).

Taxicab Drivers

14. Payroll/receipts from the service industries in the Omaha MSA is 0.37. Source: U.S. Department of Commerce, Bureau of the Census, Census of Service Industries, 1982. The average wage per employee in the taxicab industry is \$5.00/hour. Source: Nebraska Job Service.
15. See note 12.
16. See note 7(d).

Visitors

17. Based on the following assumptions:

- (a) An estimated 153,000 visitors traveled to the Omaha MSA by air in 1977. Source: U.S. Department of Commerce, Census of Transportation, Travel during 1977.
- (b) Growth in visitor traffic is correlated strongly with growth in income.

18. Based on the following assumptions:

- (a) The estimated price per mile of a round trip of 1,000 miles (500 each way) is \$0.15 per mile. Personal communication with a representative of Air Transport Associates indicated that the cost per mile of an 890-mile trip in 1984, was \$0.121.
- (b) About 22 percent of all airline trips are for business and 78 percent are for nonbusiness, while the average length of stay is 4 nights. Source: U.S. Department of Commerce, Census of Transportation, Travel during 1977.
- (c) The average cost of a nonbusiness trip by automobile to Kansas City (400 miles round trip at \$0.2696 per mile) is \$107.80. The same trip for business (\$0.3062 per mile) is \$122.50. Source: Statistical Abstract of the United States, 1985, table 1051.
- (d) The cost of a round trip to Kansas City for a nonbusiness traveler (we assumed 8 hours at minimum wage, \$3.35 per hour) is \$26.80. The cost of a business trip was assumed to be \$393 per day.
- (e) The cost of meals for the trip would be \$41 per day.
- (f) The cost of transportation to the airport to and from home and to and from the hotel would be \$18 each or \$36 total.

For d, e, and f, see R. G. O'Lone, "Study Shows Air's Cost Edge over Auto," Aviation Week and Space Technology, March 17, 1980.

19. On average, a visitor arriving by air stays 4 nights (see note 18(b)) and spends an average of \$150 per day. Source: Greater Omaha Convention and Visitors Bureau, Fall Survey, 1984.

20. To determine the reduction in the amount of direct and indirect personal income caused by the estimated reduction in visitors' expenditures (\$66.0 million), the multipliers for the service industry were used. Source: An Input Output Study for the Omaha SMSA, J. D. Stolen and P. C. Chang, October 1969, p. 22.

21. See note 7 for the average wage. The service industries typically pay lower wages than more basic industries so this figure is high, which in turn produces a low estimate of employees.

Induced Income

22. Source: An Input Output Study for the Omaha SMSA, J. D. Stolen and P. C. Chang, October 1969, p. 22.
23. See note 7.
24. The sum of personal income created in related activities is \$4.0 million (direct and indirect personal income created by travel agencies) + \$0.8 million (taxicabs) + \$53.5 million (visitors) = \$58.3 million.

Benefits to Omaha Travelers

25. Concerns which arise at this point are the net effects of increased visitors' expenditures in Omaha and decreased expenditures by Omahans who travel elsewhere. Both effects are related to reduced travel costs associated with the availability of the airport. The method used here is to consider only the increased visitors' expenditures while ignoring the decreased expenditures by Omahans. First, the net decrease in expenditures due to Omahans traveling elsewhere by air would be based on the assumption that these Omahans would not travel elsewhere without the airport. It is obvious that this would not be true. Secondly, much of the income gained by Omahans because of the decreased cost of travel will be spent in Omaha. It is difficult to take the full effect of this into account, but it is assumed that it would more than compensate for decreased expenditures in Omaha caused by more Omahans traveling elsewhere. On balance, we feel that the benefits will be understated.
26. The estimate of 1,921 miles round trip is from U.S. Department of Commerce, Census of Transportation, Travel during 1977.
27. The average number of households (220,825) during 1984, was derived from the Consumer Preference Study, 1985, conducted by the Omaha World-Herald.
28. The estimates of 5.8 trips per household per year and 17 percent of the trips being by air were taken from U.S. Department of Commerce, Census of Transportation, Travel during 1977.
29. There were 2,081,065 air passengers at Eppley Airfield in 1984 (Source: Omaha Airport Authority, Traffic Statistics). The 220,000 trips equate to 440,000 passengers or 21 percent of passengers. The 182,000 visitors to Omaha account for more than 17 percent of passengers. Connecting passengers account for 21 percent (Source: Official Statement on the Airport Authority by Smith Barney, Harris Upham Co., 1984). The remaining 41 percent of passengers are travelers who live in the Omaha area but outside the Omaha MSA and visitors to the Omaha area outside the Omaha MSA.
30. See note 18.
31. The change in airline trips would decline by 86.7 percent (see note 18). This translates into a reduction of 133,000 trips or a reduction in the total number of trips by Omahans to 87,000.

Combined Benefits

32. Three percent is the average rate of interest over time on 20-year treasury bonds. Source: Morgan Guaranty Trust Company of New York.
33. See note 27.

Local and State Government Revenues

34. Source: U.S. Department of Commerce, Bureau of the Census, Government Finance in 1983-84.

Construction Activity

35. Figures for construction expenditures by the airport authority were obtained from Airport Authority of the City of Omaha: Report on Examination of Financial Statements and Supplemental Information 1984 and 1983 by Touche, Ross and Company. Figures for investments by the airport tenants were obtained from the CAUR survey conducted in 1985.
36. See An Input Output Study for the Omaha SMSA, J. D. Stolen and P. C. Chang, October 1969, p. 22. See note 7 for ratio between wages and salaries and personal income.
37. See note 34.