

## VALUE OF LIVINGSTON COUNTY AIRPORT TO THE HOWELL AREA

### ECONOMIC VALUES

Livingston County Airport (OZW) is estimated to have an impact on its service area of approximately \$25.2 million annually in total economic activity. Of this figure, approximately \$11.3 million is in household earnings. This impact is due principally to the provision and use of general aviation services.

### AIRPORT CHARACTERISTICS

Livingston County Airport is owned and operated by Livingston County. It is a public use facility classified as a transport airport (T-3) on the Michigan Aviation System Plan. Livingston County Airport is designated as a reliever airport on the National Plan of Integrated Airports System (NPIAS). In 1995, it was among the busiest airports in Michigan with 48,200 aircraft operations. Livingston County Airport currently accommodates almost all types of general aviation aircraft including small jets.

### AIRPORT SERVICES

Livingston County Airport offers a wide range of services including those listed in Exhibit 1. All of these services have positive economic significance to the Howell area. This is due to the creation of employment, generation of taxes and potential attraction/retention of businesses to the area.

#### Exhibit 1 - Services Offered at Livingston County Airport

Air Cargo	Air Taxi/Charter	Aircraft Rental	Aircraft Repair
Aircraft Sales	Avgas Fuel Sales	Car Rental	Engine Overhaul
Flight Instruction	General Aviation	Hangar Rental	Jet Fuel Sales
Medical Airlift	Tie Downs	Vending	

### Airport Facilities

Livingston County Airport is an all weather facility capable of handling virtually all general aviation aircraft. The facilities present at the airport are listed in Exhibit 2. With only one runway, aircraft operators are somewhat vulnerable to closures of that runway for snow removal or other maintenance activities.

**Exhibit 2 - Facilities at Livingston County Airport**

Runway	13/31
Length	4,300
Surface	Paved
Taxi System	Full Parallel
Edge Lights	MIRL
REIL	Yes
PAPI	Yes
Approach	Non-Precision

Notes: MIRL = Medium Intensity Runway Lights; REIL = Runway End Identifier Lights; PAPI = Precision Approach Path Indicator.

**Airport Use**

Livingston County Airport currently serves substantial general aviation use in the form of private pilots, training flights and corporate operations. This results in the fleet mix of based aircraft shown in Exhibit 3 and the operational levels delineated in Exhibit 4.

**Exhibit 3 - Based Aircraft at Livingston County Airport 1995**

Single Engine	105
Multi Engine	13
Jet	0
Helicopter	0
Total	118

**Exhibit 4 - Aircraft Operations at Livingston County Airport**

Year	Itinerant	Local	Total
1991	16,940	16,940	33,880
1992	18,310	18,310	36,620
1993	19,680	19,680	39,360
1994	22,000	22,000	44,000
1995	24,100	24,100	48,200

Total aircraft operations at the airport have shown a modest but steady growth over the past five years with an annual average increase of 8.5 percent. With its designation as a reliever airport, and local commitment towards improving the airport as demonstrated through recent hangar development and installation of an AWOS, increases in operations levels should continue. The substantial number of both itinerant and local aircraft operations reflects the airport's use as both a transportation facility, and a significant training facility.

## AIRPORT ECONOMIC ROLES

Livingston County Airport is not specifically oriented to serve a certain segment of the local economy. Rather it serves the broad range of needs with an equally broad range of services. Additionally, the location of the facility allows county residents, visitors and commercial interests a high level of utility. The following items comprise the principal economic impact types found at the airport.

### Retention and Support of Private Business

Livingston County Airport is considered valuable to the competitive position of a number of local business organizations. If the facility were not present, it is possible that these firms would choose or be forced to locate elsewhere. These organizations use the air charter and general aviation services made possible by the existence of the airport. Survey responses by area businesses indicated a preference for the use of Livingston County Airport. However, the survey could not directly attribute any significant new economic development to the facility.

### Business Oriented General Aviation

A significant portion of general aviation use at Livingston County Airport is business oriented. Several firms in the county have aircraft at Livingston County Airport including those listed in Exhibit 5.

#### Exhibit 5 - A Sample of Firms With Aircraft at Livingston County Airport

- Boss Engineering
- Mareico Power Systems, Inc.
- M.S. Machining Systems
- Santa Fe Corporation

In addition to firms who own based general aviation aircraft, there are others who depend on the facility for charter, air cargo and other general aviation services made possible by the existence of the airport.

### Private Flying General Aviation

The large number of single engine aircraft registered to individuals at Livingston County Airport shows, that in addition to business use of the airport, the importance of the facility to the individual recreational flyers of the county.

A Number of nationally ranked aerobatics pilots, including a former international champion, base aircraft at the Livingston County Airport.

Additionally, the presence of flight training services underscores the importance of the airport as an aviation training facility.

#### LIVINGSTON COUNTY AIRPORT ECONOMIC IMPACT

The Livingston County Airport aviation related annual economic impact of \$25.2 million is comprised of the impact types listed in Exhibit 6.

#### Exhibit 6 - Aviation Related Impact of Livingston County Airport (Millions of Dollars)

Impact Type	Amount
Direct	\$1-6
Indirect	\$13.7
Induced	\$9.9
Total	\$25-2

Note: Totals may not add due to rounding.

Exhibit 7 provides a sample of airport tenants and others included in the impact estimates. The total impacts by type are outlined in Exhibit 8. There are some impacts at the airport which are not necessarily attributable to aviation. This study, however, assesses only the aviation related impacts.

#### Exhibit 7 - Sample Firms Creating Impacts at Livingston County Airport

Direct Impacts	Indirect Impacts
Air Service Enterprise	Fowlerville Machine Prod
Emerg Physicans Med Grp	Mareico Power Systems, Inc
Salo Aviation Enterprises	OGIHARA America Corp

**Exhibit 8 - Estimated Annual Economic Impact at Livingston County Airport**

Impact Type and Source	Firms	Total
<b>DIRECT IMPACTS</b>		
Aviation Related Firms	4	\$613,000
Flight/Ground Schools	4	\$358,000
Governmental Units	2	\$607,000
Subtotal	10	\$1,578,000
<b>INDIRECT IMPACTS</b>		
Visitor Expenditures		\$697,000
Regional Expenditures		\$2,000
Corporate Operations & Others		\$1,438,000
Dependent Firms		\$11,534,000
Subtotal		\$13,671,000
<b>INDUCED IMPACTS</b>		<b>\$9,936,000</b>
<b>TOTAL IMPACTS</b>		<b>\$25,186,000</b>

Note: Totals may not match due to rounding.

**Direct Impacts**

Direct impacts comprise the value of those activities involved in providing aviation services at the airport. Exhibit 9 provides a breakdown, by type, of the estimated \$1.6 million in direct impacts. Direct payroll comprises payments to those people who work directly at the facility, or are employed by airport tenants. Capital expenditures include improvements to facilities located on the airport as well as to the airport itself. Operating expenses are local expenditures by the airport operator and tenants.

**Exhibit 9 - Estimated Direct Annual Impacts at Livingston County Airport**

Direct Impact Type	Amount
Direct Payroll	\$412,000
Capital Expenses	\$416,000
Operating Expenses	\$751,000
<b>TOTAL</b>	<b>\$1,579,000</b>

Note: Totals may not match due to rounding.

**Indirect Impacts**

Indirect impacts are caused by airport use in the form of expenditures by air travelers and by those firms who depend on the airport for some or all of their business.

It is estimated that more than 22,000 visitors to the area arrive via Livingston County Airport annually. These visitors arrive via air taxi/charter, and general aviation aircraft.

Total visitor expenditures are estimated at \$697,000. Based on the proportion of visitors staying overnight (more than one day) it is estimated that the average visitor entering the region through Livingston County Airport, spends \$32 per trip at off airport locations. Resident users of the airport also generate impacts estimated at \$2,000.

The aviation related indirect economic impacts attributable to Livingston County Airport are estimated to be approximately \$13.7 million. A breakdown by type is given in Exhibit 10. The visitor expenditures listing is based on a mix of tourist, business and personal travel derived from the results of other surveys throughout Michigan. All visitor expenditures are at the actual cost outlay except retail sales, which, since it is a margin industry, is shown at 20 percent of the actual expenditures. Expenditures by airport dependent firms consist only of those costs attributable to airport related activity.

### Exhibit 10 - Estimated Indirect Impacts at Livingston County Airport

Indirect Impact	Amount
VISITOR EXPENDITURES	
Lodging	\$235,000
Food and Beverage	\$198,000
Retail Sales	\$18,000
Entertainment	\$61,000
Ground Transport	\$53,000
Business	\$43,000
Other	\$88,000
Subtotal	\$697,000
REGIONAL EXPENDITURES	\$2,000
CORPORATE AVIATION	\$1,438,000
DEPENDENT FIRMS	\$11,534,000
INDIRECT TOTAL	\$13.671.000

Note: Totals may not match due to rounding.

#### Induced Impact

Direct impacts of \$1.6 million and indirect impacts of \$13.7 million represent increases in final demand for goods and services in the area. To these must be added the "multiplier" effect which is the impact produced by money circulating through the regional economy. To determine this induced impact, the U.S. Department of Commerce Regional Input/Output Modeling System (RIMS-II) was used. It is estimated that the induced impact produced by Livingston County Airport is approximately \$9.9 million.

#### AIRPORT DERIVED EMPLOYMENT

An important element in the Livingston County Airport impact total is the employment which the airport creates. People are employed in airport related activities at the airport and at other off airport sites (hotels, businesses, factories). Furthermore, the direct and

indirect expenditures attributable to the airport continue to flow through the regional economy, creating additional employment through the multiplier effect. A summary of the jobs attributable to Livingston County Airport is given in Exhibit 11.

The RIMS-II model treats jobs as full time equivalents. As the exhibit shows, there are approximately 45 jobs either located at the airport or related to the facility in some way. Additionally, there are 264 jobs indirectly generated by the operation and use of Livingston County Airport.

**Exhibit 11 - Jobs Attributable to Livingston County Airport**

Job Source	Full Time Equivalents
On Site	30
Off Site Airport Related	15
Induced & Other Indirect Jobs	264
Total	309

**INDUSTRIES WHICH BENEFIT**

The economic activities at Livingston County Airport produce expenditures for a wide variety of goods and services. Many types of industries benefit, whether or not they are themselves airport users. Exhibit 12 lists impacted industry groups, and shows the extent to which each benefits from the airport in terms of total economic activity, household earnings and employment.

Exhibit 12 - Total Impacts at Livingston County Airport (Thousands of Dollars)

Impacted Industry Group	Annual Output (Output)	Annual Payroll (Earnings)	Employment (Jobs)
Ag Products & Forestry Serv.	\$180	\$36	4
Forestry Products	\$7	\$1	0
Crude Petroleum	\$54	\$5	0
New Construction	\$415	\$152	5
Maintenance & Repair Const	\$398	\$172	6
Food & Kindred Products	\$283	\$39	1
Apparel	\$18	\$4	0
Paper & Allied Products	\$7	\$1	0
Printing & Publishing	\$283	\$93	4
Chem & Refined Petrol Prod	\$25	\$3	0
Rubber & Leather Products	\$48	\$11	0
Lumber & Furniture Products	\$12	\$1	0
Stone, Clay & Glass Products	\$27	\$6	0
Primary Metals	\$12	\$2	0
Fabricated Metals	\$93	\$22	0
Non-electrical Machinery	\$21	\$6	0
Electrical Machinery	\$4	\$1	0
Motor Vehicles & Equipment	\$36	\$8	0
Other Transportation Equip	\$51	\$0	0
Instruments	\$1	\$0	0
Miscellaneous Manufacturing	\$30	\$7	0
Communications	\$793	\$193	5
Utilities	\$542	\$55	1
Wholesale Trade	\$381	\$139	4
Retail Trade	\$1,298	\$605	44
Finance	\$459	\$144	6
Insurance	\$158	\$46	1
Real Estate	\$1,384	\$25	7
Lodging & Amusements	\$435	\$143	4
Personal Services	\$123	\$52	5
Business Services	\$1,051	\$457	14
Drinking & Eating Estab	\$1,076	\$314	30
Health Services	\$64615	\$351	15
Other Services	\$506	\$180	10
Households		\$39	8
<b>TOTAL</b>	<b>\$25,186</b>	<b>\$11,324</b>	<b>309</b>

## NONECONOMIC BENEFITS

Not all benefits a community derives from an airport are quantifiable in dollar terms. Livingston County Airport provides residents of the county with alternative linkages to Michigan and beyond. For residents and commercial interests located in most of the region, the facility provides more convenient access to many airport services than alternative sites.

Livingston County Airport also supports the maintenance of essential community services such as law enforcement. Uses by the police include support and operation of aerial surveillance, search and rescue, and prisoner transfers. The facility is also used by the Civil Air Patrol as a base for search operations.

Livingston County Airport also provides medical transport, access to emergency medical treatment, and is utilized as a training facility by the city of Howell fire department.

In recent years, general aviation has become a major training ground for rewarding aeronautical careers. The presence of flight schools at the facility gives area residents convenient access to these career opportunities.

Livingston County Airport is home of Explorer Post 555, and an Experimental Aircraft Association (EAA) Chapter. More than 200 children each year participate in the Young Eagles program through Livingston County Airport.