Montana Airport Multimodal Study
Part I Methods and Results

by

James T. Sylvester
Susan Selig Wallwork
Paul E. Polzin
Marlene Nesary

Bureau of Business and Economic Research
School of Business Administration
The University of Montana

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16. Abstract

This study examines the representative Montanans' awareness of multimodal transportation opportunities and looks at their usage of airports in the Montana economy. This study is based on a random survey of 1225 Montana households.

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The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Montana Department of Transportation or the Federal Highway Administration.

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Executive Summary

This study examines the representative Montanans' awareness of multimodal transportation opportunities and looks at their usage of airport resources. We also analyze the broad economic implications of airports in the Montana economy. This study is based on a random survey of 1,225 Montana households.

Montana residents know what transportation is available in their community and they know what services are available at their local airport. Montanans think the primary benefits of having a local airport are convenience and added economic vitality. Emergency medical service is important to rural residents.

Most Montanans are familiar with the state's major airports, which are situated in the seven most populous -- or trade center -- counties: almost 80 percent of the respondents said they visited one of the seven airports with year-round scheduled service. Slightly less than two-thirds of the visitors lived in one of the seven trade center counties, while the remaining one-third traveled from a neighboring rural area. Interestingly, only about 30 percent of airport visitors were actually airline travelers, while the remaining 70 percent were with other travelers, or had other reasons for visiting the airport. Thus, non-travelers outnumbered travelers about two to one among major airport visitors.

Montanans were relatively satisfied with the condition of major airport facilities and services and relatively dissatisfied with the cost of scheduled passenger service.

Most rural general aviation airports are supported by local governments and so must compete with other government services for funding. Not surprisingly, the study found that users of airport facilities were more willing than non-users to fund improvements with local property taxes. Willingness to pay for desired improvements peaked at under $25 per year. Airport noise and safety appear to be non-issues for most rural respondents. Height limits were the only development restrictions for local airports mentioned by a majority of rural residents.

Air transportation firms in Montana employed about 1,300 persons in 1994. These employees earned about $30 million in wages and salaries. An additional $7-8 million was earned by self-employed persons providing crop-spraying or charter services during 1994.

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I. Methodology

Montanans' attitudes and opinions concerning multimodal topics were derived using telephone interviews. This is a reliable and accurate method of sampling state residents because most households -- about 93 percent -- have a telephone. The remaining Montana households contain a proportionately small portion of the population, and these persons are difficult to contact in any circumstance. Using other survey techniques such as mail or personal interview, may not be more successful.

The Bureau of Business and Economic Research has conducted survey research since 1968, and uses the following professional and scientifically valid methods. Telephone survey respondents were chosen using a two-stage selection procedure and represent a cross-section of Montana adults. First, telephone numbers were randomly generated by computer, a comprehensive approach because all numbers are not listed in the phone book, and the listed numbers may not be accurate because people move. A second random procedure selects one person in the household as respondent, eliminating bias due to time of day or week, interviewer preference, or other sources.

All interviews were conducted at the Bureau using CATI (Computer Assisted Telephone Interviews) methods and thoroughly trained and monitored interviewers. The questionnaire was pretested to check questions, programming and ease of use. The interviews were conducted from November 1994 to January 1995.

Sampling Errors

Most survey findings are reported in terms of percentages of the respondents polled, a number generalizable to the population of Montana adults as a whole. We found, for example, that about 79 percent of respondents were users of the state's major airports. Thus we reason that about 79 percent of adult Montanans use the state's major airports.

However, since the 79 percent figure is based on a sample only, we must account for the possibility of error. That is, if we interviewed all Montana adults, the actual percentage using the state's major airports may not be exactly 79 percent.

Researchers have developed a rather complex formula for determining this "margin of error". It involves two variables: 1)the total number of respondents to a given question, and: 2)the percentage of respondents giving a particular answer. Each variable can independently influence the margin of error and every question in a survey requires a separate calculation. Representative values for the usual scientific standard of 95 percent accuracy are as follows:

For 95% Probable Accuracy

	Percentage of respondents giving a particular answer	
Number of response to a given question	50%	90% or 10%
1,225	2.8	1.6
700	3.8	2.2
500	4.4	2.6
400	5.0	3.0
100	10.0	6.0

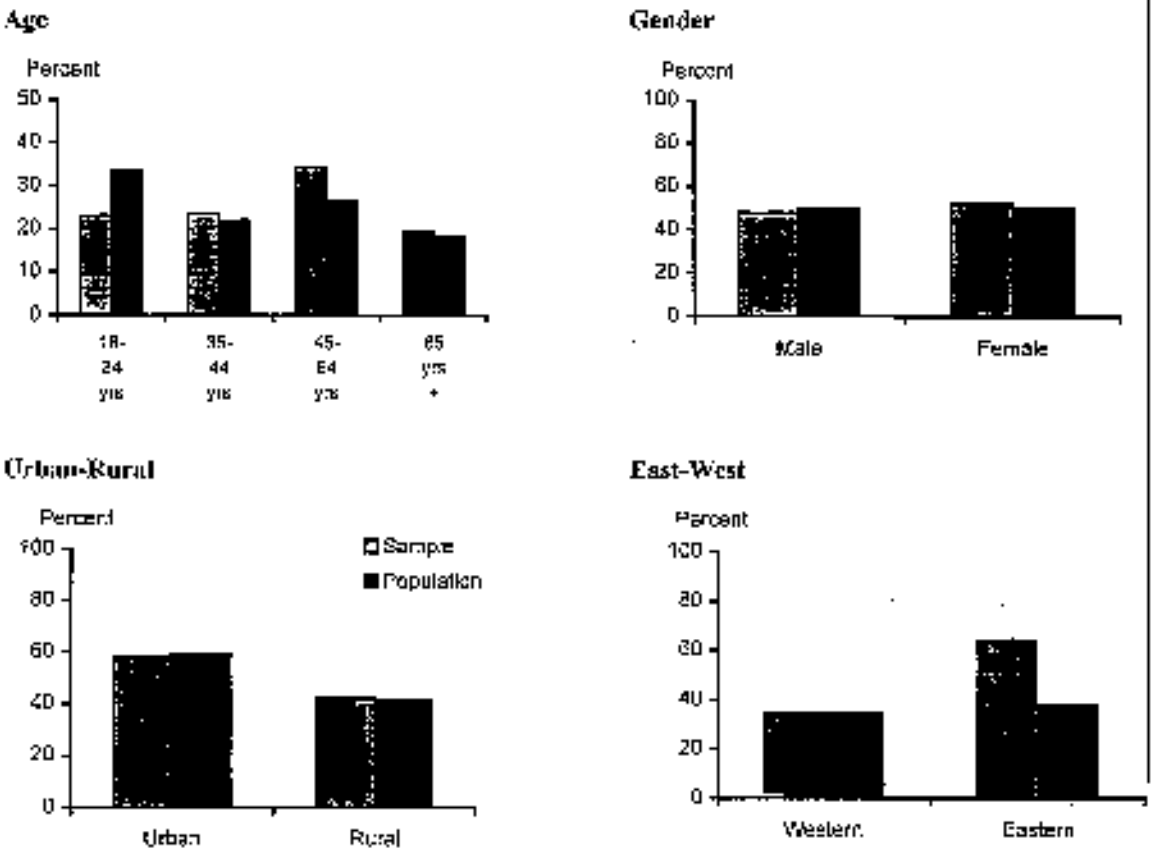
Thus our example – 79 percent of 1,225 respondents said they use the state's major airports – would have a sampling error of about plus or minus 1.6 percent. Seventy-nine percent is closer to the outlier value of 90 percent than to the mid-range of 50 percent; chance of error is higher in the mid-range. When we examine a smaller subgroup the margin of error rises. When responses to a question are evenly divided, the margin of error rises.

Sample Validation

In addition to calculating margins of error for the survey, we also need to insure that our respondents represent an accurate cross-section of Montana adults. To do this, we "validate" the sample by comparing the demographics of our 1,225 sample households with data from the 1990 Census.

The following charts compare the 1,225 households sampled with 1990 Census of Population figures.

Demographic Comparisons of Survey Sample and 1990 Census of Population



Sources: The University of Montana, Bureau of Business and Economic Research, Montana Multimodal Study, and: U.S. Department of Commerce, Bureau of the Census.

II. Concepts and Definitions

Personal interview surveys take responses at face value. Usually no attempt is made to check for their factual accuracy because respondents attitudes and opinions are the subject of research. In this case we explored Montanans' perception of multimodal issues and opportunities. The inaccuracies and misconceptions that surface among respondents may be used to guide future public education efforts.

Airport types

Montana's airports range from busy commercial fields near urban centers to grass landing strips in rural regions. We classify them as follows:

Major airports have year-round scheduled service and enplane at least 2,500 passengers per year. At present, this category includes the seven airports associated with Montana's trade centers -- Billings, Missoula, Bozeman, Great Falls, Kalispell (Glacier International), Helena, and Butte. These are certificated airports and have met US Federal Aviation Administration (FAA) criteria for safety, fire, crash, and rescue services.

General aviation airports include the remaining airports available for public use. Four (Miles City, Sidney, Glasgow, and Lewistown) offer regularly scheduled commuter flights which are subsidized by the federal government under its essential air service program. West Yellowstone offers scheduled service in the summer.

Respondent Types

For the purpose of this study, we use the following geographical classifications:

Urban residents are those respondents living in Montana's most populous counties: Yellowstone, Missoula, Gallatin, Cascade, Flathead, Lewis and Clark, and Butte-Silver Bow. These urban, or trade center counties also contain Montana's seven major or certificated airports.

Rural residents are those respondents living in one of Montana's other 49 non-urban counties.

III. Multimodal Transportation Services

Montanans are generally quite knowledgeable about available multimodal transportation. With one exception, respondent awareness of specific services exceeded 80 percent. That exception was shuttle service; 35 percent of respondents said they didn't know if that was available in their community.

"Is (transportation service) available in your community or not?"

	Urban Residents	Rural Residents	Don't Know
Scheduled air passenger service	92%	39%	7%
Local bus service	73%	19%	8%
Intercity bus service	60%	17%	18%
Interstate bus service	65%	13%	13%
Railroad passenger service	20%	14%	13%
Rail freight service	75%	57%	18%
Taxi or limo service	85%	29%	3%
Package delivery	93%	90%	3%
Truck freight service	81%	72%	19%
Auto rental	89%	28%	12%
Shuttle van service	63%	39%	35%

Distance to transportation service is as important to users as variety. Not surprisingly, urban Montanans are generally closer to transportation services than are rural residents. The one exception here is rail passenger service, which is available only along the state's sparsely populated northern border.

"About how far are you from (transportation facility), in terms of miles?"

Average Mileage to Transportation Service or Mode

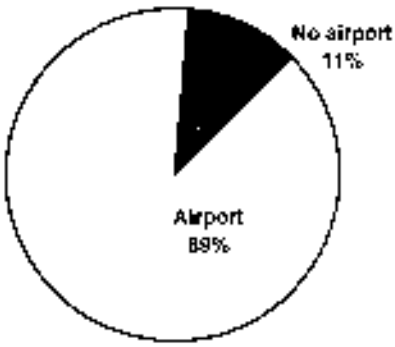
	Urban Residents	Rural Residents
Paved highway	2.7	2.2
Rail passenger service	56.2	76.1
Trucking service	5.1	30.5
Bus service	6.6	35.5
Airport	8.3	12.1
Airport with scheduled passenger service	10.8	50.9

IV. Airport Awareness

Our study explored public knowledge of Montana airports in several ways, including the most basic question of presence or absence. Almost 90 percent of the respondents said their community had an airport of some kind.

Then we explored respondents' awareness of seventeen specific airport services and features. We compared urban and rural resident's responses and, not surprisingly, many more services were available in major airports than in smaller communities. Agricultural services were the only exception, being more widely available to rural airport users.

Is there any kind of an airport in your local community?



Does your community airport have . . . .

	Urban Residents	Rural Residents
Scheduled passenger service	97%	34%
Air taxi or commuter service	59%	35%
Charter service	77%	43%
Small package express service	80%	32%
Air cargo service	53%	8%
Agricultural services	44%	72%
Emergency medical based at airport	44%	42%
Flight instruction	71%	53%
Aircraft fuel & maintenance services	83%	56%
Aerial photography services	37%	24%
Auto rental services	81%	18%
Airport courtesy car	27%	12%
Travel agency services	63%	16%
Restaurant or drinking establishment	37%	8%
Waiting room	91%	50%
Airport shuttle service	40%	7%
Monitored parking	89%	26%

V. Community Benefits of Airports

More than fifty percent of the respondents, both urban and rural, said that convenience was the most important community benefit of an airport. Next, most important to both groups was a cluster of economic benefits -- business travel, economic growth, personal travel, and tourism. Urban residents place relatively more importance on an airports effect on tourism. Rural residents, on the other hand, place a relatively higher value on medical air service, presumably because of otherwise more limited access to broad spectrum medical care.

*How do communities **BENEFIT** from airports (not prompted)?*

	Urban Residents	Rural residents
Convenience	57%	50%
Business travel	33%	23%
Economic growth	32%	25%
Personal travel	30%	22%
Tourism	28%	17%
Small parcel service	6%	6%
Air cargo	6%	3%
Crop spraying	2%	5%
Air taxi	1%	1%
Medical air service	9%	21%
Other	10%	13%

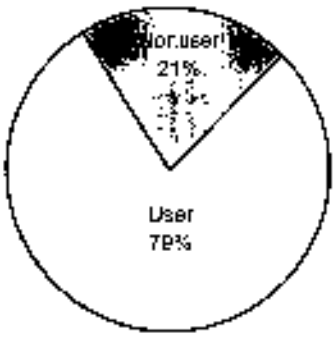
VI. Montana's Major Airports

National airlines provide year-round scheduled service to seven Montana cities -- Billings, Great Falls, Missoula, Bozeman, Butte, Helena, and Kalispell. These urban airports also provide transportation services to surrounding rural areas and are vital inter- and intra-state. The following discusses Montanans' use of and attitudes toward these linchpin facilities.

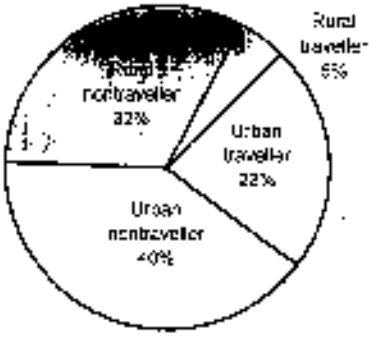
Users, Travelers, and Non-Travelers

The state's major airports are broadly used by Montanans. Almost 80 percent of all respondents said they had visited a major airport at one time or another and most of these visits occurred in 1993 or 1994. Urban residents accounted for roughly 63 percent of major airport users, while those driving from rural counties accounted for the remaining 37 percent. Surprisingly, most major airport users weren't themselves flying in or out. Instead they visited the airport to meet or dispatch other travelers, to patronize a restaurant, or conduct other business. Non-traveler visits to major Montana airports outnumbered traveler visits in our survey by more than two to one. The graphs below break out traveler and non-traveler by geographic origin.

Major Airport Use by Montana Residents



Major Airport User by Type



Major airport user profiles.

Now for a more detailed look at those who visit and use Montana's seven major airports. The accompanying table shows median age, household income, education and employment status for nonusers of major Montana airports, for urban and rural users.

Note that:

- Travelers, both urban and rural, have higher incomes than non-travelers and non-users;
- Urban travelers are much more likely than their rural counterparts to be college graduates;
- Retirees constitute a disproportionate share of rural based visitors.

Comparing Major Airport Users and Non-Users

	Urban Airport User		Rural Airport User		
	Traveler n=239	Non traveler n=412	Traveler n=60	Non-traveler n=275	Nonuser n=291
Median age	46	45	55	50	44
Household Income in 1994					
Under $15,000	19%	24%	16%	21%	26%
$15,000 -$34,999	34%	39%	30%	42%	42%
$35,000 and Over	43%	37%	54%	37%	32%
Education of Respondent					
Percent high school graduate	95%	95%	98%	87%	86%
Percent college graduate	51%	28%	33%	21%	20%
Employment status					
Employed	70%	72%	64%	55%	65%
Retired	18%	13%	28%	21%	17%
Student	1%	5%	2%	3%	3%
Other	7%	10%	6%	11%	13%

Condition of Major Airports

We asked respondents several questions about major airport conditions. In general urban residents were more knowledgeable than rural residents about airport conditions and services, and more satisfied. Dissatisfaction tended to be focused on costs for both user types; rural users were dissatisfied with flight availability as well. What follows is a summary of the responses.

*The **STRUCTURAL CONDITION** of the airport facility itself?*

	Urban Resident		Rural Resident		
	Traveler	Non-traveler	Traveler	Non-traveler	Nonuser
Excellent	33%	30%	24%	20%	14%
Good	52%	53%	54%	52%	62%
Fair	10%	9%	13%	13%	14%
Poor	2%	1%	6%	12%	7%
Don't know	4%	7%	23%	3%	3%
Total	100%	100%	100%	100%	100%

*The **QUALITY** of the services at that airport?*

	Urban Resident		Rural Resident		
	Traveler	Non-traveler	Traveler	Non-traveler	Nonuser
Excellent	44%	40%	27%	24%	18%
Good	32%	35%	24%	26%	24%
Fair	10%	10%	14%	17%	31%
Poor	1%	2%	10%	27%	13%
Don't know	7%	5%	7%	6%	25%
Total	100%	100%	100%	100%	100%

*The **RANGE** of services available now?*

	Urban Resident		Rural Resident		
	Traveler	Non-traveler	Traveler	Non-traveler	Nonuser
Completely sufficient	46%	41%	27%	17%	22%
Somewhat sufficient	36%	41%	33%	22%	31%
Somewhat lacking	13%	12%	7%	13%	15%
Completely lacking	0%	2%	13%	28%	11%
Don't know	5%	3%	19%	21%	20%
Total:	100%	100%	100%	100%	100%

FREQUENCY of scheduled passenger service in your area?

	Urban Resident		Rural Resident		
	Traveler	Non-traveler	Traveler	Non-traveler	Nonuser
Completely satisfied	35%	39%	28%	24%	21%
Somewhat satisfied	47%	48%	47%	39%	58%
Somewhat unsatisfied	11%	9%	11%	6%	7%
Completely unsatisfied	2%	2%	11%	12%	8%
Don't know	5%	3%	4%	19%	13%
Total	100%	100%	100%	100%	100%

*Availability of **DIRECT FLIGHTS** to major cities in Montana?*

	Urban Resident		Rural Resident		
	Traveler	Non-traveler	Traveler	Non-traveler	Nonuser
Completely satisfied	28%	24%	28%	28%	20%
Somewhat satisfied	38%	43%	25%	31%	38%
Somewhat unsatisfied	17%	17%	19%	12%	11%
Completely unsatisfied	4%	5%	13%	13%	14%
Don't know	13%	12%	17%	22%	17%
Total	100%	100%	100%	100%	100%

COST of scheduled passenger service?

	Urban Resident		Rural Resident		
	Traveler	Non-traveler	Traveler	Non-traveler	Nonuser
Very reasonable	5%	2%	6%	5%	5%
Somewhat reasonable	36%	34%	39%	28%	25%
Somewhat excessive	30%	35%	22%	23%	20%
Very excessive	19%	19%	16%	16%	13%
Don't know	9%	9%	15%	28%	37%
Total	100%	100%	100%	100%	100%

*The **SAFETY and COMFORT** of the equipment?*

	Urban Resident		Rural Resident		
	Traveler	Non-traveler	Traveler	Non-traveler	Nonuser
Completely satisfactory	46%	38%	33%	32%	44%
Somewhat satisfactory	40%	49%	56%	36%	39%
Somewhat unsatisfactory	6%	5%	2%	2%	4%
Completely unsatisfactory	2%	3%	0%	1%	1%
Don't know	6%	13%	9%	27%	11%
Total	100%	100%	100%	100%	100%

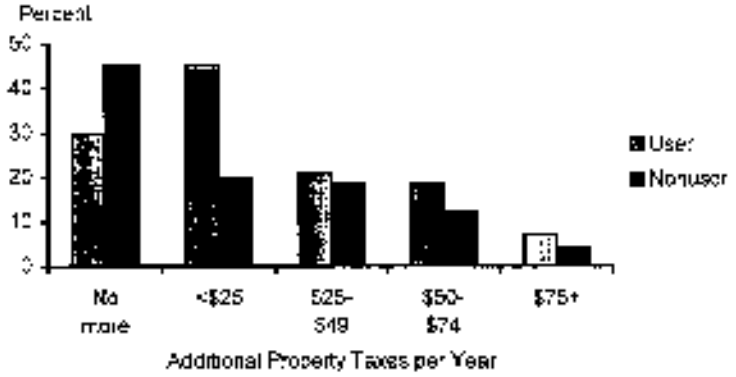
VII. Montana's General Aviation Airports

Willingness to Fund

Cities and counties own and operate most general aviation airports in Montana, so these community airports must compete for taxpayer dollars with law enforcement, sanitation services, libraries , and other important local needs.

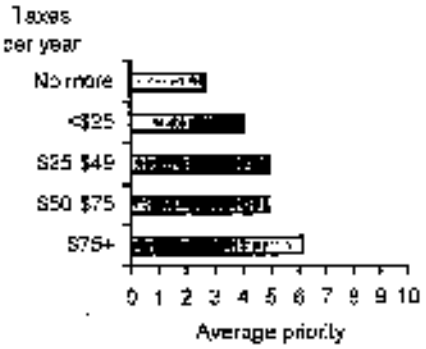
We asked rural respondents how high a priority they placed on upgrading their community airport, and how much more in property taxes - if anything - they were willing to pay for such improvements. Not surprisingly respondents willingness to pay related to their level of use. Rural respondents overall gave general aviation airport funding a priority rating of four out of ten. Airport users gave it a 4.5, as compared to 4.1 by nonusers. Note that even among users, willingness to pay peaked at less than 25 dollars in additional taxes.

Willingness to Pay Additional Property Taxes for General Aviation Airports by Respondent Type

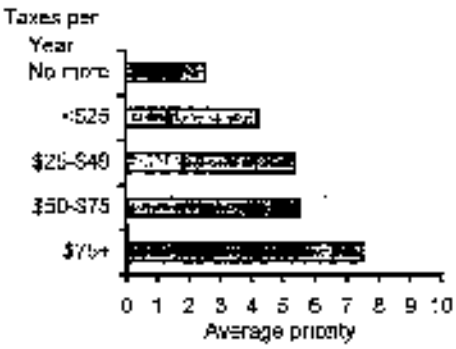


We also looked at the relationship between respondents' willingness to pay for service and facility upgrades and the priority they gave to such improvements. Not surprisingly, those who place a higher priority on upgrading airport facilities and/or services are more willing to fork over additional taxes. Improved services were slightly more "valuable" in this measure.

Facility Upgrade by Willingness to Pay



Service Upgrade by Willingness to Pay



Noise and Safety Issues

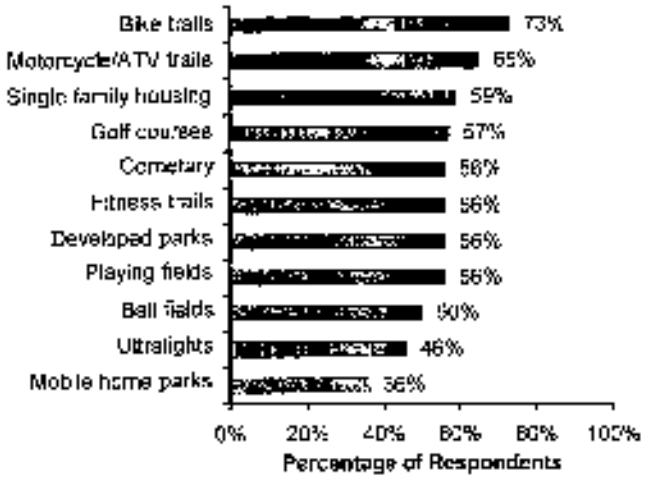
We queried rural respondents about general aviation airports' noise and safety levels. The accompanying table shows the overwhelming response was "no problem" for self or community. Urban residents, to whom we did not pose this question, may very well have a different profile on airport noise and safety.

	Noise		Safety	
	Personally	Community	Personally	Community
No problem	83%	92%	90%	90%
Very serious	1%	0%	1%	1%
Somewhat serious	1%	2%	2%	3%
Not too serious	4%	4%	6%	6%
Not serious	9%	3%	5%	2%
Total	100%	100%	100%	100%

Land Use Near General Aviation Airports

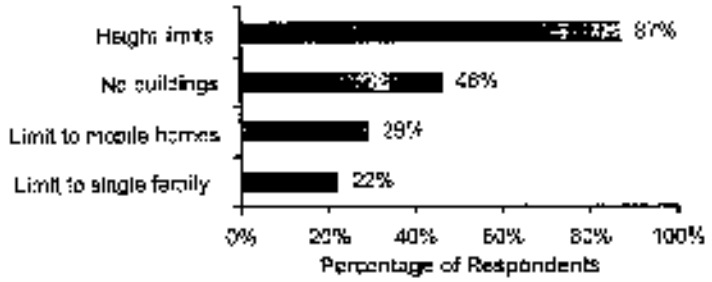
About half of the rural respondents had no objections to the listed activities.

Acceptable Activities Near General Aviation Airports



Height limits near the airport were the only land use restriction acceptable to a majority of respondents.

Acceptable Land Use Restrictions Near General Aviation Airports

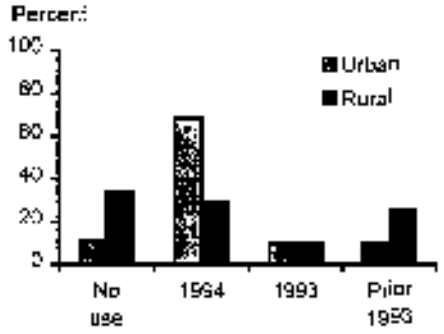


VIII. Airport Usage

We asked respondents several detailed questions about their use of airports. Nearly all urban respondents visited their local airport, and most of these visited occurred within previous year. Rural residents were less likely to use their community airport; almost a third had never visited the airport for any reason.

Respondents traveled to airports via their personal vehicles. Nobody hopped a bus and almost nobody took a taxi.

*The **LAST** time you were at the airport for any reason*



***Mode** of travel to the airport*

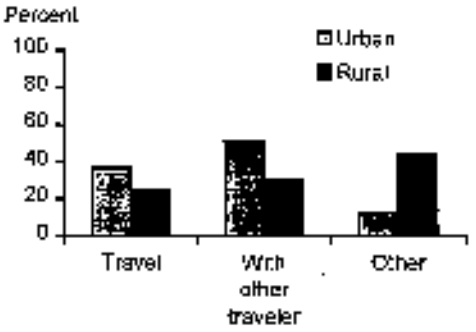
Personal vehicle	91%
Courtesy, corporate car	3%
Taxi	1%
Local bus	0%
Other bus	0%
Shuttle van	4%
Other	0%

Urban residents used their airports more often than rural residents. As noted earlier, respondents visited airports for personal travel less often than for other reasons.

***Frequency** of airport use last year*

	Urban Residents	Rural Residents
Once	39%	42%
Twice	20%	20%
Three times	12%	12%
Four or more times	29%	25%
Total	100%	100%

Purpose for being there --



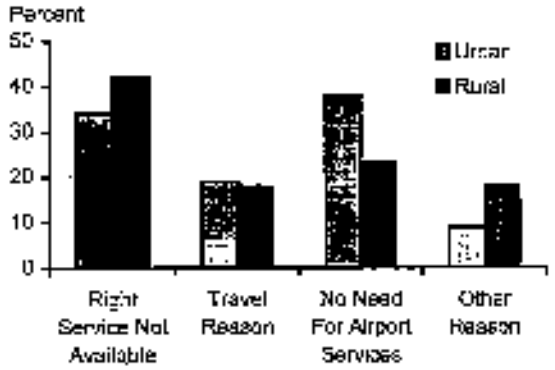
Respondents were asked about various services available at Montana airports. Rural residents used their airports for a broader array of services (crop dusting, charters, medical). Urban residents' usage was more focused on passenger services and restaurants.

What SERVICES do you generally use (prompted)?

	Urban Residents	Rural Residents
Scheduled passenger service	100%	55%
Air taxi-commuter	4%	10%
Charter	4%	16%
Small freight	4%	4%
Air cargo	4%	5%
Agriculture service	5%	6%
Emergency medical	5%	4%
Flight instruction	2%	2%
Aircraft services	5%	8%
Auto rental	6%	2%
Lounge/bar	3%	0%
Travel agency	1%	0%
Eating and drinking establishments	24%	8%
Waiting room	6%	3%
Shuttle van	1%	0%
Parking	10%	3%
Other service	14%	52%

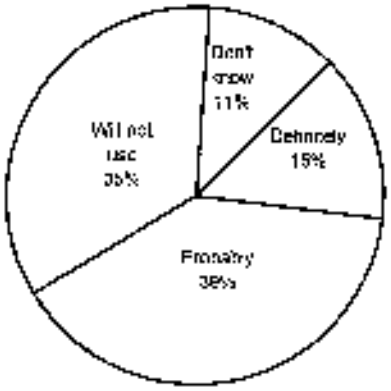
In addition to usage patterns, it's important to know why people don't use airports. So we asked respondents who had never visited their local airport why not. About a third of the urban nonusers said they couldn't get service to their desired destination. Another third said they didn't travel and thus had no need for airport services.

*Reason **NEVER** used the local airport?*



Since rural nonusers were likely to cite availability issues, we followed up with the obvious – if scheduled service were available, would you use it? Only 15 percent said they'd definitely use such service if available; 40 percent said maybe.

*Would you use scheduled air passenger service if it were available?**

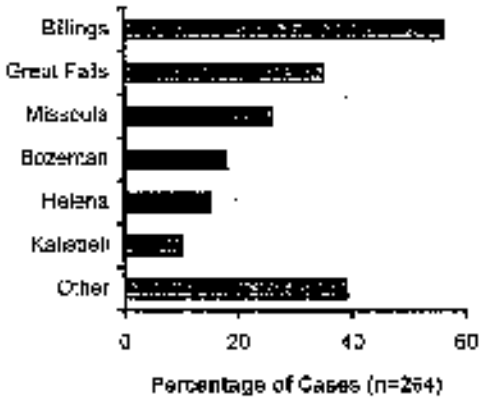


*Asked of rural non users only.

We followed up the definites and maybes (53 percent of rural nonusers) by asking about their willingness to pay for additional air service and their preferred destination. Many respondents were vague about their willingness to pay – but not about where they wanted to go. Billings was by far the favored destination followed by Great Falls. This isn't too surprising given the distances between population centers in eastern and northern Montana.

*How much would you pay for scheduled air transportation service?***

*Hypothetical service destinations***



**Asked of rural non-user respondents who said they would use scheduled air passenger service if available.

IX. A Typical 100-Mile Montana Trip

It's useful to know the travel habits of a given population especially if you're in the business of planning transportation infrastructure. Thus we asked all respondents if they'd traveled 100 miles or more during 1994. Most had. About a third of those trips lasted only one day and the pattern was similar for both urban and rural residents.

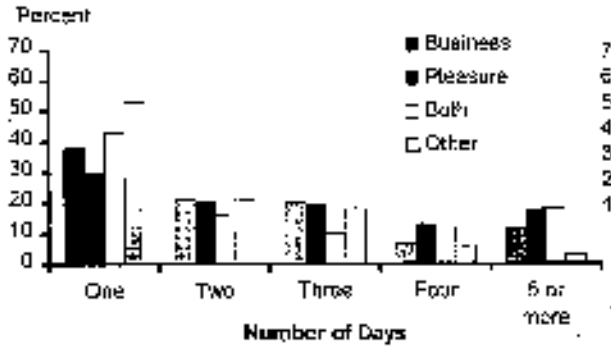
Did you take trip in Montana of at least 100 miles in 1994?

How long was the trip?

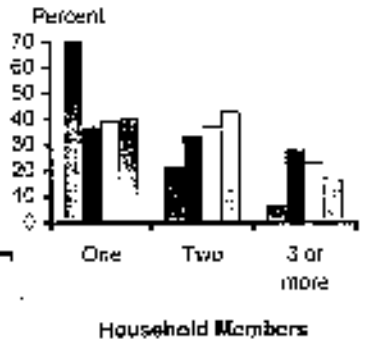
	Urban Residents	Rural Residents
One day	32%	37%
Two days	21%	13%
Three days	18%	17%
Four days	13%	12%
Five or more days	16%	17%

Business trips tended to be shorter overall, while pleasure trips were more evenly distributed. Most business trips were solo affairs; traveling for pleasure and other purposes more often included additional household members.

Trip length and purpose



Number traveling



Helena and Billings were more frequently cited as business destinations. Those whose destination was Butte or Kalispell said they went for pleasure.

Destinations?

Destination	Business	Pleasure	Both	Other	Number of Respondents
Billings	28%	45%	20%	7%	331
Bozeman	19%	67%	14%	1%	127
Butte	19%	74%	7%	0%	36
Great Falls	24%	52%	19%	5%	182
Helena	35%	45%	14%	5%	188
Kalispell	13%	71%	13%	3%	77
Missoula	22%	62%	14%	2%	171
Other MT city	15%	69%	13%	3%	206

Personal vehicles were far and away the most common mode of transportation for respondent's in-state trips. Even if it were available for in-state trips, respondents said they would not use air transportation.

Transportation Mode?

Airplane	5%
Passenger vehicle	93%
Bus	1%
Other	2%

Would You Use Air Transportation?

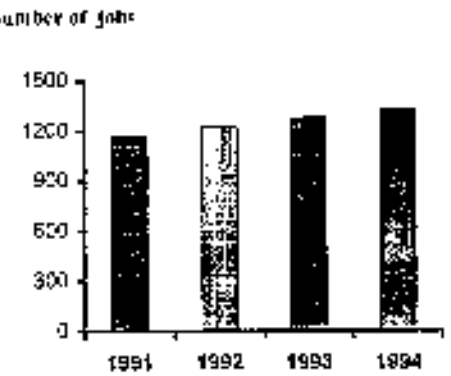
Use air transportation	1%
Would not use air	99%

X. Economic Impact

Employment and Wages

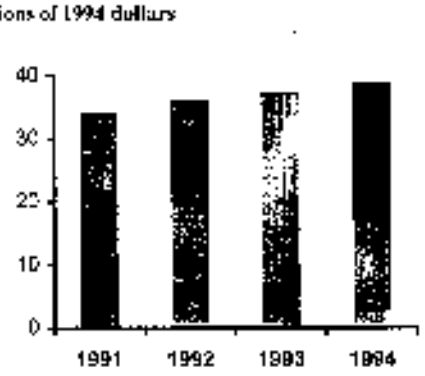
Firms providing some facet of air transportation in Montana employed about 1,300 persons statewide in 1994. Earnings in this sector amounted to about $38 million in 1994. About $30 million of that was attributable to wage and salary workers. The rest was earned by self-employed persons working at FBO's such as crop-spraying or charter services.

Air Transportation Sector Jobs in Montana 1991-1994



Sources: Montana Department of Labor and Industry, Research and Analysis Bureau; and The University of Montana, Bureau of Business and Economic Research, Economics Montana.

Air Transportation Sector Earnings in Montana, 1991-1994



Source: The University of Montana, Bureau of Business and Economic Research, Economics Montana.

The following table summarizes employment numbers and wages and salaries for firms located at each major airport in Montana. Dollar figures do not include self-employment earnings. Figures are estimated for on-airport employment as well as firms that do business with the airport, such as taxis and travel agents.

Note that:

- Air transportation companies dominate Billings airport employment.
- The U.S. Forest Service is the largest tenant at the Missoula airport. Minuteman Aviation and Northstar Aviation make up a large portion of the air transportation category.
- The National Guard is the largest employer at the Great Falls airport.

- The Bozeman and Kalispell airport have a relatively large airport dependent sector because they are tourist hubs.

- Employment at the Helena airport is much more diversified; besides the National Guard, government agencies such as the FAA, US Forest Service and the Immigration Service.

Employment and Wages, Major Montana Airports, 1994

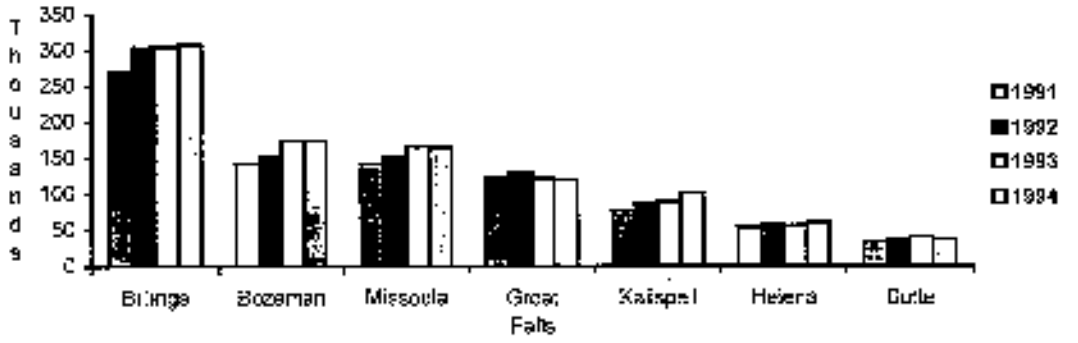
	Billings	Bozeman	Missoula	Great Falls	Kalispell	Helena	Butte	Other Montana	Montana
Employment									
Total	920	370	500	1,490	310	600	220	260	4,640
On airport	700	150	270	1,320	60	510	70	130	3,240
Air transportation	670	80	150	200	20	70	30	130	1,350
Other on airport	30	60	220	1,220	70	440	40		2,080
Airport dependent	220	170	210	160	190	90	50	130	1,730
Wages and salaries (millions of dollars)									
Total	15.0	4.0	12.4	27.9	3.5	10.0	1.9	2.0	79.4
On airport	14.1	3.6	12.0	26.8	1.7	9.3	1.5	1.6	77.6
Air transportation	13.2	2.1	3.7	3.7	1.6	1.4	.8	[illegible]	29.8
Other on airport	.9	1.5	8.3	23.1	.1	7.9	.7		47.8
Airport dependent	1.6	1.2	1.3	1.1	.8	.7	.4	.5	7.8

Source: The University of Montana, Bureau of Business and Economic Research.

XI. Major Airport Profiles

Finally we compare activity levels at Montana's seven major airports. Our survey suggests that 80 percent of Montanans use these major airports in a given year, though most of their visits are for purposes other than personally flying in or out. As shown below, at nearly all the major airports in Montana, boardings by commercial airline passengers increased between 1991 and 1994. Great Falls was the lone exception.

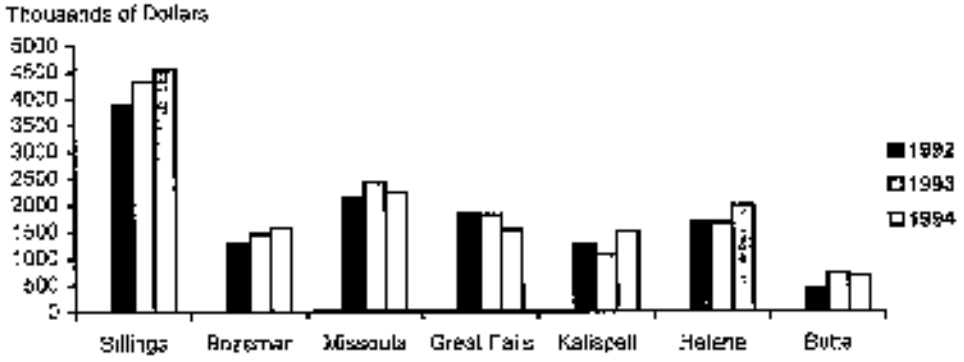
Annual Boardings by Certificated Airport, Montana's Major Airports, 1991-1994



Source: Montana Airport Managers Association.

Revenue trends show a somewhat different pattern. Most major airports experienced slight revenue growth between 1992 and 1994. However, Missoula's revenues were down in 1994 due to a major construction project. Great Falls, where passenger boardings were down over the period, also experienced a decline in landing fees and building rents.

Annual Revenues by Certificated Airport, Montana's Major Airports, 1992-1994



Source: Montana Airport Managers Association.

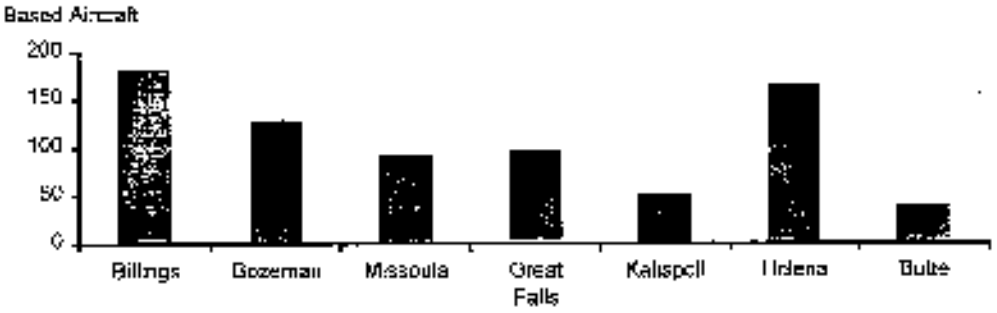
Operations -- basically aircraft wheels touching the runway -- are the usual way of measuring airport activity levels. Billings was the most active airport in 1994, as shown below, followed by Helena. Note that a sizable portion of Helena operations is attributable to military activity. This is also true of Great Falls, where National Guard operations make up nearly half of the total. General aviation activity comprise the bulk of operations in Billings, Bozeman, Missoula, Kalispell and Butte.

Operations by Type and Certificated Airport, Montana's Major Airports, 1994

Source: U.S. Department of Transportation, Federal Aviation Administration.

Finally, we compare the number of aircraft based at major airports. This provides an indicator of usage by local aviation enthusiasts. Billings was by far the most active major airport by this measure, although it's important to note that smaller general aviation airports close by Missoula and Kalispell may siphon off some usage that otherwise would be attributable to those sites. For instance, the Stevensville airport, about 30 miles from Missoula, is home for 47 private planes. These added to Missoula's 100, general aviation aircraft mirror local general aviation operations. Likewise, adding aircraft at Kalispell City Airport (61) to those at Glacier International, nearly doubles general aviation aircraft. Thus in terms of general aviation, Kalispell is the third most active area in the state.

Based Aircraft by Certificated Airport, Montana's Major Airports, 1994



Source: U.S. Department of Transportation, Federal Aviation Administration.

In sum, Montana airports are vital players in the state's economic and community life. Montanans rely on them for a surprising variety of services and they're generally satisfied with this relationship.