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Title: *Northern New Mexico Regional Airport Market Feasibility*

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Donna Supulver Williams
Energy and Environmental Analysis (TSA-4)

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Public Affairs Office (PA-3)

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Conclusion:

The information and analysis in this report indicate that the commercial airline passenger market for a NNM airport is currently too small to justify its market feasibility.

1. The northern New Mexico (NNM) region accounts for an estimated 300,000 to 450,000 annual airline trips. Currently, these people are all served by airlines at Albuquerque's Sunport (ABQ).

2. Any NNM airport will continue to share and compete for its markets with ABQ, reducing the expected market to much less than the 300,000 to 450,000 annual trips generated by the region.

   - Albuquerque will offer lower average fares (its fares are among the lowest in the U.S., 20% less than the average for communities of its size), much greater frequency of service, much more airline choice, much higher percentage of jet service, and only a relatively small penalty in driving time to reach it from NNM.
   - Quantitative market estimates based on real analogy airport information from 18 other similar regional situations across the U.S. indicate a blissfully optimistic estimate of as much as 100,000 annual enplanements — ignoring NNM's closer than average location to its major competing airport at Albuquerque. A more rigorous mathematical analysis of the data indicates a likely range of 5,000 to 51,000 annual enplanements. This is well below the threshold for maintaining regular jet service.
   - A key factor reducing the market advantage of a NNM airport is that the population is too close to ABQ. The average time savings for a trip to a NNM airport vs. ABQ is only about 45 minutes. Usually at least two hours time savings is required before a regional airport becomes viable when it faces competition from a major airport such as ABQ.
   - The NNM population in the airport service area is 225,000. This is too small to be so close to ABQ and still expect the possibility of significant regional airline service. A population of 500,000 is often a more viable threshold in national data and in airline rules-of-thumb. The combination of small population and being too close to ABQ combines to obstruct commercial airline feasibility.
   - The combination of the current NNM commercial service airports at Los Alamos and Santa Fe have never exceeded 25,000 annual enplanements.

3. Airline executives indicated poor to nonexistent prospects for any NNM commercial market other than a prop shuttle service to ABQ.

   - The NNM region is cited as being:
     - — Too small (500,000 is a frequently-cited minimum regional size to have regular jet service), NNM's population is 225,000.
     - — Too close to ABQ (at least a 2 hour driving time differential or at least 100 miles is often used as a minimum rule-of-thumb).
   - No business strategy for regional jet service from NNM works at present.
     - — Airlines already at ABQ would lose by splitting their operations, increasing costs, and would merely be cannibalizing their ABQ business with no net passenger gains.
     - — Airlines currently not in the ABQ market are even less interested in NNM because of its small size, likely higher costs for operations, and tough competition from ABQ.
     - — Low-fare or new entrant airlines are unlikely to try the strategy, sometimes employed, of trying to steal market share by operating at a secondary airport because of ABQ's low fares and Southwest Airline's dominance in the region.
     - — Identified special niche markets in NNM (Los Alamos National Laboratory travel plus regional tourism) are too small to support regional jet service.
   - There has been no history of success in NNM, and even the prop shuttle service to ABQ has not always been viable.

4. Managers of regional airports with whom we discussed the proposed NNM airport were skeptical of its prospects for anything other than a prop shuttle service to ABQ. Their thoughts repeated the central idea that NNM is too small and too close to ABQ.

5. Future growth is too distant to strongly enhance anticipated future market feasibility. (The NNM region is less than half the normal minimal size to obtain regional jet service, and at FAA commercial passenger growth forecasts of about 4%/year NNM is many years from reaching a normal minimum size market.) The new regional jets now coming into service (50 to 70 seats) may reduce the usual minimum size of communities to support regular jet service, but this is undemonstrated so far. There are some competitive questions about operating costs of these smaller jets, and it is premature to guess at how this will work.

Other Findings

1. Albuquerque's Sunport currently offers excellent service to all of central New Mexico and NNM. ABQ provides a formidable competitive obstacle to any NNM airport. The people of New Mexico are fortunate to have such good service available through ABQ.

   - ABQ enjoys some of the lowest average airfares in the U.S. Fares per mile are 20% below similar mid-sized U.S. communities and 11% below the largest American cities.
   - It has a wide variety of choice among airlines. It is served by all of the major national airlines except U.S. Airways at present, plus all of the regional southwestern U.S. carriers.
   - There are 61 daily nonstop flights to hubs in the southwest and another 21 daily nonstops to hubs in other parts of the country. These flights offer excellent frequency of service and destination choice for a region the size of ABQ's service area.

2. The Santa Fe airport has the potential to be NNM's regional airport. The Santa Fe airport often is mentioned by airline executives, airport managers, and FAA officials as being as suitable as any other to serve NNM. Our analysis indicates that its location is at least as good as any other for serving the likely market. It would be better at capturing the Santa Fe County passenger traffic than a further north location by enhancing the driving time savings and safety to Santa Fe residents, while not hurting these same parameters significantly for the remaining minority of the other air travelers in the region. The Santa Fe airport already is available, paid for, and capable of handling the emerging regional jet traffic. If Santa Fe cannot establish a viable airline market, any other NNM location is certainly no more likely and probably less likely to be able to create an equivalent market.

Recommendations

1. The potential airline passenger market feasibility of a NNM regional airport should be considered highly precarious for the present time.

2. We recommend that the findings of this market feasibility study be revisited in two to three years to evaluate what changes have occurred in some of the critical market feasibility considerations.

   Things that could possibly change within a few years to significantly enhance the feasibility of a NNM regional airport are the following:

   - Major new industries relocating to the NNM region with accompanying large increases in demand for commercial air service.
   - Automobile transportation costs or traffic changes in some unanticipated ways making it significantly more onerous to get to ABQ from NNM.

- Small regional jets prove to be opening up new airline markets throughout the U.S. and creating a type of commercial airline service that does not now exist. This could redefine the rules-of-thumb and market strategies for regional airports such as NNM.
- Southwest Airlines makes a significant reduction in ABQ service, likely resulting in less airline price competition overall and possibly much higher average ABQ airfares.
- Other unforeseen deterioration in commercial airline service quality or availability at ABQ creating better competitive strategic options for airlines at a new NNM airport.

1. Introduction

1.1 Commercial Airline Passenger Market Feasibility

This report is about the market for airline travel in northern New Mexico. Interest in developing a northern New Mexico regional airport has periodically surfaced for a number of years. The New Mexico State Legislature passed a memorial during the 1998 Second Session calling for the conduct of a study to determine the feasibility of building a new regional airport in NNM. This report is a study of the passenger market feasibility of such an airport.

In addition to commercial passenger market feasibility, there are other feasibility issues dealing with siting, environmental impact, noise, economic impact, intermodal transportation integration, region-wide transportation services, airport engineering requirements, and others. These other feasibility issues are not analyzed in any depth in this report although none were discovered to be show-stoppers as a by-product of our doing research on the passenger market itself. Preceding the need for a detailed study of these other issues is the determination of the basic market need for an airport with regular commercial airline service in the first place. This report is restricted to an in-depth look at the market for commercial passenger air service in NNM.

1.2 Proposed NNM Airport Concept

The concept for the proposed NNM airport is to locate it in the vicinity of Española or Pojoaque, 15 to 25 miles north of Santa Fe, about 70 to 85 road miles north of Albuquerque. Suitable BLM land is available in several locations as is other open space in various other forms of ownership. Shifts in location within this general region, all the way down to the location of the current Santa Fe airport on the southwestern edge of the proposed NNM airport service area, do not significantly alter any of the analyses or results in this feasibility study. The proposed airport engineering plan is to have two perpendicular runways capable of handling jet aircraft. The terminal building would have four jetway-equipped gates. A preliminary estimate by ICF Kaiser of the construction budget is $106 million.

Each passenger that gets on an airplane is counted as one "enplanement." Airports often inflate their passenger counts by counting each "deplaning" passenger as well. This report deals only with enplanement totals. Enplanements are the basic unit of market size. There are about 600 million annual U.S. enplanements.

1.3 Report Contents

The main analysis of the market feasibility of a NNM regional airport proceeds through this report as follows:

The concept for a NNM airport assumes that it will have regular daily jet service and not merely be a prop shuttle to ABQ.

1. A regional overview of existing southwestern U.S. and New Mexico air service,
2. Measuring the size of the NNM market for commercial air travel,
3. Examining the market sharing of the NNM airline traffic between Albuquerque's Sunport and a new NNM airport,
4. Input about market feasibility from interviews with airline executives, and
5. Conclusions.

2. U.S. Commercial Service Airports

The National Plan of Integrated Airports Systems (NPIAS), 1993 to 1997, describes the complete U.S. airport system. The U.S. has 18,233 airports, most of which are very small and often closed to the public. There are 554 airports providing commercial service and accounting for all commercial enplanements. Figure 1 shows these airports using the NPIAS classifications.

The Albuquerque Sunport with its 3.1 million annual enplanements during 1997 is a typical medium-hub primary airport. During the 1990s it

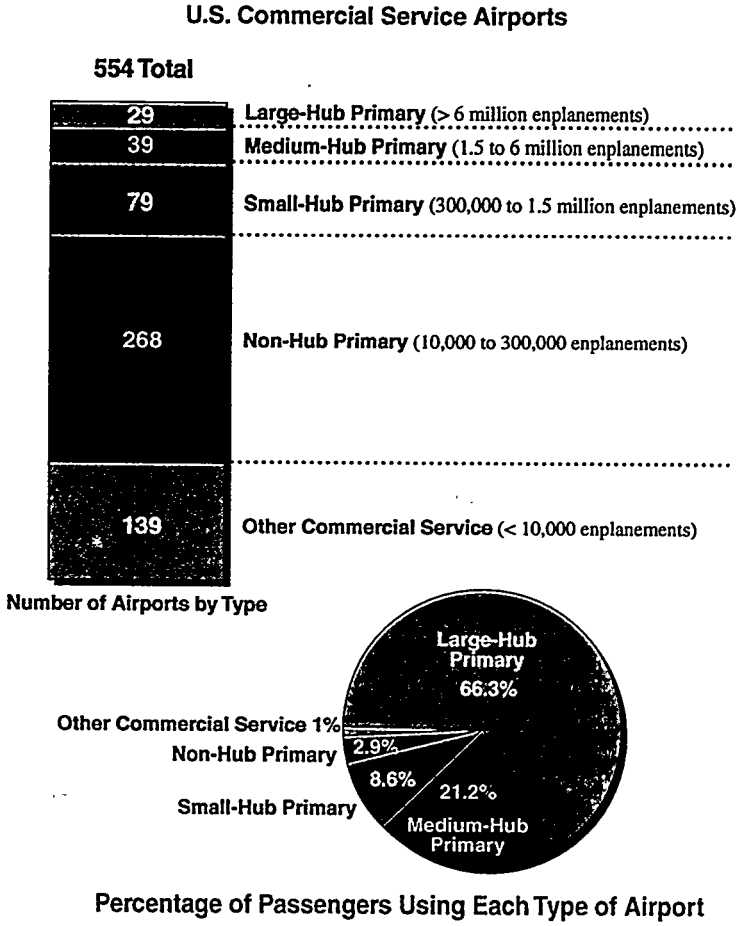


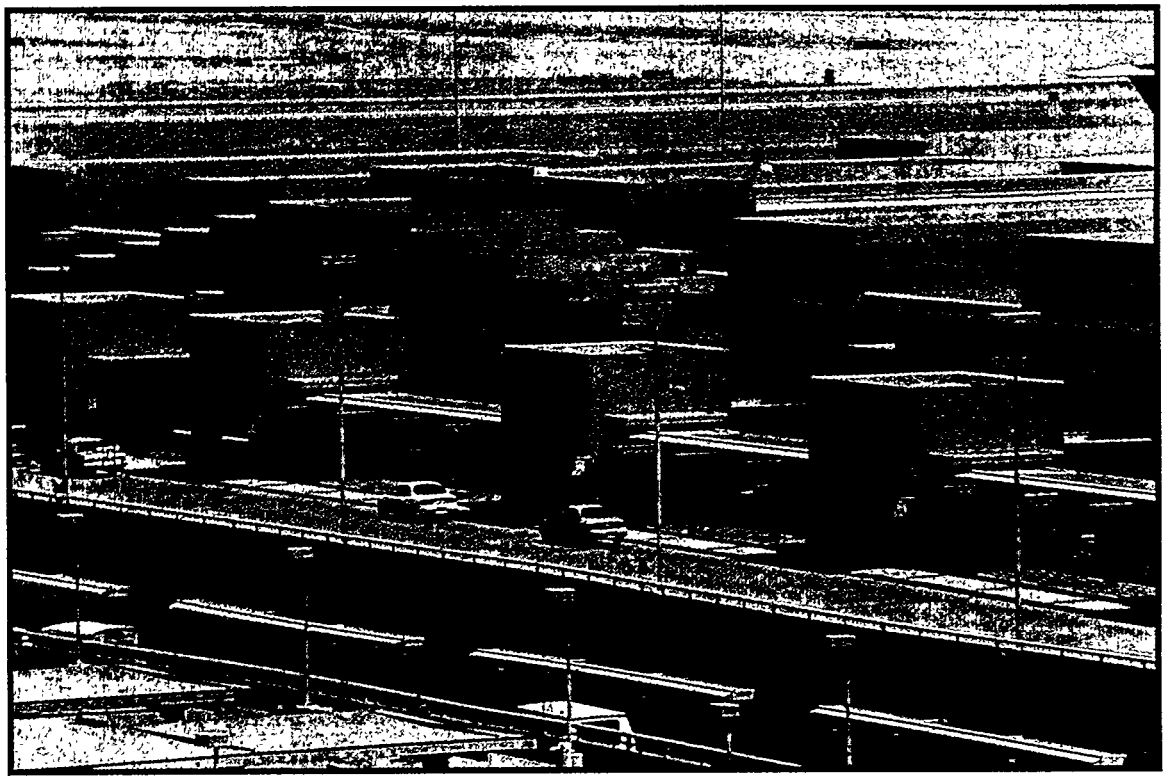
Figure 1. ABQ is a typical medium-hub primary airport with 3.1 annual enplanements in 1997. The proposed NNM airport would be a non-hub primary airport.

has consistently ranked somewhere around the 50th busiest airport in the U.S. The surrounding major southwest region airports at Dallas, Denver, Houston, Las Vegas, Phoenix, and Salt Lake City are all large-hub primary airports of considerable national importance. Dallas, Denver, and Phoenix all make the national top 10 list. Dallas' secondary airport, Love Field, by itself has more passenger traffic than ABQ as does Houston's secondary airport, Hobby.

The proposed NNM airport, if successful, would be a typical non-hub primary airport. It would probably rank somewhere in the bottom half to bottom third in passenger counts among the 554 commercial service U.S. airports.

3.1 General Southwestern U.S. Region

Figure 2 includes a map of the four-corners states plus Texas. All of the airports shown on the map are ranked in the top 100 of U.S. airports in terms of passenger counts (except Amarillo). The area of the circle representing each airport is proportional to its annual passenger count. Glancing at the map it is apparent that Albuquerque sits near the middle of a large empty region surrounded by some of the busiest airports in the world: Dallas, Houston, Denver, Phoenix, Las Vegas, and Salt Lake City. These airports all rank within the top 20 or so nationally. Albuquerque's passenger traffic is a small fraction of any of these huge airports. The secondary airports at both Dallas (Love Field) and Houston (Hobby) both outrank Albuquerque in annual passenger totals. Nonetheless, with its 3.1 million annual passenger enplanements, Albuquerque typically ranks about 50th in the U.S. and 115th in the world. Albuquerque is a quantitatively significant part of the U.S. national system of airports and is geographically important just because it sits in the middle of big geographic gaps in the southwestern U.S.



Albuquerque's Sunport is about the 50th busiest airport in the U.S. and is served by almost all major airlines.

3. Regional Background

The proposed northern New Mexico regional airport would fit into the system of airports and other air service infrastructure already existing within the region. The following information delineates some of the major characteristics of air service within the surrounding region.

Albuquerque has frequent service to the airline hubs of the southwestern U.S.: Dallas, Houston, Denver,

Albuquerque Nonstop Flights to Hubs

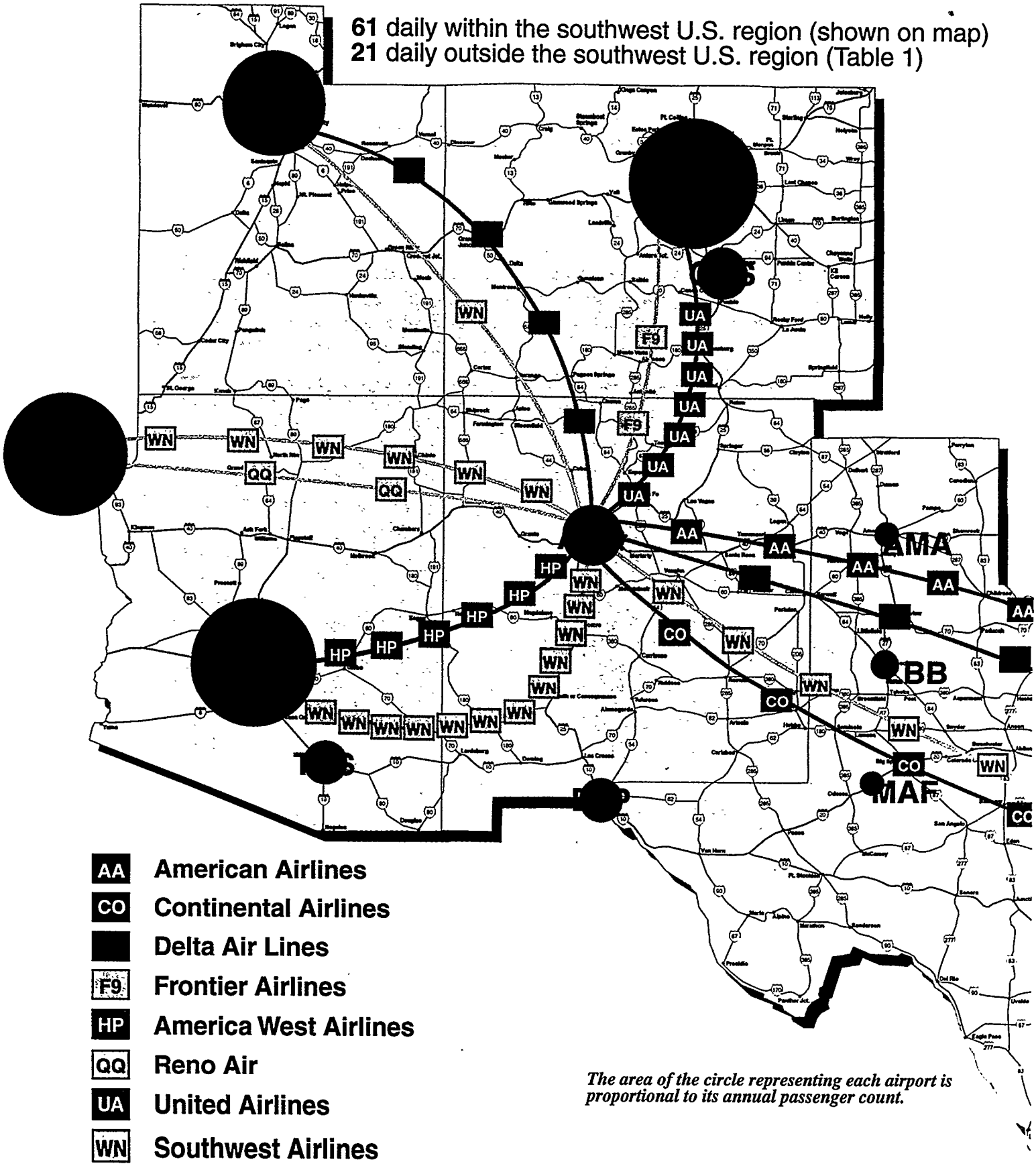
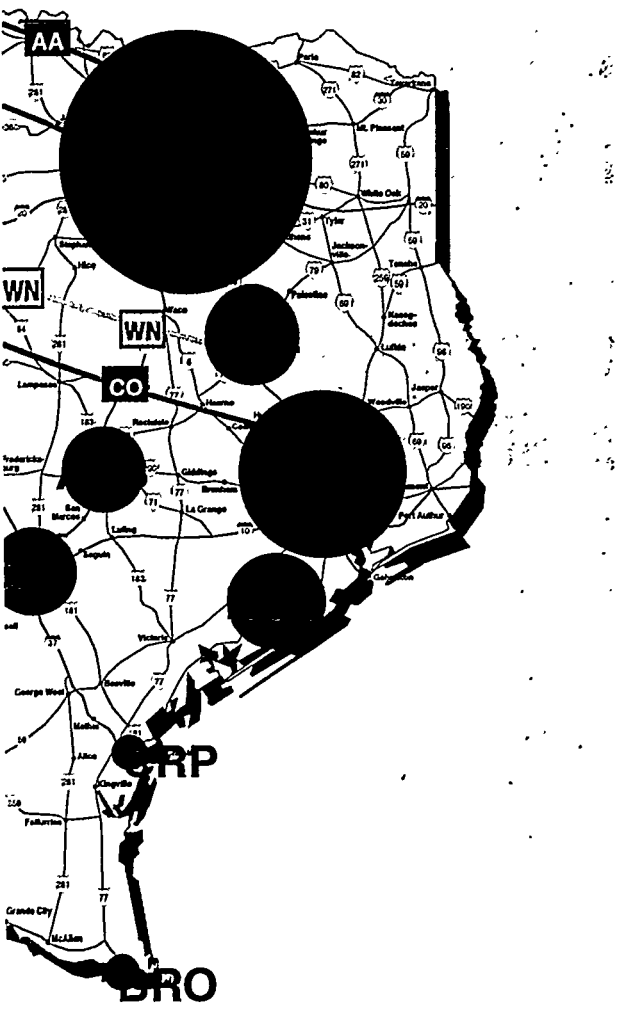


Figure 2. ABQ fills a geographical gap in the southwest and is surrounded by some of the busiest, major U.S. airports. ABQ has lots of nonstop airline service to these major hubs, as well as, hubs outside of the region.

Passenger Activity at Southwest U.S. Region Airports

	Airport	Annual Passengers Enplaned (millions)
ABQ	Albuquerque	3.1
AMA	Amarillo	0.5
AUS	Austin	2.8
BRO	Brownsville	0.5
COS	Colorado Springs	2.4
CRP	Corpus Christi	0.5
DAL	Dallas Love Field	3.5
DEN	Denver	15.2
DFW	Dallas/Fort Worth	26.6
ELP	El Paso	1.8
HOU	Houston Hobby	4.0
IAH	Houston Int'l	11.6
LAS	Las Vegas	14.1
LBB	Lubbock	0.6
MAF	Midland	0.5
PHX	Phoenix	14.8
SAT	San Antonio	3.3
SLC	Salt Lake City	9.5
TUS	Tucson	1.7



Phoenix, Las Vegas, and Salt Lake City. Figure 2 indicates the frequency of daily flights, by airline, to each of these hubs. Table 1 indicates other daily flights to hubs outside of the region. There are 61 daily nonstop flights to hubs within the region and another 21 nonstops to hubs in other parts of the U.S. Albuquerque itself is not used as a hub by any of the major airlines. Southwest Airlines does have a great deal of passenger transfer traffic at Albuquerque, but does not use it as a true hub. Albuquerque is serviced by all of the U.S. major airlines except U.S. Airways which discontinued service during 1997. This plethora of airlines means that Albuquerque and New Mexico have an excellent selection of choices and access to destinations nationwide. The competition also helps to keep average fares low as discussed in the section on airfares.

Table 1. Daily nonstop flights outside the southwest U.S. region to hubs.

Atlanta	3 Delta
Chicago	1 American
Cincinnati	1 Delta
Los Angeles	6 Southwest
Minneapolis	2 Northwest
St. Louis	5 TWA and 1 Southwest
San Francisco	2 Southwest
	21 flights

Table 1. In addition to ABQ's 61 flights to regional hubs there are 21 additional flights to extra-regional hubs.

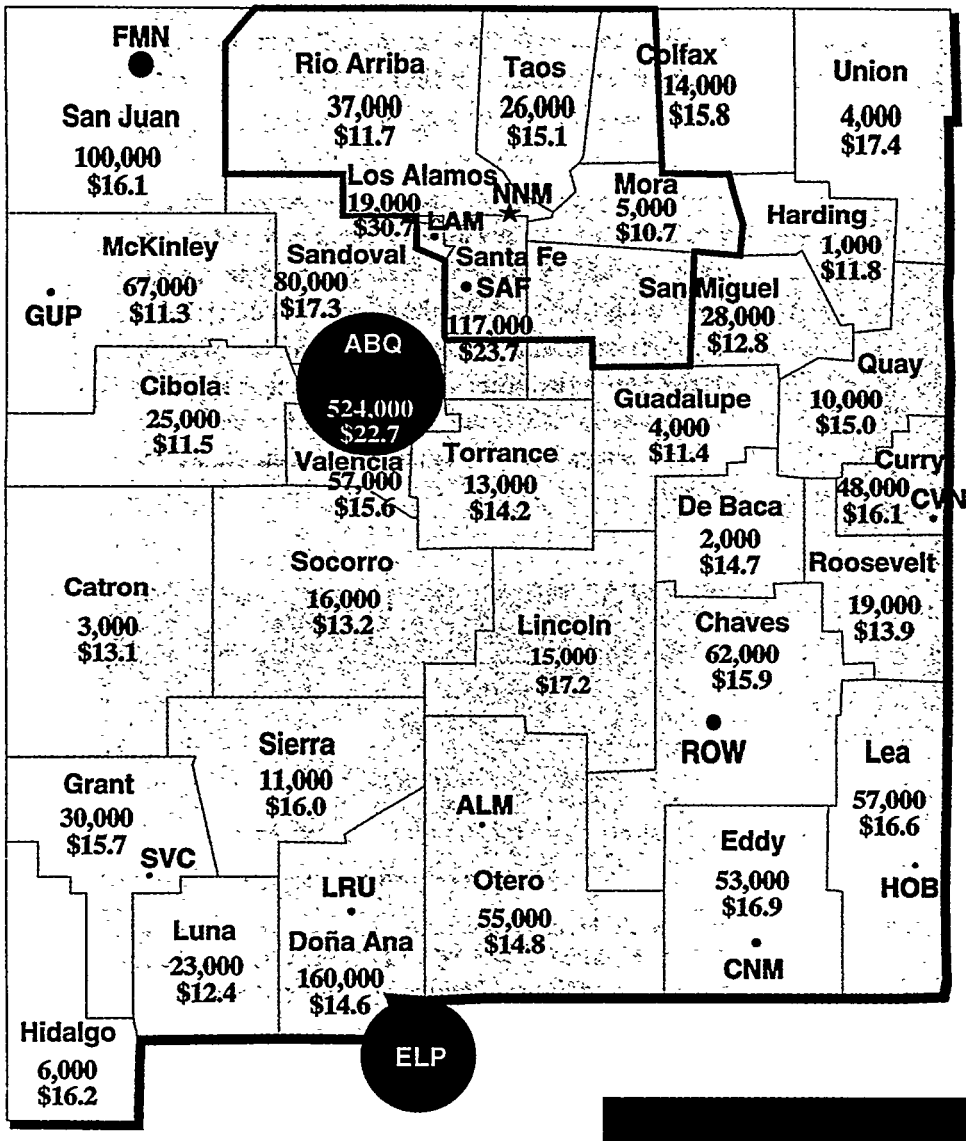
3.2 New Mexico

Figure 3 is a map that covers only the state of New Mexico. Every airport with commercial air service in the state is shown on the map. Again, the area of the circle representing each airport is proportional to its annual passenger count. Many of the circles are almost invisible because they are so small. Albuquerque dwarfs all of the other New Mexico airports.

New Mexico county population and per capita income are shown in Table 2 as well as in Figure 3. The proposed NNM airport service area is outlined in red on the map.

Figure 3 also includes the El Paso airport because it serves most of southern New Mexico. The El Paso airport serves about two thirds as many total passengers annually as Albuquerque. About 66% of El Paso passengers are flown by Southwest Airlines, giving it very strong dominance in western Texas and southern New Mexico.

New Mexico Commercial Air Service, Population, and Per Capita Income



Passenger Activity at New Mexico Airports		
Airport		Annual Passengers Enplaned (thousands)
ABQ	Albuquerque	3065.2
ALM	Alamogordo	3.4
CNM	Carlsbad	9.7
CVN	Clovis	5.2
ELP	El Paso	1812.4
FMN	Farmington	80.8
GUP	Gallup	7.2
HOB	Hobbs	3.4
LAM	Los Alamos	7.4
LRU	Las Cruces	6.4
ROW	Roswell	26.4
SAF	Santa Fe	12.3
SVC	Silver City	3.5

★ Proposed NNM Regional Airport

Region	Population	Per Capita Personal Income (thousands)
New Mexico	1,690,000	$18.2
Northern NM	225,000	$19.7
U.S.	262,890,000	$23.3

Figure 3. ABQ is the only large airport in New Mexico. It dwarfs all other New Mexico airports. The El Paso, Texas airport serves a large part of southern New Mexico.

Not shown on Figure 3, but on the southwest U.S. regional map (Figure 2) are the airports at Amarillo, Lubbock, and Midland/Odessa just across the New Mexico/Texas border and also strongly dominated by Southwest Airlines. These airports are used by most people in eastern New Mexico in preference to the much more distant Albuquerque Sunport. The effect of these various Texas airports on New Mexico travel demographics is not known precisely but it can be inferred through analysis that of the total population of New Mexico, roughly two thirds

Southwest Airlines has nearly half of ABQ's traffic, about two thirds of El Paso's traffic, and most of the Amarillo, Lubbock, and Midland jet traffic. It is the dominant airline for all of New Mexico's passengers.

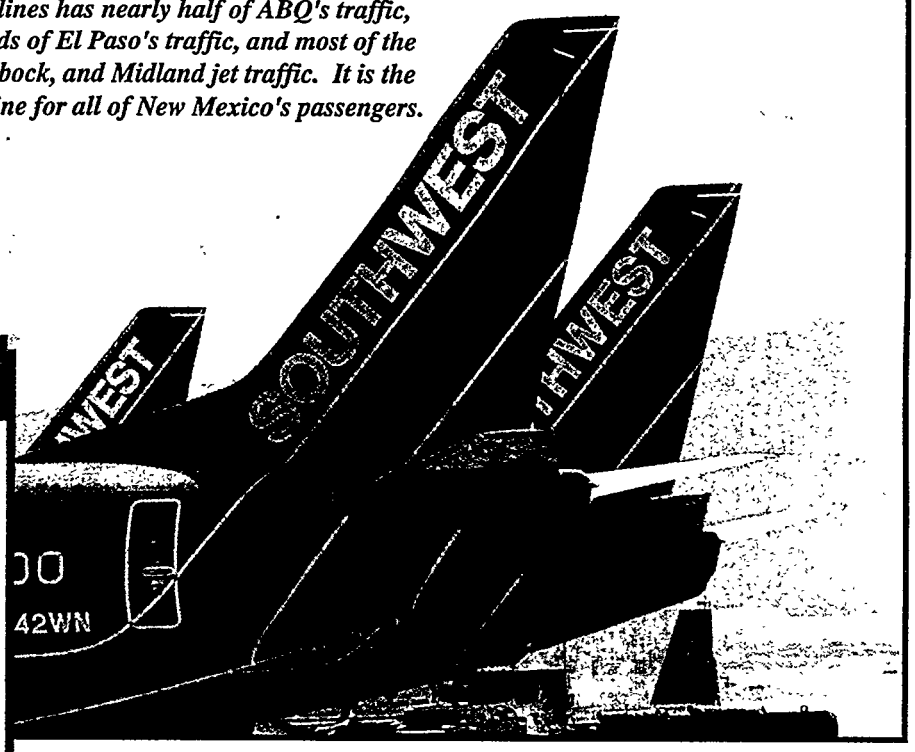


Table 2. New Mexico demographics by county.

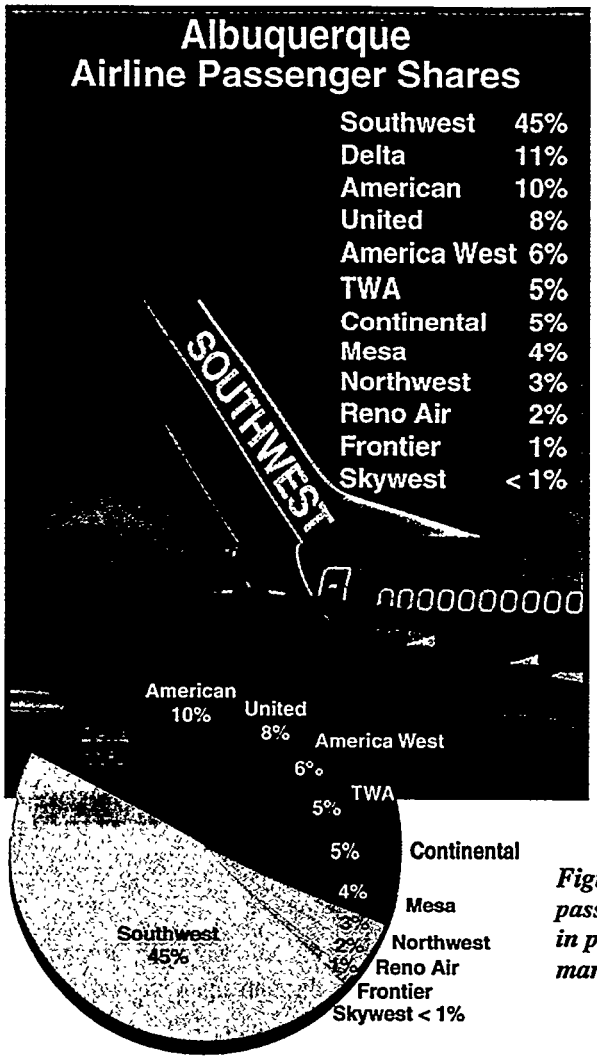
County	Population	Personal Income Per Capita (thousands)
Bernalillo	524,000	$22.7
Catron	3,000	$13.1
Chaves	62,000	$15.9
Cibola	25,000	$11.5
Colfax	14,000	$15.8
Curry	48,000	$16.1
De Baca	2,000	$14.7
Doña Ana	160,000	$14.6
Eddy	53,000	$16.9
Grant	30,000	$15.7
Guadalupe	4,000	$11.4
Harding	1,000	$11.8
Hidalgo	6,000	$16.2
Lea	57,000	$16.6
Lincoln	15,000	$17.2
Los Alamos	19,000	$30.7
Luna	23,000	$12.4
McKinley	67,000	$11.3
Mora	5,000	$10.7
Otero	55,000	$14.8
Quay	10,000	$15.0
Rio Arriba	37,000	$11.7
Roosevelt	19,000	$13.9
San Juan	100,000	$16.1
San Miguel	28,000	$12.8
Sandoval	80,000	$17.3
Santa Fe	117,000	$23.7
Sierra	11,000	$16.0
Socorro	16,000	$13.2
Taos	26,000	$15.1
Torrance	13,000	$14.2
Union	4,000	$17.4
Valencia	57,000	$15.6
New Mexico	1,690,000	$18.2
Northern NM	225,000	$19.7
U.S.	262,890,000	$23.3

Table 2. Northern New Mexico's per capita income is 8% higher than the New Mexico average and 15% lower than the U.S. average.

are served through Albuquerque, about one sixth through El Paso, and about one sixth through the Texas border combination of Amarillo, Lubbock, and Midland.

About two thirds of New Mexico's population and all of northern New Mexico obtain their national air service through Albuquerque's Sunport. Figure 4 shows the market shares of the airlines operating at Albuquerque. Southwest Airlines had 45% of all passengers enplaning at Albuquerque during 1997. This was actually down slightly from previous years but Southwest has to be regarded as the dominant airline in the New Mexico market. The three largest U.S. carriers United, American, and Delta all had roughly equal shares of around 10%. The smaller national airlines TWA, Continental, and Northwest had smaller but respectable shares and America West was well represented as a primarily western regional U.S. carrier. U.S. Airways dropped out of the market during 1997, so it is the only major national carrier not currently represented.

The destinations of New Mexico air travelers are shown in Figures 5 and 6. Somewhat more than half of the traffic is to the east and a bit less than half to the west. (Los Alamos National Laboratory travel is more evenly split between east and west due to strong California research connections and travel to the Nevada Test Site.)



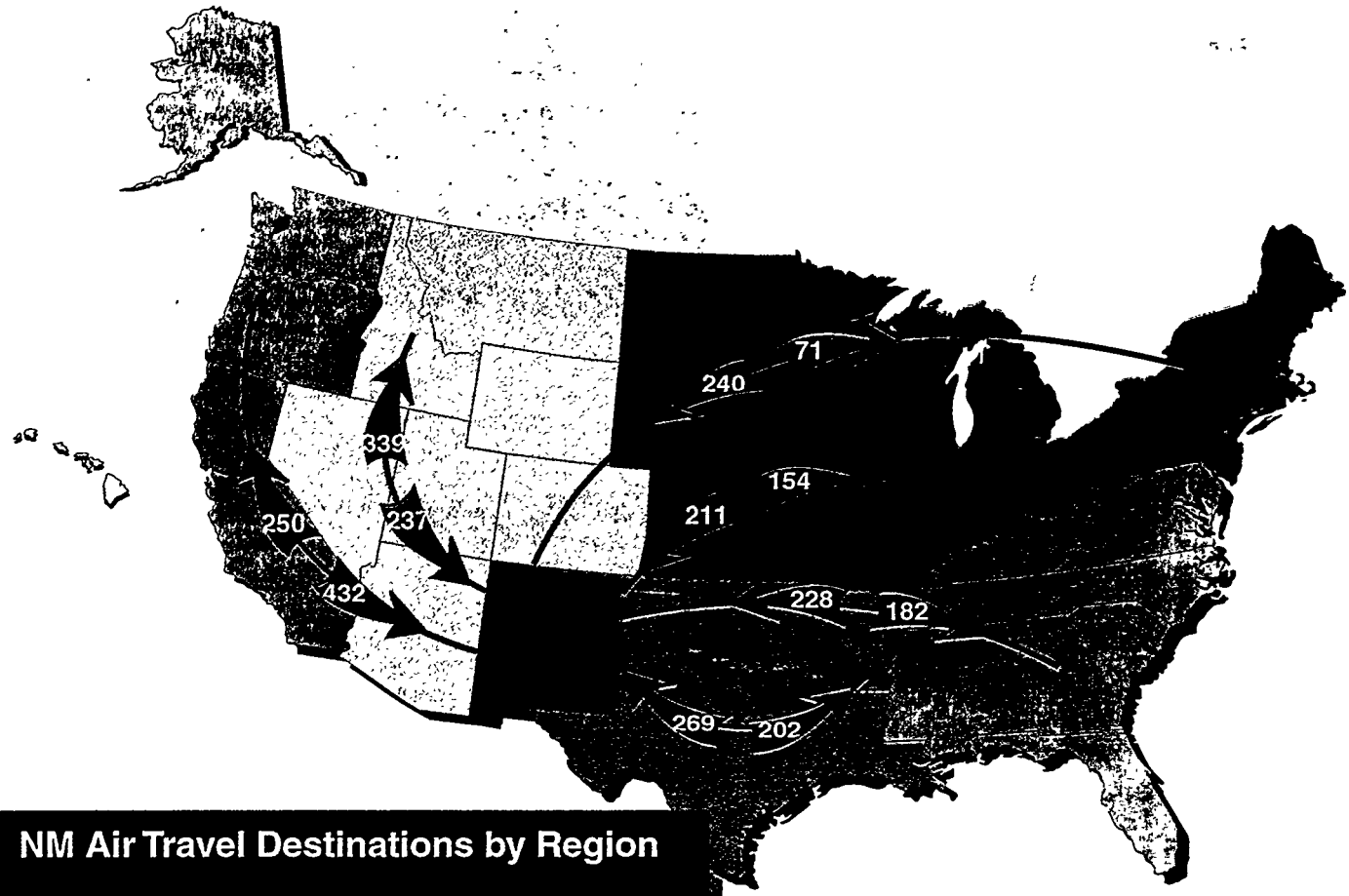
California tops the list of most frequently served markets with 20% of New Mexico's air trips, and Texas is an impressive second with 14% of all trips. The total New Mexico air passenger traffic consists of about 44% New Mexico residents and 56% out-of-state visitors. (We are not counting all of the transfer passengers who just change planes passing through without ever leaving the airport although they do contribute to airport business and enplanement statistics.) The imbalance favoring visitors over New Mexico residents is consistent with national patterns. It is explained most simply by the fact that New Mexico's per capita income is 22% below the national average, and air travel is strongly influenced by income.

The purposes for which air travel is undertaken are shown in Figure 7. Business travel at 45% of the total is somewhat less than the national average of about 48%. The various business and personal travel purposes are similar for residents and visitors to the state. The use of these particular statistics is important in market analysis because the business traveler is generally much less sen-

Figure 4. Southwest Airlines has nearly half of ABQ's passengers. The major national airlines are represented in proportions roughly resembling their nationwide market shares.

Business travelers generally pay higher fares and are more important revenue sources to airlines than personal travelers. Frequency of flights and schedules are often targeted to the business market.

New Mexico Air Travel Destinations by Region



NM Air Travel Destinations by Region

Region	Residents of NM (thousands)	Visitors to NM (thousands)	All Trips (thousands)	All Trips (percent)
New Mexico	73		73	3%
Northeast	71	240	311	11%
Midwest	154	211	365	13%
South	182	228	410	14%
TX, OK, LA, AR	202	269	471	16%
Mountain West	339	237	576	20%
Pacific West	250	432	682	24%
All Trips	1,271	1,617	2,888	100%

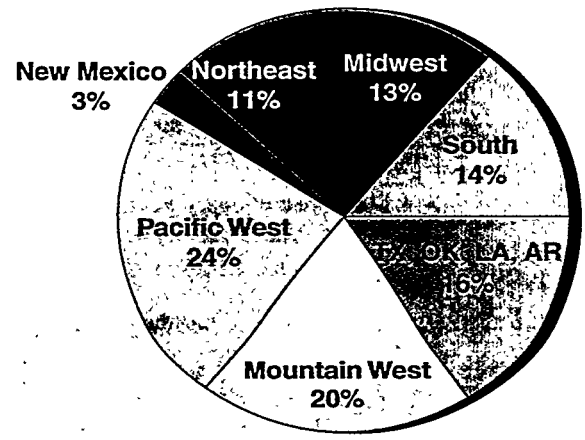


Figure 5. New Mexico's air traffic destinations are spread all over the U.S. New Mexico residents account for 44% of the passengers while 56% are visitors to New Mexico.

sitive to fares. Business travelers typically pay higher fares, but they are much more sensitive to frequency of service and scheduling convenience — often a big problem for smaller airport markets with more limited choices of flight schedules and airlines.

4. Airfares

Airfares charged throughout the country vary over a wide range, and in ways which often appear to be capricious. Generally,

New Mexico Air Travel Destinations by State Markets

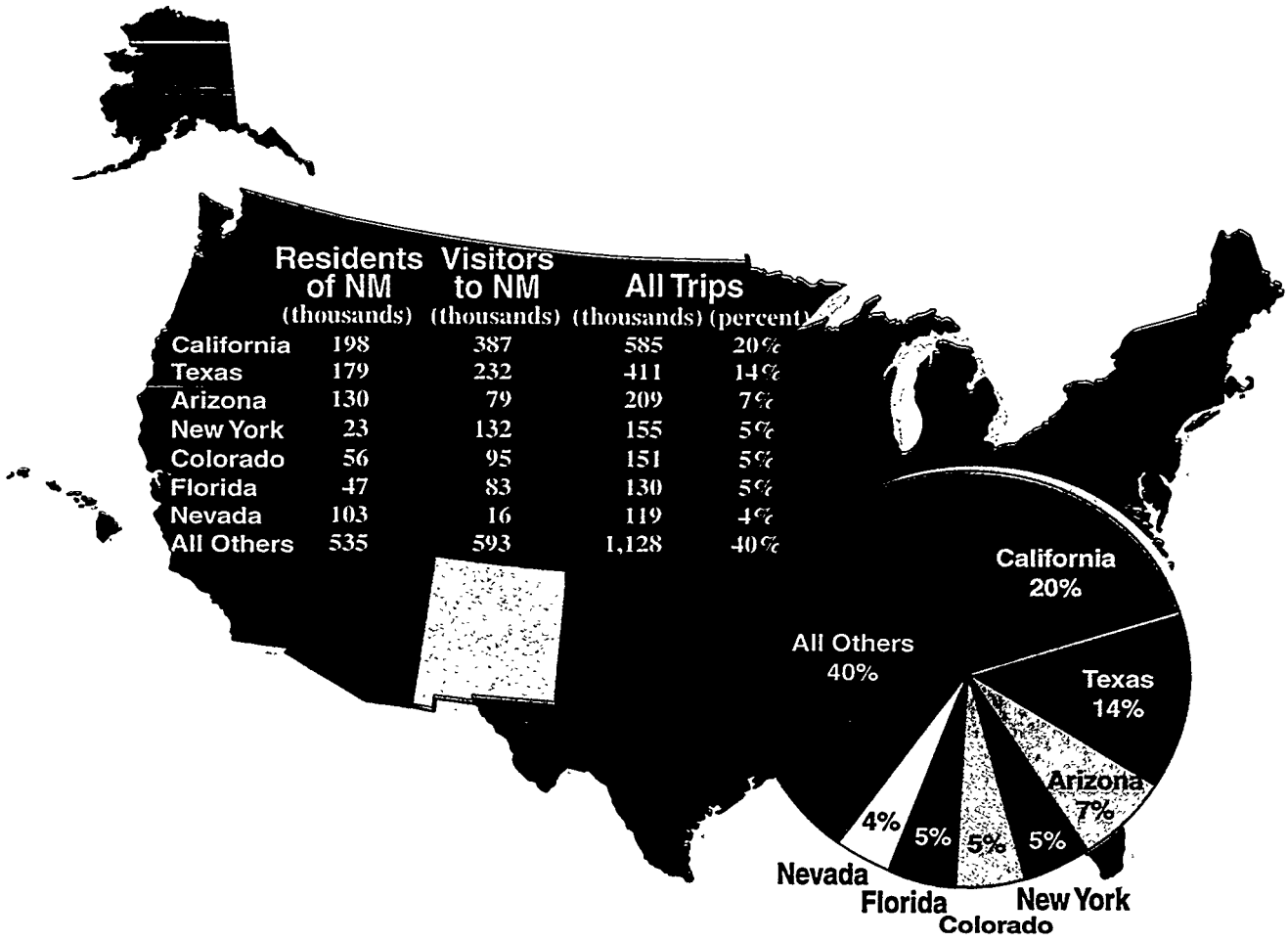


Figure 6. California and Texas are by far the largest single markets for New Mexico passengers.

- nondiscretionary business travelers pay higher fares,
- the discretionary personal travelers who can plan further ahead and/or place a lesser dollar value on their use of time pay lower fares,
- city pair markets served by few airlines have less competition and higher fares,
- a low-fare airline has a big influence in any market it serves, forcing somewhat lower fares on its competitors within that market,
- hubs dominated by a major airline usually have higher fares for people originating or flying to the hub, but not necessarily for those just passing through, and
- small airports/markets have higher fares.

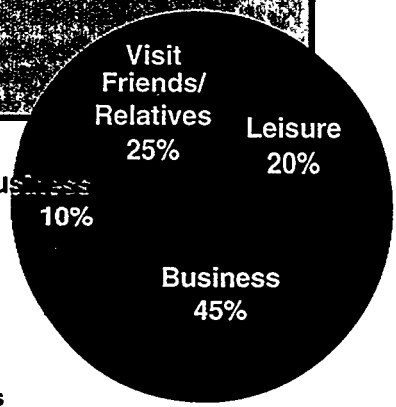
The actual fare differences between and within specific city pair markets arise from business decisions made by airlines. These decisions are dependent upon many market factors which change rapidly even within very short time periods, so it is difficult to make definitive statements or predictions about fares. In this study, there are two major situations associated with fares which will be addressed: 1) Albuquerque passengers enjoy relatively low average fares, and 2) It is reasonable to expect that a new NNM airport would have average fares relatively higher than Albuquerque.

4.1 Albuquerque Passengers Enjoy Relatively Low Average Fares

A 1996 Government Accounting Office (GAO) study, GAO/RCED-96-79, took a careful statistical look at average airfares at 112 airports accounting for about 66% of all U.S. air traffic. Airports were classified according to the size of the metropolitan population (not

New Mexico Air Travel Purposes

Purpose	Origin NM (thousands)	Origin NM (percent)	Destination NM (thousands)	Destination NM (percent)	All Trips (thousands)	All Trips (percent)
Business	558	44%	737	46%	1295	45%
Personal Business	153	12%	123	8%	276	10%
Visit Friends/Relatives	340	27%	387	24%	727	25%
Leisure	220	17%	371	23%	591	20%
Total	1,271	100%	1,617	100%	2,888	100%



Business Trip: Any trip where the purpose of the trip is given as business, combined business with pleasure, or convention, conference, or seminar.

Personal Business Trip: Any trip where the purpose of the trip is given as school-related activity, personal, or family business including weddings and funerals.

Visit Friends/Relatives Trip: Any trip where the purpose of the trip is given as visiting friends or relatives.

Leisure Trip: Any trip where the purpose of the trip is given as rest or relaxation, sightseeing, outdoor recreation, entertainment, or shopping.

Figure 7. Both residents and visitors travel for the same purposes. New Mexico business travel at 45% is slightly below the national average of 48%.

annual enplanements as is more often encountered). Albuquerque falls into GAO's medium-sized-community category. A summary of results appears in Table 3 and Figure 8. We did some cursory analysis of other years data using the same basic reference source, the DOT Origin and Destination (O&D) data base, and found that the GAO findings would continue to be generally valid. Average airfare refers to the price per mile paid by all passengers flying to or from a particular airport. The 1997 national average airfare was about $0.14/mile.

Albuquerque's average airfare:

- Was 20% less than the average for its peer group of medium-sized communities.
- Only 2 of the 38 medium-sized communities had slightly lower fares, Las Vegas and Spokane. Figure 8 arrays these average fare data.
- Only 3 of the 49 small communities had slightly lower fares: Eugene, Reno, and Fort Myers.
- Albuquerque's fares were 11% less than the average large community in GAO's sample. Figure 8 arrays Albuquerque with these large airports and their average fares. The only lower fares were at Phoenix and Houston-Hobby (both with heavy low-fare competition provided by Southwest Airline's huge local

Table 3. Average airfares per mile.

Community Size	Airports in Sample (number)	Normalized Average Airfare (per passenger mile)
Small	49	114%
Medium	38	111%
Large	25	100%
Albuquerque	---	89%

Table 3. ABQ's average airfares are 20% below its peer group for medium-sized communities, and are among the lowest in the country.

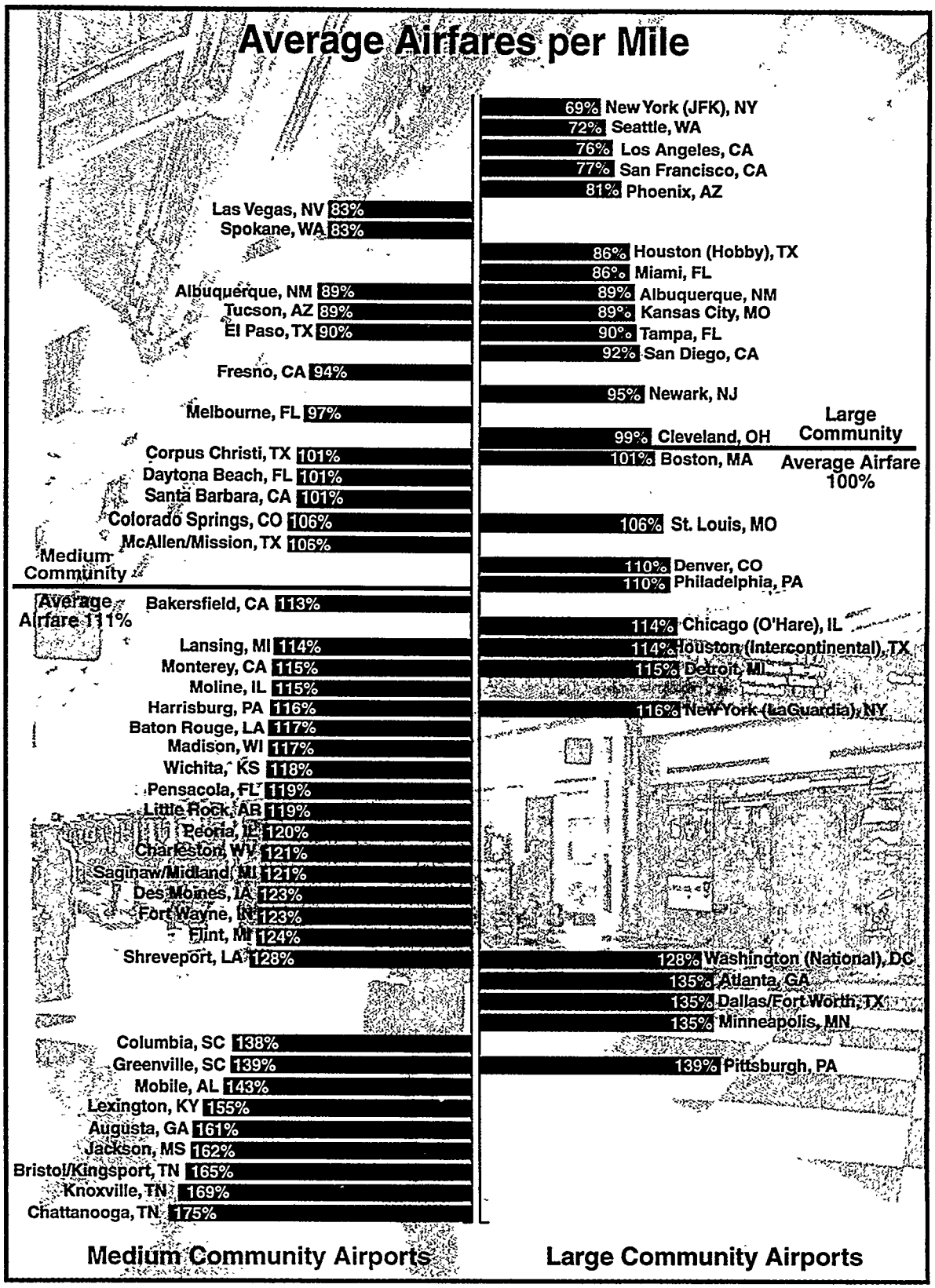


Figure 8. ABQ airfares are low compared to most major airports. Only international-flight hubs and Southwest Airlines-dominated hubs have lower fares. ABQ airfares are among the very lowest among its peer group of medium-sized communities. In 1997, nationwide average airfares were $0.14/mile.

market position), and New York's JFK, Los Angeles, Miami, Seattle, and San Francisco (all of which have high proportions of international flights with very long distances and consequently lower average fares per mile).

Albuquerque passengers' good fortune at having relatively low fares has been consistent over a long period of time. The principal reasons for these low fares are apparently:

- The market is big enough to have attracted most of the major airlines and supports a robust airport infrastructure with modest costs.
- No airline has created a hub where it controls most of the local traffic.
- The market is split fairly equally among the major carriers (about 10% each for the big 3, Delta, United, and American; with decent but lesser representation by TWA, Northwest, Continental, and others from time to time.)
- Strong competition for westbound traffic between Southwest and America West.
- Southwest's high-profile presence with close to half of the enplanement traffic and its pressure as the leading U.S. low-fare carrier limiting the major airlines' fare opportunities in many nationwide city pair markets involving Albuquerque.

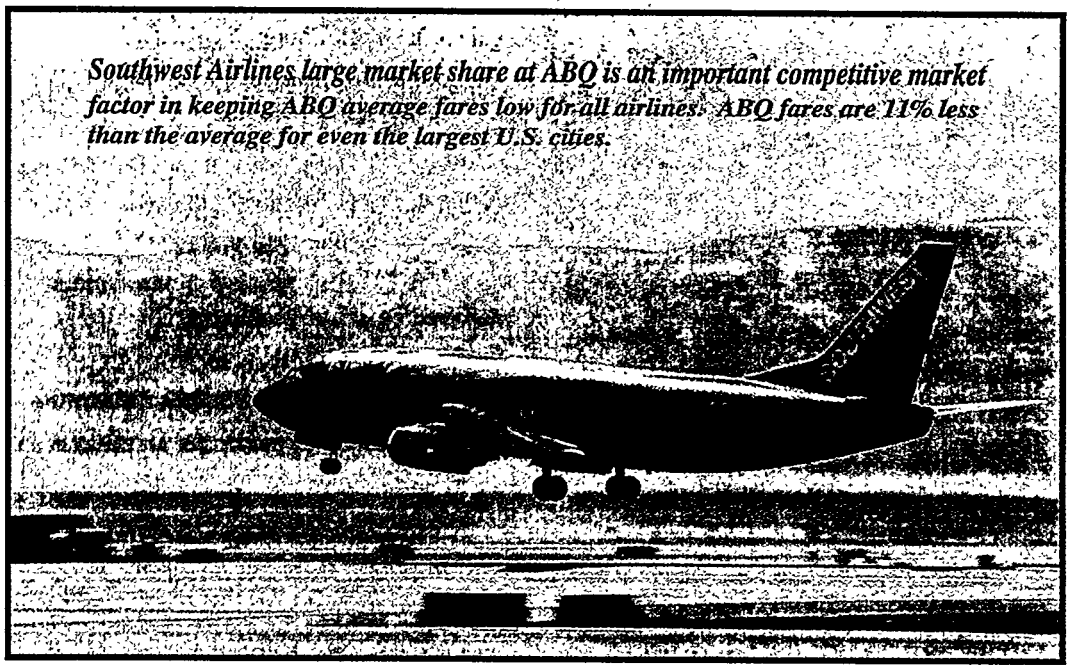
4.2 Expect a NNM Airport to Have Higher Fares than Albuquerque

Most airports nationwide have higher average fares than Albuquerque. The happy concatenation of circumstances that has given Albuquerque its low-fare status cannot be duplicated in the smaller market of NNM. Any new airport in NNM would have a much smaller base market than Albuquerque and this would inevitably lead to less competition and probably higher fares.

The NNM market size is well below the threshold for having more than one or two airlines provide an acceptable frequency of service. The most optimistic market size is about one fifth that of Albuquerque and this would be further eroded because Albuquerque's superior availability of service (frequency, schedule, destination, and carrier choices) would drain off customers even without any fare advantage.

Estimating what fare premiums might be charged at a NNM airport represents little more than guessing. But the important indicators in such a guess all indicate higher fares.

1. The GAO statistics in the preceding section, 4.1, indicate that the average small community airport has fares 29% greater than Albuquerque. Small communities are defined in the GAO study as having total populations of



less than 300,000 people. The NNM airport would be categorized as a small community airport.

2. In markets where 1 or 2 airlines control 85% or more of the traffic, there are several empirical studies examining average fare premiums across the U.S. The NNM airport cannot reasonably be expected to have any more than one or two carriers because there is not enough potential traffic to support more flights per day than can be handled by one or two carriers. Various formal study results are listed in Table 4. These results indicate that our NNM airport should expect somewhat higher fares than nationwide averages. On top of this fact is the circumstance that Albuquerque already has fares significantly below national averages, suggesting that the likely NNM vs. Albuquerque fare differences could be even more substantial.

Table 4. Airport fare premiums with one or two dominant airlines.

Study	Average Fare Premium
Air Transport Association, 1989	very small
Borenstein, 1989	2% to 12%
General Accounting Office, 1996	21%
Air Transport Association, 1989 (re-estimate), Abunassar, 1994	10%
Department of Transportation, 1997	often > double
Many mid-1980s studies	around 5% to 15%

Table 4. Studies show airfares are higher at airports with only one or two airlines supplying most service.

3. Airport costs charged to airlines at new airports are typically higher than costs at established airports. This is because established airports:

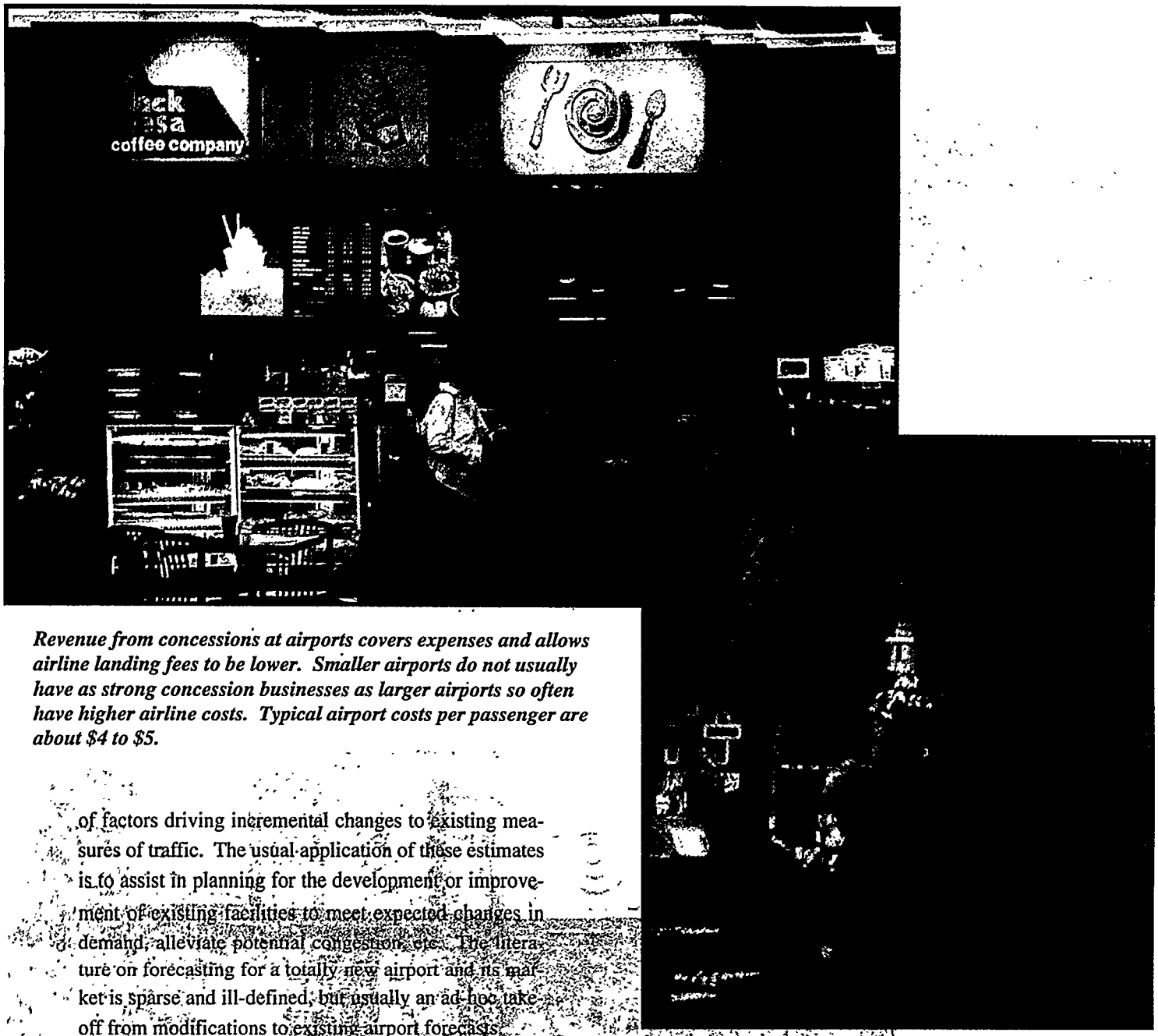
   - have already amortized many construction and improvement expenses,
   - have already developed revenue sources from concessions and other sources that reduce requirements for operating expense recovery from airlines' fees,
   - generally enjoy lower cost bases due to having purchased during earlier, lower cost time periods, and
   - possess more certain and stable financial relationships.

A well publicized example is the new Denver DIA airport's costs of $15 to $20/passenger vs. the more typical value of less than $5/passenger at the older, major airports. Albuquerque has costs in the range of about $5/passenger, and these are higher than before its recent expansion and need for new cost recovery. Costs are not precisely known or posted because they are individually determined in bilateral business deals between airports and specific airlines. Higher airport costs to airlines at new airports put pressure on ticket prices, although these ticket prices are ultimately determined through competitive market forces.

A new NNM airport would likely have minimal initial revenue from concessions (parking, restaurants, bookstores, etc.) as is typical of small airports and particularly for new airports. If it were very successful with 100,000 passenger enplanements/year and had an operating budget of $2.5 million (as guessed at from rough rules-of-thumb in DOT's "Estimating the Regional Economic Significance of Airports," ADA 257 658) this would amount to $25/passenger. This ignores any additional interest or amortization expense left over from the construction program. Clearly without offsetting local subsidies and vigorous development of other income sources, airport passenger charges would be a major deterrent to market development and a cost-based source of fare premiums.

5. NNM Air Travel Market Estimation

Estimating the market for air travel at an airport is discussed at length in airport engineering and planning textbooks as well as many other literature sources. These methodologies were very carefully reviewed for use in this report. Most of the formal methodologies involve estimations for existing airports that are designed to forecast future changes in existing markets. They make use



Revenue from concessions at airports covers expenses and allows airline landing fees to be lower. Smaller airports do not usually have as strong concession businesses as larger airports so often have higher airline costs. Typical airport costs per passenger are about $4 to $5.

of factors driving incremental changes to existing measures of traffic. The usual application of these estimates is to assist in planning for the development or improvement of existing facilities to meet expected changes in demand, alleviate potential congestion, etc. The literature on forecasting for a totally new airport and its market is sparse and ill-defined, but usually an ad-hoc take-off from modifications to existing airport forecasts.

This report's estimate of traffic at a new NNM airport is based upon two stages of estimation:

1. The size of the actual market for air travel in NNM, and
2. The sharing of this market between ABQ and a new NNM airport. How much of the actual market would be served or captured by the new airport?

The current size of the market for air travel in New Mexico is well measured.

1. The actual passenger counts by quarter, airline, destination, etc., are available with high accuracy for every U.S. commercial service airport in the DOT O&D data base. A problem with this data base is that it is airport oriented and cannot identify the residential or business location of the traveler, only their airport starting and finishing locations. Obviously, almost all ABQ passengers are New Mexico travelers, either residents or visitors. However, El Paso passengers are a mix of New Mexico and Texas travelers. The same is true of the airports at Amarillo, Lubbock, and Midland, Texas.

2. The American Travel Survey conducted by the Census for DOT gathered extremely detailed traveler information throughout 1995, including air trips, purpose, destinations, lengths of stay, etc. The survey sampled 80,000 people nationally, and conducted 3,900 detailed interviews within New Mexico. Because the American Travel Survey results can be associated directly with specific local populations, these data have been most useful in estimating the air travel market in NNM. Our report uses New Mexico-specific results scaled to the size of the population of our NNM airport service area. We discussed getting special purpose data based solely upon survey results from NNM, but the Bureau of the Census standards for sample size and protecting confidentiality of personal data prevented them from releasing this type of information to us.

   In using American Travel Survey data for New Mexico, we often checked it for consistency with DOT's O&D data, specific airport reports, Air Transport Association and Federal Aviation Administration data, and other sources. We found good consistency and tended to prefer using the American Travel Survey data because of its high quality and detail. Also, these data are less subject to transitory changes due to competitive business decisions causing market statistics to make shifts between airlines or airports.

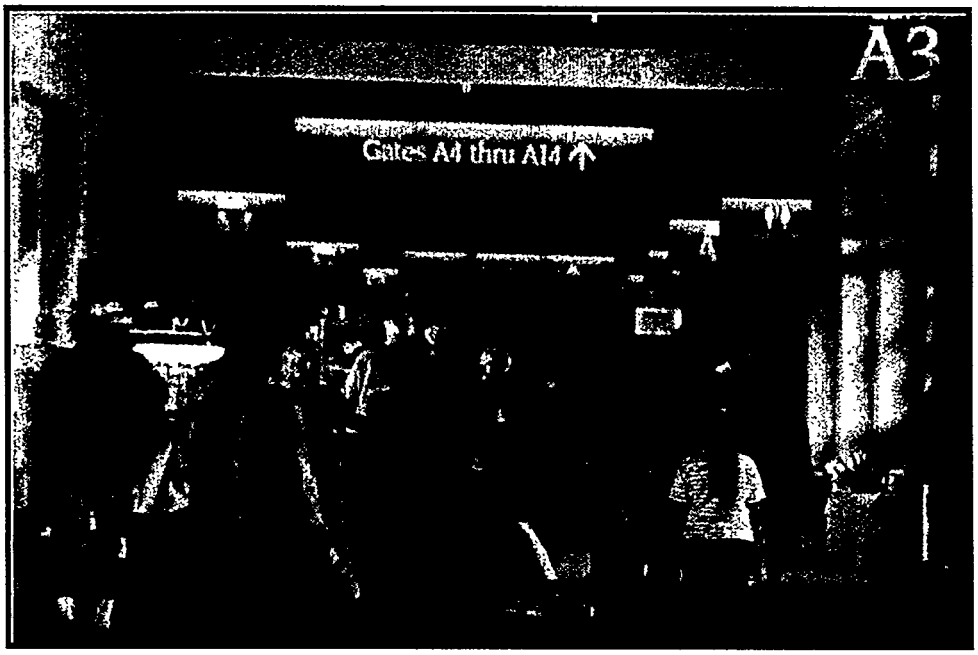
5.1 NNM Airport Service Area

The most fundamental factor in estimating air service demand is the population served (Figure 9). NNM population has been counted in this report using Bureau of Census 1995 population estimate updates for New Mexico counties as well as local census districts where only partial counties fit our definitions.

The definition of our airport service area is anyone who is closer in driving time to the NNM airport than to ABQ. The airport service area is shown on Figures 3 and 9.

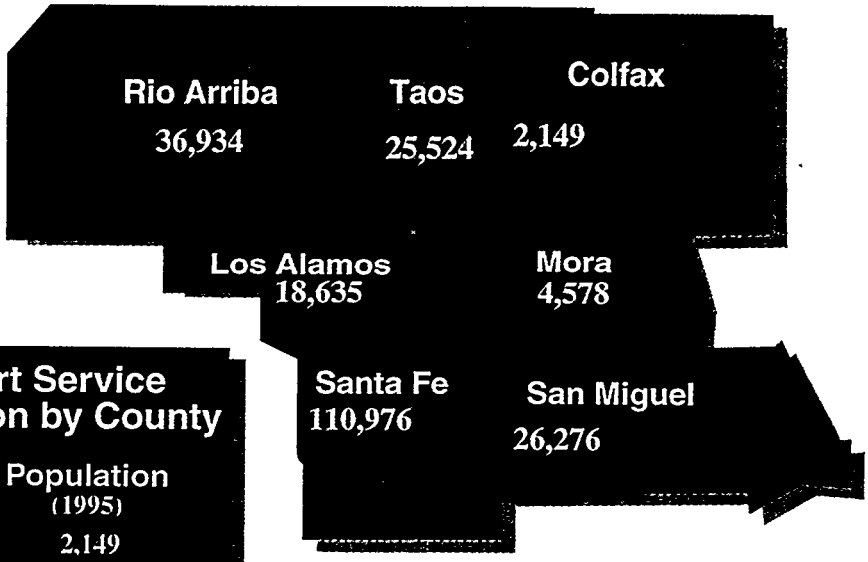
These airport service area population totals are insensitive to the location of the NNM airport. They would be essentially the same whether the airport was slightly NE or NW of Española or near Pojoaque or even at Santa Fe because the driving time for all of these people would still be less than to ABQ. The relative time savings would change, however, affecting the competitive choice between NNM and ABQ in different ways for different segments of this population.

On the far fringes inside and outside of this defined service area are quite small populations with relatively very low per capita incomes. An area in southern Colorado potentially could be added to the service area if an Española location were chosen, but not for NNM locations near Pojoaque or Santa Fe. Southern Colorado residents from Alamosa northward can reach Colorado Springs in less driving time, and the more southerly Antonito census division has a population of less than 2,000 people. Southern Colorado has been excluded from our analysis because it is so tenuously far from our



Both the DOT Origin and Destination data base for airline travel and the Bureau of Census' American Travel Survey produce good quality data on airline passenger demographics to help us measure the size of the NNM market.

Northern NM Airport Service Area Population by County



NNM Airport Service Area Population by County

	Population (1995)
Colfax*	2,149
Los Alamos	18,635
Mora	4,578
Rio Arriba	36,934
San Miguel**	26,276
Santa Fe***	110,976
Taos	25,524
Total	225,072

*** Only Cimarron census district. Most of Colfax county is closer to the Colorado Springs airport than to Española. The Cimarron census district includes eastern Colfax towns such as Cimarron, Eagle Nest, and Angel Fire.**

**** Excludes Villanueva and Conchas census districts. The Villanueva and Conchas census district residents are closer in driving time to ABQ because drivers drop straight south to Interstate 40 rather than going past Santa Fe on Interstate 25.**

***** Excludes Census Tract 103.06 - Edgewood Area. The southern part of Santa Fe county is really part of metropolitan Albuquerque.**

Figure 9. The regional population is the foundation of the market for commercial air travel. Air travel by both residents and visitors is closely related to the region's total population.

potential locations and would be too much of an excessively optimistic stretch to include. These fringes do not contribute much to the potential air service market and would not significantly affect the subsequent analysis.

This report takes the current service area population as 225,000 for all of its analyses.

5.2 Number of Annual NNM Air Trips

Textbook estimates of air travel for a region depend on data about: 1) population, 2) per capita income, 3) population density (regional scale), and 4) business and cultural demographics.

5.2.1 Population

Our service area's population is 225,000 people. This is a fundamental measure of the need for all travel and for trips by air. Analytical studies almost always scale air trips higher or lower based on other characteristics of the region, but people are the main driver of trip creation. This is true for visitors to the region as well as residents. Visits for business purposes are more numerous if there are more businesses (people) to visit. Personal visits from outside of the region to relatives and friends and for personal business depend on the numbers of residents to visit. Pure leisure (sightseeing) travel into New Mexico is the only category which depends less strongly on resident population counts, but makes up only about 13% of all New Mexico air trips.

5.2.2 Per Capita Income

Per capita income for all of New Mexico is shown in Table 2 and on Figure 3 in a previous section. The weighted average per capita income for NNM based on our service area population defined above is $19,700. This

is 8% above the New Mexico average, and 15% below the U.S. average.

Examining Figure 3 it should be noted that our airport service area's income distribution is very unequal. Santa Fe and Los Alamos have the two highest incomes of any counties in New Mexico. The per capita income of this high income cluster of 130,000 people is $24,700 (6% above the U.S. average, 36% above the New Mexico average). It is likely that three quarters of the region's air trips are generated by these two counties alone. The balance of the NNM air service area has incomes only about half as high and are some of the lowest income counties in both the U.S. and New Mexico. Figure 10 shows the total personal income by county within the NNM airport's service area, where 71% of the income is found in Santa Fe and Los Alamos counties.

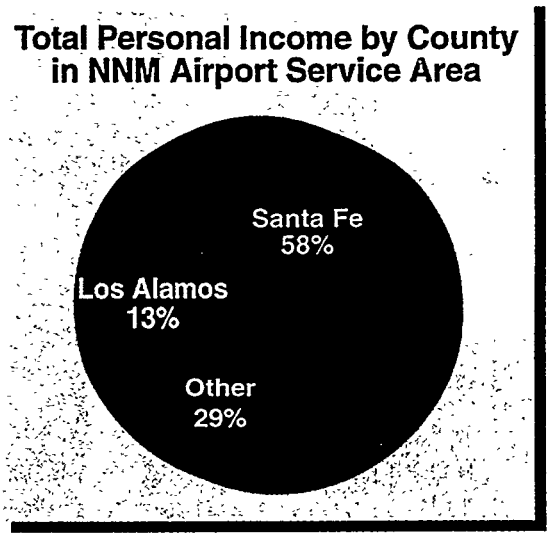


Figure 10. Santa Fe and Los Alamos have nearly three fourths of the region's total income. This indicates that most of the NNM air travel market will be generated by those two counties.

Per capita income is an important determinant of market size because air travel is an expensive means of travel. Relatively higher incomes result in more personal trips being taken by air by residents. The local population's incomes do not have much influence on personal trips taken by visitors from outside of our area for personal reasons, the out-of-state visitors incomes are the determinant. But business trips by both residents and visitors are likely to be more numerous if local income is higher, because that per capita income is usually a good proxy for the overall strength of the local business sector.

5.2.3 Population Density (regional scale)

The population of New Mexico and all of the Southwest is spread out over large distances and has relatively low numbers of people per square mile. This regional-scale low-population density results in more air travel per capita than in the more densely populated areas of the East or on the West Coast. People have to travel longer distances to be exposed to the same number of other people or businesses, so long-distance travel becomes more common. Because of this, New Mexico has more air travel per capita than the national average, in spite of significantly lower per capita income. The other four-corners states, sharing the overall population density characteristics of the region, all have significantly higher air travel per capita than even New Mexico (see Figure 11 and Table 5) because they have significantly higher income levels.

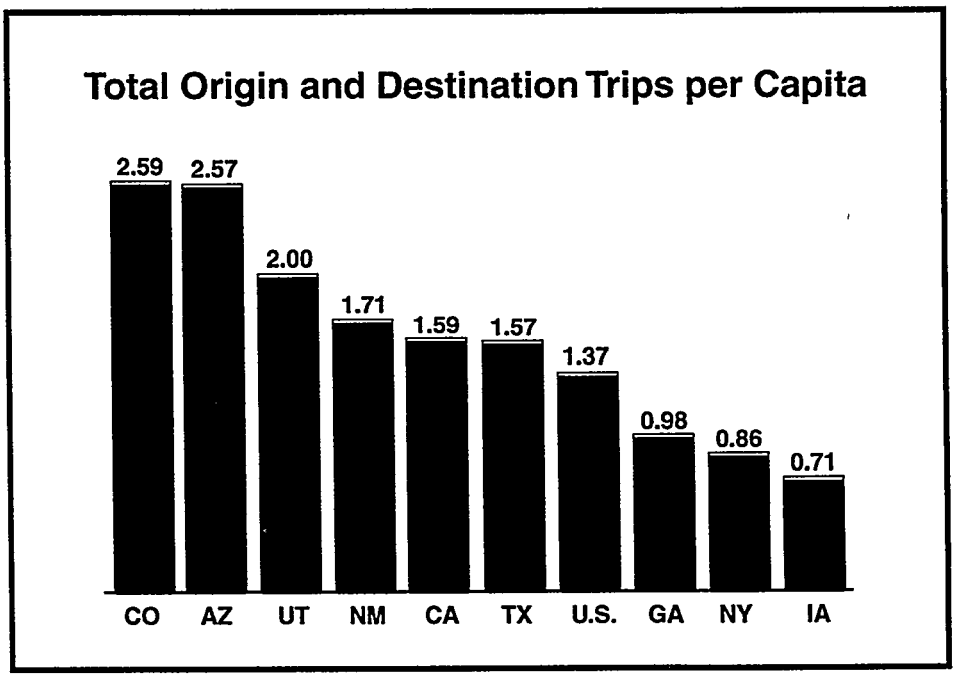


Figure 11. Annual commercial air travel for selected geographical areas shows a wide range. New Mexico per capita air travel is the lowest in the four-corners region, but is significantly above the U.S. average.

Table 5. Annual commercial air travel - basic origin and destination facts for selected geographical areas.

State	Origin (millions)	Destination (millions)	Population (millions)	Origin per Capita	Visitors per Capita	Total O&D Trips per Capita
New Mexico	1.3	1.6	1.7	0.8	1.0	1.7
U.S.	180.3	180.0	262.9	0.7	0.7	1.4
Southwest						
Arizona	4.2	5.3	3.7	1.1	1.4	2.6
Colorado	4.0	4.8	3.4	1.2	1.4	2.6
Texas	14.7	12.2	17.1	0.9	0.7	1.6
Utah	1.8	1.6	1.7	1.1	0.9	2.0
West Coast						
California	25.3	22.1	29.8	0.9	0.7	1.6
Oregon	2.8	1.4	2.9	1.0	0.5	1.5
Washington	5.3	3.2	4.9	1.1	0.7	1.7
Northeast						
Massachusetts	3.8	3.7	6.0	0.6	0.6	1.3
New York	8.0	7.4	18.0	0.4	0.4	0.9
Pennsylvania	4.8	4.0	11.9	0.4	0.3	0.7
South						
Alabama	0.9	1.1	4.1	0.2	0.3	0.5
Georgia	3.3	3.2	6.6	0.5	0.5	1.0
South Carolina	1.1	1.4	3.5	0.3	0.4	0.7
Virginia	3.8	3.7	6.3	0.6	0.6	1.2
Midwest						
Illinois	8.2	6.1	11.5	0.7	0.5	1.2
Indiana	2.2	1.5	5.6	0.4	0.3	0.7
Iowa	1.2	0.8	2.8	0.4	0.3	0.7
Michigan	5.1	2.8	9.3	0.6	0.3	0.9
Ohio	5.3	4.0	10.9	0.5	0.4	0.9
South Dakota	0.3	0.4	0.7	0.4	0.5	0.9

Table 5. There is a wide variation by geographic region in the amount of air travel in the U.S. The less densely populated southwest has more travel per capita than the national average, and the higher-income states in the four-corners region have more travel than these lower-income states.

5.2.4 Business and Cultural Demographics

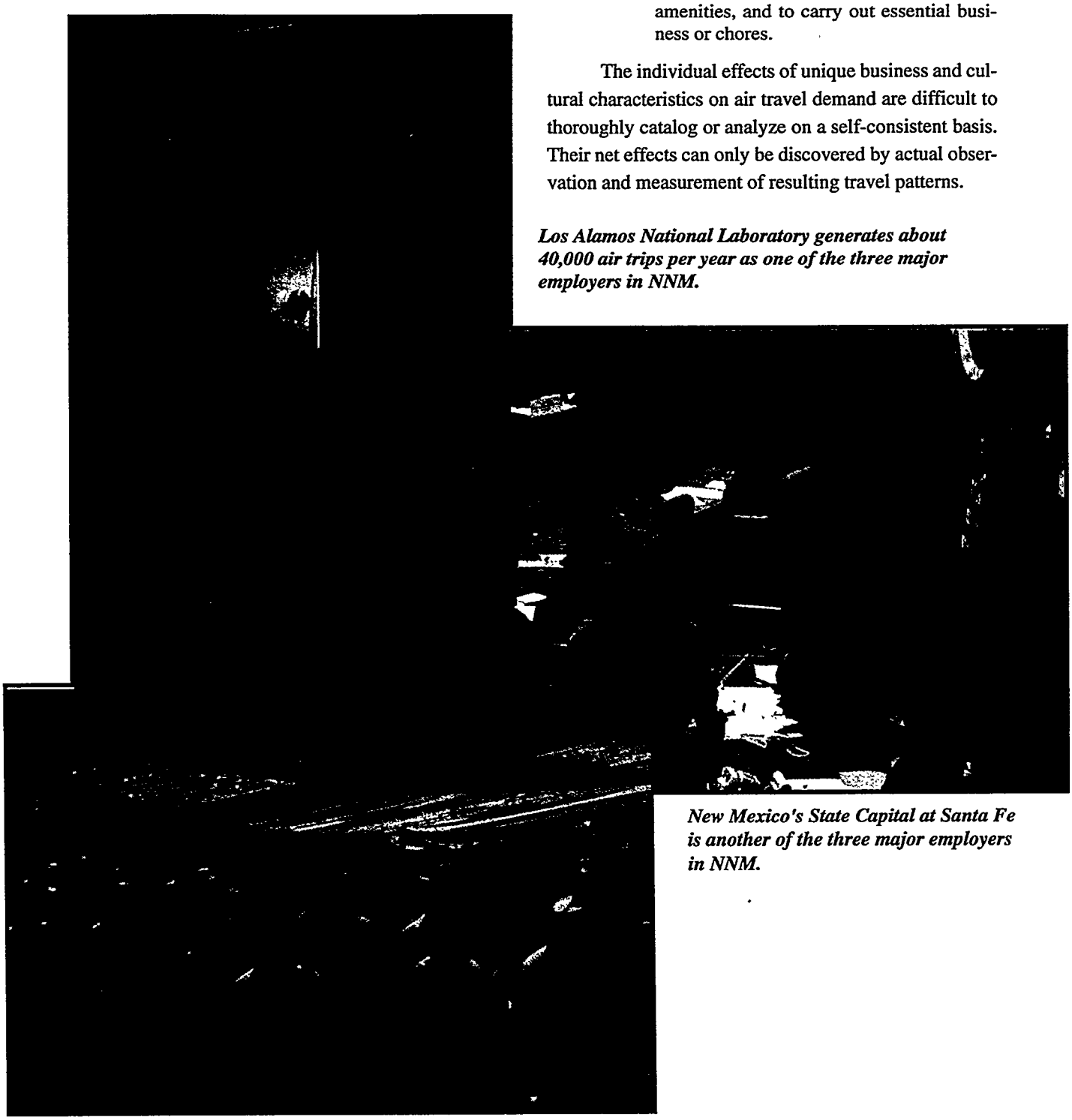
Business and cultural demographics are unique to any region. Some of the obvious unique characteristics of NNM are:

- There are three major/basic industries generating out-of-region sources of revenue to fuel the local economy: Los Alamos National Laboratory, New Mexico State Government, and Tourism. These enterprises would normally account for a major share of the business related travel in the region.
  - — Los Alamos National Laboratory generates 27,000 annual air trips for its own employees plus receives business visitors bringing its total air trip market to something like 40,000 trips.
  - — New Mexico State Government probably generates fewer air trips than similarly sized enterprises because its basic business is confined within New Mexico.
  - — Tourism by out-of-state air travelers to all of New Mexico consists of 370,000 trips. Current travel surveys indicate that about 25% of tourism destinations are in NNM, yielding a regional tourist market for about 90,000 annual air trips.
- Most of Los Alamos and about half of Santa Fe both have population bases which have large proportions of people who have migrated to New Mexico from faraway places during the last 50 years. This population requires much more than average long-distance travel to visit families and friends that still live far away. This population additionally has above average income also tending to generate more air trips than average.
- The balance of NNM's population base has a rich Hispanic culture and tightly-knit family structure that has a continuous 400-year history in the region with comparatively little out-migration. The permanence of this

cultural structure generates below average need for travel out-of-the-region to visit relatives or friends because of low historic migration to other places, so fewer than average air trips are generated.

- The business, government, education, entertainment, and retail sectors of Albuquerque offer services, facilities, and amenities that are far more numerous and complete than anywhere else in New Mexico. People in NNM often combine trip purposes (including air travel plans) to facilitate visits to Albuquerque in order to accomplish various errands and activities. Some NNM residents will choose ABQ for air travel instead of a NNM airport for these reasons of being complementary with other Albuquerque amenities, and to carry out essential business or chores.

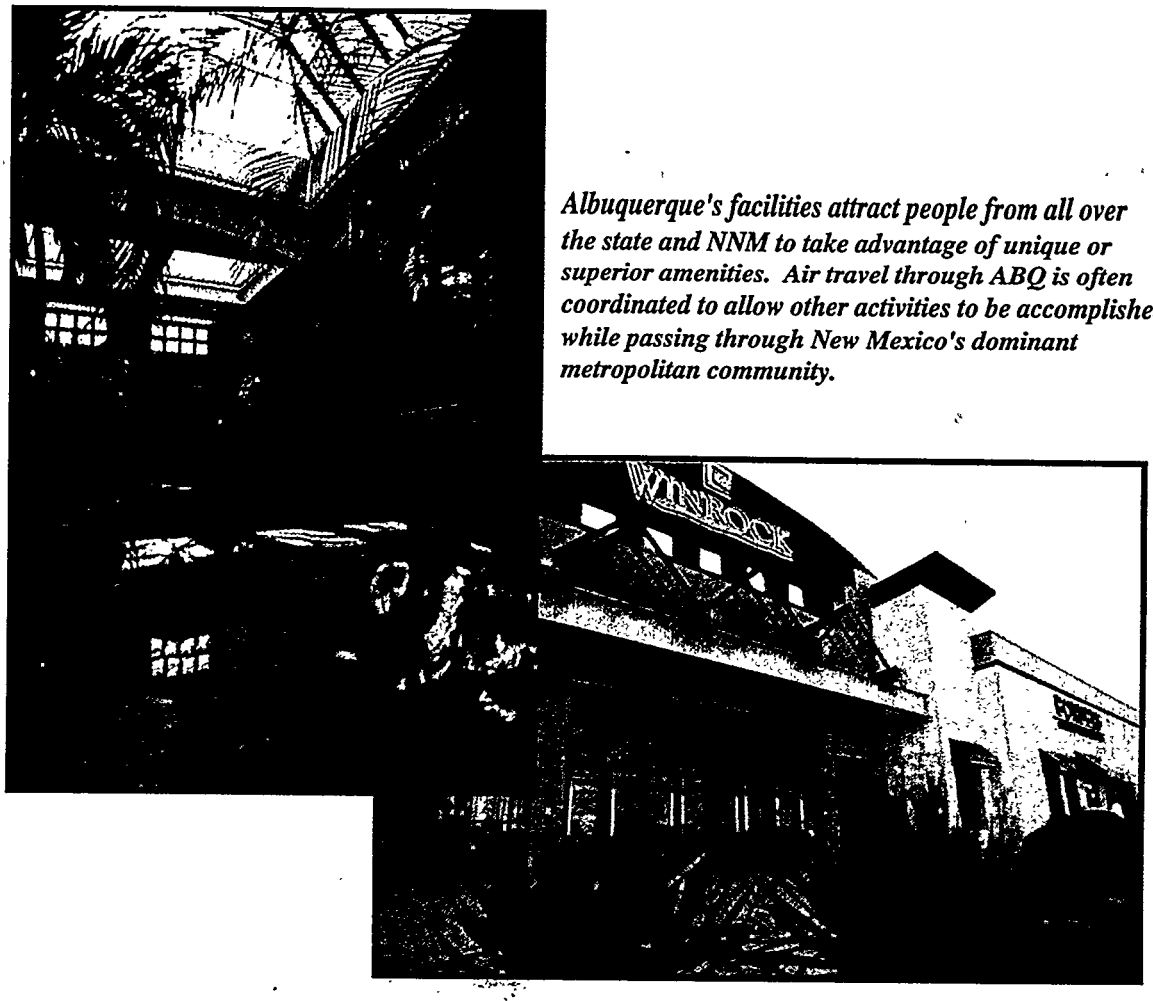
The individual effects of unique business and cultural characteristics on air travel demand are difficult to thoroughly catalog or analyze on a self-consistent basis. Their net effects can only be discovered by actual observation and measurement of resulting travel patterns.



Los Alamos National Laboratory generates about 40,000 air trips per year as one of the three major employers in NNM.

New Mexico's State Capital at Santa Fe is another of the three major employers in NNM.

Tourism in NNM is a major employer and attractor of visitors. About 90,000 annual trips by airline are made by visitors to NNM.



Albuquerque's facilities attract people from all over the state and NNM to take advantage of unique or superior amenities. Air travel through ABQ is often coordinated to allow other activities to be accomplished while passing through New Mexico's dominant metropolitan community.

5.3 NNM Estimates of Air Travel from DOT/Census Survey Data

It is not possible to create a reliable air travel estimate for NNM using the above theoretical factors of population, per capita income, population density (regional scale), and business and cultural demographics. We have incomplete information on the required parameters and lack sufficient quantitative data to make such an analysis. These factors still can be considered in pondering the meaning of other analytical results and in developing business scenarios for the potential airport's market or likely customer requirements. But it would be too ambitious to think that a trustworthy calculation could be made.

Instead, the American Travel Survey conducted by the Census for DOT can provide a good estimate of NNM air trips. Although the Bureau of the Census will not release data below the aggregation level of New Mexico or Albuquerque, this is good enough for a decent NNM estimate. Populations can be precisely counted. NNM per capita income is 8% above the statewide value, 13% less than Albuquerque — so, not so different as to believe that wild discrepancies would apply to its effect on air travel. (NNM internal-to-the-region income disparities are probably more important, but difficult to analyze.) Regional population densities are conceptually similar throughout the whole southwestern region. Business and cultural considerations within New Mexico are more alike than dissimilar, particularly compared to neighboring states or the whole U.S.

To put the American Travel Survey data in perspective, we have provided Table 5 and Figure 11 which display a variety of states with the numbers of air trips for both residents and visitors. New Mexico has fewer air trips than the other four-corners states of Colorado, Arizona, or Utah. This is consistent with our lower per capita income even though other regional characteristics are similar. New Mexico has many more trips per person than the densely populated eastern states. This is consistent with the population density concept. Overall, New Mexico residents take a few more trips than the national average, and we have many more visitors than the national average. New Mexico's summary result is that there

are 1.71 annual air trips generated for every resident (0.75 trips by residents themselves, plus 0.96 trips by visitors for each resident).

Northern New Mexico Market Size:
(population) x (air trips/person) = total NNM air trips
(225,000) x (1.71) = 385,000

This is our estimate of the number of annual air trips made to and from NNM: 385,000. Of course 385,000 is only an estimate. Looking over the numbers that go into it, perhaps as much as 20% to 30% of the population is culturally-situated or income-situated such that it is not very active in the air travel market. Perhaps 20% to 30% is so high income as to have very high air travel demands. It would be a stretch of imagination to believe that NNM is more than 10% to 20% different from the New Mexico statewide average. The 1.71 trips/person in New Mexico stacks up against a national average of 1.4, or 2.6 in neighboring Colorado or Arizona. A reasoned guess is that the overall estimate is not likely to be off by more than plus or minus 20% which results in a range of about:

300,000 to 450,000 total NNM air trips.

Every one of these trips results in either a resident of NNM getting on a plane in Albuquerque to leave the region or a visitor getting on a plane in Albuquerque on their return trip home. About 400,000 annual enplanements may be attributable to NNM passenger traffic. This can be compared to ABQ's 1997 total annual enplanements which were 3,100,000.

Annual enplanements of 400,000 represents a substantial market. If a single airport had this many enplanements it would typically be served by something like 10 to 15 jet flights/day plus 15 to 20 prop flights/day. Unfortunately, the story for NNM is not that simple. NNM is close enough to Albuquerque that passengers will always have a choice of taking some extra driving time to use Albuquerque with its superior choices of airlines, frequency of service, schedule flexibility, fares, and other attractive amenities. The airport choice decision will seriously erode the potential number of enplanements expected at a NNM airport. The following sections analyze the reality of market capture for the NNM and Albuquerque airports.

Much of NNM is quite rural with little business travel demand. It also has a rich culture of family stability and low migration to other parts of the U.S. This implies less than the average amount of personal travel to visit far distant relatives and friends (Photo credit to: Vic Stevenson, Los Alamos National Laboratory).

6. Airport Choice

The approximately 400,000 annual enplanements attributable to NNM are all being served through Albuquerque. If a NNM regional airport were to be opened, it would compete with ABQ for travelers' airport business. There is vast literature examining airport choice. The important factors identified by many studies are discussed in the next 8 sections (Sections 6.1 through 6.8 — not in order of importance; the relative importance of each factor depends on the circumstances of each situation).

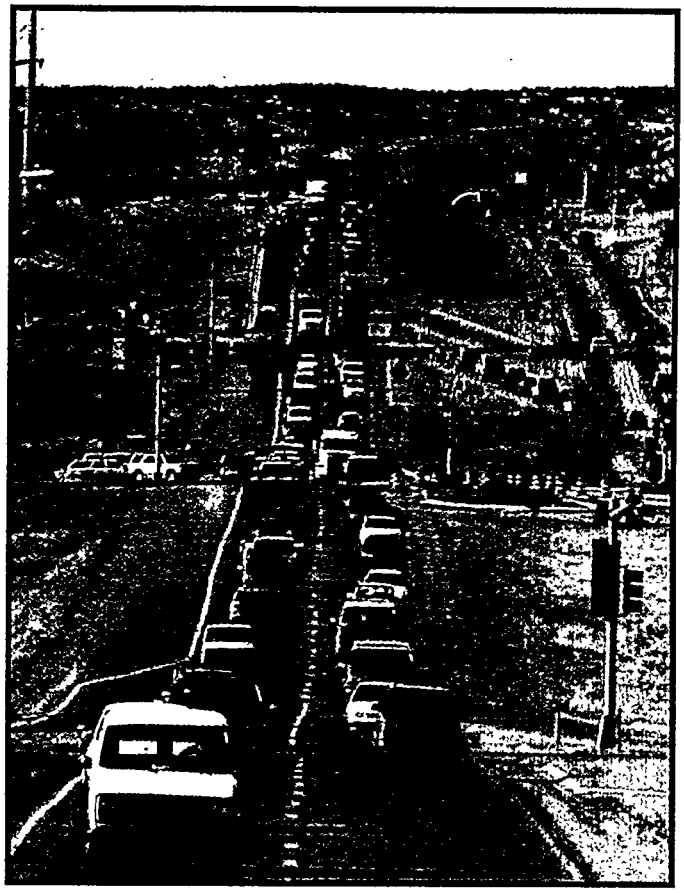
6.1 Fare Differentials

Fares are important to people's decision to fly. Any fare premiums must not exceed the dollar value of time savings, jet availability, frequency of service, or other advantages of a competing airport. Please see the preceding Section 4 on Airfares for extensive treatment of expected fare premiums at a NNM airport. Because ABQ has relatively low fares and the NNM airport is likely to have substantially higher fares than ABQ, NNM is likely to lose a lot of its market share to ABQ.

6.2 Travel Time to Airport Differentials

The main advantage of a NNM airport over ABQ would be the time savings in getting to the airport. The basic service area is defined by any person that is closer to the NNM airport than to ABQ in driving time. Figure 12 shows the driving time savings from various locations in the region. The time savings is about 30 minutes from central Santa Fe, 1.5 hours from Española northward, or 1 hour plus 10 minutes from Los Alamos. These times were derived by using the actual speed limits on roads, mile-by-mile, with a total extra delay of 5 minutes for traffic crossing all of Santa Fe and 1.5 minutes for all of Española.

Figure 12 also shows the population counts throughout the area so that estimates can be made of total time savings in the whole region. All residents of Rio Arriba or Taos counties have identical time savings because they all have to drive through the same highway choke points, even though individual's total driving times will be different depending on their starting points. The same applies to all of the other counties except for Santa Fe. For Santa Fe each census district population is identified for more detailed analysis of driving time savings. The weighted average time savings for the entire 225,000 population area is about 45 minutes one way per traveler. This is not a large number according to airline rules-of-thumb. Airlines think something like two hours driving time from a major airport is usually needed before considering offering competing air service at an outlying airport. None of our market area has time savings of as much as two hours. In any event, the typical time savings value for many travelers is at risk of being overcome by any notable fare premium for NNM, or other superior service factors at ABQ.



The advantage of a NNM regional airport is that it would save driving time, money, and aggravation over trips to ABQ. Other factors such as fares, frequency of flight availability, and airline choice all work against this advantage.

6.3 The Fare Premium vs. Time Savings Tradeoff

The potential tradeoff between fare premium and time savings is very complicated to compute. Figure 13 gives some idea of the complexity. It shows the effective population remaining out of NNM's 225,000, as fare premium percentages increase at NNM relative to ABQ. Depending on people's value of time ($5/hour, $30/hour, etc.) the time savings can be wiped out by the extra dollars paid for the airline ticket. Figure 13 uses the population distribution from Figure 12 with the associated time savings. It is based on a single ticket price ($125 one

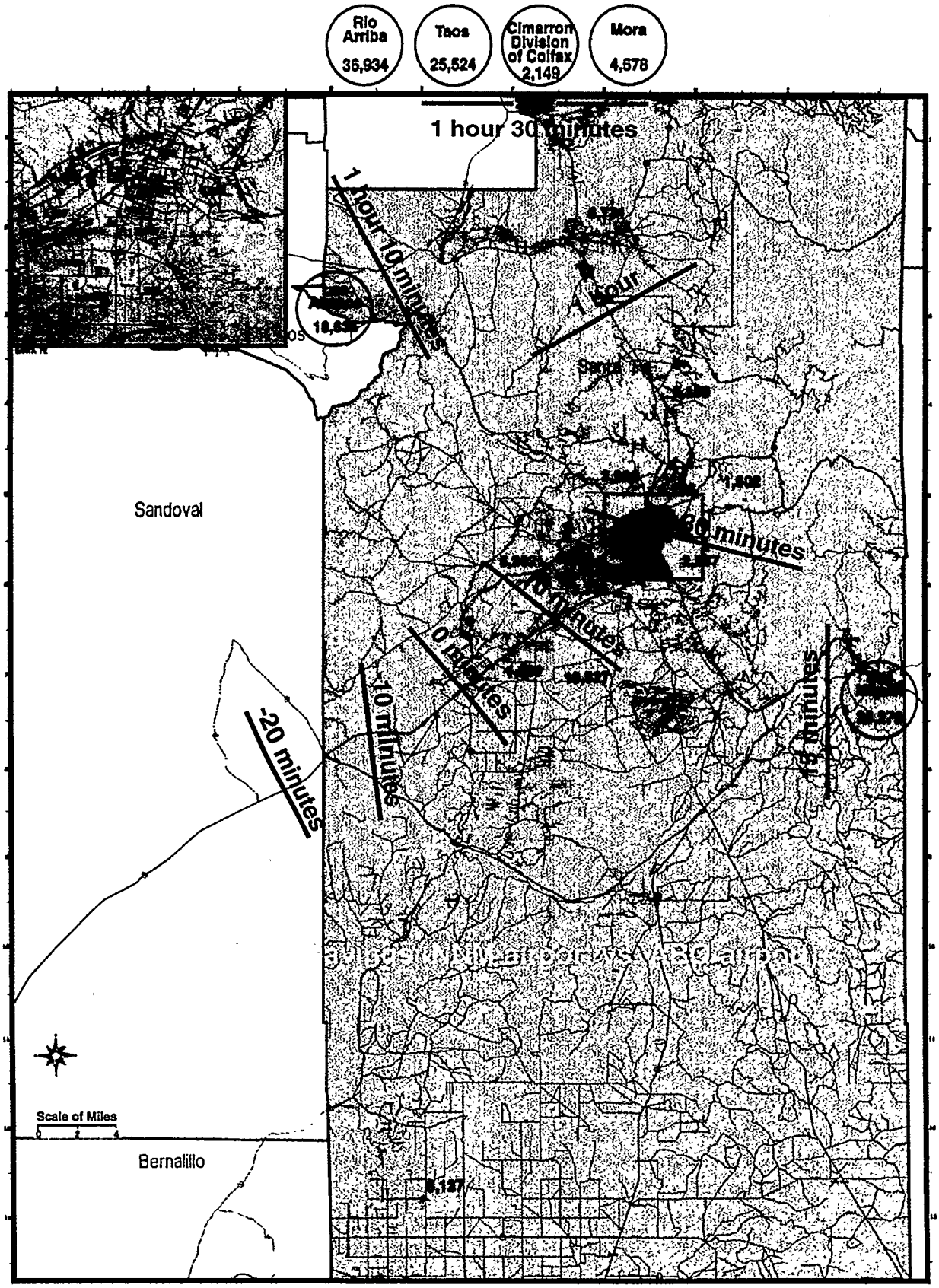


Figure 12. Time savings to travelers using a NNM airport instead of ABQ would average 45 minutes. This is the main advantage of a NNM location competing with ABQ.

way, the average ABQ one-way ticket price), so a 20% fare premium is $25. If travelers value their time at $10/hour, they would be willing to drive an extra 2 hours to save $20, so a $25 fare premium would induce them to not use NNM but to drive to ABQ. Of course travelers have widely differing values they place on their time. Some numbers which are representative are listed in Table 6.

The family of curves on Figure 13 shows that at low dollar values of time, NNM loses much of its market (effective population) to ABQ with only small fare premiums. Larger fare premiums can wipe out segments of the market that have even higher dollar values for their time. Detailed analysis is very complicated, and inadequate personal-value data exists to carry it out rigorously. The message should be clear that within actual ranges of time savings, reasonable personal valuations of time, and potential/anticipated fare premiums, a NNM airport is at high risk of losing big chunks of market share to ABQ. The actual time savings (45 minutes or less for much of Santa Fe or even the 1 hour and 10 minutes for Los Alamos) are not big by nationwide standards for regional airports. Only business travelers with quite high time-value remain solidly in the NNM market based on this concept. But business travelers would have other problems with frequency of service and variety of airline/destination choice which would tend to lure them back to ABQ.

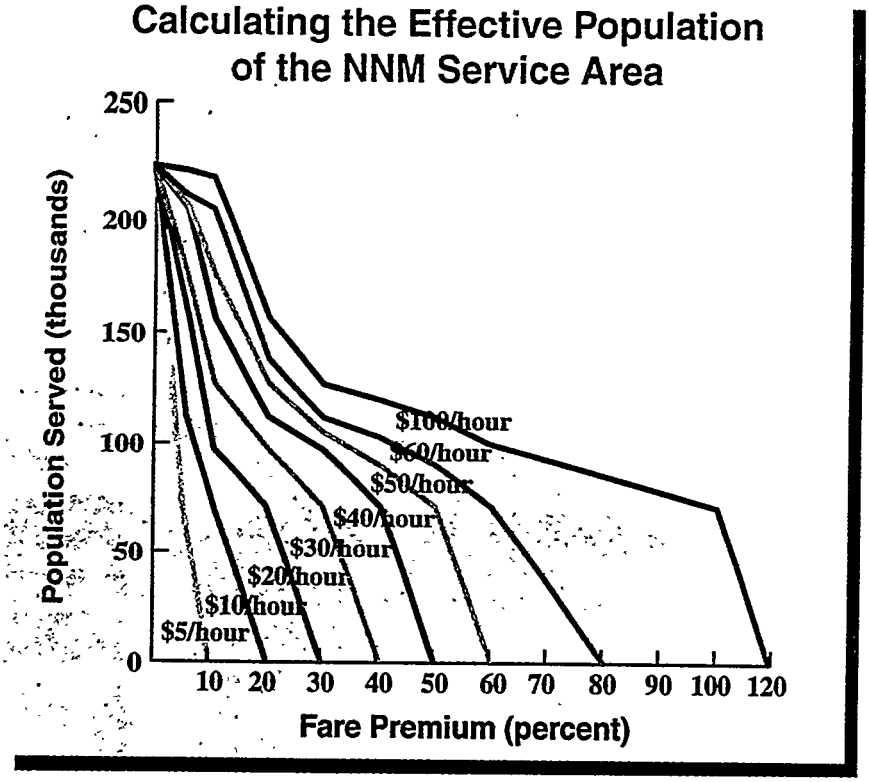


Figure 13. A NNM airport rapidly loses market share (effective population served) to ABQ as fare premiums rise — wiping out the value of time savings. Market share is also quickly lost if people put a low value on their time, $5 to $10 per hour, and are willing to put in extra driving time to get lower fares at ABQ.

Table 6. Typical dollar values of transportation time.

Study or Source	Value of Time
Literature Review, Journal of Transportation Studies, January 1998 (many motor vehicle transportation studies reviewed)	$3/hour to $10.60/hour
Federal Aviation Administration, ADA 257 658 (narrowly applied to runway congestion)	$30/hour
Department of Commerce (average wage rate divided by two)	~ $7 to $10/hour
Los Alamos National Laboratory (fully burdened personnel cost of travelers)	$95/hour

Table 6. People generally value their personal time at less than $10 per hour. This makes them willing to drive the relatively small extra time to ABQ, 45 minutes on average for our whole service area, to obtain the other advantages ABQ can offer.

6.4 Availability of Jet Service

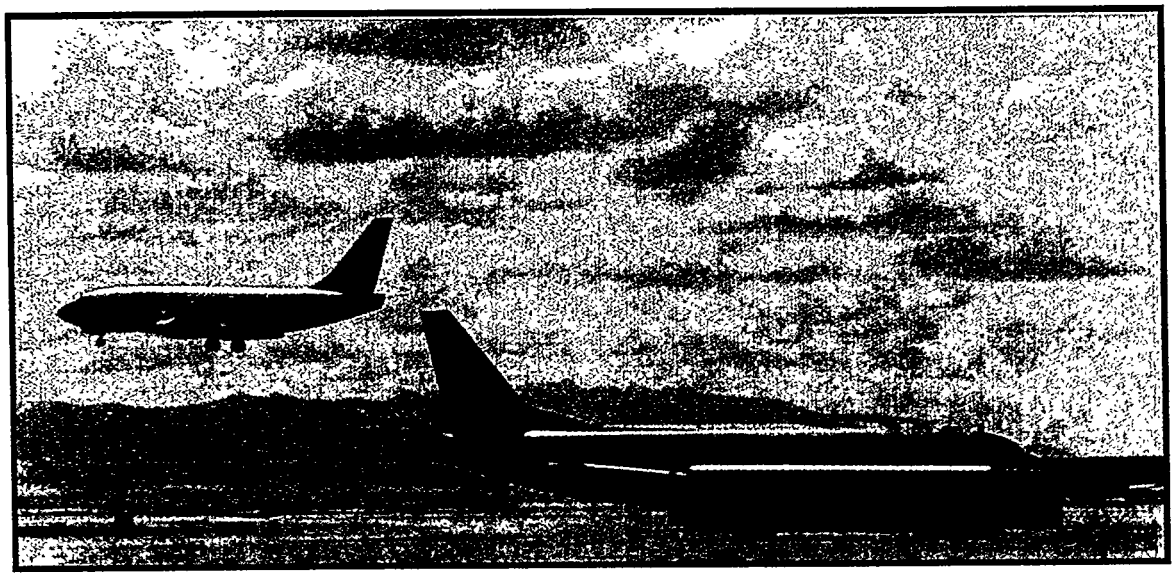
The empirical work is all consistent in finding that people have a strong preference for traveling on jet aircraft. They will drive long and far to ride on jets rather than use nearby airports with only prop service. Jets are perceived to be safer. Jets are generally much more comfortable, quieter for passengers, and have overall superiority in passenger amenities. Of course, the intent is have NNM be a jet-serviced airport. A failure to achieve enplanement levels sufficient to maintain jet service would result in a significant additional exodus of passengers to ABQ. Other analyses in this report indicate that NNM will be at the margin or below to support jet service. Our most optimistic point estimate for annual enplanements is around 100,000. There are very few jet-served airports at this low enplanement level. The threshold is usually closer to 150,000 to 200,000 enplanements, although this varies widely with circumstances. Failure to obtain or maintain jet service could result in a downward market share spiral making the NNM regional airport concept infeasible.

6.5 Relative Frequency of Schedules

Travelers have strong preferences for lots of choice among schedules and for frequent departures. This is more important to business travelers who have a higher dollar value of time and need more flexibility to work the travel schedule into their work requirements, or to be able to make changes on short notice without being penalized by long waits between available flights. Personal travelers have more flexibility to plan ahead, but still prefer more choice. The frequency of schedules comes out more important than fare differentials or travel time differentials in many studies of airport choice. Airlines frequently cite it as the most important factor that they try to manage in a market.

We estimated the total market for enplanements attributable to NNM at around 400,000. Even if NNM captured this entire market (very unrealistically high in terms of market share) it would leave ABQ with 2,700,000 enplanements. Having 15% or less of ABQ's enplanements implies having far fewer planes, and that ABQ would have at least six or seven times as many flights on average. This is a powerful frequency of flight disadvantage to travelers choosing the NNM airport and implies a major loss of market share.

A related factor is airline choice. Habit, prejudice, and frequent flier programs often cause people to strongly prefer a particular airline. A small airport such as NNM served by a small number of carriers is likely to lose market share to ABQ because travelers will remain tied to certain airlines that do not fly into the smaller market.



People have a strong preference for jet service over prop planes, so a NNM regional airport must have regular jet service to capture a significant portion of the market. Failure to have jet service will greatly reduce the NNM market size.

Business travelers are less sensitive to airfares, but more demanding of frequency of flights than personal travelers. ABQ will always have much higher frequency of service and airline choice than a NNM airport.

6.6 Travel Purpose - Business vs. Personal

Overall analysis generally must recognize big differences in choice decisions between business travel and personal travel. Business travelers usually have much less discretion in choice. Business travelers usually have a much higher dollar value of time, so they will pay higher fares, require more frequent schedules, care more about extra driving time, and have to make more short-notice changes in plans. Business travelers to NNM are more likely to make use of the time convenience of a NNM airport in spite of fare premiums, but not if the frequency of schedules or choice of destinations is insufficient. Personal travelers will care much less about extra driving time to ABQ, will be much more fare conscious, and be more insistent on flying only jets — all factors seriously hurting a NNM airport's market share relative to ABQ.

6.7 Habit

Empirical studies of new airports indicate that they often have huge startup problems in creating market share because people are habitual in airport choice. It has proven very difficult to get people to switch to a new airport even when its objective characteristics in term of fares, time saved, service offered, etc., appear to be favorable. This would be a problem faced by a new NNM airport. It is an important risk because even our most optimistic enplanement estimates are likely to be marginal and their achievement would be endangered if minimal thresholds for jet service, frequency of schedules, airline operating cost coverage, etc., were initially unreachable before habits could be changed. The NNM airport might never break out to a large enough market share to make itself viable, even if other factors indicated that it could achieve success in some longer-period time frame.

6.8 Airport Choice Analysis

The factors delineated above might be analyzed using particular facts about the NNM vs. ABQ airport circumstances to estimate quantitative market capture by each airport. But the many parameters, as well as, the empirical literature have too much variability and uncertainty to lend much confidence to any quantitative results which might be derived.

We have indicated under the discussion of each factor the likely direction of its effect on the relative market shares. Except for the time savings advantage of the NNM airport, all of the factors work to move passengers to the ABQ airport, reducing the NNM airport's market share. Because the total trips attributable to NNM are in the range of about 300,000 to 450,000 from the section

"NNM Air Travel Market Estimation," it is safe to say that the final market share for enplanements at NNM will be much less than this range.

The factors discussed throughout this section should be taken as a theoretical underpinning (with some quantitative, factual backup) to the empirical look at analogy airports in Section 7. The theoretical analysis has insufficient numerical data and parametric foundations to make it reliably robust, but its flavor supports and helps to explain/understand the look at actual facts about analogous airport situations. The look at analogy airports that follows brings the NNM airport's estimated market down to a range of about 5,000 to 50,000 annual enplanements. That result is consistent with the theoretical market share reducing factors discussed previously.

7. Analogy Airports Used to Estimate NNM Airport Market Size

We gathered facts about airports which exist in analogous situations to NNM. The idea was to see how similar airport markets actually work in the real world. Table 7 shows facts about 18 airports which have similar characteristics to our NNM situation. The criteria used to try to identify similar situations were:

- Region's population size is not too different from our 225,000.

Table 7. Analogy airports (DOE complex and other locations).

DOE Complex Locations	Annual Enplanements	Population	Daily Jets	Daily Props	Miles to Major Airport via Highways	Major Airport's Enplanements (millions)
Amarillo, TX	450,000	361,000	13	11	285 - Albuquerque	3.1
					347 - Dallas	26.6
Augusta, GA	234,000	526,000	6	11	159 - Atlanta	30.4
					159 - Charlotte	10.0
					(68 - Columbia, SC)*	.5
Idaho Falls, ID	115,000	228,000	4	14	283 - Boise	1.2
					226 - Salt Lake City	9.5
Pasco, WA	170,000	281,000	4	25	213 - Portland	6.1
					219 - Seattle	11.5
					135 - Spokane	1.6
Other Locations						
Bakersfield, CA	111,000	543,000	0	32	110 - Los Angeles	22.7
Bay City/Midland/Saginaw, MI	291,000	527,000	13	10	130 - Detroit	14.1
Cheyenne, WY	22,000	94,000	0	6	102 - Denver	15.2
Laramie, WY	10,000	47,000	0	4	137 - Denver	15.2
Cheyenne/Laramie, WY combined	32,000	141,000	0	10		
Chico, CA	20,000	207,000	0	5	86 - Sacramento	3.3
Redding, CA	68,000	160,000	0	12	163 - Sacramento	3.3
Yuba City, CA	0	58,000	0	0	45 - Sacramento	3.3
Eugene, OR	384,000	675,000	11	24	116 - Portland	6.1
Fort Smith, AR	97,000	178,000	0	20	163 - Little Rock	1.3
					116 - Tulsa	1.6
Grand Junction, CO	138,000	157,000	0	21	248 - Denver	15.2
					254 - Salt Lake City	9.5
Montrose, CO	60,000	43,000	0**	12	261 - Denver	15.2
Grand Junction/Montrose, CO combined	198,000	200,000	0	33	330 - Salt Lake City	9.5
Rockford, IL	38,000	378,000	0	9	73 - Chicago	30.5
Terre Haute, IN	4,000	212,000	0	3	74 - Indianapolis	3.3
Yuma, AZ	76,000	107,000	0	20	185 - Phoenix	14.8
					182 - San Diego	6.5
Northern NM	??	225,000	??	??	70 - Albuquerque	3.1

* Columbia also mainly served via Atlanta and Charlotte
** 3 weekend-only jets during ski season

Table 7. Regional airports with analogous situations to NNM show that jet service is relatively rare. Most are much farther from their competing major airport than NNM is to ABQ, and populations significantly greater than NNM are usually required to obtain the level of service hoped for in the NNM airport concept.

- Population is counted in the same way as done for NNM (i.e., including outlying counties lying in the direction even farther from the major nearby airport). It must be fairly easy to define the regional airport's service area.
- Region is served by a major competing airport with multimillions of annual enplanements. No other small airports with national service are nearby.

About 50 to 70 situations were given a preliminary evaluation. Typically in the East the populations are larger and more densely packed, and the airports are close together in all directions with many possibilities for airport choice. There are very few situations that looked like reasonable analogs to NNM in the East. In the West and Midwest quite a few situations were rejected because the regional populations were too low (and therefore, they also had minimal prop air service — not a suitable analog for our hoped for regional jetport), or there was no major airport anywhere nearby to compete against (being unrealistic as an analog because one of NNM airport's biggest barriers to success is strong, high-quality ABQ competition).

Table 7 contains facts about the 18 airports we did identify as close enough analogs to NNM's situation. Four of these airports are identified as DOE Complex Locations. They just happened to meet the selection criteria above. They also have the characteristic of having a major employer with demographic, business, and travel characteristics like Los Alamos National Laboratory as being one of the most dominant industries in their region. This made them particularly interesting analogs.

7.1 Observations about the Facts

- The 4 DOE complex location airports all have jet service although it is very minimal except at Amarillo which is a day's drive from any major airport and serves a population 50% larger than NNM. Of the remaining 14 airports, only 2 have jet service and both of these have populations more than twice that of NNM.
- Most service, even at airports having daily jets, is by prop planes. At the 18 airports there are totals of 51 daily jets and 239 daily props.
- Annual enplanements are significantly less than the total regional population at all airports, except Amarillo and Grand Junction/ Montrose (both regions are a day's drive from any major airport).
- The ratio of annual enplanements to regional population is typically 0.5 to 0.6 (or less for airports that are relatively close to their major competing airport). An uncritical application of this ratio to NNM would yield annual enplanements of 110,000 to 135,000. (But NNM is closer to ABQ than almost all of the analogy airports.)
- The ratio of enplanements to population becomes less as the regional airport becomes closer in driving miles to the major airport. This relationship is very strong and is further analyzed in Section 7.2.

7.2 Regional Airport Enplanements Depend on Distance from Major Airport

One of the most regular features of the analogy airport data is that the small airports' market shares drop as they get closer to a major airport. This is not surprising, as shorter driving distance reduces their time savings advantage. It is also consistent with the discussion in Section 6, Airport Choice, where most other choice factors usually favor the larger airport. This notion was confirmed during the course of conversations with small airport managers while we were seeking their enplanement data. They frequently commented on the relative closeness of NNM to ABQ and how that would make it difficult to establish any significant regional service other than possibly a shuttle to ABQ. Figure 14 shows our analogy airports on a map of the U.S. It should be noted that

Analogy Airports

DOE Complex Locations	Annual Enplanement/ Population Ratio	Miles to Major Airport
Amarillo, TX	1.25	285
Augusta, GA	.44	159
Idaho Falls, ID	.50	226
Pasco, WA	.60	135
Other Locations		
Bakersfield, CA	.20	110
Bay City/Midland/Saginaw, MI	.55	130
Cheyenne/Laramie, WY	.23	102
Chico, CA	.10	86
Redding, CA	.43	163
Yuba City, CA	0	45
Eugene, OR	.57	116
Fort Smith, AR	.54	116
Grand Junction/Montrose, CO	.99	252
Rockford, IL	.10	73
Terre Haute, IN	.02	74
Yuma, AZ	.71	182

Figure 14. The ratio of enplanements to population drops as the distance to a major airport gets closer. NNM is very close to ABQ compared to the general case for our analogy airports. This relationship is plotted in Figure 15.

NNM's population is much closer to ABQ than most of the analogy airports. Figure 14 also arrays the data on the ratio of enplanements to regional population versus the driving distance to a major airport. This relationship is plotted in Figure 15 and mathematically analyzed.

Figure 15 plots these analogy airport data to show the effect of shorter driving distances to a major airport in eroding the share of population that actually is captured by a regional airport. The ratio of enplanements to regional population is shown as if it depended only upon the driving distance to the nearest major airport. The relationship is clear in Figure 15. The Los Alamos Statistics Group helped to examine these data to evaluate their mathematical rigor. Mathematically, the regression analysis says that for this data set, 80% of the variation in enplanements/population is explained by driving distance separating the airports. The actual slope of the line is insensitive to adding or dropping particular data points lending further confidence to the quantitative results.

7.3 Mathematical Predictions from the Data

The NNM population center is about 70 miles from ABQ. The mathematics behind the graph of analogy airport data gives an enplanement/population ratio of 0.125 for this mileage.

(population) x (enplanements/population) = annual NNM enplanements
(225,000) x (0.125) = 28,000

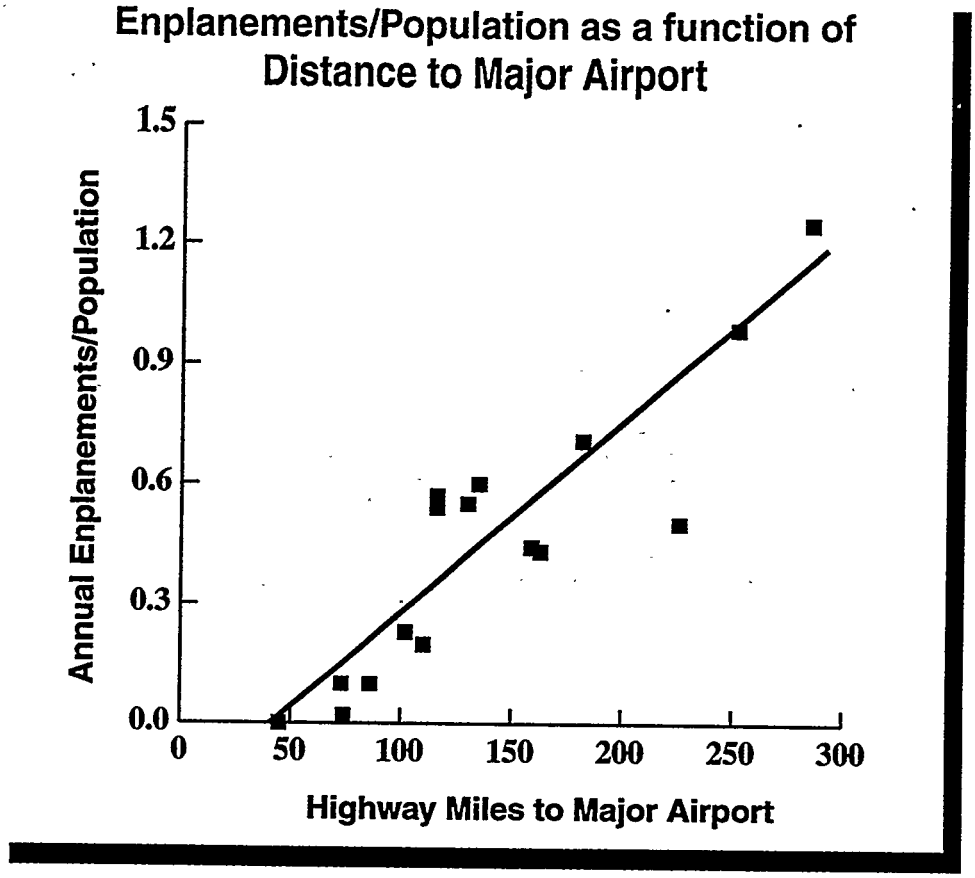


Figure 15. For our analogy airports, the percent of annual enplanements to population drops predictably as the regional airport gets closer to a major airport. NNM's population is on average much closer to ABQ than most of these airports and the mathematics yields a very low expected percentage of our population that would actually use a NNM airport.

So a basic calculation estimates our NNM airport's enplanements at 28,000. The 28,000 statistical estimate has wide bounds on its possible underlying range. The 90% mathematical confidence bounds are:

5,000 to 50,000 annual NNM enplanements (90% confidence bounds).

A different statistical result derived from the data is the driving distance from a major airport where the expected passenger enplanements at the smaller airport become zero (i.e., there is no use whatsoever of an airport because it is too close to the major airport).

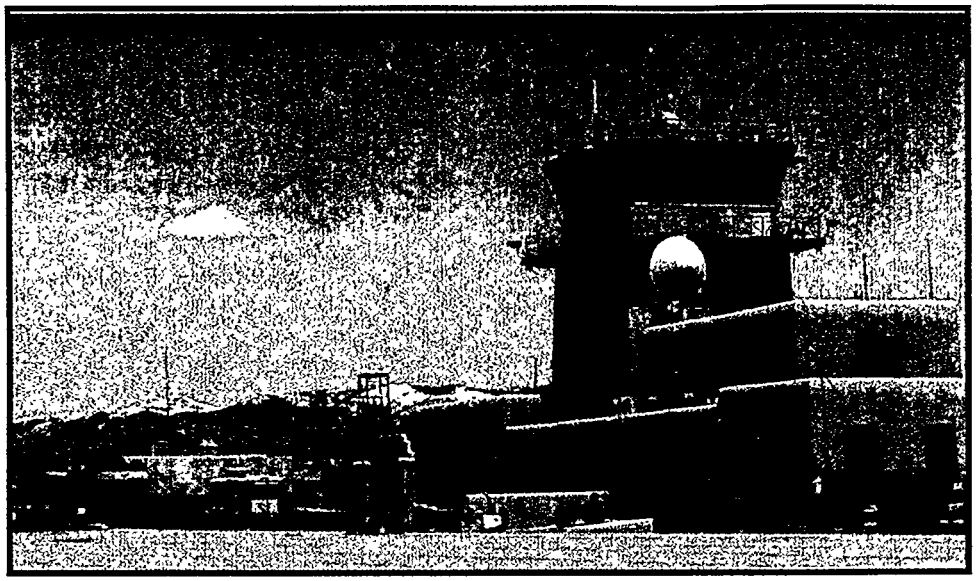
enplanements = 0: if 42 to 82 miles or less from major airport (90% confidence bounds)

This mileage range estimate for no service is very consistent with many airport situations nationwide.

The reasonableness of the mathematical modeling results using the analogy airports to estimate the NNM market, 5,000 to 50,000 annual enplanements for NNM, is confirmed by actual NNM experience. (The center of our estimated range is 28,000.) Figure 16 shows the actual combined Los Alamos and Santa Fe enplanements for the most recent years when both airports had commercial flights. (Los Alamos has not had regular service since 1995.) These airports carry the only current NNM commercial passengers, and these people have enplaned at the rate of 20,000 to 24,000 for most recent years.

7.4 Implications of Estimated Enplanement Calculations

The estimated 5,000 to 50,000 annual passenger range is well below the threshold for an airport to have regular jet service at present. For example, Idaho Falls,



The Santa Fe airport is jet capable. It has never achieved an ongoing level of regular enplanements of more than a few percent of the community's population. In several recent years it has had no airline service at all. Nonetheless, Santa Fe's airport is noted as the best NNM regional airport candidate by airline executives, airport managers, and FAA officials.

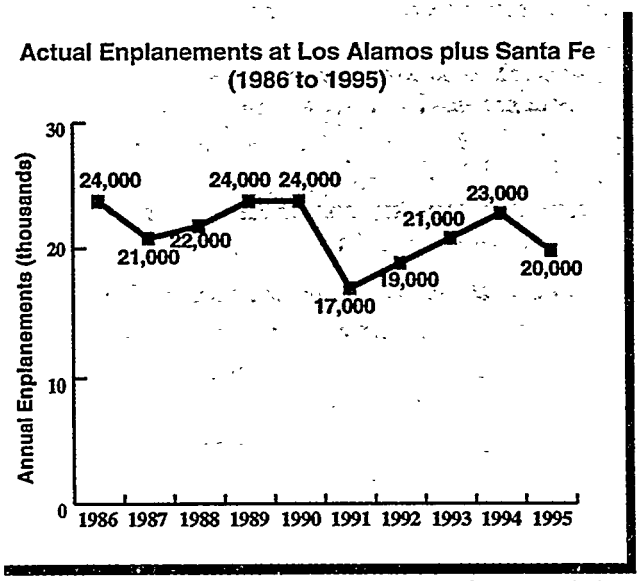
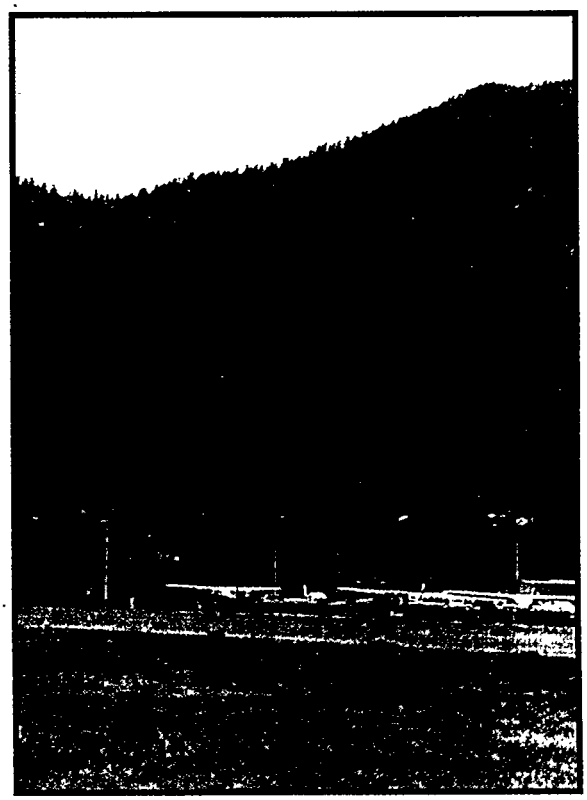
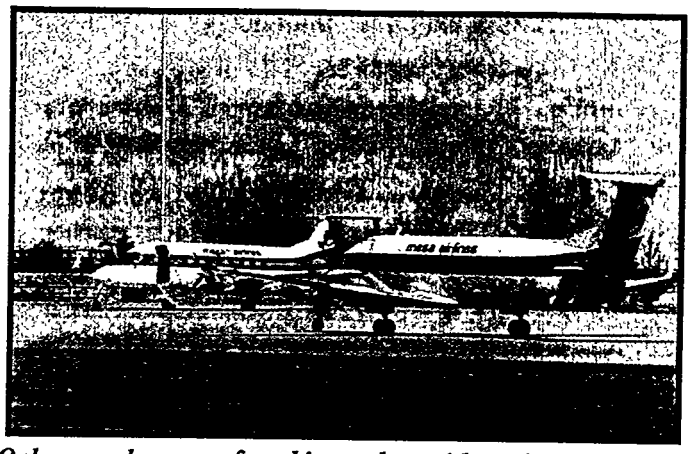


Figure 16. The actual enplanements at the two existing NNM commercial service airports, Los Alamos and Santa Fe, during the last 10 years before termination of regular service at Los Alamos were usually around 20,000 to 24,000.



The Los Alamos airport was the fourth busiest in New Mexico for decades (ranking after ABQ, Farmington, and Roswell). Service declined from a peak in the mid-1980s until the DOE subsidized service by Ross Airlines was lost completely in 1995. Three subsequent airline entrants failed to establish a viable market (Eagle, Peacock, and Mesa) and there has been no service since Mesa pulled out due to low passenger loads in May 1996.

Idaho has minimal jet service at 115,000 annual enplanements (its population is very similar to NNM's population in numbers — 228,000 and other factors). Delta Air Lines recently is averaging about 90 jets/month into Idaho Falls with annual jet passengers of about 60,000 during 1997. The balance of Idaho Falls enplanements (55,000/year) is on prop planes. The 90 jets/month barely meets typical airline rules-of-thumb for 3 planes a day to sustain a minimal service of any kind into any airport. Pasco, Washington with a 25% larger population does get 170,000 annual enplanements, but has minimal jet service with almost the same counts as Idaho Falls. The extra Pasco passenger enplanements are all on prop planes shuttling passengers to Seattle and Portland.

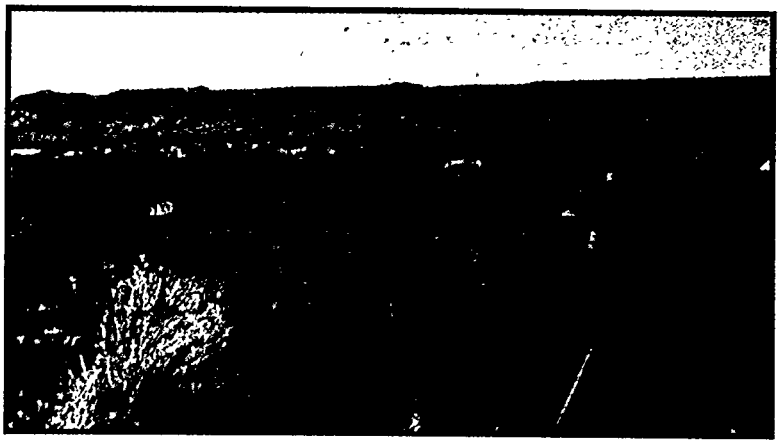


Only prop planes are found in markets with enplanements as low as our forecasted range of no more than 50,000 passengers.

Eyeball optimism applied to Figure 15 could find quite a few analogy airports with enplanement/population ratios of about 0.5 to 0.6. This could imply a market for 110,000 to 135,000 annual enplanements at a NNM regional airport. This level of business could sustain minimal daily jet service. The problem with this idea is that NNM's population center is much closer to ABQ than the analogy airports with enplanement/population ratios as favorable as 0.5.

The estimated range of 42 to 82 miles for the distance at which a small airport loses its market completely to a multimillion annual passenger airport is consistent with many observations around the U.S. It is also conservative compared with some airlines' rules-of-thumb that you need to be at least two hours driving time from another airport before a smaller airport can sustain any significant viable air traffic. The location of a large fraction of our NNM population is within this distance of having no air service at all. About half of NNM's population resides less than 70 miles from ABQ. Per capita incomes by location are skewed toward the closer-to-ABQ populations of relatively high income Santa Fe and Los Alamos counties. These counties have to be considered as having the lion's share of the potential air travel market in NNM. The more distant counties have very low per capita incomes and relatively undeveloped business sectors that support much less air travel than Santa Fe and Los Alamos.

Overall, these estimates based upon real analogy airports around the U.S. present a pessimistic prospect for the level of activity that would be expected at a NNM regional airport. These estimates are grounded in what is happening in the real world with similar regions. They are consistent with the broad views of the airline executives that were interviewed for this report, i.e., the prospects are very poor for a NNM regional airport having anything other than prop, shuttle service to ABQ or possibly another regional hub. The estimates are also consistent with the actual history of NNM regional commercial air service where Santa Fe has never achieved as many as 20,000 annual enplanements. And, where by the mid-1990s Los Alamos had lost its ABQ shuttle service after decades of being the fourth busiest airport in New Mexico (Los Alamos achieved its peak annual enplanements of 23,000 in 1986 and these steadily declined to less than 10,000 by 1992). The overall conclusion has to be that NNM's passenger market prospects for a true regional airport are poor.



The more rural parts of NNM that are most distant from ABQ's competitive airlines service have relatively low per capita demand for air travel. The most air travel demand comes from the closer to ABQ areas of Santa Fe and Los Alamos.

8. Airline Executive Interviews

We sought input for our NNM airport analysis from airlines. The airlines contacted were America West, American, Continental, Delta, Frontier, New West, Northwest, Reno, Southwest, TWA, United, and U.S. Airways (Figure 17). The airlines were contacted by telephone and sent a short information sheet summarizing information about the NNM population demographics and airport, plus a few general questions to help guide them as to what counsel we were hoping to receive from them. Figure 18 is the summary information sheet that each airline received from us.

Ten of these 12 airlines provided significant advice and guidance. The others were apparently reluctant to participate at this stage of analysis or the correct person was never tracked down. There were three other (unlisted) airlines that we were not even able to get enough positive response from to send them our information sheet.

In order to assure fairly candid and open responses we promised not to attribute specific comments to particular people or their airlines. The summary which follows does not focus on any specific airlines, but synthesizes the conversations we had with the 10 actively responding airlines. In several cases we spoke to 2 knowledgeable people from the same airline, so the responses represent 14 knowledgeable airline executives. Most of the respondents were executives directly responsible for planning or scheduling.

8.1 Summary of Interviews

8.1.1 General — Synopsis of Conclusions

1. There is no interest from any existing ABQ airline in serving a NNM airport in addition to their existing ABQ service.
2. The population of NNM is (a) too small, and (b) too nearby to ABQ. So, there is no sound business strategy for existing airlines to serve NNM, dividing their resources and schedules, without moving into a worse competitive position.
3. There is no interest in using NNM to compete with airlines already at ABQ from any of the airlines currently not in the ABQ market. Those that have no current ABQ service expressed even less interest in NNM than they would in entering/re-entering the ABQ market.

Figure 17. Contact was made with 12 airlines. Interviews were conducted with 10 of these airlines including 14 different executives. Most were pessimistic about the prospects for a NNM airport.

Northern New Mexico Proposed New Regional Airport

Airport Market Information, and Request for Advice and Guidance

Introduction

The New Mexico State Legislature passed a memorial during the February 1998 legislative session calling for the conduct of a study to determine the feasibility of building a regional airport in northern New Mexico. This study is being coordinated by the Los Alamos National Laboratory in Los Alamos, New Mexico.

Los Alamos personnel have gathered and analyzed demographic and air service information for New Mexico and northern New Mexico, as well as, other U.S. regions with apparently similar air service market characterisitics. We are seeking discussions of our findings about the potential northern New Mexico market with corporate airline officers willing to give us advice and guidance as to the market viability of such a new regional airport. The following is a brief summary of information about the proposed airport project and the market in northern New Mexico.

Airport Market Information Summary

Proposed Airport Location:
Vicinity of Española or Pojoaque, 15 to 25 miles north of Santa Fe, about 85 road miles north of Albuquerque, or 330 road miles south of Denver.

Airport Plan:
Airside: Two perpendicular runways capable of handling jet aircraft. Terminal building with four jetway-equipped gates. Estimated construction budget of $106 million. Suitable BLM land is available in several locations.

Market Service Area:
Counties of Santa Fe, Los Alamos, Taos, Rio Arriba, Mora, western Colfax, and San Miguel.
Population: 225,000
Per Capita Income: $19,700 (vs. New Mexico statewide: $18,200; or U.S.: $23,300)
High Income Cluster: Santa Fe plus Los Alamos (130,000 population, $24,700 income)
Major Industries: Los Alamos National Laboratory, New Mexico State Government, Tourism

Estimates of Northern New Mexico Air Travel Market Size:
From DOT/Census 1995 American Travel Survey data: 169,000 annual commercial air trips by residents
216,000 annual commercial air trips by visitors to service area
385,000 estimated northern New Mexico annual commercial air trips

Proposed regional airport would share these trips with Albuquerque's airport:
Analogy airport situations (regional airports with similar area populations, competing with a major airport having millions of annual enplanements) indicate potential for annual enplanements possibly as high as 135,000, possibly as low as 52,000 or less, with a reasonable preliminary estimate somewhere around 100,000 for northern New Mexico.

Unique Market Niches:

Los Alamos National Laboratory:
27,000 annual air trips by employees during 1997, plus probably half again as many by official visitors to the Lab, creating a distinct nondiscretionary market of 40,000 annual trips.

Regional Tourism:
370,000 annual out-of-state-visitor pure leisure trips are by commercial air into New Mexico. Current travel surveys indicate about 25% of destinations are in northern New Mexico, yielding a regional tourist market for about 90,000 annual air trips.

Request for Advice and Guidance

We would appreciate receiving your views on the following topics. Your advice and guidance will be used to help evaluate the potential feasibility of proceeding with a new airport development project in northern New Mexico.

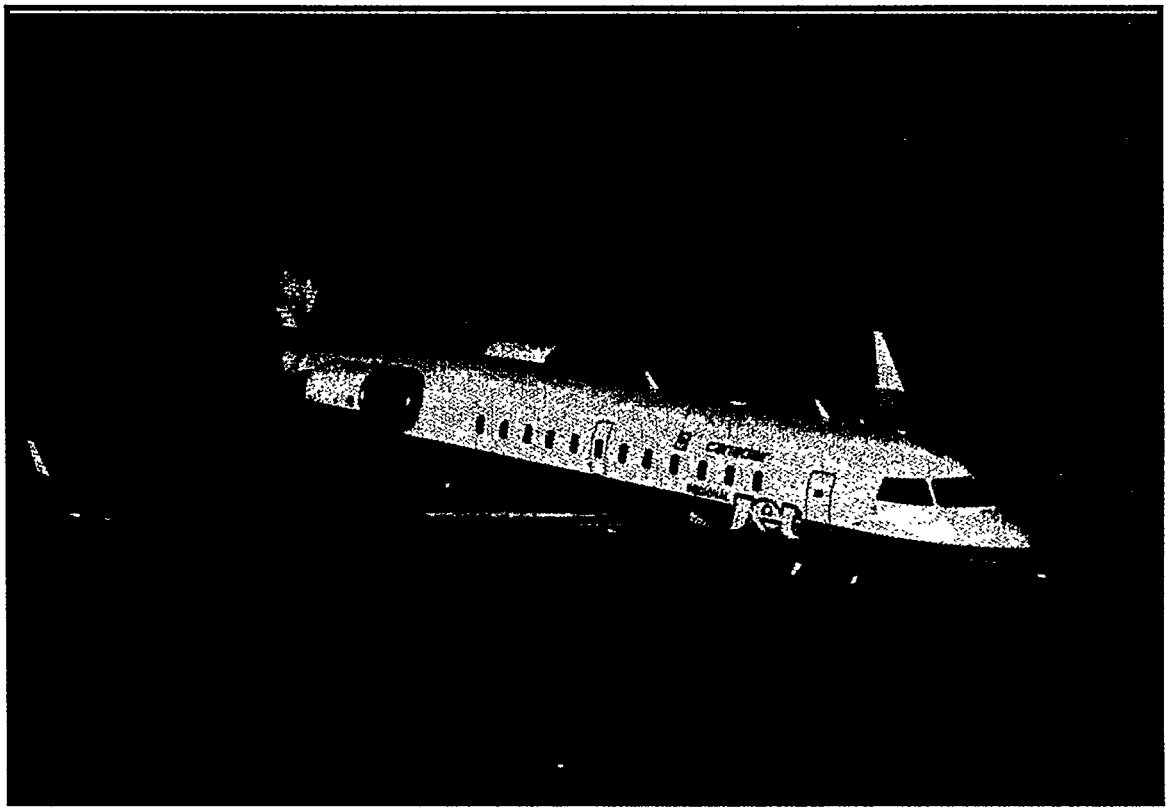
1. Would your airline be interested in serving this northern New Mexico market through a new airport?
2. Do you think such an airport is needed or viable, whether or not your own airline is interested?
3. What typical level of air service would you envision for a market with these characteristics? (The proposers see it as a regional airport with daily jet service to major hubs such as Phoenix, Dallas, Denver, or Salt Lake City - not merely as a feeder or commuter service to Albuquerque.)
4. Can you describe minimum market requirements or rules-of-thumb that you typically apply in deciding to enter a market?
5. What other advice and guidance can you provide to help us evaluate the feasibility of this new airport project?

Figure 18. Northern New Mexico proposed new regional airport request for guidance sent to airlines.

4. A new entrant (new startup) or low-cost airline sometimes has a strategy of moving into a regional airport (such as NNM) hoping to take some market share away from the existing airlines at a large airport (such as ABQ). This is thought to be not viable in our NNM case because Southwest has such a strong presence at ABQ and fares at ABQ are too low to compete against from a secondary airport.

8.1.2 General — Airline Rules-of-Thumb

1. Minimum population sizes for regional airport service areas are often around 500,000 (if there is any major airport anywhere in the vicinity). Special niche markets can overcome this rule, but they would be very rare. This rule is not applicable in some very sparsely settled regions with no major airports such as Montana, Idaho, or West Texas.
2. At least a two hour driving time to a major airport is required before any market is usually justified for regional airport service. Others phrase this rule as needing at a bare minimum to be more than 100 miles away (or else have a very large population).
3. Personal travelers will drive several (three to four) hours to save on airfares. Small airports cannot compete with large airports unless they can keep fares to nearly the same level for personal travelers, or are very far away from the competing airport.
4. Viable airline markets must have at least three daily flights: morning, midday, and evening. Four is preferred as a minimum if possible. Without this you have no hope of meeting the round-trip business travelers' requirements and the market will not work. Normal seasonal and random variance makes even these minimums questionable and more flights per day than three to four are important to maintain flexibility and long-run market viability. Also, on-the-ground infrastructure costs are too high if they cannot be spread over enough flights.



Regional jets such as the 50 to 70 seat Canadair models can make regular jet service viable in much smaller markets because the minimum three to four flights per day can support profitable load factors compared to the larger jets which cannot. Hundreds of these smaller jets are on order and will be entering service over the next few years. Successful operating results, cost per passenger, and traveler demand have not yet been demonstrated on a large scale, but these aircraft are expected to change the nature of regional service and enhance the potential market feasibility of many smaller markets. (Photo credit to: Bombardier Aerospace, Garratt Boulevard, Downsview, Ontario, Canada M3K aY5)

8.1.3 Specific Comments (Paraphrased from Airline Executives)

This section contains streams of comments from the actual interviews conducted with planning and scheduling airline executives. Not all are in agreement on all points, but the flavor is very consistent in doubting the viability of a NNM airport, and the basic reasons for the doubt. One startup airline is the general exception, but it never got off-the-ground, possibly confirming the mainline consensus.

It can be argued that it is in the business interest of the existing airlines to take this opportunity to try to stall or stop a new airport which they expect to hurt their ABQ business positions. But the reasons proffered against the NNM airport's feasibility seem logically and strongly based. They are consistent with the balance of facts and analysis in this report. We believe that the responses were generally candid, sincere, and astute.

Only minimal organization or editing has been imposed on this stream of responses. The reader should quickly scan through the material to develop their own flavor of the gist of the airline executives' advice and guidance.

8.1.3.1 Market Analysis Comments

Comment 1. *Airlines focus on how much market share can be captured from existing traffic when determining which markets to enter. They use quality of service (QSI) indices (nonstop vs. connections, etc.), frequency and timing of service, fares, etc., to array possibilities against the competition. Unproven markets are avoided (such as NNM).*

Comment 2. *Decision to serve a market depends on lots of factors not just population, but 225,000 is awfully small. If there is a lot of certain growth potential in the immediate future or if much of the travel is business-serving (higher fares) rather than tourism or personal, then a smallish population area might be viable — not like what we seem to have in NNM.*

Comment 3. *Biggest thing against NNM is that it is less than 100 miles from ABQ. This does not work.*

Comment 4. *Major airlines have about five or six people doing the intellectual work of scheduling and choosing the city pair markets.*

Comment 5. *The major airlines cannot realistically operate in NNM anyway — could not do it because of its aircraft being the wrong size (too big, too many seats).*

Comment 6. *To evaluate a city pair market some airlines use the QSI. Example is nonstop = 1.0; 1 stop = 0.14; connection = 0.0762. Add them all up for a market. Example: 10.75 total for all existing flights. Then if you put in 3 nonstops you should get 3/10.75 as a market share. This can be boosted by a 20% premium for correct scheduling,... factors vary depending on other things — tables of these are published. It seems to work pretty well. Also there are factors for market stimulation such as low fares, etc.*

Comment 7. *Why in the world would anyone want to have another airport serving this same New Mexico market? Our airline is not at all enthused from a business point of view.*

Comment 8. *Our airline has no set minimum size of market, but it must have low operating costs.*

Comment 9. *We have counted license plates at some airports — shows that people will drive several hours to get better fares. Driving time is not important to people — what counts are fares.*

Comment 10. *NNM is too small. It would force a frequency of flight service that is too low, so people would not use the service. This is even worse if there is more than one airline splitting the market.*

Comment 11. *Anything less than two hours driving time from a major airport makes it too tough to warrant a new airport even in much larger markets than NNM.*

Comment 12. *Basically NNM is much too small, plus ABQ handles the service area fine — implying no sense to a new NNM location.*

Comment 13. *NNM market is very much too small — it does not have a sustainable amount of traffic. In a small market, the normal variance in traffic also makes things worse with the inability to reduce minimal flight frequency, so airlines would get less than break-even on too many flights — never can sustain this kind of service.*

Comment 14. *Most growth is always from established airports. A new airport is always hard to forecast and risky. The way to look at it is filling another spoke from a major hub, but there is no way to have confidence in a new market.*

Comment 15. *We would look at ABQ vs. the "catchment" area of points north. You need to see if incremental passengers can be gained by serving the north of New Mexico separately or are they all in the ABQ catchment area anyway? The obvious conclusion appears to be the whole population is in the ABQ area already, so no gains would accrue from new service to NNM.*

Comment 16. *Three to four daily flights is minimum in any market, otherwise people will not use an airline. Plus, all people like a nonstop but this requires much more than the minimum three to four flights per day at any airport.*

Comment 17. NNM might have some benefit (niche) for tourism, but is too tiny a market to have this be the driver to establish service... and ABQ handles that traffic pretty well now.

Comment 18. People do not care about driving time and airlines do not worry about it when choosing an airport. Will drive a long way to save on airfare.

Comment 19. Most airlines (maybe all airlines) do not have high profits in ABQ. To cut into this base with a NNM airport could drive some out of the area altogether. This could lead to less competition, worse service, and higher fares for all of New Mexico.

Comment 20. At $30 to $40 million/plane our airline will only consider an established traffic base and figure on market share — we do not want to test brand new airports. It is too uncertain to predict a new traffic base.

Comment 21. The single bottom line is overall population of a new market — it should be large so that forecast mistakes do not result in financial disaster. NNM is too small.

Comment 22. Our airline has taken a look at service into Santa Fe every year. It is worth examining, but so far it is too small to make it work. It has the most potential for getting the originating traffic out of Santa Fe. It is not yet large enough to be viable.

Comment 23. Before going ahead with more effort on a brand new airport, you should focus on the existing Santa Fe airport which is already fine and has most of the local market anyway in terms of potential passengers.

Comment 24. ABQ has decent business traffic, so airlines can make some money. But overall, New Mexico has too high a portion of leisure traffic which makes it not so attractive a market.

Comment 25. Our airline is too small to initiate a venture into a new market. There must be a proven market before we will enter and try to get some anticipatable market share. There is much too much risk in shifting multimillion dollar airplanes into an uncertain revenue stream from a new airport market.

Comment 26. Santa Fe or NNM are both too close to ABQ and have too small a population to make them a good market. We would not even try this.

8.1.3.2 Business Considerations

Comment 1. Eastern-based airlines are not good candidates to consider for NNM because the logistics train is too long. We need a western oriented carrier.

Comment 2. The most you can hope for is a feeder service to ABQ, and usually these require more than 200,000 population if it is less than 100 miles to the big airport. This is even more true for ABQ because it is not really a hub with immediate connections to anywhere else. It is mostly point-to-point, therefore less viable even for a transfer/feeder service. ...Maybe a feeder to Denver is more viable where there is only one more flight to the final destination.

Comment 3. Our best hope is to make a special package deal with an airline where we guarantee a certain minimum seat sales figure. Examples of this that work are Traverse City to Detroit; Rochester, Minnesota to Minneapolis... but even these are more viable than NNM to ABQ because these are true hubbing airports.... Have seen others often fail after a while.

Comment 4. Some startup airline might be talked into a deal with NNM, but about the only thing imaginable is a trial express service to ABQ or maybe Denver served by 19 to 30 seat prop planes, 3 to 4 per day. A regional jetport to a major hub is very, very unlikely to make it given the proximity to ABQ.

Comment 5. No airline will want to move to serve a second location so close to ABQ — it is a loser of a concept.

Comment 6. On-time performance is even more important in a small market with only a few flights per day. The first time you cause a person to miss a connection or cancel a flight when there are no alternatives, you are poisoning your whole market with that person and they will not give you another chance.

Comment 7. A Skywest or Vanguard type operation might be best for NNM with the CRJ 50 or CRJ 70 (50 to 70 seat Canadian Regional Jet) with an optimum range of 575 miles at this altitude — would be a good compromise.

Comment 8. If our airline was running at near maximum load factor in ABQ it still would not switch any into NNM because it would not have excess planes to move there — would probably partner with someone who would be a regional code-share partner because they are more flexible on moving planes into markets and have smaller size planes.

Comment 9. Often airports offer marketing money to an airline to get it to come. Lots of ski communities guarantee minimum seat sales.

Comment 10. Cost is the key to the airlines. Cost/passenger would be way too high at a new NNM airport. Our airline's system-wide airport cost is $3.50-$4.00/passenger. ABQ cost is $5.00 which is a little high, but we need them in order to serve the New Mexico market.

Comment 11. New NNM airport costs would be much higher than even ABQ, and cause most airlines to have no interest because of competitive factors with nearby ABQ.

Comment 12. NNM is a small local traffic market, mainly focused on the leisure market which is low profit for airlines.

Comment 13. Regional jets (for example, the RJ-85 with 69 seats) may make the Santa Fe or other NNM market more viable. There are several hundred on order now by U.S. airlines — they are just coming into service and are not in any significant numbers yet.

Comment 14. People strongly prefer jets. Regional jets have higher operating costs than the props, but people will pay. Small jets also have higher operating costs than the big jets, so cannot compete on many routes — they will only play in regional markets.

Comment 15. Maybe a prop shuttle service to ABQ or PHX could work (skeptical about even the Los Alamos market — as a proven difficult/failure situation). Anything farther than PHX is too far for long-term sustainability even for a prop shuttle. Must compete against ABQ which is less than two hours away, and this will not work.

Comment 16. The NNM market is very small and it would be too difficult to have a suitable minimal level of service to catch the business flyers. Business travelers need at least three or four flights per day.

Comment 17. Our airline competes with Southwest Airlines on fares and manages to do OK. The larger airlines do not like to compete as much on fares because they have higher cost structures.

Comment 18. Mapping the ABQ and NNM service area, it would appear that not many new customers would be generated by NNM — it is just taking away from ABQ. So it makes no sense to airlines which already have the infrastructure to capture these same people at ABQ.

8.1.3.3 Airport Analyses

Comment 1. New Mid-America airport across from St. Louis in Illinois is a good regional field, but no airlines are planning to use it — Lambert Field is much more convenient and better for marketing.

Comment 2. Airlines are already in ABQ and would not consider any smaller market in New Mexico. New Mexico is well served in the northern part by ABQ and the southern part by El Paso. Southwest Airlines dominates both of these locations so it would be fruitless to try to compete against them from a smaller base anywhere in New Mexico.

Comment 3. The feasibility of operating on-time is important. It helps to have a weather advantage to justify serving a competing airport. ABQ weather and capabilities are likely to be superior to a smaller airport in a valley or mountain location in NNM.

Comment 4. NNM could have some charter possibilities for the tourist-oriented trade — because ABQ charter landing fees are high.

Comment 5. ABQ airport costs are reasonable but not great.

Comment 6. ABQ fares are low, but all of the airlines are operating out of there because they are making some profits.

Comment 7. SLC, PHX are too distant to hurt ABQ's market, so ABQ gets the whole region, and gets reasonable frequency of service without splitting any of its population off to some other airport (NNM) with national service. Could hurt all of New Mexico service to add another airport.

Comment 8. Denver is too expensive — so no threat to New Mexico market.

Comment 9. We served a new airport at Newburgh, NY and our airline finally dropped out last year. The airport never developed the needed traffic even though it has a huge population base. People there use NYC airports.

Comment 10. Southwest Airline's dominance in ABQ keeps lots of ABQ fares low, so profits are not high. The airlines cannot afford to lose base traffic to another airport in the same catchment area.

Comment 11. Southwest's dominance at ABQ already keeps it from being highly profitable for the major airlines operating at ABQ — this keeps overall market fares fairly low. It would be even worse to try to operate out of NNM in competition with ABQ.

Comment 12. When we evaluate Santa Fe as a possible market we see that Mesa has never been able to get enough people onto its 19 passenger planes, so the market looks way too small for us. We are doing well in all of our markets, but are too small to take risks in unproven markets.

8.1.3.4 Strategies

Comment 1. Nobody wants to go into an unknown new market. Always have a strategy in mind for capturing a piece of some existing market share. No reason to think that NNM would have a unique market of any size that is not very well handled by ABQ.

Comment 2. Our airline has no interest in this area. We are only interested in obtaining market share in existing airport city pairs with good profit margins. We would never consider going into a new airport with an unproven demand profile. If ABQ does not meet our requirements, then NNM is even less of a prospect. (From an airline that is not now serving ABQ.)

Comment 3. Dynamics of population are important in a new market. You must look closely at competition from other airports in the area — you need a compelling reason to move to a new one.

Comment 4. Our airline is currently expanding into New England at secondary airports to draw traffic away from major airlines.

Comment 5. Besides having too small a market, the frequency of service would kill the viability in such a small market as NNM. Normally this would be combated by looking for specific holes in the ABQ schedules to compete against, but in a market this small, that cannot be done.

Comment 6. Even if our optimistic estimate of 100,000 enplanements/year is OK, you will get only props,... no jets, leading to fewer enplanements (people hate props) so declining frequency... leading to fewer business travelers... leading to fewer flights... going to nothing... just not feasible.

Comment 7. Our airline would be reluctant to serve both ABQ as well as a new airport. (Is there any reason it is a better place with more customers that would be captured? — Not that anyone could see!)

Comment 8. No existing ABQ airline would want to serve NNM if they get the same passengers through ABQ anyway.

Comment 9. Would suggest that maybe U.S. Airways try NNM because they have no ABQ presence, but this is a long stretch of imagination. (They are the only major airline not currently in the ABQ market.)

Comment 10. Only a very small player in ABQ could try because they might steal northern business from the significant ABQ airlines.

Comment 11. The 50 to 70 seat regional jets make a smaller market more viable, including point-to-point flyovers of hubs. The majors will not play big in regional jets — union agreements prohibit this. Regional airlines will take on this business and it may become important.

Comment 12. The regional jets may make NNM more viable, but will require courageous new regional entrants and will get stiff resistance from both the ABQ airport and the major airlines.

Comment 13. Slight enhancements due to more convenient flight service at NNM do not justify cannibalizing the ABQ market. Gains in leisure passengers are not important compared to diluting the frequency of service which is critical to the higher fare business traveler market. Must have three trips per day at each airport and the market is too small for this... have to serve one or the other, and ABQ is the much bigger market.. NNM is within the ABQ catchment area anyway.

Comment 14. A low cost airline strategy is to serve the smaller market and steal flyers away from the larger airport. This is often done by Southwest across the U.S. But this strategy does not apply in New Mexico because Southwest is already a dominant low-cost user of ABQ. It would not make sense for any other low-cost airline to set up in NNM because you cannot beat the already low-cost ABQ market.

Comment 15. A large airline like American or Delta might take a risk with one plane out of their 700 to 800 to try a new market, but it is too risky for a smaller operator like us with only 100 or so airplanes.

8.1.3.5 Strategy — A Startup Airline's View of NNM

These are special notes on "New West Airlines" which we were given permission to explicitly identify with their project. This story is the exception to most of the other comments. They are from a startup airline that proposed jet service through Santa Fe. This project did not get sufficient funding to proceed, but was a serious attempt to launch a new airline with some direct service to NNM.

Comment 1. Very interested in NNM — tried to start a new airline to serve through ABQ and Santa Fe. Tried to establish "New West Airlines" in 1994.

Comment 2. Was stalled or stopped by Mayor Jaramillo of Santa Fe.

Comment 3. When trying to start New West they had 300 to 400 people turn out for public sessions in Santa Fe — most opposed to it, wanted no noise and no more tourists.

Comment 4. First proposed in 1992 — wanted to be a new entrant into business with headquarters at ABQ. Thought certain markets were underserved by ABQ — Austin, San Antonio. Also wanted to serve the biggest markets for ABQ which are Los Angeles and Dallas.

Comment 5. Would use the BA-146 — small 4-engine jet with 96 seats (same one serves Aspen). Believed lots of people use ABQ because there is no Santa Fe service — wanted to diversify choices out of Santa Fe.

Comment 6. Big question for investors was whether you could split business away from ABQ to Santa Fe??? Answer: only if you are a new entrant.

Comment 7. Existing ABQ airlines would not find it economical or market wise to split their service.

Comment 8. Intended to charge a $10/ticket price premium — thought the Santa Fe market would accept that for the convenience.

Comment 9. Not afraid to compete with Southwest on price.

Comment 10. Also proposed to have similar, future operations to serve Eugene and Tucson which are analogous situations.

Comment 11. Were optimistic about NNM based on ABQ and Santa Fe ticket surveys.

Comment 12. An established carrier would not try a regional service in NNM — only a startup.

Comment 13. Advice: use "Santa Fe" in the name of any NNM airport. This is recognized for marketing purposes all around the country — do not use Española name which is not recognized nationally.

Comment 14. They were going to have two flights/day in each direction from Santa Fe — to Los Angeles and Dallas (even though admitting that the minimum standard is three).

Comment 15. The business plan was to get up to 15 planes, but startup was with 2 growing to about 5 planes over the first year.

Comment 16. Viewed Reno Air as a good model — actually took ABQ business away from Southwest Airlines on the big market routes to Los Angeles and Las Vegas. Does not understand why Reno has now given up and dropped out of ABQ.

Comment 17. Thinks that rental car study showed 60% of ABQ rentals were headed to NNM — another clue that there is a good market there. People like to drive from ABQ on their first visit, but after that it is boring and would rather fly straight into NNM.

Comment 18. Ten million dollars was the FAA resources requirement to get certified as an airline.

Comment 19. New West Airlines needed $10 million. They were about $500K short when ValueJet crashed and all money for new startup airlines dried up — that stopped the project. The final stock placement failed. The project has not been rejuvenated.

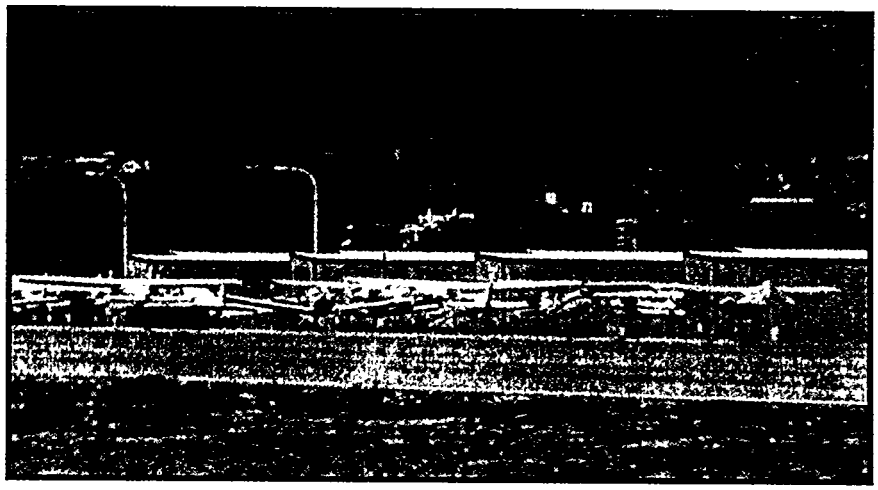
9. Other Considerations

9.1 General Aviation Aircraft

Any NNM regional airport would attract some general aviation aircraft. While this is of no real consequence to the commercial passenger market feasibility of the airport, we note that this enhancement of local airport availability is another benefit to the region. At present there are approximately the following numbers of based general aviation aircraft at the region's existing airports:

Angel Fire	5
Española	10
Taos	22
Los Alamos	70
Santa Fe	155

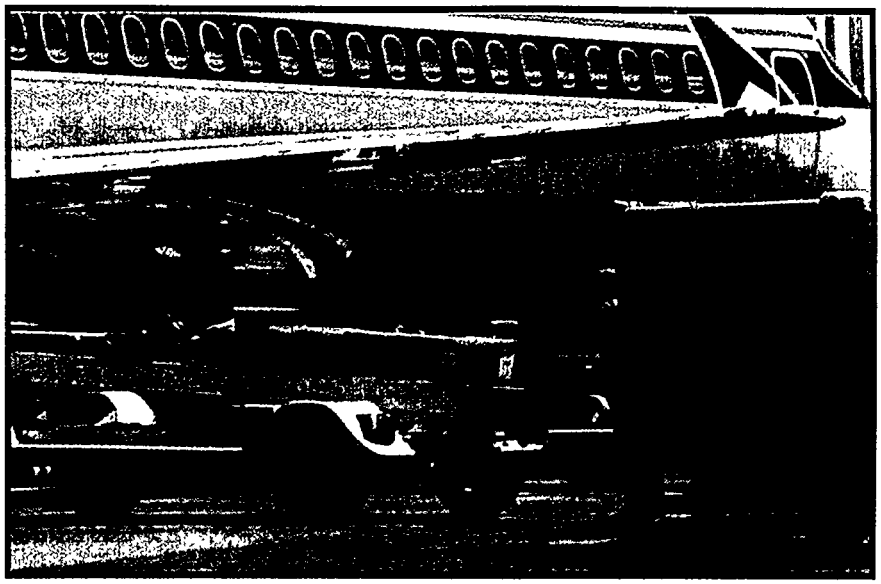
Eyeballing these numbers, it would appear to be a reasonable forecast for something like 100 based aircraft to find their way to a new NNM regional airport. These aircraft would be composed of some of the existing planes moving to the new airport and from some brand new activity. We have made no detailed analysis of the general aviation market for this report. In FAA planning documents, it is typical to expect about 100 based aircraft to accompany a regional airport having approximately 100,000 commercial enplanements.



The market for general aviation at a NNM regional airport might include something like 100 based aircraft, similar to the numbers currently at Los Alamos and Santa Fe.

9.2 Cargo Activity

We have not made any formal estimate of cargo activity at a NNM airport. The cargo business is of little consequence to the overall market feasibility of the NNM airport. Most air cargo moves in the belly of commercial passenger airliners. Smaller airports usually have little or no special cargo market activity other than what moves on the passenger airliners. At much larger airports there are cargo specialists, but this would appear to be a very unlikely prospect in our NNM case.



Air cargo mostly moves inside passenger airliners and would not be a significant market feasibility factor for a NNM regional airport.

Some interviewed airline executives commented that the specialized air express services such as Federal Express or UPS have strong existing infrastructures at Albuquerque. They use trucks to transport packages from Albuquerque. If they choose to use smaller shuttle flight aircraft to NNM, the existing airports at Santa Fe and Los Alamos are already well located in the vicinity of the only significant air express market customers in the region.

9.3 Highway Traffic Impact

People who drive to a NNM airport instead of Albuquerque will change the flow of highway traffic in the region. The most notable changes will be reductions in the flow of vehicles down Interstate 25 to Albuquerque and increases in the traffic going north out of Santa Fe on US 84/285. Table 8 is an unrefined estimate of net changes in one-way automobile trips. Our working assumption is that the NNM airport will have 100,000 annual enplanements and that these are distributed throughout the population in accordance with personal income. The traffic results scale up or down according to the actual number of enplanements. (The total income-based estimated distribution of trips is 58,000 for Santa Fe; 13,000 for Los Alamos; 8,000 for the Las Vegas area; and 21,000 for the combined Rio Arriba, Taos, Mora, and western Colfax counties.)

All of the average traffic flow rates are changed by less than 1% except for the 2% decrease in the most rural sections of Interstate 25 between Santa Fe and Albuquerque. All of these are insignificant changes which have virtually no effect on road traffic or congestion.

9.4 Estimating NNM Airport's Regional Economic Significance

The U.S. Department of Transportation has published a methodology "Estimating the Regional Economic Significance of Airports," ADA 257 658. This methodology applied to our estimated NNM airport enplanements provides a rough idea of some of the direct economic benefits expected from such a project's continuing operations. It provides a noncontroversial, conservative quantification of some of the economic benefits of the airport. It does not deal with the subtle, long-term economic development benefits of enhancing the regional transportation infrastructure. These long-term development results are much more speculative and difficult to quantify, but probably the most important economic aspects of the airport. These are beyond the scope of the current analysis.

The DOT suggested analysis recognizes three types of economic benefits: 1) nonquantifiable, 2) time/cost savings to travelers, and 3) regional employment and spending impacts.

9.4.1 Nonquantifiable

The nonquantifiable benefits include:

1. Medical — quicker personal evacuations, delivery of critical supplies, etc.;

Table 8. Highway traffic counts.

Highway	Average Traffic Counts (daily)	NNM Airport Traffic Increment per Day (100,000 anuual enplanements)	Change (percent)
Interstate 25 (Santa Fe to Albuquerque at Algodones or San Felipe)	29,000	- 548	- 1.9%
Interstate 25 (Albuquerque at Paseo del Norte)	65,000	- 548	- 0.8%
US 84/285 (north of Santa Fe at Tesuque)	30,000	+ 132	+ 0.4%
Route 502 (Pojoaque to Route 30)	11,000	- 71	- 0.6%
Route 30 (Española to Route 502)	12,000	+ 71	+ 0.6%

Table 8. Changes in NNM traffic flow due to airport traffic would not be significant. They would neither help nor hurt local traffic flow or congestion.

2. Career training in aviation and related activities;
3. Expedited civil defense and other access requirements;
4. Business stimulation;
5. Access to the national airport and air service system;
6. Recreational aviation activities; and
7. Expanded cargo/shipping opportunities.

9.4.2 Time/Cost Savings to Travelers

We have estimated time/cost savings to travelers using NNM data generated for this report. These estimates strictly follow the DOT methodology. Using our NNM population maps with estimated time savings (see Figure 12) we have a total of about 153,000 annual hours saved for an assumed market of 100,000 annual enplanements. (The reader can scale all of the following numbers up or down from a base of 100,000 enplanements — a first, very optimistic point estimate for a successful NNM regional airport.) Further, using the FAA's $30/ hour, and IRS's $0.315/ mile, our travelers' cost savings are shown in Figure 19.

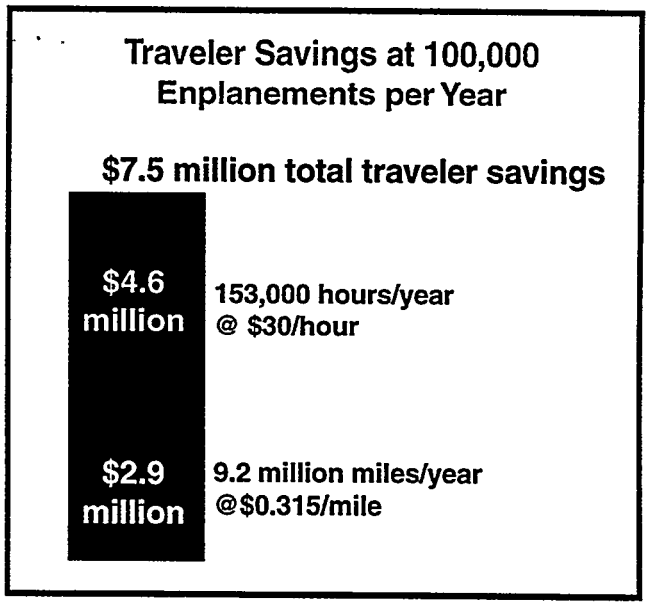


Figure 19. Potential traveler savings are significant for a successful NNM airport, but only if fares are competitive with ABQ. The direct cost savings are only about 0.5% of the region's total personal transportation expenditures.

9.4.3 Regional Employment and Spending Impacts

The regional employment and spending impacts using DOT rules-of-thumb for airport employees and payrolls for a 100,000 enplanement level of activity plus 100 based general aviation aircraft are listed in Figure 20. Specific detail was added to the DOT analysis by using the DOE economic models of the NNM area providing more robust economic multipliers. The economic impact does not consider the local spending of travelers using the airport. This is because DOT says that if the enplanement/population ratio is less than 1.0 (ours is less than 0.5) it implies a negligible new traveler spending impact — and the common sense is that these visitors would have mostly come from a larger airport (ABQ), so there is no real net new visitor traffic that is not already present with their spending in the economy. The tabulated economic impact is due to the airport activity itself with its multiplied local employment effects. These effects apply in NNM. Statewide, there is a negligible net impact because the NNM gains are approximately offset by the loss of Albuquerque traffic and support requirements.

The cost savings associated with less driving to get to a NNM airport instead of ABQ would be a principal advantage to travelers in the region.

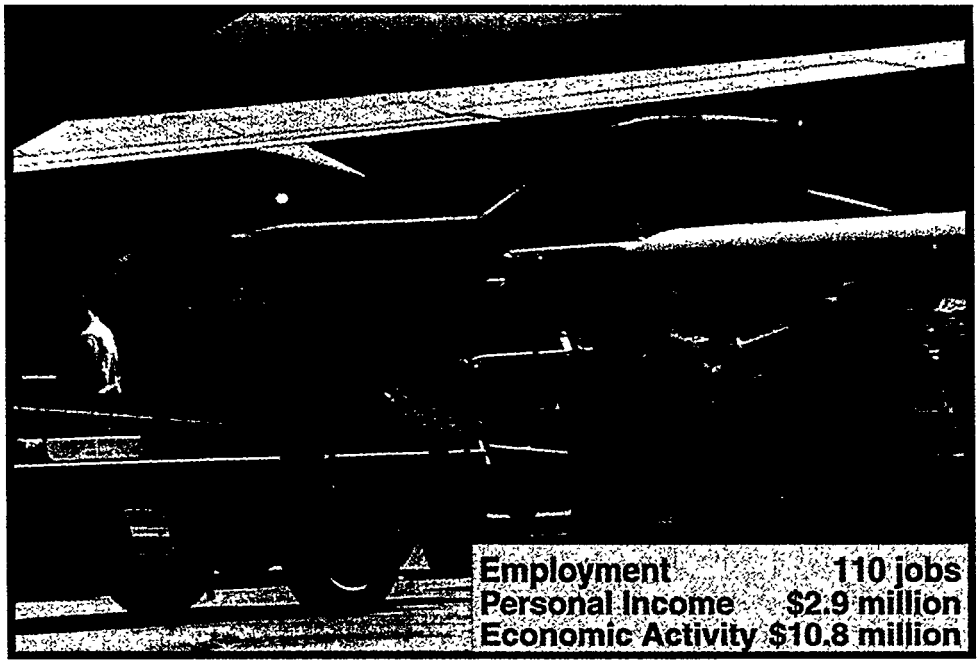


Figure 20. The employment impact of a NNM airport is only about 0.1% of NNM jobs.

10. Conclusions - Market Feasibility

The information and analysis in this report indicate that the commercial airline passenger market for a NNM airport is currently too small to justify its market feasibility.

1. The NNM region accounts for an estimated 300,000 to 450,000 annual airline trips. Currently, these are all served by airlines at Albuquerque's Sunport.

2. Any NNM airport will continue to share and compete for its markets with Albuquerque, reducing the expected market to much less than the 300,000 to 450,000 annual trips generated by the region.

   - Albuquerque will offer lower average fares (its fares are among the lowest in the U.S.), much greater frequency of service, much more airline choice, much higher percentage of jet service, and only a relatively small penalty in driving time to reach it from NNM.
   - Quantitative market estimates based on real analogy airport information from 18 other similar regional situations indicate a blissfully optimistic estimate of as much as 100,000 annual enplanements — ignoring NNM's closer than average location to its major competing airport at Albuquerque. A more rigorous analysis of these data indicates a likely range of 5,000 to 50,000 annual enplanements. This is well below the threshold for maintaining regular jet service.
   - The combination of the current NNM commercial service airports at Los Alamos and Santa Fe have never exceeded 25,000 annual enplanements.

3. Airline executives indicated poor to nonexistent prospects for any NNM commercial market other than a prop shuttle service to ABQ.

   - The NNM region is:
     - — Too small (500,000 is a frequently-cited minimum regional size to have regular jet service), and
     - — Too close to ABQ (at least a 2 hour driving time differential or at least 100 miles is often used as a minimum rule-of-thumb).
   - No business strategy for regional jet service from NNM works at present.
     - — Airlines already at ABQ would lose by splitting their operations, increasing costs, and would merely be cannibalizing their ABQ business with no net passenger gains.
     - — Airlines currently not in the ABQ market are even less interested in NNM because of its small size, likely higher costs for operations, and tough competition from ABQ.
     - — Low-fare or new entrant airlines are unlikely to try the strategy, sometimes employed, of trying to steal market share by operating at a secondary airport because of ABQ's low fares and Southwest Airline's dominance in the region.
     - — Identified special niche markets in NNM (Los Alamos National Laboratory travel plus regional tourism) are too small to support regional jet service.
   - There has been no history of success in NNM, and even the shuttle service to ABQ has not always been viable.

4. Future growth is too distant to strongly enhance anticipated future market feasibility. (The NNM region is less than half the normal minimal size to obtain regional jet service, and at FAA commercial passenger growth forecasts of about 4%/year NNM is many years from reaching a minimum size market.) The new regional jets now coming into service (50 to 70 seats) may reduce the usual minimum size of communities to support regular jet service, but this is undemonstrated so far. There are some competitive questions about operating costs of these smaller jets, and it is premature to guess at how this will work.

5. **Recommendation:** We recommend that the findings of this market feasibility study be revisited in two to three years to evaluate what changes have occurred in some of the critical market considerations.

   Things that could possibly change within a few years to significantly enhance the feasibility of a NNM regional airport are the following:

- Major new industries relocating to the NNM region with accompanying large increases in demand for commercial air service.
- Automobile transportation costs or traffic changes in some unanticipated ways making it significantly more onerous to get to ABQ from NNM.
- Small regional jets prove to be opening up new airline markets throughout the U.S. and creating a type of commercial airline service that does not now exist. This could redefine the rules-of-thumb and market strategies for regional airports such as NNM.
- Southwest Airlines makes a significant reduction in ABQ service, likely resulting in less airline price competition overall and possibly much higher average ABQ airfares.
- Other unforeseen deterioration in commercial airline service quality or availability at ABQ creating competitive strategic options for airlines at a new NNM airport.

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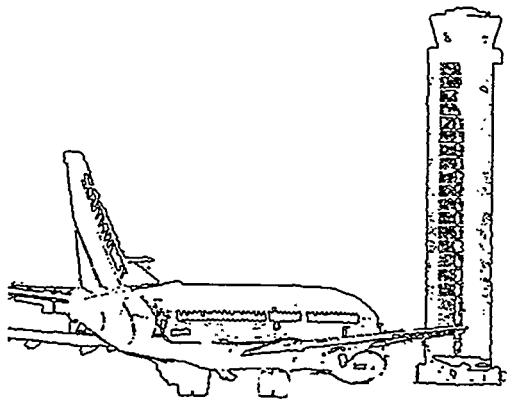

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