

**EFFECTS OF AIRLINE DEREGULATION
ON AIR FARES AND SERVICE
IN NORTH DAKOTA**

By

**Dennis R. Ming
Research Associate**

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**DENNIS R. MING
RESEARCH ASSOCIATE**

**UPPER GREAT PLAINS TRANSPORTATION INSTITUTE
NORTH DAKOTA STATE UNIVERSITY
P. O. BOX 5074
FARGO, NORTH DAKOTA 58105**

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Introduction

Price competition in the airline industry was nonexistent prior to the passage of the Airline Deregulation Act of 1978. Prior to deregulation, air fares were set based on formulas that represented industry costs. Proposed fares that deviated significantly from formulated costs were not allowed. Today, airlines have complete freedom in rate making since domestic rate regulation by the Civil Aeronautics Board (CAB) ended December 31, 1982.

Opinions on the effects of airline deregulation are mixed. Many feel that airline industry losses in 1981 and 1982 were caused by deregulation. The Braniff Airlines bankruptcy was viewed by many as a consequence of ruinous competition prompted by deregulation. Others indicated that industry losses were caused mostly by the downturn in the economy and that airlines will profit from deregulation in the future. It is evident that much is to be debated in the future as to the pros and cons of deregulation. However, one thing is clear -- the deregulatory environment has brought with it an undeniable amount of uncertainty. No longer are inflationary cost indexes the primary price-setting factor. Instead, airlines must now set fares subject to industry competition. The effectiveness of various airline pricing strategies will depend on, among other things the level of competition within markets, market densities and the relative market price elasticities of demand.

Air Fares

It has been shown that following passage of the Airline Deregulation Act of 1978, air fares from North Dakota increased greater than industry-wide fares (Table 1). The Wall Street Journal reported that air fares increased an average of 71 percent from 1979 to 1982. An analysis of fares from Bismarck and Fargo, North Dakota, indicated increases of 106 percent and 99 percent, respectively. Fares from Minneapolis increased an average of 78 percent during the same period.

TABLE 1. COMPARISON OF INCREASES IN AIR FARES.

Origin	Actual vs. CPI -----	1-1-82 vs. 1-1-79 -----
	cpt	
Minneapolis	24	78
Fargo	38	99
Bismarck	43	106
Industry*	--	71

Source: Tolliver, Denver D., and Dennis R. Ming, The Effects of Airline Deregulation on North Dakota Fares and Service: An Economic Analysis Prepared for the Governor's Commission on Air Transportation, UGPTI, NDSU, Fargo, North Dakota, March 31, 1982.

*Wall Street Journal, December 4, 1981.

Air fares increased more than inflation between 1979 and 1982. Inflation during this period was slightly over 44 percent as measured by the Consumer Price Index (CPI). Fares from Minneapolis, Fargo and Bismarck increased 24 percent, 38 percent and 43 percent, respectively, more than inflation during this same period.

Comparing air fares on a passenger-mile basis reveals some significant changes between 1982 and 1984. Coach fares in 1982 from Bismarck, Fargo, Minneapolis and Chicago were significantly higher than coach fares from Houston and Los Angeles when compared on a per passenger-mile basis (Table 2). Costs were over \$0.23 per mile for the former cities while they were less than \$0.15 per mile from Houston and Los Angeles. Discount fares from Los Angeles, Houston and Chicago were \$0.099, \$0.099 and \$0.106, respectively in 1982 while discount fares from the other three markets were \$0.168 per mile or greater.

TABLE 2. COACH AND DISCOUNT FARES ON A REVENUE PASSENGER MILE BASIS, 1982 AND 1984.

Origin	Coach			Discount		
	3/15/82 (Per Passenger Mile Cost)	3/15/84 (Per Passenger Mile Cost)	change (%)	3/15/82 (Per Passenger Mile Cost)	3/15/84 (Per Passenger Mile Cost)	change (%)
Fargo	.245	.271	11	.182	.180	(1)
Bismarck	.231	.254	10	.168	.156	(7)
Minneapolis	.250	.297	19	.170	.175	3
Los Angeles	.137	.223	63	.099	.107	8
Houston	.162	.258	59	.099	.129	30
Chicago	.259	.374	44	.106	.223	110

Per passenger-mile costs of coach fares increased significantly more from Los Angeles, Houston and Chicago than from Bismarck, Fargo and Minneapolis. However, discount fares from Los Angeles and Houston remained significantly lower on a passenger-mile basis.

Changes in air fares (both coach and discount) between 1982 and 1984 were more dramatic in the Los Angeles, Houston and Chicago markets than in the Fargo, Bismarck and Minneapolis markets (Table 3).² Coach fares from Fargo and Bismarck increased an average of 9 percent between 1982 and 1984. Coach fares from Los Angeles, Houston and Chicago increased 63 percent, 59 percent and 61 percent, respectively, during the same period. Discount fares from Fargo, Bismarck and Minneapolis remained virtually unchanged while discount fares from the other three markets increased, particularly from Chicago where discount fares increased an average of 31 percent.

²It should be noted that the analysis that follows is based on coach and discount air fares to 34 destinations from the 6 origins.

TABLE 3. MEAN COACH AND DISCOUNT AIR FARES TO 34 DESTINATIONS, 1982 AND 1984.

Origin/ Type of Fare	Fare		Change 1982 to 1984 --- pct. ---
	March 1982 ----- dollars -----	March 1984 -----	
Fargo:			
Coach	493	539	9
Discount	342	345	1
Bismarck:			
Coach	525	572	9
Discount	361	343	(5)
Minneapolis:			
Coach	402	476	18
Discount	269	260	(3)
Los Angeles			
Coach	416	680	63
Discount	294	318	8
Houston:			
Coach	302	480	59
Discount	210	236	12
Chicago:			
Coach	270	436	61
Discount	181	237	31

Air Service

North Dakota airline service deteriorated significantly between July 1978 (immediately preceding deregulation) and July 1983. For example, seven major cities in North Dakota³ had 108 fewer departures and 8,646 fewer seats available per week in 1983 compared to 1978 (Table 4). These losses in service amounted to 23 percent fewer departures and 21 percent fewer seats available in 1983 when compared to 1978.

Jamestown gained 4 flights (from 14 to 18) but lost 1,522 seats per week (1,792 versus 270), a decrease of 85 percent. Williston was the only city to gain in both the number of departures and seats with increases of 20 percent and 3 percent, respectively. However, Williston is a unique situation in that during that time period oil exploration increased substantially in the western part of the state.

Fargo, Bismarck and Grand Forks, the three largest cities in the state, all lost departures and seats between 1978 and 1983. Bismarck had 20 fewer departures per week while Fargo and Grand Forks had 30 and 55 fewer, respectively. Fargo had 8 percent fewer seats available per week in 1983 compared to 1978 while Bismarck and Grand Forks had 24 percent and 30 percent fewer available seats.

³For purposes of this discussion "the state" or "North Dakota" refers to the seven major cities of Bismarck, Devils Lake, Fargo, Jamestown, Grand Forks, Minot and Williston.

TABLE 4. AIRLINE DEPARTURES AND AVAILABLE SEATS IN NORTH DAKOTA, 1978 and 1983.

Origin	No. of Depart./week			No. of Seats/week			% Change	
	7/1/78	7/1/83	change	7/1/78	7/1/83	change	Depart.	Seats
Bismarck	125	105	-20	12,070	9,167	-2,903	-16	-24
Devils Lake	14	12	-2	672	180	-492	-14	-73
Fargo	117	87	-30	11,412	10,546	-866	-26	-8
Jamestown	14	18	4	1,792	270	-1,522	+29	-85
Grand Forks	125	70	-55	11,103	7,793	-3,310	-44	-30
Minot	53	42	-11	3,996	4,425	429	-21	+11
Williston	30	36	6	570	588	18	+20	+3
Total	478	370	-108	41,615	32,969	-8,646	-23	-21

Source: CAB, Implementation of the Provisions of the Airline Deregulation Act of 1978, Report to Congress, Jan. 31, 1984.

Summary and Conclusions

Initially following passage of the Airline Deregulation Act of 1978 air fares from North Dakota increased substantially more than industry-wide fares. However, from 1982 to 1984 North Dakota fares stabilized somewhat relative to fares from Chicago, Los Angeles and Houston. On a per passenger-mile basis discount fares are significantly lower in the Los Angeles and Houston markets. But overall North Dakotans have benefitted recently (1982 to 1984) from relatively lower fares when compared to fares from some major markets.

Loss of service appears to be a greater problem facing North Dakota communities today than air fares. In 1983 the state (based on seven major cities) had 108 fewer departures per week and 8,646 fewer seats per week compared to 1978.