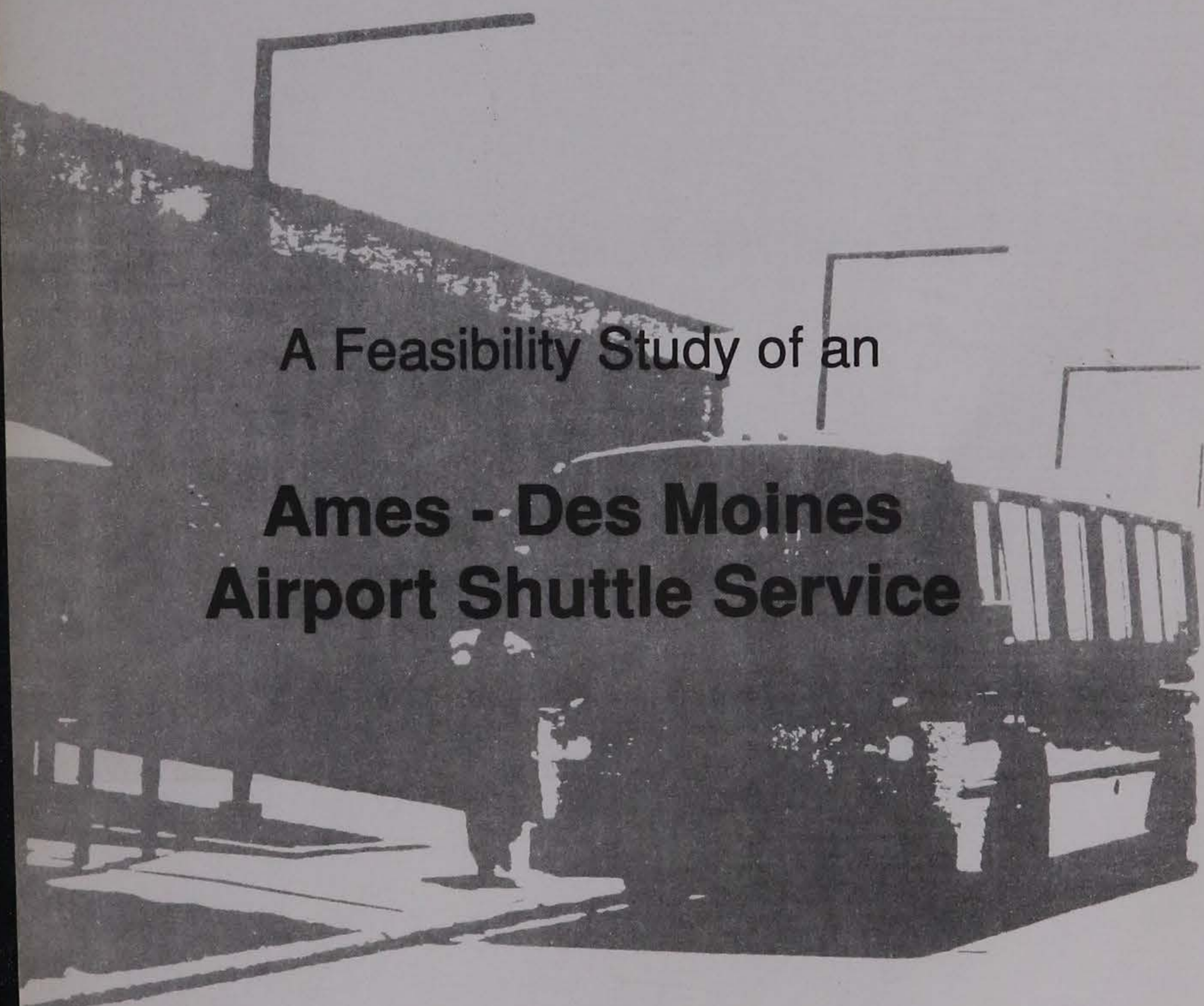


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A Feasibility Study of an
**Ames - Des Moines
Airport Shuttle Service**

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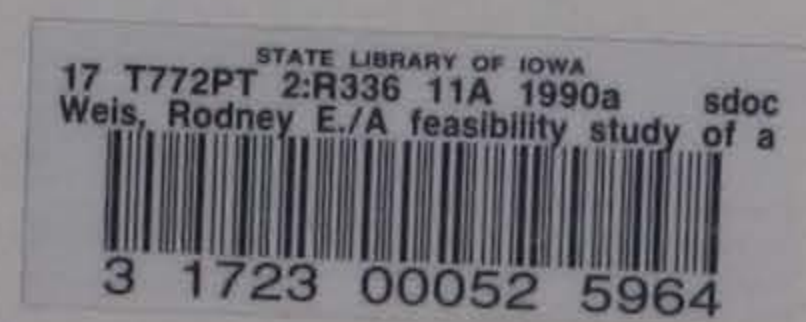
A FEASIBILITY STUDY OF AN AMES - DES MOINES INTERNATIONAL
AIRPORT SHUTTLE SERVICE

by

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DISCLAIMER

The opinions, findings, and conclusions expressed in this report are those of the authors, who are responsible for the facts and accuracy of the material presented herein. The contents do not necessarily reflect the official views, policies, or conclusions of the Iowa Department of Transportation or the Urban Mass Transportation Administration.

TABLE OF CONTENTS

Chapters:

	Page
1. Disclaimer.....	i
2. Introduction.....	1
3. Methodology.....	5
4. Analysis.....	8
5. Market Potential.....	14
6. Projected Cost.....	15

Appendices:

A.....	ISU Survey
B.....	General Public Survey
C.....	Flight Schedules
D.....	Trips by Time of Day
E.....	Graphs
1.....	Market Potential
2.....	Projected Ridership (5, 10, 15 Trips)
3.....	Projected Ridership (4 - 16 Trips)
F.....	Tables Showing Projected Costs
G.....	Comments

INTRODUCTION

Dispatchers and office personnel at Cy-Ride have noticed an increase in the number of inquiries from the public regarding service to the Des Moines International Airport. Various services have been offered, but none have been successful in attracting enough riders to make an Ames - Des Moines Airport service economically viable.

Approximately one year ago, an informal investigation of the alternatives available to the general public was completed. It was discovered that there is a serious lack of dependable, affordable, transportation service between Ames and Des Moines.

Currently, there are several alternatives available for persons who need to get to the Des Moines airport. Most people drive their personal vehicle and park at the airport. Many others have family members, friends, or business associates take them to the airport. Greyhound has service from Ames to downtown Des Moines. Taxi service is available in Ames and Des Moines and there are also several limosine services available in both cities.

One of the Ames limosine services has a van available for airport service. Three to four people can ride, depending on the amount of luggage they take. This service does not run a fixed schedule and they prefer 24 hour notice if possible. The fare for the service is \$40.00.

There is also an air shuttle service available at the Ames Airport. Cost for this service is \$40.00 for up to three people and the trip takes approximately 20 minutes.

One private carrier provides one round trip per day to the Des Moines Airport. All of the available alternatives present problems for different segments of the traveling public. A brief summary of the problems associated with the various modes currently available is discussed on the following pages.

Currently, the most common mode used is the private auto.

Problems associated with this mode include:

1. Cost-ISU currently pays approximately \$8.86 in mileage for a one-way trip. This does not include parking charges at the airport. According to AAA Motor Club statistics, it costs approximately \$0.30 per mile to operate a mid sized vehicle. Using a \$0.30 per mile average cost, the 88 mile round trip to the airport costs a traveler \$26.40 plus parking.
2. Many ISU students, especially freshmen and international students, do not own a vehicle and depend entirely on public and private transit.
3. Many elderly citizens do not own a vehicle, are unable to drive for various reasons, or choose not to drive.
4. Some families own one vehicle and need it every day so they cannot leave it at the airport. This forces them to make two trips to the airport: one trip to deliver the person flying, and one trip to pick up the person upon their return.
5. Security: some people do not like to leave a vehicle in the open lots at the airport for extended periods of time because of the incidences of vandalism and theft.

It is possible to get to the airport via Greyhound and taxicab. Greyhound has a bus that leaves Happy Chef at 4:20AM. Five Oaks Company runs a commuter bus from Ames to Des Moines at 6:20AM. The next Greyhound leaves Ames at 12:25PM, again at 5:00PM, and again at 10:05PM. The last bus leaves Happy Chef at

11:50PM for Des Moines. Buses depart downtown Des Moines for Ames at 11:50AM, 3:45PM, 4:25PM, and 12:50AM. The commuter bus leaves the Des Moines Airport at 4:30PM.

The fare for Greyhound is \$9.00. They have a student discount fare of \$6.75. Cab fare from the Greyhound Depot at 11th and Keo Way to the airport is approximately \$8.00. Fare for the commuter bus is \$11.00.

Although there are problems associated with this alternative, it is included in this study because it may be possible to integrate the available trips with a shuttle schedule. While transferring from bus to taxi is inconvenient, the fare is affordable, so it is an alternative that should be considered. Problems with this alternative are listed below.

1. Travel time - the trip by bus takes approximately an hour and the cab trip takes another 30-40 minutes.
2. Cost - total cost for the trip ranges from \$15.00 to \$20.00.
3. Transferring of luggage and length of wait make this alternative unacceptable for elderly and handicapped persons.
4. Persons unfamiliar with Ames and Des Moines probably would not think of this alternative.
5. This service is not accessible to the mobility impaired.
6. Commuter service runs Monday through Friday only.

Taxi cab service is available in both Ames and Des Moines. While this service is timely and convenient, the cost ranges from \$45.00 to \$55.00 one-way, making it unaffordable for the vast majority of the traveling public. The same problem exists with

the various limosine services that are available. Costs range from \$30.00 per hour to \$40.00 per hour with a two hour minimum on most services. Most limo services also require 1 to 3 days advance notice. Again, as in several of the other alternatives discussed earlier, taxi cabs and limosines are not a viable alternative for many handicapped persons because they are not equipped with wheel chair lifts.

In light of these problems, the decision was made to conduct a study to determine the demand for an airport shuttle service. This study consists of two parts. In Part I, total demand for a shuttle service is discussed and the different market segments are identified. Part II shows projected costs for a shuttle service at varying levels of service.

METHODOLOGY

Surveys were conducted to determine what combination of fare and frequency of service is acceptable to the general public. Specific problems with earlier attempts at starting an Ames to Des Moines route are noted and possible solutions are addressed in this study. Existing alternatives are considered and problems with the existing alternatives are discussed.

The data presented in this study were obtained from various sources and several different methods of data collection were used.

Dr. Steven Padgitt of the Iowa State University Department of Sociology assisted in formulating the questions for the surveys and tabulated the results.

Airline flight information was obtained through the cooperation of Mr. Craig Stephens, Airport Operations Officer for the City of Des Moines.

The survey data from the Iowa State University Deans, Directors, and Department Heads was collected by mail. One hundred and sixty four (164) surveys were mailed out. One hundred and thirty three (133) of the forms were completed and mailed back. This is a total return rate of 81.09%. A sample of the survey is included in this report as Appendix A. Many of the comments included in this document were obtained from these survey forms.

This study was designed to measure the market potential of persons traveling between Ames and the Des Moines International Airport. It does not include the commuter market or the

transportation needs of the general public traveling to and from Des Moines for reasons other than airline travel. When the term "general public" is used in this report, it refers to all persons surveyed other than ISU Deans, Department Heads, and Directors who were included in the ISU survey. In light of these parameters, another survey was written for distribution by all of the Ames travel agents. All of the travel agents in Ames were asked to hand out the form to persons purchasing an airline ticket. Three hundred and eighty seven (387) survey forms were distributed to persons purchasing airline tickets. Two hundred and eighteen were completed and returned. This is a total return rate of 56.33% for the mail-in general public survey. Results from this survey are included and shown as Appendix B.

Interviews were conducted by telephone and in person. Persons chosen for these interviews were picked at random and only those persons who traveled to the Des Moines Airport were included. Approximately 50 telephone interviews were conducted. Suggestions and comments received during these telephone interviews are included in the Comments section of this report (see Appendix G). Twenty one (21) surveys were completed during these telephone interviews and are included in the total number for the general public survey.

Observation and interviews were also conducted by the author at the Des Moines Airport over a two day period. Persons interviewed at the Des Moines Airport were chosen on the basis of their county of residence. When a person arrived at the airport in a car bearing Story County plates, they were asked if they

could take a few minutes to complete a survey form. Of the twenty three persons interviewed, eighteen (18) completed surveys. Thus, the total number of respondents for the general public survey is two hundred and fifty seven (257).

All additional comments received, whether by mail, telephone, or during interviews, are included in the Comments section of this report.

One segment of the market that is difficult to survey is the convention and seminar market. Further research should be conducted to determine the travel preferences of this market. Currently, there is very limited information available about the persons who attend conventions in Ames. Because of the efforts of the Ames Convention and Visitors Bureau and the Conference Services Office at ISU, this market will continue to expand.

Actual flight schedules were used to determine the number of trips required for a 45 minute wait time and a 90 minute wait time. This information is included for reference only and is not intended for use as a schedule. Further study should be conducted to identify high use flights. The shuttle schedule should be matched to these flights to minimize wait time for these flights. The schedules used for 5, 10, and 15 round trips per day are included in this report as Appendix C.

ANALYSIS

The most often heard comment while conducting this study has been that it is a real problem picking up visitors to Ames at the airport. One professor stated that "every time there is an important session during a seminar, either a graduate student, myself, or another member of the department has to go to Des Moines to pick someone up. You then miss the session but there are no other alternatives available, so you go". Most people who have hosted a seminar or convention are also in favor of implementing a shuttle service because of the planning problems involved in coordinating transportation to Ames for the participants. The convention/seminar market would be the easiest market for a shuttle provider to capture because of the lack of affordable alternatives. The convention/seminar market comprises approximately 25% or 20,000 of the projected 81,100 trips annually. For a shuttle to succeed, the service provider will have to initiate an aggressive marketing program that stresses close cooperation between the Ames Convention and Visitors Bureau, the Conference Services Office at ISU, and the service provider. A large proportion of the convention and seminar market would use a shuttle service if it is marketed through these offices.

Question #1 in the ISU survey (Appendix A) clearly indicates that most people feel there is a need for a shuttle service between Ames and Des Moines. When asked if they felt a shuttle service would attract more conventions and seminars to Ames (Appendix A-Question #10), there is almost an even split.

It is also apparent from the surveys that \$10.00 per trip is an acceptable fare. In the ISU survey, (Appendix A-Question #11) 93% of the respondents said they would pay \$10.00 to ride the shuttle. When the fare is increased to \$12.50, only 49% said they would be willing to pay that amount. The acceptance level drops to 19% at the \$15.00 fare level and 7% at the \$17.50 fare level.

The general public survey that was distributed by Ames travel agents is marked as Appendix B. Question #4 relates to acceptable fare levels, and the results closely parallel those found in the ISU survey. 86.5% said they would be willing to pay \$10.00 for a one-way trip to Des Moines. When asked about their willingness to pay \$12.50 to ride the shuttle, again 49% answered yes.

The next important factor to consider is frequency of operation or wait time for the passenger. Questions 2, 3, and 6 in Appendix A measure respondent's attitudes towards different wait times. In answering Question #2, with a wait time of 45 minutes, 58% of the respondents indicated that they would use the shuttle. When wait time is increased to 90 minutes, only 14% said that they would ride the shuttle regularly.

In the general public survey, (Question #3, Appendix B) 61.3% of the respondents indicated that they would use a shuttle with a wait time of 45 minutes while only 23.4% would use it if the wait time were 90 minutes.

Question #3 in the ISU survey was written to measure what the reaction of staff would be if ISU required use of the shuttle by reimbursing mileage costs based on the shuttle fare. Again, there is a wide discrepancy between the 45 minute wait time and the 90

minute wait time. Many respondents wrote on the survey that while they would not require employees to use the shuttle, they would strongly encourage its use, and the positive responses on Question #2B indicate that they would encourage shuttle use among departmental employees. The survey indicates that most persons, when given alternatives, will use the more expensive alternative rather than wait long periods of time for a bus.

The next section of this study shows the market potential. Based on statistics from 1988, there were 81,100 trips between Ames and the Des Moines Airport. 48,000 of the trips were made by the general public. This comprises a 59% share of the total available market. This is also the hardest segment of the market to attract. Americans are very reluctant to give up the freedom of having a car at their disposal. Consequently, when making ridership projections, you must be very conservative in estimating the number of fares that will be drawn from this segment of the market.

The second largest segment of the market is convention and seminar attendees. While smaller than the Ames residents market, this segment can be drawn to a shuttle easier, and the percentage of riders from this segment will be much higher. A well run shuttle could attract as much as 40% of this market if it is sufficiently promoted.

ISU staff trips and miscellaneous travel each comprise approximately 7.5% of the market. International students make up the other 1.5%. A graphic representation of the total potential market is shown in Appendix E, Graph #1. An explanation of how the total market was determined is included in the section marked "Market Potential".

As mentioned, an important factor in the success of a shuttle is wait time for the passenger. To facilitate the comparison of different wait times, the airline schedule for outgoing flights is included in this study and marked as Appendix C.

Since the projected ridership data in this report is based on 5, 10, and 15 round trips, sample schedules are included for each level of service. At the 5 trips/day level, the maximum wait time is 4 hours based on the sample schedule. When service is increased to 10 trips/day, maximum wait time decreases to approximately 90 minutes. As stated earlier, given a 90 minute wait at the \$10.00 fare level, approximately 16% of the persons polled indicated that they would nearly always ride the shuttle.

The third schedule shown is based on 15 trips/day. Maximum wait time on this schedule is approximately 45 minutes, with many of the flights met within a half hour period. All three schedules include an 11:00PM trip because many persons interviewed indicated that their biggest concern was being stranded at the airport if the 11:00PM flights were late.

The next section of the study deals with projected ridership. The bar graph (Appendix E, Graph #2) shows the projected number of passengers based on a 5, 10, and 15 trip/day level of service. At

the 5 trip level, approximately 3700 passengers would ride the first year. By the third year of operation, this would increase to 7500. The projections at the 10 and 15 trip level are based on the responses obtained in the surveys.

The second graph shows projected ridership at service levels ranging from 4 trips/day up to 16 trips per day. Linear regression was used to find an equation for projecting ridership at various service levels. The equation used had a correlation coefficient of 0.998.

It should be noted that while the projected ridership figures are based on actual survey responses, many other factors will enter into the decision to ride a shuttle. Exhibit B, Question #5 asked how much importance the respondent attributed to reliability. 99% indicated that this was a very important factor. If the service provider does not prove reliable, ridership at the end of the third year will be significantly lower than projected. Quality of service, including wait time, flights met, equipment, drivers, management, and other factors will have a considerable impact on ridership. The riders projected are based on the assumption that a high quality service is in place.

Appendix D of this report is included to give an indication of when people travel. This data is based on actual arrival and departure times of ISU faculty and staff who traveled from October 1 through December 31, 1988. The tables show the total numbers at different time segments. A different table is shown for arrivals and departures. The first graph shows arrival times at the airport and the second graph shows departure times. Further study

should be conducted on arrival and departure times before a shuttle schedule is set. Study of arrivals and departures should continue after implementation of a shuttle so changing consumer preferences on flight times are taken into account.

The last section of this study is a listing of comments received on the survey forms and during interviews. Some of the comments received mention problems associated with past shuttle services like reliability, safety concerns, frequency of service, and fare levels. All the concerns mentioned are addressed in this study or have been included in a Bid Specification document that service providers would be required to fulfill in the event that a service would be subsidized by the Ames Transit Agency. A complete listing of comments received is included in Appendix G.

MARKET POTENTIAL

Total estimated market potential was derived from figures based on interviews with Ames travel agents, Ames Convention and Visitors Bureau, and figures supplied by ISU department heads.

The total number of airline tickets sold in the last 12 months by the Ames travel agents is estimated to be 27,000. Of this total, it is estimated that 3000 tickets were used by ISU faculty and staff.

The total number of convention and seminar attendees who use the Des Moines Airport is estimated at 10,000 per year. It is also estimated that 1,100 international students at ISU make at least one trip per year to the airport. Another 3,000 people per year visit Ames for miscellaneous reasons including campus visits, job interviews, athletic events, and family visits.

Total number of trips was computed as follows:

1.	24,000 Ames Residents	= 48,000
2.	3,000 ISU trips (Staff)	= 6,000
3.	10,000 Conventions & Seminar Attendees	= 20,000
4.	3,000 Miscellaneous	= 6,000
5.	1,100 International Students	= 1,100

	Total trips made per year	= 81,100

Lines 1, 2, 3, and 4 are multiplied by two because it is assumed that these passengers will be making round trips. Line 5 is not multiplied by two because the majority of International students come to Ames and stay longer than one year. A graph showing the percentage breakdown of market potential is included in Appendix E.

PROJECTED SHUTTLE COSTS

Costs figures used in this study were obtained by interviewing five area transportation firms and using the average price quoted for charters. The average cost per mile for charters in this area is \$1.71. This is based on the cost of operating a large charter coach.

Tables 1, 2, and 3 in Appendix F show costs for an airport shuttle based on 5, 10, and 15 trip levels of service. The tables all show trips per day, the total number of miles per day at a given service level, the total cost per day at each service level, and a total cost per year based on 362 days of operation (no service on Christmas, New Year's Day, or Thanksgiving). The fares needed for break-even was calculated by dividing total cost per year by \$10.00 on all three tables. Projected number of fares is derived from the projections presented in this study and represents the expected number of passengers who would use the shuttle at the various service levels.

The figures for subsidy required were derived by subtracting the expected revenue from the total cost per year. The cost per mile used in Table 1 is \$1.71, Table 2 is \$1.50, and Table 3 is \$1.10. The lower cost per mile tables are included to show the effect of a small drop in cost per mile on the total cost per year.

The \$1.71 cost per mile is based on an average of five transit companies in the area. At the average existing cost of \$1.71 per mile level, total subsidy required over a three year

period for a 5 trip per day level of service would be \$679,255.00. At a ten trip per day level, the three year total is \$1,206,111.00. At the 15 trip per day level, this figure increases to \$1,697,415.00.

Based on an assumption that a van type shuttle could operate at a cost of \$1.10 per mile, the five trip level costs \$375,030.00, the ten trip level costs \$597,660.00, and the fifteen trip level costs \$784,742.00 over the initial three year period.

The only way to determine what the actual cost of an airport shuttle would be is through a process of competitive bids. A service using vans would be more economical to operate than the large coaches. An existing company with drivers, dispatchers, mechanics, and vehicles would have an advantage over a new company because their fixed costs would not increase in proportion to the revenue generated by a new service. Small differentials in fuel and labor costs between companies would make a tremendous difference in total costs for a year because of the high number of miles driven. Other variables also enter into the total cost figures and a competitive bid process would be the best way to determine actual shuttle costs.

Given a competitive bid situation, the expected cost per mile would be in the \$1.40 to \$1.50 range. The table on the following page shows that at a \$10.00 fare level, a 5 trip per day level of service, and a \$1.50 cost per mile, the first year subsidy would total \$202,370. Total subsidy for the initial three year period is \$574,131.00.

At a \$10.00 fare level, a 10 trip per day level of service, and a \$1.50 cost per mile, the first year subsidy would total \$359,990. Total subsidy for the initial three year period is \$1,069,130.00.

Again, at a \$10.00 fare level, with a 15 trip per day level of service, and a \$1.50 cost per mile, the first year subsidy would total \$509,760. Total subsidy for the initial three year period at the 15 trips per day level of service is \$1,491,944.00.

PROJECTED COSTS OF AIRPORT SHUTTLE

TRIPS/ DAY	TOTAL MILES	COST/DAY	COST/YEAR	Fares Needed	Projected No. Fares	Subsidy Required	Subsidy/ Passenger
FIRST YEAR							
5	440	\$660.00	\$238920.00	23892	3655	202370	\$55.37
10	880	\$1320.00	\$477840.00	47784	11785	359990	\$30.55
15	1320	\$1980.00	\$716760.00	71676	20700	509760	\$24.63
SECOND YEAR							
5	440	\$686.40	\$248476.80	24848	5910	189377	\$32.04
10	880	\$1372.80	\$496953.60	49695	17080	326154	\$19.10
15	1320	\$2059.20	\$745430.40	74543	28595	459480	\$16.07
THIRD YEAR							
5	440	\$712.80	\$258033.60	25803	7565	182384	\$24.11
10	880	\$1628.00	\$589336.00	58934	20635	382986	\$18.56
15	1320	\$2442.00	\$884004.00	88400	36130	522704	\$14.47
* Based on 88 mile round trip, \$1.50 per mile cost the first year plus 4% each succeeding year, and a \$10.00 per trip fare level.							

Given a company with sound management and experience in the transit industry, it is not unreasonable to expect a cost per mile in the \$1.50 range. It is also feasible to target the high demand flights and build a shuttle schedule around these flights. By targeting the high demand flights and providing service to Huxley and Ankeny for commuters to Des Moines, a high quality service that is aggressively marketed could exceed the projections for ridership contained in this report. By stopping in Huxley and Ankeny, some of the airport business would be lost but the steady revenue from the commuter business may well off-set the loss. This is an alternative that should be studied closely if a shuttle is instituted.

1. Do you feel that there is currently a need for a shuttle service to the Los Angeles Airport?

1. Yes 2. No
 3% 2%

(H-128)

2. If an Auto-Bus-National Airport Shuttle was available, would you use it, assuming the following:

A. a direct shuttle to and from the airport with no other stops and a maximum wait of 20 minutes from the time your baggage arrived until the bus departed.

Probable Use (H-131)

1. Yes, nearly always	14%
2. Yes, on occasion	47%
3. Yes, in emergencies only	23%
4. No	17%

B. a direct shuttle to and from the airport with no other stops and a maximum wait of 45 minutes from the time your baggage arrived until the bus departed.

APPENDIX SECTION

(H-132)

1. Yes, nearly always	10%
2. Yes, on occasion	30%
3. Yes, in emergencies only	5%
4. No	55%

3. If an Auto-Bus-National Airport Shuttle was available, would you require your employees to use it, assuming the following:

A. a direct shuttle to and from the airport with no other stops and a maximum wait of 20 minutes from the time your baggage arrived until the bus departed.

Probable Use (H-129)

1. Yes, nearly always	7%
2. Yes, on occasion	20%
3. Yes, in emergencies only	5%
4. No	68%

B. a direct shuttle to and from the airport with no other stops and a maximum wait of 45 minutes from the time your baggage arrived until the bus departed.

Probable Use (H-130)

1. Yes, nearly always	3%
2. Yes, on occasion	17%
3. Yes, in emergencies only	7%
4. No	73%

1. Do you feel that there is currently a need for a shuttle service to the Des Moines Airport?

1. Yes	2. No	(N=129)
92%	9%	

2. If an Ames-Des Moines Airport Shuttle was available, would you use it, assuming the following:

A. a direct shuttle to and from the airport with no other stops and a maximum wait of 90 minutes from the time your baggage arrived until the bus departed.

Probable Use		(N=133)
1.-----Yes, nearly always.	14%	
2.-----Yes, on occasion.	47%	
3.----Yes, in emergencies only.	23%	
4.-----No.	17%	

B. a direct shuttle to and from the airport with no other stops and a maximum wait of 45 minutes from the time your baggage arrived until the bus departed.

Probable Use		(N=133)
1.-----Yes, nearly always.	58%	
2.-----Yes, on occasion.	39%	
3.-----Yes, in emergencies only.	3%	
4.-----No.	5%	

3. If an Ames-Des Moines Airport Shuttle was available, would you require your employees to use it, assuming the following:

A. a direct shuttle to and from the airport with no other stops and a maximum wait of 90 minutes from the time your baggage arrived until the bus departed.

Probable Use		(N=129)
1.-----Yes, nearly always.	7%	
2.-----Yes, on occasion.	30%	
3.-----Yes, in emergencies only.	9%	
4.-----No.	55%	

B. a direct shuttle to and from the airport with no other stops and a maximum wait of 45 minutes from the time your baggage arrived until the bus departed.

Probable Use		(N=129)
1.-----Yes, nearly always.	30%	
2.-----Yes, on occasion.	28%	
3.-----Yes, in emergencies only.	2%	
4.-----No.	40%	

4. If a shuttle service to the Des Moines airport were available, and the cost was less than or equal to paying mileage and parking, would you require your employees to use it, assuming a direct route and a 90 minute wait?

Probable Use		(N=125)
1.-----	Yes, nearly always.	9%
2.-----	Yes, on occasion.	29%
3.-----	Yes, in emergencies only.	10%
4.-----	No.	52%

5. If a shuttle service to the Des Moines airport were available, and the cost was less than or equal to paying mileage and parking, would you require your employees to use it, assuming a direct route and a 45 minute wait?

Probable Use		(N=124)
1.-----	Yes, nearly always.	41%
2.-----	Yes, on occasion.	21%
3.-----	Yes, in emergencies only.	4%
4.-----	No.	34%

6. What is the MAXIMUM amount of time that you feel would be acceptable for an employee or guest of the university to wait at the airport for a shuttle bus to return them to Ames?

		(N=133)
1.	15-30 minutes	17%
2.	31-45 minutes	48%
3.	46-60 minutes	23%
4.	60-90 minutes	12%
5.	Other _____	0%

7. When your department has visiting professors, speakers, students, etc., arrive at the Des Moines airport, how do they get to Ames?

		(N=133)
1.	Rent a car	14%
2.	Someone from department picks up	86%
3.	Taxi cab	0%
4.	Other _____	0%

8. In the past year, approximately how many employees from your department used the Des Moines Airport for business travel?

Range = 1 to 1000 Median = 17 (N=126)

Total Number = (Estimate = 3000 trips/year)

9. In the past year, how many visitors to Ames did your department host (include professors, speakers, graduate students, seminar attendees, etc.) who used the Des Moines Airport?

Range = 1 to 3000 Median = 11.5 (N=120)

Total Number = (Estimate for all ISU = 4550 trips/year)

10. Do you feel that a shuttle service would attract more seminars and conventions to Ames?

(N=118)

- | | |
|--------|-----|
| 1. Yes | 53% |
| 2. No | 47% |

11. If a shuttle service were offered, for a one-way fare would you be willing to pay as much as:

Amount	Yes	No
7.50-----	1 99%	2 1%
10.00-----	1 93%	2 7%
12.50-----	1 49%	2 51%
15.00-----	1 19%	2 81%
17.50-----	1 7%	2 93%

12. Please write any additional comments or suggestions in the space below. Thank you for your cooperation in this study.

Dear Traveler,

A study is being conducted to assess the feasibility of an Ames-Des Moines airport shuttle service. Would you please take a few minutes to answer the questions on this form?

In answering the questions, assume the shuttle service would be direct from the airport to Ames with no stops in downtown Des Moines. Questions are asked about two different wait times at the airport in Des Moines--a 45 minute wait or a 90 minute wait.

Your cooperation in this study is needed and greatly appreciated. You may leave this form with your travel agent. If that is not convenient, ask your travel agent for a postage paid envelope and mail the form back to me at your convenience. If you have any additional comments or suggestions after completing this form, feel free to write them on this form or enclose them in an envelope along with this form. Any suggestions that will improve the service and/or customer convenience will be considered.

Forms must be returned by 9/30/89.

Thank you for your help.

Rod Weis
Operations Assistant
Cy-Ride

* Please circle the appropriate answer.

1. Approximately how many times a year do you travel to the airport? (N=255)

A. 1-2 B. 3-4 C. 5-6 D. 7-12 E. 13+

14.3% 33.0% 20.9% 23.0% 8.8%

2. How do you currently travel to/from the Des Moines Airport?

(N=253)

A. Personal car/park at airport

Never	Less than Half	More than Half	Always
1	2	3	4
21.1%	21.1%	26.7%	31.1%

B. Shared ride/park at airport

Never	Less than Half	More than Half	Always
1	2	3	4
74.0%	23.4%	2.6%	0%

C. Driven by family/friend

Never	Less than Half	More than Half	Always
1	2	3	4
33.0%	27.5%	22.0%	17.5%

D. Ride bus or taxi

Never	Less than Half	More than Half	Always
1	2	3	4
88.5%	5.1%	2.6%	3.8%

3. If an Ames-Des Moines Airport Shuttle were available, would you use it, assuming the following:

(N=254)

a. A direct shuttle and a maximum wait from baggage arrival to departure of 90 minutes:

Probable Use	
1. -----Yes, nearly always	23.4%
2. -----Yes, on occasion	44.4%
3. -----Yes, in emergencies only	20.0%
4. -----No	12.2%

b. A direct shuttle and a maximum wait from baggage arrival to departure of 45 minutes:

Probable Use	
1. -----Yes, nearly always	61.3%
2. -----Yes, on occasion	31.2%
3. -----Yes, in emergencies only	6.5%
4. -----No	1.0%

4. If a shuttle service were offered, for a one-way fare would you be willing to pay as much as: (N=257)

Amount	Yes	No
7.50-----	1 100%	2 0%
10.00-----	1 86.5%	2 13.5%
12.50-----	1 49.4%	2 50.6%
15.00-----	1 16.7%	2 83.3%
17.50-----	1 8.7%	2 91.3%

5. If a shuttle service were available, how important are the following factors: (N=249)
- a. Reliability- shuttle not cancelled, shuttle operates on time, etc.

1. Little	2. Some	3. Much
1.1%	0%	98.9%

- b. Pick up/departure sites in Ames

1. Little	2. Some	3. Much
17.0%	24.5%	58.5%

- c. That cost be less than operating expenses/parking for personal car

1. Little	2. Some	3. Much
14.0%	47.3%	38.7%

6. How often do you or members of your family use Cy-Ride? (N=256)

1. Never	2. Less than once/month
29.8%	28.7%
3. 1-4 times/month	4. At least weekly
20.2%	21.3%

7. Employment: (N=257)

1. Self-employed	19.1%
2. Employee--private firm	18.6%
3. Employee--public firm	41.5%
4. Student	11.8%
5. Not employed (retired etc.)	4.7%
6. Other	4.3%

Airline Abbreviation Codes

	<u>Code</u>	<u>Carrier</u>	<u>Daily Flights</u>
1.	HP	America West	16
2.	AA	American Airlines	14
3.	ML	Midway Airlines	8
4.	NW	Northwest Airlines	10
5.	TW	Trans World Airlines	12
6.	UA	United Airlines	18
		Total Air Carrier Flights	78

7.	ZV	Air Midwest	20
8.	YX	Skyway	8
9.	ZK	Great Lakes Aviation	12
10.	9N	Trans States	5
11.	SC	Sun Country	-
12.	XJ	Mesaba	2
13.	8G	GP Express	-
		Total Commuter Flights	47

(5 TRIPS/DAY)

Appendix C, PAGE 2

Outgoing Flights Effective 9-30-89 (Monday-Friday)

	Departure Times	Flight Number	Gate	Destination
T R I P #1	6:00AM	TW 694	C4	St. Louis/Raleigh/Norfolk
	6:15AM	NW 591	C1	Minneapolis/St. Louis
	6:25AM	ML 192	A1	Midway/LaGuardia
	6:43AM	UA 604	A3	Chicago/Tampa/St. Petersburg
	7:00AM	AA 1237	C6	Dallas/Ft. Worth/San Antonio
	7:00AM	CF ZV 1470	CR	Kansas City
	7:09AM	AA 101	C6	Dallas/Phoenix
	7:10AM	UA 787	A4	Denver
	7:45AM	HP 419	C3	Phoenix/Los Angeles
	8:05AM	AA 638	C7	Chicago/Harrisburg
	8:15AM	CF ZV 1472	CR	Kansas City
	8:50AM	CF ZK 51	CR	Ottumwa
	8:55AM	TW 654	C4	St. Louis/West Palm/Ft. Laud.
	9:15AM	UA 570	A2	Chicago
	9:25AM	CF YX 1043	C2	Milwaukee
	9:27AM	CF ZV 1471	CR	Waterloo
	9:56AM	CF 9N 7155	C4	St. Louis
	10:10AM	CF ZK 61	CR	Minneapolis
	10:24AM	AA 555	C7	Dallas/Ft. Worth/Shreveport
10:30AM	ML 318	A1	Midway/Detroit	
10:30AM	UA 991	A4	Denver	
T R I P #2	11:10AM	NW 1435	C1	Minneapolis
	11:17AM	CF ZV 1474	CR	Kansas City
	11:22AM	TW 360	C4	St. Louis/Atlanta
	11:28AM	AA 1276	C7	Chicago/Albany
	12:01PM	UA 948	A2	Chicago
	12:45PM	CF 9N 7157	C4	St. Louis
	12:50PM	CF ZV 1484	CR	Kansas City
	12:55PM	NW 524	C1	Minneapolis/LaCrosse
	1:47PM	CF ZV 1476	CR	Kansas City
	1:57PM	AA 660	C7	Chicago/Providence
	2:05PM	ML 172	A1	Midway/Philadelphia
	2:10PM	HP 250	C3	Cedar Rapids

* See Appendix C, Page 1 for Codes.

Outgoing Flights Effective 9-30-89 (Monday-Friday)
(Continued)

T R I P #3	3:13PM		UA 674	A2	Chicago
	3:30PM		TW 328	C4	St. Louis/Syracuse
	3:45PM		UA 865	A4	Denver
	4:00PM		NW 601	C1	Minneapolis/St. Louis
	4:10PM		HP 252	C3	Cedar Rapids
	4:10PM	CF	ZV 1478	CR	Kansas City
	4:50PM		HP 578	C3	Phoenix/Oakland
	5:05PM	CF	ZK 64	CR	Ottumwa
	5:10PM	CF	XJ 3225	C2	Minneapolis
	5:50PM	CF	ZV 1486	CR	Kansas City
	5:56PM		UA 564	A2	Chicago
	6:07PM		AA 1072	C6	Chicago/Raleigh/Durham
	6:10PM		ML 380	A1	Midway/LaGuardia
T R I P #4	6:30PM		TW 542	C4	St. Louis/Chicago
	6:30PM	CF	ZK 65	CR	Minneapolis
	6:55PM		HP 1225	C3	Phoenix/Oakland
	6:55PM		UA 433	A4	Denver
	6:56PM	CF	ZV 1480	CR	Kansas City
	7:05PM		AA 135	C7	Dallas/Ft.Worth/Lubbock
	7:20PM		YX 1025	C2	Milwaukee
	8:35PM		NW 467	C1	Minneapolis
	9:20PM		HP 325	C3	Omaha/Las Vegas
	9:36PM		TW 505	C4	Kansas City
	9:46PM	CF	ZV 1481	CR	Waterloo
	10:30PM		HP 256	C3	Cedar Rapids

Note: Trip #5 Would Meet 11:00PM Incoming Flights Not Shown.

* See Appendix C, Page 1 for Codes.

(10 TRIPS/DAY)

Appendix C, PAGE 4

Outgoing Flights Effective 9-30-89 (Monday-Friday)

	Departure Times		Flight Number	Gate	Destination
T R I P #1	6:00AM		TW 694	C4	St. Louis/Raleigh/Norfolk
	6:15AM		NW 591	C1	Minneapolis/St. Louis
	6:25AM		ML 192	A1	Midway/LaGuardia
	6:43AM		UA 604	A3	Chicago/Tampa/St. Petersburg
	7:00AM		AA 1237	C6	Dallas/Ft. Worth/San Antonio
	7:00AM	CF	ZV 1470	CR	Kansas City
	7:09AM		AA 101	C6	Dallas/Phoenix
	7:10AM		UA 787	A4	Denver
T R I P #2	7:45AM		HP 419	C3	Phoenix/Los Angeles
	8:05AM		AA 638	C7	Chicago/Harrisburg
	8:15AM	CF	ZV 1472	CR	Kansas City
	8:50AM	CF	ZK 51	CR	Ottumwa
	8:55AM		TW 654	C4	St. Louis/West Palm/Ft. Laud.
	9:15AM		UA 570	A2	Chicago
	9:25AM	CF	YX 1043	C2	Milwaukee
	9:27AM	CF	ZV 1471	CR	Waterloo
T R I P #3	9:56AM	CF	9N 7155	C4	St. Louis
	10:10AM	CF	ZK 61	CR	Minneapolis
	10:24AM		AA 555	C7	Dallas/Ft. Worth/Shreveport
	10:30AM		ML 318	A1	Midway/Detroit
	10:30AM		UA 991	A4	Denver
	11:10AM		NW 1435	C1	Minneapolis
	11:17AM	CF	ZV 1474	CR	Kansas City
	11:22AM		TW 360	C4	St. Louis/Atlanta
11:28AM		AA 1276	C7	Chicago/Albany	
T R I P #4	12:01PM		UA 948	A2	Chicago
	12:45PM	CF	9N 7157	C4	St. Louis
	12:50PM	CF	ZV 1484	CR	Kansas City
	12:55PM		NW 524	C1	Minneapolis/LaCrosse
T R I P #5	1:47PM	CF	ZV 1476	CR	Kansas City
	1:57PM		AA 660	C7	Chicago/Providence
	2:05PM		ML 172	A1	Midway/Philadelphia
	2:10PM		HP 250	C3	Cedar Rapids

* See Appendix C, Page 1 for Codes.

Outgoing Flights Effective 9-30-89 (Monday-Friday)
(Continued)

T R I P #6	3:13PM		UA 674	A2	Chicago
	3:30PM		TW 328	C4	St. Louis/Syracuse
	3:45PM		UA 865	A4	Denver
	4:00PM		NW 601	C1	Minneapolis/St. Louis
	4:10PM		HP 252	C3	Cedar Rapids
	4:10PM	CF	ZV 1478	CR	Kansas City
	4:50PM		HP 578	C3	Phoenix/Oakland
T R I P #7	5:05PM	CF	ZK 64	CR	Ottumwa
	5:10PM	CF	XJ 3225	C2	Minneapolis
	5:50PM	CF	ZV 1486	CR	Kansas City
	5:56PM		UA 564	A2	Chicago
	6:07PM		AA 1072	C6	Chicago/Raleigh/Durham
	6:10PM		ML 380	A1	Midway/LaGuardia
	6:30PM		TW 542	C4	St. Louis/Chicago
	6:30PM	CF	ZK 65	CR	Minneapolis
T R I P #8	6:55PM		HP 1225	C3	Phoenix/Oakland
	6:55PM		UA 433	A4	Denver
	6:56PM	CF	ZV 1480	CR	Kansas City
	7:05PM		AA 135	C7	Dallas/Ft.Worth/Lubbock
	7:20PM		YX 1025	C2	Milwaukee
	8:35PM		NW 467	C1	Minneapolis
T R I P #9	9:20PM		HP 325	C3	Omaha/Las Vegas
	9:36PM		TW 505	C4	Kansas City
	9:46PM	CF	ZV 1481	CR	Waterloo
	10:30PM		HP 256	C3	Cedar Rapids

Note: Trip #10 Would Meet 11:00PM Incoming Flights Not Shown.

(15 TRIPS/DAY)

Appendix C, PAGE 6

Outgoing Flights Effective 9-30-89 (Monday-Friday)

	Departure Times		Flight Number	Gate	Destination
T R I P #1	6:00AM		TW 694	C4	St. Louis/Raleigh/Norfolk
	6:15AM		NW 591	C1	Minneapolis/St. Louis
	6:25AM		ML 192	A1	Midway/LaGuardia
	6:43AM		UA 604	A3	Chicago/Tampa/St. Petersburg
#2	7:00AM		AA 1237	C6	Dallas/Ft. Worth/San Antonio
	7:00AM	CF	ZV 1470	CR	Kansas City
	7:09AM		AA 101	C6	Dallas/Phoenix
	7:10AM		UA 787	A4	Denver
	7:45AM		HP 419	C3	Phoenix/Los Angeles
#3	8:05AM		AA 638	C7	Chicago/Harrisburg
	8:15AM	CF	ZV 1472	CR	Kansas City
	8:50AM	CF	ZK 51	CR	Ottumwa
	8:55AM		TW 654	C4	St. Louis/West Palm/Ft. Laud.
#4	9:15AM		UA 570	A2	Chicago
	9:25AM	CF	YX 1043	C2	Milwaukee
	9:27AM	CF	ZV 1471	CR	Waterloo
	9:56AM	CF	9N 7155	C4	St. Louis
#5	10:10AM	CF	ZK 61	CR	Minneapolis
	10:24AM		AA 555	C7	Dallas/Ft. Worth/Shreveport
	10:30AM		ML 318	A1	Midway/Detroit
	10:30AM		UA 991	A4	Denver
#6	11:10AM		NW 1435	C1	Minneapolis
	11:17AM	CF	ZV 1474	CR	Kansas City
	11:22AM		TW 360	C4	St. Louis/Atlanta
	11:28AM		AA 1276	C7	Chicago/Albany
	12:01PM		UA 948	A2	Chicago
#7	12:45PM	CF	9N 7157	C4	St. Louis
	12:50PM	CF	ZV 1484	CR	Kansas City
	12:55PM		NW 524	C1	Minneapolis/LaCrosse
#8	1:47PM	CF	ZV 1476	CR	Kansas City
	1:57PM		AA 660	C7	Chicago/Providence
	2:05PM		ML 172	A1	Midway/Philadelphia
	2:10PM		HP 250	C3	Cedar Rapids

* See Appendix C, Page 1 for Codes.

(15 TRIPS/DAY)

Appendix C, PAGE 7

Outgoing Flights Effective 9-30-89 (Monday-Friday)
(Continued)

TRIP #	TIME	CARRIER	FLIGHT #	CLASS	DESTINATION
#9	3:13PM	UA	674	A2	Chicago
	3:30PM	TW	328	C4	St. Louis/Syracuse
	3:45PM	UA	865	A4	Denver
	4:00PM	NW	601	C1	Minneapolis/St. Louis
#10	4:10PM	HP	252	C3	Cedar Rapids
	4:10PM	CF	ZV 1478	CR	Kansas City
	4:50PM	HP	578	C3	Phoenix/Oakland
	5:05PM	CF	ZK 64	CR	Ottumwa
	5:10PM	CF	XJ 3225	C2	Minneapolis
#11	5:50PM	CF	ZV 1486	CR	Kansas City
	5:56PM	UA	564	A2	Chicago
	6:07PM	AA	1072	C6	Chicago/Raleigh/Durham
	6:10PM	ML	380	A1	Midway/LaGuardia
	6:30PM	TW	542	C4	St. Louis/Chicago
	6:30PM	CF	ZK 65	CR	Minneapolis
#12	6:55PM	HP	1225	C3	Phoenix/Oakland
	6:55PM	UA	433	A4	Denver
	6:56PM	CF	ZV 1480	CR	Kansas City
	7:05PM	AA	135	C7	Dallas/Ft.Worth/Lubbock
#13	7:20PM	YX	1025	C2	Milwaukee
	8:35PM	NW	467	C1	Minneapolis
	9:20PM	HP	325	C3	Omaha/Las Vegas
#14	9:36PM	TW	505	C4	Kansas City
	9:46PM	CF	ZV 1481	CR	Waterloo
	10:30PM	HP	256	C3	Cedar Rapids

Note: Trip #15 Would Meet 11:00PM Incoming Flights Not Shown.

* See Appendix C, Page 1 for Codes.

ISU Trip Data

Total Number of Passengers LEAVING Des Moines
 Shown by Departure Times
 October 1 through October 31, 1988

Appendix D, PAGE 1

MONTH/YEAR	MID-7:00	7:00-9:00	9:00-11:00	11:00-3:00	3:00-6:00	6:00-MID
OCT-88	2	3	2	3	3	1
	1	1	3	1	1	1
	8	7	12	1	1	2
	1	1	2	2	1	
	1	1	1	1	3	
	1	8	1	8	3	
	1	7	4	3	1	
	1	1	1	3	2	
	4	1	2	1	1	
	1	2	1	1	1	
	1		3	2	1	
	8		1	2	1	
	1		1	2	1	
	3		1	1	1	
	2		1	5	1	
	2			2	3	
	1			3	1	
	4			2	1	
	1			2	3	
	1			1		
	1			1		
	1			1		
				2		
				1		
				4		
				1		
TOTALS	47	32	36	56	30	4
% of Total	23%	16%	18%	27%	15%	2%
GRAND TOTAL	205	AVERAGE TRIPS PER DAY		6.61		

ISU TRIP DATA

Total Number of Passengers ARRIVING Des
 Shown by ARRIVAL Times
 November 1 through November 31, 1988

Appendix D, PAGE 4

MONTH/YEAR	MID-7:00	7:00-9:00	9:00-11:00	11:00-3:00	3:00-6:00	6:00-MID
NOV-88	2	1	1	4	4	3
	1	1	1	1	5	1
	1	3	4	1	1	1
	1	2	1	5	14	1
	1	1	2	1	1	2
	1	2	1	3	1	1
	2		1	1	1	1
	1		1	1	1	2
			1	1	1	1
			1	1	2	1
				1	2	
				1	1	
				2	2	
				6	2	
				1	1	
				1	3	
				1	2	
				1	1	
				1	2	
				1	1	
				1	1	
				6	1	
				1		
TOTALS	10	10	14	44	50	15
% of Total	8%	8%	11%	34%	38%	11%
GRAND TOTAL	143	AVERAGE RIDERS PER DAY		4.61		

ISU Trip Data

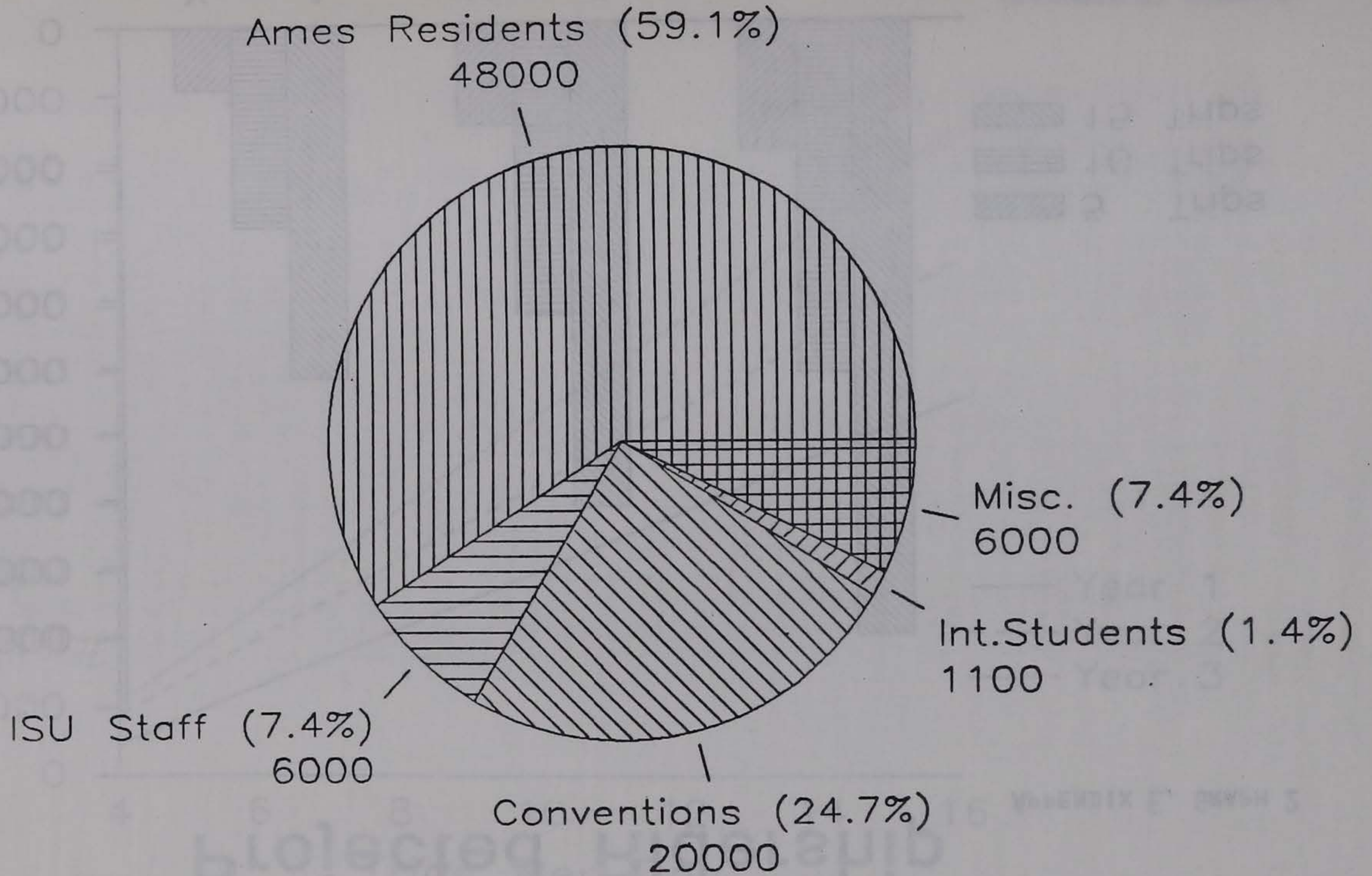
Total Number of Passengers LEAVING Des Moines
Shown by DEPARTURE Times
December 1 through December 31, 1988

Appendix D, PAGE 5

MONTH/YEAR	MID-7:00	7:00-9:00	9:00-11:00	11:00-3:00	3:00-6:00	6:00-MID
DEC-88	2	1	1	1	3	1
	1	1	1	1	1	1
	1	5	1	1	1	1
	3	2	1	1	2	2
	2	1	1	7	1	
	1	3	1	1	2	
	2	1	1	1	1	
	5	1	4	2	1	
	1	1	1	1	1	
	1	4	1	1	1	
	1	5	2	1	1	
	2	2	2	1	1	
	2	1	1	1	1	
	2	1	1	1	2	
	1	1	1	3	1	
	1	2	1	1	4	
	1	1	2	1		
	1	1	2	1		
	1	1	1	1		
	1	1	1	1		
	3	2	1	1		
TOTALS	32	32	30	25	25	5
% of Total	21%	21%	20%	17%	17%	3%
GRAND TOTAL	149		AVERAGE RIDERS PER DAY	4.81		

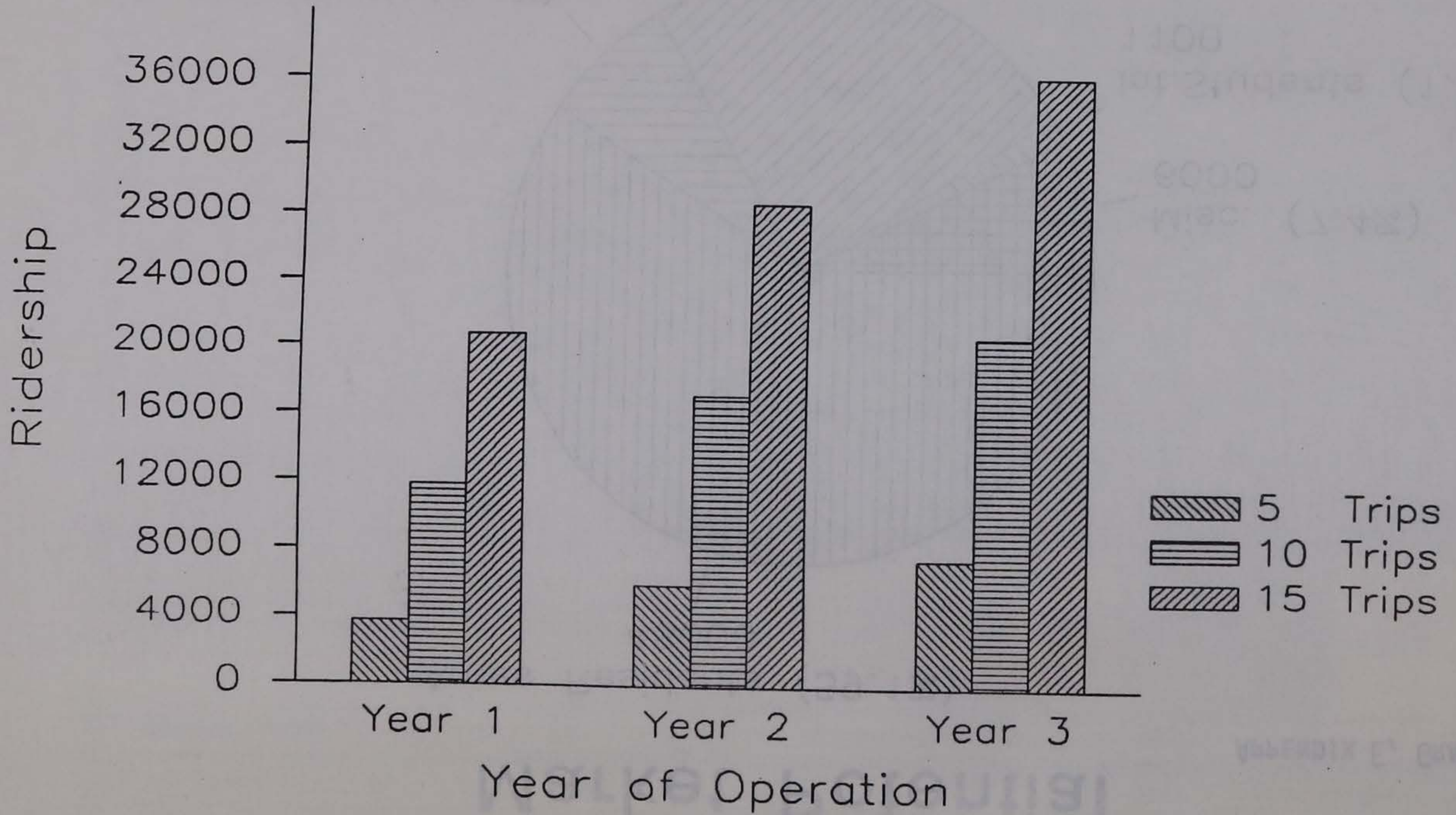
Market Potential

APPENDIX E, GRAPH 1



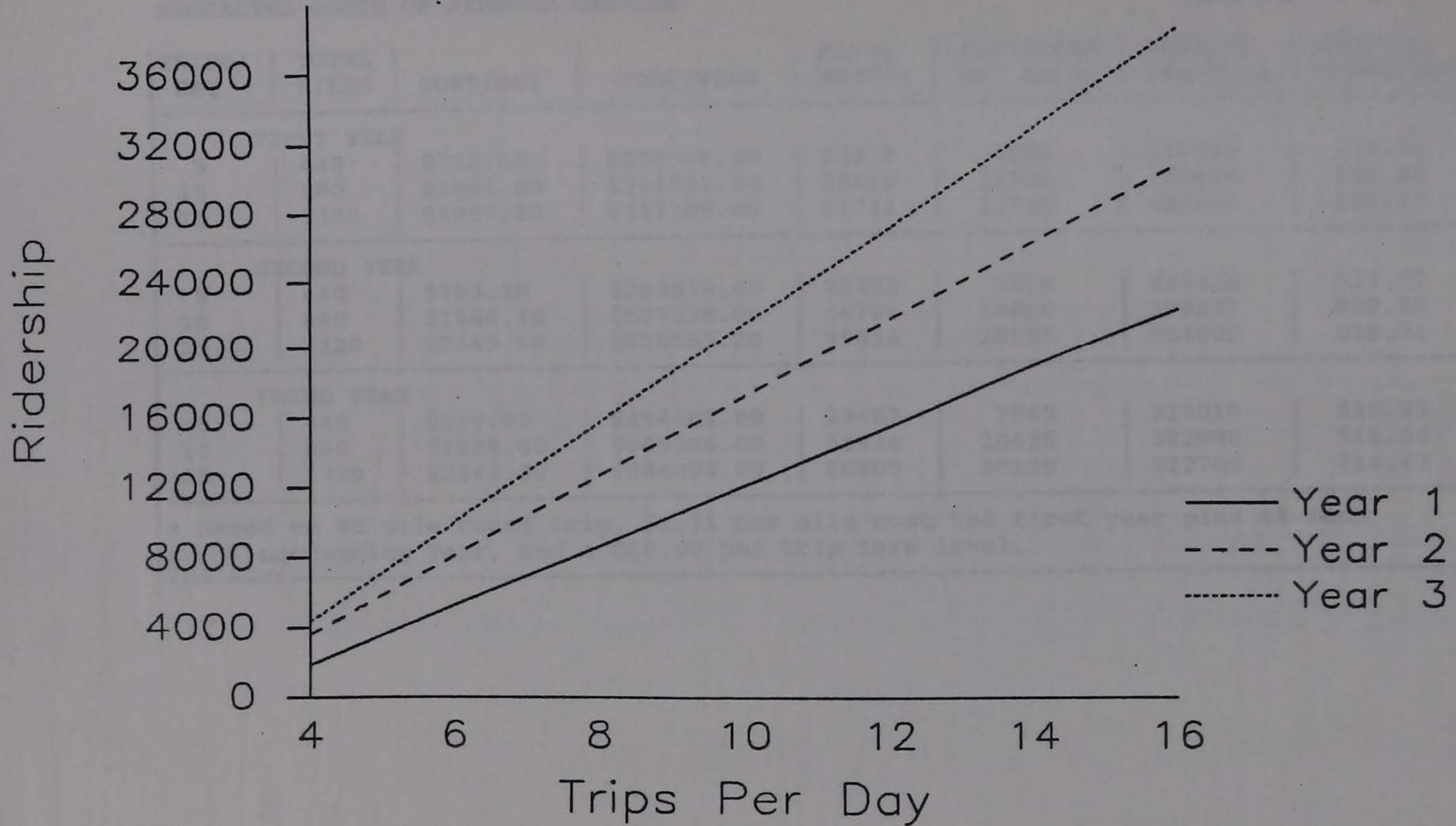
Projected Ridership

APPENDIX E, GRAPH 2



Projected Ridership

APPENDIX E, GRAPH 3



PROJECTED COSTS OF AIRPORT SHUTTLE

Appendix F, Table 1

TRIPS/ DAY	TOTAL MILES	COST/DAY	COST/YEAR	Fares Needed	Projected No. Fares	Subsidy Required	Subsidy/ Passenger
FIRST YEAR							
5	440	\$752.40	\$272368.80	27237	3655	235819	\$64.52
10	880	\$1504.80	\$544737.60	54474	11785	426888	\$36.22
15	1320	\$2257.20	\$817106.40	81711	20700	610106	\$29.47
SECOND YEAR							
5	440	\$783.20	\$283518.40	28352	5910	224418	\$37.97
10	880	\$1566.40	\$567036.80	56704	17080	396237	\$23.20
15	1320	\$2349.60	\$850555.20	85056	28595	564605	\$19.74
THIRD YEAR							
5	440	\$814.00	\$294668.00	29467	7565	219018	\$28.95
10	880	\$1628.00	\$589336.00	58934	20635	382986	\$18.56
15	1320	\$2442.00	\$884004.00	88400	36130	522704	\$14.47
<p>* Based on 88 mile round trip, \$1.71 per mile cost the first year plus 4% each succeeding year, and a \$10.00 per trip fare level.</p>							

PROJECTED COSTS OF AIRPORT SHUTTLE

Appendix F, Table 2

TRIPS/ DAY	TOTAL MILES	COST/DAY	COST/YEAR	Fares Needed	Projected No. Fares	Subsidy Required	Subsidy/ Passenger
FIRST YEAR							
5	440	\$660.00	\$238920.00	23892	3655	202370	\$55.37
10	880	\$1320.00	\$477840.00	47784	11785	359990	\$30.55
15	1320	\$1980.00	\$716760.00	71676	20700	509760	\$24.63
SECOND YEAR							
5	440	\$686.40	\$248476.80	24848	5910	189377	\$32.04
10	880	\$1372.80	\$496953.60	49695	17080	326154	\$19.10
15	1320	\$2059.20	\$745430.40	74543	28595	459480	\$16.07
THIRD YEAR							
5	440	\$712.80	\$258033.60	25803	7565	182384	\$24.11
10	880	\$1628.00	\$589336.00	58934	20635	382986	\$18.56
15	1320	\$2442.00	\$884004.00	88400	36130	522704	\$14.47

* Based on 88 mile round trip, \$1.50 per mile cost the first year plus 4% each succeeding year, and a \$10.00 per trip fare level.

PROJECTED COSTS OF AIRPORT SHUTTLE

Appendix F, Table 3

TRIPS/ DAY	TOTAL MILES	COST/DAY	COST/YEAR	Fares Needed	Projected No. Fares	Subsidy Required	Subsidy/ Passenger
FIRST YEAR							
5	440	\$484.00	\$175208.00	17521	3655	138658	\$37.94
10	880	\$968.00	\$350416.00	35042	11785	232566	\$19.73
15	1320	\$1452.00	\$525624.00	52562	20700	318624	\$15.39
SECOND YEAR							
5	440	\$501.60	\$181579.20	18158	5910	122479	\$20.72
10	880	\$1003.20	\$363158.40	36316	17080	192358	\$11.26
15	1320	\$1504.80	\$544737.60	54474	28595	258788	\$9.05
THIRD YEAR							
5	440	\$523.60	\$189543.20	18954	7565	113893	\$15.06
10	880	\$1047.20	\$379086.40	37909	20635	172736	\$8.37
15	1320	\$1570.80	\$568629.60	56863	36130	207330	\$5.74
<p>* Based on 88 mile round trip, \$1.10 per mile cost the first year plus 4% each succeeding year, and a \$10.00 per trip fare level.</p>							

COMMENTS

1. I would not require faculty in my department to use the shuttle if it meant a considerable waiting time (which 45 minutes is), but I would heartily encourage such usage.
2. I would strongly encourage faculty use but would not require it.
3. I would not require shuttle use but would encourage them to use it as much as possible.
4. Believe shuttle service would be a nice service to provide but don't believe employees should be required to use it. Out of seven professional staff, three don't live in Ames. Need flexibility to get to and from airport.
5. There are peak times at the University when the shuttle would be used heavily, but not every day.
6. The hours of the shuttle service would need to be considered before I would consider requiring anyone to use it. Also the drop-off point in Ames. If I get in at 12:30AM, I'm not going to want to call my family out of bed to pick me up. I think it could be required that we use it from 7:00AM to 9:00PM, but after that we should be allowed to use our own vehicle.
7. I like the idea of a shuttle and I hope this survey allows you to establish the service at a reasonable price (less than \$10) and with not more than a 30 minute wait. Mandating use by my faculty is not a reasonable expectation.
8. Many staff combine trips to the Des Moines Airport with other business in Des Moines, making use of the shuttle unacceptable.
9. Many flights late in the day are delayed and you would need to accomodate these persons.
10. Some staff take family members on trips and you would need a family fare that was reasonable.
11. We definitely need such a service. The question is how we can cost-effectively operate such a service.
12. The previous service to the airport and back with stops in Des Moines is still better than no service.
13. Would be interesting to know amount of resources ISU pays for travel expenses to and from airport and parking at airport.
14. If cost less than per-diem and mileage, then probably would only reimburse employees at shuttle rate.
15. Rental car rates are also a factor.

16. In lieu of shuttle, information on who's traveling (if willing to ride-share) might be helpful.
17. A major concern for faculty travel is late night returns from Chicago (11:00PM-1:00AM) and knowing that a shuttle bus will still be available.
18. You must be prepared to risk an adjustment period when travelers will be convinced to leave their cars in Ames and use the service. Our employees may not use the service immediately.
19. Good luck-I am a strong supporter of the concept.
20. The current ISU rate is about \$8.82 one way if a person drives their car. A shuttle should be in the same range or people will ask to drive their car for less cost AND less wait.
21. I don't feel a shuttle service would attract more seminars or conventions to Ames but it would be used and appreciated by those who do come.
22. The service must be dependable, available for ALL flights, and points of embarkation and debarkation must be convenient.
23. Why not have a bus that meets the major in-coming flights, say from Chicago. It would be important to run the shuttle after the last Chicago flight. It (last flight) is frequently late. If the shuttle didn't wait, the passengers would be stranded. Maybe check with travel agencies to see what flights ISU people take and run shuttle for those.
24. I would consider bus fare only reimbursement for travel.
25. Length of stay and parking at \$4.00/day would be a factor.
26. I don't know if a shuttle would attract more seminars but it would certainly make planning one easier.
27. The University probably would not require staff to use anything. We might not reimburse staff more than the fare but it is not practical to require use of the shuttle.
28. Every year 800-900 new foreign students come to Ames. Most come through the Des Moines Airport. Many are met by friends from their own country. We organize a volunteer shuttle service for a few days before each semester. Approximately 100 students use this. Most students however, are not met by friends or use our shuttle service. We would publicize a new shuttle service in our welcome letters.
29. It must be competitive with personal car reimbursement and parking. It's a good idea-thanks for trying! I think it's better to get air service to Ames. Let's try that again, especially with the extended runways.

30. I assume the shuttle drops one off at their residence. If not, shuttle offers little advantage. I have found air service out of Des Moines to be so unreliable that a car at the airport is almost essential. Many early evening scheduled flights end up arriving at midnight or later. I would be concerned about being stranded in Des Moines (heaven forbid)!!!

31. This type of service is long overdue. The lack of such service contributes to "agnaphobia" on the part of our colleagues on both coasts. I suggest two pick-up points-the Memorial Union and North Grand Mall.

32. Conferences that run over several days are troublesome to run because of sporadic arrival and departure times of conference attendees. A regular service would be great! I hope you can run at least 4-5 trips per day.

33. Could you also consider a reservation system?

34. I think a shuttle would attract more conferences because it would provide additional incentive for funding agencies to finance proposals for conferences.

35. I'm glad your looking into this in an organized manner.

36. Our department is within the Library. The Library has many people coming from the airport - job interviews, speakers, etc..

37. I live 11 miles from Ames and would rather leave my car at the airport than on Campus.

38. The last time such a service was available we recieved numerous reasons for persons not wanting to use it (drivers exceeding the speed limit, driver smoking, late plane arrivals, etc.). I suggest someone review why it failed to attract riders; we don't want to repeat the experience.

39. I would encourage employees to use it.

40. I am a newly appointed department head so I do not have all the information you requested at my fingertips. I do know that other constraints besides cost sometimes dictate faculty use of the type of service you propose. For example, class schedules may make a shuttle service that does not pick up frequently an impossibility. I do think that it is a very good idea if it can operate frequently.

41. Some employees need transportation from the University to their residence - would there be pick-ups and drops at the University?

42. Like the resurrection of Cy-Ride itself, the successful resurrection of the shuttle depends MAINLY on its being ABSOLUTELY reliable, and to a certain extent on cost. Mileage and parking is a good rule of thumb but most such trips in my department are not reimbursed, so mileage is actually a "fantasy" figure. I hope this does succeed. Thanks for looking into it.
43. There has been a need for a shuttle service for a long time.
44. I would encourage use but cannot force or require. Deans, Directors, or the Provost may be able to require use-they once did.
45. Problems with former shuttles:
- A. Stopped at several places enroute.
 - B. Drivers regularly exceeded speed limits.
 - C. Schedule was inconvenient.
 - D. Not very dependable.
 - E. Shuttle never waited for late flights.
- I finally gave up on the last item. I missed the shuttle several times at night because the plane was 15 minutes late. Need to provide "clean-up" service after the last delayed flight or after all carriers are in for the night for me to use it regularly.
46. I believe round-trip car mileage is around \$18.00 so in many cases it would be as cheap to drive, particularly if more than one person was involved.
47. This is a good idea. Hopefully someone from the Memorial Union staff fills this out too - they host many guests who fly in.
48. An important adjunct to good shuttle service is drop-off at the Ames residence or, at a minimum, notification of the residence of estimated time of arrival and a decent waiting area in Ames.
49. I would use it only if there were convenient and safe parking at the Ames end. Also require arrival in Des Moines no more than 45 minutes ahead of desired arrival.
50. I think this is an excellent idea but I don't think it will fly! It was tried once before. It doesn't save very much money and it can be very inconvenient. In my own case, my plane had problems, I missed the last shuttle, and I had to stay in Des Moines. Other times, just missing one shuttle and having to wait for the next one is not a very good use of time and one does not try to use it the next time.
51. The problem is I fly United and they are frequently an hour late with the 7:05PM flight out of Chicago. I won't do anything that leaves me stranded!
52. I frequently take the 6:35AM flight to Chicago and leave Ames at 5:00AM.

53. My concern is missing flights and getting stranded in Des Moines. The four times I've flown into airport this summer, all four were late. Of the four to five departures, three were late. Depends on how return service is structured. What about a reservation based service so you reserve by flight?

54. Most people drive their own vehicle which costs ISU \$16.80 plus parking at the airport which would typically be \$10.00 or less. The problem with shuttle bus is two fold: waiting for half hour or more, and once the passenger comes to Ames (say Depot or Memorial Union) another trip from that point to office or residence is very inconvenient.

55. Quality of service will determine success.

56. I hope very much that you institute such a service.

57. Transportation is the biggest problem with conventions and seminars in Ames.

58. I hope ISU helps to subsidize this service.

59. The availability of a van leaving the airport every hour on the hour would be a terrific asset. There are many, many hours wasted in picking up visitors, friends, etc.. However I do not think it can be made to be a paying proposition unless its use is required. Neither do I think it can bring more conventions here in that there are many more variables to consider in that decision.

60. Visitors would have a lot better opinion of Ames if we had a class operation of this kind.

61. One factor of importance to most travelers is the length of stay on a trip. If they are to be gone a few days, airport parking becomes a big factor in cost.

62. I don't have much feeling for the likely success or acceptance of the shuttle idea. It seems that the concept could well be worth a try.

63. Transportation to and from the airport really isn't a problem.

64. I usually combine travel to and from the airport with other activities in Des Moines. Shuttle would be inconvenient for that.

65. Most of our faculty are very busy people and want to travel from place to place quickly. Almost all have their own car and a second family car that they use to go to the airport.

66. If a GOOD service were in place, I would consider bus fare as the only reimbursement for travel to and from airport.

67. I would strongly encourage use by faculty, staff, and students.

68. There are peak times at the University when the shuttle would be used heavily.

69. 45 minutes is the upper limit of my willingness to wait. I'd prefer service every half hour to be really interested.

70. While there is no great problem with limited departure sites in Ames, it isn't very convenient to be brought back to Ames-perhaps late at night-and just be left at some central location. One can hardly expect door to door service but when I return to Ames if I'm still not home and have to be picked up by someone, that certainly reduces the convenience and adds to a wait of 45 minutes. These factors may tip me in favor of driving my car. There are several advantages to the shuttle however: cheaper than driving and parking and security for your car (it is in your own garage).