



TRANSPORTATION

71 - INTRODUCTION

This section deals with the Mass Transportation Plan, the Airport Plan, Motor Freight Services and Rail Service. These four elements provide the transportation services required to transport the citizens of Independence and the merchandise they need for work and home.

Independence offers the residents and industry a complete range of transportation services and has allowed for the future growth and development of the community. Independence is located in America's heartland, which has fast, easy, economical access to the rest of the nation.

72 - MASS TRANSPORTATION

Independence offers three mass transportation services for residents of city. Two of these services were implemented to address the needs of the elderly and persons with disabilities.

One service is the Dial-A-Ride program that allows persons 60 years of age and persons with disabilities to travel within the city with a reduced fare coupon. The city currently contracts this service with the Independence Cab Company. The Independence Cab Company uses their vehicles and the City provides two fifteen passenger buses equipped with lifts.

The second service provided is the Intra-City Red and Yellow Bus Routes. These two routes serve elderly apartments, commercial areas, low-income housing, two major hospitals other medical areas, the older

residential sections other medical areas, the older residential sections of the city. This service is operated by the Kansas City Area Transportation Authority by contract.

The third service provided is Inter-City Bus Service, between Independence and downtown Kansas City, Missouri. There are two bus routes that provide transportation for the work force as daily transportation to Kansas City. They are identified as Routes 24 and 28.

There are three legs that branch off Route 24. These branch legs primarily serve the work force traveling to Kansas City. Two of these legs offer an express bus service.

Route 28 serves a small portion of southwest Independence with two trips in the morning and two in the evening.

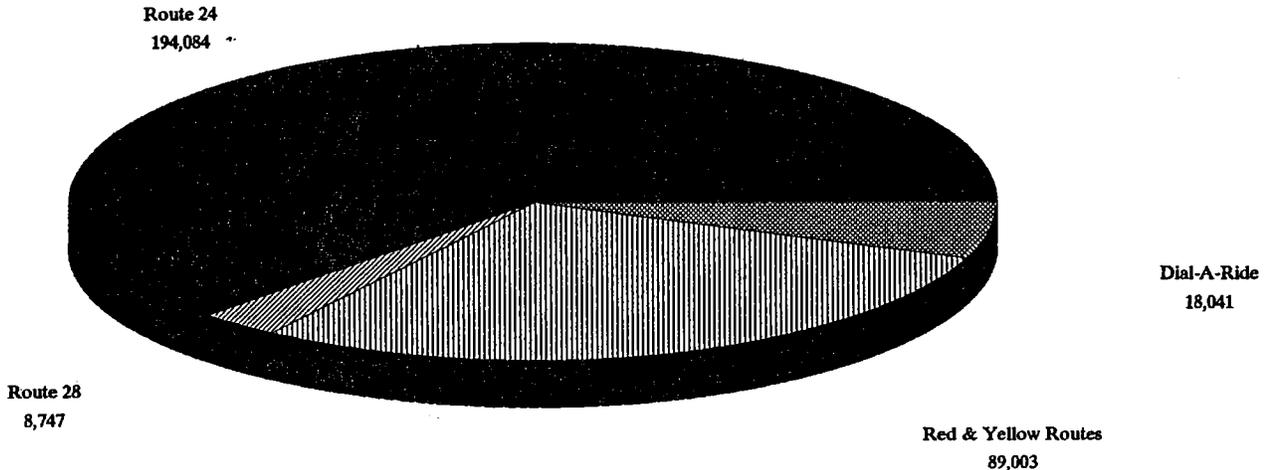
This report will discuss these services and their ridership over the past three and a half year period, from 1990 through June of 1993. Also, a plan to help meet the demand for providing paratransit services to persons with disabilities is included.

Figure 7.21 illustrates the total passenger trips for all transportation services provided by the City of Independence during the 1992 calendar year. This chart compares the volume of service for each of these transportation programs. A passenger trip is usually considered from the point of boarding a bus to the point of leaving the bus. A trip can be for any distance along the bus route from the point the route starts to the end of the route. A returning bus counts new passengers as a new trip. The figures in following sections illustrate the total ridership for each of the transit services being provided by

Figure 7.21

1992 TOTAL PASSENGER TRIPS

Independence Transit Services



the City of Independence and compare the decrease in passenger trips for each of these services for the three and a half year study period from 1990 through June 1993. Service reductions have had an affect on the overall ridership of those services. Almost any transportation service reduction in the future will reduce ridership using those services.

Route 24 has experienced a lost of 31,682 passenger trips from 1990 through 1992. Route 28 has decreased by 730 passenger trips during the same time period and the Red and Yellow Rourtes have decreased by 12, 495 passenger trips. The Dial-A-Ride program has been increased during this same time period and the ridership shows the passenger trips have increased by 4,864 from 1990 through 1992.

The first six months of 1993 have shown a stable ridership for the Inter-City and Intra-City bus service, but the Dial-A-Ride program has indicated a slight decline of passenger trip

which can be related to the extreme weather conditions during the first part of this year.

73 - DIAL-A-RIDE PROGRAM

The Dial-A-Ride program is a coupon system that provides transportation for the elderly and persons with disabilities to anywhere within the city limits, including the Blue Ridge Mall and the Blue Ridge Towers. An elderly resident must be at least 60 years of age to qualify. A person with disabilities must be able to show proof of a disability from a doctor or other agency.

Dial-A-Ride coupons may be used for any trip purpose, which could include the doctor, post office, shopping, movies, etc., as long as it is within the city limits of Independence. This program is intended to provide an alternate source of mobility for those residents that do not have

any other source of transportation and are confined to their home.

The Dial-A-Ride program is currently funded using a 50% match from a portion of the City of Independence one cent sales tax and a 50% match of federal funds from Section 9 of the Urban Mass Transportation Act. The City has budgeted \$31,750 to be matched by the Section 9 Federal Grant.

This funding allows the city to spend \$63,500 (City and Section 9) for the total year. The City has \$15,875 available for each quarter of the year to pay for patron coupons used, operating costs for gas and repair of the two Dial-A-Ride buses.

The Dial-A-Ride system was set up under the assumption that all issued coupons would not be used each quarter. This allows the city to issue more coupons and offer the service to a greater number of citizens. There are 10,800 coupons allocated each quarter and assuming that only 50 to 60% of these would be used, allows the program to stay within the budget and provide a needed program to a larger number of persons.

There are 900 citizens currently registered for this program. Twelve coupons are issued to each person per quarter. There are a total of 43,200 coupons issued each year.

The City currently pays \$3.00 for each coupon used and returned to the city by the Independence Cab Company. Based on a fifty percent usage of coupons by the 900 applicants that receive 12 coupons each quarter the city will pay \$14,625 each quarter for this service or \$58,500 per year.

The remaining amount of funds appropriated for this program are retained in case the number of applicants increases or the number of coupons used exceeds one fourth of the amount budgeted. Constant monitoring of this service is required in order to maintain this program.

All changes to this service are reviewed by the City Council for final action to be taken and a public hearing is held to receive comments from the residents of Independence.

Figure 7.31 at the bottom of the page, graphically illustrates the total number of one-way trips patrons use each month on the Dial-A-Ride program. Comparing the years 1990 through June of 1993 on this graph it shows there is not a consistent month where ridership is higher or lower. This would indicate that the majority of the trips are used for recreation or general travel when weather conditions are good, trips generally decrease when the weather is bad or the temperature is too hot or too cold.

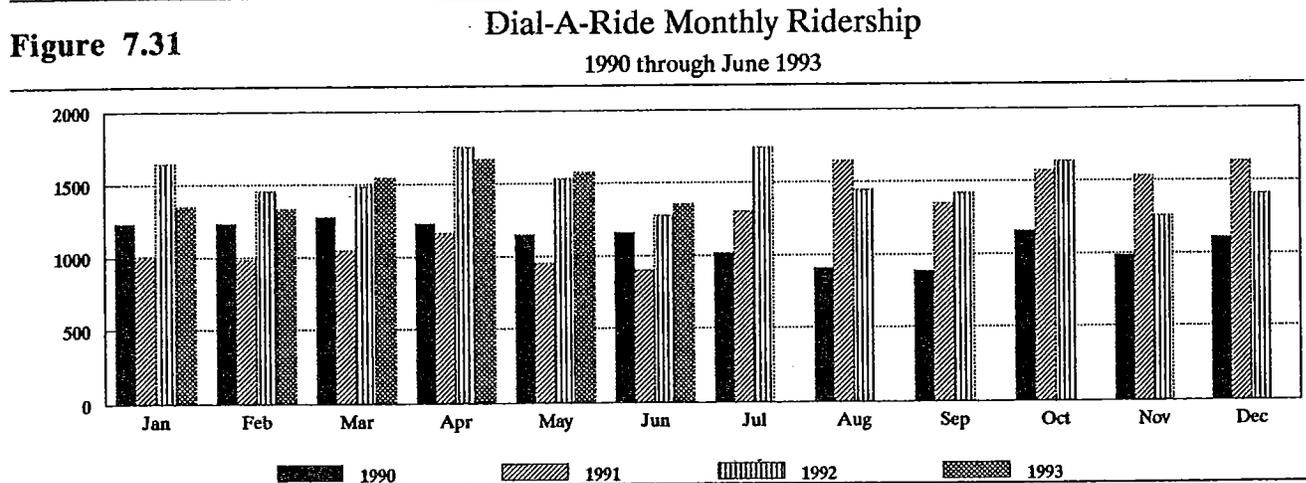


Figure 7.32

Dial-A-Ride Ridership
Average Ridership Per/Week

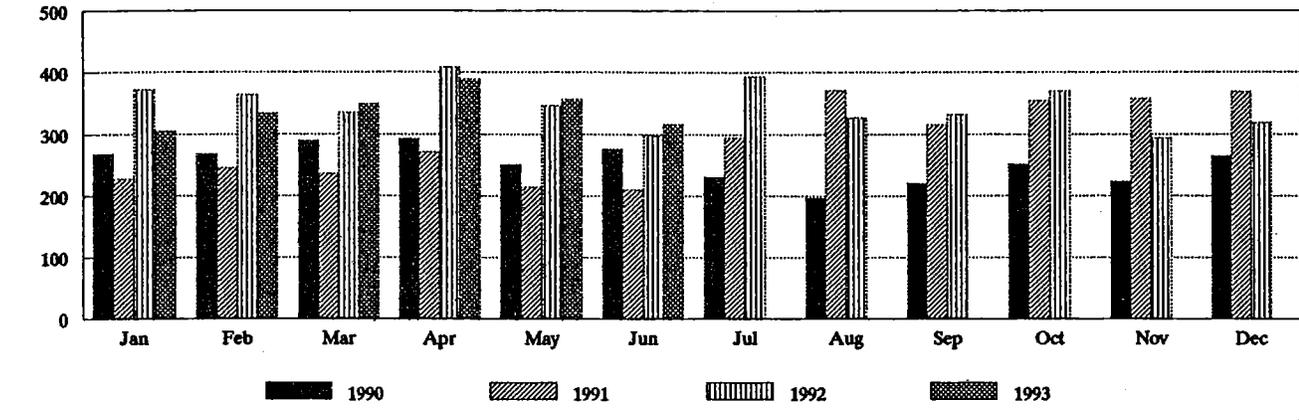


Figure 7.32 illustrates the average number of trips each week during that particular month of the study period. Even though the number of coupons were increased during the 1991 calendar year to 10,800 and the number of applicants were increased at the same time to 900 persons, the percentage of ridership to number of coupons issued has remained stable. As shown in these graphs the ridership has remained constant throughout this time period.

With the increase in applicants and number of coupons issued per applicant the system is staying within the projected fifty percent usage of coupons per quarter. This will allow the city

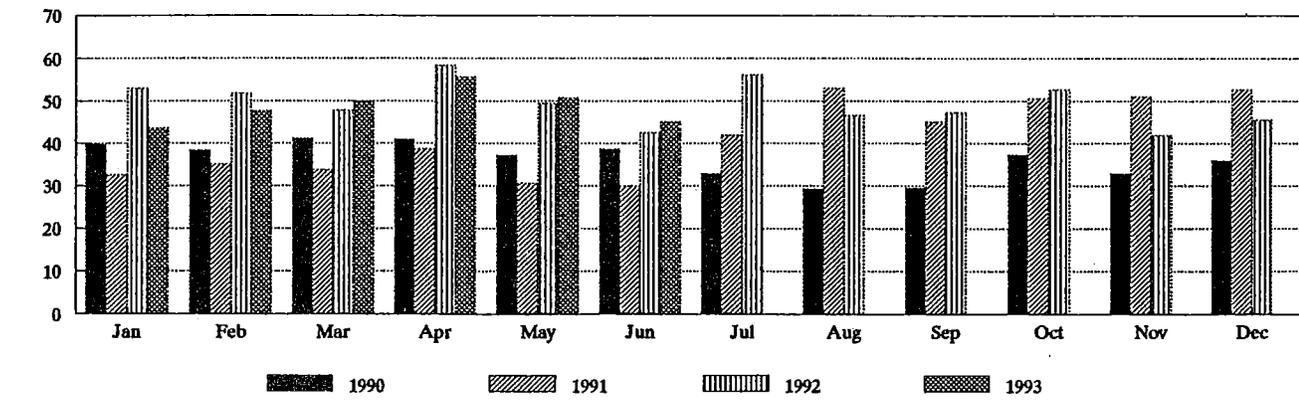
to maintain the current level of service for this program.

The last figure 7.33 at the bottom of the page illustrates the same information for the average number of daily trips during that particular month of the study period. The first month of each quarter usually has the highest total number of riders, because applicants have received their new coupons for that quarter and tend to use most of the coupons in the first month.

Using this data and the ridership survey conducted through the Independence Cab Company on a monthly basis shows that 51 percent of the

Figure 7.33

Dial-A-Ride Ridership
Average Daily Trips



trips are used for doctor or medical trips, 44 percent of the trips are used for recreational general transportation needs and five percent is for day care.

In order to comply with the Americans with Disabilities Act a plan was submitted to the Federal Transportation Administration (FTA), U.S. Department of Transportation to provide paratransit services using the Dial-A-Ride program for persons with Disabilities. That plan is now part of the Transportation Plan for the City of Independence and is outlined in the next section of this chapter.

7.4 ADA PARATRANSIT PLAN

Americans With Disabilities Act (ADA) affect on the Transportation Programs in Independence

The Americans With Disabilities Act which was signed into law as new civil rights legislation in 1990 is now included in the Urban Mass Transportation Administration (UMTA) requirements. In August of 1991, UMTA released the final rule for implementing the ADA legislation. Public entities operating or providing a fixed-route bus system are required to provide paratransit or other special service to individuals with disabilities that is comparable to the level of service provided to individuals without disabilities who use the fixed-route system.

Since the City of Independence is part of the Kansas City Area Transportation Authority (KCATA) fixed-route system we agreed to work with KCATA to develop a plan detailing how we are to provide such services. A generalized joint plan was submitted to the U.S. Department of Transportation by the July 26, 1992 deadline. This plan outlined how each community would provide additional service to persons with disabilities in order to comply with the requirements. A subse-

quent review of the plan was made by the U.S. Department of Transportation Midwestern area office. This preliminary review was returned to KCATA on August 31, 1992 for additional information and clarification of certain elements of the plan.

The following outline indicates the plan as submitted to the Federal Transportation Administration (FTA), U.S. Department of Transportation using the Independence Dial-A-Ride Program for the type of service that will be provided in order to comply with the American's With Disabilities Act. The City of Independence, City Council approved the Independence ADA Transportation Plan on November 23, 1992 which will insure compliance with the ADA regulations as outline in The Urban Mass Transportation Administration ADA Paratransit Handbook.

Plan Submitted to the Federal Transportation Administration, U.S. Department of Transportation

A. Independence Dial-A-Ride Compared to ADA Paratransit Service Criteria and Other Requirements

The U.S. Department of Transportation rules regarding the ADA state that in order for paratransit service to be deemed comparable to the fixed-route service, it must meet certain conditions in each of the following areas:

1. Service Area
2. Response Time
3. Fares
4. Trip Purpose Restrictions
5. Hours of Days of Service
6. Capacity Constraints

The following section analyzes the discrepancies that exist between the existing paratransit service and the service that is required under the final rules, particularly the deficiencies.

1. Service Area

The Dial-A-Ride service is operated anywhere within the city limits of Independence, and will also serve trips to and from the Blue Ridge Mall, a major shopping center located on the southwest edge of the city that actually has part of the parking area within the city limits, and the Blue Ridge Towers, a medical office building that residents of the city use and is located next to the shopping center.

The Metro bus service, however, crosses the city boundary. Fixed service route passengers may board the Route 24 Independence bus and ride to downtown Kansas City, Missouri, or other locations along this route, and transfer on to other routes. A small portion of Independence is also served by Route 28 Blue Ridge, which is also an inter-city bus route.

The Dial-A-Ride program meets the requirement for the service area for trips within Independence, but not for trips between jurisdictions.

2. Response Time

Dial-A-Ride trips are scheduled the same day the request is made. There is no requirement for patrons to call to reserve trips for the day before. However, it is recommended that wheel chair users that need lift-van service call the day before to be sure the trip can be scheduled. Reservations may be made any day of the week, Monday through Sunday. Reservations may be made in advance if desired. There is no policy limitation on how far in advance a trip may be scheduled.

3. Fares

The Dial-A-Ride fare is currently \$1.00 per trip. The last fare increase was approved by the City Council on June 17, 1991 from \$0.50 to \$1.00. A similar trip on the Metro would cost \$0.90 on the intra-city bus service, and \$1.00 on the inter-city bus service. This is within the required limits set by ADA, which is not to charge more than twice the fixed route bus service. If the city were to increase the fare to twice the amount for ADA eligible persons, the entire Dial-A-Ride program would be required to charge twice the amount for all persons using this service. However, those riding with the patron could also be requested to pay the full unsubsidized cost, which would amount to \$3.50 per trip at this time. There is no stated policy provision in the program for a companion or a personal care attendant. However, there is a verbal agreement with the Independence Cab Company to allow a personal care attendant to ride with a person with a disability with no additional charge for that person.

The ADA regulations state that up to two individuals accompanying the paratransit individual shall be provided service. At least one personal care attendant and/or companion accompanying the paratransit eligible person shall be provided service. The personal care attendant shall not be charged, and the companion shall pay the same amount as the eligible program participant.

4. Trip Purpose Restrictions

The Dial-A-Ride program does not impose any trip restrictions and is therefore in compliance with regulations on this issue.

5. Hours and Days of Service

Dial-A-Ride service is available from 7:00 a.m. to 11:00 p.m., seven days a week. The intra-city bus service only operates six days a

week in the mid-day. However, inter-city bus service is available from 5:23 a.m. to 7:07 p.m., six days a week. No service is available on Sundays. The only time of day or day of the week that paratransit service is not in compliance with the regulations is from 5:23 a.m. to 7:00 a.m., Monday through Saturday.

6. Capacity Constraints

The requirement that paratransit service for eligible individuals and number of trips not be limited in the number of trips available to the individual is clearly different from the Dial-A-Ride program provisions. Patrons are only allowed the possibility of taking a maximum of twelve one-way trips per quarter year, a total of 48 trips per year. This is based on the number of patrons in the current program, the usage of the service by patrons and the available funds to provide this service.

7. Other Discrepancies

The eligibility criteria of the Dial-A-Ride are very different from the ADA paratransit criteria. The current program requires that a qualified rider must be sixty or more years of age or be able to show proof of a disability from a doctor or agency, and be a resident of Independence. The ADA eligibility requirements are functionally dependent on an individual's inability to access the fixed route bus service because of the individual's physical or mental impairment regardless of where they live. Residency is not indicated to have any relevance to the ADA certification process. The Dial-A-Ride program was established to provide transportation for elderly citizens and persons with disabilities, who are residents of Independence, not for one specific group of people who may or are may not be residents of the city.

Summary

Paratransit in Independence has these issues

for consideration when planning how to meet ADA requirements.

1. Service to and from Kansas City, Missouri for Independence residents.
2. Personal care attendants, companions, and their fare.
3. Service from 5:23 a.m. to 7:00 a.m. in the relevant service area.
4. Number of trips allowed per person per quarter year.
5. Reservation time requirement for wheelchair users.
6. The city residency requirement and the lack of a visitor's policy.

B. Demand Estimation and Cost for Paratransit Service for ADA Eligible Individuals

As part of the planning process, demand estimates for the complementary paratransit service are needed. These estimates are used to compare service already provided with total demand, of the unmet need. Funding of this additional service can then be estimated, by multiplying the current trip cost of the Dial-A-Ride service by the estimated number of additional trips required.

Complementary paratransit service must be provided to all origins and destinations within the bus service area as defined by the ADA regulations. The service area of the fixed route bus system serving Independence for ADA eligible persons that may make trips within this area was defined using the following criteria. The service area for the bus system serving Independence is a corridor centered on the bus routes and extending 3/4 of a mile to either side of the route. This service area includes, Route 24 and 28 (Inter-City), the Red and Yellow Routes (Intra-City) and encompasses the western two-thirds of the city,

which includes almost all of the developed portion of the city.

Table 7.41 shows the total estimated ADA eligible population for Independence within the service area. This was accomplished using the method outlined in the ADA Paratransit Handbook, September, 1991, prepared by UMTA. First, the percent of ADA eligible persons in all categories of eligibility is estimated to be 2.5 percent of the 1990 service area population. This is weighted by the percent of population with

public transit disabilities, according to the 1980 Census. (This statistic is not available for 1990.) When the total number of estimated ADA eligible persons is developed, it is next required to estimate the average number of trips per day that is needed by this population. From data developed from studies of paratransit in other areas, it was determined that .07 times the eligible population would produce a reasonable estimate. This figure is then expanded to an annual figure. Table 7.42 shows the estimated number of ADA eligible trips from 1992 through 1996 as compared to all Dial-A-Ride trips. There is a 3% increase of ADA eligible trips up to 1996 with an estimated number unlimited trips in 1997. Also, indicated in this table are the number of vehicles which will be needed in order to provide this service using the Independence Cab Company.

The problem with using this data to determine the amount of unmet need is that many of the trips now being supplied through the Dial-A-Ride service are by non-ADA eligible persons and they are not ADA eligible trips. It is likely that the level of unmet demand is higher than the current level of service. The estimated average number of ADA eligible trips in Independence

Table 7.41

Estimated ADA Population and Transportation Trips using the Dial-A-Ride Program			
Service Area Population for 1990 in Independence	Total Estimate of ADA Eligible Population	Estimated Trips Per Day: 7% of Eligible Population	Annual Estimate (Based on No. of Days Fixed Bus Routes Operate)
73,671	1,473	103	32,239

Table 7.42

ADA PARATRANSIT BUDGET ESTIMATES 5-YEAR DEMAND AND VEHICLE ESTIMATE							
	January 1993	Actual					5-Year Total
		1992	1993	1994	1995	1996	1997 92-97
ESTIMATED ADA PARATRANSIT DEMAND							
Number of ADA Paratransit Trips/year	9,158	9,432	9,700	9,992	10,291	32,239	80,812
Number of Total Paratransit Trips/year	18,316	18,836	19,401	19,984	20,583	42,839	139,959
No. of ADA Paratransit Trips Denied	0	0	0	0	0	0	0
DENIED each year because of capacity constraints/other)							
Number of Paratransit Vehicles -- Cabs	12	12	13	13	13	27	90
Number of Paratransit Vehicles -- Vans	1	1	1	1	1	1	1
Number of Paratransit Vehicles -- Buses	2	2	2	2	2	2	12

is 103 per day. The current program provides only 50 trips per day, some of which may be non-ADA eligible persons (elderly but not disabled). It is estimated that a minimum of 50 percent of these trips are used by persons that would be ADA eligible.

Since it is not known what portion of trips currently supplied are ADA eligible trips, only an estimate of the minimum amount of additional funds needed can be made. Table 7.43 indicates the estimated funds needed to comply with the ADA requirements to provide paratransit transportation for ADA eligible patrons.

The total cost for the Dial-A-Ride program is estimated to be \$55,199 for 1992 calendar year. This is based on the current usage and the average cost of \$3.06 per trip for the operation, gas and

Table 7.43

Estimated Cost for ADA Eligible Trips for Independence Dial-A-Ride Program

Net Annual Program Cost for 1992	Trips Per Year	Operating Subsidy Per Trip	Additional Trips Needed - Projected Trips Minus 50% Current Trips	Minimum Estimated Subsidy of Additional Trips
\$55,198.97	18,041	\$ 3.06	23,219	\$79,050

maintenance of city vehicles. At the current time \$63,500 is appropriated for the Dial-A-Ride program, 50% city funds and 50% federal funds, of

Table 7.44

**TOTAL SYSTEM BUDGET ESTIMATES
5-YEAR CAPITAL AND OPERATING BUDGET SUMMARY
(in thousands of 1992 dollars)**

Jan. 93	Actual					5-Year Total	
	1992	1993	1994	1995	1996	1997	92-97
TOTAL SYSTEM EXPENSES							
1 Capital Expenses	0	0	72	0	0	0	72
2 Operating Expenses	66	67	69	72	74	153	501
3 TOTAL SYSTEM EXPENSES (lines 1 + 2)	66	67	141	72	74	153	573
TOTAL SYSTEM REVENUE							
4 Total System Revenue	66	67	127	72	74	98	504
5 Estimated Budget Surplus / (Deficit) (lines 4 - 3)	0	0	(14)	0	0	(56)	(70)
6 TOTAL ADA PARATRANSIT EXPENSES	33	34	107	36	37	115	362

Note: Independence, Missouri Fixed Route Bus System is included in the Kansas City Area Transportation Authority Report

which approximately \$8,301 can be used to increase the number of trips per person or increase the number of persons that can use the service in the last quarter of the fiscal year. Another use would be to have this money available to cover additional trips that may be needed by the ADA eligible patrons. Multiplying the \$3.06 cost per trip times the estimated number of trips for ADA eligible patrons, which is 23,219 trips, it will require an additional \$71,050 to provide this service.

Table 7.44, on page 7-9, indicates the five year capital and operating expenses of the Dial-A-Ride Paratransit service for both the current riders using this service and the estimated ADA eligible trips. It is recommended that in 1994 the two 15 passenger buses equipped with lifts, which will be ten

years old at that time, will need to be replaced and a federal grant for capital improvements will help offset the estimated cost of these two vehicles. This table also combines all revenue estimated for this service, which includes the \$1.00 fare charge per trip, federal section 9 funds and city general funds.

Table 7.45 indicates the estimated cost for operating the Dial-A-Ride program and providing paratransit service for ADA eligible persons over a five year period.

The additional funds needed for the ADA eligible trips can be partially offset with the \$8,301 that is estimated to be available for other Dial-A-Ride services in the last quarter of the

Table 7.45

ADA PARATRANSIT BUDGET ESTIMATES							
5-YEAR CAPITAL AND OPERATING BUDGET SUMMARY							
(in thousands of 1992 dollars)							
Jan. 93	Actual						5-Year
	1992	1993	1994	1995	1996	1997	Total 92-97
ADA PARATRANSIT EXPENSES (using a ratio to breakout ADA Total Paratransit costs is acceptable.)							
1 Capital Expenses	0	0	72	0	0	0	72
2 Operating Expenses	33	34	35	36	37	115	290
3 Subtotal ADA Paratransit Expenses (Lines 1 + 2)	33	34	107	36	37	115	362
TOTAL PARATRANSIT EXPENSES (ADA & Non-ADA combined)							
4 Capital Expenses	0	0	72	0	0	0	72
5 Operating Expenses	66	67	69	72	74	153	501
6 TOTAL ADA PARATRANSIT EXPENSES (lines 4 + 5)	66	67	141	72	74	153	573

In 1991, the paratransit costs for our transit system were \$59,072.

Note: Independence, Missouri Fixed Bus Route System is included in the Kansas City Area Transportation Authority Report

current fiscal year. Another option to reduce cost would be to limit this service to ADA eligible persons only, which would reduce the number of elderly persons using this program to only those that qualify as ADA eligible. A second option would be to increase the fare on the Dial-A-Ride program for all patrons to no more than twice the amount as the fixed bus route service. The current fare on the fixed route service is \$1.00, this would allow the city to increase the fare for Paratransit Dial-A-Ride services for all patrons to \$2.00 per trip.

C. Paratransit Plan to Meet ADA Requirements

Eligibility Requirement

As the first step in providing complementary paratransit that will eventually meet all the requirements of the ADA, a process to determine ADA eligibility must be developed. Persons will become eligible for the ADA required service on the basis of the eligibility requirements of the Act.

The following items are the requirements of the ADA:

1. Any individual with a disability who is unable, as the result of a physical or mental impairment (including a vision impairment), and without the assistance of another individual (except the operator of a wheelchair lift or other boarding assistance device), to board, ride, or disembark from any vehicle on the bus system which is readily accessible to and usable by individuals with disabilities.
2. Any individual with a disability who needs the assistance of a wheelchair lift or other boarding assistance device and is able, with such assistance, to board, ride and disembark from any vehicle which is readily accessible to and usable by individuals with disabilities if the individual wants to travel on a route on

the bus system during the hours of operation of the bus system at a time, or within a reasonable period of such time, when such a vehicle is not being used to provide designated public transportation on the route.

3. Any individual with a disability who has a specific impairment related condition which prevents such individual from traveling to a boarding location or from a disembarking location on such system.

The following Phases of the Independence, Missouri ADA Paratransit Plan represent the necessary steps for complying with the ADA requirements:

PHASE I: Present to December 31, 1993.

1. By January 1, 1993, an ADA eligibility process will be established. It shall strictly limit ADA paratransit eligibility to persons meeting the requirements of the ADA. All information about the process, materials necessary to apply for eligibility, and notices and determinations concerning eligibility will be made available in accessible formats, upon request at the KCATA offices.

A sample copy of the form to be used to help establish that a person is or is not ADA eligible is shown in Exhibit D-1 through D-5. This form was developed by the KCATA through Public meetings addressing the needs of ADA eligible persons. Both current Dial-A-Ride clients and new applicants will use the same form to establish eligibility.

If by a date 21 days following the submission of a complete application, the KCATA staff has not made a determination of ADA eligibility, the applicant shall be treated as ADA eligible and provided service until and unless the application is denied.

KCATA's determination concerning eligibility will be in writing. If the determination is that the individual is ineligible, the determination shall state the reasons for the finding. There will be some individuals who will not be ADA eligible, but those persons who are 60 years or older will be eligible for the Independence Dial-A-Ride program.

KCATA will provide documentation to each eligible individual that he or she is "ADA Paratransit Eligible." The documentation shall include the name of the eligible individual, the name of the transit provider (Independence Dial-A-Ride), Dial-A-Ride's phone number, any expiration date for eligibility, and any condition or limitations on the individual's eligibility including the use of a personal care attendant. Documentation issued to those qualifying for Dial-A-Ride, but who are not ADA eligible will only indicate that the person is eligible for Dial-A-Ride, not that the individual is ADA eligible.

KCATA may require recertification of the eligibility of ADA paratransit eligible individuals at reasonable intervals.

KCATA shall establish an administrative appeal process through which individuals who are denied ADA eligibility can obtain review of the denial. The review process for appealing ADA eligibility, will follow the FTA guide lines and will be similar to the KCATA Share-A-Fare appeal process for individual's who have been denied Share-A-Fare eligibility.

KCATA will require that an appeal be filed within sixty days of the denial of an individual's application. The appeal process shall include an opportunity to be heard and to present information and arguments, separation of functions (i.e., a decision by a person(s) not involved with initial decision to deny eligibility), and written notification

of the decision, and the reasons for it. KCATA is not required to provide paratransit service to the individual pending the determination on appeal. However, if a decision has not been made within 30 days of the completion of the appeal process, Independence Dial-A-Ride shall provide paratransit service from that time until and unless a decision to deny the appeal is issued.

2. In applications for ADA paratransit eligibility, KCATA will require the applicant to indicate whether or not he or she travels with a personal care attendant. A personal care attendant that has been approved through the ADA eligibility requirements will be allowed to ride with an ADA eligible persons at no charge.

3. An ADA eligible person shall be allowed to have one (1) companion ride with the ADA eligible person per trip using the Dial-A-Ride program and be charged the same fare as the ADA eligible person.

4. The ADA requires that if a non-disabled person can travel using the public transit system from one specific location to another, a disabled person should be able to make the same trip, only limited by the specific service parameters of the ADA.

The ADA eligibility determination process will be opened to regional residents who are not Independence, Missouri residents. However, any service provided to non-Independence, Missouri residents will be subject to the provisions of the agreement between the City of Independence, Missouri and the KCATA, such provisions will be limited by the budgetary constraints of the City of Independence and the Kansas City Area Transportation Authority.

Inter-jurisdictional arrangements for work and medical trips will be made and implemented for all ADA eligible persons. In

order to meet ADA requirements, cooperative service agreements and arrangements shall be developed by the City of Independence and the KCATA.

Procedural options that will be utilized to achieve this may include:

1. Pre-arranging transfers from one system to another at a specific time and location.

2. A contract between Kansas City, Missouri Share-A-Fare and the City of Independence, Dial-A-Ride to allow the cost of the inter-jurisdictional trips to be equitably applied.

3. Agreements whereby a trip in one direction of travel would be covered by one jurisdiction, the return trip covered by the other.

5. The ADA visitor's policy for Independence, Missouri Dial-A-Ride services shall include ADA eligible persons who are not residents of the City of Independence, Missouri, who have ADA eligibility status granted by another jurisdiction and have ADA eligible documentation from another jurisdiction will be provided Dial-A-Ride service for at least twenty-one days following the first use of the Dial-A-Ride service.

To receive Dial-A-Ride service, a visitor must contact the KCATA, either in person or through a letter, presenting ADA eligibility documentation. Dial-A-Ride will grant the visitor a specific number of trips per quarter using the same criteria as used for other Dial-A-Ride participants.

Coupons for visitors trips will be printed within twenty-four hours of a validated visitor's request. The coupons will be mailed to the visitor the same day they are printed.

Visitors may only reserve trips if the trip is

ADA eligible in regard to service criteria. Fare levels for the individual, his/her companion, and personal care attendants shall be the same as charged other ADA eligible Dial-A-Ride participants. These trips will be limited to inside the City of Independence, Missouri, unless a similar program is established in Kansas, City Missouri.

An ADA eligible person who plans to be a frequent visitor (several times a year) will be advised to apply for KCATA's ADA eligibility. However, an ADA eligible person who only visits once a year or less will be granted visitor status for each visit.

A visitor who does not have documentation that he/she is ADA eligible from another jurisdiction will qualify for "presumptive eligibility". Both proof of an out-of-town residency and of disability will be required. Proof of disability will require medical documentation for the mailed in requests, and in cases of "hidden impairment" such as a cardiac condition.

6. The number of trips available to ADA eligible persons each quarter of the year will be determined using the same procedure as used for all Dial-A-Ride participants. The current Dial-A-Ride program allows for the first 900 applicants to receive 12 trip coupons per quarter of the year for a maximum number of 48 coupons per year. This allows the city to issue 43,200 coupons for this program. If the number of applicants or coupons used increases the coupons or trips will be reduced to stay within the budget of the program.

7. The hours of service for ADA eligible persons taking ADA eligible trips shall be expanded to allow early a.m. trips and to allow p.m. trips within the same time period as the KCATA Metro bus service in Independence. The Dial-A-Ride service shall be between the hours of 5:15 a.m. to 9:15 p.m.,

six days a week, Monday through Saturday.

8. The Independence Dial-A-Ride will begin a process of contacting program participants to inform them that an ADA eligibility process is available.

PHASE II: The following items are to be accomplished by December 31, 1994.

1. The number of trips granted to ADA eligible persons will be expanded as allowed by the budget of the Dial-A-Ride program for the City of Independence.

2. Inter-jurisdictional paratransit transfer procedures and policies revised and implemented for trips between Kansas City, Missouri and Independence, Missouri, to eliminate trip purpose restrictions that would apply to these transfer trips.

Phase III: To be accomplished by December 31, 1995

1. The number of trips granted to ADA eligible persons will be expanded as allowed by the budget of the Dial-A-Ride program for the City of Independence.

Phase IV: To be accomplished by December 31, 1996

1. Trip quantity restrictions will be removed for ADA eligible persons taking ADA eligible trips. The City of Independence, Missouri plans to be in compliance with the ADA paratransit requirements by December 31, 1996.

E. Estimated Cost of ADA Paratransit Transportation Services

Phase I:

1. In this phase it is estimated that the number of work and medical trips for ADA eligible

persons that live within Independence could cost an additional \$59,549 based on the current contract with the Independence Cab Company. The number of ADA eligible persons living in Kansas City that may use this service is unknown at this time and can not be estimated until the service is provided and data developed. The additional funds needed for the ADA eligible trips can be partially offset with the \$16,316 that is estimated to be available for other Dial-A-Ride services in the last quarter of the current fiscal year.

Another option to reduce cost would be to limit this service to ADA eligible persons only, which would reduce the number of elderly persons using this program to only those that qualify as ADA eligible. A second option would be to increase the fare on the Dial-A-Ride program for all patrons to no more than twice the amount as the fixed bus route service. The current fare on the fixed route service is \$1.00, this would allow the city to increase the fare for Paratransit Dial-A-Ride services for all patrons to \$2.00 per trip.

2. The verbal agreement with the Independence Cab Company to allow a personal care attendant to ride with no charge will be required to be written in the contract for the next fiscal year. There is no anticipated increase in cost to allow a personal care attendant to ride with an ADA eligible person.

3. To allow one (1) companion to ride with an ADA eligible person and be charged the same fare as the ADA eligible person will be required to be written in the contract with the Independence Cab Company. There is no anticipated increase in cost to allow one (1) companion to ride with an ADA eligible person.

4. The inter-jurisdictional work and medical

trips between Kansas City, Missouri and Independence for ADA eligible person will be subject to the provisions of an agreement between the City and the KCATA. Any increase in cost for this service would be when the city increases the number of coupons issued to each ADA eligible person.

5. The number of ADA eligible persons who are visitors to this area and that may use this service is unknown at this time and can not be estimated until the service is provided and data developed.

6. If the number of coupons issued remains the same there should not be an increase in cost. If additional coupons are allowed for ADA eligible persons the cost of service will be increased by the number of coupons issued.

7. If the hours of service (7:00 am through 11:00 pm) are changed to (5:15 am through 7:15 pm) to coincide with the hours of operate of the fixed bus service. This should not cause an increase in the cost of service.

8. No additional cost is anticipated to contact program participants.

Phase II:

1. The cost to expand the service allowing additional trips for ADA eligible persons using the Dial-A-Ride program is unknown at this time. The number of coupons issued per person would have to be the same for all patrons using this service.

2. Eliminating trip purpose restrictions for ADA eligible persons in this phase would not affect the program, if total number of coupons issued stays within the city budget. However, if trip restrictions are eliminated for ADA eligible persons, all patrons using this service should be allowed unrestricted trips.

Phase III:

1. The number of ADA eligible persons who will use this service is unknown at this time and the cost and ridership can not be estimated until the service is provided and data developed.

Phase IV:

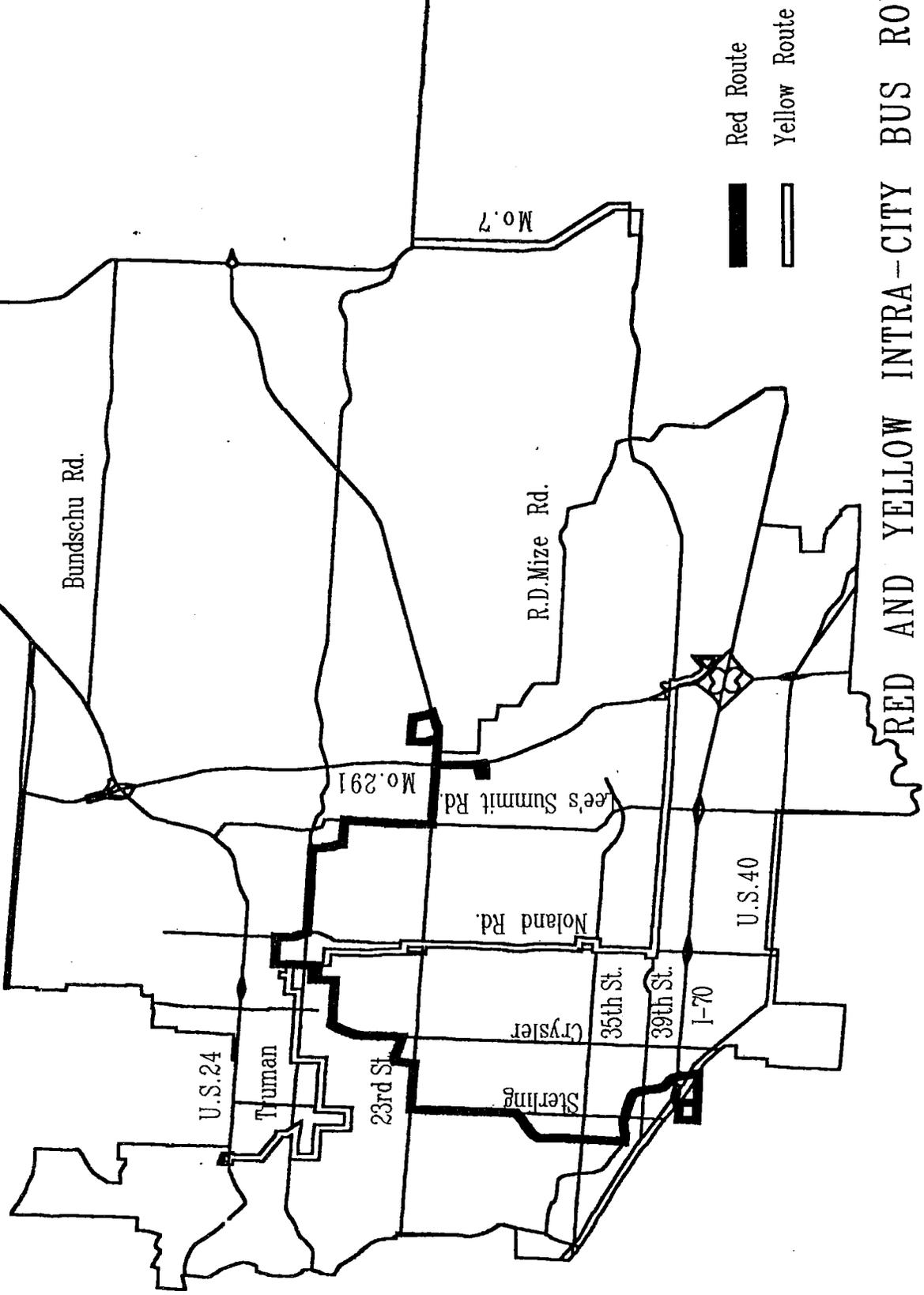
1. The unlimited number of trips an ADA eligible person may need to take and use this service is unknown at this time and can not be estimated until the service is provided and data developed.

7.5 - INTRA-CITY BUS SERVICE

The Intra-City bus service was started in 1975 in order to provide a transportation service for residents that wanted to travel to various locations within the city. The map on the following page, Figure 7.51 on page 7-16 indicates the route locations for the Red and Yellow Intra-City bus service. The routes were designed to serve the older and more densely populated areas of the city. But they also traverse through new areas of the community to shopping areas, medical facilities, and apartment complexes. This gives residents the opportunity to travel within the community using a regularly scheduled bus service.

The graphs and charts in this section are based on information available at the time of this report and are for the three and a half year time period of 1990 through June of 1993. These graphs are separated to show the passenger ridership on Intra-City Bus Service, which is referred to as the Red and Yellow Routes. These two routes criss-cross Independence with the Independence Square as a transfer point. This bus service is provided for all citizens of Independence and is available Monday through Saturday. The elderly, persons with disabilities and children

Figure 7.51



RED AND YELLOW INTRA-CITY BUS ROUTES

pay a reduced fare of one half the current rate.

The Red Route follows a route from the Blue Ridge Mall northeast through the city crossing the Square area and then continues east to 23rd and Missouri 291 Highway and the Highleah Apartments. This bus service currently operates with a two hour headway between trips. It starts at 10:20 a.m. and the last trip is 6:22 p.m.

The Yellow Route follows a route from the northwest area of the city, Mount Washington and travels southeast through the Square area and continues southeast to the Independence Center. This bus service currently operates with a one hour

headway between trips. The service starts at 9:25 a.m. and the last trip ends at 6:20 p.m.

At the present time all information concerning the intra-city bus service is provided monthly from the Kansas City Area Transportation Authority. This service is operated as one program and it does not divide the Red and Yellow Routes to give separate passenger count data for each route.

Figure 7.52 compares the total number of Intra-City passenger trips for each month in the three and a half year time period. This graph indicates that ridership has been stable using this service over the three year period. The first six months of 1993 indicate a reduction in ridership,

Figure 7.52

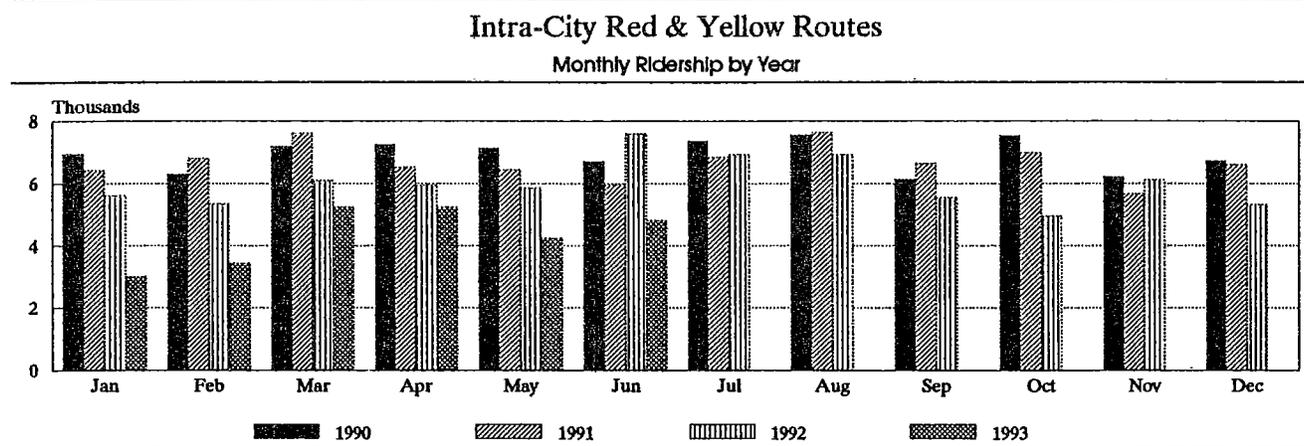
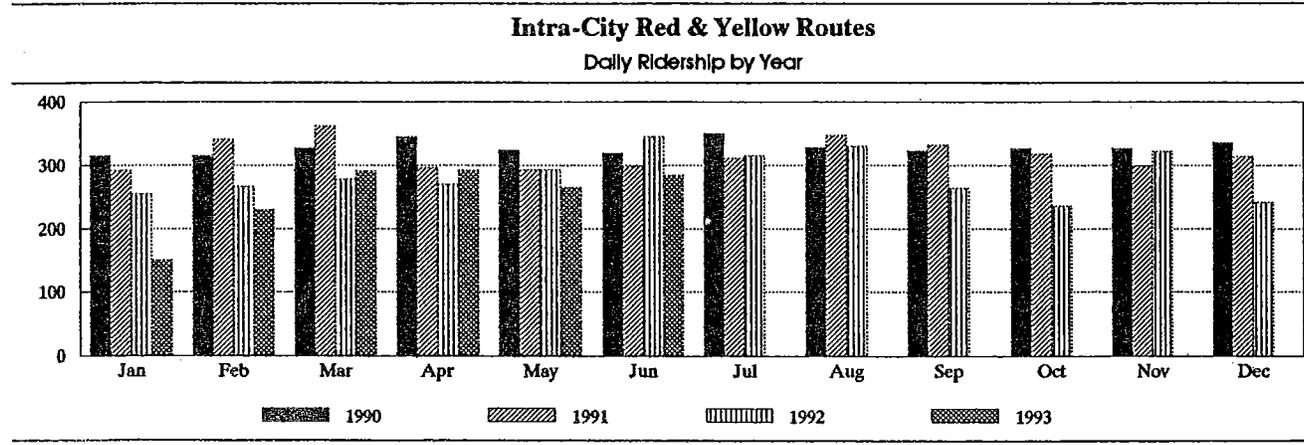


Figure 7.53



which could be due to colder and rainy weather during this time period. twelve month period using the total weekday trips.

page, shows the average number of passenger trips each day for that particular on the Red and Yellow Routes. Figure 7.54 shows the average number of passengers per/bus each month for the same time period for the Intra-City service.

Figure 7.53 at the bottom of the preceding

Figure 7.54

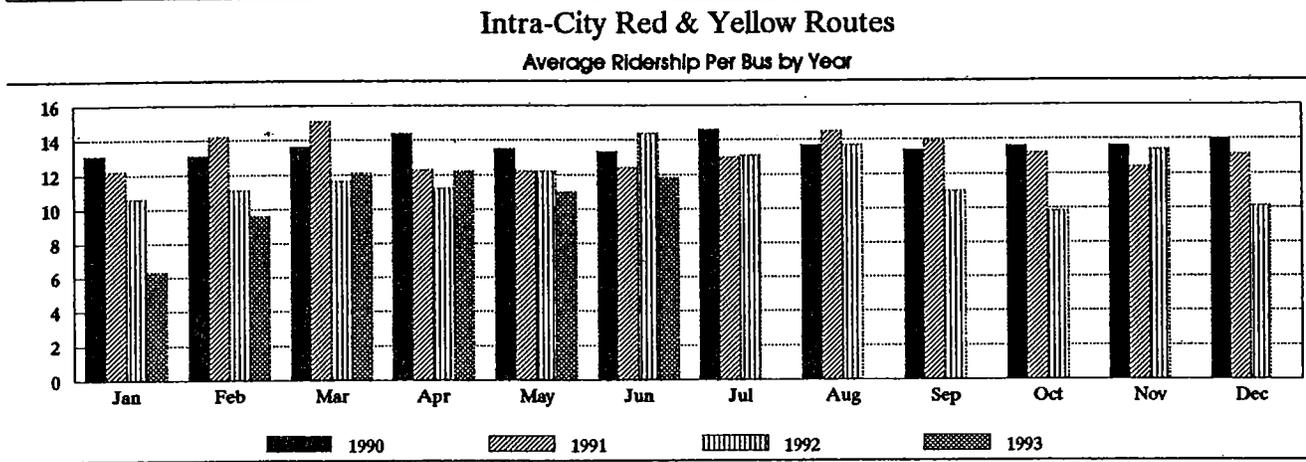


Figure 7.55

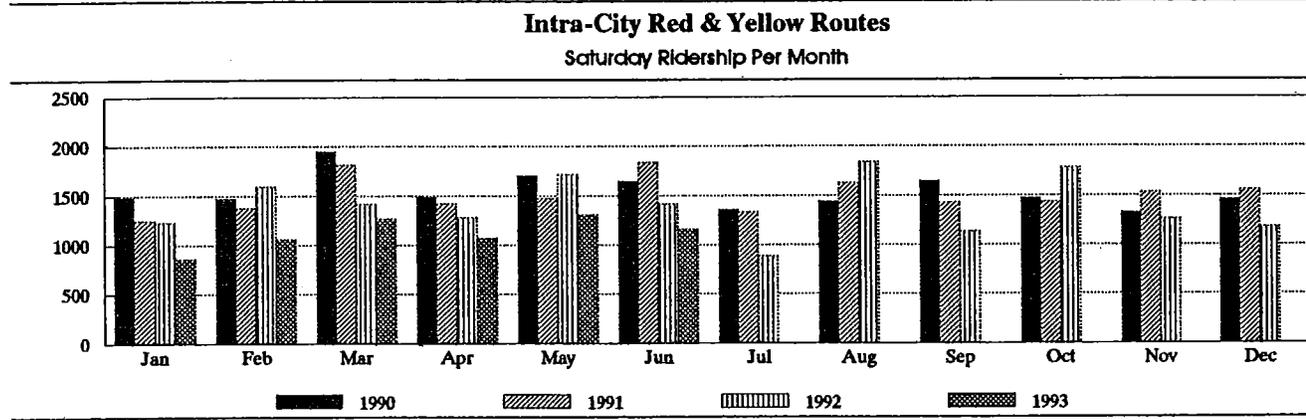


Figure 7.56

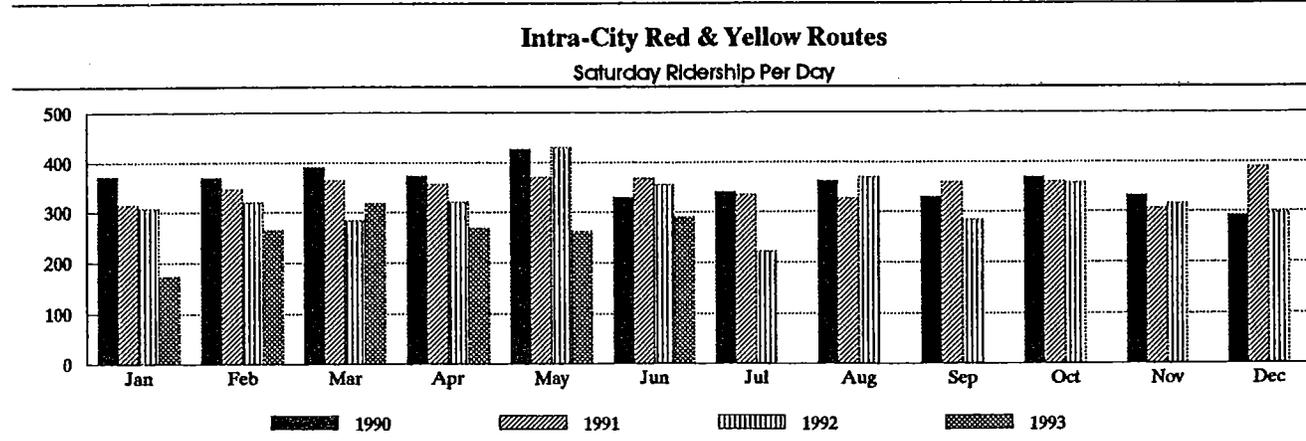


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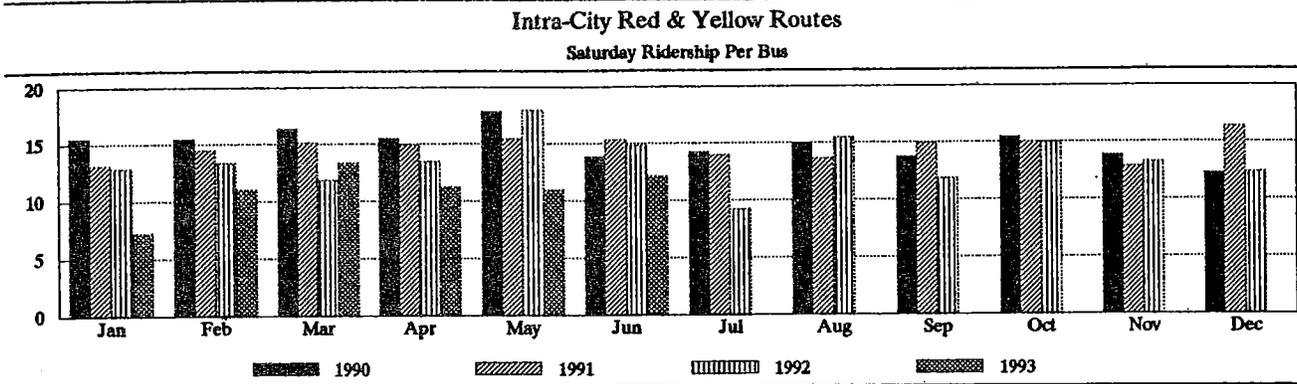


Figure 7.55 on the preceding page shows the total passenger trips each month for Saturday service. Figure 7.56 shows the average passenger trips per/Saturday and figure 7.57 shows the average passenger trips per/bus on Saturday.

These graphs indicate there is a stable ridership throughout the time period for the weekday and Saturday service Red and Yellow Routes. The reduction of service in 1992, elimination of Tuesday bus service, is reflected with a slight decrease in overall ridership, but trips per/bus remained the same.

During the week there are sixteen (16) bustrips perday on the Yellow Route and eight (8) trips on the Red Route. The same number of bustrips are available to residents on Saturdays. This is the minimum number of bus trips that should be used in order to maintain an active bus service.

The Planning Department annually monitors this bus service using the data furnished by the Kansas City Area Transportation Authority. The ridership data and financial funding of this service is reviewed when the contracts with the KCATA are scheduled for renewal.

7.6 INTER-CITY BUS SERVICE

The Inter-City bus service provides a connecting link with the Kansas City Area bus

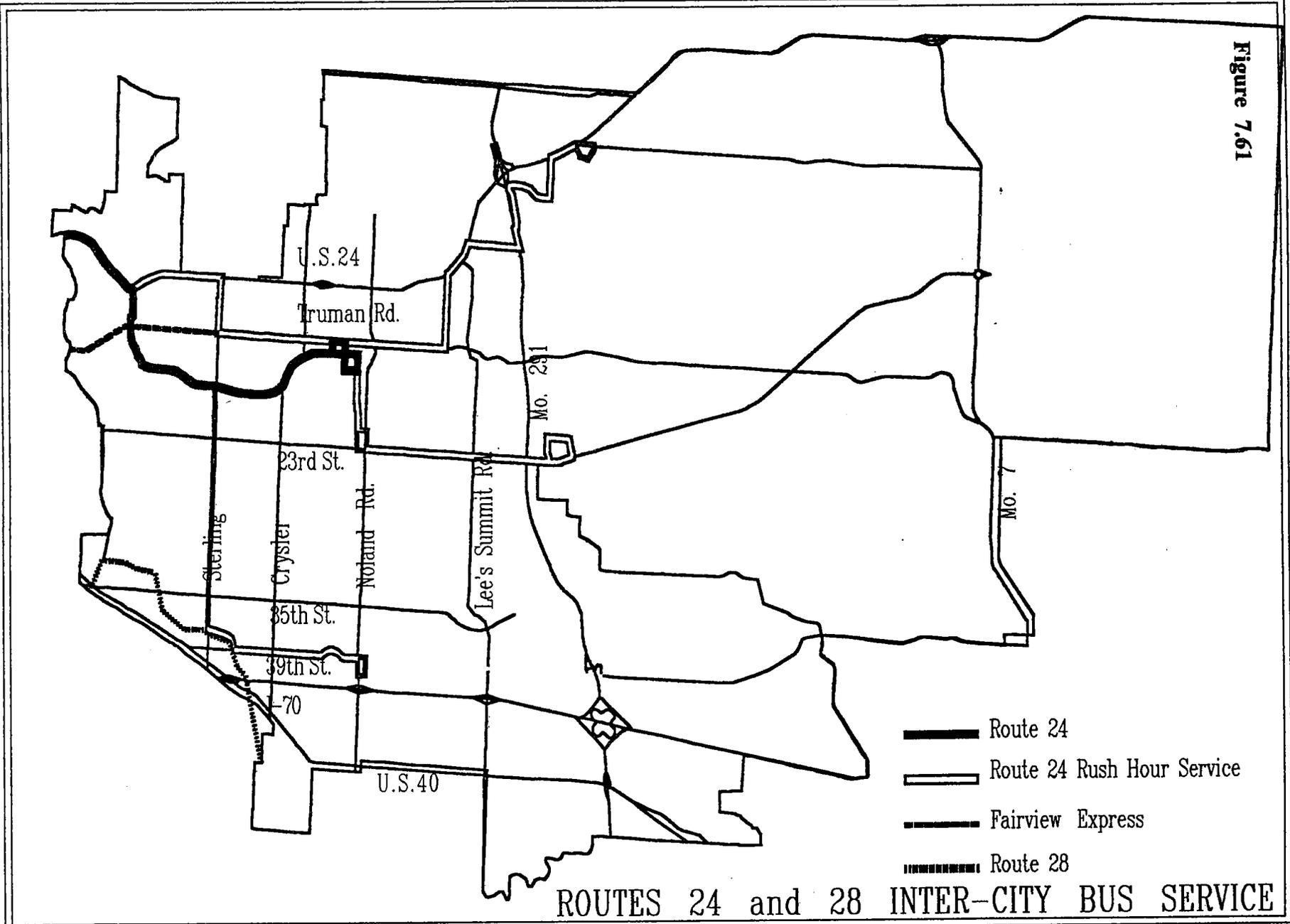
network serving the metropolitan area. The main ridership using this service from Independence is the work force that is employed in Kansas City. This transportation service is vital to this group of citizens. A large percentage of these commuters have no other means of transportation. The patrons using this bus service help to reduce the number of vehicles on the over crowded through-fares connecting Kansas City and Independence by riding the bus.

The main route is referred to as Route 24. A secondary line in the southwestern portion of the city is Route 28. The map on the following page 7-20, Figure 7.61, indicates the route locations and the feeder lines that serve parts of Independence during the peak morning and evening rush hour time.

Route 24 follows a direct line into Independence using U.S. 24 Highway and Winner Road. It terminates in the Square at Osage and Lexington Streets. The rush hour legs radiate out from Route 24 to various locations in the city.

One feeder line serves the northeastern portion of the city at the Farview Shopping area and the Hawthorne Apartments. A second line follows 23rd Street to Missouri 291 Highway and the Highleah Apartments. The third line follows Sterling Avenue to Noland Road to the designated Venture shopping center park and ride lot.

Figure 7.61



In conjunction with the feeder lines on Route 24 there are express buses that serve the Farview and Highleah areas during the peak morning and evening rush hour. There is one trip to each of these locations in the morning and evening.

Route 24 bus service is provided on weekdays and Saturdays only. Currently there are a total of sixtyfour (64) bus trips between Independence and Kansas City during the week. On Saturday there are only twenty-eight (28) trips between the two cities. The city does not provide this service on Sundays or Holidays.

Route 28 travels throught the southwestern portion of Independence using Blue Ridge Boulevard and U.S. 40 Highway. This route is part of a larger line that serves Raytown and Kansas City. Only a small portion of the line serves Independence.

There are two buses in the morning and two buses in the evening. The commuters using this service are generally part of the work force employed in Kansas City.

The Inter-City bus service is financed in part from the revenue collected by fares, a federal grant from Section 9, of the Urban Mass Transpotation Act and from a portion of the one

cent city sales tax. At the present time the base fare for the Inter-City bus service is \$1.00 and \$1.10 for the express service. The elderly, persons with disabilities and childern pay a one half fare. The Planning Stafff presented a transportation review to the City Council on December 15, 1993. Part of this review included a proposed fare increase. A public hearing will be held on January 10, 1994 to propose a fare increase of twenty cents for both the Inter-City service and Intra-Cityservice.

Route 24

Inter-City bus ridership on Route 24 is shown in Figure 7.62, and compares the total number of Inter-City passenger trips for each month for 1990 through June of 1993. The total yearly passenger trips for 1990 were 204,101, total trips in 1991 were 200,471, total trips in 1992 were 175,106 and there were 74,187 trips for the first six months of 1993. This breaks down to a average of 806 trips per/day and 11.8 passenger trips trips /bus in 1990 compared to 690 trips per/day and 10.1 per/bus in 1992.

Figure 7.63 on the following page shows the average ridership per/day for each month and figure 7.64 shows the average ridership per/bus for each month of the three and a half

Figure 7.62

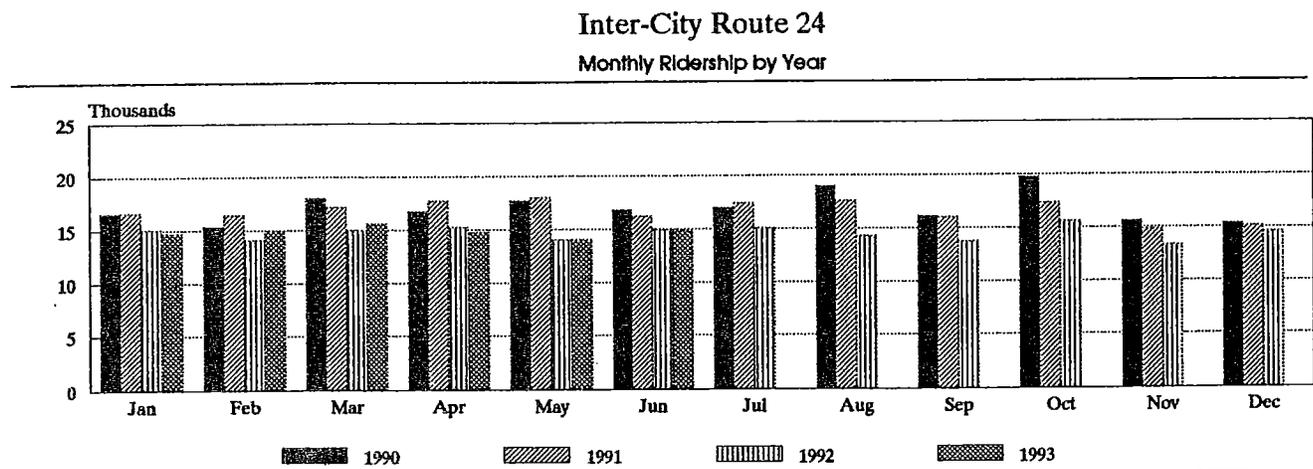


Figure 7.63

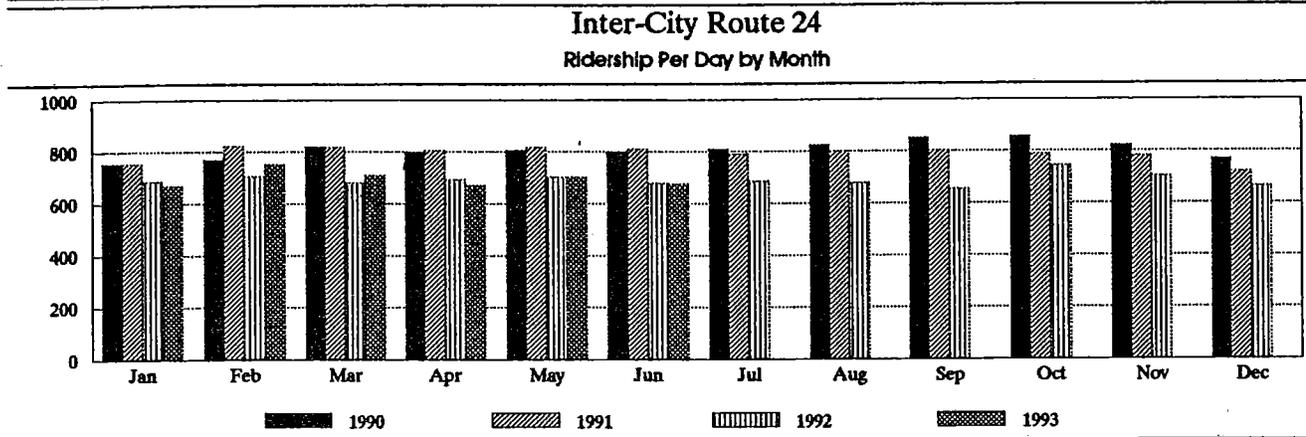
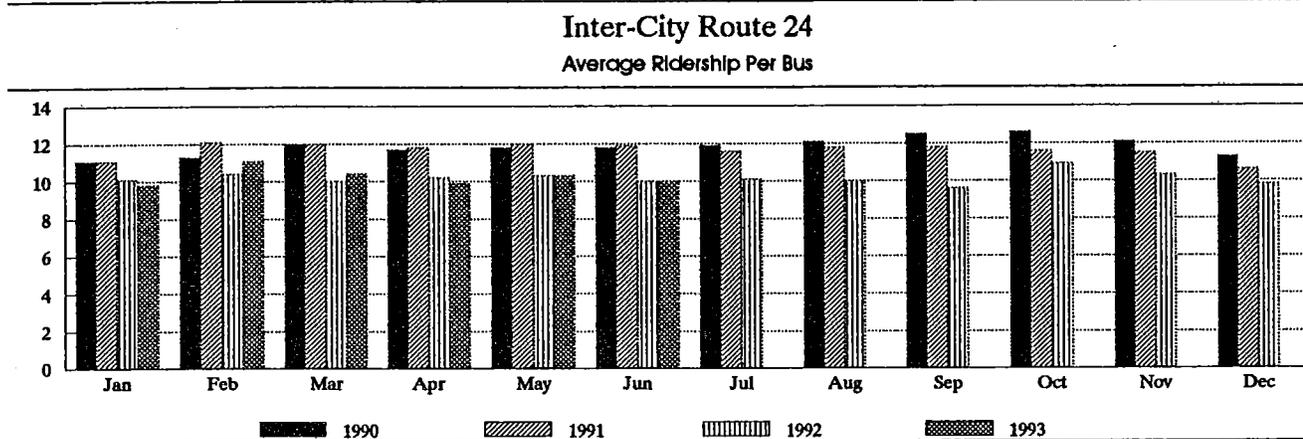


Figure 7.64



year study period. The Saturday ridership on Route 24 is constant throughout the study period. The number of passenger Saturday passenger trips in 1990 totaled to 21,665 and

averaged 417 trips per/Saturday with 14.9 passenger trips per/bus. This compares to 18,978 total Saturday trips in 1992 averaging 369 trips per/Saturday with 13 trips per/bus.

Figure 7.65

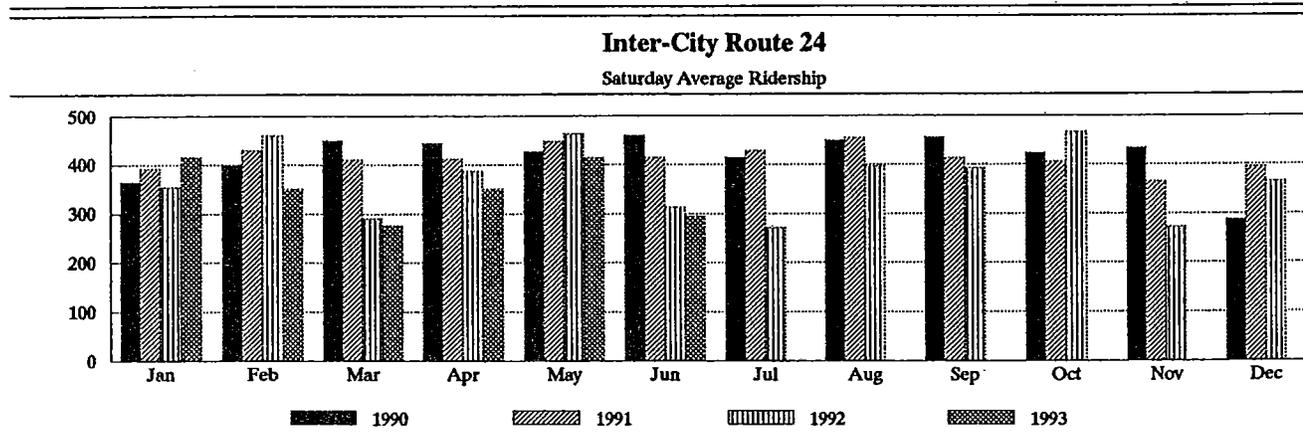


Figure 7.66

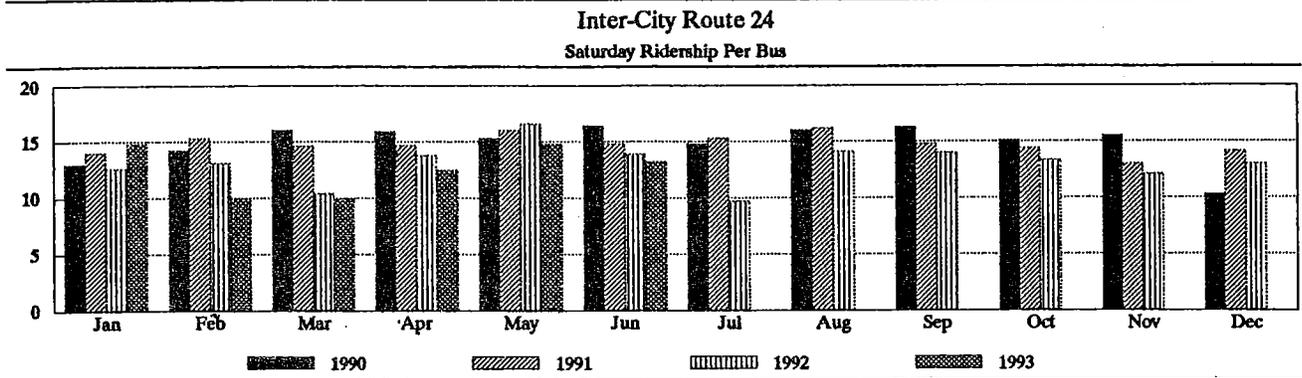


Figure 7.65 on the preceding page indicates the total Saturday passenger trips for each month of the study period and figure 7.66 shows the average ridership per/bus for each month for the same time period. These graphs indicate there has been constant ridership for both the weekday and Saturday service on Route 24. Past performances have shown that ridership will be seriously affected if any service cuts are made to eliminate trips or

hours of services on Route 24.

Route 28

Ridership on Route 28 is shown in figure Figure 7.67 and compares the monthly ridership for 1990 through June of 1993. Figure 7.68 shows the average ridership per/bus each month for this same time period.

Figure 7.67

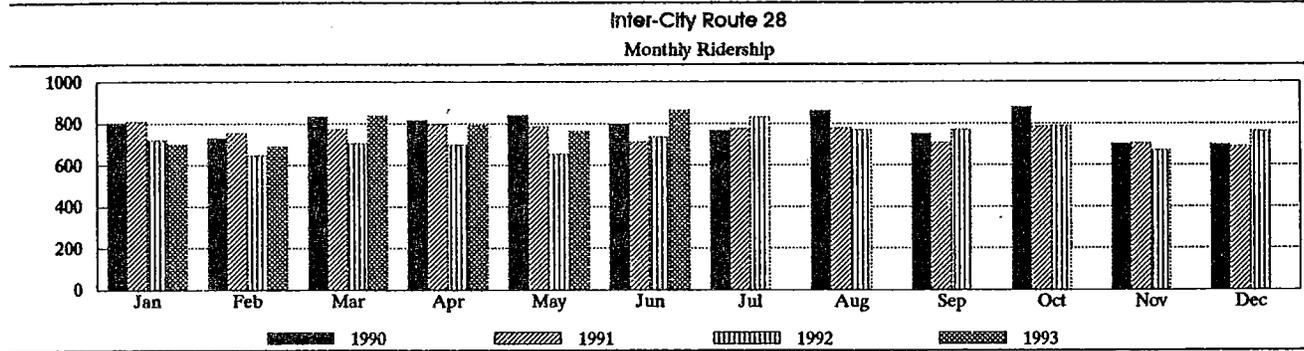
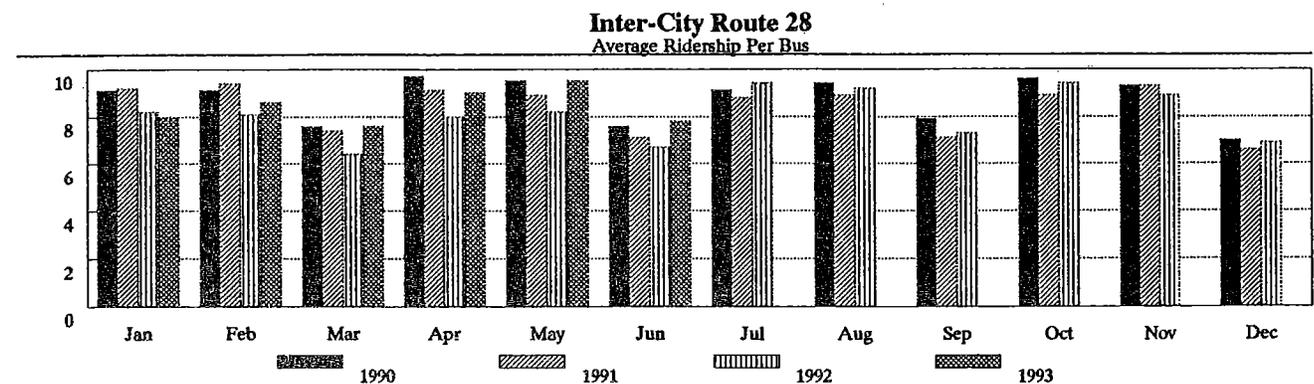


Figure 7.68



Route 28 bus line is located in the southwestern portion of Independence. This line follows Blue Ridge Boulevard east to Blue Ridge Cut-Off and then south to U.S. 40 highway to Kansas City. The portion of Route 28 that serves Independence is a small part of the total line that serves Raytown and Kansas City. The ridership on Route in this report only deals with passengers boarding and leaving buses within Independence. This service operates only in the morning during the peak hour time and again in the evening during peak hour time. This service is basically used as work trip service for those citizens going to work in the morning and returning at night.

77 - BUS SERVICE CONCLUSION

Inter-City and Intra-City Bus Service

Fare box revenue amounts to 14 percent of the Kansas City Area Transportation Authority service costs. The remaining 86 percent is covered by Federal and City funds. Inflation has increased costs, while federal funding has slowly decreased over the past twenty years. Independence has no new funding sources for transportation. The only alternatives available at this time are to increase fares, reduce service, or a combination of the two.

The last fare increase for all bus service in the City was approved by the City Council and implemented February 7, 1993. All fares were increase by twenty (20) cents per trip. The base fare on the Intra-City, Red and Yellow Routes, was increased from \$0.90 to \$1.10. The reduced fares for elderly, persons with disabilities and children was increased from \$0.45 to \$0.55. The base fare on the Inter-City, Routes 24 and 28, was increased from \$1.00 to \$1.20, with reduced fares increasing from \$0.50 to \$0.60. The Express bus fares increased from \$1.10 to \$1.30.

Unfortunately, fare increases alone cannot

cover costs to the degree needed. Trying to identify trips that cost the most to operate, or have fewest riders, or operate at times when another bus is available, or a combination of these factors, is a difficult process.

In March of 1993 the service area of the Red and Yellow bus routes was reduced. The segments eliminated on each route indicated low or no ridership during the 1987 and 1992 passenger surveys that were conducted to review passengers boarding and leaving buses. Also, current bus service that is available within a three block walking distance was used as part of the criteria to establish some of the proposed changes. The loss in ridership is estimated to be minimal with the following changes.

Section of Red and Yellow bus routes to be eliminated:

Red Route

The area west of Sterling along Blue Ridge Boulevard, Overton and 31st Street. The area along Sterling between 23rd Street and Winner Road. The area north of U.S. 24 highway and west of Chrisman High School along Liberty, Nickell, and Noland, Chrisman Plaza and College east of Noland. Also, a section of the Red Route and Yellow Route between the Square and Sterling were switched in order to eliminate the duplication in service along Sterling.

Yellow Route

The area north and west of Fairmount Business area along Huttig, Kentucky, Arlington, Independence Avenue and Brookside. The area along Sterling between 23rd Street and Winner Road. The same section of the Red and Yellow Route between the square and Sterling as described earlier.

Reviewing the bus service, after the fare increases and service changes, reveals that there has not been an appreciable change in the

passenger trips. The total passengers per/day has dropped one percent or less with these changes, but the passenger trips per/bus trip have increased slightly. The current work force using this service has been able to use other bus trips to compensate for the service changes. This is reflected in a slightly higher passenger trips per/bus trip.

There is a stable ridership using the bus services provided by the City. This is reflected in the over all passenger trips shown in the Intra-City Red and Yellow Route, Inter-City Routes 24 and 28, and the Dial-A-Ride program. If ridership changes occur in the future, either up or down for any of these programs the services will be evaluated for a course of action to be taken.

In June of 1994 the KCATA and the City of Independence will jointly provide interjurisdictional trips for work and medical purposes for persons with disabilities between Independence and other communities. The KCATA will provide for the ADA eligible interjurisdictional by using the Kansas City Share-A-Fare program. The City of Independence will pay for these trips with federal funds allocated to the city for transit services. The estimated cost for this service is \$26,000 per year. This will reduce the available funds by that same amount which is currently used to provide the fixed route bus service.

Dial-A-Ride Service

The Independence Dial-A-Ride program is currently being used by the elderly and persons with disabilities. The joint ADA plan for the Kansas City Area Transportation Authority and the City of Independence ADA provides paratransit service to persons with disabilities that can not use the fixed route bus service. This plan will have an impact on how and who will be able to use the Dial-A-Ride service in the future.

The amount of money available to the Dial-

A-Ride program may require any/or all of the following, increase the fare per trip, reduction of applicants, make service available only to persons with disabilities, and/ or reduction of number of trips for non-ADA eligible trips. This would only be a temporary solution to the problem.

By December 1996 the restriction to the number of ADA eligible trips has to be removed and unlimited trips have to be made available to persons with disabilities. The estimated cost for unlimited ADA eligible trips is \$71,050 per year. This is in addition to the current Dial-A-Ride program cost of \$63,500 per year.

In order to comply the Federal Transportation Administration requirements to provide trips for ADA eligible person it will be necessary to increase the number of trips per person. These changes can be phased in over a period of time, but they need to be completed by 1997. In June of 1994 the number of coupons per person will be increased for ADA eligible persons that have been approved for this service. They will receive four (4) additional coupon, or trips, per quarter or twelve per year.

At the present time the number of ADA eligible persons and ADA eligible trips is unknown. In order to follow through with the ADA plan to provide trips for ADA eligible persons it will be necessary to increase the fare charge per trip. The City Council approved the fare increase from \$1.00 to \$2.00 per trip for the Dial-A-Ride program. This will give the city approximately \$18,000.00 per year more in revenue to based on the current ridership. This will allow the city to increase the number of trips per person and help offset the cost to provide this service.

The proposed increase will take effect on July 1, 1994 when a new contract is approved to provide this service either through the Independence Cab Company or some other transit carrier.

Background

Historically, the growth and economic development of communities has been directly related to the expansion and technological advancement of the transportation industry. This has included the railroads, the automobile, and most recently, aviation. In metropolitan areas, adequate air transportation is an essential element for all overall economic growth, and facilities in the region. Within metropolitan areas, airports function independently and as part of an interdependent system.

In the Kansas City metropolitan area, the Mid-America Regional Council (MARC) is responsible for the planning of the regional system of airports. The need for a new full-service public-use airport in the eastern Jackson County area has long been recognized by MARC and by the Federal and Local officials. This fact is included and documented in MARC's first Regional System Plan adopted in 1974. To stay a-breast of the changing needs of the System, MARC has periodically re-evaluated the regional demand for airport facilities and in each update has re-affirmed the need for the eastern Jackson County facility. The most recent update completed was in December 1984.

In addition to the regional planning done by MARC, in 1979 the City of Independence initiated an Airport Site Selection Study to determine potential locations for airport development. In this study, it was found that there were only a few sites in the area that could be economically developed into an adequate, durable airport facility. This was primarily due to the topography of the County (there are few areas of level terrain), the existence of the floodplain along the little Blue River, and that large

areas of the County are urbanized. The study considered four sites for airport development including the existing Independence Memorial Airport. All had severe site constraints and no site was selected for future development.

Although no specific site was selected as a result of the Site Selection Study, the City has continued to explore the prospects for development of a regional airport to primarily serve the business interests of Independence and the eastern Jackson County area. As a result of these efforts and after careful analysis, a potential site has been located in the Little Blue River Valley northeast of Independence.

To make an objective decision concerning the development of an airport on this location, the City of Independence has developed an Airport Master Plan, which was completed in November 1987 and prepared by Bucher, Willis & Ratliff, Consulting Engineers, Planners & Architects.

Purpose of the Master Plan

The overall purpose of the Master Plan program is to determine the long-range requirements for airport development, to assess site development alternates, and to prepare a phased development plan which will ultimately result in the construction of safe, efficient, and environmentally compatible public facilities. Three objectives must be met for a workable course of action.

1. Identify all potential site development alternatives.
2. Site layout must be economically and financially feasible to develop, provide an adequate level of public service to the area, meet State and F.A.A. design criteria for development grant eligibility, and have the capability to develop into a durable asset to the region and metro area.

3. Adequate data and analyses must be provided to bring about a consensus on the most desirable site development option.

The over all goal of the airport planning process is to provide an airport that is safe; economically viable; fulfill broad national; state and regional goals; be acceptable to the user and general public; and substantially be supported by the users of the facility.

Site Location

The site for the proposed Independence/Eastern Jackson County Airport is located in the Little Blue River Valley northeast of the City. More specifically, the site is north of Blue Mill Road, west of Atherton Road and east of the Union Pacific/Missouri Pacific Railroad tracks. The map on the following page, Figure 7.81, illustrates the proposed airport location relative Independence.

Due to its location, in the Little Blue River valley, the site is flat although it is bordered on the east and west by low, rolling hills. The area is predominantly agricultural in character with some scattered single-family residences. Property generally is held in large ownerships which will aid in the assembly of land for airport and adjacent industrial development. Immediately to the west of the site is the treatment plant for the Little Blue Valley Sewer District.

The Corps of Engineers has completed a channelization improvement program that has removed large areas of the Little Blue Valley from the 100-year floodplain. Longview Reservoir and the Blue Springs Reservoir are part of the flood control project and have been completed. These projects have effectively opened up the area in the Little Blue Valley for the proposed airport and potential adjacent industrial development.

Roadways

Vehicular access to the proposed site is currently provided by taking U.S. 24 Highway to Blue Mills Road to Atherton Road. Both Blue Mills Road and Atherton Road are two-lane roadways intended to serve as collector streets for the surrounding rural and semi-rural areas. U.S. 24 Highway is a four-lane, high-volume highway which runs west through Independence and Kansas City and east through Buckner and Lexington. U.S. 24 Highway also connects to the major north-south arterial streets, which are Missouri 291 and Interstate 435 located to the west and Missouri 7 Highway to the east..

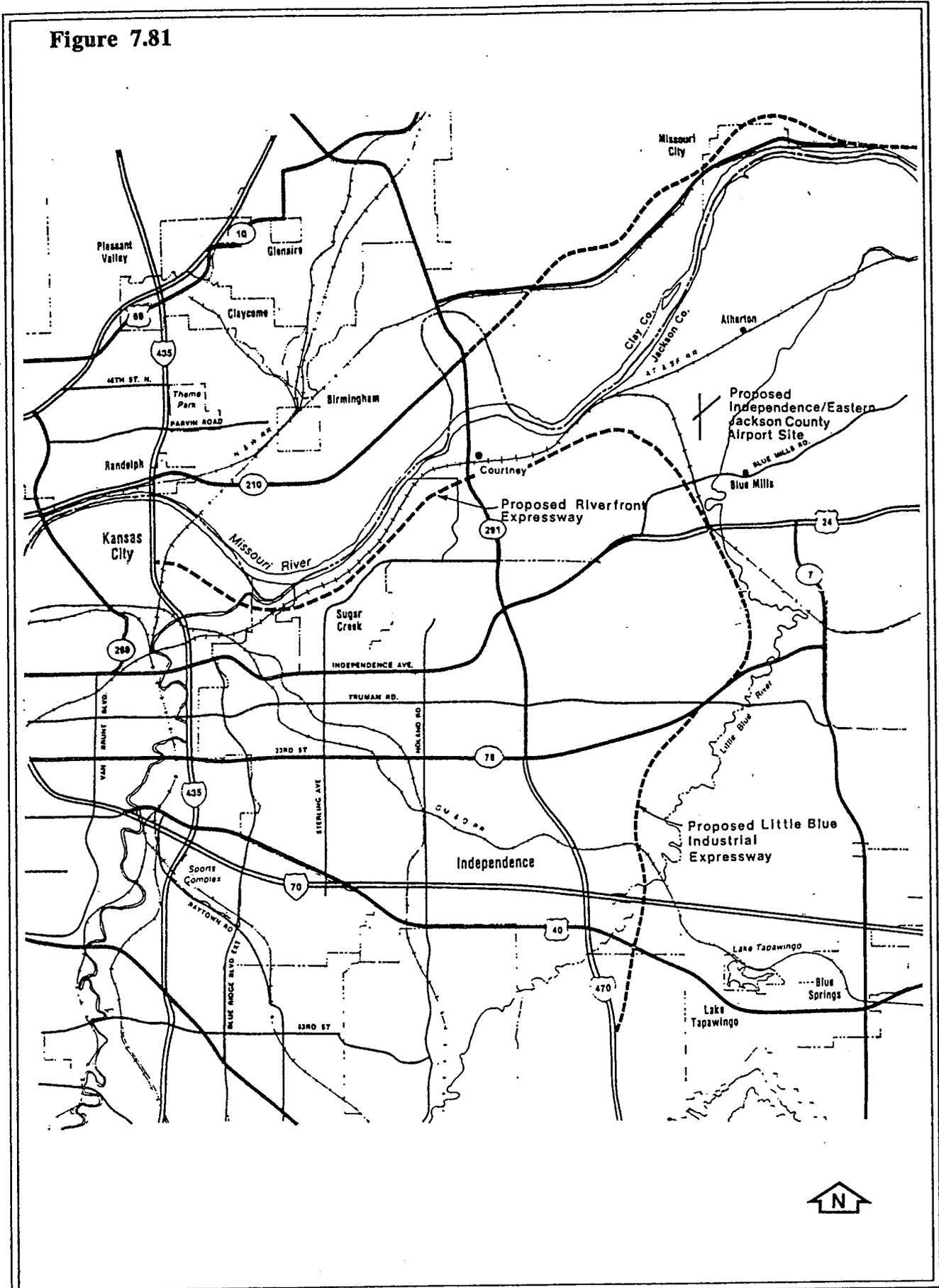
In order to improve access to the Little Blue and Missouri River Valleys, a new roadway has been proposed connecting U.S. 40 Highway, Interstate 70 at Selsa Road, and U.S. 24 Highway. The proposed Little Blue Expressway is a necessary improvement in-order to open the river valley to industrial development. The expressway parallels the Little Blue River and connects to U.S. 24 Highway on the west side of the Little Blue River.

Another roadway project, South Riverfront Expressway, is currently funded through a Federal Grant and has been designed to connect with the Little Blue Expressway at U.S.24 Highway. This roadway will parallel the Missouri River to the west and connect with Interstate 435 at Front Street in Kansas City. Together the Little Blue Expressway and the South Riverfront Expressway combine to form the Jackson County Expressway.

Railways

Two railroad lines crisscross the area adjacent to the proposed airport site. The Santa Fe tracks run east from Kansas City along the southern edge of the Missouri River through Sugar Creek, Atherton and Sibley. The Union Pacific tracks parallel the Santa Fe tracks through

Figure 7.81



Sugar Creek but turn south long the Little Blue River to the Lake City Ammunition Plant and then east through Buckner.

Waterways

The Missouri River is a major inland navigational channel which is maintained by the U.S. Army Corps of Engineers. Several dock facilities are currently located on the Missouri and there is the possibility of a barge facility being built on the river approximately two miles north of the proposed airport site. A 1977 study done by MARC identified that site as one of 35 potential sites in the Kansas City region.

Airports

Within the eight-county metro area, there

location of airports in the Kansas City metropolitan area. With the closure of Heart Airport in the fall of 1986, there are now 7 airports in Jackson County including Richards-Gebaur Airport, which is operated by the City of Kansas City. The only other public-owned facility is the McComas/Lee's Summit Municipal Airport. Other airports within close proximity to the proposed airport site are Liberty and Roosterville airports. Both are privately-owned airports, but both are open to the public. Table 7.81 shows the existing area airports, number of aircraft and current use of facility.

Future Development

Fortunately, there is little in the current land use pattern or current zoning designations which is incompatible with the development and operation of the proposed airport. Simi-

Table 7.81

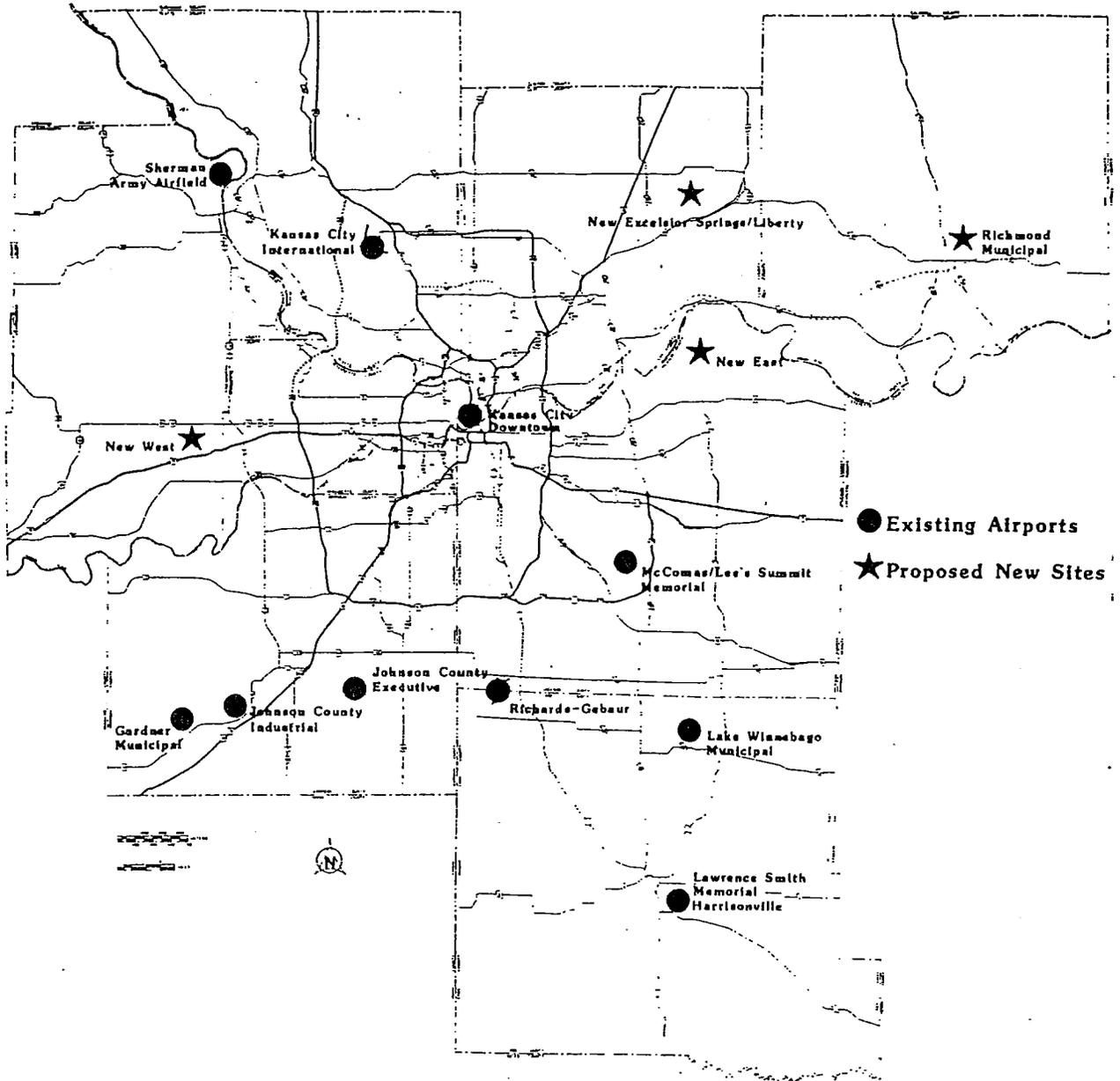
EXISTING AREA AIRPORTS					
Name of Airport	Ownership	Open To Public	Principal Runway Length	Total Based Aircraft (1985)	Estimated Aircraft Operations (1985)
JACKSON COUNTY					
Berry Field	Private	No	2,600"	0	200
East Kansas City	Private	Yes	3,800"	160	28,000
Independence Memorial	Private	Yes	2,600"	125	19,000
McComas/Lee's Summit Municipal	Public	Yes	3,000"	146	81,500
Stafford	Private	No	3,600"	5	50
Stevenson Farm	Private	No	1,900"	0	N/A
Richards-Gebaur	Public	Yes	9,000"	79	30,000
CLAY COUNTY					
Liberty	Private	Yes	1,850"	N/A	300
Roosterville	Private	Yes	2,900"	61	12,000

Source: MARC Regional Airport System Plan, 1984: MARC Special Aviation Studies, 1985; F.A.A. Forms 5010

are 62 active airport facilities. Of these, only 12 are presently public-owned. Of the 50 private airports, only 13 are open for public use. The map on the following page, Figure 7.82 shows the

larly, plans to develop the Little Blue Valley as a major industrial center and economic belt stretching from I-70 to the Atherton bottoms is feasible, given the area's physical attributes. The

Figure 7.82



industrial development in the valley has already begun in areas where the flood plain is not a factor and where access is available. These include the industrial park adjacent to the Independence Municipal Airport north of R.D. Mize Road and a warehousing development at the expressway's intersection with U.S. 40 Highway. It is important to point out, however, that the current lack of obstacles does not guarantee that continued future development will automatically occur as planned. There are a variety of actions which need to be taken to maximize the probability that future development plans will be successful.

At the north end of the economic industrial belt and, as far as the airport is concerned, it is crucial that the future development of adjacent land not compromise or constrain its full utilization. The noise and vibration of take-offs and landings, for example, could cause problems if residential development (or other noise sensitive development) is allowed to take place along the airport's approach paths. The relatively low usage typical of the early stages of airport development may make this problem seem insignificant initially, and thus residential growth may not seem objectionable. As usage increases, however, noise problems can become more severe and complaints more frequent. As a result, land uses which are likely to be sensitive to airport operations should be prohibited from developing near the airport so that the long-term ability to increase operations to full capacity is not lost.

Furthermore, uses which have physical characteristics that would negatively impact the airport should also be controlled. Industrial uses that create a large volume of smoke, for example, should not be permitted in locations which would impair visibility. Similarly, uses which require tall structures (smokestacks, cooling towers, etc.) should be located so that they do not become airspace obstructions. Each of these potential problems can and should be addressed immediately through the strict ap-

plication of zoning controls.

Zoning controls are also important to the long-term viability of industrial development plans. Even more important, however, is the commitment of funds for infrastructure improvements. The Little Blue Valley will be competing for industrial development prospects with the I-435 and Front Street area in Kansas City, the Highway 210 and Missouri 291 corridors in Clay County, and the I-70 corridor through Blue Springs, Grain Valley and Oak Grove. Unless land is available with full utility service and excellent vehicular access, the Little Blue Area will not compete well. Currently, the most notable missing element is vehicular access, particularly to I-70. Although the potential for rail, air and barge access is an appealing asset, it does not make up for the lack of a major highway. The Little Blue Expressway, of course, could resolve that problem providing that a source for construction funds can be found in the near future. Once the expressway is in place, then an actual industrial park can be developed with water, sewer, roads gas and electricity in place. Due to a variety of alternative sites in the surrounding areas, these infrastructure improvements are virtual prerequisites to a successful industrial development effort adjacent to the proposed airport.

Regional Demand

Aviation demand forecasts are normally formulated in two distinct steps. In general, first, past trends in aviation activity data are examined with the assumption that the patterns identified will give an indication of future activity levels. These past trends and related socio-economic trends are then extended into the future by use of statistical methods.

As indicated previously, in 1984 the Mid-America Regional Council (MARC) prepared the Regional Airports Systems Plan for the Kansas City Metropolitan Area. As part of the plan, MARC prepared a series of aviation

Table 7.82

GENERAL AVIATION FORECAST FOR KANSAS CITY METROPOLITAN AREA

	1990*	1995*	2000*	2005**
Based Aircraft				
Single Engine	1,391	1,555	1,740	1,923
Multi-Engine	332	380	432	497
Other	41	47	53	60
Total Based Aircraft	1,764	1,982	2,225	2,480
Annual Operations				
Local	398,000	472,000	574,000	706,600
Itinerant	339,000	558,000	638,000	866,000
Total Annual Operations	797,000	1,030,000	1,212,000	1,572,000

Source: * Airports System Plan 2000, Kansas City Metropolitan Region; Mid-America Regional Council, 1984, 1986 (Revised)

** Bucher, Willis & Ratliff, 2000-2005

forecasts for the region and for individual sub-areas within the metro area. These system forecasts, which were revised in 1986, looked at economic and population trends and projections for the region, aeronautical activity, current available airport facilities, and land use and transportation plans for the metro area.

Table 7.82, at the top of the page, shows the regional forecast for general aviation based aircraft by type and for aircraft operations through the year 2005. General aviation operations are forecast to increase by 197 percent over the same time period.

7.9 AIRPORT DEVELOPMENT PLAN

This section details the airport development program and was designed to provide a logical and cost-effective plan that is keyed to the facility requirements of actual aviation demand. Upon construction of the initial phase of the Airport development program, subsequent expansion will only take place as activity warrants and based

on the availability of funds (State, local, FAA).

The improvements are recommended by phase to yield a safe, efficient and attractive public facility. One individual phase should not necessarily be considered as a single project, however, but rather a series of projects which will accrue to the ultimate development concept. The timing of projects within each phase will depend, of course, on the relative priorities of airport development among other City development projects and services. Also, the ability and willingness of local business and industry to lend support to the airport improvement program is a key issue in whether or not airport improvements are realized.

The following is an overview of the major components of the ultimate development plan:

- Acquire all property and easements for ultimate airport development and provide relocation and severance.
- Grade and construct a 3,300' x 60' primary north-south basic utility runway with turn

- arounds and basic markings.
- Install medium intensity runway lights (MIRL) and threshold lights.
- Construct terminal/administration building; auto parking area; access road.
- Construct aircraft parking apron and tie-down areas.
- Construct T-hangars and conventional hangars for fixed base operators (by others).
- Construct T-hangars access taxiway.
- Connect utilities (water, sewer, telephone, electric, etc.).
- Install precision approach path indicators (PAPI).
- Install security (terminal) and perimeter fencing.
- Construct 35' wide north-south parallel taxiway lights.
- Grade, extend and widen basic utility runway to 4,000' x 75'; extend and relocate medium intensity runway lights (MIRL); relocate south end threshold lights and install runway end identification lights (REIL). Apply non-precision marking.
- Relocate PAPI (south end).
- Install non-directional beacon (NDB).
- Relocate 161KV power line (west side).
- Extend north-south parallel taxiway to 4,000' x 35' and extend medium intensity taxiway lights (MITL).
- Expand aircraft parking apron, install tie down.
- Grade, extend and widen general utility runway to 5,500' x 100'; extend and relocate medium intensity runway lights (MRIL); relocate south end threshold lights and runway end identification lights (REIL).
- Overlay 4,000' x 75' runway, apply non-precision marking.
- Install localizer.
- Relocate Atherton Road.
- Expand terminal area auto parking.
- Construct T-hangars and conventional hangars (by others).
- Construct T-hangar access taxiway.
- Install ILS/MLS (microwave landing system) to provide for full precision instrument landing capabilities.
- Install high intensity runway lights (HIRL).
- Expand terminal building (if required).
- Grade and construct 4,000' x 75' northeast-southwest crosswind runway; install medium intensity lights (MIRL) and threshold lights; install PAPI.
- Construct 35' northeast-southwest parallel taxiway and medium intensity taxiway lights (MITL).
- Extend 5,500' x 100' north-south runway to 7,000' x 100'; extend high intensity runway lights (HIRL).
- Relocate 345KV and 161KV power lines on north end).
- Relocate ILS/MLS, runway end identification lights (REIL) and threshold lights.

- Extend 35' parallel taxiway and taxiway lights.
- Expand aircraft parking apron, terminal area, auto parking and hangar facilities as required.

Financing

This section consists of an evaluation of the financing aspects of the development of the airport and the implications the development program will have on the City.

The operation of an airport is similar to any other public facility. It, like streets, water systems and municipal building, requires regular maintenance and periodic capital improvements to remain a functioning, useful service to the community. Like other facilities, financing these improvements is often a major difficulty.

Phased development of the proposed airport facility could cost nearly \$10.4 million over the next twenty years. However, a substantial portion of this money may be available from other sources. In fact, nearly 93 percent of the estimated cost for development could come from grants from the Federal Aviation Administration and the Missouri Division of Aviation.

The following sources of revenue and financial assistance are, or may become alternatives for, airport improvement financing:

- Federal Aviation Administration 90% grant
- State of Missouri Highway and Transportation Department-Aviation Division 50% state and 50% local matching fund for construction. A 75% state and 25% local match for maintenance.

- Industrial or Agricultural Leases for areas identified on the Airport Plans.
- City Staff services could be provided from other departments during low work periods.
- County Funds could be solicited for some assistance or services and equipment could be made available for maintenance and/or construction.
- Fixed-Base Operator leases
- User Charges for landing fees are assessed, on aircraft specialty shops, and hangars and aircraft tie-downs.
- General Obligation Bonds
- Military Surplus Property could be purchased at nominal fees.
- Industrial Revenue Bonds
- Investment of Airport Fund Residuals
- Auto Parking Meters and charges
- Business License Tax
- Sale of Property for Industrial Purposes
- Display Rental Charges
- Restaurant Leases

Many of these sources are not applicable funding sources for major capital improvements, but may become useful during future construction phases.

Table 7.91, on the following page, shows the cost estimates for each of the three phases of the proposed Independence/Eastern Jackson County airport development plan. This plan is based on a twenty year improvement program.

Table 7.91

Airport Development Cost Estimate by Phases			
Development Phase	Total Cost	Federal Cost	City and State Cost
Phase 1 - (Six Year Program)			
- Initial Development	\$ 2,613,300	\$ 2,252,600	\$ 360,700
- Remaining Phase 1 Improvements (as activity warrants)	1,514,400	1,362,900	151,500
Phase 2 - (Four Year Program)	2,337,300	2,032,700	304,600
Phase 3 - (Ten Year Program)	2,389,500	2,090,500	299,000
Sub-Total	\$ 8,854,500	\$ 7,738,700	\$ 1,115,800
F.A.A. Navigational Aids (100% Federal Funds)			
- Phase 1	300,000	300,000	
- Phase 2	950,000	950,000	
Airport Terminal Building			
- Phase 1	175,000		175,000
- Phase 2	105,000		105,000
Total Estimate Cost	\$10,384,500	\$ 8,988,700	\$ 1,395,800

Note: Unit costs reflect local construction prices on July, 1987. Program assumes a 90% Federal Grant is available from (F.A.A.). A portion of the City's share may be eligible for a State Grant.

The cost estimates reflect the local construction prices in 1987.

The break down of funding for this facility assumes that 90% of the cost would be funded through federal grants from (F.A.A.). The remaining cost includes the City's share and possible State participation for eligible improvement items. This also includes the cost estimates for navigational aids that would be financed with 100% federal funds. These improvements would be required in Phase 2 for \$300,000 and Phase 3 for \$950,000.

The last part of this table includes the cost for an airport terminal building. These improvements were not included in the cost to construct the airfield and other facilities. If the city decides to construct a terminal building the cost is estimated at \$175,000 in Phase 1 and \$105,000 in Phase 3.

The maps on the following three pages illustrate the proposed development plan in

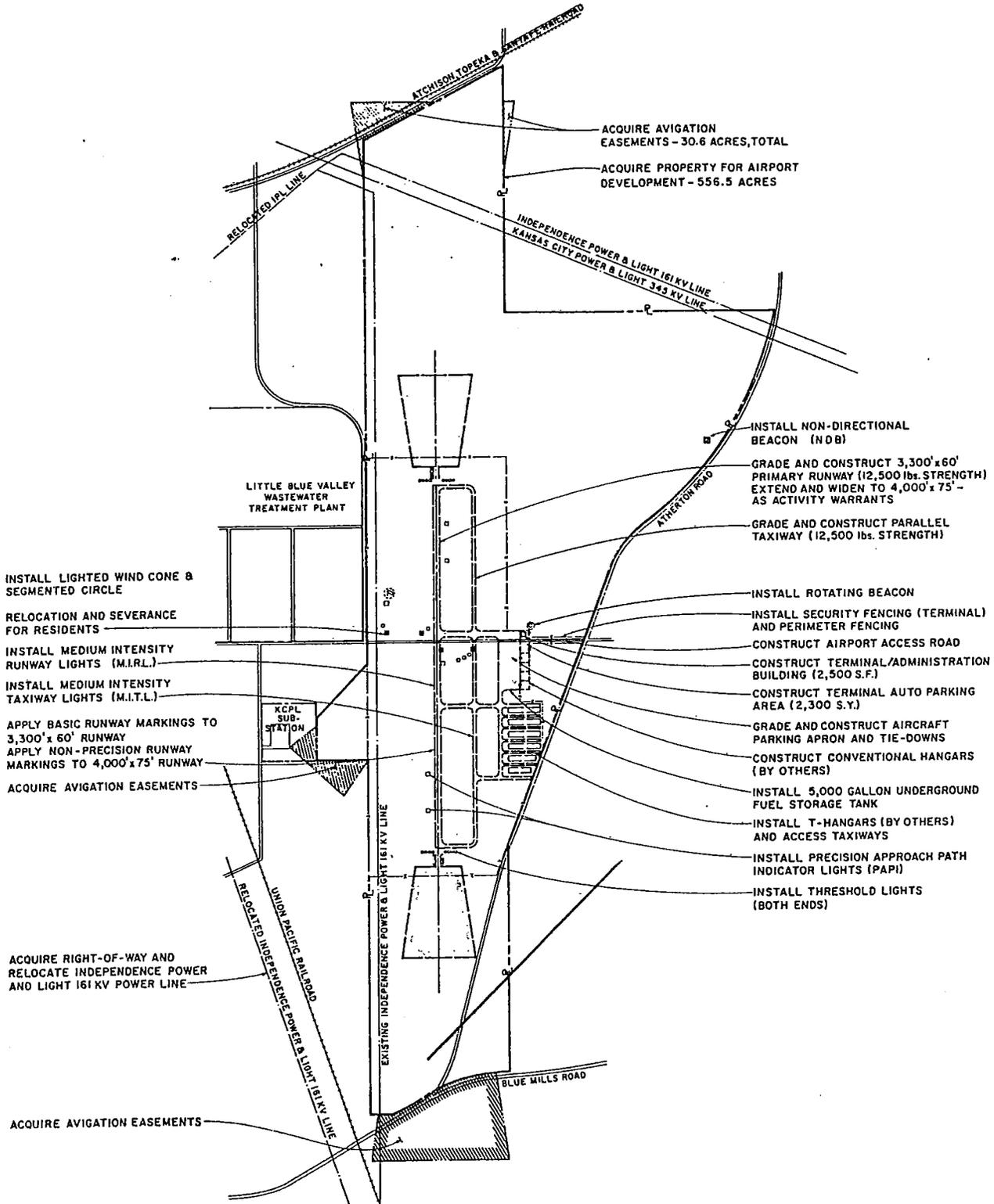
phases. Each map indicates the required development for completion of that particular phase.

Figure 7.91, Phase 1 shows the initial development requirements and an estimated time of six years for completion of this phase. The total cost for Phase 1 initial development is \$2,613,300. Additional development costs required in Phase 1 as activity warrants would amount to \$1,514,000.

Figure 7.92, Phase 2 shows the development requirements over an additional four year period based on whether activity warrants further development. The total estimated cost for this phase is \$2,337,300.

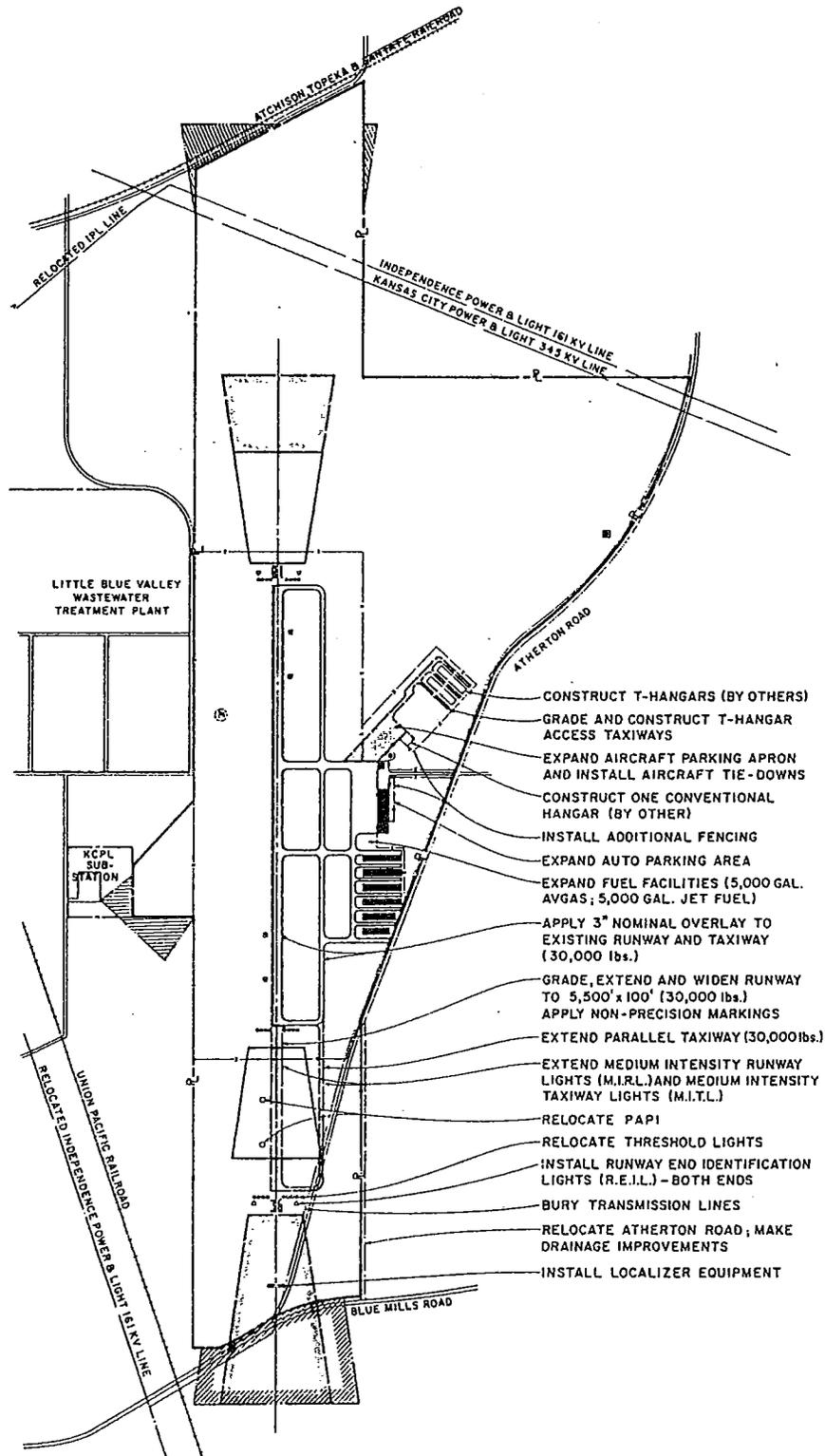
Figure 7.93, Phase 3 shows the development requirements over an additional ten year period. This would be the final expansion of the airport facilities based on the activity of the airport at that time. This final expansion is estimated to be \$2,389,500.

Figure 7.91



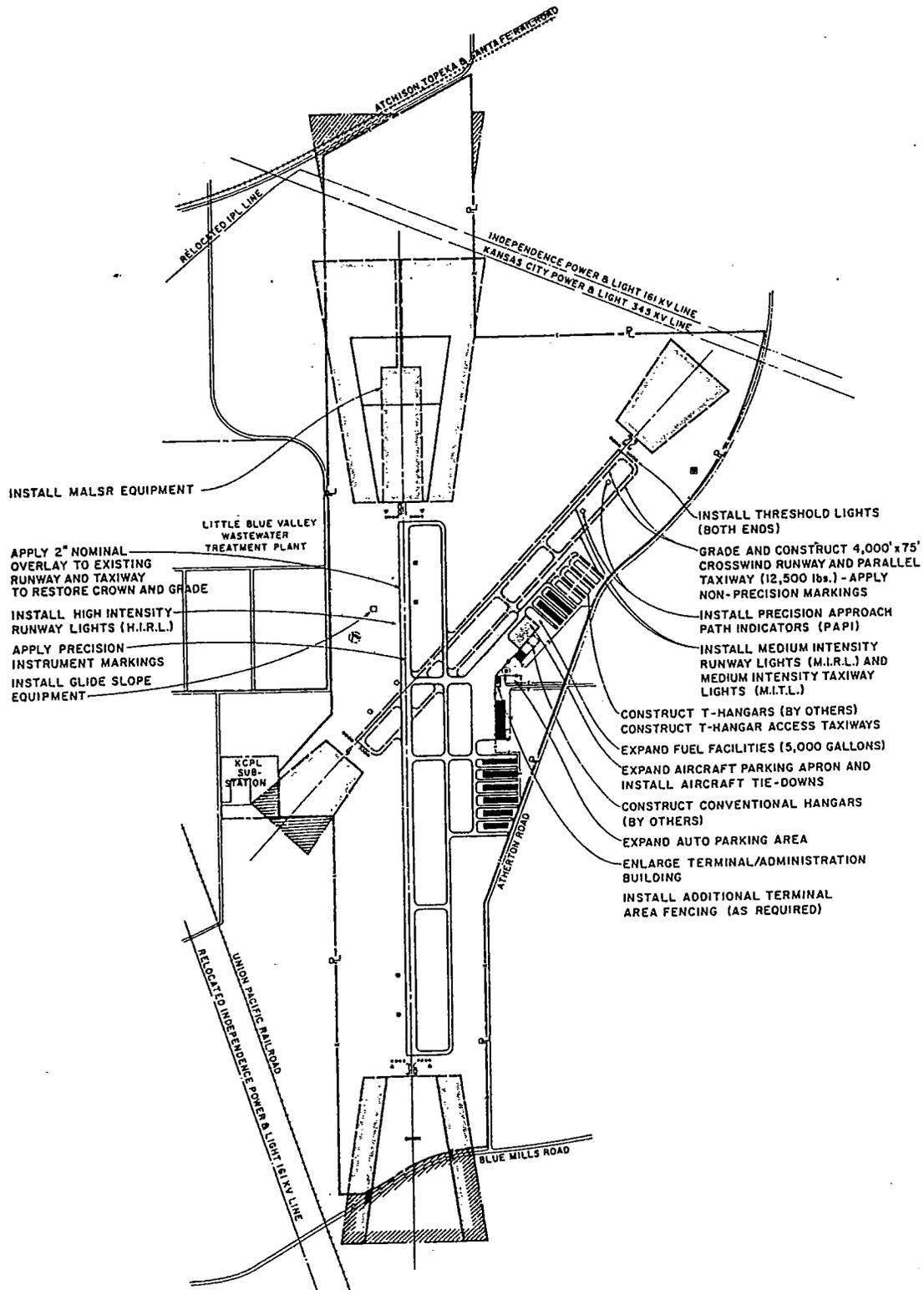
Phase I Development (Six Year Program)

Figure 7.92



Phase II Development (Four Year Program)

Figure 7.93



Phase III Development (Ten Year Program)

7-10 MOTOR FREIGHT

Transporting raw materials and finished products by highway is fast and convenient from Independence. A well-built, uncongested highway system allows goods to move swiftly and safely year round.

The Kansas City Metro area has more interstate per capita than any other city in the nation. Independence is served by I-70 in the southern area of the city. Two other interstate highways, that are circumferential linkages to the area, are I-435 on the west side of the City and I-470 in the east central portion of the city. There are two federal highways, U.S. 24 Highway and U.S. 40 Highway that traverse the city in a east-west direction. There are three state highways, of which two M-291 and M-7 travel north-south through the city and M-78 travels east-west through the center of the community.

The proposed Little Blue Expressway will be located in the east-central portion of Independence, roughly paralleling the Little Blue River. It's northern most point of access will be located on U.S. 24 Highway just west of the Little Blue River and connect to the South Riverfront Expressway. This will provide a circumferential link of highways in eastern Jackson County from I-470 to I-435 when completed.

Independence is served by the country's top ten trucking carriers. The most outstanding aspect of the growing use of the motor freight industry is the area's distinct advantage of a central location. This geographic centrality translates to significant savings in time and energy costs. All points in the continental U.S. can be reached within two working days from pickup via motor freight delivery. Sixteen states can be reached overnight and an additional twenty states by the end of the first full working day. The remaining twelve states can be reached no

later than the following (or second) working day.

When highway carriers are needed, Independence users can expect outstanding service from a significant portion of the area's more than 250 motor freight carriers. Specialized carriers provide all types of service including heavy hauling, liquid or dry bulk, and thermal transport. Shippers needing to use combinations of rail, truck or barge use local companies to move containers or "pigs" to their destinations. Freight forwarding services from 28 firms are also available.

Virtually all of the common and contract carriers that service the region's commercial zones serve Independence. The following list of carrier names are some of the companies that serve Independence:

- ABF Freight System, Inc.
- All Ways Freight Line, Inc.
- B & H Freight Line
- Beaufort Transfer Co.
- Churchill Truck Lines, Inc.
- Consolidated Freightways, Inc.
- H & W Motor Express Co.
- Holmes Freight Lines, Inc.
- Inland Freight Services, Inc.
- Interstate Express, Inc.
- Tollie Freightways, Inc.
- Yellow Freight System, Inc.

The list on the following page contains package service carriers serving Independence:

- United Parcel Service (UPS)
- DHL Worldwide Express
- Greyhound Package Express Service
- Federal Express
- Emery Worldwide
- Airborne Express

THE RAILROADS

Independence is served by the main lines of the Atchison, Topeka & Santa Fe Railways, Chicago North Western Transportation, Union Pacific Railroad and Amtrak. These rail lines are illustrated on the map on page 40, Figure 7.111. They offer fast transportation services within two to three days to most U.S. points.

The rail lines serving Independence are an integral part of the rail system that radiates out from Kansas City. Metropolitan Kansas City is the country's second largest rail center and is served by the following eleven railroad companies:

- Amtrak
- Atchison, Topeka & Santa Fe Railway
- Norfolk Southern
- Soo Line/Milwaukee Road
- Kansas City Southern Lines
- Chicago North Western Transportation
- Union Pacific
- Southern Pacific
- Burlington Northern
- Kansas City Terminal Railway
- Gateway Western

The railroad business is a multi-billion dollar industry that serve the freight transport business. There are approximately 219,000 miles of rail line throughout the nation. Many lines duplicate services by paralleling each other or are within a very short distance from each other.

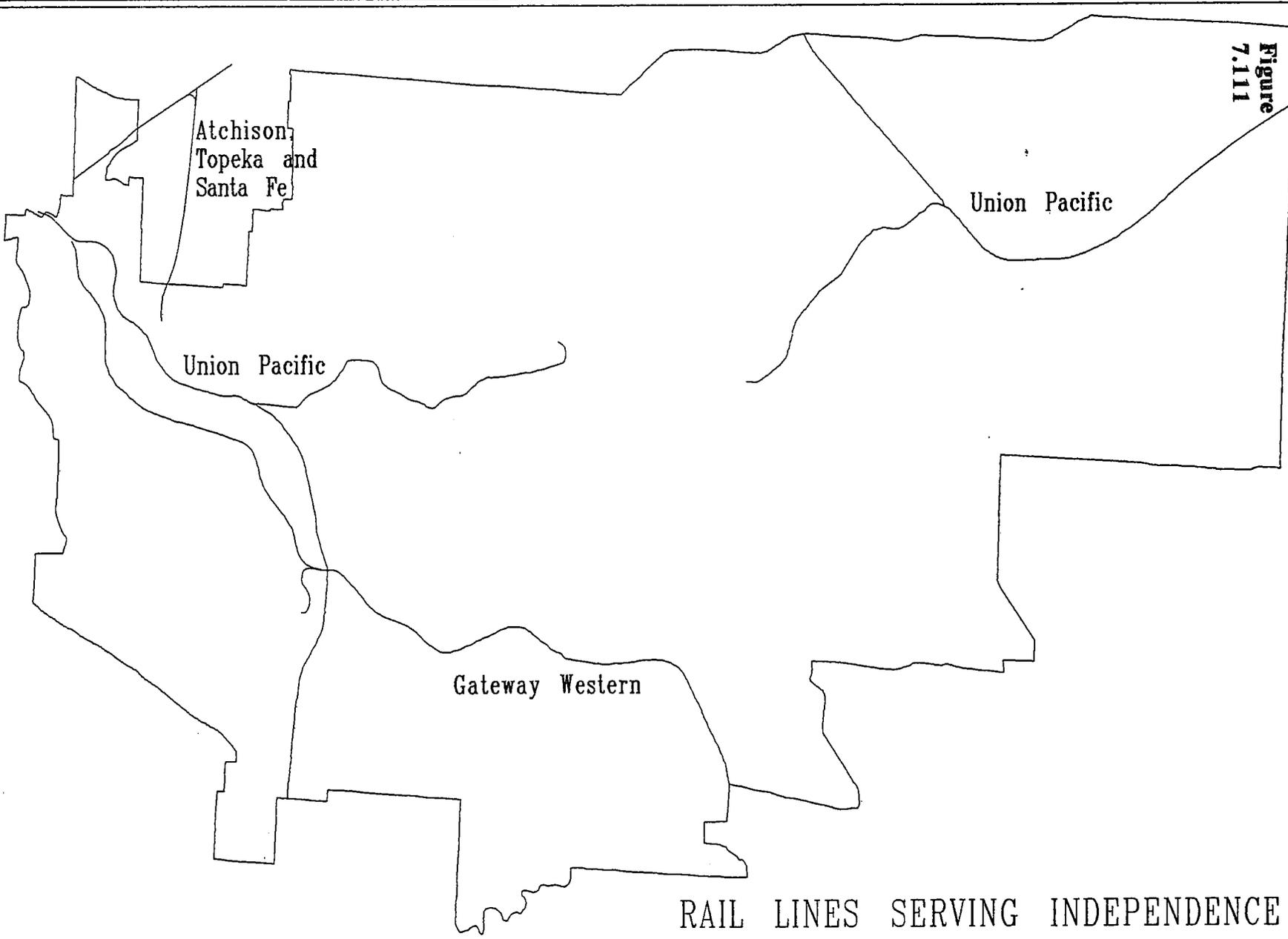
One example of rail service paralleling each other within Independence are the two lines that have common points in Fairmount to common points near 31st and Noland Road. This is essentially a duplication of service, as well as a continuing problem where streets do not have grade separations. Additional grade separations are expensive to both the City and the railroads. Both could benefit through the joint-use of one of these lines through a major portion of the City.

Passenger service is currently being provided by the Amtrak on a limited bases to Independence. There are two east bound trips, one in the morning and one in the afternoon. There are two west bound trips, one in the afternoon and one in the evening. The Amtrak service is currently looking for an alternative to the current Amtrak stop, which is the Harry S Truman Depot, located south and west of the Independence Square area.

The railroad service to Independence is part of the total transportation picture and the changing trends to the industry. Competitive relationships between air, rail, water, and trucking are constantly changing.

Independence will benefit enormously from these services when the Little Blue Expressway is constructed and the river valley is opened to industrial development. Both from the additional taxes created by the new businesses and for the jobs that will be created for residents of Independence and Eastern Jackson County.

Figure
7.111



RAIL LINES SERVING INDEPENDENCE