Regional Transit Study
for Doña Ana County

Prepared in cooperation with the City of Las Cruces, Doña Ana County, the cities of Hatch, Mesilla, and Sunland Park, and the New Mexico State Highway and Transportation Department. The contents of this report reflect the view of the Contractor who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of cooperative entities.

Final Report

Presented to

City of Las Cruces

LKC

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Chapter Three
GOVERNANCE AND FUNDING OF TRANSIT SERVICES

Introduction

LKC

Introduction

In the Autumn of 1997, the City of Las Cruces, in cooperation with Doña Ana County, the cities of Mesilla, Hatch, and Sunland Park, and the New Mexico State Highway and Transportation Department (NMSHTD), contracted with LKC Consulting Services, Inc. (LKC) to perform a Regional Transit Study for Doña Ana County, New Mexico. The study was completed by LKC with the assistance of Jenkins Consultant Services of Las Cruces and the New Mexico State University Center for Economic Development.

Doña Ana County, New Mexico is located in south central New Mexico (**Figure i-1**). The county borders the Mexican state of Chihuahua to the south, the state of Texas to the east and south, and other New Mexico counties to the north, east, and west. The county covers over three thousand square miles of territory encompassing mountain ranges, green valleys, desert, and white gypsum sand ranges (a portion of White Sands National Monument). The economy of this diverse area has historically been agricultural, but growth and development along the Mexico and Texas borders is industrializing the south county. The more heavily traveled highways running through Doña Ana County include Interstate 10, Interstate 25, and US 70.

The county's population at the time of the 1990 Census was 135,510. By 1997 population was estimated at 168,470, a growth of nearly 25 percent. Nearly half of the county's population reside in the City of Las Cruces, the Doña Ana County seat, or the urbanized area surrounding the city including the Town of Mesilla. Another 10 percent of the population reside near the City of Sunland Park in the south part of the county. Outside of these urban areas, much of the county remains rural with little or no infrastructure (i.e., roads, sewers, developed land). Rural areas include the incorporated City of Hatch and unincorporated communities such as Anthony and Chaparral in the south and Rincon and Radium Springs in the north. Many other rural communities exist along the Rio Grande River Valley and along major highway corridors. Due to its proximity to Mexico, the county has a well-established Hispanic culture and population.

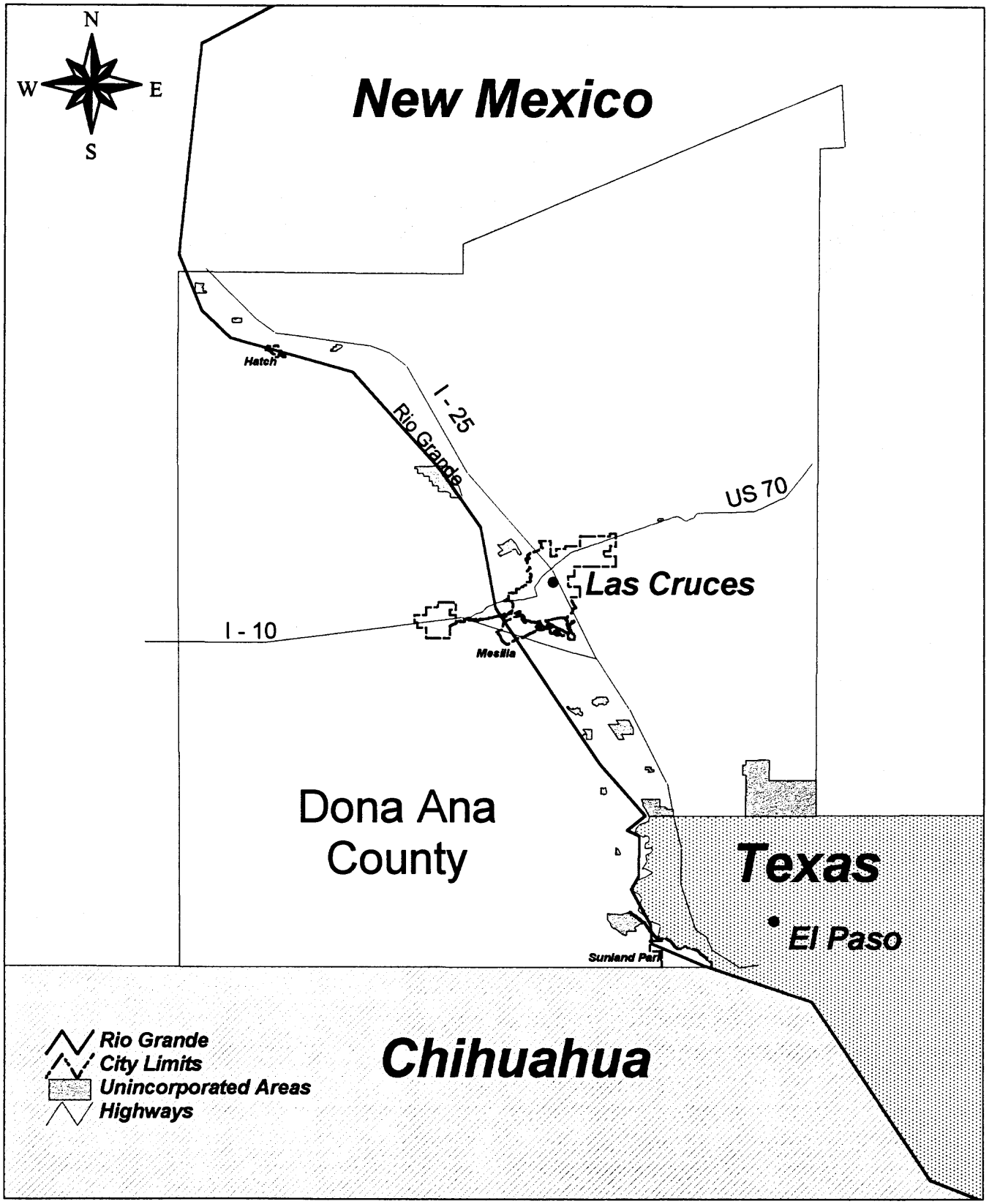
Currently, the only residents in the county with access to public transit services are those who reside within the city limits of Las Cruces. Residents of Mesilla, Hatch, Sunland Park, and unincorporated areas of Doña Ana County have no public transportation services. The county has a history of need for access to health care and social services for rural residents living outside the City of Las Cruces, and the need for transportation to education, training, and jobs has gained prominence in the community due to federal welfare reform.

The county's need for public transportation was confirmed in a 1994 "Memorial" passed by the New Mexico State Legislature. The Memorial, sponsored by State Senators Fernando Macias and Cynthia Nava, requests the NMSHTD work with Doña Ana County, the City of Las Cruces, and the City of Sunland Park to develop and implement a metropolitan transit authority to better serve the public transportation needs of citizens.

Figure i-1

Regional Transit Study for Dona Ana County

Study Area



LKC Consulting Services, Inc.

Study Scope

The purpose of the Regional Transit Study for Doña Ana County is to determine the need for expanded transit services in Doña Ana County. The study area includes the urbanized areas surrounding the City of Las Cruces (Town of Mesilla, community of Doña Ana, and the East Mesa), the City of Sunland Park, and rural Doña Ana County including the City of Hatch. The study objectives are to identify the need for transit, recommend cost-effective transit services to meet the need, and identify funding sources for services.

Steering Committee

The Regional Transit Study is guided by a Steering Committee whose role is twofold. First, the LKC project team seeks the thoughtful advice and suggestions of an informed and involved group of constituents for the study process. Second, the members of the Steering Committee represent the interests of their appropriate constituent communities to provide solid feedback on the products of the study. Members of the Committee included:

- Massoud Javid, Planner
  Las Cruces Metropolitan Planning Organization
- Susan Krueger, Administrative Assistant
  Town of Mesilla
- Pam Lillibridge, Associate Executive Director
  Tresco, Inc.
- Mike Noonchester, Transit Director
  City of Las Cruces
- Judith M. Price, Director for Community Development
  Doña Ana County
- Timothy A. Roberts, Transportation Planner
  El Paso Metropolitan Planning Organization
- Larry Shannon, Planner
  Doña Ana County
- Kathe Stark, ADA Coordinator
  City of Las Cruces
- Dan Stover, Management Analyst
  New Mexico State Highway and Transportation Department
- Marcia Weist, Planner
  New Mexico Department of Health
- Benjamin E. Woods, Assistant Vice President
  New Mexico State University

Report Organization

In the first chapter of this report, the transit need of Doña Ana County is discussed. The second chapter details the transit services recommended to meet the needs. The third and final chapter explores options for funding the recommended services. Following the final chapter is an appendix containing financial tables and other support materials.

Transit Need in Dona Ana County

LKC

Chapter One
TRANSIT NEED IN DOÑA ANA COUNTY

Communities provide public transit or public transportation services to better the environment for residents, businesses, and local government. Recent research has shown that the presence of public transit has impacts on both local and regional economies and affects the quality of life and potential economic and social contributions of residents. Doña Ana County's rural residents living outside of the urban area in which public transit services are provided display many of the characteristics associated with populations that would benefit from public transit investment. Making public transit available to additional markets in Doña Ana County will eliminate a difficulty faced each day by many county residents.

Why Provide Public Transit?

Public transit serves multiple purposes in a community (**Table 1-1**). At the minimum level, transit provides access to basic necessities, such as medical appointments, social services, and grocery shopping. Increasing the level (frequency and availability) of service provided allows transit to serve additional purposes, which can improve the quality of life for residents in the community. Taking a transit trip, or moving from one location to another via public transportation, can improve quality of life by providing access to education, vocational training, and recreation. At the highest level, transit creates economic opportunities by making jobs and higher education accessible to residents.

Table 1-1
Transit Trip Purposes and Populations Served

	Basic Necessity	Improve Quality of Life	Advance Economic Opportunity
Trip Purposes	Medical Social Service Shopping	Education Vocational Training and Skill Development Recreation	Jobs Higher Education
Population Served	Seniors Disabled Below Poverty Level - For example: Low income Low auto ownership Large household size	Youths Welfare Recipients Families	Employees College/University Students

Transit trips of basic necessity and to improve quality of life are of a personal or familial nature. They provide needed access to the most basic of human needs and create independence for those with limited access to automobiles or resources to operate and maintain personal vehicles. This independence means greater freedom to explore opportunities for education, training, and jobs, thus empowering residents to achieve more than they have in the past.

These empowered residents are the core of a community's economic health and vitality. The ability to get skilled employees to jobs strengthens the local economy by making local business more productive and by attracting additional business to the area. More residents going to work reduces the numbers of people requiring help through public assistance programs. Dollars formerly funneled into these programs can be diverted to new opportunities or used to bolster other worthwhile programs that formerly struggled for funding.

The ability to move freely throughout a community via transit helps not only employers and employees, but all services and businesses. By increasing access to existing infrastructure, transit reduces the demand to expand other services. For example, instead of taking services to residents through construction of satellite locations, local government can centralize services, creating more effective and efficient operations. Development becomes more focused.

Through increased transit availability and use, communities realize reductions in automobile congestion and related pollution. Fewer vehicles on the road improves roadway safety, reducing the number of deaths and accidents attributable to automobile accidents, as well as reducing costs associated with insuring vehicles.

Benefits of Transit

Public transportation produces a wide range of benefits. Many are obvious and easy to measure, but others are less obvious and remain difficult to measure in both quantitative and qualitative terms.

All of Doña Ana County can benefit from transit investments. A recent publication entitled *Dollars and Sense: The Economic Case for Public Transportation in America* (by Donald H. Camph and supported by The Campaign for Efficient Passenger Transportation) discusses public transportation's contributions to both rural and urban economies. The document estimates the economic return of each dollar invested in transportation at four or five to one. The benefits of investment in transit (for example, increased ridership and economic growth) are not limited only those who use transit but exist for employees, business, motorists, and society in general as well.

According to *Dollars and Sense*, transit benefits communities by:

- Creating jobs - attracts employers who prefer areas with greater accessibility for the employment pool
- Empowering workers - enables more people to reach jobs and be productive members of society
- Strengthening local business - provides greater access to workers and a larger market
- Enabling independence - provides access to health care, shopping, social services, and other basic life needs for those with limited access to a car
- Reducing congestion and related insurance costs - decreases the number of vehicles on the road, thereby increasing the safety of roads and reducing the costs of insurance to travel on those roads

- Making multi-modal transportation systems more efficient - allows transportation components to share facilities and infrastructure

- Spurring and focusing development - increases accessibility to areas and improves feasibility of expansion

In low density and rural communities, transit can especially stimulate economic development. Nearly one-third of rural Americans either do not have a car or cannot drive; therefore, public transportation can have a deep impact in these areas.

Transit 2001 Technical Report, a publication which contains researched conducted in 1997 for the governor of North Carolina, details the economic and social functions of public transportation. The report states that in urban areas, public transportation generally focuses on supporting economic activities, providing access to jobs for workers, and expanding labor markets for employers. In smaller urban areas, transit focuses on meeting the needs of citizens with limited mobility and improving access to employment, education, and job-training opportunities.

Transit 2001 emphasizes that expanding the availability and use of public transportation affects fundamental quality of life measures, such as economic security by making businesses more stable and productive; personal safety and neighborhood security by reducing congestion and the number of vehicle collisions; environmental quality through reduction of vehicles on the road; and fiscal integrity of government by promoting development patterns that reduce the cost of infrastructure and public services.

The technical report suggests that for every dollar of capital investment in transit, $3.00 to $3.50 in business revenue is generated. Studies show that a $100 million investment in transit capital projects creates 5,800 new jobs, and a $100 million investment in transit operations creates 7,300 new jobs. Returns to regions and states have been approximated at over $9 for every dollar spent. Expenditures reduced through transit investment include the costs of roads, schools, and water/sewer facilities, Medicaid transportation costs, and costs of vehicle emissions and land consumption. Many costs currently borne by society and government may be avoidable.

A third report, *Measuring and Valuing Transit Benefits and Disbenefits*, points out that investment in transit is often narrowly viewed in terms of short-term capital investment requirements. Agencies and bodies must not lose sight of long-term benefits of transit. A few of the benefits cited are:

- Value of ensuring that disadvantaged and dependent citizens have access to not only employment and training opportunities, but to social services and health care as well

- Improved access to employment and educational opportunities

- Increased gross regional product, increased personal income, increased business profitability, and enhanced government fiscal position

- Cost avoidance by individuals in terms of less dollars being required for auto ownership with more dollars available to improve their quality of life

- Reduced airborne emissions, noise, and levels of stress
- Reduced requirements for road building
- Increased conservation of natural resources

Obviously, there are many benefits to public transportation investment. Doña Ana County must not dismiss how these benefits can create value for the county and its citizens.

Does Doña Ana County Need Expanded Transit?

Doña Ana County exhibits many characteristics that reflect a need for transit. Characteristics defining the nature of the need are described in terms of demographic, economic, and community variables.

Demographics

Examining demographic variables such as population, population density, educational level, personal income, and isolation factors makes apparent those characteristics having an effect on the need for public transit.

Population and Population Density. Doña Ana County is a large county. The county covers over 3,800 square miles, much of which is rural undeveloped desert with little or no infrastructure. Although overall population density for the county is 35 persons per square mile, the majority of the population is concentrated along the Rio Grande River and along the Interstate 10, Interstate 25, and US 70 corridors. The county is also one of the most highly populated counties in the state, second only to Bernalillo County (Albuquerque area) in northern New Mexico. The county's population in 1997 was 168,470, accounting for nearly 10 percent of the state of New Mexico's population. Doña Ana County's population grew nearly 25 percent in the period between 1990 and 1997. During the same period the state's population grew only 14 percent, and Bernalillo county's population grew less than 10 percent. These high growth rates may even be underestimated as it has been suggested that the county's population is often under-reported.

Educational Level. Although Doña Ana County has a slightly higher percentage of the population holding Bachelor's or other advanced degrees than that of the state (Doña Ana County - 22 percent, New Mexico - 20 percent), the county also has a significantly higher number of residents with less than a 9th grade education (Doña Ana County - 18 percent, New Mexico - 11 percent). The larger number of highly educated residents is, in part, due to the presence of New Mexico State University (NMSU). The high proportion of those with less than 9th grade education points to the number of agricultural migrant workers residing in the county.

Educational achievement is often an indicator of potential economic achievement and one's ability to sustain an adequate lifestyle in terms of accessibility to needed items and services. The large number of modestly-educated residents indicates that there

Area (MSA) during the period January 1997 to September 1997 was 67,915. Most employees work in retail, educational services, public administration, construction, and agricultural positions. These employees account for approximately 8 percent of the state of New Mexico's total labor force (821,975). Two other MSA's in New Mexico, Albuquerque and Sante Fe, account for 44 and 9 percent (respectively) of the New Mexico labor force.

The 1997 unemployment rate in the Las Cruces MSA has varied from a high of 10.1 percent in January to a low of 7.3 percent in September. At 8.9 percent, the MSA's 1997 average unemployment rate far exceeds the state's1997 average unemployment rate of 5.9 percent. The Las Cruces rate also exceeds those of Albuquerque (4.5 percent) and Sante Fe (4 percent) for the same time period. The higher unemployment rate in Las Cruces is due in part to the fact that one-half of the county's residents live outside of Las Cruces where the majority of jobs are located. The outlook for Doña Ana employment was also recently affected by Sara Lee Hosiery's (a facility employing over 300 workers) announcement that they will be closing their plant in Mesilla Park.

Doña Ana County's unemployment difficulties are reflected in its poverty rates and in the number of county residents receiving public assistance. In 1990, Doña Ana County had reached a 23 percent poverty level while the level for the state was relatively high as well at 17 percent. Recent reports estimate the number of county food stamp assistance recipients at 24,100 (approximately 15 percent of the county's population) and the number of Temporary Assistance for Needy Families (TANF) recipients at 7,500 (5 percent of county residents). At 14 percent statewide, there are proportionately fewer food stamp recipients in the state than in Doña Ana County. The number of TANF recipients is also proportionately lower statewide (6 percent).

Economic Growth and Development. Doña Ana County has a history of development being spurred through transportation improvements. Running through the Mesilla Valley, the Camino Real de Sante Fe (the King's Highway to Sante Fe), developed into a main trade route between Mexico City and Sante Fe and created the first colonial settlements in the area. The Town of Mesilla was also an important stop on the Butterfield Overland Mail Route and Butterfield Overland Stage in the mid 1800's. The town's reputation as the only place that one could find a bed between San Antonio and Los Angeles made it a desirable location for merchants. Picacho was another stop for the Butterfield Overland Trail. Railroad development in the late 1800's established the settlements of Anthony, Rincon, and Hatch.

More recently, Doña Ana County is undergoing another surge in growth. The number of building permits issued has steadily increased from 2,371 in 1993 to 2,546 in 1997, an increase of 7 percent. Total value of permits has also increased from $290,000 to $941,000, an increase of over 220 percent. A number of large retail centers have recently opened, and employers such as Parkview Metals have located within the county. Residential development has also been growing.

Specific development plans that should have positive (increased growth) impacts upon

Doña Ana County include a new port of entry located in Santa Teresa; Santa Teresa and Las Cruces airport expansions; Santa Teresa intermodal facility; foreign trade zone designations at the Santa Teresa Industrial Park and the Las Cruces West Mesa Industrial Park; special impact designation for census tracts in the south county; potential commuter rail service between El Paso and Las Cruces; and development and construction of a Spaceport at White Sands Missile Range.

Community

Examining community characteristics such as automobile ownership and the conditions created by auto ownership or educational opportunities clarifies those traits having an influence on the need for public transit.

Automobiles and Conditions Created by Auto Ownership. In spite of air quality problems, residents are often reluctant to give up what they consider to be the flexibilities and advantages of private automobile ownership. Building flexible, patron-friendly transit systems may persuade some in larger urban areas to leave their cars behind, but in smaller areas where service is not as plentiful or as flexible, this is not the case. Additionally, for some in Doña Ana County who have saved to own a vehicle, car ownership is a cultural sign of independence, and changing tradition can be difficult.

In 1995, Sunland Park was designated by the Environmental Protection Agency (EPA) as a non-attainment zone for ozone. Ozone non-attainment is often associated with traffic congestion and auto emissions. The State of New Mexico does not currently require safety inspections, and emissions inspections are only required in the Albuquerque area.

At 28 deaths for every 100,000 people, New Mexico has the second highest rate of motor vehicle deaths in the United States. Auto insurance premiums in New Mexico averaged $815 per year in 1996 and ranked 22nd in the nation. A ranking this high is unusual for such a rural state. Vehicle crash death rates are a function of the degree of urbanization, amount and type of travel, type of vehicle, state law, emergency care capabilities, weather, and topography. For New Mexico, type of vehicle has a particularly great influence, with 35 percent of motor vehicle deaths involving occupants of pickups, utility vehicles, and large vans. According to recent research by the Transportation Research Board, motor vehicle crashes are the third leading cause of death among Hispanics. Hispanics account for over half of Doña Ana County's population. In light of the high New Mexico accident rate, having less residents driving on the roads in New Mexico and Doña Ana County will save lives.

According to the American Automobile Association (AAA), national car ownership costs are now approximately $6,000 per vehicle per year. With many households in Doña Ana County in the $12,000-$15,000 per year income range, the cost of transportation is becoming one of the largest elements in the household budget. The Department of Labor (DOL) has indicated that even in households with automobile ownership, *reliable* transportation remains an important issue in getting welfare

recipients to work.

Educational Opportunities. Doña Ana County is home to five colleges and universities. Troy State University is a private college located on the grounds of White Sands. Two other private colleges, the University of Phoenix and Webster University, are located in Santa Teresa. The majority of college students attend either Doña Ana Branch Community College (DACC) or New Mexico State University (NMSU).

DACC's main campus is located on the edge of the NMSU campus in Las Cruces. The school offers instruction leading to occupational certificates and associate degrees and preparation for further academic work. DACC currently operates satellite campuses in Anthony, Chaparral, and Sunland Park. The Anthony and Sunland Park campuses offer both adult basic education courses and core curriculum courses for associate degrees. The Chaparral Learning Center offers only adult education courses. The college has plans to open facilities in Hatch and the East Mesa within the next six years.

Located in Las Cruces, NMSU is a four year public university dedicated to teaching, research, and service. The university offers Bachelor's, Master's, and Doctoral programs in disciplines ranging from agriculture to engineering.

Ensuring access to educational and research facilities such as these will allow for personal development of county residents as well as encourage additional economic contribution by residents and faculty.

Transit Services Currently Provided

Five types of public transportation services are currently or have been provided in Doña Ana County. Those types are urban transit, commuter transit, SafeRide, client and intercity transportation.

Urban Transit

The only public transit provider in the county, RoadRunner Transit, operates within the city limits of Las Cruces and within a small portion of the county adjacent to Las Cruces known as Tortugas. RoadRunner Transit has a fleet of buses that operate nine routes on a radial network, "pulsing" at the downtown Las Cruces central transfer point. Service is provided Monday through Saturday between 6:30 AM and 7:15 PM. The base fare for a ride is $0.50; a discounted ride for seniors, persons with disabilities, students, and youth is $0.25. **Figure 1-1** shows the coverage the nine routes provide. Route area coverage is considered to be all areas within a one-quarter mile zone on either side of each route. As some routes intersect and run parallel to one another for brief distances, there is multiple coverage of some areas. RoadRunner also provides complementary paratransit or Dial-A-Ride services for the qualified disabled within the Las Cruces city limits.

Commuter Transit

Although the State of New Mexico has maintained a vanpool loan program since 1978, the success of and participation in these operations in Doña Ana County has been minimal. However, the county does maintain a ride-matching database for commuters who wish to share their rides. The Rideshare ride-matching program is currently being examined by the state for improvements and is also being considered to be linked to a state ride-matching data pool.

Non-Emergency Medical Transportation

A private organization known as SafeRide operates within Doña Ana County. SafeRide is a twenty-four hour, seven day a week, door-to-door demand response system. Service is open to anyone in the county, but is provided for non-emergency medical trips only. At $2.00 per mile, the service is costly for those users without Medicaid reimbursement. The county supports SafeRide's operations in the amount of $200,000 per year.

Client Transportation

While there is a variety of transportation service providers in Doña Ana County, the majority of services are provided to only an eligible segment of the population. Specialized services include transportation of seniors and disabled to medical, social service, recreation, and shopping centers; transportation of students to public and private learning centers; transportation for clients of specific agencies, for example senior centers; and for-hire (taxi) transportation.

Intercity Transportation

Through their local franchise, TNM&O Coaches, Greyhound Bus Lines operates intercity transportation service between El Paso and Las Cruces. Service operates twice daily in each direction. While en route, TNM&O does pass through many locations in Doña Ana County. However, the only stop in the county that is currently scheduled is in Las Cruces. Some private van operators do provide service in Anthony, Texas, but they do not cross the border into New Mexico. There are presently no other intercity service providers in the county and no Doña Ana County connections to El Paso's Sun Metro bus system.

Areas of Transit Need in Doña Ana County

Even with the available public transportation services described above, many Doña Ana County residents are unable to get where they need to go. The demographic, economic, and community variables all point to conditions within Doña Ana County creating a need for additional public transit services.

LKC has employed an innovative transit need index that used some of these variables and demographic data to identify areas of need. Categories of population information are often used by transit planners to identify geographical concentrations of transit dependency, need, and potential demand. Identifying, indexing, and ranking the categories serves the purpose of identifying areas most in need of transit services. The categories used in the Regional Transit Study for Doña Ana County were identified by the study Steering Committee. Their characteristics are:

Category	Characteristic
Population Density	Density in persons per square mile
Age Distribution	Concentrations of those persons between age 6 and 15 and those over age 65 with no disabilities
Disabled Population	Concentrations of persons with a disability
Large Households	Percentage of persons in households of over 6 persons
Low Household Income	Median household income
Auto Availability	Concentrations of households with one or less available motor vehicle

Population Density

Traditionally, areas with higher population densities are most cost-effective to serve via public transit. More residents are located in a concentrated area allowing transit to serve greater numbers of residents with fewer vehicles. This is the case for Las Cruces, which has the highest population densities in Doña Ana County and receives the benefit of RoadRunner Transit services. As the Regional Transit Study seeks to move beyond providing only urban transit services, areas with the lowest population densities, which are also the areas with the least opportunities for resident access and mobility, have higher needs for transit.

Age Distribution

Sharp growth in the over 65 senior population has recently occurred in Doña Ana County and is expected to continue. Between 1990 and 1996, the over sixty-five population of Doña Ana County grew by over 30 percent while the entire state's growth for the same population was only 17 percent. As they cannot or choose not to drive, areas with higher concentrations of seniors are typically considered to have higher transit need. With the continued influx of retirees into Doña Ana County, the need for senior transportation will continue to increase.

Disabled Population

According to the 1990 census, 6.6 percent of Doña Ana County is disabled. This percentage may be underestimated. It has been suggested that the percentage of disabled people as determined by the census is historically low due to the way in which disability is defined.

Like the senior population, many persons with disabilities cannot or choose not to drive. They therefore have a higher need for public transportation than does the general population.

Large Households

The size of a household is oftentimes constraining. In large households of six or more persons, household or family members all require access to a limited number of household resources. This resource shortage creates a situation where some or all household members require assistance. Assistance increases opportunities for advancing quality of life and could be in the form of public assistance or in the form of providing transportation.

are more residents in Doña Ana County on average than in the state who could require assistance in achieving a reasonable quality of life.

Personal Income. In 1995 Doña Ana County had a per capita personal income (PCPI) of $14,643. Doña Ana County's PCPI ranked 21st out of 33 counties in the state and was 81 percent of the $18,161 state average. During the same time, Bernalillo County had a PCPI of $22,718, which ranked 3rd and was 125 percent of the state average. The 1995 Doña Ana PCPI reflected an increase of 6.5 percent from 1994, while Bernalillo's change was 7.0 percent and the state's change was 6.3 percent.

Doña Ana County's lower per capita personal income reflects that this rural county, while indeed growing, is not advancing as quickly as some of its peer counties.

Isolation. Due to mountain ranges, portions of the county are physically cut off from the rest of the county. For example, the Franklin Mountains cut the community of Chaparral off from its nearest Doña Ana County neighbor, Anthony. Lack of infrastructure also creates barriers. As of six years ago, only half of the county-maintained roads were paved.

Without transportation options, rural residents are almost required to move into urban areas or to purchase cars. Often, neither is a desirable option, resulting in a change in lifestyle or quality of life.

Today, colonias (densely populated, low income areas) and the East Mesa have layouts that make them unserviceable by many forms of public transportation. Doña Ana County has begun to address zoning and land use issues connected with future growth of the county. Design and planning of future roads and communities will be completed in cooperation with other county and city agencies to ensure that infrastructure is consistent with the future needs of residents and the county. Even with these planning improvements, much of the county remains rural and inaccessible. Getting transportation to those in need is a challenge.

Economy

Examining economic variables such as employment, poverty rates, public assistance, and economic growth and development help to clarify those characteristics having an effect on the need for public transit.

Employment, Poverty, and Public Assistance. Employment opportunities in Doña Ana County are not centralized and require considerable amounts of travel. According to the New Mexico Department of Labor, the majority of Doña Ana County's large employers (defined as those employing 25 or more persons) are located in Las Cruces. Remaining employers are scattered throughout the county, but are generally located in Anthony, Chamberino, Hatch, Mesilla, Mesquite, Santa Teresa, and Sunland Park.

The average size of the civilian labor force in the Las Cruces Metropolitan Statistical

Low Household Income

Lower household income affects the ability of families to afford many things, including the costs of owning and maintaining automobiles. Lower income therefore corresponds to a higher need for transit.

Auto Availability

Auto availability measures the number of households with one or no available automobile. Those households with an available automobile have a lower transit need than those without. Even those with an automobile may not have a reliable vehicle or may have to share that automobile with others. Limited access to a vehicle creates a need for access to transit.

Data for these demographic variables and county characteristics were used to analyze transit need. A master data file, including all census tracts in Doña Ana County, was developed to allow comparison of census tracts for each characteristic. The tracts were compared to county averages and analyzed in terms of four target areas described in **Table 1-2** below. Target market areas were defined by grouping census tracts in the county into reasonable regions. A visual representation of these regions is presented in **Figure 1-2**.

Table 1-2
Doña Ana County Target Markets

Area	Census Tracts			Communities
Urban	11.01 11.02	12.01 12.02	13.00*	Doña Ana, East Mesa, Mesilla
North County	13.00**	14.00	15.00	Garfield, Hatch, Radium Springs, Rincon, Salem
South County	16.00	18.00		Anthony, Berino, Chaparral, La Mesa, Mesquite, San Miguel, Vado
Sunland Park	17.00			Chamberino, La Union, Santa Teresa, Sunland Park

** Only the community of Doña Ana*
*** Excluding the community of Doña Ana*

As previously detailed, the City of Las Cruces provides public transit services via RoadRunner Transit to residents within the city limits and to the adjacent county area of Tortugas. Other populations within the Las Cruces city limits are provided with transportation via RoadRunner's Dial-A-Ride service and several client/agency transportation providers. As Las Cruces has both public transit and other services, the Las Cruces city limit area is not considered a target market for public transit services. The Las Cruces city limit area is comprised of census tracts 1.01, 1.02, 2.00, 3.00, 4.01, 4.02, 5.00, 6.00, 7.00, 8.00, 9.00, and 10.00.

Similarly, Census tract 19.00, the White Sands area of Doña Ana County, was not included as a target market area due to extremely low population levels and its standing as federally owned land.

Urban Target Market

The Urban Target Market area includes the communities of Doña Ana, the East Mesa, the unique urban/rural Town of Mesilla, and several other small communities. Mesilla is the only incorporated city in the Urban Target Market area. The area is characterized by lower population densities than those occurring within the city of Las Cruces, but higher densities than those occurring in rural areas of Doña Ana County. Approximately 10 percent of the population in this area is over the age of 65. On average, 6 percent of the population is disabled. About 4 percent of residents reside in large households of 6 or more persons. One-third of households have access to one or no auto. Even when an auto is available, it must be shared between household members. At $27,000, median income in the area is higher than the county average of $22,109.

The characteristics of the Urban Target Market and the area's proximity to the urban Las Cruces area make it a candidate for public transit services aimed at improving quality of life and advancing economic opportunity for residents. The services designed should allow residents to get to basic necessities and also to educational and recreational facilities and jobs.

North County Target Market

The North County Target Market includes communities such as the incorporated City of Hatch and the unincorporated communities of Garfield, Radium Springs, Rincon, and Salem. The North County Target Market has lowest population density of all the target markets. Like the Urban Target area, about 10 percent of the population is over age 65. Just under 6 percent of residents are persons with disabilities. Nearly 8 percent of residents reside in large households. Thirty-five percent of households have access to one or no auto. The North Market's average median income is about 10 percent lower than the average for the rest of the county.

The characteristics of the North County Target Market make the area a candidate for public transit services aimed at providing transit trips to basic necessities such as medial and social services and shopping.

South County Target Market

The South County Target Market includes communities such as Anthony, Berino, Chaparral, La Mesa, Mesquite, San Miguel, and Vado. There are no incorporated communities in this area. Although higher than the population density of the North Target Market, the population density for the south county target area is lower than those of the Urban Target Market. The number of seniors in the area is slightly higher than the county average. At 5 percent, the number of persons with disabilities is lower than the county average of 6.5 percent. Over 10 percent of residents live in large households. This is far above the county average of 6 percent. Forty percent of households have access to one or no auto. Median income in this market in nearly 20 percent below that of the county average.

Like the North County Target Market, characteristics of the South County Target Market make the area a candidate for public transit services aimed at providing transit trips to basic necessities.

Sunland Park Target Market

The Sunland Park Target Market includes the incorporated City of Sunland Park and unincorporated communities such as Santa Teresa, Chamberino, and La Union. The area's proximity to the City of El Paso, Texas causes the area's population density to be higher than that of the rural Doña Ana County areas, but still lower than densities in the Las Cruces area. The number of seniors in the area is lower than in any other target market. The number of persons with disabilities is close to the county average. Fifteen percent of residents live in large households and 40 percent of households have access to one or no auto. Median income is over 20 percent lower than the county average.

The characteristics of the Sunland Park Target Market and the area's proximity to the urban area of El Paso, Texas make it a candidate for public transit services aimed at advancing economic opportunities. The public transit services designed should allow residents to get to basic necessities, educational and recreational facilities, and jobs.

Transit Destinations

Public transit patrons need to make transit trips for a variety of reasons. These reasons correspond to the transit trip purposes detailed in **Table 1-1**. To determine where Doña Ana County residents may require transportation, need for public transit was also examined in terms of potential transit destinations.

Medical. Some medical agencies and organizations have made efforts through the creation of satellite offices and branches to accommodate the lack of mobility of their clients. For example, La Clinica de Familia has established offices in Anthony, San Miguel, and Sunland Park, and Public Health has opened offices in Anthony, Chaparral, Hatch, Organ, and Sunland Park. However, 66 percent of the hospitals, nursing homes, and medical facilities in Doña Ana County are located in Las Cruces.

Social Service. Some social service agencies have also made efforts to accommodate the lack of mobility of their clients through the placement of satellite branches. For example, Southern New Mexico Human Services has established branches in Anthony and Sunland Park. However, Las Cruces, being the county seat for Doña Ana County, has the majority (75 percent) of social service offices located there.

Shopping. As Las Cruces has the highest population densities, retail centers and shopping centers have located there rather than in other low-density, rural areas with less potential for shopping traffic. This is evidenced by the presence of only two large (over 65,000 square feet) shopping centers outside of Las Cruces. Even these two are located in Mesilla, another urban area. The stores that are located in rural areas are generally small with a limited variety of products. Due to proximity, many south county residents prefer to shop in El Paso.

Education and Training. Doña Ana County has five colleges and universities. Two small private universities are located in Santa Teresa, close to the urban City of Sunland Park. A third small university is located on the grounds of White Sands Missile Range, providing education to employees of that facility. Most students in the

county attend either NMSU or DACC, whose main campuses are both located in Las Cruces. DACC has opened learning centers and smaller satellite campuses in Anthony, Chaparral, and Sunland Park, but these facilities offer only a fraction of the courses offered at the main campus. In addition to the five university in Doña Ana County, some county residents choose to take courses at the University of Texas - El Paso.

Recreation. Over 75 percent of the city parks, ball parks, youth activity centers, golf courses, and other recreational facilities within Doña Ana County are located in Las Cruces.

Jobs. The majority of Doña Ana County employers are located in the Las Cruces area. Seventy percent of employers employing more than 50 persons are located in Las Cruces. Another 11 percent are located in the vicinity of urban Sunland Park. Additionally, many south county residents are employed in the El Paso, Texas area.

Opportunities for Expanded Transit in Doña Ana County

All of these transit destinations and the transit need indicators of population density, age distribution, household size and income, and auto availability point to the fact that a large number of Doña Ana County residents require transportation to Las Cruces and to El Paso. A large number of Doña Ana County residents requiring these public transit services are not yet receiving them. Even in the City of Las Cruces, where the concentration of transportation services is highest (RoadRunner, Dial-A-Ride, and private agency services), areas like the East Mesa remain under-served. Residents in other parts of the county lack the most basic transportation opportunities, such as being able to get to a grocery store. South county residents living near the border have no connection services to El Paso's Sun Metro bus system. Residents who cannot obtain a ride from friends or relatives are literally stranded. Providing services to all county residents is an opportunity to expand the county's economic base as well as boost the quality of life for residents.

Revisiting the Trip Purposes and Populations Served table, target markets according to the type of transit needs to be served in each can be summarized and origin and destination pairs that will meet the need requirements can be offered (**Table 1-3**).

Table 1-3
Trip Purposes and Populations Served
with Target Markets and Service Examples

	Basic Necessity	**Improve Quality of Life**	**Advance Economic Opportunity**
Trip Purposes	Medical Social Service Shopping	Education Vocational Training and Skill Development Recreation	Jobs Higher Education
Population Served	Seniors Disabled Below Poverty Level - For example: Low income Low auto ownership Large household size	Youths Welfare Recipients Families	Employees College/University Students
Target Markets	North South	Urban	Urban Sunland Park
Potential Services	Hatch to Las Cruces Anthony to Las Cruces South County to Las Cruces	Mesilla to Las Cruces Mesilla Tourist East Mesa	Doña Ana to Las Cruces Sunland Park to El Paso Chaparral to Northgate in El Paso

Goals for Transit Service in Doña Ana County

Goals help to determine the best areas for focus and the most appropriate transit alternatives for development. Through literature review, stakeholder interviews, and focus group meetings, LKC identified goals that were reviewed with the community and the Steering Committee.

- Provide transit access to countywide services for those persons who have no other form of transportation, including youths and students.
- Utilize city and county resources in an efficient and cost effective manner.
- Promote regional mobility by developing transit options that contribute to a reduction in automobile trips in order to improve air quality, reduce congestion, and reduce demand for expanded (highway/street) infrastructure.
- Expand access to services for seniors and persons with disabilities who live outside the current RoadRunner Transit service area.
- Provide transit access to employers, employment centers and special generators, including community colleges, universities, medical centers, retail shopping, and other activity centers, such as the Plaza in the Town of Mesilla.

- Improve image and awareness of RoadRunner Transit services.
- Develop complementary land use and transit planning guidelines to promote intermodal opportunities.

These goals were continually referred to during the planning of expanded transit services for Doña Ana County, ensuring that the transit service alternatives described in the next chapter best met the communities' needs.

Recommended Transit Services

LKC

Chapter Two
RECOMMENDED TRANSIT SERVICES

Public transit services are not available to many residents of Doña Ana County who need access to health services, essential shopping, education, and employment. Residents in the rural North and South Target Markets need access to basic necessities such as shopping and medical trips. In the urban areas of Mesilla and the East Mesa, residents will benefit from services that focus on improving the quality of life. In Sunland Park, residents need transportation for jobs and other opportunities for advanced economic development.

Through a New Mexico State Memorial by State Senators Cynthia Nava and Fernando Macias, the development and implementation of a transit program in Doña Ana County has been called for, and elected officials of the City of Las Cruces have expressed an interest in cooperating to achieve meeting the transit needs of the county.

Implementing additional transit service in Doña Ana County will not be easy. Service to remote communities will be costly in operating dollars and will require local resources to operate. Public subsidy is inherent in public transportation. Implementation requires capital investment and, although federal funds will help finance the purchase of buses and passenger shelters, a local share will be required.

Public transit services that are recommended for implementation must be cost-effective and must reduce the amount of public subsidy required. To meet these requirements and respond to the immediate needs of residents, Doña Ana County should take a conservative approach to public transit service implementation. This conservative approach will define the transit services and level of service recommended by this Regional Transit Plan.

Transit Service Concepts

Doña Ana County's combination urban-rural environment creates a transit atmosphere that can support three forms of transit service. These forms are:

- Fixed-route transit with complementary ADA paratransit service
- Flexible-route transit
- Demand-response

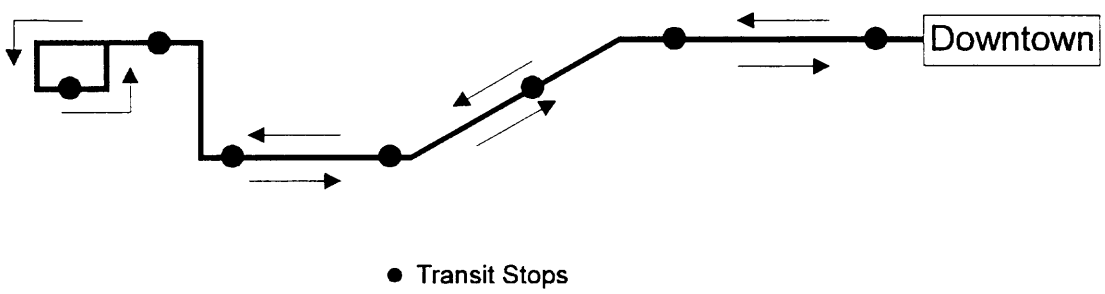
Not included in the above list are commuter-oriented services, such as park and ride or express routes, which are suited to locations with heavy traffic congestion and significant concentrations of work trips. Commuter services are also appropriate when heavy travel demand exists between neighboring cities. These services would be best suited to trips such as between Las Cruces and White Sands Missile Range (WSMR) or between Las Cruces and El Paso. The City of Las Cruces recently submitted a park and ride proposal to address these commuter issues of Las Cruces residents; therefore, the service concept is not further detailed here.

Fixed-Route Transit

Fixed-route transit is a scheduled service using buses or transit vans. In fixed-route transit service, vehicles operate along specific streets and passengers board and alight at designated stops along the route according to a preset schedule. Transit stops are normally marked by signs and bus stops to inform passengers where to board. An example of a fixed-route system is RoadRunner Transit that currently operates within the Las Cruces city limits.

Fixed-route services are more suited to urban areas such as Las Cruces, Mesilla, and Doña Ana, providing a higher level of transit services to serve basic necessity and improved quality of life trips, as well as supporting opportunities for economic advancement. Fixed route is also appropriate where large volumes of riders are originating and are destined along a set route that is physically able to carry transit service. Fixed routes are not appropriate where demand is lighter, frequent deviations to nearby destinations are warranted, or the streets have a "neighborhood character." The fixed-route concept is illustrated in **Figures 2-1**.

Figure 2-1
Fixed-Route Transit Service Concept

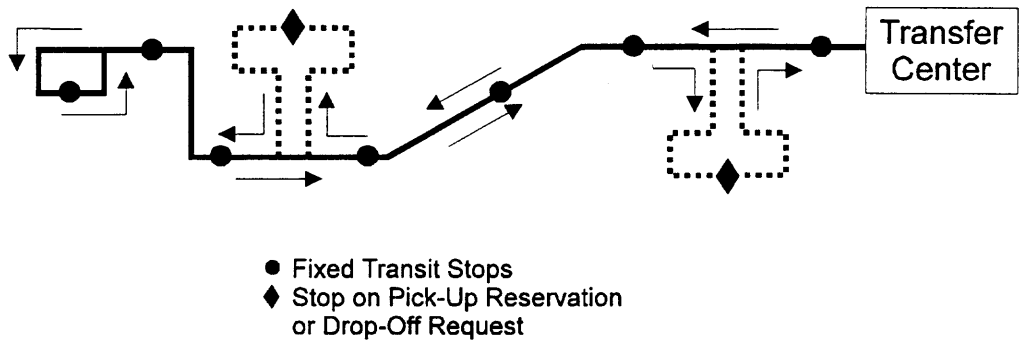


All fixed-route transit systems are required to offer complementary paratransit service under the Americans With Disabilities Act (ADA). Paratransit service provides curb-to-curb demand-response service for persons with disabilities. Eligible passengers reserve trips at least twenty-four hours in advance. At a minimum, ADA paratransit service must be available during the same hours as fixed-route service and cover any area within three-quarters of a mile of a fixed transit route.

Flexible-Route Transit

A flexible-route transit service operates with a scheduled route much like fixed-route; however, passengers may request a curbside stop by calling ahead to make a reservation for pick-up or by requesting a curbside drop-off. The transit vehicle will leave the route to pick-up or drop-off passengers, then return to the route to resume scheduled service. Route deviations may be limited to a specific distance, such as one-half mile from the scheduled route. Because of the flexibility in service provided by flexible-route transit, ADA complementary paratransit service is not required. Further detail on this point is located in the U.S. Department of Transportation Urban Mass Transportation Administration ADA Paratransit Handbook (document number: UMTA-MA-06-0206-91-1). The flexible-route concept is shown in **Figure 2-2**.

Figure 2-2
Flexible-Route Service Concept

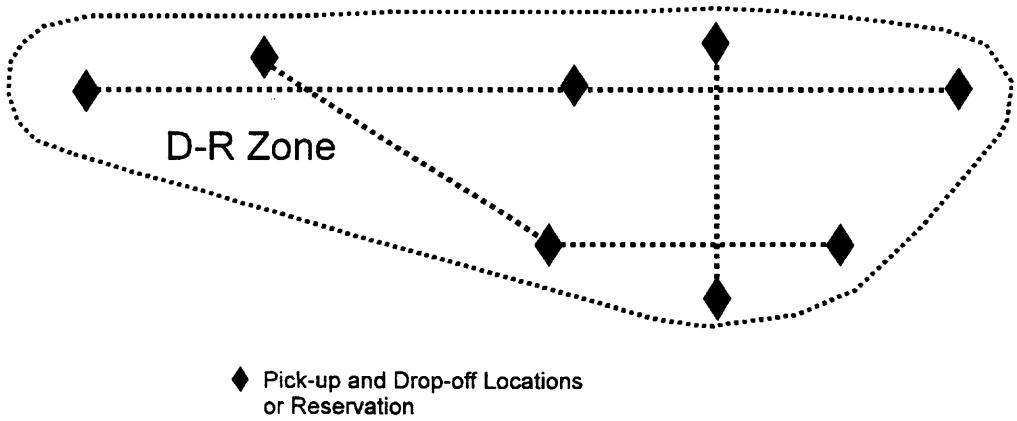


Flexible routes are appropriate in lower density urban and rural communities with focused demand along a given route or corridor. Flexible routes are well-suited to target markets where there are occasional demands for curbside service for residents. If curbside demand exists on every trip, the route should be changed to fixed-route. Examples of markets suited to flexible route service are communities in the North and South County Target Markets that require, at a minimum, basic necessity and some quality of life trips.

Demand-Response Transit

Demand-response transit is curb-to-curb service that utilizes relatively small vehicles to provide transportation at the user's demand. Passengers make reservations twenty-four hours in advance of their trip or sign up in advance for subscription service (making the same regularly scheduled trip). Demand-response transit is similar to a shared-ride taxi service where several passengers may be picked up and dropped off simultaneously. Demand-response transit may be open to the general public, or it may be restricted to segments of the population, such as seniors and persons with disabilities. A reasonable service area is defined according to the needs of the passengers and the ability of the operating entity to serve that area with widely dispersed trips. The concept is illustrated in **Figure 2-3**.

Figure 2-3
Demand-Response Transit Service Concept



Demand-response service areas need to be small to permit vehicles to quickly travel from one side of the area to another. Too large a zone will overtax the ability of vehicles to pick up multiple riders and will require additional vehicles to meet demand, increasing service costs. Demand-response works better than fixed-route or flexible-route where the street network is discontinuous, such as a neighborhood that does not have any through streets. Transit vehicles travel to the neighborhood only when a rider needs the service, thereby minimizing the impact on the neighborhood and the costs required to provide service. This type of service is inappropriate when travel demand is high. Demand-response transit is highly appropriate in areas such as the East Mesa for serving basic necessity and some quality of life trips.

Transit Plan

The Regional Transit Study for Doña Ana County proposes a three-term Transit Plan to meet the regions's goals and future needs. The Transit Plan is comprised of transit services tailored for target markets (defined in Chapter One) within Doña Ana County. The Short-Term Transit Plan (years one through four) includes newly designed services and the expansion of the existing RoadRunner Transit. In anticipation of future opportunities and based upon projected economic growth, development, and planning currently underway, the Mid-Term (years five through seven) and Long-Term (years eight through ten) Transit Plans build upon the services of the short-term. The services proposed were refined through Steering Committee involvement to ensure they reflected the county's transit needs and markets.

The three-term Transit Plan consists of a total of nine routes. Seven routes are suggested for implementation in the short-term and one additional route is suggested for each of the mid- and long-terms. Service levels on routes are increased as the plan progresses from the short-term into later terms based upon a presumption of growing ridership and transit demand.

Service Statistics

Base ridership for each service was calculated for the short-term through the use of the Transit Cooperative Research Board's Rural Transportation Demand Model. This model is based upon community demographics and calculates the need for basic human service trips. Where the model's parameters did not best meet the development level of the target market, ridership was adjusted to reflect the actual community need. Ridership estimates for the mid-term and long-term expanded upon those of the short-term according to projected growth rates and expected changes in needs and markets.

Cost and Revenue Estimation

Based upon suggested service levels, ridership estimates, and cost estimate assumptions, costs and revenues for each individual service and each term of the transit plan were calculated. Cost estimate assumptions included a yearly inflation rate, operating costs per hour, and base fares.

> Inflation Rate. The 1.6 percent per year inflation rate used was based upon the national Consumer Price Index for All Urban Consumers (CPI-U) for the twelve month period ending January 1998. Inflation was considered in all operating and

capital cost estimates.

Operating Cost. Operating costs were based upon historical costs for RoadRunner Transit operations during fiscal year 1997. In that year, the operating cost per hour of fixed-route service was $39.16.

Fares. Initial fares were based on the current RoadRunner Transit fare of $0.50 and the current RoadRunner Transit discounted fare for seniors, disabled, and youths of $0.25. In the short-term, fares are increased in increments of $0.50 (full fare) or $0.25 (discounted fare) depending on the distance traveled. For example, to travel from Mesquite to Las Cruces is a $0.50 full fare. To travel from Vado to Las Cruces (passing through Mesquite) is a $1.00 full fare. In the mid-term fares are based on $0.60 full fare increments, and in the long-term fares are based on $0.75 full fare increments.

Vehicles were assumed to operate from a base facility in Las Cruces during the short-term. In the mid- and long-term, vehicles move to operating facilities closer to the point at which each service begins each day. The complete detail of assumptions is included in the Appendix along with complete cost summaries and estimated capital requirements for each route during each term.

The nine transit services recommended for the implementation in the Transit Plan are listed below in **Table 2-1** and are described in detail in the following pages.

Table 2-1
Doña Ana County Transit Plan

	Short-Term Transit Plan (Yrs 1-4)	Mid-Term Transit Plan (Yrs 5-7)	Long-Term Transit Plan (Yrs 8-10)
Doña Ana to Las Cruces	Implementation	Expanded	Expanded
Mesilla to Las Cruces	Implementation	No Expansion	No Expansion
Mesilla Tourist	Implementation	No Expansion	No Expansion
Hatch to Las Cruces	Implementation	Expanded	No Expansion
Sunland Park to El Paso, Texas	Implementation	No Expansion	Expanded
South County to Las Cruces	Implementation	Expanded	Expanded
Anthony to Las Cruces	Implementation	Expanded	No Expansion
East Mesa		Implementation	Expanded
Chaparral to Northgate			Implementation

Doña Ana to Las Cruces

Doña Ana is a semi-urban community to the north of Las Cruces. Currently the area has no access to the RoadRunner Transit services operating within the Las Cruces city limits. The Doña Ana to Las Cruces route is an extension of the current RoadRunner Transit fixed route, Route 1. Proposed service will travel to the community of Doña Ana via Elks Drive for a distance of 12 miles (**Figure 2-4**). In the short-term, the route will operate six days per week, 12 hours per day on a 60-minute frequency and will provide basic necessity, quality of life, and economic opportunity trips to residents of Doña Ana and Las Cruces. As this service is fixed-route, complementary ADA paratransit service is required.

This service requires an additional bus along with the bus currently operating on Route 1. An additional ADA vehicle will also be required to meet the increased demands on the paratransit system. An additional $20,000 will be required to construct one medium-sized transit terminal.

Expected ridership and operating costs for the Doña Ana route in the short-term are shown in **Table 2-2** below.

Table 2-2
Doña Ana to Las Cruces Fixed Route
Short-Term Transit Plan (Yrs 1-4)

Days per Week	6
Expected Ridership per Year	44,990
Total Annual Operating Cost (includes ADA paratransit cost)	$177,328
Total Annual Fare Revenue (includes ADA paratransit fares)	$21,649
Total Annual Operating Deficit (operating cost less fares)	$155,680
Total Capital Cost for Vehicles (includes ADA paratransit capital cost)	$101,925
Total Capital Cost for Terminals	$20,000

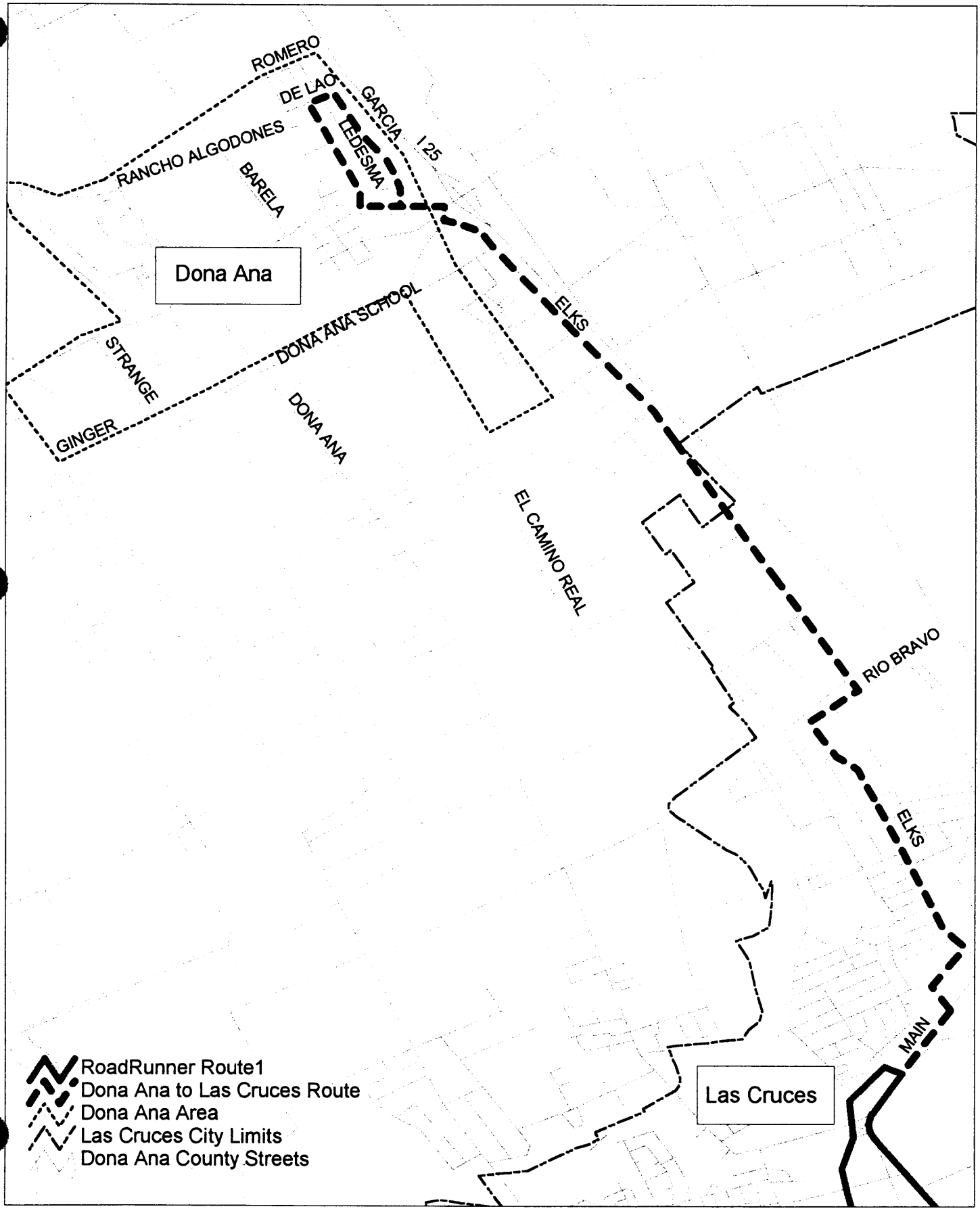
Non-Discounted Fare

From: \ To:	Dona Ana	Las Cruces
Dona Ana		$0.50
Las Cruces	$0.50	

To address anticipated future needs and opportunities, the frequency of this route is recommended to be improved in the mid-term to 30 minutes during peak periods and 60 minutes during non-peak periods. Although this expansion requires an additional bus, the more frequent service provides additional opportunities for advancing economic conditions. In the long-term, the frequency is recommended to be improved, this time to 30 minutes throughout the entire day.

Figure 2-4

Dona Ana to Las Cruces



Mesilla to Las Cruces

Mesilla is an urban community to the southeast of Las Cruces known for its old town shopping district. Currently the area has no access to the RoadRunner Transit services operating within the Las Cruces city limits. The Mesilla to Las Cruces route will be a fixed route linking the Las Cruces transit center with the New Mexico State University (NMSU) area via Avenida de Mesilla and will pass by the Trails West senior housing community **(Figure 2-5)**. Mileage for this route is 6 miles. The route will operate three days per week, 10 hours per day on a 60 minute frequency and will provide basic necessity and some quality of life trips to residents of Mesilla, Trails West, and those residing between Mesilla and Las Cruces. As this service is fixed-route, complementary ADA paratransit service is required.

This route will share the new ADA vehicle with the Doña Ana to Las Cruces route. An additional $20,000 will be required to construct one medium-sized transit terminal.

Expected ridership and operating costs for the Mesilla route in the short-term are shown **Table 2-3** below.

Table 2-3
Mesilla to Las Cruces Fixed Route
Short-Term Transit Plan (Yrs 1-4)

Days per Week	3
Expected Ridership per Year	15,698
Total Annual Operating Cost (includes ADA paratransit cost)	$71,079
Total Annual Fare Revenue (includes ADA paratransit fares)	$7,795
Total Annual Operating Deficit (operating cost less fares)	$63,283
Total Capital Cost for Vehicles (includes ADA paratransit capital cost)	$28,925
Total Capital Cost for Terminals	$20,000

Non-Discounted Fare

From: \ To:	Mesilla	Las Cruces
Mesilla		$0.50
Las Cruces	$0.50	

No service level changes for this route are recommended in the mid- and long-terms.

Mesilla Tourist

The Mesilla Tourist route is a flexible-route operating on Saturday and Sunday from 9:00AM to 5:00 PM to serve the needs of tourists wishing to take advantage of the shopping offered in Old Town Mesilla. The route travels six miles, starting at the Las Cruces transit center, passing through Mesilla, and continuing on to the hotel district near NMSU (**Figure 2-6**). The route can be "flexed" to serve different residential areas within Las Cruces as long as service operates at a 60-minute frequency. The route will operate eight hours each Saturday and Sunday on a 60-minute frequency and provide opportunities for advanced economic activity. As this service is flexible-route, complementary ADA paratransit service is not required.

This service shares a bus with the Mesilla to Las Cruces route. No additional transit terminal is required.

Ridership and operating costs for the Mesilla Tourist route in the short-term are expected as in **Table 2-4** below.

Table 2-4
Mesilla Tourist Flexible Route
Short-Term Transit Plan (Yrs 1-4)

Days per Week	2
Expected Ridership per Year	6,426
Total Annual Operating Cost	$31,952
Total Annual Fare Revenue	$6,426
Total Annual Operating Deficit	$25,526
Total Capital Cost for Vehicles	$0
Total Capital Cost for Terminals	$0

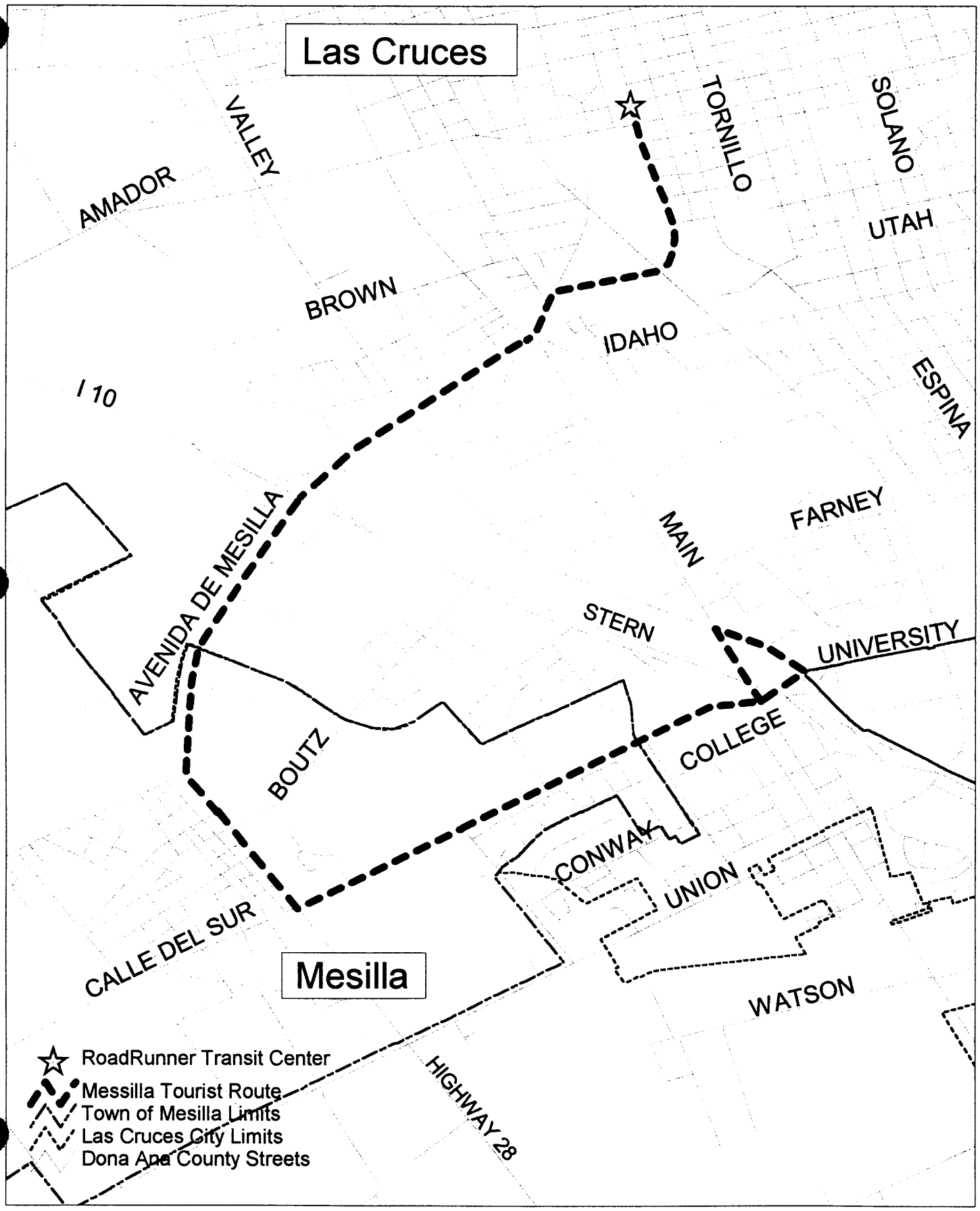
Non-Discounted Fare

From: \ To:	Mesilla	Las Cruces
Mesilla		$1.00
Las Cruces	$1.00	

No service level changes for this route are recommended in the mid- and long-terms.

Figure 2-6

Mesilla Tourist



Hatch to Las Cruces

Hatch is an incorporated agricultural community in northern Doña Ana County. The area currently has no public transit services. The Hatch to Las Cruces route will travel 55.3 miles via State Highways 85, 140, and 154 and Interstate 25 (**Figure 2-7**). The route will initially operate two days per week, 12 hours per day, with two trips per day and will provide basic necessity trips to residents of Salem, Hatch, Rincon, and Radium Springs. As this service is flexible-route, complementary ADA paratransit service is not required.

To reduce capital costs, this service shares a vehicle with the Mesilla to Las Cruces and Mesilla Tourist routes in the short-term. An additional $40,000 will be required to construct four small transit shelters.

Expected ridership and operating costs for the Hatch route in the short-term are shown in **Table 2-5** below.

Table 2-5
Hatch to Las Cruces Flexible Route
Short-Term Transit Plan (Yrs 1-4)

Days per Week	2
Expected Ridership per Year	2,202
Total Annual Operating Cost	$47,928
Total Annual Fare Revenue	$3,883
Total Annual Operating Deficit	$44,045
Total Capital Cost for Vehicles	$17,500
Total Capital Cost for Terminals	$40,000

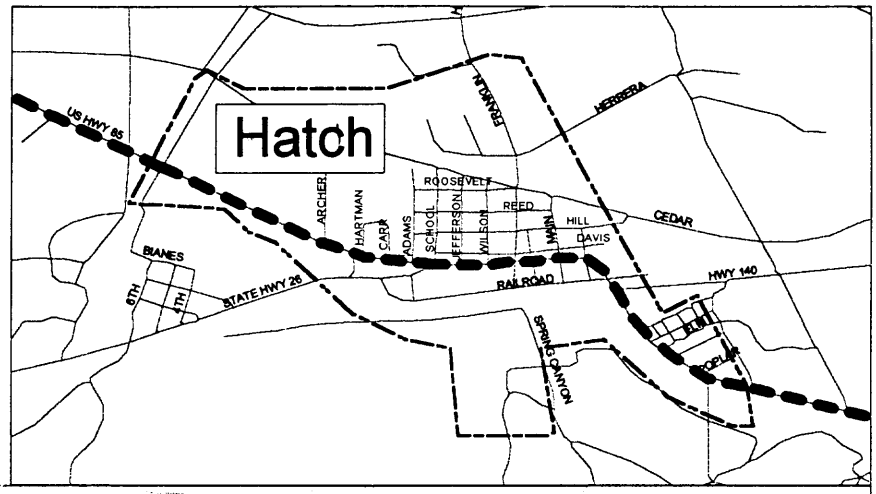
Non-Discounted Fares

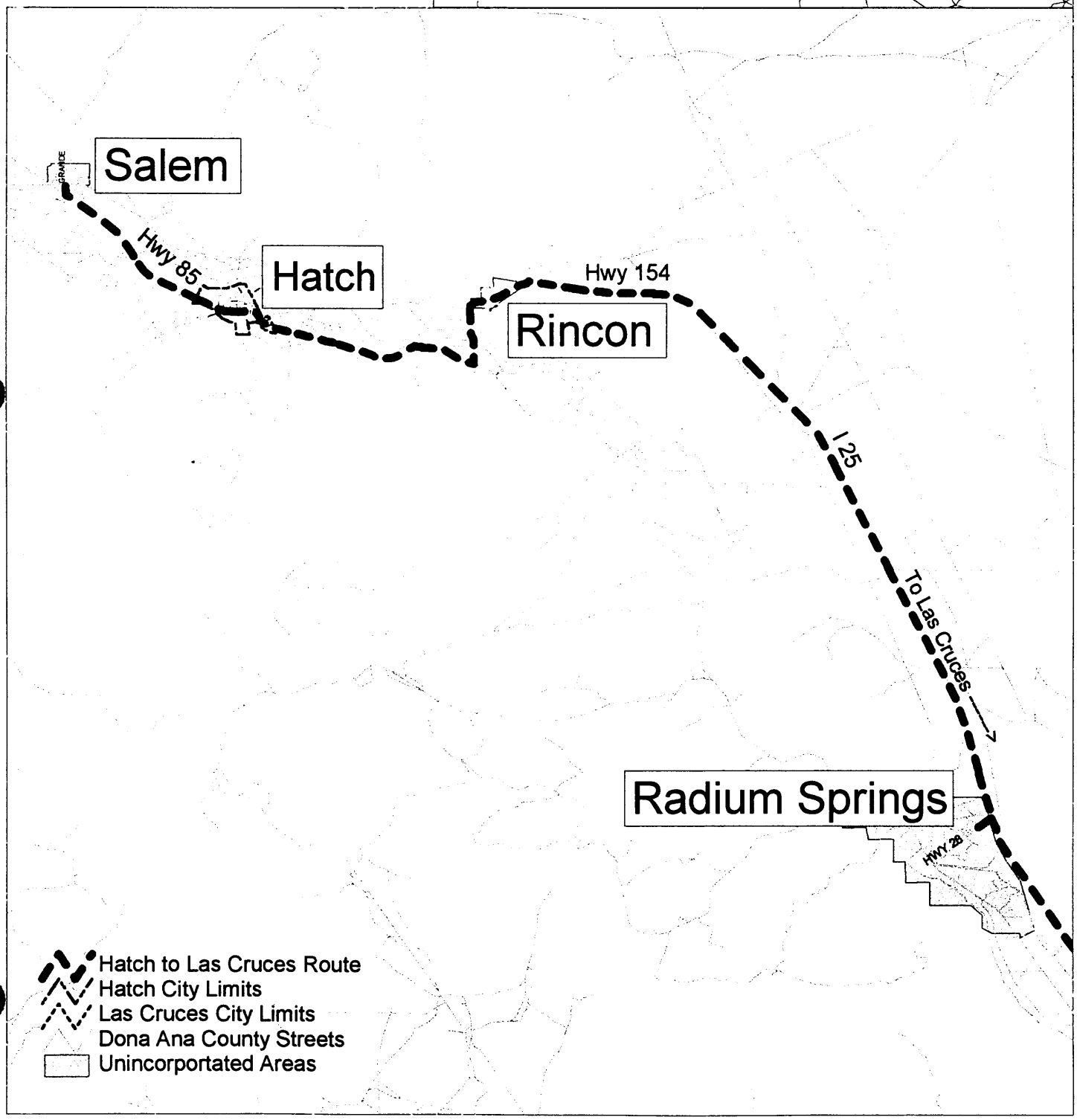
From: \ To:	Salem	Hatch	Rincon	Rad Springs	Las Cruces
Salem		$0.50	$1.00	$2.00	$3.00
Hatch	$0.50		$0.50	$1.50	$2.50
Rincon	$1.00	$0.50		$1.00	$2.00
Rad Springs	$2.00	$1.50	$1.00		$1.00
Las Cruces	$3.00	$2.50	$2.00	$1.00	

To address anticipated future needs and opportunities, the level of service on this route is recommended for three days per week and three trips per day in the mid-term. This expansion requires an additional vehicle. No service level changes are recommended in the long-term.

Figure 2-7

Hatch to Las Cruces





Sunland Park to El Paso, Texas

Sunland Park is a highly urbanized community bordering the state of Texas in southern Doña Ana County. The area has no access to public transportation in Doña Ana County or El Paso, its Texas neighbor. The Sunland Park to El Paso flexible-route travels a distance of 9.5 miles, connecting Sunland Park with Sun Metro's Crossroads/Mesa Transit Center (**Figure 2-8**). Sun Metro is El Paso's public transit system. In the short-term, the route will operate six days per week, 12 hours per day on a 60-minute frequency and will provide basic necessity, quality of life, and economic opportunity trips to residents of Sunland Park. As this service is flexible-route, complementary ADA paratransit service is not required.

The route will require a vehicle of its own. An additional $110,000 will be required to construct one large transit terminal and one small transit shelter.

Expected ridership and operating costs for the Sunland Park to El Paso route in the short-term are shown in **Table 2-6** below.

Table 2-6
Sunland Park to El Paso Flexible Route
Short-Term Transit Plan(Yrs 1-4)

Days per Week	6
Expected Ridership per Year	43,860
Total Annual Operating Cost	$143,783
Total Annual Fare Revenue	$20,757
Total Annual Operating Deficit	$123,026
Total Capital Cost for Vehicles	$71,200
Total Capital Cost for Terminals	$110,000

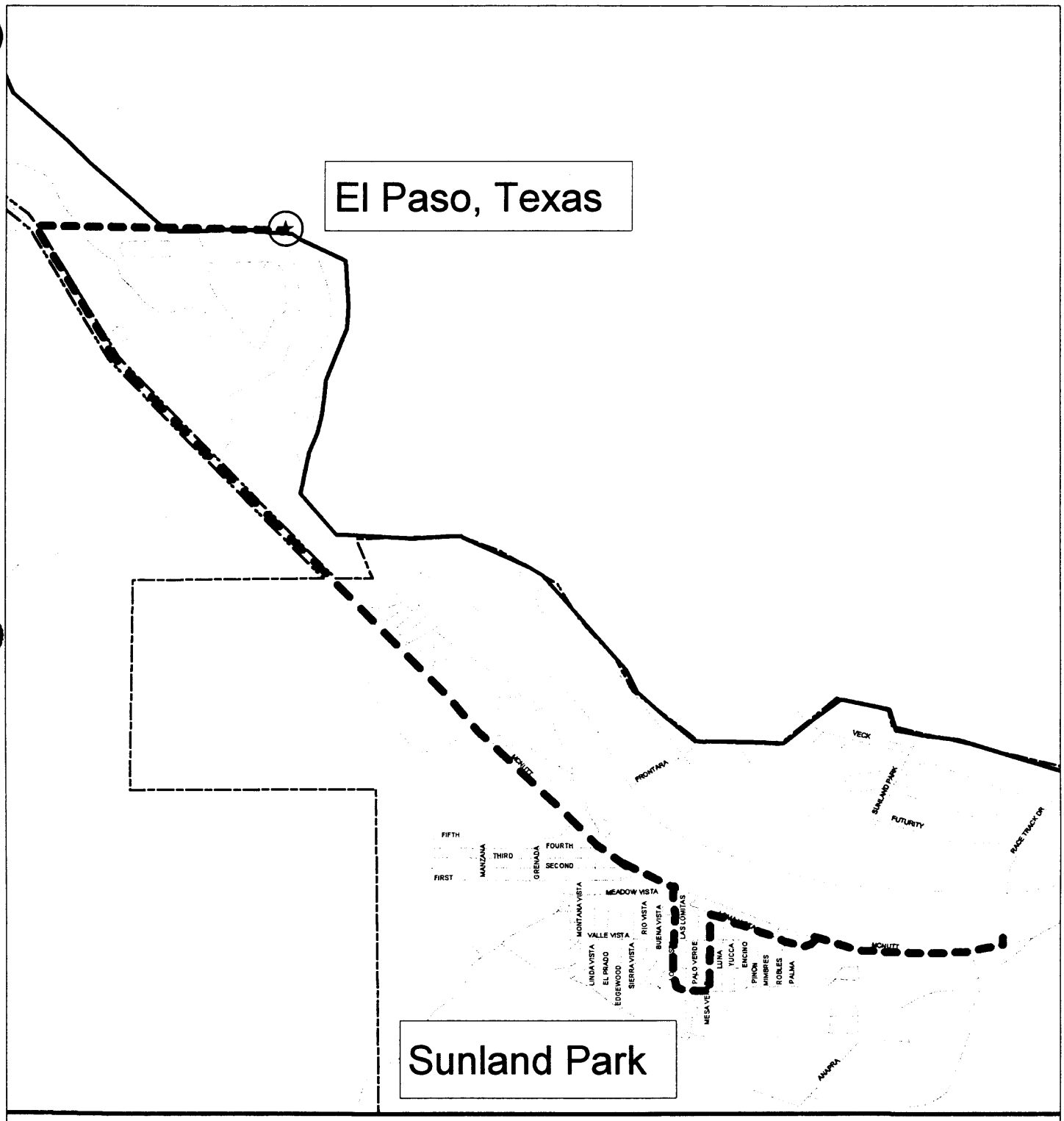
Non-Discounted Fares

From: \ To:	Sun Park	El Paso
Sun Park		$0.50
El Paso	$0.50	

No service level changes for this route are recommended in the mid-term. In anticipation of need for service, the route is recommended to extend into Anapra in the long-term. However, the short distance of this extension has a negligible impact on operating cost and service statistics.

Figure 2-8

Sunland Park to El Paso



Crossroads Mesa Transit Center
Sunland Park to El Paso Route
Sunland Park City Limits
State Border
Dona Ana County Streets

South County to Las Cruces

The southern portion of Doña Ana County contains many small, unincorporated communities and currently has no access to public transit services. The South County to Las Cruces route will travel 49.2 miles via McNutt and State Highways 273, 28, 228, and 478 (**Figure 2-9**). The route will also provide access to Las Cruces for residents of Tortugas. The route will initially operate two days per week, 12 hours per day, with two trips per day and will provide basic necessity trips. No complementary ADA paratransit service is required.

To reduce capital costs, this service will share a vehicle with the Anthony to Las Cruces route described below. An additional $50,000 will be required to construct five small transit shelters.

Expected ridership and operating costs for the South County route in the short-term are shown in **Table 2-7** below.

Table 2-7
South County to Las Cruces Flexible Route
Short-Term Transit Plan (Yrs 1-4)

Days per Week	2
Expected Ridership per Year	4,581
Total Annual Operating Cost	$47,928
Total Annual Fare Revenue	$7,355
Total Annual Operating Deficit	$40,573
Total Capital Cost for Vehicles	$35,600
Total Capital Cost for Terminals	$50,000

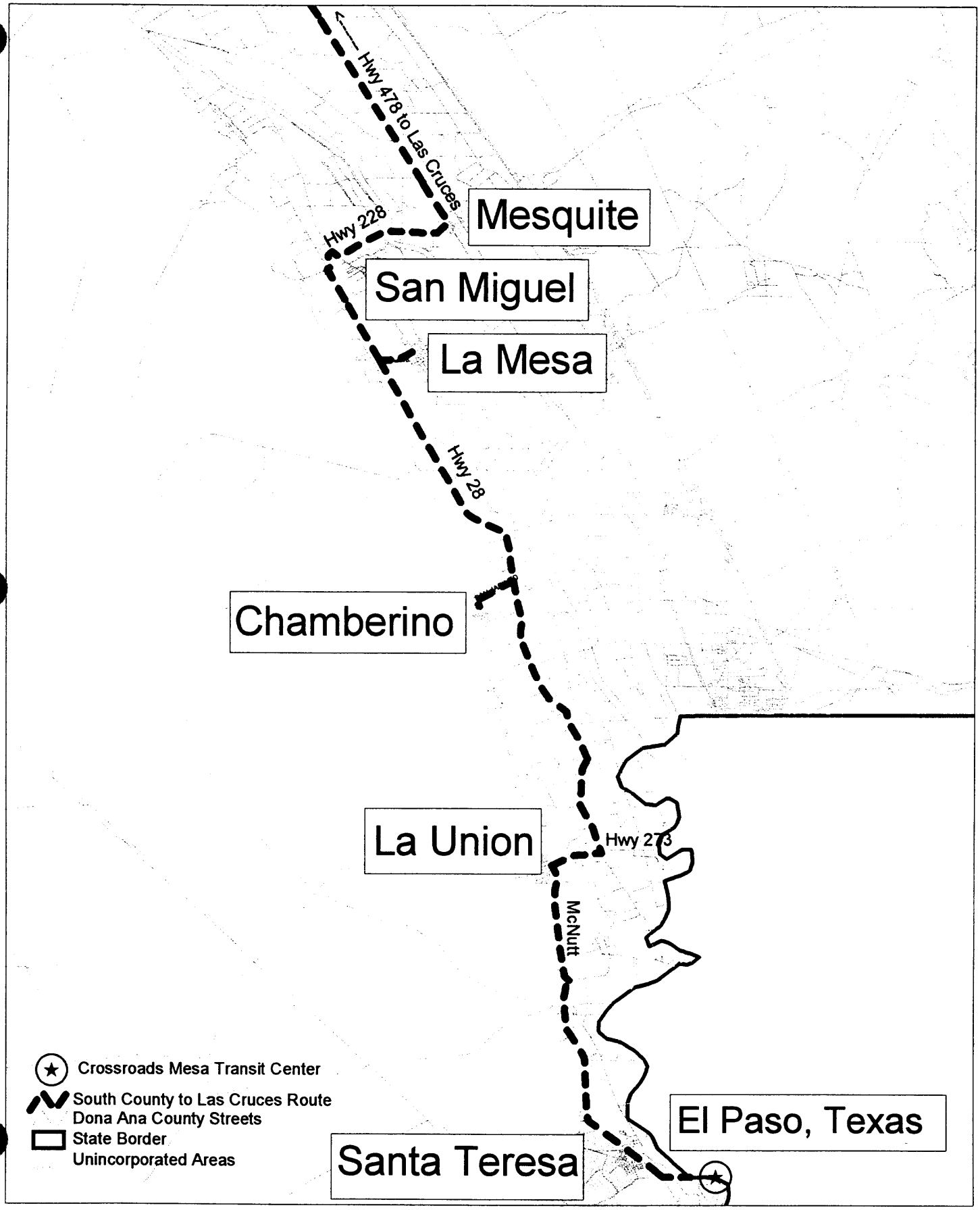
Non-Discounted Fares

From: \ To:	Xroads Mesa	La Union	Chamberino	La Mesa	San Miguel	Mesquite	Las Cruces
Xroads Mesa		$0.50	$1.00	$1.50	$2.00	$2.50	$3.50
La Union	$0.50		$0.50	$1.00	$1.50	$2.00	$3.00
Chamberino	$1.00	$0.50		$0.50	$1.00	$1.50	$2.50
La Mesa	$1.50	$1.00	$0.50		$0.50	$1.00	$2.00
San Miguel	$2.00	$1.50	$1.00	$0.50		$0.50	$1.50
Mesquite	$2.50	$2.00	$1.50	$1.00	$0.50		$1.00
Las Cruces	$3.50	$3.00	$2.50	$2.00	$1.50	$1.00	

The level of service on this route is recommended to increase to three days per week, 14 hours per day, with three trips per day in the mid-term. The route will continue to share a vehicle with Anthony to Las Cruces. The additional service provides opportunities to serve some quality of life trips. The route is extended into downtown Sunland Park in the long-term. The short distance of this extension (approximately 5 miles) has a negligible impact on operating cost and service statistics.

Figure 2-9

South County to Las Cruces



Anthony to Las Cruces

Other communities in the southern portion of Doña Ana County not served by the south county to Las Cruces route are Anthony, Berino, and Vado. None have access to public transit services. The Anthony to Las Cruces flexible-route will travel 32.9 miles via State Highway 460 and the Interstate 10 westside frontage road (**Figure 2-10**). The route will initially operate two days per week, 12 hours per day, with three trips per day and will provide basic necessity and some quality of life trips to residents. As this service is flexible-route, complementary ADA paratransit service is not required.

To limit capital costs, the route shares a vehicle with the South County to Las Cruces route. An additional $30,000 is required to construct three small transit shelters.

Expected ridership and operating costs for the Anthony route in the short-term are shown in **Table 2-8** below.

Table 2-8
Anthony to Las Cruces Flexible Route
Short-Term Transit Plan (Yrs 1-4)

Days per Week	2
Expected Ridership per Year	4,945
Total Annual Operating Cost	$47,928
Total Annual Fare Revenue	$5,527
Total Operating Deficit	$42,401
Total Capital Cost for Vehicles	$35,600
Total Capital Cost for Terminals	$30,000

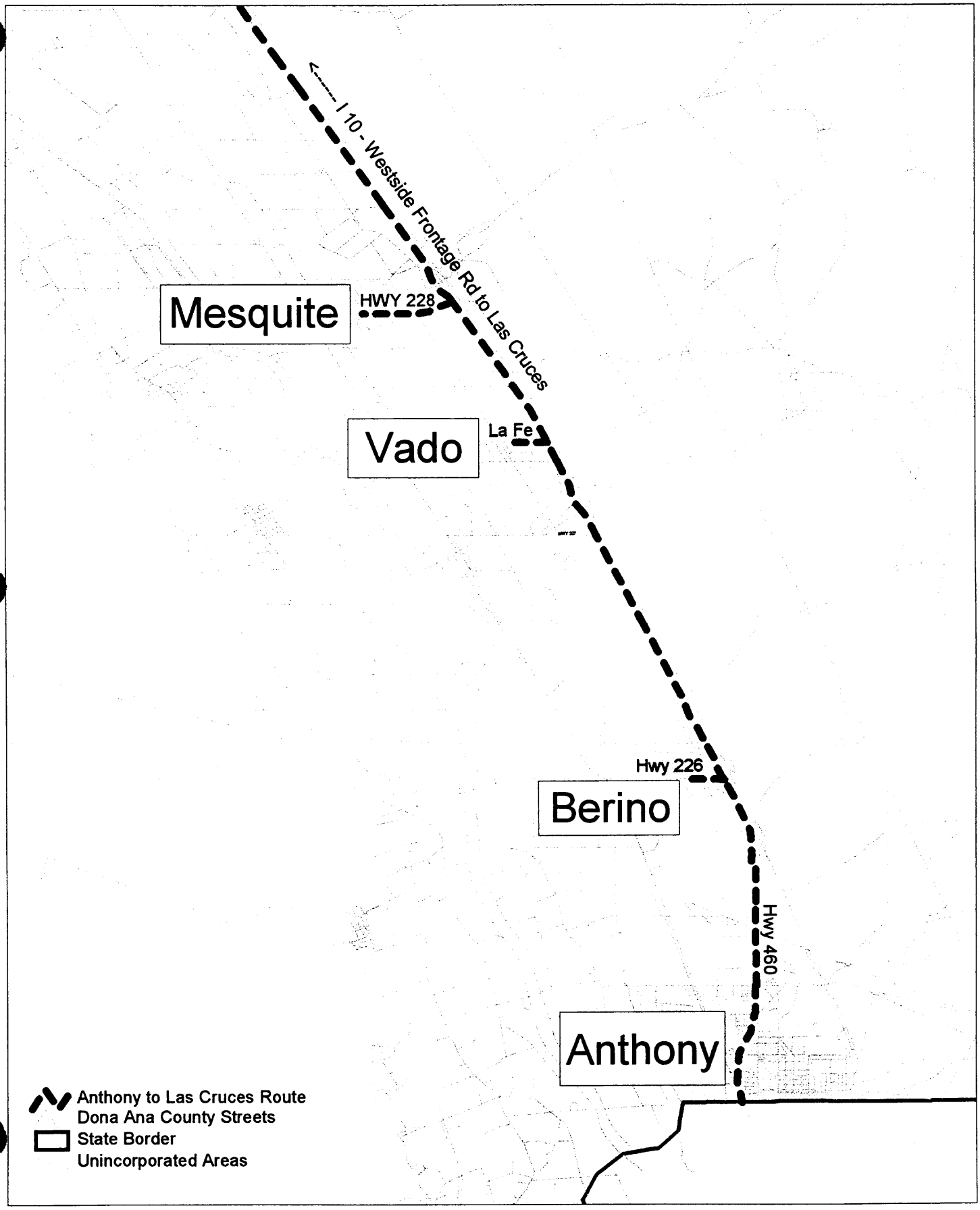
Non-Discounted Fares

From: \ To:	Anthony	Berino	Vado	Mesquite	Las Cruces
Anthony		$0.50	$1.00	$1.50	$2.50
Berino	$0.50		$0.50	$1.00	$2.00
Vado	$1.00	$0.50		$0.50	$1.50
Mesquite	$1.50	$1.00	$0.50		$1.00
Las Cruces	$2.50	$2.00	$1.50	$1.00	

To address anticipated future needs and opportunities, the level of service on this route is recommended to increase in the mid-term to three days per week with four trips per day. To control capital costs, the route continues to share a vehicle with the South County to Las Cruces route. The additional service provides opportunities to begin serving quality of life trips. There are no service changes recommended in the long-term.

Figure 2-10

Anthony to Las Cruces



Other Programs

Two non-transit programs are also recommended for implementation in the short-term. These are a program for public information materials and another for Rideshare matching software.

Public information materials include bus schedules, maps, awareness programs, and advertising expenses. Costs for this program are based on the anticipated number of riders that the new transit services will bring. At $0.10 per each of the approximately 12,000 riders in the short-term, public information material costs are estimated at $12,000 in the short-term. These costs are increased in the mid- and long-terms according the expected ridership on these nine services.

The City of Las Cruces currently operates a successful ride-matching program covering the southern portion of New Mexico, known as Rideshare, to assist residents interested in carpooling in finding carpool partners. The program has resulted in some of the highest Rideshare modal splits in the nation. The city supplies an 800 number for patrons and maintains a list of candidate carpoolers. Historically a manual matching process, the state is investigating investing in software with GIS capabilities to automate the matching process. The software will also allow for coordination with other state ride-matching programs. An estimated $75,000 is necessary to properly investigate, purchase, and implement the software, as well as train personnel to use the software.

Short-Term Transit Plan Summary

A summary of expected ridership, level of service, and cost and revenue estimates for the Short-Term Transit Plan (consisting of the seven core routes and other transit programs) follows in **Table 2-9**.

Table 2-9
Short-Term Transit Plan Summary

Transit Service	Annual Passengers /Year	Days Operated/ Week	Annual Operating Cost	Annual Fare Revenue	Annual Operating Deficit	Capital Cost- Vehicles	Capital Cost- Terminals
Dona Ana to Las Cruces	44,990	Six	$177,328	$21,649	$155,680	$101,925	$20,000
Mesilla to Las Cruces	15,698	Three	$71,079	$7,795	$63,283	$28,925	$20,000
Mesilla Tourist	6,426	Two	$31,952	$6,426	$25,526	$0	$0
Hatch to Las Cruces	2,202	Two	$47,928	$3,883	$44,045	$17,500	$40,000
Sunland Park to El Paso	43,860	Six	$143,783	$20,757	$123,026	$71,200	$110,000
South County to Las Cruces	4,581	Two	$47,928	$7,355	$40,573	$35,600	$50,000
Anthony to Las Cruces	4,945	Two	$47,928	$5,527	$42,401	$35,600	$30,000
Total	$122,702		$567,926	$73,392	$494,534	$290,750	$270,000

Other	**Cost/Year**
Public Information Materials	$12,000
Rideshare matching software	$75,000

Two additional transit services are recommended for implementation in the mid- and long-term. A description of these services and a summary (**Table 2-10 and 2-12**) for both the Mid-Term Transit Plan and Long-Term Transit Plan are located in the following pages.

Additional operating statistics and detailed costs for all routes are located in the Appendix.

East Mesa

In the mid-term, one route is added to the core seven routes. This demand-response service was developed in anticipation of continued growth and increasing transit need in the East Mesa area. The East Mesa is characterized by development with discontinuous streets and difficult access. For this reason, a demand-response zone is recommended.

The East Mesa demand-response zone will cover the populated areas to the north and south of North Main Street to the east of Las Cruces. The zone extends as far east as the community of Organ (**Figure 2-11**). The service will initially operate five days per week, 12 hours per day, providing basic necessity trips to residents along the North Main Street corridor. No complementary ADA paratransit service is required.

The service will require a vehicle of its own, and $21,000 will be required to construct one medium-size transit terminal.

Expected ridership and operating costs for the East Mesa in the mid-term are shown in **Table 2-10** below.

Table 2-10
East Mesa Demand Response
Mid-Term Transit Plan (Yrs 5-7)

Days per Week	5
Expected Ridership per Year	12,243
Total Annual Operating Cost	$92,658
Total Annual Fare Revenue	$6,189
Total Annual Operating Deficit	$86,469
Total Capital Cost for Vehicles	$45,000
Total Capital Cost for Terminals	$21,000

Non-Discounted Fares

From: \ To:	East Mesa	Las Cruces
East Mesa		$0.60
Las Cruces	$0.60	

To address anticipated future needs and opportunities, the level of service in this zone is recommended to increase in the long-term to six days per week.

Figure 2-11

East Mesa

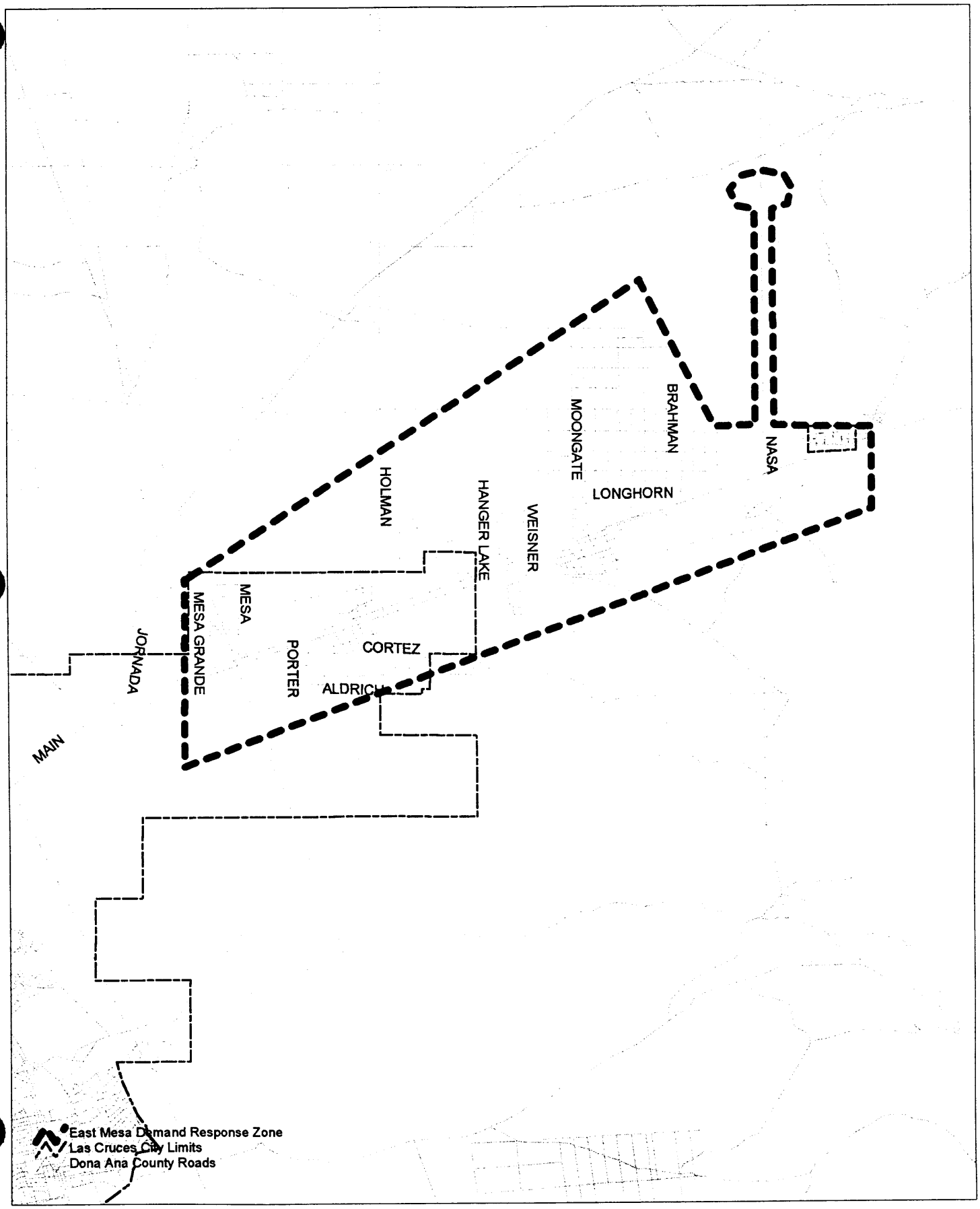


Table 2-10
Mid-Term Transit Plan Summary

Transit Service	Annual Passengers /Year	Days Operated/ Week	Annual Operating Cost	Annual Fare Revenue	Annual Operating Deficit	Capital Cost-Vehicles	Capital Cost-Terminals
Dona Ana to Las Cruces	88,508	Six	$267,653	$45,716	$221,937	$95,000	$0
Mesilla to Las Cruces	25,218	Three	$76,453	$13,758	$62,694	$58,300	$0
Mesilla Tourist	7,390	Two	$34,046	$9,237	$24,809	$0	$0
Hatch to Las Cruces	3,933	Three	$76,604	$7,677	$68,928	$17,500	$0
Sunland Park to El Paso	85,310	Six	$153,209	$42,843	$110,366	$0	$0
South County to Las Cruces	9,039	Three	$86,180	$15,931	$70,249	$0	$0
Anthony to Las Cruces	9,746	Three	$76,604	$11,769	$64,835	$0	$0
East Mesa	12,243	Five	$92,658	$6,189	$86,469	$45,000	$21,000
Total	241,387		$863,407	$153,120	$710,287	$215,800	$21,000

Other	**Cost/Year**
Public Information Materials	$24,100

Chaparral to Northgate

In the long-term, one last route is added to the core seven routes for a total of nine routes. This flexible-route will operate 10.2 miles between the unincorporated community of Chaparral in southeastern Doña Ana County and Sun Metro's Northgate Transit Center in El Paso (**Figure 2-12**). The route will be in service 6 days per week, 11 hours per day, providing basic necessity, quality of life, and advanced economic opportunity trips to residents in the Chaparral area who are geographically isolated from the rest of Doña Ana County. Being a flexible-route, no complementary ADA paratransit service is required.

The service will require a vehicle of its own, and $22,000 is required to construct one medium size transit terminal.

Expected ridership and operating costs for Chaparral to Northgate in the long-term are shown in **Table 2-11** below.

Table 2-11
Chaparral to Northgate Flexible Route
Long-Term Transit Plan (Yrs 8-10)

Days per Week	6
Expected Ridership per Year	14,949
Total Annual Operating Cost	$147,291
Total Annual Fare Revenue	$9,292
Total Annual Operating Deficit	$137,999
Total Capital Cost for Vehicles	$38,500
Total Capital Cost for Terminals	$22,000

Non-Discounted Fares

From: \ To:	Chaparral	Northgate
Chaparral		$0.75
Northgate	$0.75	

Figure 2-12

Chaparral to Northgate

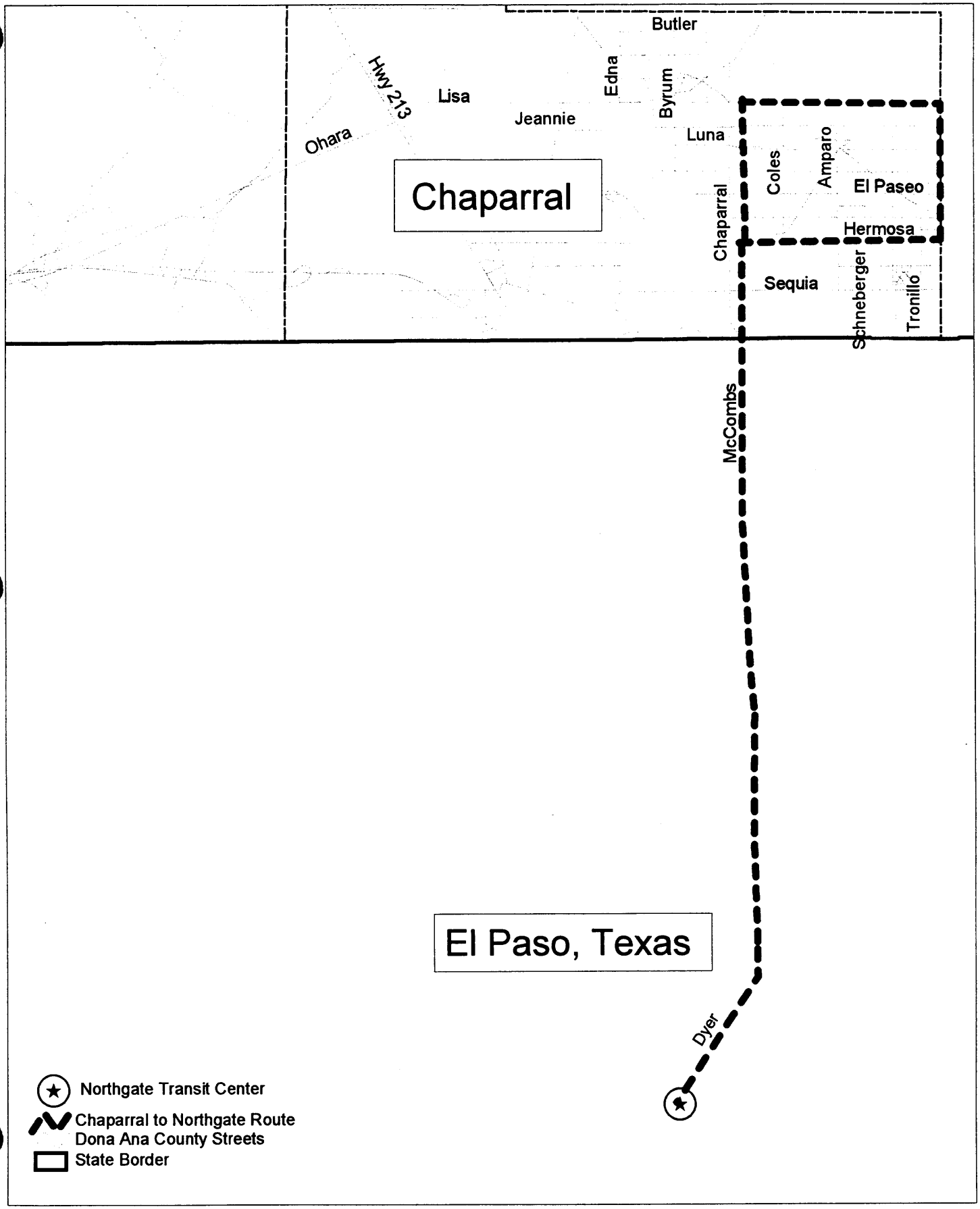


Table 2-12
Long-Term Transit Plan Summary

Transit Service	Annual Passengers /Year	Days Operated/ Week	Annual Operating Cost	Annual Fare Revenue	Annual Operating Deficit	Capital Cost-Vehicles	Capital Cost-Terminals
Dona Ana to Las Cruces	145,691	Six	$363,374	$92,535	$270,839	$12,775	$0
Mesilla to Las Cruces	36,015	Three	$80,975	$24,046	$56,929	$12,775	$0
Mesilla Tourist	8,498	Two	$35,707	$12,748	$22,959	$0	$0
Hatch to Las Cruces	5,580	Three	$80,340	$13,614	$66,727	$38,500	$0
Sunland Park to El Paso	128,113	Six	$160,681	$79,379	$81,302	$0	$0
South County to Las Cruces	13,577	Three	$93,730	$27,556	$66,174	$0	$0
Anthony to Las Cruces	14,637	Three	$80,340	$21,821	$58,520	$0	$0
East Mesa	20,808	Six	$116,612	$13,009	$103,603	$0	$0
Chaparral to Northgate	14,949	Six	$147,291	$9,292	$137,999	$38,500	$0
Total	387,868		$1,159,050	$294,000	$865,052	$102,550	$0

Other	Cost/Year
Public Information Materials	$40,000

Governance and Funding of Transit Services

LKC

Chapter Three

GOVERNANCE AND FUNDING OF TRANSIT SERVICES

In the previous chapter, the recommended transit services, operating and capital costs, anticipated ridership and fare revenues were detailed. After fare revenues are deducted from operating costs, the operating deficit and the capital costs must be financed from public resources. Federal funds may be used to cover only a percentage of the capital investment for transit and the annual operating deficit. After federal grants, the remaining portion of the capital cost and operating deficit must be "matched" with local funds. Local funds can be contributed by the State of New Mexico, Doña Ana County, the City of Las Cruces or the other incorporated cities.

The first section in this chapter addresses the question of governance for transit services within Doña Ana County. The following sections of the chapter describe the federal funding programs, their relation to the needs in Doña Ana county, and the potential state and local funding sources required to match the federal funds.

Governance

Public transportation services may be provided in New Mexico through a city, county, or a private non-profit organization. There are also opportunities for regional transit through joint powers agreements.

Municipal Transit

As provided by the New Mexico Municipal Transit Law, a municipal corporation may engage in the business of transportation of passengers and property within the municipality by whatever means it may decide (NMSA 1978 Section 3-52-4A). A municipality engaged in the business of transportation may extend any system of transportation to points outside the municipality where necessary and incidental to furnishing efficient transportation to points in the municipality (NMSA 1978 Section 3-52-4D). A municipality may also furnish transportation service to areas located outside the city limits and within the county in which it is located, so long as prior contracts have been made with the county covering the schedules, rates, and services to be provided (NMSA 1978 Section 3-52-4F). Transit service may be extended to points outside the county in which the city is located only after prior approval is obtained from the state corporation commission and other regulatory bodies having jurisdiction in the matter (NMSA 1978 Section 3-52-5B). The city, as an operating entity, may enter into contracts for special transportation service, charter buses, advertising, and any other function which private enterprise could do or perform for revenue (NMSA 1978 Section 3-52-4H). However, federal guidelines may limit charter bus activity that is in competition with the private sector. The governing body may spend public monies to pay part of the costs of operation of public transit if revenues of the system prove to be insufficient (NMSA 1978 Section 3-52-4I).

Consistent with the Municipal Transit Law, the City of Las Cruces provides public transit services to residents of the city via RoadRunner Transit. By agreement with Doña Ana County, transportation service is also provided to at least one area located outside the city limits, the adjacent community of Tortugas. Public transportation services are not provided by other municipal governments in Doña Ana County.

County Transit

State statutes provide authority for county operated public transportation services. The authority of a county is almost identical to Municipal Transit Law. A county may engage in the business of transportation of passengers and property within the political subdivision by whatever means it may decide. The county may do all things necessary for the acquisition and conduct of the business of public transportation (NMSA 1978 Section 7-24A-3A). A county engaged in the business of transportation may extend any system of transportation to points outside its boundaries where necessary and incidental to furnishing efficient transportation to points within the county (NMSA 1978 Section 7-24A-3C). Any county may furnish transportation service to areas located outside its boundaries if prior contracts have been negotiated covering the schedules, rates, services and other pertinent matters (NMSA 1978 Section 7-24A-3E). The county, as an operating entity, may enter into contracts for special transportation service, charter buses, advertising, and any other function which any private enterprise operating a public transit facility could do or perform for revenue (NMSA 1978 Section 7-24A-3G). However, federal guidelines may limit charter bus activity that is in competition with the private sector.

Doña Ana County does not provide general public transportation services. The county is responsible for ambulance transportation of indigent county residents (NMSA 1978 Section 27-5-2). Doña Ana County also supports SafeRide in the amount of $200,000 per year for non-emergency medical trips only. The service is available to anyone in the county.

Regional Transit

There are no specific statutory provisions for a regional transit authority in New Mexico. House Bill 669 was proposed in the 43rd Legislature, First Session 1997, to allow a local option to create a regional transit authority with an elected board and funded from a dedicated gross receipts tax not to exceed ¼ of 1 percent. The purpose of the legislation was to serve the public welfare by providing for the creation of a comprehensive network of safe, efficient, affordable public transportation within a metropolitan area. The definition of a metropolitan area was "an area consisting of at least two contiguous counties, one of which has a principal city with a population in excess of 20,000 or has a principal city with a population of no more than 5,000 that currently operates a public transit system." The specific language excluded Doña Ana County from acting on its own to create a regional transit system. The bill was not approved by the Legislature. However, portions of the bill were incorporated into legislation on infrastructure gross receipts taxes which was passed in the 1998 Regular Session of the Legislature.

Joint Powers Agreements

The absence of specific language to provide for a regional transit authority does not obviate a regional approach to transit in Doña Ana County. The Joint Powers Agreements Act (NMSA 1978 Section 11-1-1 to 11-1-7) states that the governing bodies of two or more public agencies may jointly exercise any power common to the contracting parties. A joint powers agreement is subject to approval by the secretary of finance and administration of the state.

Any joint powers agreement must specify the purpose of the agreement. The agreement must also provide for the method by which the purpose will be accomplished and the manner in which any

power will be exercised under such an agreement. The parties to the agreement may provide therein that funds of the public agencies will be contributed to pay for the joint effort. One agency in the joint agreement may be designated under the terms of the agreement to be paid to collect and disburse funds. The agency provided by the agreement to administer or execute the agreement may be one of the parties to the agreement or a commission or board constituted pursuant to the agreement. The administering agency under such agreement shall be considered under the Joint Powers Agreement to possess the common power specified in the agreement, subject to any of the restrictions imposed in the agreement. The agreement may be continued for a definite term or until rescinded or terminated (NMSA 1978 Section 11-1-4).

Bi-State Transit

The New Mexico Joint Powers Agreement Act also extends to bi-state opportunities. If authorized by their governing bodies, two or more public agencies may jointly exercise any power common to the contracting parties even though one or more of the contracting parties may be located outside the state (NMSA 1978 Section 11-1-1).

Texas statutes authorize the municipal transit department for the City of El Paso to agree with another transportation system for the establishment of through routes, joint fares, or transfers of passengers (Texas Transportation Code, Chapter 453, Municipal Transit Departments, Section 453.105). Although bi-state opportunities are not specifically mentioned, such arrangements are not prohibited. Texas statutes for inter-local agreements are similar to the New Mexico Joint Powers Agreements Act.

There is precedent for bi-state partnerships to address regional issues. The New Mexico-Texas Water Commission has embarked on the El Paso-Las Cruces Regional Sustainable Water Project. Engineering and environmental studies are underway in June 1998 to assess ways to provide a year-round supply of surface waters to users in the El Paso-Las Cruces area.

Federal Funding

Federal funding for transportation primarily comes through the United States Department of Transportation (USDOT). Other federal departments also have funds available that can be used for transit if transportation benefits the main purpose of the department, such as urban development or job training and placement.

The programs and funding from the USDOT were established in the umbrella legislation known as the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. ISTEA established the authorized funding levels and programs for transit and highway projects and institutionalized the ability to shift funds from one program to another depending upon local priorities. ISTEA expired at the end of fiscal year (FY)1997 and has been replaced by new legislation. The Transportation Equity Act of the 21st Century (TEA-21) maintains the previously established programs, while generally raising the overall funding levels. TEA-21 is effective for a six-year period, with specific spending levels established each year as part of the federal budgeting process.

TEA-21 provides funding for the US DOT and its subsidiary agencies, including the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA). The FTA funding sources

consist of Section 5307, the Urbanized Area Formula Program for urbanized areas with more than 50,000 residents; Section 5311, the Non-urbanized Area Formula Program for rural areas; Section 5310, the Elderly and Persons with Disabilities Program, which provides capital assistance for transportation for these individuals; and Section 5309, the Capital Program, which provides major funding for bus and rail facilities.

Additional federal funds that can be used for public transit are available from FHWA under the Congestion Mitigation and Air Quality (CMAQ) Program. CMAQ funds have been established to further the goals of the Clean Air Act Amended (CAAA) of 1990 to reduce the levels of air pollution in cities that violate the health standards established by the Environmental Protection Agency (EPA).

Other federal funds that can support transit operations originate from the Department of Health and Human Services and from the US Department of Labor (USDOL) in the form of welfare-to-work grants. These funds are established in separate authorization bills other than TEA-21. Welfare-to-work grant applicants are encouraged in the development of responsive transportation, as well as other areas, designed to move eligible individuals into unsubsidized employment in a local, community-based context.

These programs and how they relate to transit in Doña Ana County are discussed below.

Section 5307 Urbanized Area Formula Program

The major federal funding source for transit is the Section 5307 Urbanized Area Formula Program. The funding levels are based upon a statutory formula and vary based upon the size of the urbanized area. Urbanized areas are grouped into three sizes: small urbanized areas having a population between 50,000 and 200,000, medium urbanized areas having a population between 200,000 and one million, and large urbanized areas having a population in excess of one million. Medium and large urbanized areas receive their funds directly from the FTA. Small urbanized areas do not receive their funds directly from the FTA. Instead, the FTA distributes funds to the governor of each state or to the governor's designated recipient.

In New Mexico, the governor has designated the New Mexico State Highway and Transportation Department (NMSHTD) as the recipient of FTA authorized and appropriated funding. NMSHTD receives the amounts granted by FTA and is responsible for distributing the funds to local transit entities and communities within New Mexico.

Two urbanized areas exist in Doña Ana County - Las Cruces and Sunland Park. Sunland Park is part of the El Paso, Texas urbanized area. For small urbanized areas such as Las Cruces, the funding is based on the population of the area and the population density, as determined by the latest census. For medium urbanized areas such as El Paso/Sunland Park, the funding formula considers population and population density and also considers the level of transit service operated as represented by revenue vehicle miles, passenger miles, and operating costs.

Table 3-1 illustrates the effect of the current formula by comparing selected cities with populations between 50,000 and 100,000. The funding per capita ranges from $5.72 in Sherman/Denison, Texas to $9.28 in Greeley, Colorado. The cities with funding per capita lower than Las Cruces' $6.82 are the three cities with lower population densities. This funding per capita is over a relatively narrow

range, which indicates Las Cruces is not receiving a lower level of federal funds than are other cities of similar size and density.

Table 3-1
Comparison of Federal Section 5307 Funding per Capita for Selected Small Cities

City	1998 FTA Formula Funds	1990 Census Square Miles	Funding/ Sq. Mile	1990 Census Population	Population/ Sq. Mile	Funding/ Population
New Mexico						
Las Cruces	$555,540	57	$9,746	81,471	1,429	$6.82
Santa Fe	$444,524	41	$10,842	63,023	1,537	$7.05
Colorado						
Greeley	$664,183	27	$24,599	71,578	2,651	$9.28
Louisiana						
Alexandria	$570,706	64	$8,917	86,001	1,344	$6.64
Texas						
Denton	$430,632	53	$8,125	66,445	1,254	$6.48
Galveston	$456,802	30	$15,227	58,263	1,942	$7.84
San Angelo	$634,663	49	$12,952	85,408	1,743	$7.43
Sherman-Denison	$317,690	63	$5,043	55,522	881	$5.72
Utah						
Logan	$361,607	31	$11,665	50,401	1,626	$7.17
TOTAL/AVG	$4,436,347	415	$10,690	618,112	1,489	$7.18

Source: 1995 National Transit Database and FY 98 transit appropriations.

Section 5307 funds are available for up to three years beyond the year in which they are appropriated. If all funds are not spent in the initial year, the recipient can spend the funds in later years. Funds spent in later years are known as carryover funds since they are carried over into future years.

In small urbanized areas like Las Cruces, the Section 5307 program provides funding for up to 80 percent of the capital, operating, and planning costs of transit programs. In previous years, the operating cost percentage was limited to 50 percent, and the full appropriation could not be used for operating expenses. These limitations still apply to any carryover funds, but do not apply to 1998 funds or funds appropriated in later years.

For medium urbanized areas like El Paso, Section 5307 funds can be used for up to 80 percent of the capital and planning costs. In FY 1998, the definition of capital costs has been expanded to included all maintenance costs. The funds for operating expenses are more limited; the Section 5307 funds can be used for a maximum of 50 percent of the operating cost. Under TEA-21, the ability to use Section 5307 funds for any operating costs in medium urbanized area is eliminated within the six-year period covered by the legislation.

In 1997 Las Cruces received $476,613 in Section 5307 funds, with an operating limitation of $185,079. In 1998, Las Cruces is scheduled to receive $555,540, a 17 percent increase over the 1997 funding level. Since Las Cruces is a small urbanized area, all funds can be used to support operations, increasing the total money that can be used to support operations from $185,079 to $555,540. Las Cruces also has $240,000 in carryover funds from FY 1997, all of which are limited to supporting capital expenses. These carryover funds will be used to update RoadRunner Transit's fleet throughout 1998. There were no carryover funds from FY 1995 and FY 1996; all funds were used in the year for which they were designated.

The El Paso urbanized area, which includes the incorporated area of Sunland Park, received approximately $6.1 million of Section 5307 funds in 1997. In 1998, the amount increases to just over $7 million. Based upon the funding formulas, the population and population density of Sunland Park generated an estimated $20,500 in 1997 and $23,900 in 1998 of El Paso's Section 5307 apportionment.

Section 5311 Non-Urbanized (Rural) Area Formula Program

Section 5311 Non-urbanized Area Formula Program funds can be used for planning, capital, operating, and administrative assistance for operators of public transportation in non-urbanized (rural) areas defined as those communities with populations less than 50,000. TEA-21 increases rural funding by 32 percent in FY 1999. The funds are appropriated to the governor of each state based upon the rural population of the state. In New Mexico, the governor has designated the NMSHTD as the fund recipient. The funds are available to states for obligation during the year of their apportionment plus two additional years. Each state must allocate a minimum of 15 percent of its appropriation toward intercity bus transportation, unless the governor certifies that the intercity bus transportation needs of the state are already being met. Section 5311 funds may be used for capital and administrative expenses with a maximum federal share of 80 percent of total costs, and funds may be used for operating expenses with a maximum federal share of 50 percent.

Currently, New Mexico has 13 rural transit operators in 10 counties that share the state allotment. The NMSHTD releases a program call for rural funds in June of each year. The funds are awarded through an annual application and planning process and are reviewed by a selection committee composed of Metropolitan Planning Organization (MPO) and Regional Planning Organization (RPO) members. No specific formula for allocation within the state exists. Doña Ana County does not currently receive Section 5311 funds, but is eligible to submit a request for funds as a New Start.

New Mexico received $1.1 million in 1997 and $1.3 million in 1998 in Section 5311 funds. To determine the portion of these funds that are generated as a result of the rural population of Doña Ana County, the federal funding formula is applied to the 45,860 rural residents. These residents generated $57,800 in 1997 and $67,100 in 1998 in Section 5311 funds. The county may be eligible to use the 15 percent set-aside of the rural funds that are designated for intercity service. The New Mexico city of Clovis and the Navajo Nation will receive this set-aside in 1998 ($190,500), but representatives for Doña Ana County could apply for a portion of FY 1999's intercity set-aside.

A separate appropriation covers the Rural Transportation Assistance Program (RTAP), which provides funding for training, technical assistance, research, and related support services. RTAP funds for New Mexico amounted to $69,000 in 1997 and $70,000 in 1998. These monies are

awarded to the New Mexico Passenger Transport Association for training programs. The Association determines how the dollars are awarded to projects.

Section 5310 Elderly and Persons with Disabilities Program

Section 5310 Elderly and Persons with Disabilities Program funds can be used for capital assistance by organizations providing transportation service for the elderly and for persons with disabilities. Applicants eligible to receive funding include private nonprofit agencies, public bodies approved by the state to coordinate services for elderly citizens and people with disabilities, and public bodies that certify to the governor that no nonprofit corporations or associations are readily available in their area to provide these services.

Funds are allocated to the governor of each state or the governor's designated recipient. In New Mexico, the governor has designated the NMSHTD as the recipient. This allocation is done each year by a formula based on the number of elderly citizens and people with disabilities within each state according to the 1990 Census. TEA-21 increases Section 5310 funds by a modest 8 percent in FY 1999. Capital assistance is provided at a ratio of 80 percent federal funds and 20 percent local. However, vehicle-related equipment needed to meet ADA or CAAA requirements is eligible for 90 percent of the cost to be covered by federal funds and the remaining 10 percent by local funds. There is no carryover of funds beyond the year in which Section 5310 funds are appropriated. Leftover funds can be transferred by the governor in the last 90 days of the fiscal year to the capital program of the urbanized or non-urbanized formula programs.

New Mexico will receive $429,000 in 1998 in Section 5310 funds. Doña Ana County had 8.6 percent of the elderly and disabled population of New Mexico in 1990. Based upon this percentage, the elderly and disabled populations generated $36,800 in 1998 funds. The FTA allows Section 5310 funds to be used to pay for vehicles and maintenance for services designed to serve concentrations of elderly persons and persons with disabilities. An area such as Hatch, which had a senior population nearing 12 percent at the time of the 1990 Census, could apply for Section 5310 dollars.

To use Section 5310 funds, applicants must submit a request to the NMSHTD. Historically, only private and Indian organizations in New Mexico have applied for funding through this program. Each application is evaluated by a review committee on the basis of project justification, other funding resources the applicant receives, the efficiency of the applicant, the degree of coordination exhibited by the applicant, and on the basis of an oral presentation. The review committee recommended to NMSHTD that nine of the 13 operators be funded. These awards must be approved by FTA. An application will be sent to FTA in July 1998.

One operator, Tresco, Inc., in Doña Ana county applied for Section 5310 funds in 1998. Tresco, Inc., a human services organization providing services to the mentally impaired throughout Southwestern New Mexico, provides door-to-door transportation service Monday through Friday to its clients. Tresco currently operates a total of 48 vans, eight of which have been funded at 80 percent through Section 5310 monies. Tresco, Inc. in Doña Ana County has received Section 5310 capital funding since 1988. However, other programs were recommended by the review committee for approval in 1998 on the basis of the earlier described criteria.

Section 5309 Capital Program

The Section 5309 Capital Program funds provide assistance for the establishment of new rail transit projects, improvement and maintenance of existing rail transit and other fixed guideway systems, and buses and other bus-related capital projects. Unlike other FTA funding categories, where money is allocated on a formula basis, Section 5309 funds are specified for a particular capital improvement project. These funds can be obtained in one of two ways. First, the project can receive an "earmark" with a funding level specified in the transportation legislation (ISTEA or TEA-21) or the annual appropriations. Secondly, projects may receive a discretionary grant on the basis of a competition for funds with all other bus or rail projects in the United States. For FY 1998, all funds appropriated under the 1998 Appropriations Act have been earmarked for specific projects throughout the United States, including New Mexico. No additional funds are available for discretionary allocation to New Mexico or any other state.

For 1998, NMSHTD requested $2-3 million in Section 5309 funds for a park and ride program to include the areas of Albuquerque, Las Cruces, and Sante Fe. Only $1 million was awarded by FTA for the project. With the reduced funding, a project that was further developed and had greater potential was approved for funding. This project was in the Sante Fe-Albuquerque area.

An additional $3.7 million in Section 5309 funds were earmarked for a Statewide Buses and Facilities program. These funds will be used to supplement capital expenses of the Section 5310 and 5311 programs. According to NMSHTD officials, all of these funds are slated for specific projects and will be awarded. In order to be considered, projects such as these are submitted to the NMSHTD who awards monies based upon a review process similar to that for Section 5310 awards. Due to the pending awards, these dollars have not been considered as available to Las Cruces to fund short-term transit plan services.

Albuquerque and Santa Fe received other Section 5309 earmarks for specific capital programs. Albuquerque received approximately $1 million for the Uptown Transit Center, and another $1 million was awarded for a National Defense Demonstration Project for Electric Buses. Santa Fe received approximately $1 million for buses and facilities.

Congestion Mitigation and Air Quality (CMAQ) Program

Under the CAAA, urbanized areas are classified by the EPA as non-attainment areas if air pollution levels exceed the national Ambient Air Quality Standards on a continual basis. Depending upon the level of pollution and the frequency the standards are exceeded, cities are classified according to increasing pollution level as either marginal, moderate, serious, severe, and extreme, with marginal being the lowest level of pollution and extreme being the highest. Cities meeting the standard, but with concern that the standards may be exceeded, are classified as maintenance.

Reflecting that some air pollution occurs as the result of traffic congestion, Congress established the CMAQ program. Administered and distributed by FHWA, the $1 billion federal CMAQ program provides each state with a minimum of 0.5 percent of total program dollars. Additional monies are allocated to states based upon the population and level of pollution in non-attainment areas within the state. Under the rules established by ISTEA, which will continue in TEA-21, CMAQ funds can be applied to either highway or transit projects. CMAQ funds can be used to fund the operating costs

of demonstration projects that are intended to reduce air pollution. Dollars are transferred to each state by FHWA, and each state allocates the funds based upon the number, size, and air quality of the areas.

New Mexico currently has one maintenance area, Bernalillo County (the Albuquerque area), and one non-attainment area, Sunland Park. Historically, New Mexico has received the minimum state CMAQ allocation of 0.5 percent. These funds have been distributed each year solely to Bernalillo County (via the Mid Rio Grande Council of Governments MPO) and used for transit projects.

In 1998 New Mexico will receive $5.8 million in CMAQ monies. Based on the presence of the two non-attainment areas (one marginal area in Sunland Park and one maintenance area in Bernalillo County) and on federally prescribed weighting factors (that correspond to the level of non-attainment), Sunland Park should receive 2 percent of New Mexico's total allocation. For 1998 this amount is just over $116,000.

In addition to the $116,000, the recently signed TEA-21 legislation may allow states to use CMAQ monies outside of non-attainment areas. Under Sec. 1110. Congestion Mitigation and Air Quality Improvement Program part c(2) the legislation states, "the State may use that portion of the funds not based on its nonattainent and maintenance area population under subparagraphs (B) and (C) of section 104(b) (2) for any project in the State eligible under section 133." If the amount of CMAQ formula funds that New Mexico would receive based only upon the population of its non-attainment areas did not reach the minimum 0.5 percent that each state receives, than New Mexico's final allocation would have been increased to the minimum. The difference between the amount New Mexico would have received based only on its non-attainment and the amount the state finally receives appears to be available for use anywhere in the state (for example, Doña Ana and other counties) so long as the program meets CMAQ guidelines. Additional investigation and interpretation of the use of CMAQ funds outside of non-attainment areas will be required to determine whether additional CMAQ funds may be requested for use in Doña Ana County.

While Sunland Park has been part of the El Paso urbanized area since 1992, Sunland Park became classified as a separate marginal non-attainment area in 1995. Previously, it was part of the El Paso severe ozone non-attainment area. Based on the weighting factors, Sunland Park was qualified to receive 2 percent per year of the New Mexico CMAQ allocations between 1995 and 1997 ($100,000 per year). Sunland Park did not receive CMAQ monies during these years.

The City of Sunland Park's non-attainment is a direct result of spillover from El Paso's non-attainment. The City submitted a request to the El Paso MPO to use some of El Paso's CMAQ funds for transit projects in Sunland Park. The proposal included a transit terminal and a commuter vanpool service. The transit terminal project is intended to serve as a transfer point for passenger drop-offs, pedestrians, and bicyclists to catch regular and express transit services operated by Sun Metro into El Paso. This terminal could be built at the Crossroads/Mesa El Paso location to serve as the transfer center between the Sunland Park to El Paso route and Sun Metro services. The funding originally requested for the terminal project totals $500,000 (FY 1999 - $100,000 for preliminary engineering and design and FY 2000 - $400,000 for construction).

Although the State of Texas has recently been authorized to use Texas CMAQ monies outside of Texas non-attainment areas (so long as the project benefits a non-attainment area), the El Paso MPO

has requested that Sunland Park solicit for New Mexico CMAQ funds to pay for the above described projects. NMSHTD is in the process of reviewing Sunland Park's request.

Summary of Federal Funding Sources

Table 3-2 summarizes the federal funds described in the previous sections that correspond to Doña Ana County for support of expanded transit service. The Las Cruces urbanized area received an increase in the total Section 5307 funds received from FY 1997 to 1998. As the 1997 funding amount is presumed to be required to maintain current RoadRunner Transit operating level, only the increase in funding is assumed to be available for expanded services in the county. The $240,000 in carryover funds is not assumed to be available for the new service.

Table 3-2
Summary of Estimated Annual Federal Funds
Available for Expanded Transit Service

Funding Category	Annual Amount	Calculation	Limitations
Las Cruces Urbanized Formula (Section 5307)	$78,900	FY 1998 allocation-less FY 1997 allocation	Can only fund Las Cruces Urbanized area service
El Paso Urbanized Formula (Section 5307)	$23,900	Based upon FTA formula and Sunland Park population	Can only fund El Paso Urbanized area service
Non-urbanized Area Formula (Section 5311)	$67,100	Based upon percentage of NM rural population in Doña Ana county applied to FTA formula	Can only fund rural area service
Elderly & Persons with Disabilities Formula (Section 5310)	$36,800	Based upon percentage of NM elderly and disabled population in Doña Ana county	Can only fund capital or maintenance expense
New Mexico CMAQ	$116,400	Based upon percentage of NM population in Doña Ana county and minimum state appropriation	Can fund operations and capital expense in non-attainment areas
TOTAL ANNUAL FORMULA FUNDS	$323,100		

State Funding

The State of New Mexico does not directly fund public transportation.

However, the NMSHTD role as the state government's administrator for most federal appropriations

for transit is very important. The NMSHTD determines the distribution of funds to counties and cities for FTA Section 5310, and Section 5311 funds and for New Mexico CMAQ dollars. NMSHTD is also responsible for passing on Section 5309 monies to awardees.

Local Match

As there are no direct state funds for public transportation, the level of available federal funds is a critical issue to the municipalities and rural areas within Doña Ana County. The capital investment to provide transit service and the annual operating deficit associated with the short-term transit plan that are not covered by federal funds must be funded through local match. In an area with limited financial resources but great need, such as Doña Ana County, local match will determine if the recommended transit services can be made available to residents. The county and municipalities must dedicate local dollars to "attract" federal grant funds.

The nine services recommended for implementation cross through many communities in the county. One route, the Sunland Park to El Paso route, even crosses into the State of Texas. The routes serve and benefit multiple target markets and communities (**Table 3-3**). Some communities in Doña Ana county are incorporated, and others are not.

Table 3-3
Target Markets Served By and
Benefitting from Recommended Transit Services

	Urban Target Market	North County Target Market	South County Target Market	Sunland Park Target Market
Doña Ana to Las Cruces	✓			
Mesilla to Las Cruces	✓			
Mesilla Tourist	✓			
Hatch to Las Cruces		✓		
Sunland Park to El Paso, Texas				✓
South County to Las Cruces	✓		✓	✓
Anthony to Las Cruces			✓	
East Mesa	✓			
Chaparral to Northgate			✓	

By serving and providing benefits to multiple communities and by crossing jurisdictional boundaries, opportunities for coordination arise. One option for coordination is through the creation of joint powers agreements. Together, the communities and county can commit to jointly provide transit service to all those in need. This joint provision of services creates the necessity of finding a

reasonable and rational way to allocate not only the direct costs of operating the services, but also the revenues generated from those operations (farebox revenue) and the funds that can be received from the federal government.

Therefore, in order to equitably distribute the costs and revenues associated with implementation of the short-term plan, an allocation methodology based on the population served along transit routes as recommended in the short-term plan was developed. Population served is the portion of the total population considered to have access to each transit route. This allocation method is recommended for use during the initial operation of services until such time that historically established ridership figures are known. Once determined, the allocation methodology should be re-examined and reworked, if necessary, to ensure its continued effectiveness.

The population served along each route was determined by summing the populations of the areas that each route passes through. The populations served were then subdivided into jurisdictional boundaries (**Table 3-4**). Each jurisdictional boundary was defined such that it represents a single area (such as a city or urbanized area) to which costs, revenues, and grants may be allocated. The three major jurisdictions are the Las Cruces Urbanized Area (Las Cruces UZA), Rural Doña Ana County, and the City of Sunland Park. The sum of the areas of the City of Las Cruces, Town of Mesilla, and Urbanized Doña Ana County jurisdictions is roughly equivalent to the Las Cruces ETZ. A combination rural and urban area, the Town of Mesilla is included in the urbanized area for the purposes of funding. Urbanized Doña Ana County is the area within the Las Cruces urbanized area excluding the city limits of both Las Cruces and Mesilla. Adding the figures for the Rural Doña Ana County and Urbanized Doña Ana County jurisdictions yields the total for Doña Ana County. Although contained within the Rural Doña Ana County area, totals for Hatch are reported separately from the county figures.

Federal funding for the transit services as described in **Table 3-2** were divided among the jurisdictions on the basis of fund use limitations and minimizing the requirement for local share. Each jurisdiction is able to receive a different group of federal funds. The Sunland Park non-attainment area is eligible to receive CMAQ funds. The non-attainment area is bounded by the New Mexico-Texas state line on the east, the New Mexico-Mexico international line on the south, the Range 3E-Range 2E line on the west, and the N3200 latitude line on the north. This area roughly corresponds to the populated areas in Doña Ana County to the west of the state line from the Mexico border to Highway 28 just north of La Union. Rural Doña Ana County can receive dollars for rural transportation services from Section 5311. Due to the low level of service provided to seniors and disabled in the Rural Doña Ana County area and in Hatch, these areas have been allocated the Section 5310, Senior and Disabled, dollars. The Urbanized Las Cruces area is eligible for urban funds -- Section 5307. The City of Sunland Park is also an urbanized area and, according to its location within the El Paso urbanized area, it has been assigned a portion of El Paso Section 5307 funding.

This allocation formula was applied to the seven core routes (Doña Ana, Mesilla to Las Cruces, Mesilla Tourist, Hatch to Las Cruces, Sunland Park to El Paso, South County to Las Cruces, and Anthony to Las Cruces) recommended for implementation in the first year of the Short-Term Transit Plan as they are described in the previous chapter. A summary of the final local match requirements for each jurisdiction follows in **Tables 3-5 and 3-6**. More detailed tables by route for each jurisdiction are located in the Appendix.

Population Allocation

	City of Las Cruces	% of Total Route Pop	Town of Mesilla	% of Total Route Pop	Urbanized Dona Ana County	% of Total Route Pop	City of Sunland Park	% of Total Route Pop	Dona Ana County Rural	% of Total Route Pop	City of Hatch	% of Total Route Pop	Total Population
Dona Ana to Las Cruces	10,724	79.1%			2,834	20.9%							13,558
Mesilla to Las Cruces	6,280	58.8%	2,311	21.6%	2,092	19.6%							10,684
Mesilla Tourist			9,945	100.0%									9,945
Hatch to Las Cruces									3,245	69.1%	1,454	31.0%	4,699
Sunland Park to El Paso							13,231	100.0%					13,231
South County to Las Cruces					1,070	9.6%			10,130	90.4%			11,200
Anthony to Las Cruces									10,817	100.0%			10,817
East Mesa	6,107	59.7%			4,125	40.3%							10,232
Chaparral to Northgate									3,878	100.0%			3,878
Population Served	23,112	26.2%	12,256	13.9%	10,121	11.5%	13,231	15.0%	28,070	31.8%	1,454	1.6%	88,244

* LCR Urbanized Area = Las Cruces City Limits + Mesilla City Limits + Urbanized DAC Area

For operating expenses, operating cost minus revenues equals the operating deficit. The operating deficit less the federal funds applied is the required local share. The percent federal share is the proportion of the total operating costs that federal funds cover. The percent local share is the proportion of the total operating costs that the local share covers. For capital expenses, the total capital expense minus the federal funds applied is the local share of capital cost. Percent federal and percent local share are calculated in the same manner as that for operating expenses.

Table 3-5
Short-Term Transit Plan
Summary of Local Match Requirements
for Operating Expanded Transit Services

	Doña Ana County Rural	City of Hatch	City of Las Cruces	Urbanized Doña Ana County	Town of Mesilla	City of Sunland Park
Operating Cost	$124,395	$14,858	$182,061	$55,594	$47,305	$143,783
Fare Revenue	$14,862	$1,204	$21,708	$6,759	$8,110	$20,757
Operating Deficit	$109,533	$13,654	$160,353	$48,835	$39,195	$123,026
Federal Funds						
Section 5307 Dollars	$0	$0	$50,954	$15,518	$12,455	$23,916
Section 5311 Dollars	$59,670	$7,441	$0	$0	$0	$0
CMAQ Dollars	$0	$0	$0	$0	$0	$19,160
Federal Share Subtotal	$59,670	$7,441	$50,954	$15,518	$12,455	$43,076
% Federal Share	54%	54%	32%	32%	32%	35%
Local Funds						
Local Share	$49,863	$6,213	$109,399	$33,317	$26,740	$79,950
% Local Share	46%	46%	68%	68%	68%	65%

Table 3-6
Short-Term Transit Plan
Summary of Local Match Requirements
for Capital to Expand Transit Services

	Doña Ana County Rural	City of Hatch	City of Las Cruces	Urbanized Doña Ana County	Town of Mesilla	City of Sunland Park
Capital Cost	$182,755	$17,825	$125,211	$43,289	$10,568	$181,200
Federal Funds						
CMAQ Dollars	$22,457	$0	$0	$0	$0	$74,743
Section 5310 Dollars	$33,536	$3,272	$0	$0	$0	$0
Federal Share Subtotal	$55,993	$3,272	$0	$0	$0	$74,743
% Federal Share	31%	18%	0%	0%	0%	41%
Local Funds						
Local Share	$126,762	$14,553	$125,211	$43,289	$10,568	$106,457
% Local Share of Capital Deficit	69%	82%	100%	100%	100%	59%

Two other costs mentioned in the Short-Term Transit Plan, the RideShare matching software and the public information costs, were not included in the general allocation. Software should be funded through FHWA and the New Mexico Energy, Minerals, and Natural Resources Department, as is the RideShare program. Public information costs should be evenly distributed throughout the county among all areas to be served by the recommended transit services.

Local (City and County) Funding

Several sources of local funds exist to satisfy the local match required for federal grants for operating and capital expenses of public transit. Bonds may also be issued to help finance significant capital investments. These sources are discussed below.

Local General Revenue

Individual municipalities and/or the county have a variety of revenue sources available to fund general operations. These sources include, but are not limited to, property taxes, gross receipts taxes, infrastructure gross receipts taxes, gasoline taxes, and miscellaneous fees and fines. These revenues are generally placed in the city or county general fund. The governing body of the municipality or county may spend these public monies to pay part of the costs of operation of public transit if revenues of the system prove to be insufficient (NMSA 1978 Section 3-52-4I).

Gross Receipts Tax

New Mexico imposes a gross receipts or excise tax on businesses in the state. The total rate is a combination of the rates imposed by the state, county, and municipalities. Gross receipts taxes are paid to the state, which keeps its portion and distributes the remainder to the county or municipality that imposed the tax. The state does not specify a maximum tax rate that can be charged.

The state imposes a rate of 5 percent in unincorporated areas and 4.5 percent in municipalities. Doña Ana County imposes an additional 0.8125 percent in the unincorporated areas and 0.4375 percent within the municipalities. The four municipalities in the county--Hatch, Las Cruces, Mesilla, and Sunland Park--have each imposed a rate of 1.4375 percent on top of the state and county rates. The resulting total gross receipts tax rate is 5.8125 percent in the unincorporated portions of the county and 6.375 percent in the four municipalities.

A municipality may dedicate revenues from the municipal gross receipts tax to public transportation (NMSA 1978 Section 7-1D-9).

Infrastructure Gross Receipts Tax

Recent legislation (43rd Legislature, Second Session, 1998, House Bills 127, 243, 299, 301, 433, and 450 as well as the House Taxation and Revenue Committee's substitute for these bills) permits an infrastructure gross receipts tax to fund transit projects.

> Municipal Infrastructure Gross Receipts Tax. A municipality may impose an excise tax not to exceed ¼ of 1 percent of the gross receipts tax. Such a tax is to be imposed in increments of 1/16 of 1 percent by ordinance. The revenue may be used for a specific purpose, including acquiring, constructing, extending, bettering, repairing, or improving, operating or maintaining public transit systems or regional transit systems or authorities. Any ordinance enacting any increment of the first 1/8 of 1 percent is not subject to a referendum, notwithstanding the specific requirement of any charter municipality (unless the excise tax is for economic development purposes, in which case an election is necessary if imposed after July 1, 1998).
>
> County Infrastructure Gross Receipts Tax. A new section of the County Local Option Gross Receipts Tax adds the authority for a county to impose an excise tax at a rate not to exceed 1/8 of 1 percent of the gross receipts. Such a tax is to be imposed in increments of 1/16 of 1 percent. The tax is referred to as the "county infrastructure gross receipts tax," and the revenue may be used for county general purposes or for specific purposes, including acquiring, constructing, extending, bettering, repairing, or otherwise improving, operating or maintaining public transit systems or regional transit systems. The county must have voter approval to impose the county infrastructure gross receipts tax.

Gasoline Tax

Under NMSA 1978 Chapter 7, Article 13, the state of New Mexico enacted the Gasoline Tax Act. The Gasoline Tax Act imposes an excise tax of $0.17 per gallon on each gallon of gasoline received

in the state.

A distribution equal to 10.38 percent of the net receipts attributable to the taxes, exclusive of penalties and interest is made to municipalities and counties in New Mexico (NMSA 1978 Section 7-1-6.9). Ninety percent of this amount is paid to municipalities and H class counties in the proportion that the taxable motor fuel sales in each of the municipalities and H class counties bears to the aggregate taxable motor fuel sales in all of the municipalities and H class counties. The remaining 10 percent is paid to counties, including H class counties, in the proportion that the taxable motor fuel sales outside of incorporated municipalities in each of the counties bears to the aggregate taxable motor fuel sales outside of incorporated municipalities in all of the counties. Monies received under this section may be used for general purposes or for any special purposes designated by the governing body of the municipality or county.

Another distribution of gasoline taxes in an aggregate amount equal to 5.76 percent of the net receipts attributable to the gasoline tax is made to New Mexico municipalities (NMSA 1978 Section 7-1-6.27). These monies are to be used for specific purposes. The purposes include expenses of purchasing, maintaining and operating transit operations and facilities, the operation of a transit authority established by the municipal transit law, and operation of a vehicle emission inspection program.

Other gasoline taxes may be used for county and/or municipal public transportation. A county may impose a gasoline tax of up to $0.02 per gallon upon all gasoline sold at retail within the boundaries of the county. Similarly, municipalities may impose a gasoline tax of up to $0.02 per gallon for all gasoline sold at retail within the boundaries of the municipality (NMSA 1978 Sections 7-1-6.27 and 7-24A-1 to 22).

Proceeds from the gasoline tax may be used for expenses that may include purchasing, maintaining and operating transit operations and facilities, operating a transit authority established by the Municipal Transit Law [NMSA 1978 Section 3-52-1 to 3-52-13], or, as provided in the Gasoline Tax Act, for repair or maintenance of transit routes in the county or municipality. When the local ordinance is passed to establish the gasoline tax, the specific purpose for which the revenues are to be dedicated are to be stated.

Community Colleges Tax Levy

The annual tax levy for community colleges can be used to pay for transportation services for students within the community college district (NMSA 1978 Section 21-12-22).

Bonds

The New Mexico statutes provide for county and municipal governments to issue bonds to finance significant capital investments such as infrastructure improvements. Separate sections of the law provide for general obligation bonds, revenue bonds, municipal transit bonds, and gross receipts tax revenue bonds. The latter two references are most applicable to transit projects and are described below.

Municipal Transit Bonds. A municipal transit bond combines elements of general

obligation bonds and revenue bonds. Like general obligation bonds, the law allows a municipality to own and operate a transit system as a municipal business, just as municipalities can own and operate municipal utilities. But unlike general obligation bonds, municipal transit bonds are not a debt of the issuing municipality. Like revenue bonds, the law requires that revenue from the transit project be dedicated to the payment of the bonds and the costs of operating the project. However, unlike revenue bonds, a municipal transit bond permits a municipality to use public money (other than property taxes) to pay the costs of maintaining and operating the transit system if the revenues from the system are insufficient. Other public money can include gasoline taxes, licensing fees, other excise taxes, and municipal gross receipts taxes (NMSA 1978 Section 3-52-6B). Bonds enable the municipality to acquire land, buildings, buses, or other equipment required for public transit. The Municipal Transit Law is full authority for authorization and issuance of bonds, and no election is necessary (NMSA 1978 Section 3-52-9).

The municipal transit bond law applies to municipalities but not to counties.

Gross Receipts Tax Revenue Bonds. Recent legislation (43rd Legislature, Second Session, 1998, House Bills 127, 243, 299, 301, 433, and 450 as well as the House Taxation and Revenue Committee's substitute for these bills) amends specific references to gross receipts tax revenue bonds for municipalities and counties.

Municipal. A municipality may issue gross receipts tax revenue bonds for the purpose of acquiring, constructing, extending, bettering, repairing or otherwise improving a public transit system or any regional transit system or facilities. The municipality may pledge irrevocably any or all of the gross receipts tax revenue to the payment of the interest on and principal of gross receipts tax revenue bonds (Amended NMSA 1978 Section 3-31-1).

County. In addition to any other law authorizing a county to issue revenue bonds, a county may issue gross receipts tax revenue bonds for the purpose of acquiring, constructing, extending, bettering, repairing or otherwise improving public transit systems or any regional transit systems or facilities. The county may pledge irrevocably any or all revenue from the first 1/8 of 1 percent increment and the third 1/8 of 1 percent increment of the county gross receipts tax and the county infrastructure gross receipts tax to the payment of the interest on and principal of gross receipts tax revenue bonds (Amends NMSA 1978 Section 4-62-1).

The dedication of revenues to fund transit service does not require additional taxes be raised. However, without an increase, funds will have to be redirected from other programs to transit. For example, Sante Fe has recently dedicated a portion of its gross receipts taxes to transit and Las Cruces has dedicated its fuel tax to transit.

Transit Generated Revenue

Aside from the fare revenues discussed in the previous chapter, a transit operator can generate additional revenue sources as a result of operating transit service. These directly generated revenues

are discussed below.

Advertising

An option to consider for generating revenue is leasing advertising rights on vehicles and at bus stops. The City of Lubbock, Texas has an aggressive program of "wrapping" its buses with advertising. A wrapped bus is one that has its sides completely covered with a photographic film that permits riders to see out of the bus but has advertising visible from the outside. Lubbock receives $12,000 annually per bus in advertising fees. Lubbock has a population of 188,000 and operates 32 buses in peak service. As the City of Las Cruces and RoadRunner Transit are much smaller than the population and transit system of Lubbock, it would likely not generate the same revenues from this type of advertising. The success of a program such as this in Doña Ana County should be fully investigated before a decision could be made.

Sponsored or Subscription Service

Service sponsors can be major employers, retail locations, or special events. Each of these groups can fund a portion of the cost of service for their particular location. Obtaining these funds requires a close working relationship with the sponsor to ensure the service meets their specific needs. Through their contributions, sponsors help to fund a transit operating deficit. An example of sponsorship in Doña Ana County is the student body of New Mexico State University's assistance with RoadRunner Transit routes 2 and 4. Both routes serve the campus, and student activity fees have supported the service by purchasing the vehicles used to run the routes.

Doña Ana County Branch Community College is another potential sponsor. The college has established satellite campuses in Anthony, Chaparral, and Sunland Park. Sponsoring a portion of the recommended transit services may help to get students to these facilities. As cited above, the annual tax levy for community colleges can be used to pay for transportation services for students within the community college district.

Indirect Funds for Transportation

Medicaid

The United States Department of Health and Human Services (DHHS) provides funding to states for Medicaid, a program of medical assistance for qualified low-income persons and persons with disabilities. States are required to arrange for transportation of beneficiaries to and from medical care. This funding represents another potential revenue source for transit.

Temporary Aid to Needy Families

The Temporary Aid to Needy Families (TANF) program was initiated as part of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 that ends the concept of "lifetime" cash assistance and replaces the Aid to Families with Dependant Children (AFDC) program with TANF. Funding under this program is in the form of block grants from DHHS to each state. TANF funds can be used to provide transportation for individuals covered by its program.

New Mexico's estimated family assistance grant for 1998 is approximately $126 million and is administered by the New Mexico Human Services Department (NMHSD). The State is willing to entertain entering contracts for transportation assistance. Contracts could be structured whereby the NMHSD buys client bus passes or tokens or directly funds a portion of the costs of transit service.

Welfare to Work

USDOL has a two-year program of welfare-to-work grants, which is administered by the USDOL's Employment and Training Administration (ETA) and has a goal to reduce the welfare roles and get people gainfully employed. New Mexico received formula funds of approximately $9.7 million in 1998. Transportation services are an allowable expense that can be funded by these grants, but only when these services are not otherwise available to program participants. These revenues could fund a portion of the cost of transit service.

State Agencies

Several New Mexico state agencies pay for the transportation of their clients to and from providers of services that clients receive under the auspices of the agency. Nothing in the rules would prohibit payment to providers of public transportation.

Human Services Department. The Human Services Department Medical Assistance Division (MAD) provides that clients traveling to and from medical services providers are entitled to payment for transportation by ambulance or other public common carrier. Taxicabs, buses, vans, and cars engaged in providing transportation services are eligible to provide services under the New Mexico MAD program.

The Human Services Department Social Services Division may provide or arrange for reasonable transportation for clients who would otherwise not have access to approved services. Several rules are in effect that provide for transportation for its clients.

The Human Services Department may not place a person in a community work program unless provision is made for the transportation of the person to and from the work site. Presumably, the department's budget allocation is used to pay for such transportation.

State Agency on Aging. The State Agency on Aging's New Mexico Older Americans Programs manual provides that transportation is one of the supportive services to be provided by the agency. As such, the agency provides funds for the purchase of vans used to transfer older persons to and from social services, medical care, meal programs, senior centers, shopping, and recreation. The aim is to make such services accessible to individuals who, because of lack of mobility, would otherwise be unable to participate.

Children, Youth and Families Department. The Children, Youth and Families Department, Office of Managed Care provides transportation for clients in group homes and for its clients in residential treatment centers.

State Department of Education. The State Department of Education Division of Vocational Rehabilitation can pay for transportation of clients for purposes of vocational education or vocational rehabilitation.

Community Development Block Grants

Community Development Block Grant (CDBG) funds originate with the federal United States Department of Housing and Urban Development (HUD). Unlike most federal funding sources, CDBG funds can be used as a local match to other federal funds. The CDBG program provides annual grants that can be used to revitalize neighborhoods, expand affordable housing and economic opportunities, and improve community facilities and services, principally to benefit low- and moderate-income persons. Since transportation is considered a service that benefits the target population, CDBG funds can be used to pay for public transportation operating and capital costs.

CDBG funds are provided directly to entitlement cities, urbanized counties, or to the state government based upon the highest of two formulas. The first formula is based upon poverty, population, overcrowded housing, and age of housing stock. The second formula is based on poverty, population growth lag, and population growth between 1960 and 1990. Entitlement communities are cities with 50,000 or more residents and urbanized counties with populations of at least 200,000, excluding the population of entitled cities.

Las Cruces is an entitled city and directly received $1.2 million in 1998. Transportation is a stated high priority for use of CDBG funds in Las Cruces, although monies have not funded transit related projects thus far.

Smaller cities and counties (non-entitled communities) receive CDBG funds from the state government. Several state agencies and appropriate Councils of Government review and select projects for funding based upon the application, a presentation and other related testimony, and several rating criteria. Rating criteria include need, appropriateness, fiscal capacity, leveraging, citizen participation/planning, feasibility/readiness, cost benefit, and implementation strategy. In 1998, New Mexico received $15.3 million in non-entitlement CDBG monies. Of this amount, Doña Ana County will receive $700,000 in grants for two development projects in 1998.

Transit Initiatives

To implement the Short-Term Transit Plan for Doña Ana County, a Joint Powers Agreement should be negotiated between the participating governmental entities in the county. To ensure an adequate level of funding to finance the Short-Term Transit Plan, several initiatives should be undertaken at the federal, state, and local levels. These initiatives are discussed below.

Governance

The Short-Term Transit Plan for Doña Ana County represents a network of regional transit services that can provide residents with access to the goods, services, and activities of the community. These regional services can be initiated within current legislative authority through a joint powers agreement.

Doña Ana County, the City of Las Cruces, the Town of Mesilla, the City of Hatch, and the City of Sunland Park can enter into a Joint Powers Agreement to fund and implement a regional transit system. The agreement should specify the purpose of the agreement, the method by which the purpose will be accomplished, and the manner in which any power will be exercised under such an agreement. The parties to the agreement should also make provisions as to how funds of the public agencies will be contributed to pay for the joint effort.

The City of Las Cruces should be designated as the administering or "lead agency." The City of Las Cruces already operates RoadRunner Transit, and the city staff has the technical expertise to plan, manage, operate, and maintain transit services and vehicles. The parties to the agreement can, in essence, contract with the City of Las Cruces doing business as RoadRunner Transit to provide specified transit services.

The Joint Powers Agreement may be continued for a definite term or until rescinded or terminated. The participating agencies could, for example set a four-year term for demonstration of the Short-Term Transit Plan. The primary consideration, however, will be the capital investment for vehicles and terminals. The life of transit vehicles is usually 7 to 10 years. The Joint Powers Agreement could include provisions for lease or buy-back of the capital investment if the City of Las Cruces were willing to consider such provisions.

Services do not necessarily have to be delivered by RoadRunner Transit. Under the Joint Powers Agreement, transit services could be delivered by whatever means are most cost-efficient and responsive to the target markets. In the community of Doña Ana or in the Town of Mesilla, the most efficient delivery of services is probably direct operation by RoadRunner Transit. However, in the south county, a more appropriate service provider could be the private company that currently provides school bus transportation for the Gadsden school district--Boone Transportation. In Hatch, a van might be operated by a member of the local community. Under the Joint Powers Agreement, the participating parties can define the role of the City of Las Cruces to manage and administer transit, but RoadRunner Transit can in turn serve as a broker to match transit demand with the most appropriate and most cost-effective transit provider.

The New Mexico Joint Powers Agreement also extends to bi-state opportunities. If authorized by their governing bodies, the participating parties may jointly exercise any power common to the contracting parties even though one or more of the contracting parties may be located outside the state. Texas statutes authorize the municipal transit department for the City of El Paso to agree with another transportation system for the establishment of through routes, joint fares, or transfers of passengers. Although bi-state opportunities are not specifically mentioned, such arrangements are not prohibited. Texas statutes for inter-local agreements are similar to the New Mexico Joint Powers Agreements Act.

Federal Funding Initiatives

The recent passage of TEA-21 brings an increase in the federal funding available for transit. TEA-21 provides significant benefits to the communities of Doña Ana County by increasing the overall urban and rural formula funds, by eliminating the distinction between operating and capital funds for smaller urbanized areas, and by maintaining the formula structure established with ISTEA.

TEA-21 establishes the authorized spending levels on public transit for the next six years. Before the funds can be spent, however, the amounts authorized must be appropriated each year as part of the annual Congressional budgeting process. The amounts authorized under ISTEA were not fully appropriated, resulting in transit systems not receiving the full amount of funds authorized. Constant vigilance is required to ensure the authorized amounts are appropriated.

New Mexico has several elected officials in a position to influence the annual appropriations. U.S. Senator Pete Domenici is chairman of the Senate Budget Committee and serves on the Transportation and Related Agencies Subcommittee of the Appropriations Committee. Senator Domenici is uniquely positioned to influence the annual appropriations so that authorized levels are actually appropriated and to earmark dollars for specific projects benefitting the communities of Doña Ana County. U.S. Senator Jeff Bingaman as Deputy Democratic Whip can lend bipartisan support to Doña Ana County's requests. U.S. Representative Joe Skeem serves on the Appropriations Committee of the House and can help influence appropriations in that chamber.

Discretionary Capital Grants. Section 5309 funds are allocated to areas based upon either a Congressional earmark or a highly competitive evaluation process conducted by the FTA where only a small percentage of requests can be satisfied. Albuquerque has received several earmarks in previous years. Neither Las Cruces or Doña Ana County have applied for discretionary capital monies in recent years.

Doña Ana County has limited transit services for its dispersed, and in many cases, poor residents. One ozone non-attainment area is located within the county. The county is home to the second largest urbanized area in the state, as well as numerous poorly-developed colonias. These circumstances indicate the need for special consideration in transit appropriation. These very needs work against the county when it is being compared to the needs in larger, more densely developed cities around the country. Without special federal aid, the county is too poor to adequately fund a transportation system that meets the needs of its people, especially the need to provide six-day-a-week service for access to jobs.

Congressional earmarks are established annually as part of the federal budgeting process. The New Mexico delegation to Congress should be approached to actively pursue an earmark for implementation of the Short-Term Transit Plan recommendations of the Regional Transit Study for Doña Ana County.

Urbanized Area Formula Study. TEA-21 authorizes the United States Secretary of Transportation to conduct a study on the urbanized area formulas used to apportion the Section 5307 funds. This study is to be completed by December 31, 1999. Under the current formula, funding for smaller urbanized areas is based only on population and population density. Rural funding is based only on rural population. Neither area receives additional funding to reflect the level of transit service provided or its use. Larger cities, however, receive additional funds based upon the level of transit service offered (as measured by revenue vehicle miles, passenger miles, and operating costs).

The New Mexico senators and congressmen should encourage the Secretary to keep in mind the needs of the smaller urbanized areas and rural communities. By their very

nature, these areas do not have high densities that support transit use. Operators in these areas have higher costs to serve the same number of riders since the users are more dispersed. Any formula that rewards higher densities works against small urban and rural areas.

The New Mexico delegation can raise the profile of the issue with the Secretary and request that density be dropped as a funding consideration for the small urban areas. For the small urban areas, ridership should be substituted for density. In rural areas, the funding formula should take into account ridership in addition to population. Such a change will reward transit operators that are more successful in attracting riders.

Federal Formula Funding for Sunland Park. The City of Sunland Park is included within the urbanized area boundary for the city of El Paso, Texas. This inclusion increases the level of Section 5307 funds provided to El Paso by increasing the population of the area. As discussed previously, the population and population density of Sunland Park generate approximately $24,000 in additional Section 5307 funds for El Paso annually. These funds should be made available by the El Paso MPO to Sunland Park for the start and continued operation of transit. After transit service is implemented, the allocation for Section 5307 funds should be adjusted to reflect additional dollars for transit productivity.

Sunland Park was designated a marginal non-attainment area for ozone in 1995. With this designation, Sunland Park began generating approximately $100,000 per year in CMAQ funds for the State of New Mexico. None of these funds have been made available to the City so far.

The integral role these funds play in expanding service to Sunland Park needs to be stressed to all parties. Service in Sunland Park benefits the entire region by improving access to El Paso for work, shopping and other trips. Using public transit for this travel instead of private automobiles reduces vehicle emissions in the area. The proposed transit service benefits residents of Doña Ana County by providing access to basic needs and to opportunities for economic advancement.

New Mexico Funding Initiatives

Several opportunities exist to increase transit funding for Doña Ana County at the New Mexico state level. One opportunity is to allocate more of the existing federal monies to the county in proportion to the population. A second opportunity is the direct state funding of transit.

Allocation of Federal Funds to Doña Ana County. As pointed out previously, Doña Ana County does not directly receive federal transit money. Instead, all federal funds provided through the Section 5307, 5309, 5310, and 5311 programs are appropriated by FTA to the governor of New Mexico. The governor has appointed NMSHTD as the agency responsible for passing on Section 5307 and 5309 funds and for distributing Section 5310, Section 5311, and CMAQ funds. Doña Ana County must pursue requests for the distributed funds through NMSHTD

Las Cruces does receive the Section 5307 funds from NMSHTD that are authorized based upon the city's population and density. Doña Ana County has not applied for, received, or used other funds that the federal funding formulas indicate are generated as a result of the population in the county. Part of the low funding levels in past years can be attributed to the lack of a transit plan for the county — the State decides to allocate funds based upon the requests received.

Doña Ana County is the second most populous county in the state and is entitled to a higher funding level than has been received in the past. Doña Ana County has 5.3 percent of the rural population of the state, but did not receive any rural funds. The county has 8.6 percent of the elderly and persons with disabilities population, but did not receive any Section 5310 funds. The county has 8.9 percent of the total population of the state, but did not receive any of the CMAQ funds appropriated to New Mexico even though the only non-attainment area in the state is located in the county. Although distribution of FTA funds on the basis of population is not the only approach available, it is a reasonable way to approximate an equitable allocation.

The Short-Term Transit Plan for Doña Ana County demonstrates the need and use for federal transit funds. Doña Ana County, the City of Las Cruces, and the other municipalities in the county should work with NMSHTD to craft a funding plan that distributes funds equitably taking into consideration the population of the county and the transit need identified in the region. **Table 3-2** illustrates the minimum funding levels for which Doña Ana county is eligible based upon FY 1998 funding levels. Taking into consideration the lack of funding in past years through some programs for which Doña Ana County has been eligible and the extra costs that are incurred in beginning new service, the county should receive a higher level of funding than that outlined in **Table 3-2**. With the higher funding levels in all categories under the provisions of TEA-21, these funding levels should proportionally increase in the next fiscal year.

Public officials representing the local jurisdictions in Doña Ana County should ensure the county receives distribution of federal dollars from the state in proportion to the population and in recognition of transit need in the county. Funds must be secured immediately in order to assure that the Short-Term Transit Plan can be implemented in the next fiscal year.

State Funding for Transit. The State of New Mexico does not directly provide funds to support public transportation in the state. This lack of funding results in local jurisdictions having the responsibility to fully fund the match required for federal grants. If this match can not be met from local revenues, available federal dollars may be allocated elsewhere, resulting in the county and the state not receiving all of the funds to which they are entitled.

Several peer states to New Mexico provide substantial support for public transportation within their boundaries. A brief overview of four state programs

follows.

Arizona. Arizona has one medium and four small urbanized areas. Although Arizona has no dedicated taxes for transit, the State has previously funded one-time Air Quality Demonstration projects through the State Air Quality Program and has pending legislation to dedicate a portion of the motor vehicle license tax (approximately $9 million per year) to transit projects throughout the state. These funds would be allocated to communities based on population.

The State operates a state lottery that generates $23 million annually. About one-third of lottery revenue is allocated to the Local Transportation Assistance Fund (LTAF). Under LTAF, each incorporated town and city in Arizona applies for and receives a portion (based on population) of LTAF funds annually. The monies are used for a variety of transportation-related purposes throughout the state, such as mass transportation programs. For cities with populations greater than 250,000, these funds must be spent on transit. For example, the city of Phoenix (more than two million population) receives approximately $7 million annually, which is normally used for transit operating expenses.

Oklahoma. The State of Oklahoma, with two medium and two small urbanized areas, allocates $850,000 annually to support rural transportation funding. Legislation stipulates that the first $850,000 from gasoline tax revenues goes into the Transit Revolving Fund. Legislation also stipulates that the first 5 percent targets new starts or expansions, 40 percent goes to the county areas of Oklahoma City and Tulsa, and the remaining 55 percent is distributed among Oklahoma's 17 rural transportation properties based on a formula that considers revenue vehicle miles from the previous operating year. These funds can be used to "promote and enhance public transportation, which includes such purposes as operations, matching funds, and capital expenses."

Texas. The State of Texas has three large, four medium, and 25 small urbanized areas. Of the 254 counties in Texas, only five do not have any public transportation services. The Texas Department of Transportation (TxDOT) administers a number of federal grant programs as well as state dollars appropriated for transit projects through the state Public Transportation Fund (PTF). Established in 1975, the PTF is funded by the Texas Legislature each biennium. Originally created to be used by large regional transit authorities as local match for federal grants, PTF distributions were dedicated to smaller municipal systems and rural transit programs in 1985.

In the 1998-1999 biennium, rural transit operators and small urbanized transit systems in smaller communities (defined as those with less than 500,000 population) will share $50.5 million through PTF, with the small urbanized areas receiving $17.6 million and the balance going to rural areas. This level represents an increase of over 20 percent from the previous biennium commitment of $42 million. The Texas Legislature has increased its funding of rural and small urbanized area transit systems each of the last four biennia, from $9.6 million in the 1992-1993 biennium to the $50.5 in the current biennium. This 426 percent increase over the past decade reflects the strong

commitment of the State of Texas to strengthen its small urbanized and rural communities. A portion of PTF funds is set aside each year for Commission Selected Projects that provide discretionary funds for projects through a competitive selection process. Projects are selected and recommended for funding to the TxDOT Commission by the Texas Department of Transportation's Public Transportation Division.

The source of PTF funds has changed over the years. Originally funded only through the state's general fund, the PTF has more recently been funded through a combination of the general revenue, state highway funds from gasoline taxes, and oil overcharge funds.

Regional transit authorities in Austin, Corpus Christi, Dallas, Fort Worth, Houston, and San Antonio and the municipal transit department in El Paso are funded through a local option sales tax. These large urban systems do not receive funding from the State of Texas. The residents of the city of El Paso pay a $0.0025 city sales tax dedicated to transit.

Washington. The State of Washington, which has one large, two medium, and six small urbanized areas, funds public transportation through a variety of sources, the principal source being the motor vehicle excise tax (MVET). This tax is based upon a percentage of the value of the motor vehicle. In the 1997-99 biennium, the tax is estimated to generate a total of $1.6 billion, with $395 million going to support transit districts in matching funds, $177 million to ferry service, $20 million for public transportation grants, $14 million for high capacity transit projects, and the remainder for various other programs.

The largest portion of the MVET tax is used to fund transit services in the state's transit districts. The MVET funds are allocated to the transit districts on a matching fund basis. The MVET funds match the local funds on a one-to-one basis. For every local transit dollar raised, an equivalent MVET amount is provided. The main local funding source for a match is sales and use tax.

Due to the lack of a local match, some MVET funds are set aside for public transit which are not distributed. These funds are appropriated to the Transportation Improvement Board, which is composed of 21 members representing cities, counties, the State, and private interests. The board administers several transportation funds, including the Public Transportation System Account and the Central Puget Sound (Seattle area) Public Transportation Account. The latter two accounts provide grant funding with no local match requirement. The grants can be used for any transit-related projects. In the 1997-99 biennium, approximately $2.7 million is available in the Public Transportation System Account, and $17.6 million is available in the Central Puget Sound Public Transportation Account. Funds are distributed based upon a competitive process, and the needs always surpass the funds available.

The state programs described above present a variety of sources for funding transit and differing rules for the eligible recipients. Some states use sales taxes, some use

motor vehicle taxes, and some use other sources. Some states divide their funding between urban and rural areas fairly evenly while others provide more funding to one or the other. All of the states share a commitment to invest in public transit for their citizens and to provide supplemental funding to the revenues available at the local level.

New Mexico state officials should establish designated state funding for public transportation services. This funding can be based upon dedicating existing revenues to supporting transit, or if the political and economic climate allows, new revenue sources can be implemented. The funding should be divided between urban and rural transit operators to benefit all residents of the state. As the success of the program is demonstrated and legislators can see their constituents' benefits, the funding levels should increase. The specific source of the funds is not as important as the initiation by the Legislature of dedicated state funding for public transportation.

If the State of New Mexico were to initiate funding of transit for the Short-Term Transit Plan, funding could be provided for operating expenses, capital expenses, or both. For example, to fund 50 percent of the operating deficit for the Short-Term Transit Plan which would remain after all fare revenue and federal funding was applied, the investment would be approximately $153,000. Or to supply Doña Ana County with a one-time contribution toward 50 percent of the capital expense remaining after all federal funds were applied, the investment would be $214,000. Any contributions made by the state toward the Short-Term Transit Plan or any other transit plan would aid municipalities and/or counties in achieving the required local match for federal funding.

Local Funding Initiatives

New taxes specifically dedicated to transit are not desirable in the current economic climate in Doña Ana County. Therefore, a new tax to fund regional transit services is not recommended. Service levels for the Short-Term Transit Plan are modest. Federal funds should be available to reduce the level of local share required. The total dollars required from local resources are reasonable. There are several opportunities to fund the local share from existing resources. For example, a municipality may designate revenues from the municipal gross receipts tax to public transportation. Recent legislation (43rd Legislature, Second Session, 1998) permits a municipality or county to assess an infrastructure gross receipts tax to fund transit projects. Gasoline taxes may be used for county and municipal public transportation. CDBG funds can be used to pay for public transportation operating and capital costs.

Official designation of existing revenue sources to fund transit should be pursued by Doña Ana County and each of the municipalities. A designated funding source provides a more secure financial footing for transit than annually soliciting funds from the general revenues of the cities and county. A constant, known revenue source permits the transit operator to create reasonable budgets and to expand in an orderly fashion.

Land-Use and Transit Planning Guidelines

To enhance the ability of public transit to offer a productive and successful service, land use regulations in the cities and counties should be written to support transit services. Sometimes existing regulations can have a negative effect on transit ridership by subtly encouraging the use of private automobiles and discouraging the use of transit.

To benefit transit users the most, regulations should be designed to promote pedestrian activity. Transit patrons almost always walk on both ends of their trip. By fostering a more pedestrian-friendly environment, transit ridership will increase as riders can more easily travel to and from the bus.

The land-use regulations having negative transit effects most often appear in regulations that segregate different land uses into different areas and prohibit mixed uses; in regulations that affect building orientation and setback requirements; in regulations that establish minimum parking requirements; or in the lack of regulations that promote increased pedestrian accessibility.

Segregated Land-Use

Regulations that require land uses to be segregated into different areas have a negative effect on the use of public transit. Strictly separating residential from office or from commercial uses requires that individuals travel further from home to work or to shop. Land use regulations should permit mixed-use development, where residential, office, and retail uses coexist. Such developments create a more lively street scape that results in a better transit environment.

In office environments, the provision of retail and restaurant locations should be encouraged. Individuals are usually more willing to use transit if they do not feel they are trapped at work during the day. Providing retail shopping and restaurants within a convenient walk from work allows people to take the bus to work and still conduct their personal business during the day.

The principal objective of these regulation changes is to reduce the need to use a private automobile. When individuals automatically believe they must use a car for every trip purpose, they never consider using public transit, even when transit can provide a convenient alternative.

Building Orientation and Setback

The objective of changing building locations and setbacks is to minimize pedestrian travel distances and to provide visible and inviting access to buildings from the street. Public transit operates along public rights-of-way, and the provision of an attractive walk from the bus stop into a building or shop will encourage the use of public transportation.

The practice of locating a building at the far end of a large surface lot is an extreme example of a site layout that discourages transit use. The transit patron's walk from the street-side stop is no closer than the parking space furthest away. No protection from the elements is provided along the way, exposing the patron to rain and extremes of temperature. At shopping locations, this building placement requires transit patrons to carry their packages long distances across a sea of parking. The ability to provide shelter and seating at the bus stop can be limited if adequate setbacks from the street are not provided.

A better approach from the perspective of encouraging transit use is to provide parking areas at the side or rear of the building. Buildings should be designed with a street "face" and a parking "face" that is equally inviting. Having building overhangs, display windows, and street-level activity results in an attractive and interesting pedestrian environment that encourages walking. Distances seem to be shorter when the walking environment is more lively.

Minimum Parking Requirements

Establishing minimum parking requirements can have the positive effect of reducing spillover parking into residential areas. In a commercial or business district, such regulations may not be required if adequate parking is already available. Requiring the construction of more parking when surplus spaces are available perpetuates the convenience of the automobile over public transit.

Similar to regulations specifying minimum parking requirements is the design standard used by many developers to build enough parking spaces for the 95th percentile day. In other words, enough parking is provided to handle all but the busiest days of the year. Such a practice results in vast amounts of unused parking space for the majority of the year. When coupled with the practice of locating the buildings at the far end of the parking from the street, the patron's difficulties are doubled — the destination is located as far from the street as possible, at the other end of a parking area that is larger than it needs to be.

A better approach is to avoid blanket minimum parking requirements and to tailor the requirements to the specific areas. In downtowns and other business developments, no minimum should be required. Instead, a maximum may be more appropriate. Developers should be encouraged not to overbuild their parking lots. Incentives can be offered instead of penalties. A developer that designs layouts in a way that encourages transit use reduces the parking requirement.

Available Guidelines

Several land-use guidelines have been prepared that already incorporate language encouraging transit-friendly development. One example from the American Planning Association is the *Planning Advisory Service (PAS) Report #468: Creating Transit-Supportive Land-Use Regulations*. This report provides specific wording for various regulations and includes examples of jurisdictions that have successfully implemented the requirements.

Appendix

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COST ESTIMATE ASSUMPTIONS

	Short-Term	Mid-Term	Long-Term
Time Line	1 - 4 Years	5 -7 Years	8 - 10 Years
Operating Cost			
Operating cost/hr Transit	$39.16	$41.72	$43.76
Passenger Fares			
Transit fare per zone	$0.50	$0.60	$0.75
Discount fare per zone	$0.25	$0.30	$0.35
- Seniors, Disabled, Youths			
Flat fare	$1.00	$1.25	$1.50
- Mesilla Tourist			
ADA fare per zone	$1.00	$1.20	$1.50
Vehicle Capital Cost			
Cost per 25', 20 passenger bus	$71,200	$75,800	$79,500
Cost per 30', 28 passenger bus	$90,500	$95,000	$99,500
Cost per ADA paratransit vehicle	$45,700	$48,700	$51,100
Cost per TeleRide vehicle	$42,800	$45,000	$47,200
Cost per 15 passenger van	$35,000	$36,700	$38,500
Terminal Capital Cost			
Cost per small transfer center	$10,000	$10,500	$11,000
Cost per med transfer center	$20,000	$21,000	$22,000
Cost per large transfer station	$100,000	$105,000	$110,000

VEHICLE ASSIGNMENTS

	Type	Cost	Short-Term	Mid-Term	Long-Term
Bus 1	30'	$90,500	Dona Ana to Las Cruces	Dona Ana to Las Cruces	Dona Ana to Las Cruces
Bus 2	ADA	$22,850	Dona Ana to Las Cruces Mesilla to Las Cruces	Dona Ana to Las Cruces Mesilla to Las Cruces	*Retired*
Bus 3	VAN	$35,000	Hatch to Las Cruces Mesilla to Las Cruces Mesilla Tourist	Hatch to Las Cruces	*Retired*
Bus 4	25'	$71,200	South County to Las Cruces Anthony to Las Cruces	South County to Las Cruces Anthony to Las Cruces	South County to Las Cruces Anthony to Las Cruces
Bus 5	25'	$71,200	Sunland Park to El Paso	Sunland Park to El Paso	Sunland Park to El Paso
Bus 6	30'	$95,000		Dona Ana to Las Cruces	Dona Ana to Las Cruces
Bus 7	25'	$75,800		Mesilla to Las Cruces Mesilla Tourist	Mesilla to Las Cruces Mesilla Tourist
Bus 8	DR	$45,000		East Mesa	East Mesa
Bus 9	VAN	$38,500			Hatch to Las Cruces
Bus 10	ADA	$25,550			Dona Ana to Las Cruces Mesilla to Las Cruces
Bus 11	VAN	$38,500			Chaparral to Northgate

Type Legend:

25'	25', 20 passenger bus
30'	30', 28 passenger bus
ADA	ADA vehicle
DR	Demand response vehicle
VAN	15 passenger van

TRANSIT TERMINALS

	Type	Cost	Short-Term	Mid-Term	Long-Term
Terminal 1	MED	$20,000	Dona Ana		
Terminal 2	MED	$20,000	Mesilla		
Terminal 3	SM	$10,000	Salem		
Terminal 4	SM	$10,000	Hatch		
Terminal 5	SM	$10,000	Rincon		
Terminal 6	SM	$10,000	Radium Springs		
Terminal 7	LRG	$100,000	Crossroads/Mesa		
Terminal 8	SM	$10,000	Sunland Park		
Terminal 9	SM	$10,000	La Union		
Terminal 10	SM	$10,000	Chamberino		
Terminal 11	SM	$10,000	La Mesa		
Terminal 12	SM	$10,000	San Miguel		
Terminal 13	SM	$10,000	Mesquite		
Terminal 14	SM	$10,000	Anthony		
Terminal 15	SM	$10,000	Berino		
Terminal 16	SM	$10,000	Vado		
Terminal 17	MED	$21,000		East Mesa	
Terminal 18	MED	$22,000			Chaparral

Type Legend:

SM	Small transfer center
MED	Medium transfer center
LRG	Large transfer station

DONA ANA TO LAS CRUCES

	Short-Term	Mid-Term	Long-Term
Route type	Fixed	Fixed	Fixed
Miles	12.0	12.0	12.0
Mph	19.2	12.9	12.9
One way trip time (min)	56	56	56
Layover/recovery (min)	4	4	4
Total cycle time (min)	120	120	120
Headway	60	30/60	30
# of buses	1	2	2
Vehicle capital cost	$90,500	$95,000	$0
Operating hours	6:00 am - 6:00 pm	6:00 am - 7:30 pm	6:00 am - 7:30 pm
# Hours of operation/day	12	18	24
# One way trips/day	12	18	24
Operating days/week	6	6	6
Operating days/year	306	306	306
Operating cost/day	$470	$751	$1,050
Operating cost/year	$143,820	$229,806	$321,300
Passengers/mile wkday	0.53	0.71	0.87
Passengers/mile wkend	0.35	0.46	0.57
Passengers/trip wkday	6.38	8.45	10.47
Passengers/hour wkday	6.38	8.45	10.47
Expected ridership/day	153	304	503
Expected ridership/day wkend	101	199	326
Expected ridership/year	44,166	87,634	144,763
Max fare	$0.50	$0.60	$0.75
Farebox recovery	7%	10%	14%
Fare revenue	$20,825	$44,667	$91,143
Operating deficit	$122,996	$185,139	$230,157
ADA operating cost/year	$33,508	$37,847	$42,074
ADA vehicle cost	$11,425	$0	$12,775
ADA expected ridership/year	824	874	928
ADA max fare	$1.00	$1.20	$1.50
ADA farebox recovery	2%	3%	3%
ADA revenue	$824	$1,049	$1,392
ADA operating deficit	$32,684	$36,798	$40,682
Total operating cost/year	$177,328	$267,653	$363,374
Total fare revenue	$21,649	$45,716	$92,535
Total operating deficit	$155,680	$221,937	$270,839
Total capital cost	$101,925	$95,000	$12,775

MESILLA TO LAS CRUCES

	Short-Term	Mid-Term	Long-Term
Route type	Fixed	Fixed	Fixed
Miles	6.0	6.0	6.0
Mph	12.0	12.0	12.0
One way trip time (min)	30	30	30
Layover/recovery (min)	0	0	0
Total cycle time (min)	60	60	60
Headway	60	60	60
# of buses	1	1	1
Vehicle capital cost	$17,500	$58,300	$0
Operating hours	8:00 am - 6:00 pm	8:00 am - 6:00 pm	8:00 am - 6:00 pm
# Hours of operation/day	10	10	10
# One way trips/day	20	20	20
Operating days/week	3	3	3
Operating days/year	153	153	153
Operating cost/day	$392	$417	$438
Operating cost/year	$59,910	$63,837	$66,950
Passengers/mile wkday	0.81	1.32	1.91
Passengers/mile wkend	n/a	n/a	n/a
Passengers/trip wkday	4.85	7.94	11.45
Passengers/hour wkday	9.70	15.89	22.91
Expected ridership/day	97	159	229
Expected ridership/day wkend	n/a	n/a	n/a
Expected ridership/year	14,841	24,310	35,052
Max fare	$0.50	$0.60	$0.75
Farebox recovery	12%	20%	34%
Fare revenue	$6,938	$12,668	$22,602
Operating deficit	$52,971	$51,169	$44,349
ADA operating cost/year	$11,169	$12,616	$14,025
ADA vehicle cost	$11,425	$0	$12,775
ADA expected ridership/year	857	908	963
ADA max fare	$1.00	$1.20	$1.50
ADA farebox recovery	8%	9%	10%
ADA revenue	$857	$1,090	$1,444
ADA operating deficit	$10,312	$11,525	$12,580
Total operating cost/year	$71,079	$76,453	$80,975
Total fare revenue	$7,795	$13,758	$24,046
Total operating deficit	$63,283	$62,694	$56,929
Total capital cost	$28,925	$58,300	$12,775

MESILLA TOURIST

	Short-Term	Mid-Term	Long-Term
Route type	Flex	Flex	Flex
Miles	6.0	6.0	6.0
Mph	12.0	12.0	12.0
One way trip time (min)	30	30	30
Layover/recovery (min)	0	0	0
Total cycle time (min)	60	60	60
Headway	60	60	60
# of buses	1	1	1
Vehicle capital cost	$0	$0	$0
Operating hours	9:00 am - 5:00 pm	9:00 am - 5:00 pm	9:00 am - 5:00 pm
# Hours of operation/day	8	8	8
# One way trips/day	16	16	16
Operating days/week	2	2	2
Operating days/year	102	102	102
Operating cost/day	$313	$334	$350
Operating cost/year	$31,952	$34,046	$35,707
Passengers/mile wkday	n/a	n/a	n/a
Passengers/mile wkend	0.66	0.75	0.87
Passengers/trip wkday	3.94	4.53	5.21
Passengers/hour wkday	7.88	9.06	10.41
Expected ridership/day	n/a	n/a	n/a
Expected ridership/day wkend	63	72	83
Expected ridership/year	6,426	7,390	8,498
Max fare	$1.00	$1.25	$1.50
Farebox recovery	20%	27%	36%
Fare revenue	$6,426	$9,237	$12,748
Operating deficit	$25,526	$24,809	$22,959

HATCH TO LAS CRUCES

	Short-Term	Mid-Term	Long-Term
Route Type	Flex	Flex	Flex
Miles	55.3	55.3	55.3
Mph	32.6	32.6	32.6
One way trip time (min)	112	112	112
Layover/recovery (min)	8	8	8
Total cycle time (min)	240	240	240
Headway	240	240	240
# of buses	1	1	1
Vehicle capital cost	$17,500	$17,500	$38,500
Operating hours	5:30 am - 5:30 pm	7:00 am - 7:00 pm	7:00 am - 7:00 pm
# Hours of operation/day	12	12	12
# One way trips/day	4	6	6
Operating days/week	2	3	3
Operating days/year	102	153	153
Operating cost/day	$470	$501	$525
Operating cost/year	$47,928	$76,604	$80,340
Passengers/mile wkday	0.10	0.08	0.11
Passengers/mile wkend	n/a	n/a	n/a
Passengers/trip wkday	5.29	4.28	6.08
Passengers/hour wkday	1.76	2.14	3.04
Expected ridership/day	21	26	36
Expected ridership/day wkend	n/a	n/a	n/a
Expected ridership/year	2,202	3,933	5,580
Max fare	$3.00	$3.60	$4.50
Farebox recovery	8%	10%	17%
Fare revenue	$3,883	$7,677	$13,614
Operating deficit	$44,045	$68,928	$66,727

SUNLAND PARK TO EL PASO

	Short-Term	Mid-Term	Long-Term
Route type	Flex	Flex	Flex
Miles	9.5	9.5	10.7
Mph	23.8	23.8	24.3
One way trip time (min)	26	26	29
Layover/recovery (min)	4	4	1
Total cycle time (min)	60	60	60
Headway	60	60	60
# of buses	1	1	1
Vehicle capital cost	$71,200	$0	$0
Operating hours	6:30 am - 6:30 pm	6:00 am - 6:00 pm	6:00 am - 6:00 pm
# Hours of operation/day	12	12	12
# One way trips/day	18	24	24
Operating days/week	6	6	6
Operating days/year	306	306	306
Operating cost/day	$470	$501	$525
Operating cost/year	$143,783	$153,209	$160,681
Passengers/mile wkday	0.89	1.30	1.73
Passengers/mile wkend	0.58	0.85	1.14
Passengers/trip wkday	8.44	12.32	18.50
Passengers/hour wkday	12.67	24.64	37.00
Expected ridership/day	152	296	444
Expected ridership/day wkend	100	193	292
Expected ridership/year	43,860	85,310	128,113
Max fare	$0.50	$0.60	$0.75
Farebox recovery	14%	28%	49%
Fare revenue	$20,757	$42,843	$79,379
Operating deficit	$123,026	$110,366	$81,302

PROPOSED DONA ANA COUNTY ROUTE/SUN METRO CONNECTIONS

Connection Point Crossroads / Mesa

ROUTE(S) #	NAME OF ROUTE(S)	SERVICE DESCRIPTION	DAYS	FREQUENCY	HOURS
15	Doniphan via Mesa	Local service to downtown via Mesa EPCC Northwest Campus Doniphan to Borderland	M-F Sat Sun	60 min 60 min 60 min	5:30 am - 9:00 pm 6:30 am - 9:00 pm 7:00 am - 8:00 pm
16	Sunland/Buena Visata	Local service to Downtown via Paisano, Mesa south of Executive Dr., Sunland Sunland Park Mall, Westside Dr., to NM State Line	M-F Sat	2 hrs 2 hrs	7:00 am - 6:00 pm 7:30 am - 5:30 pm
18	Westside Express	Express to downtown via Mesa to Resler to IH-10	M-F	30 min 30 min	6:00 am - 8:00 pm 4:15 am - 6:15 pm

SOUTH COUNTY TO LAS CRUCES

	Short-Term	Mid-Term	Long-Term
Route type	Flex	Flex	Flex
Miles	49.2	49.2	55.2
Mph	24.2	24.2	24.7
One way trip time (min)	135	135	134
Layover/recovery (min)	0	0	1
Total cycle time (min)	270	270	270
Headway	270	270	270
# of buses	1	1	1
Vehicle capital cost	$35,600	$0	$0
Operating hours	6:30 am - 6:30 pm	5:45 am - 7:15 pm	5:45 am - 7:15 am
# Hours of operation/day	12	14	14
# One way trips/day	4	6	6
Operating days/week	2	3	3
Operating days/year	102	153	153
Operating cost/day	$470	$563	$613
Operating cost/year	$47,928	$86,180	$93,730
Passengers/mile wkday	0.23	0.20	0.27
Passengers/mile wkend	n/a	n/a	n/a
Passengers/trip wkday	11.23	9.85	14.79
Passengers/hour wkday	3.74	4.38	6.34
Expected ridership/day	45	59	89
Expected ridership/day wkend	n/a	n/a	n/a
Expected ridership/year	4,581	9,039	13,577
Max fare	$3.50	$4.20	$5.25
Farebox recovery	15%	18%	29%
Fare revenue	$7,355	$15,931	$27,556
Operating deficit	$40,573	$70,249	$66,174

ANTHONY TO LAS CRUCES

	Short-Term	Mid-Term	Long-Term
Route type	Flex	Flex	Flex
Miles	32.9	32.9	32.9
Mph	28.7	28.7	28.7
One way trip time (min)	76	77	77
Layover/recovery (min)	14	13	13
Total cycle time (min)	180	180	180
Headway	180	180	180
# of buses	1	1	1
Vehicle capital cost	$35,600	$0	$0
Operating hours	6:30 am - 6:30 pm	6:30 am - 6:30 pm	6:30 am - 6:30 pm
# Hours of operation/day	12	12	12
# One way trips/day	6	8	8
Operating days/week	2	3	3
Operating days/year	102	153	153
Operating cost/day	$470	$501	$525
Operating cost/year	$47,928	$76,604	$80,340
Passengers/mile wkday	0.25	0.24	0.36
Passengers/mile wkend	n/a	n/a	n/a
Passengers/trip wkday	8.08	7.96	11.96
Passengers/hour wkday	4.04	5.31	7.97
Expected ridership/day	48	64	96
Expected ridership/day wkend	n/a	n/a	n/a
Expected ridership/year	4,945	9,746	14,637
Max fare	$2.50	$3.00	$3.75
Farebox recovery	12%	15%	27%
Fare revenue	$5,527	$11,769	$21,821
Operating deficit	$42,401	$64,835	$58,520

EAST MESA

	Mid-Term	Long-Term
Route type	Demand Response	Demand Response
Miles	n/a	n/a
Mph	n/a	n/a
One way trip time (min)	n/a	n/a
Layover/recovery (min)	n/a	n/a
Total cycle time (min)	n/a	n/a
Headway	n/a	n/a
# of buses	1	1
Vehicle capital cost	$45,000	$0
Operating hours	7:00 am - 7:00 pm	7:00 am - 7:00 pm
# Hours of operation/day	12	12
# One way trips/day	n/a	n/a
Operating days/week	5	6
Operating days/year	255	306
Operating cost/day	$363	$381
Operating cost/year	$92,658	$116,612
Passengers/mile wkday	0.40	0.60
Passengers/mile wkend	n/a	0.40
Passengers/trip wkday	n/a	n/a
Passengers/hour wkday	4.00	6.00
Expected ridership/day	48	72
Expected ridership/day wkend	n/a	48
Expected ridership/year	12,243	20,808
Max fare	$0.60	$0.75
Farebox recovery	7%	11%
Fare revenue	$6,189	$13,009
Operating Deficit	$86,469	$103,603

CHAPARRAL TO NORTHGATE

	Long-Term
Route type	Flex
Miles	10.2
Mph	23.95
One way trip time (min)	28
Layover/recovery (min)	2
Total cycle time (min)	60
Headway	60
# of buses	1
Vehicle capital cost	$38,500
Operating hours	7:00 am - 6:00 pm
# Hours of operation/day	11
# One way trips/day	22
Operating days/week	6
Operating days/year	306
Operating cost/day	$481
Operating cost/year	$147,291
Passengers/Mile wkday	0.24
Passengers/Mile wkend	0.12
Passengers/trip wkday	2.41
Passengers/hour wkday	4.82
Expected ridership/day	53
Expected ridership/day wkend	28
Expected ridership/year	14,949
Max fare	$0.75
Farebox recovery	6%
Fare revenue	$9,292
Operating Deficit	$137,999

PROPOSED DONA ANA COUNTY ROUTE/SUN METRO CONNECTIONS

Connection Point Northgate Transit Center

7	Northeast/ Lower Valley	Bassest Center, Cielo Vista Mall North Loop, Alameda	M-F Sat Sun	50 min 55 min 65 min	6:00 am - 6:00 pm 5:30 am - 5:30 pm 10:00 am - 6:00 pm
35	North Park via Dyer	Dyer	M-F	30 min 30 min 30 min	6:00 am - 10:00 pm 6:00 am - 8:00 pm 8:00 am - 8:00 pm
40	North Hills via Rushing	Rushing / MLK	M-F	60 min 60 min 60 min	6:00 am - 10:00 pm 6:00 am - 8:00 pm 8:00 am - 8:00 pm
41	North Park via Piedras	Beaumont Hospital	M-F	30 min 60 min 60 min	6:00 am - 10:00 pm 6:00 am - 8:00 pm 8:00 am - 8:00 pm
42	Northeast Connector LTD	Express to Downtown	M-F Sat Sun	15 min 30 min 60 min	6:00 am - 10:00 pm 6:00 am - 8:00 pm 8:00 am - 6:00 pm
43	Shearman Park via Dyer	Dyer , Hondo Pass	M-Sun	60 min	
44	S. Haggerty via McCombs	McCombs	M-Sun	60 min	
45	Northeast Circulator via McC.	Rushfair Shopping Center, EPCC TMtn	M-Sat	60 min	
46	Northeast Circulator/Rushing	Rushfair Shopping Center, EPCC TMtn	M-Sat	60 min	

NON-DISCOUNTED FARES - Mid Term

Dona Ana to Las Cruces

To:	Dona Ana	Las Cruces
From:		
Dona Ana		$0.60
Las Cruces	$0.60	

Mesilla to Las Cruces

To:	Mesilla	Las Cruces
From:		
Mesilla		$0.60
Las Cruces	$0.60	

Mesilla Tourist

To:	Mesilla	Las Cruces
From:		
Mesilla		$1.25
Las Cruces	$1.25	

Hatch to Las Cruces

To:	Salem	Hatch	Rincon	Rad Springs	Las Cruces
From:					
Salem		$0.60	$1.20	$2.40	$3.60
Hatch	$0.60		$0.60	$1.80	$3.00
Rincon	$1.20	$0.60		$1.20	$2.40
Rad Springs	$2.40	$1.80	$1.20		$1.20
Las Cruces	$3.60	$3.00	$2.40	$1.20	

Sunland Park to El Paso

To:	Sunland Park	El Paso
From:		
Sunland Park		$0.60
El Paso	$0.60	

NON-DISCOUNTED FARES - Mid Term

South County to Las Cruces

To:	Xroads/Mesa	La Union	Chamberino	La Mesa	San Miguel	Mesquite	Las Cruces
From:							
Xroads/Mesa		$0.60	$1.20	$1.80	$2.40	$3.00	$4.20
La Union	$0.60		$0.60	$1.20	$1.80	$2.40	$3.60
Chamberino	$1.20	$0.60		$0.60	$1.20	$1.80	$3.00
La Mesa	$1.80	$1.20	$0.60		$0.60	$1.20	$2.40
San Miguel	$2.40	$1.80	$1.20	$0.60		$0.60	$1.80
Mesquite	$3.00	$2.40	$1.80	$1.20	$0.60		$1.20
Las Cruces	$4.20	$3.60	$3.00	$2.40	$1.80	$1.20	

Anthony to Las Cruces

To:	Anthony	Berino	Vado	Mesquite	Las Cruces
From:					
Anthony		$0.60	$1.20	$1.80	$3.00
Berino	$0.60		$0.60	$1.20	$2.40
Vado	$1.20	$0.60		$0.60	$1.80
Mesquite	$1.80	$1.20	$0.60		$1.20
Las Cruces	$3.00	$2.40	$1.80	$1.20	

East Mesa

To:	East Mesa	Las Cruces
From:		
Sunland Park		$0.60
Las Cruces	$0.60	

NON-DISCOUNTED FARES - Long Term

Dona Ana to Las Cruces

To:	Dona Ana	Las Cruces
From:		
Dona Ana		$0.75
Las Cruces	$0.75	

Mesilla to Las Cruces

To:	Mesilla	Las Cruces
From:		
Mesilla		$0.75
Las Cruces	$0.75	

Mesilla Tourist

To:	Mesilla	Las Cruces
From:		
Mesilla		$1.50
Las Cruces	$1.50	

Hatch to Las Cruces

To:	Salem	Hatch	Rincon	Radium Spring	Las Cruces
From:					
Salem		$0.75	$1.50	$3.00	$4.50
Hatch	$0.75		$0.75	$2.25	$3.75
Rincon	$1.50	$0.75		$1.50	$3.00
Radium Spring	$3.00	$2.25	$1.50		$1.50
Las Cruces	$4.50	$3.75	$3.00	$1.50	

Sunland Park to El Paso

To:	Sunland Park	El Paso
From:		
Sunland Park		$0.75
El Paso	$0.75	

NON-DISCOUNTED FARES - Long Term

South County to Las Cruces

To:	Xroads/Mesa	La Union	Chamberino	La Mesa	San Miguel	Mesquite	Las Cruces
From:							
Xroads/Mesa		$0.75	$1.50	$2.25	$3.00	$3.75	$5.25
La Union	$0.75		$0.75	$1.50	$2.25	$3.00	$4.50
Chamberino	$1.50	$0.75		$0.75	$1.50	$2.25	$3.75
La Mesa	$2.25	$1.50	$0.75		$0.75	$1.50	$3.00
San Miguel	$3.00	$2.25	$1.50	$0.75		$0.75	$2.25
Mesquite	$3.75	$3.00	$2.25	$1.50	$0.75		$1.50
Las Cruces	$5.25	$4.50	$3.75	$3.00	$2.25	$1.50	

Anthony to Las Cruces

To:	Anthony	Berino	Vado	Mesquite	Las Cruces
From:					
Anthony		$0.75	$1.50	$2.25	$3.75
Berino	$0.75		$0.75	$1.50	$3.00
Vado	$1.50	$0.75		$0.75	$2.25
Mesquite	$2.25	$1.50	$0.75		$1.50
Las Cruces	$3.75	$3.00	$2.25	$1.50	

East Mesa

To:	East Mesa	Las Cruces
From:		
Sunland Park		$0.75
Las Cruces	$0.75	

NON-DISCOUNTED FARES - Long Term

Chaparral to Northgate

To:	Chaparral	Northgate
From:		
Chaparral		$0.75
Northgate	$0.75	

Cost and Revenue Allocation
Dona Ana County Rural Short-Term

	Hatch to Las Cruces	South County to Las Cruces	Anthony to Las Cruces	Total
Operating				
Population Served	3,245	10,130	10,817	
% of Total Route Pop	69.1%	90.4%	100.0%	
Total Operating Cost	$47,928	$47,928	$47,928	
DAC Rural Op Cost Portion	$33,118	$43,349	$47,928	$124,395
Total Fare Revenue	$3,883	$7,355	$5,527	
DAC Rural Fare Portion	$2,683	$6,652	$5,527	$14,862
DAC Rural Op Deficit	$30,435	$36,697	$42,401	$109,533
Total Section 5311 Dollars Allocated	$16,563	$19,999	$23,108	$59,670
DAC Rural Op Deficit After Allocation	$13,872	$16,697	$19,293	$49,862
Federal %				54.5%
Local %				45.5%
Capital				
Total Capital Cost	$57,500	$85,600	$65,600	
DAC Rural Cap Cost Portion	$39,733	$77,422	$65,600	$182,755
Total CMAQ Dollars Allocated	$0	$22,457	$0	$22,457
Total Section 5310 Dollars Allocated	$7,283	$14,212	$12,042	$33,536
DAC Rural Cap Deficit After Allocation	$32,450	$40,754	$53,558	$126,762
Federal %				30.6%
Local %				69.4%

Cost and Revenue Allocation
Urbanized Dona Ana County Short-Term

	Dona Ana to Las Cruces	Mesilla to Las Cruces	South County to Las Cruces	Total
Operating				
Population Served	2,834	2,092	1,070	
% of Total Route Pop	20.9%	19.6%	9.6%	
Total Operating Cost	$177,328	$71,079	$47,928	
Urbanized DAC Area Op Cost Portion	$37,062	$13,931	$4,601	$55,594
Total Fare Revenue	$21,649	$7,795	$7,355	
Urbanized DAC Area Fare Portion	$4,525	$1,528	$706	$6,759
Urbanized DAC Area Op Deficit	$32,537	$12,404	$3,895	$48,836
Total Section 5307 Dollars Allocated	$10,339	$3,941	$1,238	$15,518
Urbanized DAC Op Deficit After Allocation	$22,198	$8,462	$2,657	$33,317
Federal %				31.8%
Local %				68.2%
Capital				
Total Capital Cost	$121,925	$48,925	$85,600	
Urbanized DAC Area Cap Cost Portion	$25,482	$9,589	$8,218	$43,289
Total CMAQ Dollars Allocated	$0	$0	$0	$0
Urbanized DAC Area Cap Deficit After Allocation	$25,482	$9,589	$8,218	$43,289
Federal %				0.0%
Local %				100.0%

Cost and Revenue Allocation
City of Hatch Short-Term

	Hatch to Las Cruces	Total
Operating		
Population Served	1,454	
% of Total Route Pop	31.0%	
Total Operating Cost	$47,928	
Hatch Op Cost Portion	$14,858	$14,858
Total Fare Revenue	$3,883	
Hatch Fare Portion	$1,204	$1,204
Hatch Op Deficit	$13,654	$13,654
Total Section 5311 Dollars Allocated	$7,441	$7,441
Hatch Op Deficit After Allocation	$6,213	$6,213
Federal %		54.5%
Local %		45.5%
Capital		
Total Capital Cost	$57,500	
Hatch Cap Cost Portion	$17,825	$17,825
Total CMAQ Dollars Allocated	$0	$0
Total Section 5310 Dollars Allocated	$3,272	$3,272
Hatch Cap Deficit After Allocation	$14,553	$14,553
Federal %		18.4%
Local %		81.6%

Cost and Revenue Allocation
City of Las Cruces Short-Term

	Dona Ana to Las Cruces	Mesilla to Las Cruces	Total
Operating			
Population Served	10,724	6,280	
% of Total Route Pop	79.1%	58.8%	
Total Operating Cost	$177,328	$71,079	
Las Cruces Op Cost Portion	$140,266	$41,794	$182,061
Total Fare Revenue	$21,649	$7,795	
Las Cruces Fare Portion	$17,124	$4,583	$21,708
Las Cruces Op Deficit	$123,142	$37,211	$160,353
Total Section 5307 Dollars Allocated	$39,130	$11,824	$50,954
Las Cruces Op Deficit After Allocation	$84,012	$25,387	$109,398
Federal %			31.8%
Local %			68.2%
Capital			
Total Capital Cost	$121,925	$48,925	
Las Cruces Cap Cost Portion	$96,443	$28,768	$125,211
Total CMAQ Dollars Allocated	$0	$0	$0
Las Cruces Cap Deficit After Allocation	$96,443	$28,768	$125,211
Federal %			0.0%
Local %			100.0%

Cost and Revenue Allocation
Town of Mesilla Short-Term

	Mesilla to Las Cruces	Mesilla Tourist	Total
Operating			
Population Served	2,311	9,945	
% of Total Route Pop	21.6%	100.0%	
Total Operating Cost	$71,079	$31,952	
Mesilla Op Cost Portion	$15,353	$31,952	$47,305
Total Fare Revenue	$7,795	$6,426	
Mesilla Fare Portion	$1,684	$6,426	$8,110
Mesilla Op Deficit	$13,669	$25,526	$39,195
Total Section 5307 Dollars Allocated	$4,344	$8,111	$12,455
Mesilla Op Deficit After Allocation	$9,326	$17,415	$26,741
Federal %			31.8%
Local %			68.2%
Capital			
Total Capital Cost	$48,925	$0	
Mesilla Cap Cost Portion	$10,568	$0	$10,568
Total CMAQ Dollars Allocated	$0	$0	$0
Mesilla Cap Deficit After Allocation	$10,568	$0	$10,568
Federal %			0.0%
Local %			100.0%

Cost and Revenue Allocation
City of Sunland Park Short-Term

	Sunland Park to El Paso	Total
Operating		
Population Served	13,231	
% of Total Route Pop	100.0%	
Total Operating Cost	$143,783	
Sunland Park Op Cost Portion	$143,783	$143,783
Total Fare Revenue	$20,757	
Sunland Park Fare Portion	$20,757	$20,757
Sunland Park Op Deficit	$123,026	$123,026
Total El Paso Section 5307 Dollars Allocated	$23,916	$23,916
Total CMAQ Dollars Allocated	$19,160	$19,160
Sunland Park Op Deficit After Allocation	$79,950	$79,950
Federal %		35.0%
Local %		65.0%
Capital		
Total Capital Cost	$181,200	
Sunland Park Cap Cost Portion	$181,200	$181,200
Total CMAQ Dollars Allocated	$74,743	$74,743
Sunland Park Cap Deficit After Allocation	$106,457	$106,457
Federal %		41.2%
Local %		58.8%