

Far West Mesa Planning Study



City of Albuquerque

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Introduction

This is a preliminary report about the development potential of Albuquerque's Far West Mesa in the vicinity of Double Eagle II Airport.

Purpose and Scope

The purpose of this report is to assess and document existing conditions within the study boundaries to serve as a baseline for further analysis and policy development. It is hoped that any future studies will use this information for that purpose.

Economic development potential is the focus. The area is expected to experience significant growth over the next 25 years. Providing industrially zoned land served by utilities and transportation facilities are important to the City's long-term economic health. The Double Eagle II Airport (DEII) and surrounding area have been identified as "a strong candidate for this type of economic development."

The report addresses 41 square miles (32,320 acres), extending from existing 2007 municipal limits and the boundaries of the Petroglyph National Monument westward to the Rio Puerco's eastern escarpment and from municipal limits on the north to I-40 on the south.

Report Development

This report, initiated in May 2006, was developed by the cooperative work of a steering committee, the City of Albuquerque Planning Department and the consulting firm HDR, Inc. The committee was composed of representatives from businesses, public land management agencies, community activists and area land owners. Stakeholder interviews were conducted and included one-on-one discussions with those identified as having specialized knowledge about or interest in the area.

Part One – Planning Framework

Area Profile

This section of the report profiles current conditions. The discussion includes consideration of these matters as detailed in the Comprehensive Plan.

Setting –Underlying geology, surface landforms and supported habitats are defining features expected to strongly influence the character, level and extent of development. The study area's setting is associated with major geological features of the North American continent as described below.

Geology - The Rio Grande Rift runs vertically down the length of New Mexico. The rift formed when the crust of the Colorado Plateau to the west pulled away from the crust of the Great Plains to the east. As the divergence continued, a giant crack developed where

the Colorado Plateau and Great Plains meet. The crust in between was stretched and thinned. Large blocks of the crust dropped down into the crack. A trough was created by this cracking and down-dropping. The trough is forty miles wide in the Albuquerque area. On the east side are the Sandia Mountains and on the west side is the Rio Puerco. Petroglyph National Monument is located in the center of the rift.

Before the rift formed, streams flowed from west to east, eventually emptying into the Gulf of Mexico. Early streams carried large amounts of alluvial sediments, sand and gravel, that began filling in the rift as it formed. The sediments filling the rift are known as the Santa Fe Formation. As the rift deepened, those streams started following the north-south trough of the rift. Eventually, the streams combined into a single river called the Rio Grande. The Rio Grande flows approximately 4 miles east of the monument.

The area surrounding the rift was unstable and subject to many earthquakes that formed fissures. Geologists estimate that 130,000 years ago magma rose along a 5 mile long fissure and reached the earth's surface. Lava flowed eastward in a sheet-like formation and covered the Santa Fe Formation, an accumulation of sand and gravel up to 25,000 feet thick. The lava cooled and hardened and became basalt rock. As the lava cooled, the fissure was blocked and vents were created. From these vents, cinder and lava accumulated creating the volcanic cones we see today.

The West Mesa is basalt lava rock that rests on the Santa Fe Formation, the accumulation of sand and gravel that eroded from the surrounding mountains and mesas. Due to the erosional powers of wind and water over thousands of years, the soft sediments of the Santa Fe Formation were carried away. Without any support beneath it, the heavy basalt cap rock broke and collapsed over the side, creating today's West Mesa escarpment.

American Indians carved petroglyphs on the escarpment which stretches 17 miles along Albuquerque's western landscape. The washes in the area contain lithic scatters, pottery fragments and other remnants of the previous inhabitants.

Topography - The study area is on the Northwest Mesa, and part of a long uplifted plain that extends approximately 20 miles north and 50 miles south of Albuquerque. It slopes gently southeast from the Rio Puerco escarpment to the escarpment associated with the west side of Albuquerque and the petroglyphs. Elevations on the mesa range from about 5120 to 5620 feet above sea level. (See Hydrology and Topology Map page 20.)

The Rio Puerco Escarpment at the western edge of the study area is an ecologically fragile area with steep slopes and a high potential for numerous archeological resources.

Hydrology - While the surface of the land slopes eastward, the ground water table slopes westward. As a result the depth to ground water is estimated to be as much as 800 feet below the surface of the mesa. The Santa Fe Formation is exceptionally permeable and significant aquifer recharge occurs throughout the area. Water quantity and quality improve west of the volcanic ridge and decrease again toward the Rio Puerco basin. (Bjorklund, 1961: Plate 1a 19-21, 44-46, 58-59)

Before water and sewer utility extension which occurred in January 2006, non-potable water for the DEII Airport was drawn from a dedicated well extended approximately 1,500 feet below ground level. Well water on the mesa is considered undrinkable due to high levels of naturally occurring arsenic.

Within the study boundaries are several designated floodplain areas associated with small, normally dry arroyos and playas. Designated as special flood hazard areas, flows are associated with runoff during and immediately after precipitation. No perennial streams occur within the area. (See Hydrology and Topography Map page 20.)

Soils - 3 types of soils are common to the area. Most predominate are the fine sandy loams of the Madurez-Wink association which are deep and well-drained. They occur on slopes of 1% to 7%. Runoff from the association is low and wind erosion is moderate to severe. Shrink swell potential limits the use of Madurez soil for dwellings and local roads. Its dustiness limits use for picnic areas, paths and trails. (See Soils Map page 21.)

Habitats - Vegetation primarily consists of grasses mixed with shrubs and annual plants. It is supported by the Madurez-Wink association and normally covers approximately 15% of the soil surface. Black grama is the dominant grass. Sand dropseed, mesa dropseed, galleta and other grasses occur less frequently.

Portions of the mesa have been studied by biologists. Their studies involved co-evolution of plants and insects including: scorpions, desert millipedes, termites and other detritus eating organisms. This area is home to many species of wildlife including fox, hawk, owl, diamondback and prairie rattlesnakes, rabbits, lizards and prairie dogs.

Visual Resources - Views to the east include the volcanoes. Views to the north, west and south include clear sighting of the Jemez Mountains, Mount Taylor and Ladron Peak.

Population and Employment – There are few people living within the study boundary. The small community of Lost Horizons located in the southwest corner contains 27 households. With the exception of Westland North, the area population is not projected to increase significantly in the next 25 years. Adjacent areas such as Quail Ranch are expected to increase significantly. (See 2000 & 2025 Population Maps pages 26-27.)

Existing employment is relatively low. It is concentrated at DEII Airport and the manufacturing and warehouse development along Paseo del Volcan east and I-40. Employment is projected to increase significantly in the next 25 years due to activities associated with Eclipse Manufacturing and employment opportunities related to the trucking industry and I-40. Currently, the Westside has “only one job for every seven people who live there, while the east side of Albuquerque has about 1.2 jobs per person.” (See 2000& 2025 Employment Maps pages 28-29.)

Land Ownership - The area is comprised of large tracts of land under single ownership. The City of Albuquerque owns substantial acreage within its boundaries, including DEII Airport, Shooting Range Park, open space lands, and the Soil Amendment Facility.

Land ownership of 14,175 acres identifies the City as the second largest owner behind Westland Development Company. City land uses include open space, open space trust land, developed park facilities, and DEII Airport. Other large tracts are owned by the State of New Mexico Land office and Bernalillo County. With the exception of parcels along I-40 which are platted at less than 5 acres, the majority of parcels are larger than 20 acres. (See Major Ownership Map page 22.)

Land Use and Zoning - Over the centuries, the volcanoes, the petroglyphs, and the valley below attracted many visitors. Native American presence dates back to the Ice Age 12,000 years ago. Many archeological sites with artifacts have been discovered throughout the vicinity, most predominantly along the Rio Puerco escarpment. Over 20,000 petroglyphs can be viewed on Albuquerque's Westside escarpment.

The National Park Service ethnographic study of 2002 identifies the entire volcanic area as an important religious and cultural site for all 20 contemporary Pueblo communities, as well as the contemporary Navajo and Apache communities.

In the 1600s, Hispanic heirs of the Atrisco land grant herded sheep in the area.

Various activities impacted the natural landscape. The mesa top was used as a bombing range in WWII and has been identified as property potentially eligible for restoration funding under the Formerly Used Defense Sites program. Electrical power lines and a gas pipeline were built. Illegal dumping and off-road vehicle use are of concern.

The vast majority of land in the study area is undeveloped. This property is in the County and zoned for agricultural uses. Non-residential exceptions are in the City and include the Airport, Shooting Range, Soil Amendment Facility, Second Chance Rehabilitation Center, TempurPedic Mattress, Shamrock Distribution, truck related maintenance shops, and RV sales located in the southern portion of the study area along Paseo del Volcan East and I-40. (See existing Land Use and Zoning Maps Pages 23 and 25.)

The only residential development is the Lost Horizons community located about a quarter mile north of I-40 just east of the Rio Puerco escarpment. It was established in the 1950's as an Air Force radar station and included 25-30 single family houses, the radar facility and utility system. It is no longer associated with the Air Force and is home to 27 private households. The Mesa Oeste subdivision, west of Lost Horizons was platted in 1993. There has been no construction to date.

Within the boundaries are large and significant open space tracts. Those tracts currently owned and managed by the Open Space Division include: 300 acres south of DEII Airport; over 1000 acres north of the City's Soil Amendment Facility and west of DEII; and, Grasslands Preserve which is comprised of 3000 acres between the Shooting Range and the Rio Puerco escarpment. The Shooting Range Park consists of 1200 acres owned by Open Space Division and managed by City Cultural and Recreational Services Department.

In 1969, a Master Plan Study for the Albuquerque International Airport urged the City to consider long-range aviation needs. In 1972 a statewide airport systems plan identified the need for additional general aviation facilities in the Albuquerque area. A master plan for a “West Mesa Airport” was developed in 1972 with an initial mission to be a reliever airport for Albuquerque. Plans to construct The DEII airport was the City’s response to the need for additional facilities.

An environmental assessment was completed in 1980. The Federal Aviation Administration (FAA) issued a finding of no significant impact. Construction of DEII Airport began in 1982 and the initial work was completed in 1983. It consisted of 2 runways, a general aviation parking apron, miscellaneous security fencing and an airport access road from I-40. An on-airport access road connecting landside facilities to an off-airport access road was constructed in 1997.

In 2000 Eclipse Aviation announced the selection of Albuquerque and DEII Airport as the site to manufacture their state-of-the-art business jets.

The July 2002 Draft Master Plan report for DEII Airport includes capital improvements at the site up to and beyond the year 2020. Many of the proposed land and airside amenities have received grant money and, if completed, could affect the nature of development.

A 2005, \$10,000,000 improvement project included installation of basic infrastructure and fiber optic lines. Runway extensions, a new hangar, and a control tower were added. Interest from aviation suppliers and manufacturers highlights the need for tenant hangar space and landing ability for corporate jets. Further runway construction is forthcoming.

Utilities - The area has several high voltage electric transmission lines as well as 2 high-pressure natural gas transmission lines. Currently there is one 8” water line serving the airport but no sewer trunk lines. (See Utilities Map page 24.) However, the ABWUA approved a line January 2006.

Circulation and Transportation - I-40 and Paseo del Volcan east provide access to the area from the south. Paradise Boulevard provides access from the north. An extension to Paradise Boulevard was completed in the mid 1990s and serves as a temporary access road. (See summary of the 2025 Metropolitan Transportation Plan (2003).

Plans Relating to the Far West Mesa Planning Study

The plans described below guide the planning and development of the Far West Mesa.

The Albuquerque/Bernalillo County Comprehensive Plan (2003 as amended) is Albuquerque’s official statement of development policy. In the plan, the Far West Mesa (FWM) is designated rural and 2 alternative futures provided: preservation of rural settlement patterns and land uses such as agriculture, and a Planned Community.

The plan refers to possible open space acquisition in the FWM. Policy D of the Open Space Network in Land Use states that “The City and County shall preserve the volcanoes, key portions of the basalt flow, and the escarpment as part of the open space network.” Recommendations are to: continue public acquisition of unpurchased lands surrounding the volcanic cinder cones and contiguous, critical portions of the basalt flow in private ownership; and, pursue agreements between City, County, State, and possibly Federal agencies to preserve State-owned sections of the basalt flow for public use.

The Planned Growth Strategy (2003) was developed jointly by the City and County (though never adopted by the County) to better manage growth. Impact fees and code amendments were adopted based on the Strategy’s “Infrastructure and Growth Plan” of projected housing, population, and employment to 2025. It classifies the Double Eagle area as “undeveloped land” and projects varying levels of employment growth, but not population growth.

The West Side Strategic Plan (2002) “provides a framework of strategic policies within which to manage future growth and development on Albuquerque’s West Side.” Relative to the FWM, the plan notes that “the most critical land use interfaces will occur adjacent to the airport, which is a general aviation reliever airport for Albuquerque International Support.” There are “significant planning and research needs associated with DEII development, which have been waiting on resolution of key road issues (particularly Paseo del Norte and Paseo del Volcan). Once the roadway issues are clarified, additional planning with regard to airport development will occur.” The plan states that Paseo del Volcan involves “environmental considerations and other land use restrictions... because of the Shooting Range and other recreation-related lands.” The plan’s Policy 3.76 proposes a Double Eagle planning study.

The plan uses the following concepts for the FWM Study Area: DEII Airport and Westland North are proposed employment centers; DEII Airport is designated as a Community Service Area; and, a community activity center is included within the Westland North boundaries.

The West Side Strategic Plan includes policies related to future development on the Far West Mesa.

- Policy 3.74: Bernalillo County shall enforce the existing regulations requiring any development within the Far West Mesa area to be developed as Planned Communities. It is the intent of this Plan that this area not develop until all other Communities on the West Side are substantially built out, which may not be for more than 50 years.
- Policy 3.75: Bernalillo County shall prepare a Rio Puerco plan which examines the resources of the area and develops policies to protect significant natural and cultural resources.
- Policy 3.77: The City of Albuquerque Open Space Division and Open Space Advisory Board, with input from all interested parties, shall clarify the future intent for the open space trust lands adjacent to Airport.

- Policy 3.78: The City of Albuquerque Open Space Division, Open Space Advisory Board, Aviation Department, Parks and General Services Department, and Cultural and Recreational Services Department shall undertake a study of the best long-term management approaches for the public lands in this area. The study shall look at updating management plans for these lands, estimating projected levels of recreational activities, providing adequate protection for resources, and complementing future development in the vicinity as growth occurs on surrounding private lands.
- Policy 3.79: The National Park Service should continue to participate in future planning efforts on the West Side, including implementation strategies for this Plan.

The Major Public Open Space Facility Plan (1999) was adopted by both the City and County. It establishes planning policy, land use decisions, and management of the Major Public Open Space system.

Large open space tracts adjacent to the Monument remain under the sole management of the City. A 4,200 acre parcel of land is predominantly north and east of the volcanoes and preserves vast expanses of mesa-top lava flows, small volcanic features, archaeological sites, arroyo courses and wide vistas. The Mesa Grasslands Preserve consists of over 3,800 acres west of the volcanoes in the Rio Puerco Valley. This area provides valuable habitat for certain plant and wildlife including an open range for herds of pronghorn antelope.

The following open space areas are designated in this study.

- Petroglyph National Monument: provide trails to ancient petroglyphs
- Piedras Marcadas Canyon: provide trails to ancient petroglyphs
- Boca Negra Canyon: three trails leading to ancient petroglyphs
- Rinconada Canyon: a 1.3-mile trail leading to ancient petroglyphs
- Volcanoes: remains of 5 extinct volcanic cores
- Shooting Range State Park: a fee area for target shooting
- Grasslands Preserve: undeveloped and closed to the public
- Horseman's Complex
- Maloof Model Airplane Field

The Double Eagle II Airport Master Plan (2002) will greatly influence future development. It includes a 2006 and 2021 analysis that examines alternatives and resulting environmental impacts, including the direct effects of land acquisition and the indirect effects of noise contours, water resources, historic and archeological resources, use and population demographics, access, visuals, vibrations, ecology, light emissions, and air quality.

The plan addresses 4,261 acres under City of Albuquerque jurisdiction. Under federal guidelines, the airport is classified as a general aviation reliever airport.

Plans to realign Paseo del Volcan, a north/south minor arterial are discussed in the Master Plan. Preferred alignment is stated as beginning at I-40, 2 miles west of the existing interchange, extending through the FWM area to the east of Shooting Range Park at the western boundary of the airport, then going north of the airport to intersect with Paseo del Norte, an east/west minor arterial.

The Master Plan contains the following utilities/drainage information about the DEII site:

- High voltage electric transmission lines cross the site
- 2 high pressure natural gas transmission lines exist, but no natural gas service
- No major telecommunication infrastructure exist aside from Qwest phone service
- No major water distribution facilities or sewer trunk lines exist
- There is a private well/tank system for non-potable water, including commercial water and fire protection
- There is a private on-site septic system

The plan does not foresee future development east of the access road. It recommends acquiring property west of the airport to accommodate future development away from the Petroglyph National Monument, which could be a land exchange with the City, the State Land Office, private owners and Quail Ranch. The plan discusses possible growth at the airport if Runway 4/22 is lengthened and business from the Sunport shifts to DEII. The plan notes that planned industrial and manufacturing growth adjacent to the north side of the airport at Quail Ranch is compatible with DEII plans.

The plan discusses the need to zone land that will permit future airfield expansion, preclude incompatible land use encroachment, provide adequate noise buffer zones, and reserve potential aviation development areas to meet long-range aviation activity demands.

The 2025 Metropolitan Transportation Plan (2003) was adopted in 2003 and will be updated every 3 years. It evaluates the current transportation system, considers probable growth patterns, and envisions an appropriate future transportation system. The goals give significant support to the development of an integrated multi-modal transportation system. It includes the 2004-2009 Transportation Improvement Program, which details federal funding for the first 6 years of the plan. It also establishes access/expansion policies for major streets. Paseo del Volcan East from I-40 to the southern boundary of the DEII Airport Master Plan is classified as an existing limited access roadway.

The Long-Range Roadway System Map (2002) was developed by MRCOG to reflect long-range policy for streets in the Albuquerque Metropolitan Planning Area and provide a framework for developing both long-range and short-range transportation programs. It is being revised from a local-system perspective to a regional-connectivity system and may incorporate proposals for inclusion in the Transportation Plan.

The Long-Range Bikeway System Map (2004) was developed by MRCOG to reflect long-range policy for bicycle facilities within the Albuquerque Metropolitan Planning Area. Like the roadway system map, it provides a framework for developing both long-

range and short-range transportation programs. This plan too is being revised from a local-system perspective to a regional connectivity perspective and may incorporate proposals adopted in the Plan Update.

The Long-Range Major Transit Map (2002) was developed by MRCOG to reflect long-range transit policy within the Albuquerque Metropolitan Planning Area and provides a framework for developing both long-range and short-range transportation programs. It is being revised from a local system perspective to a regional-connectivity perspective and may incorporate to be included in the Transportation Plan.

The Quail Ranch Master Plan Phase I addresses 6,492 acres of undeveloped area marketed as Quail Ranch and annexed by the City of Rio Rancho in 2003. Phase I (west of Paseo del Volcan, south of Paseo del Norte, north of McMahan), is projected to be built out 9-12 years from initiation and includes 1,025 acres; 4,320 single family dwelling units; 270 multi-family dwelling units; and 272,250 sq feet of commercial development. Industry and manufacturing is planned for south Quail Ranch to border the northern edge of DEII Airport. Existing pumping and booster stations from lower wells are feasible for the first 1,000 dwelling units.

The Westland Master Plan was adopted to provide a framework for land development. The plan was adopted by Bernalillo County in 1997 and the City of Albuquerque in 1998. The plan foresees a self-sufficient, mixed-use community with permanent open space, the same jobs to housing ratio as the City, and a central commercial core with village centers. The existing land use is agriculture/low density residential. The plan envisions the area as a highly visible gateway for travelers from the west. The ABCWUA is committed to providing water and sewer infrastructure. Arsenic removal will not be subsidized by existing ABCWUA customers. A wastewater treatment facility at the eastern edge is proposed. Future expansion of DEII Airport and employment activities will likely expand noise contours closer to the northern portions of the Westland Plan Area. For this reason, the Westland Plan identified industrial park-type uses meant to provide adequate buffer to the residential uses to the south.

Albuquerque Bernalillo County Water Utility Authority Utility Plan - Guiding principles for utility development for the Far West Mesa Area have been developed. It is anticipated that a Request for Proposals for a comprehensive utility plan will be issued in early 2008. It will be an integrated water/wastewater/reuse master plan and will replace the initial plan that was produced in the 1960s.

The 2004 New Mexico Utilities Master Plan Update - New Mexico Utilities provides water and sewage collection services to about 41,000 people in an area of approximately 34 square miles northwest of the study area. Since its acquisition in 1969, the utility has grown from approximately 800 connections to almost 13,000 connections. Its 6 wells produce water from the Rio Grande Underground Basin. The water is then treated and stored in 5 reservoirs.

The Aerospace Technical Park Master Plan delineates platting and right of ways for aviation related development, including Eclipse Aviation west of the north/south runway.

The Petroglyph National Monument Ethnographic Landscape Report (2002) details aboriginal uses of the FWM area. Regional stakeholders include Pueblo groups, Navajo, Apache tribes, land grant heirs, Hispanics, and Anglos. The Monument is cooperatively managed by the National Park Service and the City of Albuquerque. The report recommends including traditional and historical communities in the future planning and management of the area.

Part Two - Issues and Concerns

Over 20 individual and small group interviews were conducted. They were structured, intensive sessions with stakeholders deemed knowledgeable about the study area.

Interviews were held between August and September 2006 in a variety of locations, including the DEII Airport. A loose script was used to gain the perspective of each stakeholder and identify additional materials that might contribute to the research.

The summary that follows include: key issues as determined and presented by the stakeholders; comments from public land management agencies; and, input from the City of Albuquerque Planning Department.

Open Space and Views

The FWM represents one of the “last frontiers” of open space in the metropolitan area, and its expanse contributes to the sense of place associated with the region. The stakeholders believe in the importance of maintaining a good relationship with the management of the Petroglyph National Monument and valuing its cultural richness. They want the area protected, enhanced, and viewed as an asset. The Open Space areas and National Monument are considered valuable public resources. Careful planning of the trail system will guarantee public access to these sites.



As the area develops the land will become more expensive and the stakeholders believe that securing additional open space now would be beneficial. Implementing the Comprehensive Plan's objectives to acquire the Rio Puerco Escarpment and Sand Dunes should be considered.

Open space acquisition should provide corridors to connect existing open space, provide safe way for wildlife, and to expand the network of open space for people and animals.

The FWM is characterized by views across vast open areas. View sheds need protection to remain one of the strongest features of the area. The views to and from the volcanoes are unobstructed and should be maintained as an asset. The views across the grasslands and from the escarpment are impressive as well.

Dark night time sky is a valuable asset and should be preserved. This could be accomplished through design guidelines and requirement of appropriate light fixtures.

Existing Development

The area is primarily open rangeland with the exception of the following developments.

Double Eagle II Airport Area -

There is a need to protect the airport and its function as a reliever airport by ensuring all future development is compatible. This may require aviation easements as well as seller disclosure on real estate contracts. The Westland Plan proposes residential land uses on their property adjacent to the airport. The Quail Ranch Plan proposes industrial uses on their property adjacent to the airport. As airport activity increases there will be a need to assess impacts on the National Monument.



The airport area is intended to be an economic generator and employment center for the city. Several factors may impact that intent. The airline industry has been financially distressed since 2000, so there is a need to look for other revenue sources to reduce dependency on airline revenue. Plans and development should support the airport and Eclipse Aviation so they can operate at their highest and best potential. Diverse employment opportunities should also be considered, particularly in the industrial and manufacturing sectors. In addition, the area may be appropriate for “resort” airport uses. The Scottsdale airport is a model for amenity offerings. There is concern that projected activity at the airport may saturate the Albuquerque air space.

Because the area surrounding the airport was used as a practice bombing range, concerns exist regarding mitigation of contaminants. The Department of Defense requires intense evaluation of a property prior to inclusion in their cleanup program. This could be costly and delay or change the build-out of the airport master plan. It could also change the relocation schedule for Eclipse Aviation and other suppliers that are considering locating in the Aerospace Technology Park. Although there is little evidence of risk, the US Army Corps of Engineers is currently evaluating any possible risk and mitigation measures.

West Central Interchange (I-40 and Paseo del Volcan) & Employment District - TempurPedic and Shamrock Warehousing (although large truck dependent developments), are viewed positively and considered a great start for the intended employment center at the interchange located at I-40 and Paseo del Volcan. A need exists to preserve a quarter-mile buffer from residential development in case of a catastrophic fire at the TempurPedic site. There is desire to diversify the immediate area and attract hotels and office parks.

Circulation and road capacity are unresolved around the interchange. There is support for a loop road with an alignment north of I-40 and a connection to the TempurPedic site.

The interchange is a gateway to the western limits of the city and a future gateway to the National Monument.

Shooting Range Park - The shooting range park is an appropriate land use and is an asset to the area and city. There is some concern that the realignment of Paseo del Volcan to the west may require adjustments to the shooting range to prevent errant fire.

Soil Amendment Center - The Soil Amendment Center is likely to continue and is not a threat to the environment or future development. There is a market for the compost the facility produces.

Infrastructure

Water is a limited resource that needs to be carefully planned and allocated. In the future, all new master-planned developments will be required to develop a utility plan and transfer water rights. There is a need to look at service requirements for the whole area and develop an integrated water/wastewater/reuse master plan.

Water, power, and road infrastructure will continue to determine how growth happens on the FWM. New development will require new infrastructure. Using limited fiscal resources to extend public infrastructure may take away from infill efforts and needed improvements to the City's existing infrastructure.

The State of New Mexico is supportive of alternative fuels research and production. Solar, wind, and other alternative energy resources generated in this area may be considered.

Jobs to Housing Balance

Employment - Economic development in the area around DEII airport would help alleviate the current lack of employment west of the Rio Grande. There was expressed concern that additional jobs would result in the building of unwanted master-planned communities. New employment opportunities may allow people living on the west side of the Rio Grande to work closer to home, however, could create long westbound commutes on both sides of the river.



Framework Issues

Multiple Jurisdictions - There are concerns that the City of Albuquerque, the City of Rio Rancho and Bernalillo County will not have compatible plans for the area's growth and development. Annexation is viewed as unlikely and fragmented decision making will produce limited results. Cooperation between the City and County is necessary to ensure development of infrastructure. Issues may arise because Paseo del Volcan is a city owned and maintained road within a County easement.

Petroglyph National Monument - The Monument has advisory authority on transportation and land use issues, but that advisory authority is not defined.

Plan Amendments - There is a compelling need to amend the West Side Strategic Plan and bring it into conformance with the Comprehensive Plan. Possible amendments include the location and definition of activity centers, the mix of uses in the area, block size and street grid, and site design standards. As more planning occurs, the amendments become more necessary. This will be an area that the city of Albuquerque will work on in the near future

Ownership Patterns

Tract Sizes - The FWM contains many large tracts under single ownership. It is an ideal area for the large master planned communities allowed by the Comprehensive Plan. The large lots are also conducive to other development such as industrial parks, large retail centers and employment districts.

Sale of Westland Development Company - The sale of Westland could represent a paradigm shift for this area. SunCal purchased Westland's holdings. SunCal now owns

1,500 acres within the City limits. SunCal land holdings total 55,000 acres. A design charrette in April 2007 revealed the desire for a New Urbanist approach including a village center and a variety of housing types.

Quail Ranch Phase I Build-Out - Quail Ranch is in Rio Rancho City limits, not in the planning study area. Most interviewees mentioned that the build-out of Phase I will have a significant impact on the area. The Comprehensive Plan must consider this eventual build-out, particularly on the circulation system in the planning study area.

Public land - Significant public land controlled by the City, State, and County is viewed as an asset to be used as open space. Large swaths of open space to serve as wildlife corridors, from the volcanos to the Rio Puerco, are seen as desirable by the City.

Transportation & Access

Trucking Access - The eastern portion of Paseo del Volcan is a narrow 2-lane road not conducive to truck traffic. Truck access from I-40 and into their sites is crucial for the success of a FWM employment center. A good interior street network will be important to move people through the area, not just north and south. Understanding the road needs of future industries will be critical to the success of the plan.

Congestion - There are few adequate north/south connections on the west side of the Rio Grande. Both alignments of Paseo del Volcan are viewed as critical to reducing congestion and including future development in the plan area.

Land Use & Urban Design

Sustainability - Development policy should address sustainability of projects including neighborhood development, buildings, landscape, water and energy use.

Aesthetic Value - Industrial, manufacturing and warehousing areas should be designed to be attractive and appropriate for the area. TempurPedic is a good example. The airport is also a model for choosing palettes that are compatible with the Monument and respectful of the viewscape. Design standards should be set now to define expectations.

Buffering and Land Use Locations – Many prospective industries want distance from residential development, but at the same time want residents to live close enough to commute comfortably. Zoning requirements often mandate specific buffers. Prospective industries want to be as close to the Interstate as possible without having to drive through neighborhoods or school zones to get to their sites. Finding creative ways to buffer or separate incompatible uses and identify which are compatible will be critical.

Residential Development - Residential areas should be master-planned LEED-ND certified, and based on sustainable patterns, including walkable, mixed-use, compact communities that include transit options, public schools, neighborhood retail, and access to open space.

Part Three - Choosing a Future

The options described below were developed by representatives from businesses, public land management agencies, community activists and area land owners, as well as those having specialized knowledge about or interest in the area. This information was synthesized by the planning department staff and its consultants and independently assessed by the steering committee on November 17, 2006.

Expected growth necessitates a focus on economic development potential and the City's long-term economic health.

Alternatives

Alternative One: Open Space Acquisition and New Employment Centers

General Description - This option focuses on the acquisition of land for open space and completion of public facility systems to support specific areas.

Scenario - At the end of the planning horizon (2025) most of the area continues to remain undeveloped.

In this scenario, the area is home to one or more employment centers, offering high paying basic employment related to the energy sector, aerospace manufacturing and sales and truck freight and warehousing. These business types have chosen to locate in the area because of the ease of development, large appropriately zoned sites and served by utilities and a convenient street system with access to regional highways. While not within walking distance of most employees, transit systems serve the area. Commutes are 20 percent shorter than the average commute for residents west of the Rio Grande. Employees' daily needs are met by limited retail and commercial service development.

Alternative Two: Open Space Acquisition, New Employment Centers and limited Residential Development

General Description - This Alternative Future includes all of the changes to the area described in Alternative one, plus the development expectation embedded in the Westland North Master plan. It reflects a partial, limited opening to residential development by utility expansion. The successful outcome of this alternative requires effective City-County coordination.

Scenario - At the end of the Planning Horizon most of the area remains vacant. Expectations are the "opportunity areas" containing the economic activities described in Alternative one, plus a partially built out planned community reflecting Traditional Neighborhood Development principals in the Westland North area. Open Space acquisition has occurred as described in Alternative one.

Alternative Three: Open Space, New Employment and “Unlimited but Planned Residential Development”

General description - This Alternative future emphasizes expanding the metropolitan area at the City’s edge by accommodating large scale residential development located between the City limits along the Airport’s southern property line and North of I-40. In addition to Open Space acquisition and development of the opportunity sites, this alternative includes residential retail and services.

Scenario - There are several “planned communities” under development. All follow the formal plans planned community criteria with some Traditional Neighborhood Design principles. They are separated by open space corridors and served by the beginnings of circulation and transit systems that connect the area to the West Mesa’s lower shelf and to Rio Rancho.

Joint Planning

Although the FWM Planning Study is a City of Albuquerque-sponsored effort, the need for a joint planning approach with Bernalillo County is critical for the future of the area. During the Study’s Key Stakeholder Interviews, nearly every stakeholder prioritized jurisdictional cooperation as a key element to the eventual success or failure of future development on the FWM. The significance of the area to the region in terms of employment, economic development, housing and regional transportation heightens the need for smart, cooperative planning that crosses jurisdictional lines.

Legally, the boundary lines between City and County are clear. The majority of the FWM Study Area 65% is under Bernalillo County jurisdiction, while the remaining 35% is under the City of Albuquerque’s jurisdiction; primarily the city owned Double Eagle II Airport and Open Space lands to the north. Stakeholders articulated a broader area significance that belongs to the public at large: the dramatic skyline of the volcanoes; the cultural amenities offered by the Petroglyph National Monument; and the potential for new industries to bring high-value jobs on land uniquely suited for that purpose.

Joint Planning: Past to Present

The dissolution of the Extraterritorial Land Use Authority (ELUA) in 2003 resulted in the lack of a City/County body to jointly plan and manage growth. The Albuquerque/Bernalillo County Comprehensive Plan now stands as the primary City/County planning tool for the FWM. As stated in “Section III: Monitoring and Implementation” of the Comprehensive Plan, amendment and review of the Plan must follow a procedure that involves both the City and the County. Detailed explanations of this process are included in that section, and could serve as a starting point for developing something similar to specifically focus on the FWM.

Reviews of the Comprehensive Plan happen biannually by a team consisting of City and County representatives. Outputs can include suggested modifications of the

Comprehensive Plan or recommended policy changes to either the City Zoning Code or the Bernalillo County Comprehensive Zoning Ordinance. In order to amend the Comprehensive Plan, the application process begins with the City Planning Department, yet the amendment must be heard, approved, and moved forward by the City Environmental Planning Commission, the County Planning Commission, all relevant City and County departments, the City Council, the County Commission, and finally the Mayor and the County Manager.

Establishing a Planning Authority

Using the Comprehensive Planning model, a joint planning process for the FWM could establish a FWM Planning Authority to jointly plan and manage growth for this critical area.

Resolutions from the Albuquerque City Council and the Bernalillo County Commission approving the establishment of this authority would begin the process of its establishment. Next, a Memorandum of Understanding (MOU) detailing its makeup and powers would need to be jointly approved.

The makeup of the Planning Authority might follow the jurisdictional makeup of the now-abolished ELUA, with one more County representative than City representative (the ELUA had seven members, four County and three City). This split would closely mirror the 65%/35% County/City jurisdictional split of the FWM Study Area.

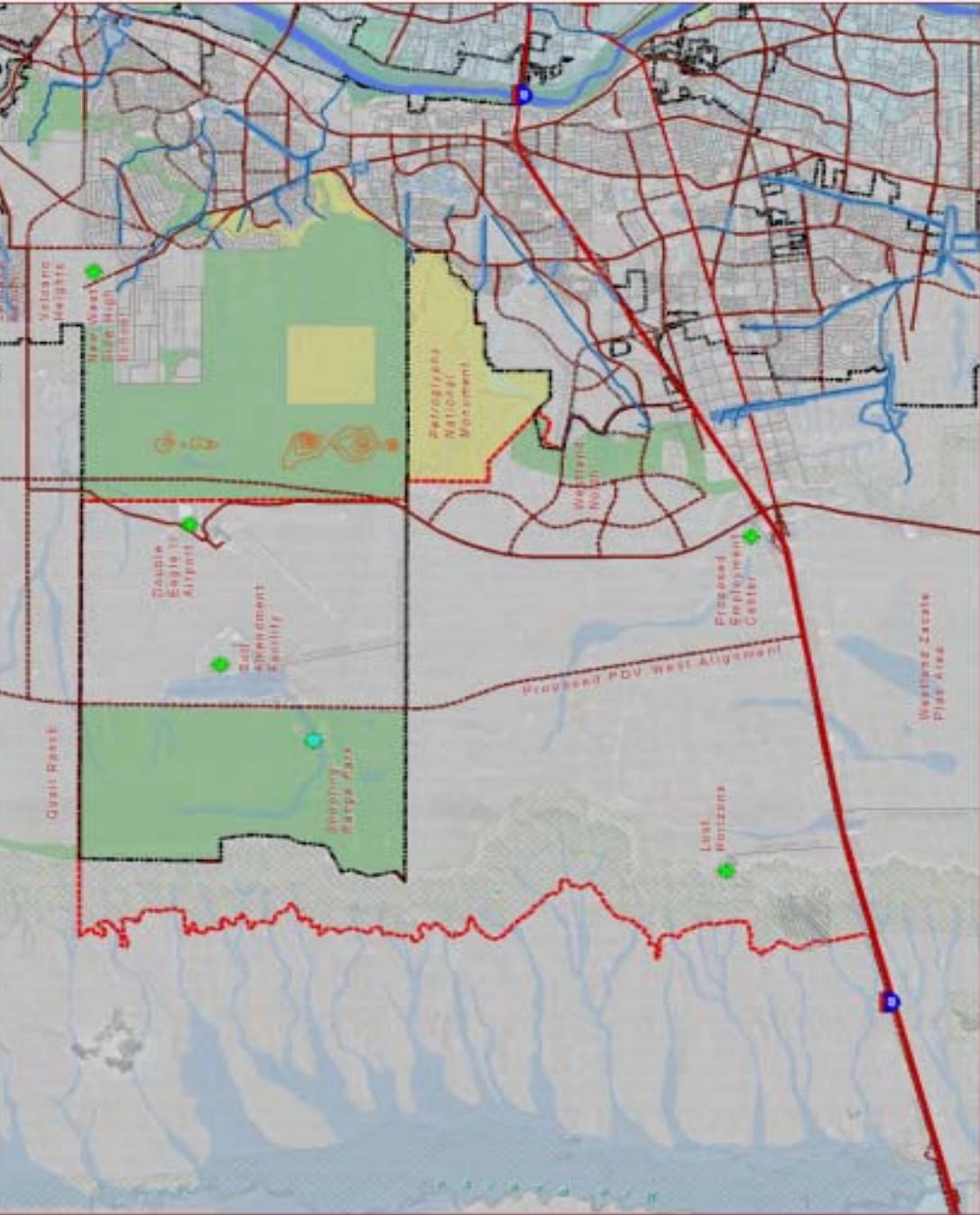
In theory, the Planning Authority could operate with as much or as little power as the City and County can agree on. On the most advisory scale, the Planning Authority could operate much like the Comprehensive Plan Review Committee that meets biannually. It could be charged with recommending changes to the Comprehensive Plan, to any relevant area or sector plans in the area, and to each municipality's zoning codes as they pertain to the FWM. On the other end of the spectrum, a more powerful Planning Authority could be charged with approving all development proposals, zone changes, and plans for the area. Using the Santa Fe City/County Regional Planning Authority as a model, the Planning Authority would be responsible for developing a comprehensive land use plan, a strategic open space acquisition plan amending zoning codes, and ensuring appropriate implementation.

Regional Approaches

Although the FWM Study Area is primarily under the jurisdiction of the City and County, the area is so large and culturally significant that it demands a regional approach to planning. Several entities active in the area and critical to future planning efforts include the Albuquerque/Bernalillo County Water Authority, Albuquerque Metropolitan Flood Control Authority and the Mid-Region Council of Governments. Additionally all surrounding jurisdictions including Sandoval County, The City of Rio Rancho, Valencia County, and all sovereign nations with cultural and economic ties to the area most significantly Laguna, Zia, Sandia and Isleta Pueblo and the To'Hajiilee (Canoncito) Chapter of the Navajo Nation.

The Albuquerque/Bernalillo County Water Authority established in 2003, will be a critical partner in future land use and infrastructure decisions for the FWM. As a regional authority, equal City and County representation on the board is mandated, and a detailed MOU outlines the procedures under which the entities operate.

The Mid-Region Council of Governments, which takes the lead on regional transportation network and road infrastructure planning and development, will also play a significant role in future planning efforts the area. As an established regional planning agency with an advisory role, the Council of Governments is an immediate forum under which separate jurisdictions can come together for joint planning purposes.



Base Map

- Legend**
- Study Area
 - City Boundary
 - Highways
 - Major Streets
 - Proposed Major Streets (LRMS27)
 - Major Arterials
 - Open Space
 - City Owned Open Space
 - County Owned Open Space
 - National Monument
 - Proposed Open Space
- Data Sources:
 Albuquerque GIS
 Mid-Region Council of Governments

Map created for the
 Far West Mesa Planning Study
 Planning Department
 City of Albuquerque, NM

November 14, 2006

0.50 25 0 0.5 1 1.5 2 Miles

This map is a representational diagram illustrating existing conditions in the Far West Mesa Planning Study. It is intended as a visual aid to support the plan text.

Hydrology & Topography

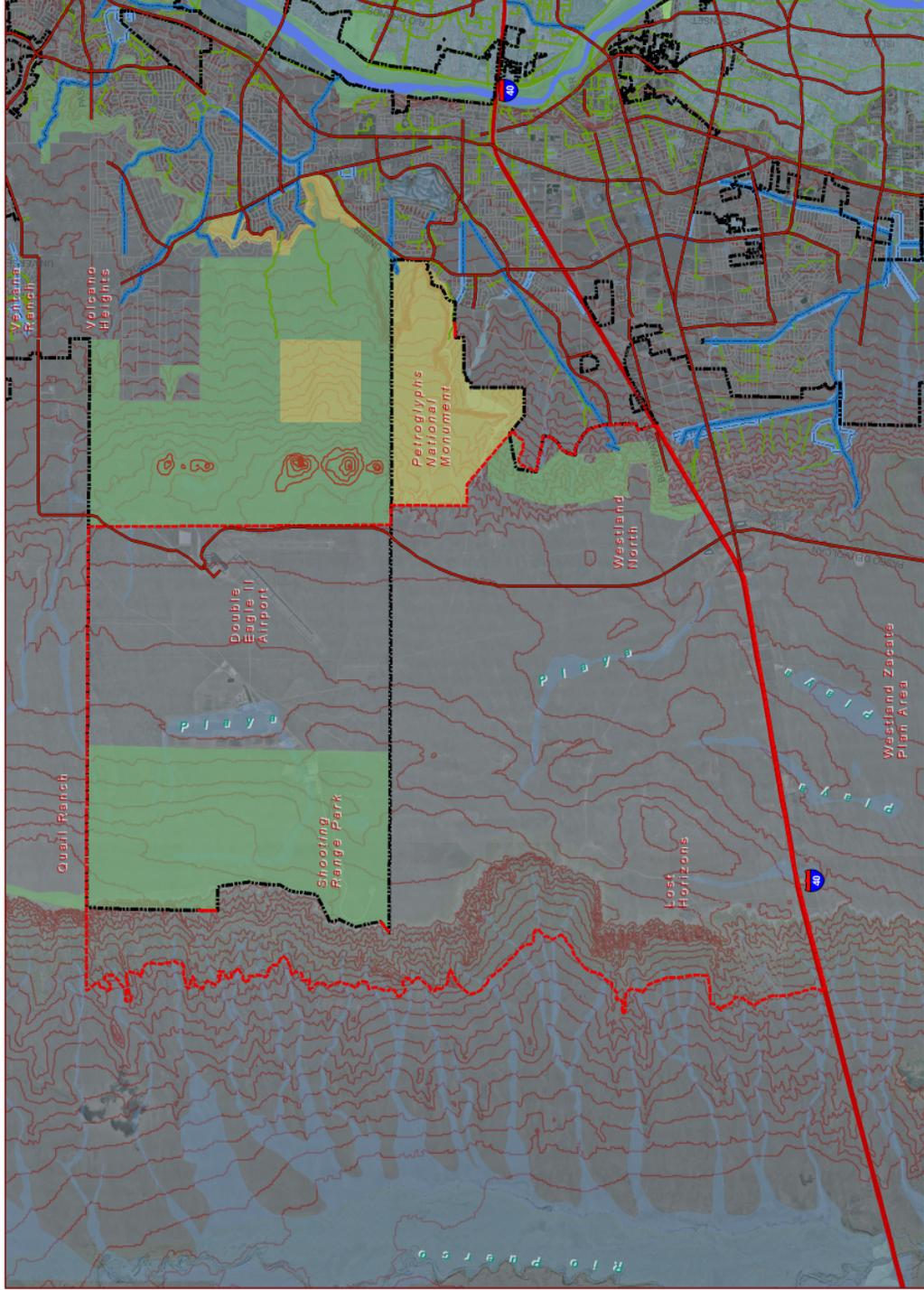
Legend

-  Study Area
-  City Boundary
-  Volcanoes
-  10m Contour
-  Major Arroyos
-  Rio Grande
-  100 Year Event Flood Zones
-  Storm Drains
-  City Owned Open Space
-  County Owned Open Space
-  National Monument
-  Proposed Open Space

Data Sources:
 Albuquerque GIS
 Mid-Region Council of Governments

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 Far West Mesa Planning Study
 Planning Department
 City of Albuquerque, NM

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Far West Mesa Planning Study

Soils

Legend

- Soils
- Af
- Ag
- AKC
- Amb
- An
- Ao
- Ar
- BCC
- BKD
- Bb
- BcA
- Br
- Bs
- Bt
- GF
- GH
- Gb
- Gd
- Ge
- Gk
- Gm
- Ha
- KR
- LIB
- MWA
- MAB
- PAC
- RBE
- TP
- VF
- Va
- VbA
- Vc
- W
- Wab

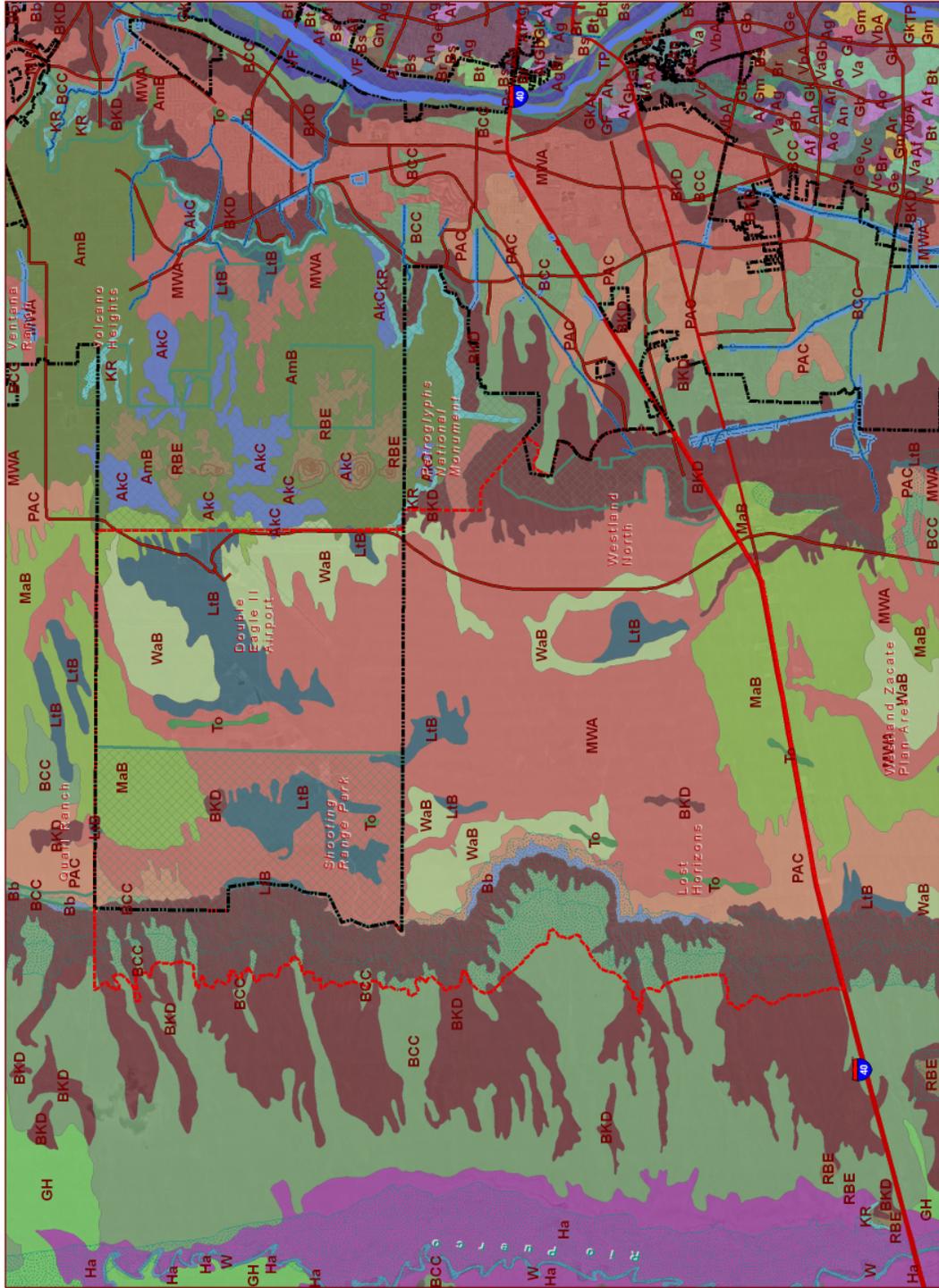
Data Source: NRCS

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November 14, 2006

0.50 25 0 0.5 1 1.5 2



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Major Land Ownership

Legend

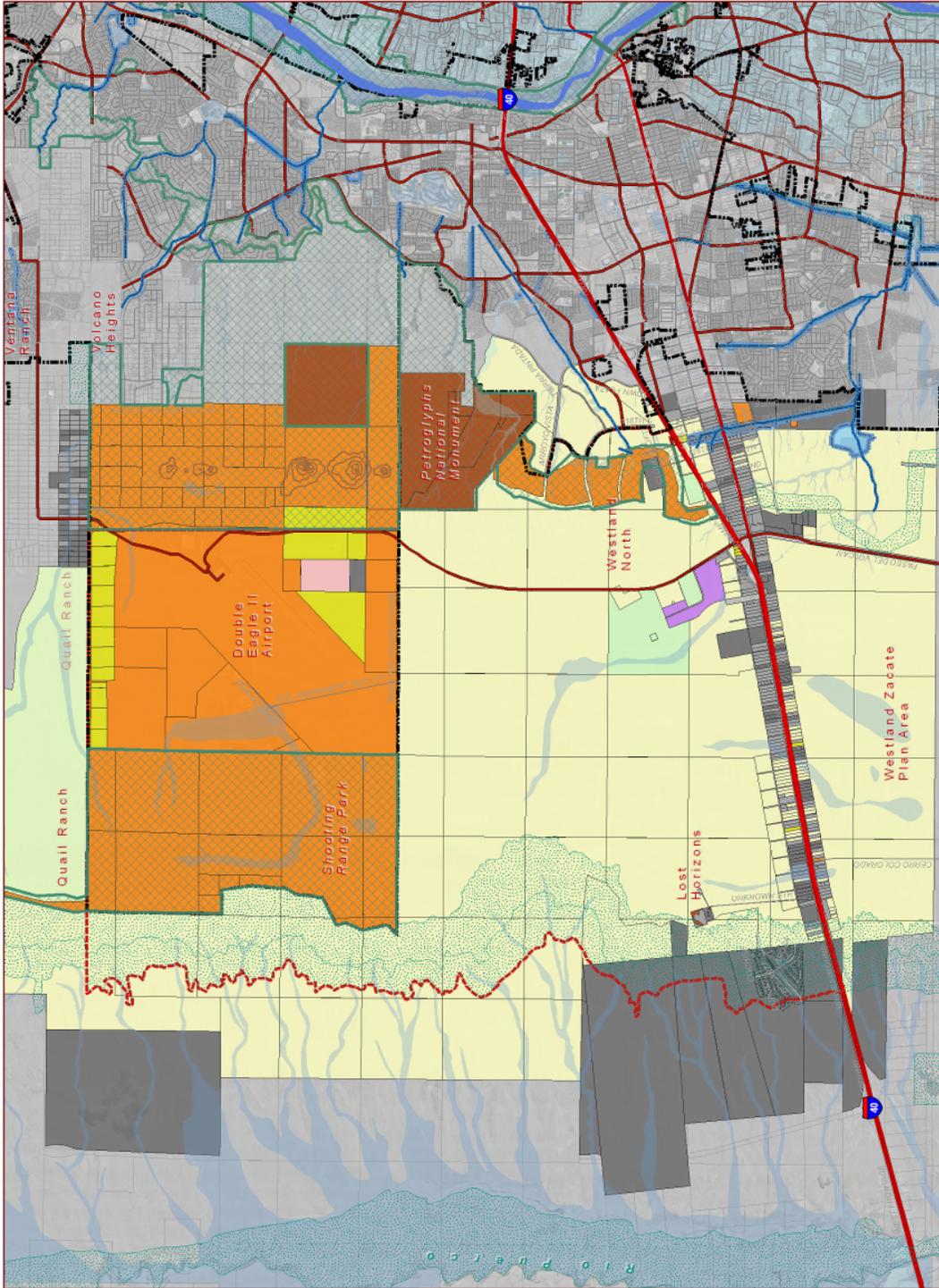
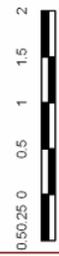
- City Boundary
- Study Area
- Ownership
- CITY OF ALBUQUERQUE
- AMTA
- COUNTY OF BERNALILLO
- BERNALILLO COUNTY TEMPORARY PROJECT (BAMC)'S PRINCIPLE
- STATE OF NEW MEXICO STATE LAND OFFICE
- MID DOT
- US Federal Government
- WESTSIDE ECONOMIC DEVELOPMENT LLC
- ECLIPSE AVIATION CORP
- BLACK FAMILY PARTNERSHIP
- WESTLAND DEVELOPMENT CO
- Lopez Private Land Holdings (Lobates)
- Small Private Land Holdings (Lobates)

Data Sources:
 Albuquerque GIS
 Mid-Region Council of Governments

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Existing Land Use

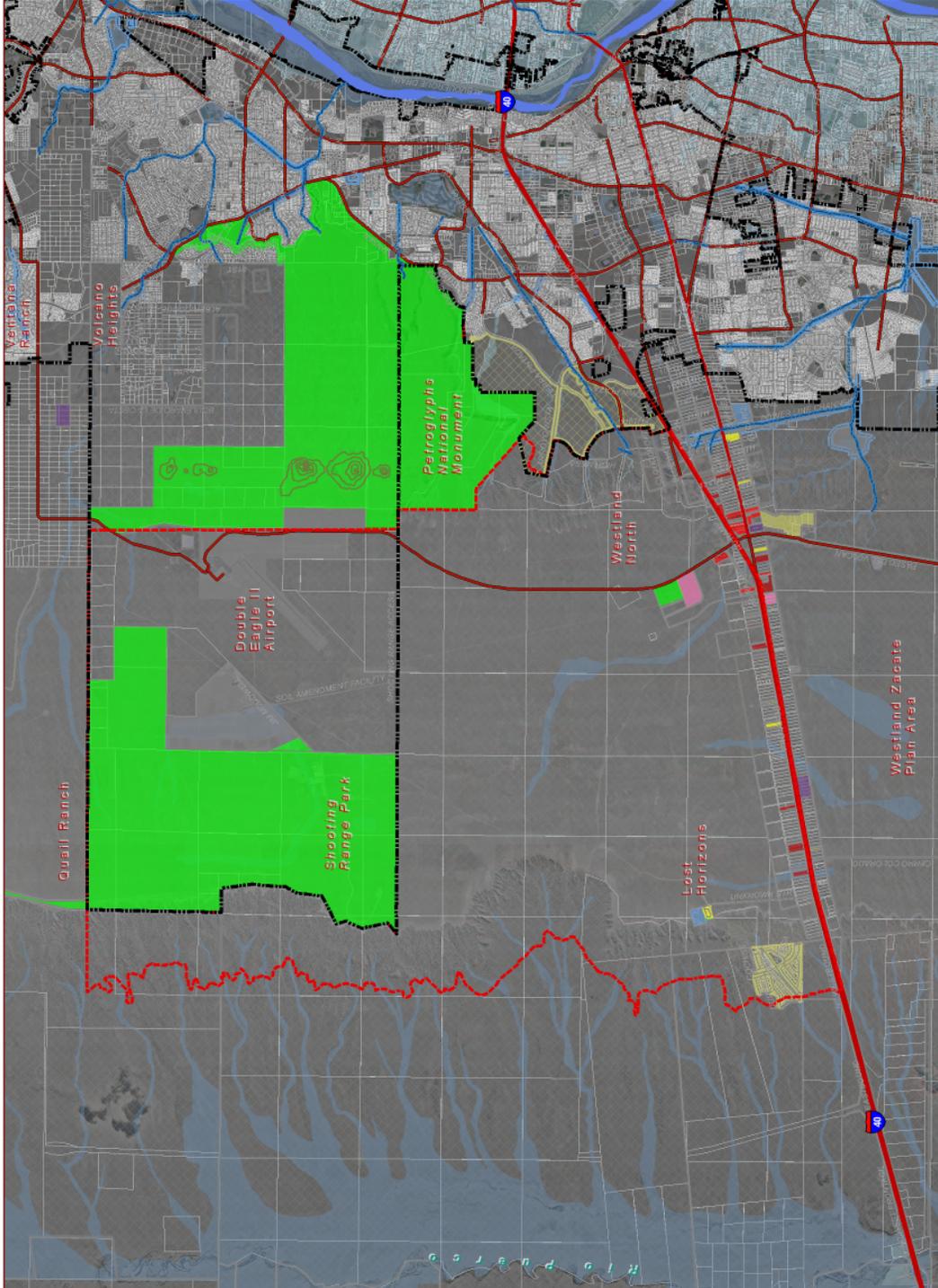
- Legend**
- City Boundary
 - Study Area
 - Existing Land Use
 - RESIDENTIAL
 - MOBILE HOME PARK
 - COMMERCIAL RETAIL
 - COMMERCIAL OFFICE & SERVICES
 - WAREHOUSING & WHOLESALE
 - MANUFACTURING & INDUSTRIAL
 - PUBLIC & INSTITUTIONAL USES
 - PUBLIC RECREATION & OPEN SPACE
 - TRANSPORTATION & UTILITIES
 - VACANT LANDS
 - VACANT LANDS - PLATTED SUBDIVISIONS

Data Sources:
Albuquerque GIS
Mid-Region Council of Governments

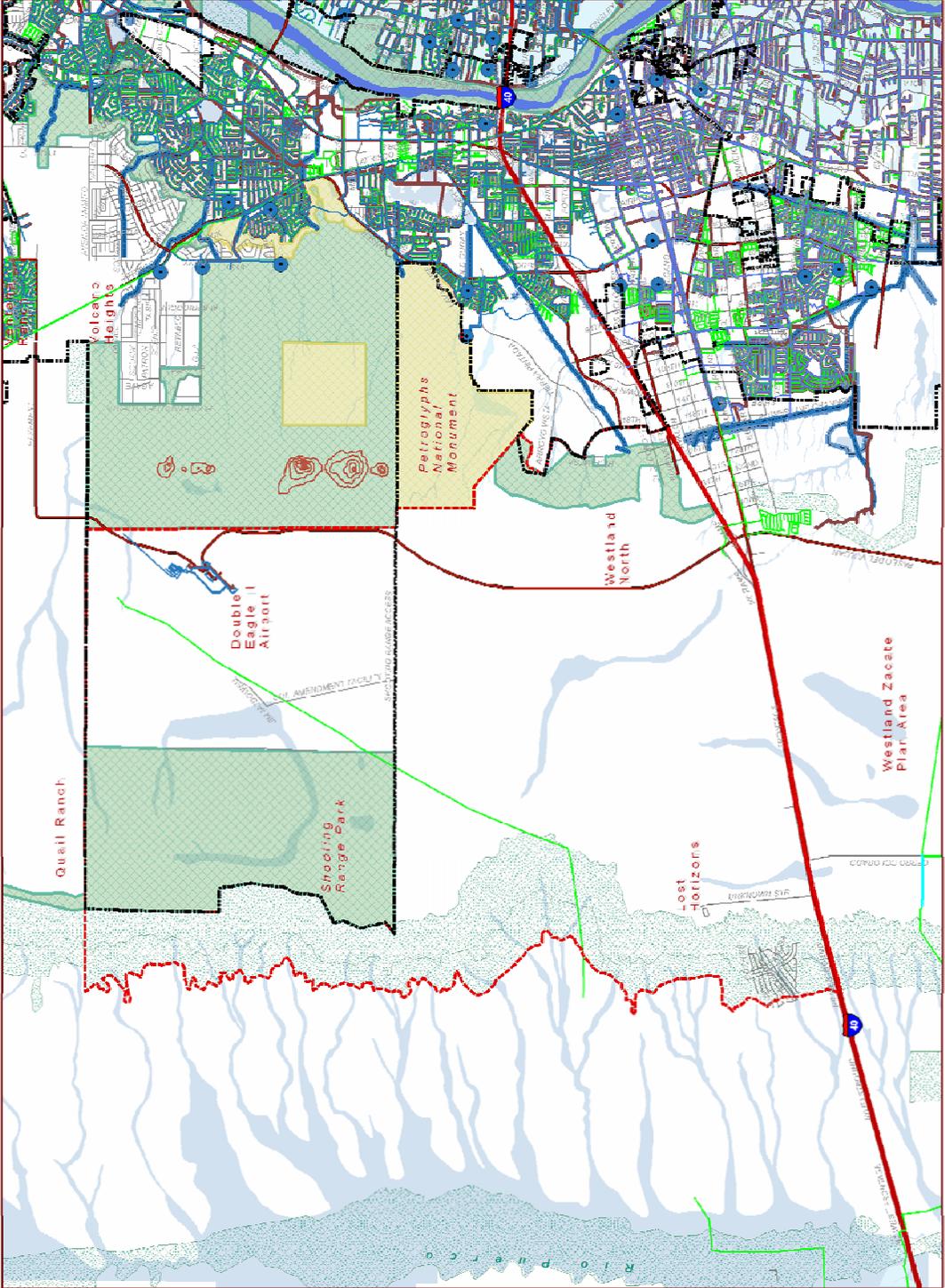
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Utilities

- Legend**
- City Boundary
 - Study Area
 - Water Mains
 - Sanitary Sewer
 - Gas Lines

Data Sources:
Albuquerque GIS
Mid-Region Council of Governments

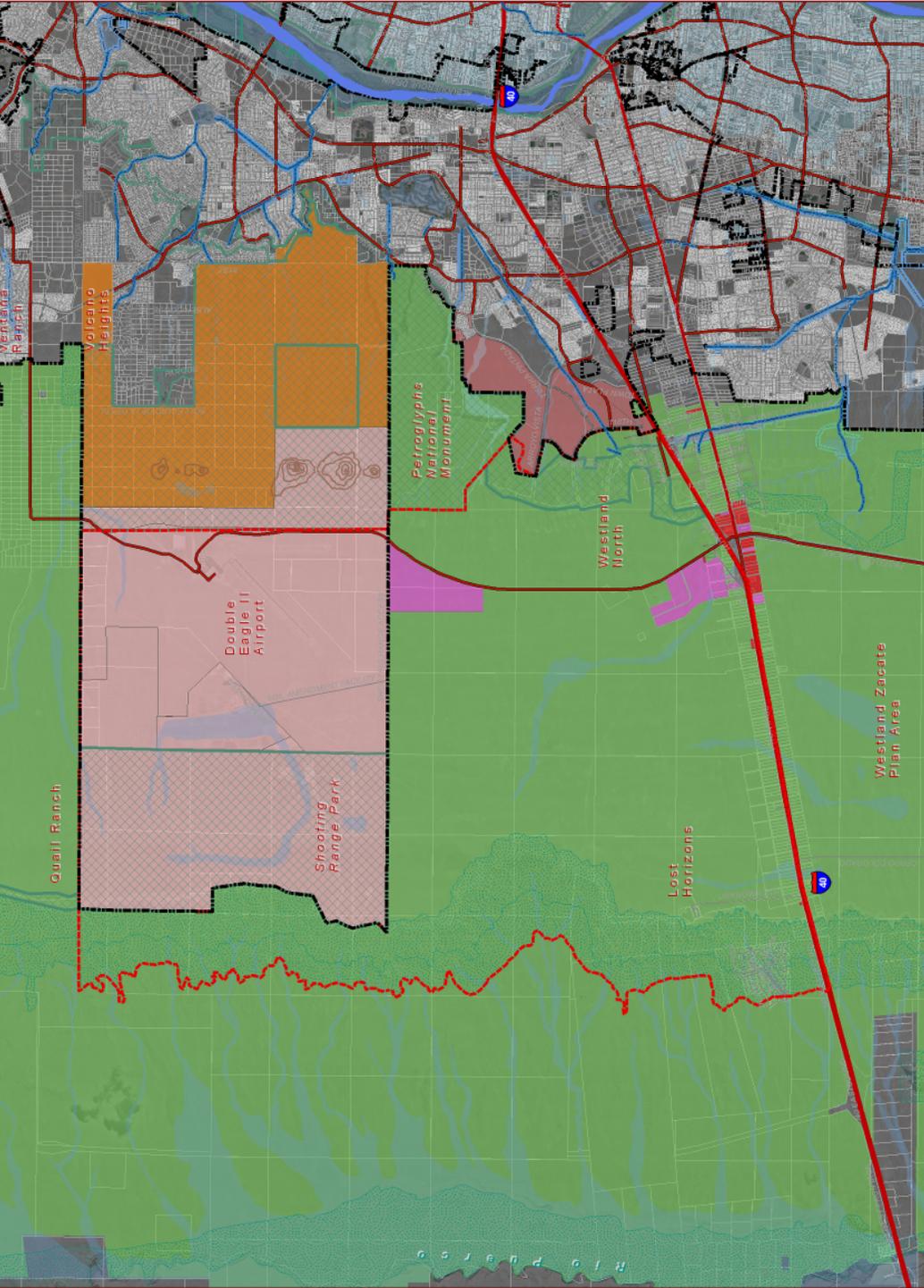
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Existing Zoning

- Legend**
- City Boundary
 - Study Area
 - Zoning**
 - A-1
 - RO-20
 - C-1
 - C-2
 - M-1
 - SU-1
 - SU-2
 - Unknown

Data Sources:
Albuquerque GIS
Mid-Region Council of Governments

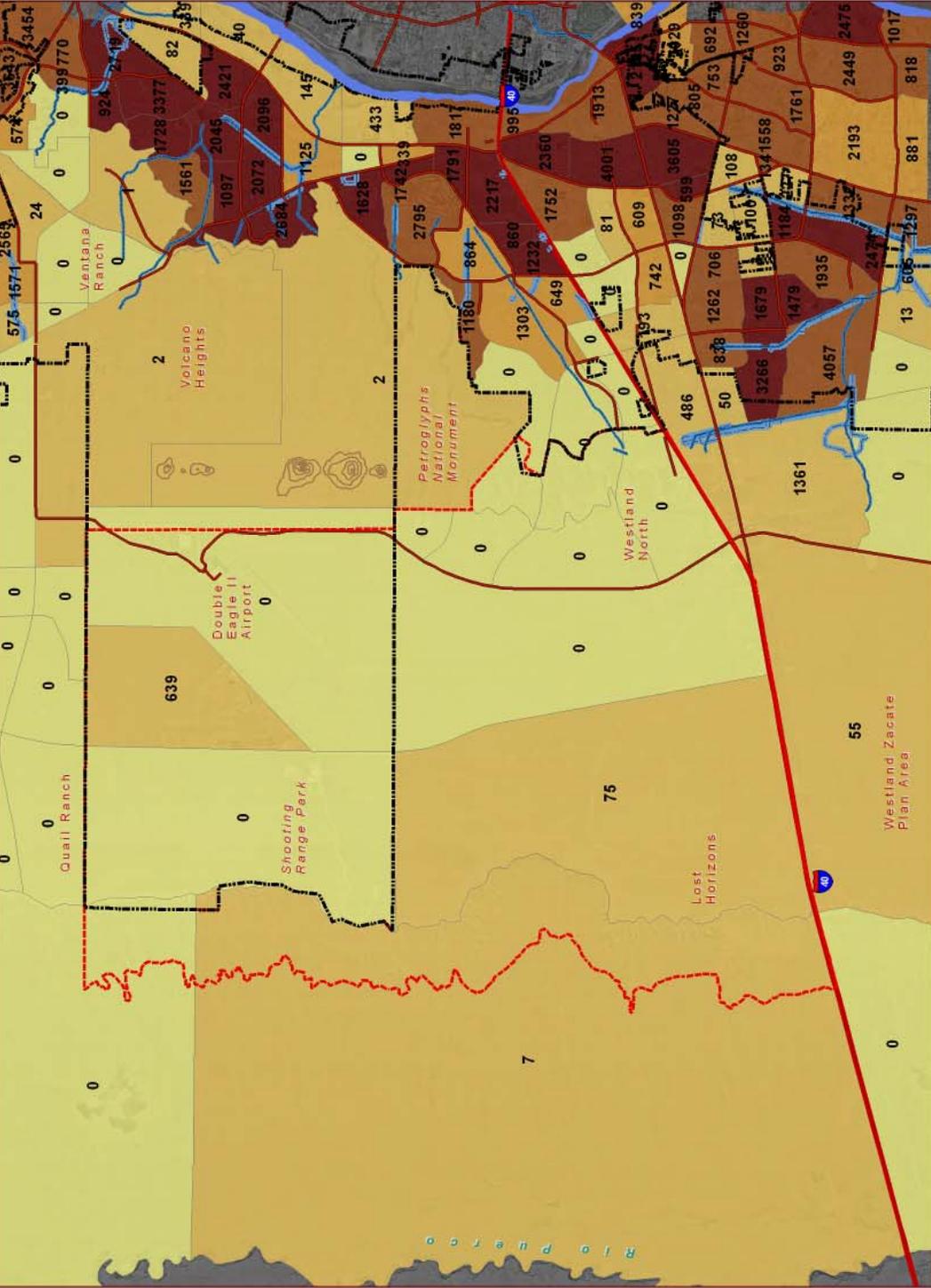
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2000 Population

- Legend**
- City Boundary
 - Study Area
 - 2000_POP / ACRES**
 - 0.00
 - 0.00 - 2.00
 - 2.00 - 4.00
 - 4.00 - 6.00
 - 6.00 - 20.53

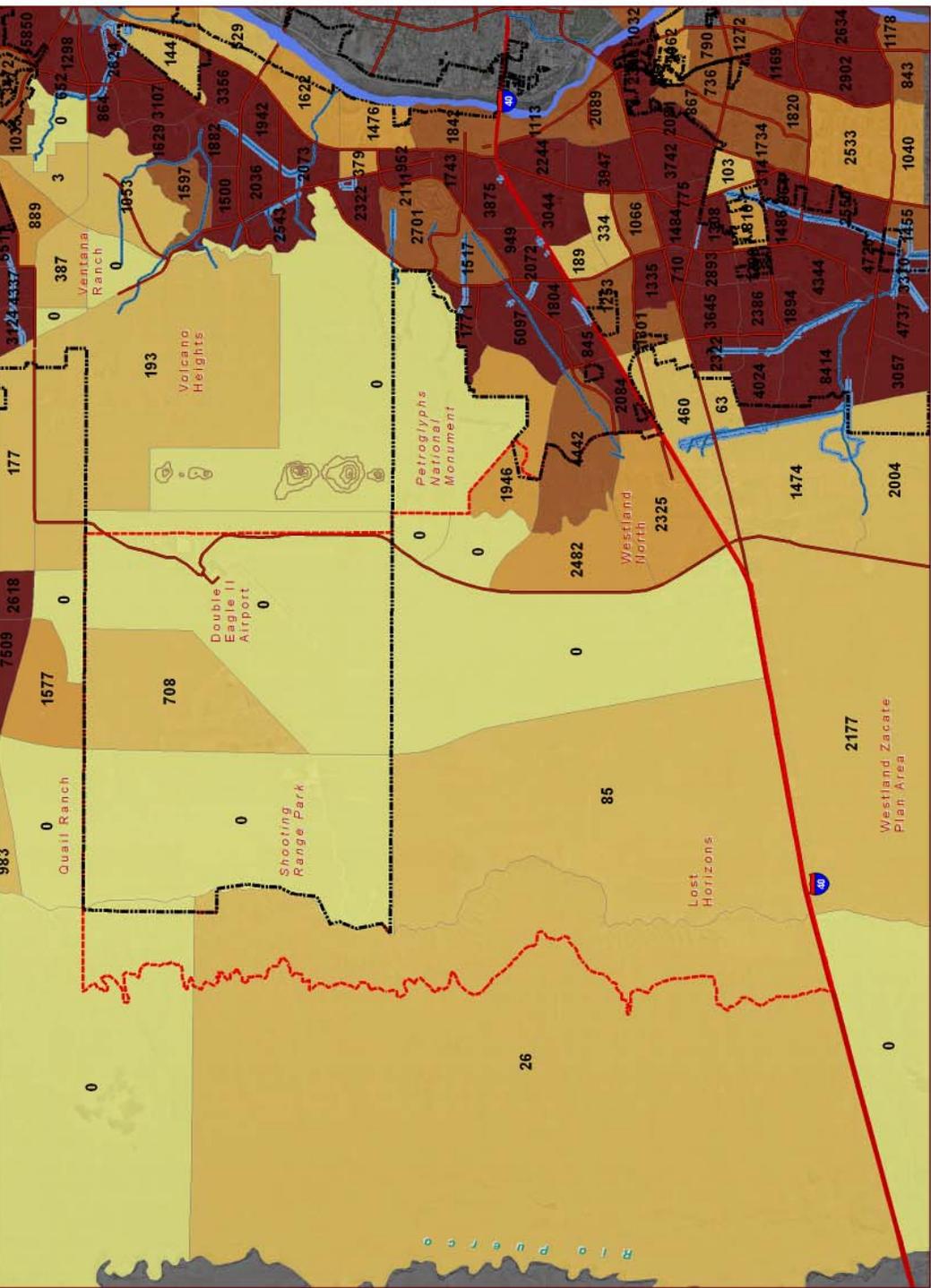
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2025 Population

Legend

- City Boundary
- Study Area

2025 Population Density

POP / ACRES

- 0.00
- 0.00 - 2.00
- 2.00 - 4.00
- 4.00 - 6.00
- 6.00 - 24.87

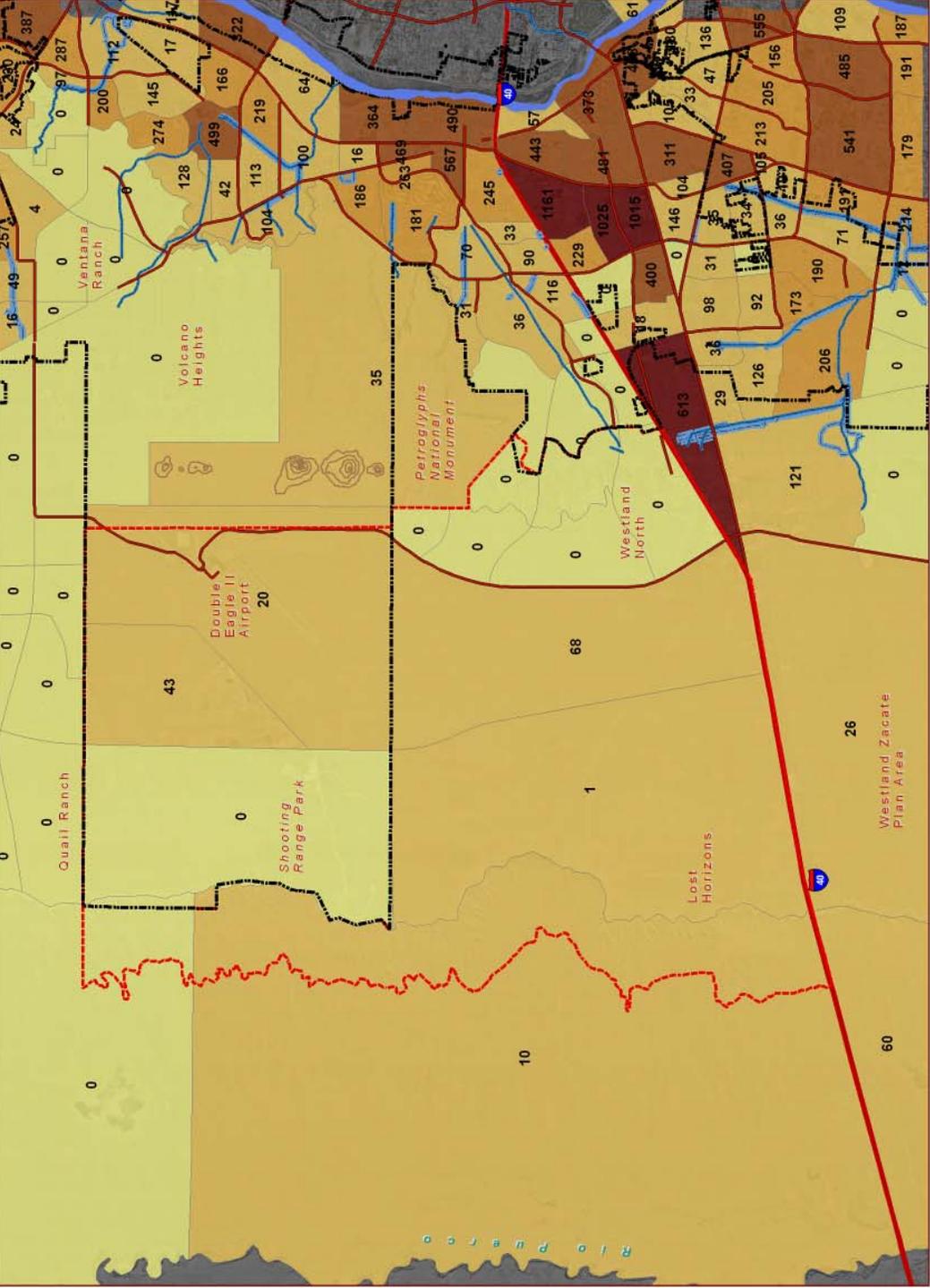
Data Sources:
Albuquerque GIS
Mid-Region Council of Governments

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November 14, 2006

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2000 Employment

Legend

- City Boundary
- Study Area
- Number of Jobs (2000)**
- 0
- 1 - 150
- 150 - 300
- 300 - 600
- 600 - 1161

Data Sources:
Albuquerque GIS
Mid-Region Council of Governments

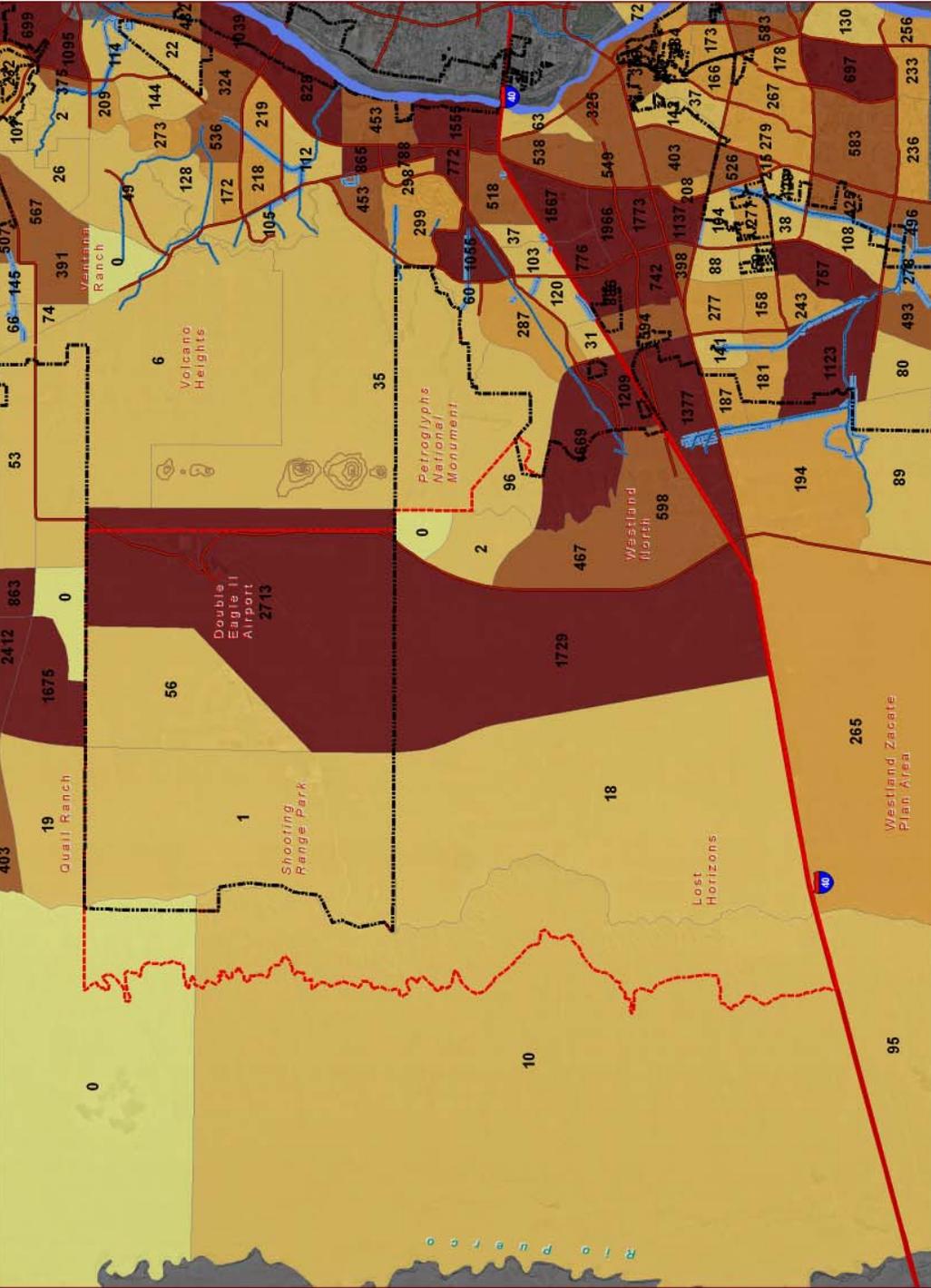
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Far West Mesa Planning Study



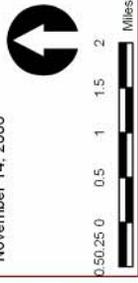
2025 Employment

- Legend**
- City Boundary
 - Study Area
 - Number of Jobs (2025)**
 - 0
 - 1 - 150
 - 151 - 300
 - 301 - 600
 - 601 - 2713

Data Sources:
Albuquerque GIS
Mid-Region Council of Governments

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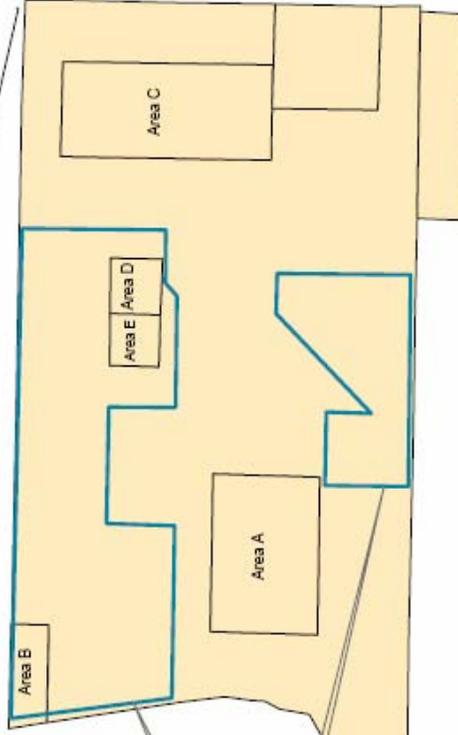
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site \approx 15,000 acres



WAA Demonstration Area
5,000 acres

Kirtland AFB Precision Bombing Ranges N-1, N-3, N-4, & "New" Demolitions

FFID: NM69799F624100
FUDS Site: K06NM044500