



CHAPTER IV

goals, policies, and implementation

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12.0 Goals

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The following goals are intended to support the policies set forth in the Rank 1 Albuquerque Bernalillo Comprehensive Plan, the Planned Growth Strategy, the Rank 2 West Side Strategic Plan, and the Rank 3 Northwest Mesa Escarpment Plan. The goals represent the overarching intent of the Plan. These goals are furthered in **Section 13.0 Policies starting on page 211.**

12.1. Environment and Open Space: The following goals are furthered with policies found in **Section 13.1 starting on page 212.**

12.1.1. Establish an interconnected open space network comprised of parks, arroyos, the Petroglyph National Monument, and other open spaces.

An organized system of open space can help conserve the natural environment, mitigate the impacts of development, provide exceptional recreational opportunities, and increase property values and quality of life for residents, employees, and visitors in and around Volcano Heights. Opportunities to experience and enjoy nature should be plentiful, especially for children. Often, these open space features can form the boundary of neighborhoods and maintain views to the Volcanoes and Sandia Mountains.

12.1.2. Respect Albuquerque’s culture and history, including Hispanic and Native American, through context-sensitive development in Volcano Mesa.

Volcano Mesa provides a unique portal to understand the rich interplay of cultures that is New Mexico. The stories and meaning of this place to Native Americans can be told through living in and visiting Volcano Heights, which should influence the way this special area develops. Volcano Heights should be an entry point for Albuquerque residents into different and important perspectives on humanity’s place on earth and our spiritual paths.

12.1.3. Conserve Volcano Heights’ archaeological resources and protect and emphasize views and visual connections to the volcanoes, Sandia Mountains, and the Rio Grande.

The volcanoes, Petroglyph National Monument, outcrops of basalt (especially those containing petroglyphs), the Sandia Mountains, and other locations are sacred places for many Native Americans, and they still figure into their ceremonial practices. Views can be protected and enhanced through considerate site planning and by creating view corridors using streets and arroyos. Important views from locations within Volcano Heights to the Rio Grande basin, across the city of Albuquerque, and to the Sandia Mountains should be protected.

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- 12.1.4. Maintain scenic edges, protect important views, and minimize the visual impact of development that can be seen throughout the city.**

The built environment and landscape along the edge of the Petroglyph National Monument will form a pleasant transition from the natural area to the developed area. Open space constitutes an important resource that demands special landscape and architectural treatments. As development within the Volcano Heights Major Activity Center will be visible from most of the City of Albuquerque, care should be taken to achieve development that is not visually intrusive, especially in the lower-density residential areas adjacent to the Petroglyph National Monument. Appropriate building heights, sizes, and reflectivity will minimize the visual impact of development.

- 12.1.5. Encourage infrastructure strategies that are economically, aesthetically and environmentally sound.**

Electrical utility distribution lines should be placed underground. Infrastructure improvements should promote and make visible an environmental ethic for the area. Infrastructure should be designed and constructed to enhance and/or encourage sustainable developments. Drainage treatments should respect sensitive lands such as Piedras Marcadas Canyon, the Petroglyph National Monument, and significant rock outcroppings, as well as the unique aesthetics of the area. Transportation infrastructure should enhance the economic sustainability of the community by offering viable choices for multiple modes of travel for people of all ages and abilities.

- 12.1.6. Minimize the negative effects of blasting and fugitive dust to the Petroglyph National Monument.**

Development design and construction activities should be carefully planned to minimize negative impacts to the Petroglyph National Monument. Property owners should consult with the City Open Space Division and National Park Service on strategies, monitoring, and construction techniques to ensure compliance with requirements and standards.

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12.2. Economic Development: The following goals are furthered with policies found in **Section 13.2 starting on page 213.**

12.2.1. Provide a variety of employment opportunities that provide livable wages and high-quality work environments.

Economic development and recruitment efforts should emphasize businesses that provide livable wages and high-quality work environments.

12.2.2. Achieve a sustainable and vital mix of regional- and local-serving retail and services.

This Plan seeks to help minimize the jobs/housing imbalance between Albuquerque's West and East sides by creating a Major Activity Center that serves local and neighboring populations. A densely-developed mix of commercial activities that meets a wide range of needs will encourage visitors to "park once and walk" to multiple destinations and attract residents and large employers to the area.

12.2.3. Coordinate development across property lines and among multiple property owners.

This Plan advocates coordination among property owners, including the possibility of working with a Master Development Coordinator who can partner with owners to oversee the improvement of all properties. This strategy is particularly helpful to coordinate infrastructure planning and construction, including grading, roads, and

utilities to prepare properties for development. A master development coordinator would be instrumental in preparing an application for a TIDD, an SAD, or a PID to benefit multiple property owners, if not the whole Plan area.

An experienced, third-party master developer and/or marketing strategist can also help to coordinate complex projects with a variety of development types and/or projects that will overlap and/or follow one another.

12.2.4. Establish a Major Activity Center in order to provide significant long-term economic development opportunities while also providing for the social, cultural, and environmental needs of the Volcano Mesa area.

The development of a Major Activity Center in this area can help achieve a diverse and balanced set of uses that would spur economic development and reduce the need for West Side residents to travel long distances to access employment and other daily services. Allowing a wide range of uses that support the establishment of a Major Activity Center can serve as a catalyst for private investment and the creation of much-needed jobs west of the Rio Grande. Capitalizing on and respecting the unique resources and features of the area, such as the Petroglyph National Monument and rock outcroppings, will strengthen "sense of place" and contribute to successful development.

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12.3. Transportation: The following goals are furthered with policies found in **Section 13.3 starting on page 214.**

12.3.1. Provide a choice of viable transportation options for commuting and daily needs.

Walking is a safe, viable travel option, especially for children and the elderly, for recreation, commuting, and shopping. For greater distances, transit should offer a convenient alternative to single-occupancy vehicles. Transit, in particular, could lessen reliance on the automobile, reducing pollution, congestion, and pressures to widen roads and bridges, especially at regional “pinch points” like the Rio Grande and the Escarpment.

12.3.2. Support an efficient and reliable transit system.

To support as frequent service as possible and maximize ridership with less public subsidy, transit stop locations should be coordinated with the development of higher density residential and employment uses. More intense corridors should include major retail, commercial, and employment destinations. Doing so will allow the earliest implementation of traditional transit service, which can eventually segue to **BRT** systems using specialized vehicles and techniques that make transit travel times competitive with the single-occupancy vehicle. While transit service may initially share general purpose travel lanes, all arterial streets in this Plan have ultimate cross-sections with enough right-of-way and flexibility to accommodate transit in multiple configurations, including as dedicated transit lanes on the outside edges or along extra-wide medians.

12.3.3. Create “Complete Streets” for people as well as cars, by providing street trees, landscaping, wide sidewalks, and active uses.

Streets should feel safe and comfortable for pedestrians and work well for all other modes of transportation. The design of streets and the buildings that face them influences whether someone will choose to walk. Pedestrian-friendly streets have sidewalks that promote both circulation and activity, street trees, and slow-moving traffic. They also have pedestrian-scaled buildings with frequent entries, windows, and attractive features. Parking lots and blank walls should be minimized along pedestrian routes.

12.3.4. Connect different uses and areas by an efficient and convenient street network.

Streets should create safe and direct connections between common destinations, not act as barriers that separate people and neighborhoods. Streets should be designed to control vehicle speeds and be a comfortable place for neighbors to interact. Rather than concentrate traffic, highly connected streets form a grid and distribute traffic among roadways. A street network grid also creates redundancy for additional safety and emergency response.

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- 12.3.5. **Retain the primary purpose of Paseo del Norte and Unser Boulevard to serve regional traffic, while balancing the needs of the local road network to serve new development and multiple modes of traffic, including pedestrians.**

The Plan recognizes the limited-access nature and classification of Paseo del Norte and Unser Boulevard. At the same time, the Plan proposes land uses and a **Primary Street** network intended for safe, attractive, dense, pedestrian-friendly urban environment, including a “loop road” of connector streets that provides alternative access to development off Paseo del Norte and Unser Boulevard. As the area develops over time, the goal is to “tame” these roads to help create a gateway to a more urban, walkable environment. These regional roads will give the first “sense of place” to many potential visitors to Volcano Heights and should reflect and complement the area’s character accordingly, while still functioning as limited-access, primary regional arterials.

- 12.3.6. **Remove restrictions on truck traffic on key roads to provide truck access necessary to support retail and commercial uses.**

Several roads on the West Side restrict truck traffic. The City **DMD** should work with the Mid-Region Council of Governments (MRCOG) and its constituent jurisdictions to remove or modify several of these restrictions in order to facilitate truck movement to serve businesses and improve services on the West Side.

- 12.4. **Land Use and Urban Design:** The following goals are furthered with policies found in **Section 13.4 starting on page 225.**

- 12.4.1. **Recognize walkable neighborhoods and districts as the essential building blocks of a more sustainable city and region.**

Strong and healthy neighborhoods, because they operate at a scale where people walk and interact, are essential to successful and sustainable development. Organizing development within walkable mixed-use districts and neighborhoods supports transit, economizes on infrastructure, and respects the environment. Requiring that development comply with design standards that support the creation of safe, comfortable, and visually attractive settings supports a community’s long-term economic, cultural, and social viability.

- 12.4.2. **Bring homes, businesses, and daily destinations — like retail and community facilities — closer together within neighborhoods and districts.**

Homes should be within walking distance of a mixed-use center containing retail, community services, park and plazas. Studies have shown that this walkable pattern of development can reduce the number of vehicle-trips dramatically. Walkable districts and neighborhoods also have proven social and economic benefits resulting from better access to basic needs, services, and amenities; safer and more active streets; and improved health through physical activity.

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- 12.4.3. Encourage architectural and landscape treatments that are consistent with the region's traditions and climate and help to establish a unique sense of place.**

New development in Volcano Heights should continue to respect and enrich Albuquerque's design traditions that spring from its arid climate, intense sun, local materials, and the cultural background of its inhabitants. These considerations deserve continued attention to respect the past and work toward an energy- and water-efficient future. The quality of individual buildings contributes to a sense of place and permanence. High standards for architectural and landscape design for individual buildings, lighting, utilities, walls, and landscaping materials help to create a built environment with lasting character that draws on southwestern regional styles and traditions. Standard franchise architecture should be discouraged. Individual design expression within distinctive character districts should contribute to an overall framework of quality. Buildings should be designed to address the unique climatic conditions of the southwest, including orientation to conserve water, protect pedestrians from intense summer sunlight and heat, provide adequate heating during cold winters, and take advantage of natural lighting.

- 12.4.4. Promote diverse housing options throughout Volcano Heights.**

A variety of housing types—at varying densities—allows the opportunity for residents to move through all stages of life within the same neighborhood. Housing diversity will also promote and attract businesses to balance residential development on the West Side.

- 12.4.5. Support the creation of a major employment center in Volcano Heights.**

Most working West Side residents commute to work on the east side of the Rio Grande (many in downtown Albuquerque or along Interstate 25), which contributes to regional traffic congestion at river crossings and on the West Side. Major job growth in Volcano Heights will provide opportunities for working closer to home, minimizing the need for river crossings or reversing commutes in a direction where roads have existing capacity. A frequent and reliable transit service for this Major Activity Center will further improve commuting times.

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- 12.4.6. **Establish a mixed-use Major Activity Center as a transit-oriented development that offers a range of retail, commercial, and entertainment destinations; urban housing; and employment opportunities.**

A Major Activity Center should encourage higher-density and higher-intensity opportunities for residential options and employment areas. While neighborhood retail can meet most daily requirements, many needs must be met within larger centers that serve larger populations. A mixed-use Major Activity Center should encourage opportunities for comparison shopping, entertainment, restaurants, cultural activities, and government services.

Unlike many exclusively single-family residential subdivisions, Volcano Heights should offer dense urban housing in mixed-use environments for those who prefer them, which greatly increases the likelihood of walking and transit use. Transit, amenities, and housing in the Major Activity Center will help attract employment to the West Side.

- 12.4.7. **Incorporate street infrastructure and streetscape details that support the creation of distinct, pedestrian-friendly districts.**

Where taller lights are required, for example a major thoroughfare, consideration should be given to a design appropriate to the larger scale. Reproductions of historic lamps such as the “bishops crook” poles are a more aesthetic solution than the cobra head.

- 12.4.8. **Locate more active uses nearest to transit, bikeway, and pedestrian facilities. Locate auto-oriented uses near ‘B’ streets.**

This Plan distinguishes between ‘A’ streets, which are designed to best accommodate pedestrians, transit users, and cyclists, and ‘B’ streets, which are meant to be more auto-oriented. Development that includes active street life, such as theatres and restaurants with patio seating, should be located along ‘A’ streets, as near to transit as possible. Auto-oriented development should be located along ‘B’ streets to provide the primary auto access to development.

- 12.4.9. **Achieve a walkable built environment through a vital mix of retail and services near higher-density residential development.**

Pedestrian-friendly commercial areas will benefit from the additional “eyes on the street” and customer base provided by high-density residential development like apartments, lofts, and condominiums. Ultimately, this vibrant “critical mass” of residents and retail and service providers will contribute to the creation of a “sense of place” in Volcano Heights that can help attract additional employers and businesses to the area.

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12.5. Infrastructure: The following goals are furthered with policies found in **Section 13.5 starting on page 228**.

12.5.1. Provide for the orderly expansion of infrastructure and public facilities in the area.

Infrastructure improvements in Volcano Heights will need to be phased in a way that recognizes technical limitations and available funding and that provides infrastructure and facilities in a timely way to meet the needs of residents, businesses, and local employees.

12.5.2. Leverage public/private partnerships and financing for infrastructure improvements that position the area for development.

The dense, transit- and pedestrian-friendly development envisioned in this Major Activity Center will require transportation infrastructure that serves all users with enhanced pedestrian realms, dedicated transit facilities, and other features not found in conventional residential subdivisions. Collaboration among property owners to use existing public/private partnership mechanisms, like TIDD, SAD, or PID for the orderly construction of transportation and other necessary infrastructure on a large scale, rather than piecemeal, will help attract development and employment to the area.

12.5.3. Invest in and incorporate the most up-to-date technology and maximum capacity for infrastructure and utilities.

The best technology and highest capacity should be planned for infrastructure and utilities, particularly telecommunications, in order to attract and support high-tech businesses as well as a diverse spectrum of desirable commercial activity.

12.5.4. Coordinate among property owners to leverage investment in water source and water quality improvements.

Volcano Heights spans two water pressure zones, one of which is smaller than the City's standards size, as it was previously owned by New Mexico Utilities. The amount of bedrock in the area, the presence of arsenic, and the need for a new water tank to support new development will pose significant front-end costs before any development can occur. These improvements could be included in a TIDD, SAD, or PID, which would provide a mechanism to share the costs across property owners based on the potential benefits to each property. [See **Section 14.0 Implementation starting on page 233** in this Plan and **Appendix A** for more explanation of Pre-Existing Conditions, including water systems.]

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12.5.5. **Clean stormwater by natural processes prior to entering the storm drain system.**

In general, the Volcano Heights area drains to the southeast corner, Paseo del Norte, and the escarpment. Drainage ponds are required due to the limited capacity of the Piedras Marcadas arroyo. Where possible, alternatives to stormwater/sewer lines are preferred. Bioswale/linear ponds, as well as other natural treatments, particularly in the Park Edge Zone (VHET), perhaps in conjunction with or incorporated into the Park Edge Road, could add natural amenities to the area as well as improve stormwater quality.

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13.1. Environment and Open Space: The following policies further goals found in **Section 12.1 starting on page 202.**

13.1.1. The City Open Space Division should prioritize significant rock outcroppings, the archaeologically significant playa area, and double-loaded portions of the Park Edge road for acquisition or land swaps. Areas identified for acquisition should be reviewed by the Open Space Advisory Board for inclusion in the **Major Public Open Space** priority acquisition list.

13.1.2. Future open space acquisitions within the Plan area should be considered for future General Obligation Bonds.

13.1.3. Sensitive lands – whether rock outcrops or significant cultural, archaeological, volcanic, or geologic land – that cannot be or have not been purchased by City Open Space should be permanently protected privately through either a Transfer of Development Rights, a Conservation Easement, or replatting as **private open space**. [See **Appendix D** for more about options for private preservation options.]

The costs of archaeological resource mitigation tend to be much higher than the alternative of in-place avoidance. The protection of archaeological sites through avoidance is included in this Plan as an incentive for greater development density and height through the optional bonus height system as well as rock outcroppings counting double their square footage to satisfy either usable or detached open space requirements.

[See **Section 6.4 starting on page 111** and **Table 6.1 on page 112** for the bonus height system and **Section 9.5.11 starting on page 144** for the square footage incentive.]

13.1.4. Property owners should provide public access to **rock outcroppings** via nearby sidewalks and pedestrian walkways. Where such access is provided, the property owner should grant a public access easement that remains with the property in perpetuity. **Appendix D** offers additional options for private preservation options, including Conservations Easements, which may be eligible for tax rebates. These areas are excellent places to incorporate **water harvesting**, as coordinated and approved by the City Open Space Division and the City Hydrologist.

13.1.5. The City should adopt an ordinance to allow Transfer of Development Rights (TDR). This would allow property owners with **rock outcroppings** to “send” density to “receiving” properties where density is more appropriate. Similarly, property owners with multiple properties — some with rock outcroppings and some without — would be able to transfer development densities and height bonuses between properties.

13.1.6. Dedications of land to the City for **Major Public Open Space, detached open space**, and/or **parks** are preferred **abutting** the Petroglyph National Monument, **rock outcroppings**, multi-use trails, or parks. Dedications are subject to approval by City Parks and Recreation and/or Open Space Division.

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- 13.1.7. The City should swap land it owns within Volcano Heights for any portions of properties rendered undevelopable by **Primary Streets**, particularly the Park Edge Road. Where a land swap is not possible, the City should purchase undevelopable remnants of land.
- 13.1.8. Open space areas should be considered for LID techniques. [See **Table 13.2** and **Exhibit 13.5 on page 229.**]
- 13.1.9. Infrastructure and development projects within the Escarpment Transition zone should be designed to minimize potential negative impacts to the Petroglyph National Monument. Construction activities should be carefully planned in consultation with the City Open Space Division and the National Park Service to minimize fugitive dust and vibration impact on the Monument and ensure compliance with standards and requirements.
- 13.1.10. Protecting the area's natural resources, including the Escarpment within the Petroglyph National Monument, is important while balancing the opportunity to create an urban district with an identity, character, and sense of place inextricably linked to the volcanic landscape. For development within the Escarpment Transition zone, abutting archaeological sites, or adjacent to Major Public Open Space, the City Open Space Division should coordinate with property owners and City Planning staff to create a process to sufficiently document existing conditions on the subject property as well as the nearby natural resource to enable effective monitoring, implementation, and oversight of construction activities – particularly blasting.
- 13.2. Economic Development:** The following policies further goals found in **Section 12.2 starting on page 204.**
 - 13.2.1. The City should designate all but the Transition zones as the Volcano Heights Major Activity Center, including updating the Centers and Corridors map in the Albuquerque-Bernalillo County Comprehensive Plan.
 - 13.2.2. Economic development should include a range of retail, office, and light manufacturing. Non-residential development should include goods and services for regional and local residents and visitors.
 - 13.2.3. Business recruitment should focus on employment opportunities that provide livable wages and high-quality work environments.
 - 13.2.4. Mixed-use development should include opportunities for retail and services for local and nearby residents.
 - 13.2.5. Innovative businesses, green businesses, and new businesses that add employment opportunities, as opposed to cannibalizing commercial uses in other areas, should receive priority consideration for public-private partnerships, matching funds, and leeway in standards within the range acceptable as Minor or Major per **Table 3.2** and **Table 3.3 starting on page 31.**
 - 13.2.6. City Economic Development should work with property owners, prospective businesses, and the Double Eagle Airport to recruit businesses for Volcano Heights.

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13.2.7. The most up-to-date and forward-thinking communications infrastructure should be incorporated throughout Volcano Heights to allow maximum flexibility for prospective businesses and industries.

13.3. Transportation: The following policies further goals found in **Section 12.3 starting on page 205.**

These transportation policies provide guidance for the development of a transportation network within the Volcano Heights Plan area. The goal is to facilitate a range of transportation options that support lifestyle choices and quality of life for people of all ages and abilities. This Plan advocates strategies to create a street network that distributes local traffic efficiently and maintains regional traffic movement through the Plan area. This street network is multi-modal, serving automobiles but also providing bicycle facilities and pedestrian amenities to serve commuters as well as recreational users, and all modes are linked to public transit routes. The intent is to create a transportation system that provides easy access to where people live, work, and play. This Plan proposes and defines a network of **Primary Streets**, for which a transportation assessment was conducted in 2012. [See **Appendix C**].

These policies are intended to support and implement goals set by the Mid-Region Council of Governments (MRCOG) to shift the mode of travel to mitigate congestion at river crossings, promote the integration of alternative modes of transportation, and encourage higher-density land use in appropriate areas oriented to multiple modes of traffic, including pedestrians, transit, and cyclists.

The designated Major Activity Center (MAC) in the Volcano Heights incorporates the higher-densities and mixed land uses that can promote walkability and ultimately support frequent high-capacity transit such as **BRT**. This type of development can also play a role in preserving open space and views and buffering existing lower-density areas from higher-activity areas.

Well-connected, context-sensitive local street systems work together with the form-based zoning to shorten block lengths, provide a variety of transportation options for commuters and for resident's daily needs, reduce traffic on arterial roadways, and support transit, bicycling, and walking as viable modes of travel.

Linking land use and transportation planning to investment is a key factor in managing congestion and improving the balance of housing and jobs west of the Rio Grande. More specifically, higher-density **mixed use** development in appropriate locations and densities is necessary to support vital local communities and a cost-effective transportation system for all modes. The Volcano Heights MAC is intended to provide a center of activity to address transportation needs throughout the metropolitan area.

Intensive uses and population density are critical to successful transit. In return, transit will play a vital role in reducing regional traffic congestion, but to be widely used it must be fast, frequent, and reliable. This Plan's emphasis on walkability and urban development will help to make more frequent transit service viable.

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MRCOG stresses the connection between land use and transportation planning in the 2035 MTP. In conjunction with the MTP, the Metropolitan Transportation Board established mode share goals of 10% of river crossing trips to be completed by transit by 2025 and 20% by 2035. MRCOG views transit-supportive developments such as Volcano Heights to be critical towards ensuring regional mobility and achieving regional mode share goals.

The **BRT** system proposed for the area in the future incorporates dedicated bus lanes and emerging technologies to make travel times competitive with the car. MRCOG is conducting a high-capacity transit study as of 2013. Potential alignments identified for high-capacity transit routes include Unser Boulevard and Paseo del Norte in the Volcano Mesa area and extend to the Journal Center / North I-25 area and ultimately to the UNM/CNM area and downtown. High-capacity transit would transport area residents and workers to and from the Plan area and established West Side communities, as well as provide mass transit to central Albuquerque and jobs in the I-25 corridor as well as other employment and activity centers east of the Rio Grande. This route alternative responds to the projected growth throughout the region's West Side and the pressure that growth would impose on the roadway network and river crossings. Rio Metro is analyzing the potential for compact and transit-oriented development to increase ridership on West Side transit routes relative to existing conditions as part of the transit study.

MRCOG will seek federal and other funding sources to implement the route that is ultimately selected as the locally-preferred alternative. The timeframe for implementation of service through Volcano Heights is dependent in part upon the approval and realization of the Volcano Heights SDP.

Developing walkable urban centers is key to ensuring pedestrian safety. The Federal Highway Administration (FHWA) recently designated Albuquerque as a Pedestrian Safety Focus City because of the high rate of pedestrian fatalities. Focus cities were identified based on more than 20 average annual pedestrian fatalities or a pedestrian fatality rate greater than 2.33 per 100,000 population. The **FHWA** will provide technical assistance to conduct training on street designs for pedestrian safety, including a Road Safety Audit in locations that have a high number of pedestrian involved crashes. A Road Safety Audit looks at all modes using the street, the current design and signalization, and the location of transit to provide short- and long-term recommendations for improvement.

MRCOG has conducted a street connectivity analysis of developed areas in the region. The analysis shows that a well-connected street network has lower levels of congestion than a less-connected network. The more connected the surrounding street network is, the less congestion there is on major arterials. The connectivity analysis is currently done by calculating the number of intersections per mile. Enhanced street connectivity can disperse traffic, enhance safety, provide alternative emergency routes, and support the use of alternative transportation modes to the single occupancy vehicle.

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13.3.1. **Regionally Significant Roads:** Paseo del Norte and Unser Boulevard through the Plan area are vital to the realization of the Major Activity Center and associated benefits of job creation and alleviation of regional traffic congestion. Both also serve a vital regional transportation function and will continue to serve existing and future development beyond the Plan area. The cross sections in this Plan are specifically designed to serve both regional transportation needs and the proposed multi-modal urban development pattern envisioned by the Plan.

(i) **Funding for Construction:** As such, the City should prioritize and attempt to secure funding to help with the construction of Paseo del Norte and Unser Boulevard within the Plan area per the cross sections within this Plan. Segments that are necessary for implementing enhanced transit service should be prioritized for funding.

(ii) **Grade-separated Interchange:** Per The Mid-Region Metropolitan Planning Organization Transportation Coordinating Committee (TCC) Resolution R-13-03 [See **Appendix C**], the intersection of these two regionally significant roads should be reviewed for the construction of a grade separated interchange at such time as traffic congestion and development conditions warrant.

Until this time, the intersection should be constructed as a traditional at-grade, signalized intersection. At such time as a grade-separated interchange is recommended by the TCC, it should be designed to complement this urban, multimodal area and minimize negative impacts to the surrounding land uses, trails, and sensitive lands, specifically:

- a. The interchange should be designed with the smallest footprint that works operationally for the defined design horizon, and
- b. The interchange should incorporate the best practices for urban, multimodal interchanges, in order to support safe crossings for all modes of transportation in all directions.

(iii) **Limited-access Intersections:** In order to protect the regional function of these roads, all access to new development in Volcano Heights should be from streets connected to the approved intersections on Paseo del Norte and Unser Boulevard shown in **Exhibit 10.3 on page 167**. Streets providing access to new development may be either **Primary or Secondary Streets** as most appropriate.

- a. For **Primary Street** locations and designations, see **Exhibit 10.1 on page 163**.
- b. For **Primary Street** cross sections and design standards, see **Section 10.6 starting on page 171**.
- c. For **Secondary Street** design standards, see **Section 10.7.3 starting on page 188**.

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13.3.2. **Transit System:** The transit system in the Volcano Mesa area should serve three significant corridors:

- (i) east-west along Paseo Del Norte;
- (ii) north-south along Unser Boulevard, and
- (iii) southeast-northwest along Rainbow Boulevard.

13.3.3. **Transit Network**

- (i) The **Primary Street** network and Secondary Streets should form a grid as much as possible in order to facilitate the movement of transit vehicles, pedestrian access to transit stops, and the dispersion of automobile traffic away from potential congestion points.
- (ii) Transit stops and/or stations should be located to maximize the number of residents and workers within a one-quarter mile walk to a stop or station.
- (iii) On these transit routes, crossings of a limited-access arterial will need special design treatment to ensure safe and easy pedestrian crossings. Possible treatments include pedestrian delays, raised center medians (pedestrian refuges), clearly identified pedestrian crossings, pedestrian yield signage, reduced curb radii, and pedestrian starts or leading pedestrian intervals, which give pedestrians authority to start crossing before non-yielding, right-turning vehicles.
- (iv) Transit stops or stations should be placed on **'A' Streets adjacent** to planned retail conveniences, schools, and public amenities.

- (v) Reasonably direct auto routes and acceptable system-wide travel speeds should be maintained.

13.3.4. **Transit Center:** A major transit center should be located in the Town Center **abutting** the Transit Boulevard to serve the Paseo del Norte and Unser Boulevard corridors. The Transit Boulevard should connect with both Unser Boulevard and Paseo del Norte at signalized intersections. A secondary transit center should be located south and west of the Neighborhood Activity Center proposed near Rainbow Boulevard and Hielo Road in the Volcano Cliffs Sector Development Plan area.

13.3.5. **Long-Range Transportation System Guidelines**

- (i) The policies and regulations in this Plan should be updated to conform with MRCOG's Long Range Transportation System Guidelines [formerly called Future Albuquerque Area Bikeways & Streets or FAABS Guidelines], which will be an addendum to the Metropolitan Transportation Plan, expected in 2013. This document will contain guidelines on roadway design that are driven by land use context, are multi-modal, and that provide a flexible range of right-of-way and design options.

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- (ii) The Long-Range Transportation System Map should designate Unser Boulevard and Paseo del Norte as suitable for High Capacity Transit. The plan should be amended to be consistent with recommendations adopted with this Sector Development Plan and updated as transit planning evolves.
 - a. The ultimate roadway design recommendations for Unser Boulevard and Paseo del Norte in this Plan incorporate **BRT** capacity in order to design them as suitable for High Capacity Transit.
 - a. Transit improvements may be phased, and interim routing may be different from the ultimate routes in some locations.
 - a. If high-capacity transit is determined to be infeasible, the City should consider amending this Plan to revise cross sections to accommodate different conditions. [See **Section 3.3 starting on page 34** for the process to amend this Plan.]

- 13.3.6. **Transit Center and BRT/HOV Lanes:** Travel lanes dedicated solely to buses and other high-occupancy vehicles (HOVs) reduce travel times for those who carpool or use transit.
- (i) Paseo del Norte and Unser Boulevard should be designed to accommodate **BRT/HOV** travel lanes.
 - (ii) Transfer between **BRT** routes and local buses should occur at a Transit Center maintained near the center of Volcano Heights to enhance its pedestrian and locational advantages.
 - (iii) Beginning 500 feet before intersections on Paseo del Norte and Unser and any other potential station locations, a minimum of 36 feet in the rights-of-way should be provided on **BRT** routes for **BRT** lanes and station platforms.
 - (iv) The final location and configuration of **BRT** and **HOV** lanes will be determined during the roadway design process, as well as from findings and recommendations from the MRCOG High-Capacity Transit study for Paseo del Norte expected in 2013.

13.0 Policies

13.3.7. **Transit Center and Transit Stop Design:** The approach to the Transit Center and transit stops should offer direct pedestrian routes and be tree-lined and barrier free for safe, efficient, and attractive pedestrian access. The Transit Center and transit stops should be designed as prominent focal points, offering well-lit shelters that provide shade and are within or **adjacent** to **plazas** or other civic features. Shelters may be incorporated within the architecture of **adjacent** buildings or through the use of arcades or durable shade structures. Transit route and system maps should be displayed at all stops. Bicycle storage racks should be located at major transit stops.

(i) **Transit-Oriented Development:** In deciding Transit Station and transit stop locations, preference should be given to locations with transit-supportive uses such as high-density, mixed-income residential developments and employment centers in order to attain and sustain high transit ridership. These uses should predominate within a quarter mile of transit stops. Transit system policies should emphasize more frequent service along high-density corridors.

(ii) **Convenience and Access:** Pedestrian routes to transit stops should be reasonably direct (along streets and/or off-street paths); circuitous routes should be avoided. [See **Exhibit 13.1** for an example illustration.] Transit stops should be placed on '**A**' Streets near retail conveniences and community amenities. Multiple stage crossings for pedestrians should be provided at transit stops for safe crossing of wide arterials by pedestrians of all abilities and ages.



Exhibit 13.1 – Circuitous vs. Direct Pedestrian Routes to Transit Stops

13.0 Policies

- (iii) **Signal Preference:** To improve travel times by transit, light signals in the Volcano Heights area should incorporate signal-preferencing technology such as “queue jumping” with a dedicated lane, or signal interruptions, to give buses priority at intersections.
- (iv) **Pre-boarding Fare Systems:** Transit should incorporate technology that allows bus fares to be paid prior to boarding, thereby greatly reducing boarding and transit travel times.

13.3.8. **Transportation Demand Management (TDM) Plans:** Major employers should consider implementing Transportation Demand Management (TDM) strategies to provide alternatives to the use of single-occupancy vehicles. TDM offers incentives for ridesharing, transit use, bicycling, and walking. Incentives may include reduced parking requirements, reduced development fees, development intensity bonuses, and/or the creation of transportation management associations to coordinate efforts among multiple users in the same area.

13.3.9. **Transportation Agency and Plan Coordination**

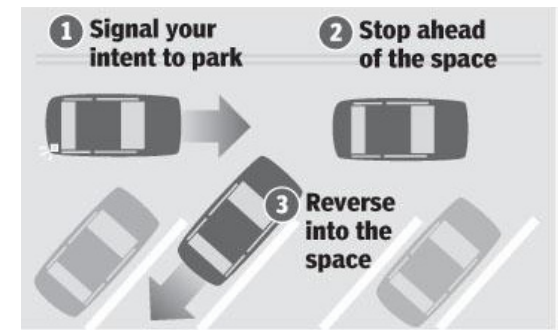
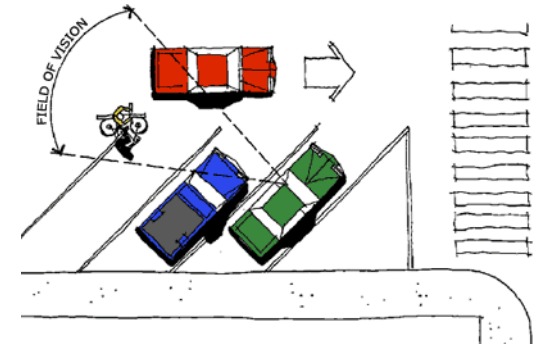
- (i) As development occurs, all transportation modes should be integrated, which will require coordination among property owners, City **DMD**, ABQ RIDE, MRCOG, and the MRMPPO. Roadways on MRCOG’s Long Range Major Street Plan must include appropriate access management strategies, which also requires coordination across transportation agencies.
- (ii) **New Primary Streets** should be added to the functional classification system in the **FAABS**.
- (iii) ABQ RIDE should coordinate with MRCOG and property owners to identify a short-term Park & Ride facility and Long-term Transit Center on the Transit Boulevard within the Volcano Heights Town Center.
- (iv) The City **DMD** should work with MRCOG and constituent jurisdictions to remove and/or alter truck restrictions on Unser Boulevard as established by R-455. Other provisions in that resolution, relating to road design, character of the roadway as a boulevard with wide median, etc., should remain.

13.0 Policies

13.3.10. Roadway Design

- (i) Roads in Volcano Heights should follow best practices for multi-modal, urban streets. Excellent sources include Context Sensitive Design and Context Sensitive Solutions, as defined by the Federal Highway Administration, the Institute of Transportation Engineer's "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach, An ITE Recommended Practice." Local sources include the New Mexico Department of Transportation's "Guide to Context Sensitive Solutions" and "New Mexico Architectural and Visual Quality Design Guidelines for Context Sensitive Design and Context Sensitive Solutions."
- (ii) Roadways should be sited and designed to minimize negative impact on views from within the Plan area to the Sandia Mountains on the east.
- (iii) The Park Edge road next to the Petroglyph National Monument should be single-loaded wherever possible. The National Park Service and the City Open Space Division prefer this edge treatment as the boundary and the transition between Open Space and development in order to enhance public safety by allowing easier patrolling, passive surveillance via more "eyes on the street," and improved access for emergency response. [See **Section 10.6.4 starting on page 178** for design standards and cross sections.]

- (iv) Roadways designated as transit corridors should be designed to best accommodate transit vehicles, pedestrians, and bicycles. [See **Section 13.3.3.iii** in this Plan for more details.]
- (v) Roadways should be designed to provide bicycle facilities and safe multiple-stage crossings for pedestrians at transit stops and for crossing wide arterials.
- (vi) Street furniture, bike racks, and pedestrian amenities such as benches and trash receptacles should be placed along '**A**' Streets. Maintenance is the responsibility of the private owner and may shared and/or coordinated through a private mechanism such as a **Business Improvement District (BID)**.
- (vii) Retail streets should be lined with a single type of tree or a coordinated palette of trees. On residential streets, street tree species should be consistent within a given street but may vary from street to street.
- (viii) Streets should be designed for all modes of transportation. On-street parking serves retail and other uses, while providing traffic calming that enhances safety and enjoyment for pedestrians and cyclists. Where permitted by available **ROW**, reverse-angle parking should be used on '**A**' Streets as the preferred parking arrangement, as it provides the best sightlines for drivers to see cyclists. [See **Exhibit 13.2.**] Reverse-angle parking generally requires 16-18 feet for stalls.



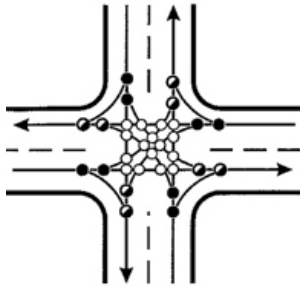
Roberto Villalpando AMERICAN-STATESMAN

Exhibit 13.2 – Reverse-angle Parking Examples

CHAPTER IV: GOALS, POLICIES, AND IMPLEMENTATION

13.0 Policies

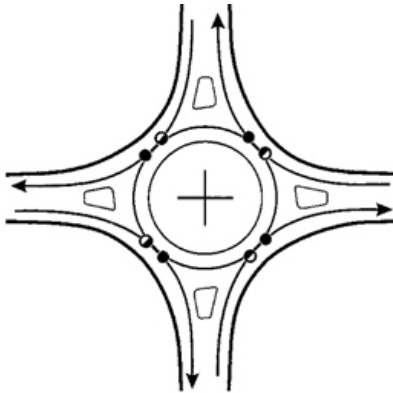
Typical Intersection



Conflict Points:

● Diverging	8
◐ Merging	8
○ Crossing	16
Total:	32

Typical Single-lane Roundabout



Conflict Points:

● Diverging	4
◐ Merging	4
○ Crossing	0
Total:	8

13.3.11. Roundabouts

- (i) Roundabouts offer significant potential benefits that warrant their consideration when a traffic control device is needed. They have been found to reduce congestion, pollution, and fuel use due to fewer conflict points, resulting in fewer stops and accelerations, fewer delays during regular and peak driving times, and less time idling. [See **Exhibit 13.3** for diagrams illustrating reduced conflict points.] There are also cost advantages, including eliminating the need for an expensive traffic signal or power service and the potential reduced need for pavement compared to a traditional intersection. In addition, some roundabouts require less right-of-way than a traditional intersection. Roundabouts also contribute to a high-quality built environment, providing wayfinding and placemaking benefits. Lastly, roundabouts can function more quietly and safely for all modes of transportation, which can also reduce costs associated with patrol and emergency response.
- (ii) Roundabouts are encouraged where warranted by traffic flow as defined by MUTCD criteria, particularly in order to avoid rock outcroppings. Care should be taken to ensure connectivity and safety for all modes of transportation. The criteria to be used for selecting a roundabout over other forms of intersection control such as signals or stop signs include, but are not limited to:
- Safety improvements, such as locations with high accident rates associated with conflicts that would be reduced or eliminated with roundabouts;
 - Operational improvements, such as locations where a roundabout would provide better performance than stop signs or traffic signals;
 - Traffic calming, appropriate for traffic circles on local street intersections;
 - Community enhancement, appropriate as a gateway treatment to convey a change in environment or land use; and/or
 - Special situations, appropriate in areas where unique alignment and/or geometric constraints make it impractical to use traditional traffic control modes.

Exhibit 13.3 – Roundabout vs. Typical Intersection Conflict Points

Source: Federal Highway Administration

13.0 Policies

13.3.12. Street Connectivity

- (i) As development occurs, streets should maintain high connectivity for pedestrians, cyclists, and vehicles to provide a variety of safe, viable transportation options. A well-connected road or path network has many short links, numerous intersections, and minimal dead-ends. New roads, pedestrian walkways, and bicycle facilities added to serve new projects should improve connectivity. As connectivity increases, travel distances decrease and route options increase, allowing more direct travel between destinations.
- (ii) As development occurs surrounding Paseo del Norte and Unser Boulevard, grade-separated crossings and/or special signalization for pedestrians and cyclists should be considered to improve access to support land uses as well as improve safety for all modes of transportation.
- (iii) Property owners, developers, and the City should coordinate with MRCOG to identify and plan new thoroughfares in the area. Streets identified as collectors within the Volcano Heights Town Center and throughout residential subdivisions should be able to accommodate circulator buses and/or shuttles that could connect with **BRT** stations and other transit infrastructure.

13.3.13. Street Maintenance

- (i) New through roads should be public rights-of-way. If a property owner wants a road to remain private, and the City agrees, then the road should be built to public standards, and a public access easement will need to be granted on the private road. Public ROW is maintained by the City. Private roads, even those with public access easements, are maintained by the owner.
- (ii) **Primary Streets** should be public rights-of-way.
- (iii) Alleys that connect and serve multiple properties should be public rights-of-way. If they are internal to a site or project and are used only for deliveries, garbage pick-up, etc., then they may remain private. The City maintains **alleys** that are public rights-of-way, but only for drainage and filling in large holes. Weeds and any surfacing improvements are the responsibility of the **abutting** property owners.

13.0 Policies

13.3.14. Bicycle and Multi-use Trail Network

- (i) Existing plans for regional trails within the Volcano Mesa area should be implemented as funding resources become available. Please refer to the Rank 2 Trails and Bikeways Facilities Plan and the Rank 2 West Side Strategic Plan for more information on the area-wide trail network.
- (ii) Because of the checkerboard property ownership, this Plan does not specifically recommend any new trails within Volcano Heights. [See **Appendix A** for existing plans for regional trail locations within the Volcano Heights area.]
- (iii) If property owners wish to collaborate to build a private trail within Volcano Heights, this may be done through the subdivision or TIDD/SAD/PID process. This trail should be privately constructed and maintained through a **property owners association**, **merchants association**, or **BID** that can manage maintenance requirements, carry liability, and assure an ongoing source of funds. Any such trail should be coordinated with City Parks and Recreation and built according to City standards. Preference should be given to locations that connect **rock outcroppings** and **sensitive lands**; follow arterial streets; or provide access to existing trails, **Major Public Open Space**, parks, or recreational areas.
- (iv) Where bike lanes are included in a street cross section, bike lane widths should not exceed 7 feet to minimize the potential for misuse as a motor vehicle travel lane. In addition to the bike lane, a striped bicycle buffer of no less than 2 feet wide should also be included to improve safety for cyclists and motorists. Bicycle lanes plus buffer placed next to on-street parking should be wide enough to allow bicyclists to avoid open car doors without having to enter motor vehicle lanes.

13.0 Policies

13.4. Land Use and Design: The following policies further goals found in **Section 12.4 starting on page 206.**

13.4.1. Replatting for Properties with Multiple Zones: Properties designated as more than one zone should be replatted to have no more than one character zone per lot.

13.4.2. Character Zones

- (i) High-density, mixed-income developments are most appropriate in the Town Center and Village Center zones, particularly because these are the most likely areas to be served by transit and can best support efficient transit service.
- (ii) Developments with high employment should be located in the Town Center and/or within a quarter mile of the Transit Boulevard as measured by existing or proposed pedestrian connections (i.e. not simply a radius).
- (iii) Development within the Town Center and Village Center zones should be the most urban, compact, and walkable developments, with high-quality pedestrian amenities and lively street activity.
- (iv) Regional retail with large areas of surface parking and auto-related uses are most appropriate in the Regional Center zone because of its proximity to Paseo del Norte and Unser Boulevard, the key regional vehicle facilities within the Plan area.
- (v) Medium-density and medium-intensity developments are most appropriate in the Mixed Use zone.

TABLE 13.1 – APPROPRIATE DENSITY AND LAND USE BY ZONE

Character Zone		Density / Intensity	Highly Compatible Land Uses
Center Zones			
	Town Center	Highest	Corporate headquarters, urban movie theaters and museums, entertainment
	Regional Center	High	Lifestyle centers, campus office parks, auto stores
	Village Center	High	Corner retail, live/work units
Transition Zones			
	Mixed Use	Medium	Campus office parks, multifamily units
	Escarpment Transition	Low	Single-family residential, small-scale office and retail, destination resort, recreation-based businesses
	Neighborhood Transition	Low	Single-family residential, small-scale office and retail

- (vi) Campus-like office parks are most appropriate in Mixed Use and Regional Center zones.
- (vii) Low-density and low-intensity developments are most appropriate in Transition zones.
- (viii) Development within the Escarpment Transition zone should honor, respect, and enhance the unique geological, cultural, historical, and anthropological context of the Petroglyph National Monument.
- (ix) Development within the Neighborhood Transition zone should respect and enhance the existing single-family neighborhoods nearby.

13.0 Policies

13.4.3. **Pedestrian Interest:** Development in all zones should contribute to a high-quality built environment, with particular emphasis on providing visual interest at the scale of the pedestrian in order to create a walkable district for residents, employees, and visitors.

- (i) Large expanses of wall or building façade should include a variety of building materials, colors, and/or openings to break up the plane.
- (ii) Civic spaces should include seating and interactive elements accessible to the public.

13.4.4. **Entrances**

- (i) Service entrances should be located to minimize visual, noise, olfactory, and air quality impacts on surrounding uses.
- (ii) Pedestrian entrances for multi-family development and non-residential development should be located to provide the most direct access to nearby transit stops.

13.4.5. **Sidewalk Locations:** The location of sidewalks shall reflect the desired character and density of the surrounding land uses. In Center and Mixed-Use Zones, sidewalks are essential to creating a vibrant, pedestrian lifestyle.

13.4.6. **Single-family Buffers:** Single-family residences should be buffered to the extent possible from the most intense uses. Landscape and screening buffers are adequate for buffering single-family residences from multifamily, light retail, and small-scale office developments.

Multifamily or small-scale retail and office developments are appropriate uses to buffer single-family residences from heavier commercial or manufacturing uses.

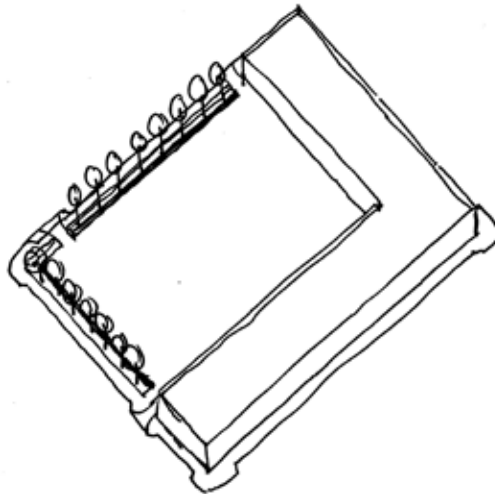
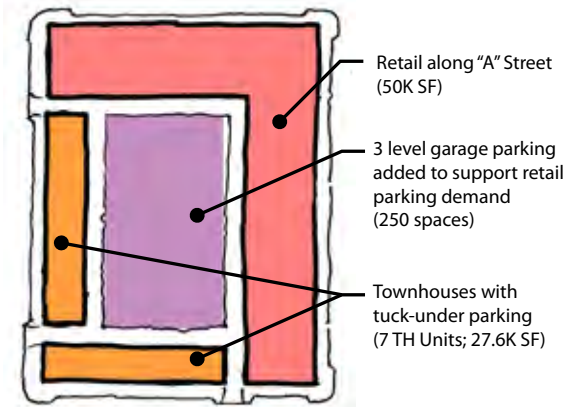
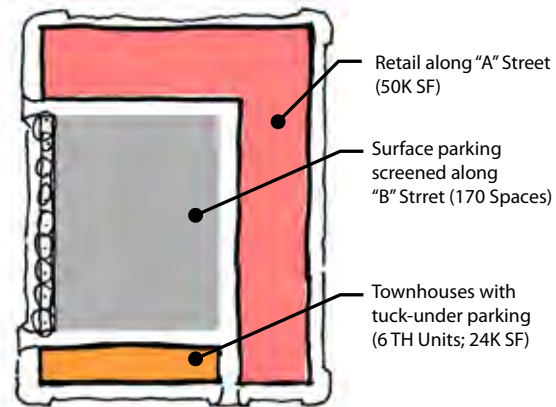
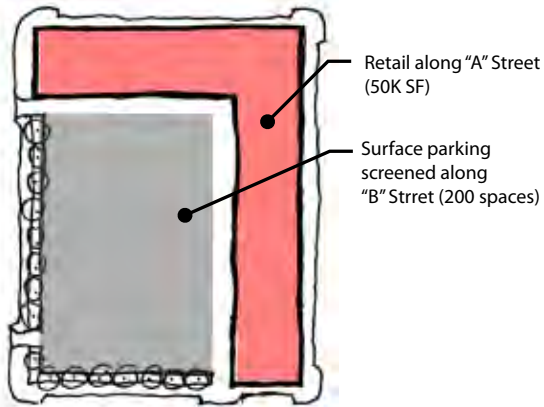
13.4.7. **Building Placement:** Site development standards, specifically building frontage standards, are designed to create high-quality pedestrian environments to support the Major Activity Center. As the area develops over time, the buildings will create an urban fabric of corridors lined with buildings. The frontage requirements are carefully designed to allow each site to increase in density over time, as surface parking transitions to structured parking lined with retail buildings, as shown in **Exhibit 13.4**, for example.

13.4.8. **Building Orientation**

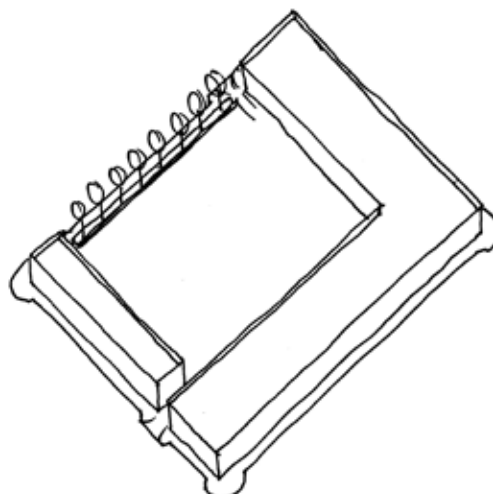
- (i) Buildings should be designed and sited to maximize solar gain and minimize solar impact on **abutting** properties.
- (ii) Buildings should be designed and sited to minimize negative impact on views from within the Plan area to the Sandia Mountains on the east.
- (iii) Buildings should be designed and sited to minimize negative visual impact on views from across the Rio Grande west toward the Volcanoes.

13.4.9. **Coordination and Maintenance:** Property owners should coordinate development, maintenance costs and responsibilities, and liability for publicly accessible private amenities either through forming a **BID** or other private mechanism.

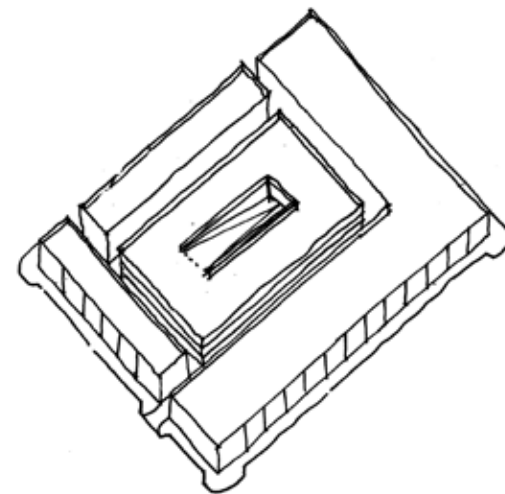
13.0 Policies



Stage 1



Stage 2



Final

CHAPTER IV: GOALS, POLICIES, AND IMPLEMENTATION

13.0 Policies

13.5. Infrastructure: The following policies further goals found in **Section 12.5 starting on page 209.**

13.5.1. New Infrastructure

- (i) The cost of infrastructure required to service new development is the responsibility of the developer, unless coordinated with other property owners as part of a master development or other mechanism to leverage investment, such as a TIDD, SAD, or PID.
- (ii) Infrastructure planning should be coordinated along corridors and across property owners.
- (iii) The cost of backbone infrastructure that can support development throughout the Plan area should be coordinated across property owners, whether through private development agreements, a master developer, or a formal TIDD, SAD, or PID.

13.5.2. Electrical Utilities

- (i) Electric infrastructure is planned and constructed in response to new development. New electric transmission lines and multiple substations will be needed within the Plan area to provide electric service once regional employment center development occurs. Substations typically require one- to two-acre parcels of land. It may be necessary for substations to be located near the electric load in the Plan area. Transmission lines should be located along arterial streets, major drainage channels, non-residential collector streets and other potential corridors as directed by the Facility Plan: Electric System Transmission and Generation (2010-2020).
- (ii) To serve future development in Volcano Heights, an additional transformer is expected to be needed. Typically, transformers require approximately two (2) acres. Property owners should consider donating or pooling land for this purpose, preferably close to the Town Center.

13.0 Policies

13.5.3. Rainwater Management

- (i) Developments should incorporate Low Impact Design (LID) techniques wherever possible and appropriate. [See **Table 13.2**, **Table 13.3**, and **Exhibit 13.5** in this Plan.]
- (ii) Property owners should consult and/or incorporate **AMAFCA's** Drainage Master Plan for Volcano Heights, being drafted as of 2013, for key drainage infrastructure. [See **Section 14.2.5 starting on page 236.**]
- (iii) Where possible, natural stormwater treatments, such as bioswales, linear ponds, etc., should be used to provide flood control and for stormwater quality.
- (iv) A bioswale/linear pond should be designed and incorporated into the median and/or eastern edge of the Park Edge Road. Such a pond, designed in consultation with the City Hydrologist, can help provide a preferred alternative to stormwater drains while helping to meet the City's water quality goals. [See also **Section 10.6.4 starting on page 178** and **Goal 12.5.5 starting on page 210** in this Plan.]

TABLE 13.2 – LOCATIONS APPROPRIATE FOR LOW-IMPACT DESIGN (LID) BY SCALE

Micro	
1	Tree wells
2	Medians
3	Parking lot islands
4	Pocket parks
5	Backyard/front yard ponds and landscape areas
6	Parkway between curb and sidewalk
7	Area behind sidewalk
8	Unused or rarely used areas of parking lots
Local	
1	Small parks and open spaces
2	On-site drainage ponds retrofit for “first flush” and floatables treatment
3	Re-graded parking lot landscape areas (use speed bumps/dips as diversions)
4	Channel tributary entrances
5	Subdivision scale detention basins
6	Subdivision entry features
Regional	
1	Regional detention basins
2	Pump stations
3	Pump station discharges into Rio Grande
4	Regional parks and open space
5	Diversion channel and arroyo outfalls to river

CHAPTER IV: GOALS, POLICIES, AND IMPLEMENTATION

13.0 Policies



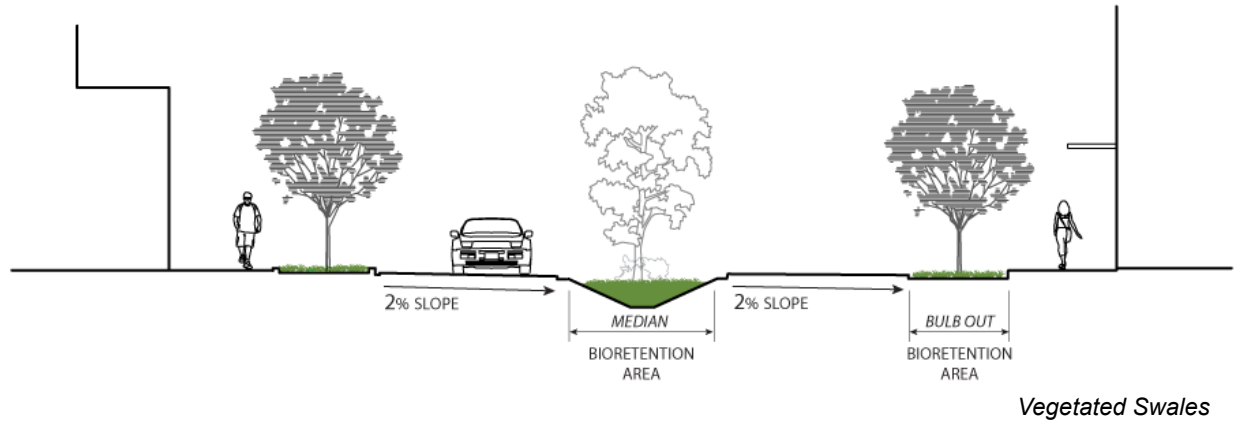
Decorative Grill and Curb Cut



Permeable Paving



Parking Raingarden



Vegetated Swales

TABLE 13.3 – OBJECTIVES AND RECOMMENDATIONS FOR LID BY DESIGN ELEMENT

Design Element	Design Objectives and Recommendations
Impervious Surfaces	Minimize the amount of directly connected impervious material. Transition to permeable material under parking areas and/or create breaks in impervious material with open curbs or flush-mount curbs that allow water to flow into landscaped areas.
Roadway Section	Roadway sections should be as open and as minimal as possible. Pedestrian zones should be separated from vehicular zones with a landscaped area bordered by open curbs or flush-mount curbs to allow for water flow.
Intersections	At large intersections, introduce a traffic circle designed to accept stormwater runoff and act as a landscaped bioretention area. At all intersections, minimize turning radii to slow traffic and reduce paved area.
Looped Turnaround	Where possible along the corridor, cluster development and design a looped turnaround for access. The center of the loop can be bordered by flush-mount curbs and act as a landscaped bioretention area.
Driveways	Where possible, share driveways and transition to permeable pavement in the driveway.
Sidewalks	Slope/grade sidewalks horizontally so they drain toward landscaped areas.

13.0 Policies

13.5.4. **Water Improvements:** As of adoption of this Plan, the Albuquerque-Bernalillo County Water Utility Authority (ABCWUA) was reviewing a 2012 draft Northwest Service Area Integrated Infrastructure Plan for an area that includes Volcano Heights, which identifies the size of water transmission trunk lines, storage capacity, water treatment, and fire storage necessary to support development.

- (i) Increased demand within both the Corrales and Volcano Trunks will require additional treatment capacity at the wells within both these trunks.
- (ii) Additional storage capacity (i.e. an additional water tank) may be needed to provide fire protection to new development within Volcano Heights. The ABCWUA will determine future storage requirements based on details as new development is proposed.
- (iii) All necessary, required infrastructure improvements to provide water service to Volcano Heights will be constructed by the developer. This includes the internal distribution systems in the study area.
- (iv) All new infrastructure must be built to ABCWUA standards before the Water Authority accepts the new infrastructure.
- (v) As Volcano Heights is outside of the existing ABCWUA service area, all development will be assessed Water Supply Charges as well as Utility Expansion Charges. The Water Supply Charges relate to the acquisition of new water rights necessary to provide service outside of the defined ABCWUA service area.

13.5.5. **Wastewater Improvements**

- (i) All necessary, required infrastructure improvements to provide wastewater collection services to Volcano Heights will be constructed by the developer.
- (ii) All new infrastructure must be built to ABCWUA standards before the Water Authority accepts the new infrastructure.
- (iii) All collected waste water flows from the study area will outfall to the existing interceptor in the Paseo del Norte/ Avenida de Jaimito Corridor. Extension of this line to the west from its current terminus (near Calle Norteña) will be required.

13.5.6. **ABCWUA Development Agreements**

- (i) All new water services within the study area will require the execution of a Development Agreement between the owner/developers and the ABCWUA before either water or wastewater service is provided.
- (ii) The Development Agreement will detail the extent of the required water and wastewater infrastructure that must be constructed before service is provided by the ABCWUA.
- (iii) The Development Agreement does not replace or supersede the development requirements of the City of Albuquerque as detailed in the Development Process Manual.

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14.0 Implementation

14.0 Implementation

14.1. Priority Capital Improvement Projects

Development of the Volcano Heights Plan area and the Major Activity Center is expected to occur over a period of decades and will require a high level of infrastructure to attract high-quality development and **major employers**, as discussed further in the fiscal impact analysis in Appendix E.

The fiscal impact analysis estimates the potential for over \$150 million in additional development value from the mixed-use, walkable environment envisioned by this Plan and enabled by its zoning and design standards, in comparison to the more typical suburban development model, with its high initial investment but steep drop off in development value. Based on this analysis, the high initial investment needed to create a “sense of place” will more than be recovered by the long-term value as the area continues to increase in value over time.

As the fiscal impact analysis indicates, the potential for better outcomes is compelling, and the City should carefully consider how to invest in Volcano Heights’ success to reap the financial benefits, as well as the enhanced opportunities for economic development and placemaking, this model offers. By investing in appropriate catalytic improvements, the City can support a sustainable development model for Albuquerque and, in particular, the West Side.

Priority infrastructure includes, but is not limited to the following needs:

- 14.1.1. The **Primary Street** network, especially the Transit Boulevard through the Town Center and the loop road to provide access to Primary Streets surrounding the intersection of Paseo del Norte/Unser Boulevard;
- 14.1.2. Complete buildout of Paseo del Norte and Unser Boulevard to the City’s required cross sections;
- 14.1.3. An internal, local road network to access residences and businesses and designed to meet **block size** requirements for each district;
- 14.1.4. Telecommunications and utility infrastructure;
- 14.1.5. Water, sewer and drainage infrastructure, including regional retention pond facilities, an additional water tank, and water source and water quality improvements;
- 14.1.6. Trails, bike facilities, and other recreational facilities;
- 14.1.7. **Civic spaces, parks and open space**; and
- 14.1.8. Transit facilities, including bus stops and a multi-modal transit center in Town Center serving proposed high-capacity transit.

14.0 Implementation

14.2. Implementation Responsibilities

Though it is likely that some funding will be available for certain projects from the City, County, State and other regional agencies, the bulk of the cost for infrastructure in Volcano Heights is the responsibility of land owners and developers. Broad coordination among multiple land owners and robust financing mechanisms will be necessary for development.

14.2.1. Property Owners

- (i) Coordination – engagement of a master developer is recommended;
- (ii) Infrastructure costs;
- (iii) Development costs;
- (iv) Implementation of finance mechanisms, such as **Special Assessment Districts (SADs)** or **Tax Increment Development Districts (TIDD)**.

14.2.2. City of Albuquerque

- (i) Sector Development Plan
 - Development of land use and zoning regulations;
 - Development of design requirements;
 - Development and implementation of streamlined review process; and
 - Adoption and update of the Plan.
- (ii) Economic Development
 - Coordination among multiple jurisdictions;
 - Promotion of area and recruitment of business; and
 - Collaboration with businesses and development of incentives, such as Industrial Revenue Bonds.

- (iii) Department of Municipal Development
 - Coordination with agencies and private utilities to develop infrastructure in a timely manner;
 - Creation and evaluation of road cross-sections; and
 - Coordination to address truck restrictions within Volcano Heights.

14.2.3. State, County, Mid-Region Council of Governments

- (i) Transportation coordination, including approving an impending update of the Future Albuquerque Area Bikeways and Streets (FAABS) Plan to better coordinate transportation and land use;
- (ii) Adding Primary Street alignments to the Long Range Transportation System map;
- (iii) Reviewing a grade-separated interchange at Paseo/Unser when traffic and development conditions warrant; and
- (iv) Assistance with infrastructure costs where feasible.

14.2.4. Albuquerque-Bernalillo County Water Utility Authority (ABCWUA): Planning guidance to verify compliance with the ongoing ABCWUA Master Planning efforts.

14.0 Implementation

14.2.5. **Albuquerque Metropolitan Area Flood Control Authority (AMAFCA):** As of 2013, AMAFCA is preparing a Drainage Master Plan for the Volcano Heights Area. The Drainage Master Plan will identify the major drainage infrastructure needed in Volcano Heights, recommend a construction plan and schedule, and work through a mechanism with property owners to finance the infrastructure. All public and private stakeholders are encouraged to participate in the process.

14.3. Optional Financial Tools

City Ordinances allow for a variety of financial tools that enable rising property values from development to pay for infrastructure. Desired outcomes at Volcano Heights will likely require the use of one or more of the following methods:

14.3.1. **Special Assessment District (SAD):** Described in the Albuquerque Code of Ordinances, Section 6-8, Special Assessment Districts (SADs) involve an additional charge added to property taxes to fund necessary improvements in new subdivisions, such as drinking water and sewer lines, paving and other government services. SADs can be requested by a percentage of landowners in an area or imposed by a local government, and SAD revenues are used to pay back city general funds or service debts, such as bonds, incurred for infrastructure construction.

14.3.2. **Public Improvement District (PID):** Described in the Albuquerque Code of Ordinances, Section 6-9 and enabled by New Mexico Statute Section 5-11-1 to 5-11-27 NMSA 1978 (2001), **Public Improvement Districts** involve an additional charge added to property taxes to fund a broad array of improvements in a subdivision, ranging from roads and drainage to recreational facilities, trails, parks, public buildings, libraries and other amenities. Like SADs, PID revenues are used to pay back general funds or debts incurred for the construction of infrastructure. The City of Albuquerque currently requires unanimous vote of property owners to establish a PID, though state statutes allow PIDs to be created with $\frac{2}{3}$ of property owners in agreement.

14.3.3. **Tax Increment Development District (TIDD):** Described in the City of Albuquerque Code of Ordinances, Section 4-10, **Tax Increment Development Districts (TIDDs)** capture a portion of the increase in property and gross receipts taxes resulting from the area's development. Funds can be used to pay back debt on a range of projects similar to PIDs, including elaborate streetscapes like the urban boulevard, parks and trails, civic spaces, and other amenities. TIDDs are typically used for a large, master-planned development, rather than a single subdivision. Unlike other funding mechanisms, they do not impose new costs or taxes on property owners (except those incurred by rising property values caused by development). TIDD proceeds can also be used for ongoing maintenance and improvement of facilities.

14.0 Implementation

TIDDs require major coordination among property owners to apply for and maintain districts, issue bonds, and manage revenues and bond payment.

- 14.3.4. **Public/Private Tax Rebate Agreement:** Similar to a TIDD, this type of agreement allows for cities, counties, and other taxing entities to enter into agreements with developers that let developers obtain rebates for infrastructure in return for development that meets standards set by the affected governments for density, walkability, sustainability, etc. Under this type of public/private partnership, the rebates can only be requested after the development has been completed as agreed upon and new property or sales tax revenues have been generated there for a set time period. Such an arrangement can allow rebates of tax revenues for a flexible range of infrastructure improvements, such as streets and utilities, but unlike TIDDs, developers must pay those costs upfront themselves – the agreement cannot be collateralized to allow bonding or other debt acquisition based on expected rebates. At least one such agreement has been made in New Mexico – a project in Rio Rancho whose developer may request up to \$2.8 million in rebates for infrastructure costs from gross-receipts (sales) taxes generated on site, after the development is complete and has been in use long enough that those revenues have been collected by the New Mexico Taxation and Revenue Department.

- 14.4. **Amending this Sector Development Plan:** Changes to the text, graphics, or zone map shall be per City Zoning Code §14-16-4-1 and §14-16-4-3.

- 14.5. **Implementation Matrix:** See Table 14.1.

CHAPTER IV: GOALS, POLICIES, AND IMPLEMENTATION

14.0 Implementation

Agency & Organization Acronyms used in the following table:

AMAFCA	=	Albuquerque Metropolitan Flood Control Authority	GARTC	=	Greater Albuquerque Recreational Trails Committee
ABCWUA	=	Albuquerque-Bernalillo County Water Utility Authority	MRCOG	=	Mid-region Council of Governments
CNM	=	Central New Mexico Community College	NMDOT	=	New Mexico Department of Transportation
DMD	=	Department of Municipal Development (CABQ)	PNM	=	Public Service Company of New Mexico (Electric Utility)
GABAC	=	Greater Albuquerque Bicycling Advisory Committee	UNM	=	The University of New Mexico

TABLE 14.1 –IMPLEMENTATION MATRIX

Element	ID	Policy Implemented	Priority	Action	Lead Agency	Coordination Required
A. Environment and Open Space						
Open Space Acquisition	A-1	13.1.1	Short-term	Prioritize open space acquisitions in Volcano Heights	City Open Space Division	Council
Transfer-of-Development Rights (TDRs)	A-2	13.1.3, 13.1.5	Medium-term	Create legal framework allowing TDRs in the City of Albuquerque or within Volcano Heights	Council/Legal	City Open Space Division
Monitoring Process for Blasting	A-3	13.1.9, 13.1.10	Medium-term	Create development process for sufficiently documenting existing conditions on a subject property and on adjacent natural resources within Escarpment Transition zone, abutting archaeological sites, and adjacent to Major Public Open Space prior to any blasting required by new development and/or infrastructure	City Open Space Division	City Development staff, Property Owners
B. Economic Development						
Economic Development & Recruitment	B-1	13.2.2, 13.2.6	Medium-term	Coordinate with property owners to form a BID and/or hire a master development coordinator	City Economic Development	Council, Property Owners
	B-2	13.2.6	Medium-term	Coordinate with property owners and Double Eagle Airport to recruit businesses for Volcano Heights	City Economic Development	Property Owners, Double Eagle Airport
C. Transportation						
Transit	C-1	13.3.2	Short-term	Identify a site for park and ride	ABQ RIDE	MRCOG, Property Owners, CNM, UNM
	C-2	13.3.4	Long-term	Identify a site for transit center	ABQ RIDE	MRCOG, Property Owners

14.0 Implementation

TABLE 14.1 –IMPLEMENTATION MATRIX (CONT'D)

Element	ID	Policy Implemented	Priority	Action	Lead Agency	Coordination Required
Autos	C-3	13.3.5	Short-term	Add Primary Streets to FAABS Street Designations	MRCOG	DMD/Planning
	C-4	13.3.1	Medium-term	Study a grade-separated interchange when traffic and/or development conditions warrant	DMD/MRCOG	NMDOT, Planning, Bernalillo County
	C-5	13.3.9	Medium-term	Study truck access to Volcano Heights to determine sufficient routes	DMD/MRCOG	NMDOT, Planning, Bernalillo County
Bikes	C-6	13.3.14	Short-term	Coordinate multi-use trails along Unser Blvd. with 50-mile Bike Loop and decide which side of Unser Blvd. and Paseo del Norte the multi-use trail should go	DMD/Parks/GABAC/GARTC	Mayor's Office
Peds	C-7	13.3.10	Long-term	Investigate grade-separated pedestrian crossings for Paseo del Norte and Unser Boulevard	DMD	Property Owners
D. Land Use and Urban Design						
Major Activity Center	D-1	13.2.1	Short-term	Update the Comprehensive Plan's Centers & Corridors Map to include Volcano Heights MAC	City Planning	Council
Coordination & Maintenance	D-2	13.4.9	Medium-term	Coordinate with property owners to form a BID to oversee implementation of the Plan and ongoing maintenance of private amenities accessible to the public.	City Economic Development	Council, Property Owners
E. Infrastructure						
Drainage Master Plan	E-1	13.5.3	Short-term	Coordinate with property owners to create a Drainage Management Plan to identify needed infrastructure and plan for its implementation	AMAFCA	Property Owners, City Hydrology
Water/Wastewater	E-2	13.5.4, 13.5.5, 13.5.6	Medium-term	Coordinate with property owners on needed improvements to water systems and execution of necessary development agreements	ABCWUA	Property Owners
Utilities	E-3	13.2.7, 13.5.2	Medium-term	Coordinate with property owners on needed improvements to electric, gas, communications, and other dry utilities	PNM, NM Gas	Property Owners
PID/SAD/TIDDs	E-4	13.5.1	Medium-term	Coordinate with property owners to form PID/SAD/TIDDs when/as requested to fund infrastructure improvements	Council	Property Owners, State of New Mexico

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