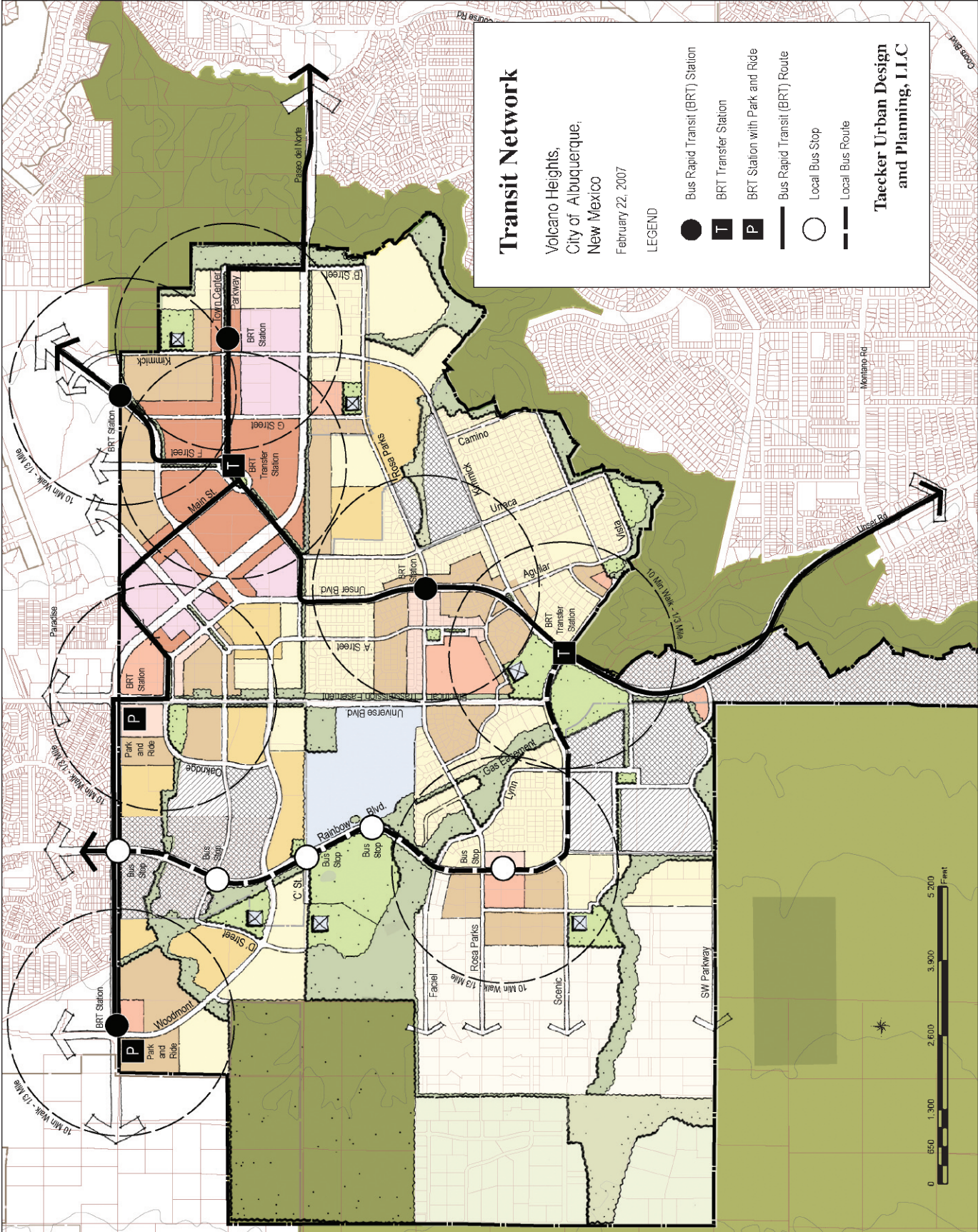


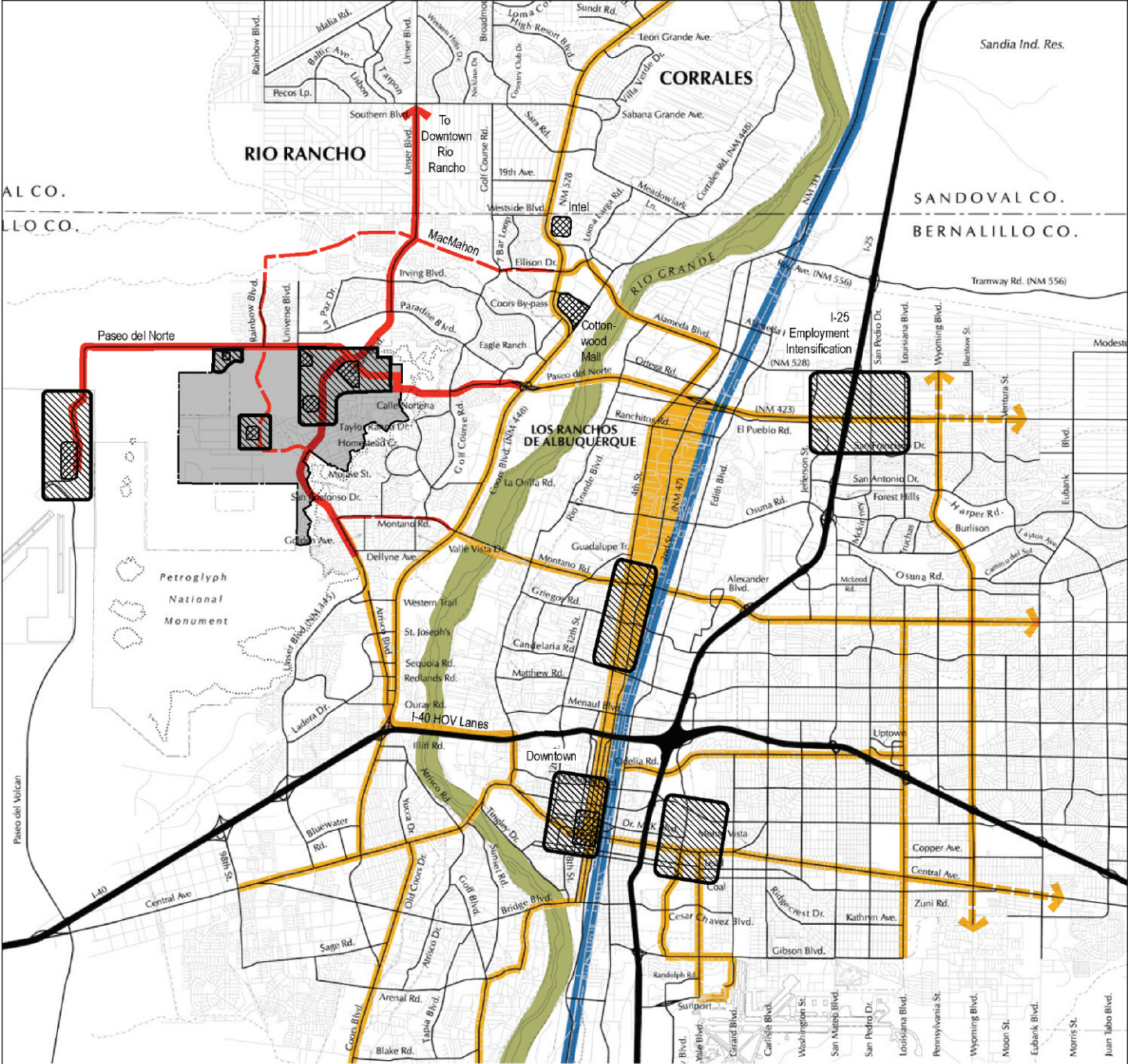
4. TRANSIT NETWORK

Transit plays a vital role in reducing regional traffic congestion, but to be widely used it must be fast, frequent, and reliable. Volcano Heights' emphasis on walkability and urban development will make more frequent transit service viable. The Bus Rapid Transit (BRT) system proposed for the area uses dedicated bus lanes and emerging technologies to make travel times competitive with the car. As proposed, BRT would whisk area residents and workers to and from central Albuquerque, and to and from jobs in the I-25 corridor.

Transit Network. The proposed Transit Network is depicted on **Exhibit 22, *Transit Network***. Transit stops and/or stations should be located to maximize the number of residents and workers who can walk less than one-quarter mile to a stop or station. On these routes, crossings of a limited-access arterial or arroyo will need special design treatment to ensure safe and easy pedestrian crossings. Transit stops or stations should be placed near the center of Village Centers, Town Center, and adjacent to where retail conveniences, schools and public amenities are planned. See **Exhibit 22, *Transit Network*** for recommended placement of transit stops, stations, and Bus Rapid Transit (BRT) transfer stations. At the same time reasonably direct routes and acceptable system-wide travel speeds should be maintained.

Long Range High Capacity Transit Plan. The map showing transit recommendations at a regional scale is shown as **Exhibit 23, *Proposed Long Range High Capacity Transit System***. The most significant change in the Long Range map is the recommendation to designate Unser as suitable for High Capacity Transit, and to link it within the Plan Area with an extension of BRT on Paseo del Norte extending west of Coors. The roadway design recommendations for Unser and PdN in the Plan incorporate potential for BRT. These Plan recommendations focus on ultimate conditions. Transit improvements may be phased and interim routing may be different than ultimate routes in some locations. The Long Range High Capacity Transit Plan shall be amended to be consistent with adopted recommendations.





LEGEND

- Local Bus
- proposed by the Area Plan
- Major Transit Extensions proposed by the Area Plan
- High Capacity Transit
- Interstate Highways
- Commuter Rail
- Districts
- Nodes
- Volcano Heights Plan Area

Proposed Long Range High Capacity Transit System

May 1, 2006



Exhibit 23

Proposed Long Range High Capacity Transit System

High Occupancy Vehicle (HOV) Lanes & Bus Rapid Transit (BRT). Travel lanes dedicated solely to buses and other high occupancy vehicles speed travel time for those who car pool or use transit. Paseo del Norte (PdN) and Unser shall be designed to accommodate travel lanes for BRT/HOV lanes, as indicated by Cross Sections 1, 2, 6, and 7. A BRT and future light rail station shall be maintained near the center of the Town Center to enhance its pedestrian- and locational-advantages. Lanes solely for the use of BRT should connect HOV lanes along PdN and Unser with the center of the Town Center, and possibly the Village Center at Universe and PdN.

Impacts of HOV/BRT lanes outside the Plan Area should be studied by the Departments of Municipal Development and Transit to determine how best to integrate these lanes at Ouray and other key intersections east of the Escarpment.

Transit-Oriented Development. To attain high transit ridership, transit-supportive uses should predominate within a third of a mile (1,760 feet) of transit stops, including Town Center, Village Center, Main Street, Office, Schools and Urban Residential uses (See **Diagram 7, Transit-Oriented Development**). Consideration should be given to transit system policies, which emphasize more frequent service along high-density corridors.

Convenience and Access. Pedestrian routes to transit stops should be reasonably direct (along streets and/or off-street paths); circuitous routes should be avoided. Transit stops should be placed near retail conveniences and community amenities.

Signal Preferencing. To improve travel times by transit, light signals in the Volcano Heights area should incorporate signal-preferencing technology (“queue jumping”) to give buses priority at intersections.

Pre-Boarding Fare Systems. Consideration should be given to technology that requires bus fares to be paid prior to boarding, thereby greatly reducing boarding and transit travel times.

Transit Centers. Transfer between BRT routes should occur at a “transit center” near the center of the Town Center; this transit center may also serve local buses and para-transit (like taxis). Transfer between BRT and local bus should be facilitated by a transit center near where Rainbow, Universe, and Unser converge; a more detailed master plan for this area should consider how this “transit center” might be accomplished.

Park & Ride. The park where Rainbow, Universe, and Unser converge presents a special “Park & Ride” opportunity, and its design should consider how future parking could be introduced. If BRT on Unser extends beyond the northern edge of the Plan Area, land should be reserved for the creation of a “Park & Ride” lot as a way of intercepting traffic flowing from Rio Rancho and other points to the north. Parking structures can provide greater security for parked vehicles and are desirable at these locations.

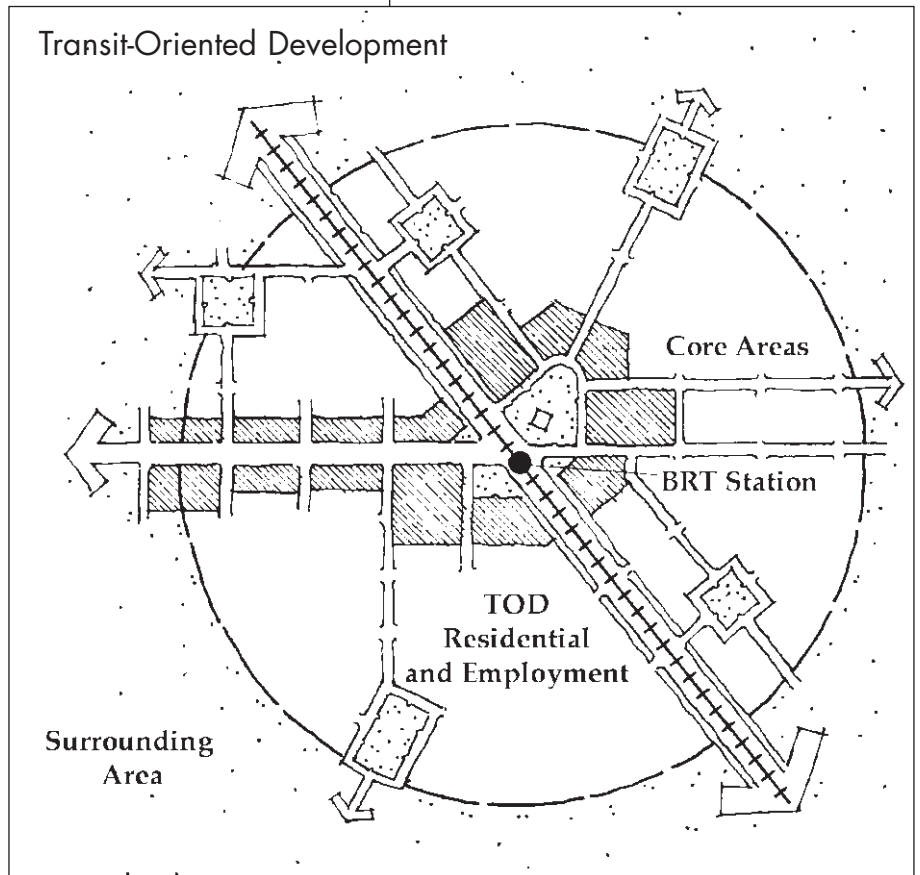


Diagram 7
Transit-Oriented Development

Transit Stop & Station Design. The approach to transit stops / stations should offer direct pedestrian routes, and be tree-lined and barrier free. Transit stops and/or stations should be designed as prominent focal points, offering well-lighted shelters with attractive architecture, and lying within or adjacent to plazas or other civic features. Shelter may be incorporated within the architecture of adjacent buildings, through the use of arcades or durable awnings. Transit route and system maps should be displayed at all stops / stations. Bicycle storage boxes should be located at major transit stops.

5. PEDESTRIAN CROSSINGS

Overpasses with Vehicular and Pedestrians. Sidewalks should be provided on both sides of bridges that need to be provided to accommodate vehicular traffic, such as at the extension of Woodmont (aka “A” Street) and Paseo del Norte. Bridges should be well lighted. Decorative metal railings and light standards should be used. Railing should be placed between travel lanes and pedestrian sidewalks, as well as at the edge of the bridge. Metal or fabric shade canopies are encouraged. Where pedestrian paths cross on- or off-ramps, reflective, long lasting, and slip-resistant crosswalks should be provided; in addition, pedestrian crossing distances should be minimized and traffic should be slowed through the use of signage, landscaping and/or break-away bollards.

Pedestrian Bridges at Paseo del Norte and Unser. High traffic volumes at this intersection necessitate pedestrian bridges across Paseo del Norte and across Unser. General design features for pedestrian bridges are described below. In addition, bridges at this regionally-significant location should be of exceptional design. An international competition might be sponsored for the design of these bridges, as was done in Redding, California, where a pedestrian bridge by Santiago Calatrava now draws tourists.

Pedestrian Crossings in Other Locations. Pedestrian crossings should be provided at signalized and unsignalized (“right-in / right-out”) intersections. Crossings should also be considered where they bring activity centers within walking distance, such as between retail centers, employment nodes, and public facilities.

Crosswalks. At signalized intersections at-grade crosswalks should be provided (except at the intersection of Paseo del Norte and Unser). Studies have shown that most pedestrians will not use an overpass or underpass if they can cross at street level in the same (or less) time. While pedestrian overpasses and underpasses eliminate conflicts between pedestrians and vehicles, their long, “uninhabited” crossing distances discourage walking. Overpasses and underpasses also cost a great deal and are visually intrusive.

To minimize increasing vehicle travel times, signals should be synchronized and pedestrian activation required. In addition, pedestrian crossing can be divided into two phases, such that pedestrians cross travel lanes for traffic in one direction during one phase, and then cross travel lanes for traffic in the other direction during the second phase. Pedestrian refuge islands should be provided where possible; refuge islands should be at least 5 feet in width and accompanied by bollards and/or landscaping.

Pedestrian Overpasses. The effectiveness of grade-separated crossings depends on how pedestrians perceived ease of access—measured in terms of time / convenience, physical exertion and safety. To the extent possible, overpasses—and their ramps and stairs—should provide a direct route between destinations and centers of activity. Use topography and site

grading to minimize the length of ramps. Stairs should be used in combination with ramps, where circuitous pedestrian routes can be avoided. Consideration should be given to extending overpasses to the buildings that will have an escalator or elevator.

Pedestrian crossings should be of exceptional design. Steel suspension and truss structures are encouraged. Concrete post-and-beam bridges are discouraged.

Pedestrian Underpasses. While pedestrian underpasses require less vertical clearance than vehicular underpasses, so ramps can be shorter, underpasses real and perceived security issues discourage their use. Pedestrian underpasses are generally discouraged, therefore, unless accompanied by exceptional design features including: bright lighting, frequent skylights / lightwells, surveillance cameras, vandal resistant walls, and good drainage. Wall surfaces should be visually interesting. Public bathrooms are encouraged near underpasses.

Pedestrian Barriers near Pedestrian Crossings. Fences or other barriers may be needed to prevent pedestrians from crossing in locations that are unsafe. Ornate metal fences should be used within and adjacent to the Town Center, Village Centers, Villages and Suburban–Small Lot areas. Post and wire fencing should be used adjacent to Suburban–Large Lot, Executive Residential, and Open Space areas.

6. TRANSPORTATION DEMAND MANAGEMENT

Comprehensive Programs. The City should require the preparation and conditions for the implementation of a Transportation Demand Management (TDM) plan, when considering approvals relating to large employers or development projects. TDM provisions support alternatives to the car, by offering 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.

7. BICYCLE TRAIL NETWORK

The Bicycle Trail Network includes some separated trails that are also part of the Multi-Use Trail system described in the Open Space section (See **Exhibit 24, Bicycle Trail Network**). Separate bicycle trails combined with walking are proposed along the Escarpment edge, along the southern edge of Paseo del Norte, along the former alignment of Rainbow, and along planned open space on the western edges of the Plan Area. A bike lane is proposed along Universe (See **Cross Sections 9 and 10** for *Minor Arterial*). Class 3 bike routes signed for bicycles but without a separate bike lane are recommended for Collector streets such as Rosa Parks, Woodmont, and the Town Center Parkway.

A bike lane has been constructed on the ROW of Unser through the Escarpment. Rather than continuing along Unser to the north, this bike lane connects to a separate bike trail along the former Rainbow alignment. This location is preferred due to safety considerations and the opportunity to combine a bike trail with the multi-use trail system. A bike lane is also shown on Universe which will provide a good alternative bicycle commuter route. This lane also connects with Unser above the Escarpment.

Trail design provisions for bicycles and pedestrians are contained within the Open Space Element.

