

Rail Corridor Study

Transit Oriented Development for Santa Fe's Rail Corridor Neighborhoods



City of Santa Fe Long Range Planning Division

AOS Architects and Charlier and Associates

REVISED DRAFT, December 8, 2008

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INTRODUCTION
Chapter 1

HOW TO USE THIS REPORT

The Rail Corridor Study is intended to introduce the ideas behind Transit Oriented Development to the Santa Fe community, and propose ways to implement them. The Study is the result of a workshop series held in Spring, 2008 that involved hundreds of residents.

Transit Oriented Development (TOD) consists of a variety of strategies addressing street design, transit systems, trails and open space, and mixed use development. Effective implementation of TOD requires the integration of strategies in each of these areas, and the customization of the strategies to the specifics of each site or neighborhood. There is no “typical” TOD, but there is a great diversity of examples around the country of successful community use of these design strategies.

This report introduces TOD concepts and Rail Corridor design objectives in Chapters 1 and 2. Chapter 3 presents future visions for four sites along the rail corridor, with cross references to the more detailed recommendations contained in Chapter 4. Appendices include the complete workshop participant comments, detailed TOD resources, and maps.



TRANSIT ORIENTED DEVELOPMENT

“Transit-Oriented Development” (TOD) is a term used to capture the main ideas surrounding the development or redevelopment of urban land adjacent to rail and other transit stops. TOD is a coordinated set of strategies that are in use in cities served by commuter rail throughout the country. These strategies can be implemented in diverse ways to enhance existing neighborhoods and create new neighborhood centers.

Because transit stops are hubs of activity involving different modes of travel, they are also excellent locations to allow for a mix of land uses to serve riders getting on and off the bus or train. For regular commuters, housing immediately adjacent to a transit stop can create the ability to walk or ride a bike to the stop without needing a car. Businesses are interested in locating where activity is generated by a point of public gathering such as a train stop. Finally, transit oriented development allows a more efficient use of land that makes use of already existent utilities and other infrastructure.

When rail service was first established in Santa Fe in 1880, it brought rapid evolution to the culture and economy of the city, and created the Railyard and adjoining neighborhoods. The bustle, vitality and economic innovations of the Railyard in its heyday mark it as an ancestor of today’s Transit Oriented Developments, or TODs. The arrival of the Rail Runner commuter rail service in December 2008 will bring similar changes to the culture and urban fabric of the city. A series of workshops held in Spring 2008 explored the opportunities and challenges of renewed rail service for the neighborhoods in the rail line corridor.

Anticipation for the Rail Runner was expressed by nearly all of the participants in the workshop series. They also expressed concerns about how neighborhoods might change with such ready access to commuter transportation. Residents participated in the workshops to ensure that the ‘how’ and ‘where’ of the city’s response to the Rail Runner would serve the interests of the whole community.

DESIGN PRINCIPLES FOR SANTA FE’S RAIL CORRIDOR

1. **Land Use Mix** – Successful rail stops have a mix of active uses including residential, office and retail in close proximity to each other, with higher densities near the center and good transitions to adjacent land uses.
2. **Transit Connections** - City buses must connect seamlessly with commuter rail service, making it accessible to as many Santa Feans as possible.
3. **Complete Streets** – “Complete Streets “ are essential to healthy neighborhoods and TODs -- streets that balance the needs of pedestrians, bicyclists, transit riders, and drivers.
4. **Trail Connections** – Inviting, safe, and accessible pedestrian and bike trails can provide necessary alternative routes to get to and from transit stops and commercial areas. Santa Fe’s arroyos naturally link neighborhoods to these existing and planned hubs.
5. **Parks, Plazas & Public Places** – Public space can make rail stops into community gathering places and improve health and public safety.
6. **Neighborhood Protection & Enhancement** – Successful TODs create amenities for nearby neighborhoods while minimizing or mitigating any traffic or parking impacts.

CONCEPTS AND OBJECTIVES

Chapter 2

Transit

- Commuter Rail
- Local Transit

Trails and Open Space

- Open Space Network
- Pocket Parks

Land Use

- Transit Oriented Development
- Mixed Use

Streets

- Complete Streets
- Street Network

TRANSIT

As cities grow, public transit increases in importance, connecting workers to jobs without contributing to congestion. With the arrival of the Rail Runner, Santa Fe is poised to shift a significant number of daily trips from automobiles to buses and rail.



Shuttle buses meeting Rail Runner Trains in Albuquerque.

COMMUTER RAIL

Commuter rail service such as the Rail Runner is growing in the United States and especially in Western states, providing a viable alternative to automobile commuting within urbanizing metro regions. Commuter rail:

- connects communities at metropolitan and regional scales.
- can use light rail or heavy rail, and can use diesel or electric power.
- provides service times, frequencies, station spacing and amenities which are tuned to commuting needs.
- ridership can generate significant foot traffic and consumer spending at stops.
- is a good match for workplaces (employers) and for higher density housing.

LOCAL TRANSIT

Local transit systems consist of bus routes, local rail lines and shuttle services, and are the link from commuter rail to individual homes and workplaces. Local rail can raise property values, support job creation, and motivate private investment in redevelopment projects.

- Local transit provides effective public transportation, uses existing roadways and can reach every neighborhood.
- Good bus systems have short waits, direct routes, minimal transfers, and extensive networks.
- A local rail service could share the commuter rail line, serving workplaces, schools and neighborhoods at additional stops along the rail corridor.

see Local Transit Vehicle Options, Appendix B-1

OBJECTIVES

- **Improve transit system to meet the commuting and local service needs of Santa Feans and the new Rail Runner commuter line.**
- **Plan transit and public infrastructure to accommodate and promote healthy, active and affordable lifestyles for Santa Feans.**
- **Increase availability of and access to multiple modes of transportation alternatives.**
- **Prepare for long term needs and growth of multi-modal transit system.**
- **Increase transit ridership and reduce need for automobile transportation for Santa Feans.**
- **Decrease traffic congestion throughout the City.**

SELECTED WORKSHOP COMMENTS

“The local bus service must be intertwined w/ the local rail service to serve every location in the city, including outlying areas such as the Community College and Airport Road. ”

“Bus access must be directly next to the station platforms for ease of transfer.”

“The local bus service needs to be improved, there are very few functional routes. The wait times on most routes are too long.”

“Any transit service must be as easy to access and use as current private automobiles. At what price of gas does public transportation become ‘worth it’?”

See Appendix A-1 for all workshop comments.



Rail Runner Station in Albuquerque.

Public Transportation Visions:

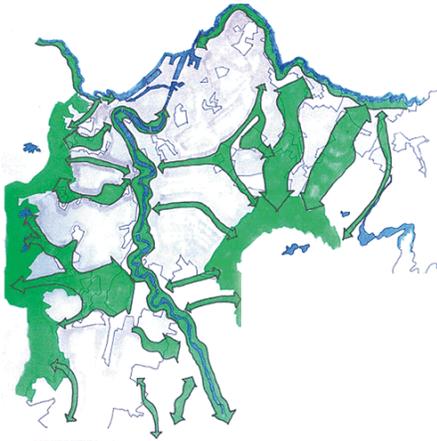
“How would you and other residents use the rail service and local transportation?”

- **Getting downtown** to the Plaza. Some people would use it often, some would rarely use it.
- High School students could use public transport to **get to school**.
- **Getting to and from work**.
- As a link to the Commuter rail, to friends/family/shopping in **Albuquerque**, to the airport.
- Could potentially **replace cars** for many people.
- Transportation for disabled, elderly, high school, and college students.
- Can envision a system with **five modes working together**: pedestrian, bicycle, car and bike sharing systems, bus/transit and private automobiles.



Santa Fe Trails Bus.

TRAILS AND OPEN SPACE



Example of open space network connecting through a city.



Pocket park on a trail system in Bozeman, Montana.



Pocket park in a co-housing community in Santa Fe.



Community garden along a trail system.

Open space is a key neighborhood amenity, and supports a pedestrian-oriented lifestyle. Commuters are more likely to choose transit over driving if the trip to the transit stop is a pleasant pedestrian one. Santa Fe's arroyos were identified in the workshops as a natural opportunity for better connections and local recreational facilities.

OPEN SPACE NETWORK

Open space resources are an important measure of livability in cities. As well as offering residents a quick break from city life into nature, open space networks can add important transportation routes.

- open space corridors connect Santa Fe's neighborhoods, often following arroyos or rail lines
- corridors can include wildlife areas, recreation areas, and community gardens
- trails should be safe, accessible and welcoming
- minor trails link each neighborhood to the citywide trail system

POCKET PARKS

Major public parks offer recreational facilities and extended natural areas, but pocket parks provide another essential urban amenity -- proximity to all residents. Pocket parks:

- are neighborhood-scaled public parks that make a convenient destination for short walks.
- provide residents with greenery, a place to sit outdoors, and specialized features like children's play areas, sculpture installations, or monuments.
- provide a good balance for denser residential neighborhoods
- are safe open spaces because surrounding uses provide informal security for the park

OBJECTIVES

- Provide opportunities for Santa Fe residents to enjoy the natural beauty of the City, and the Northern New Mexico climate and landscape.
- Provide lifestyle affordability to Santa Feans through access to amenities and services without the use of an automobile.
- Comprehensively develop an open space and trails network to improve and enhance pedestrian and bicycle connectivity and safety.
- Ensure safe pedestrian and bicycle access through existing and potential barriers such as highway corridor areas, steep grade changes and railroad tracks.



Santa Fe Rail Trail.

SELECTED WORKSHOP COMMENTS

“Certain trail connections need to be established, existing trails need to be formalized & improved upon so that they are walkable, bikeable, safe, and functional.”

“Trails would be used for linking to the rail line and bus stops, as well as for recreation.”

“Develop the Arroyo Trails into a trail system.”

See Appendix A-1 for all workshop comments.



Arroyo de los Chamisos passing under St. Francis.

LAND USE



Mission Meridian Urban Transit Oriented Development in Pasadena, California.

Potential TOD Land Uses:

- Ground Floor Retail
- Commercial Office
- Institutional/Civic Office
- Multi-Family Residential
- Plazas, Open Space & Trails
- Parking



Rendering of the new Farmers' Market in Santa Fe.



Mixed use buildings downtown Santa Fe.

Land use plays a critical role in sustainable community--determining where people live and work, and what sorts of services are available. Land use decisions lay the ground for transportation decisions. Isolated, single use developments incur longer automobile-dependent commutes.

TRANSIT ORIENTED DEVELOPMENT

TOD is a set of development strategies that maximize living and work environments in proximity to transit. TOD strategies can be used in many combinations to suit the character and intensity of use in the surrounding area.

TOD Strategies:

- Land Use -- a mix of uses, with a decreasing densities from center to edge
- Transit -- facilitate multi-modal transfers , including rail, bus, bike and pedestrian
- Neighborhoods -- protect and enhance surrounding neighborhoods
- Streets -- create a pedestrian-priority environment and support bicycling
- Open Space -- parks, plazas and other public gathering spaces

A TOD:

- is a mixed-use residential or commercial area designed to maximize access to public transport
- has a center with a public gathering space, surrounded by higher-density development with progressively lower-density development spreading outwards from the center.
- is generally located within a radius of one-quarter to one-half mile from a transit stop, to support pedestrian access.

See *TOD Station Typologies, Appendix B-3*

MIXED USE

Mixed use zoning can make an effective transition from residential neighborhoods to the busier environments of transit stops. Mixed use strategies:

- create neighborhoods with commercial and workplace areas within walking distance
- uses do not need to be mixed in the same building or the same block
- commercial uses support the shopping or employment needs of local residents
- parking demand can often be reduced based on shared use, local pedestrians and alternative transportation

Further Reading: *Congress for the New Urbanism, www.cnu.org; Smart Growth Network, www.smarthgrowth.org; and Urban Land Institute, www.uli.org.*

OBJECTIVES

- **Develop stations and surrounding development with specific site identity and characteristics for each proposed location.**
- **Propose a mix of uses, spaces and amenities within new Transit-Oriented Development (TOD) areas and local service stops that support and enhance the surrounding neighborhoods.**
- **Develop areas to reflect the needs of existing residents.**



Existing under-utilized land near the intersection of the rail line with Rodeo Road.

SELECTED WORKSHOP COMMENTS

“Any development must be in keeping with Santa Fe character and the scale of its specific neighborhood (limits of density can be pushed somewhat to create a more friendly environment) but should be progressive, tasteful, and interesting. ”

“There must be appropriate density along the corridor in order to serve the local service rail. Appropriate density should not drastically change neighborhoods, unless it is desired by the community.”

“Each stop should have its own identity.”

See Appendix A-1 for all workshop comments.



Future vision of Rodeo Transit Station serving local rail service, established neighborhoods and some new development.

STREETS

ELEMENTS OF A PEDESTRIAN SUPPORTIVE ENVIRONMENT

The Roadway Corridor

Creating pedestrian supportive environments requires careful attention to the design of streets, to the allocation of space within street right-of-way, to street crossings and signals. In general, corridors that are pedestrian friendly have traffic volumes less than 20,000 vehicles per day with speeds of 30 mph or less, typically with on-street parking.

The Pedestrian Realm

This area includes sidewalks, as well as the buffer zones on either side that separate the walkway from motor vehicle traffic and link the walkway to destinations on adjacent properties. Consider placement and design of pedestrian furnishings, transit stops and lighting.

Adjacent Land Use

To generate a significant pedestrian presence, land uses must be highly mixed and reasonably dense. Buildings should frame the street, and the street grid should be fine-grained.

Because pedestrian trips are an essential part of effective public transportation, street design must focus on making pedestrians welcome and safe. Streets should be imagined as public “rooms”, with a variety of uses including access and mobility, but also commerce, social exchange and cultural events.

COMPLETE STREETS

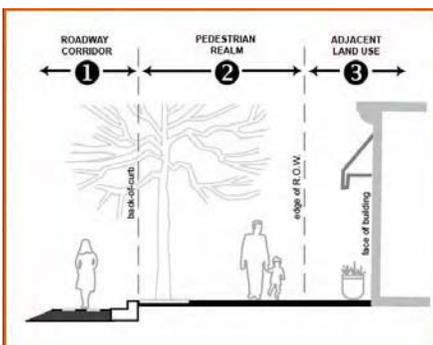
‘Complete streets’ is a design concept in broad use nationwide, ensuring that streets serve all users.

- street design can communicate changes in speed and appropriate driving styles to drivers entering neighborhood areas
- traffic calming measures are design strategies to influence vehicle speeds and driver behaviors
- most conflicts between cars and bikes or pedestrians occur at intersections
- better crossings and lane markings can improve communication and reduce accidents
- like cars, bicycles need safe and convenient parking areas

See *Types of Walking Environments, Appendix B-4*

The Institute of Transportation Engineers (ITE) has published the Proposed Recommended Practice, Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities, <http://ite.org/bookstore/RP036.pdf>

See the Complete Streets Coalition website, www.completestreets.org, and the Bikes Belong Coalition, www.bikesbelong.org, for more resources.



STREET NETWORK

With advances in traffic modelling, engineers are finding that networks of smaller streets, like those found in many older city cores, can make more robust circulation systems.

- streets should form a well-connected network for all modes of travel, with multiple routes to avoid congestion
- streets should work as a system to manage driver’s expectations, reducing through-cutting and excessive speeds
- street networks are constrained by the capacity of roadway segments and the functions and signal controls of intersections
- transitions between modes of transportation should be designed to resolve traffic bottlenecks and parking conflicts

OBJECTIVES

- Support a pedestrian-friendly environment.
- Support access and direct connections between adjacent areas.
- Improve existing street networks to reduce congestion, improve connectivity, and improve safety for pedestrians, bicyclists and all vehicular modes of transit.
- Implement thoughtful parking strategies to both meet the needs of new development and prevent spillover parking in residential neighborhoods.

SELECTED WORKSHOP COMMENTS

“Developments should be ‘permeable’ to pedestrians from the neighborhoods & nearby trail networks.”

“Adequate bicycle access & facilities must be provided along the trails & at the stations.”

“Neighborhood traffic & parking must be moderated & regulated.”

See Appendix A-1 for all workshop comments.



Pedestrian Places are districts with mixed-use land development, density, good transit service, great streets, and extensive pedestrian accommodations. Here people will stroll and linger past storefronts and urban landscape features, walking for both utilitarian and recreational purposes.



Pedestrian Supportive Environments are safe environments for walking, where sidewalks are continuous and buffered from streets, wide enough for passing and walking side by side, and where good street crossings have been provided. Land uses generate and attract short walking trips or will attract recreational walkers and joggers. Building fronts face streets. A parent would feel comfortable letting a child walk ahead of them with minimal supervision.



Pedestrian Intolerant Environments are pedestrian-hostile areas where walking is unsafe and unattractive.

LEGEND

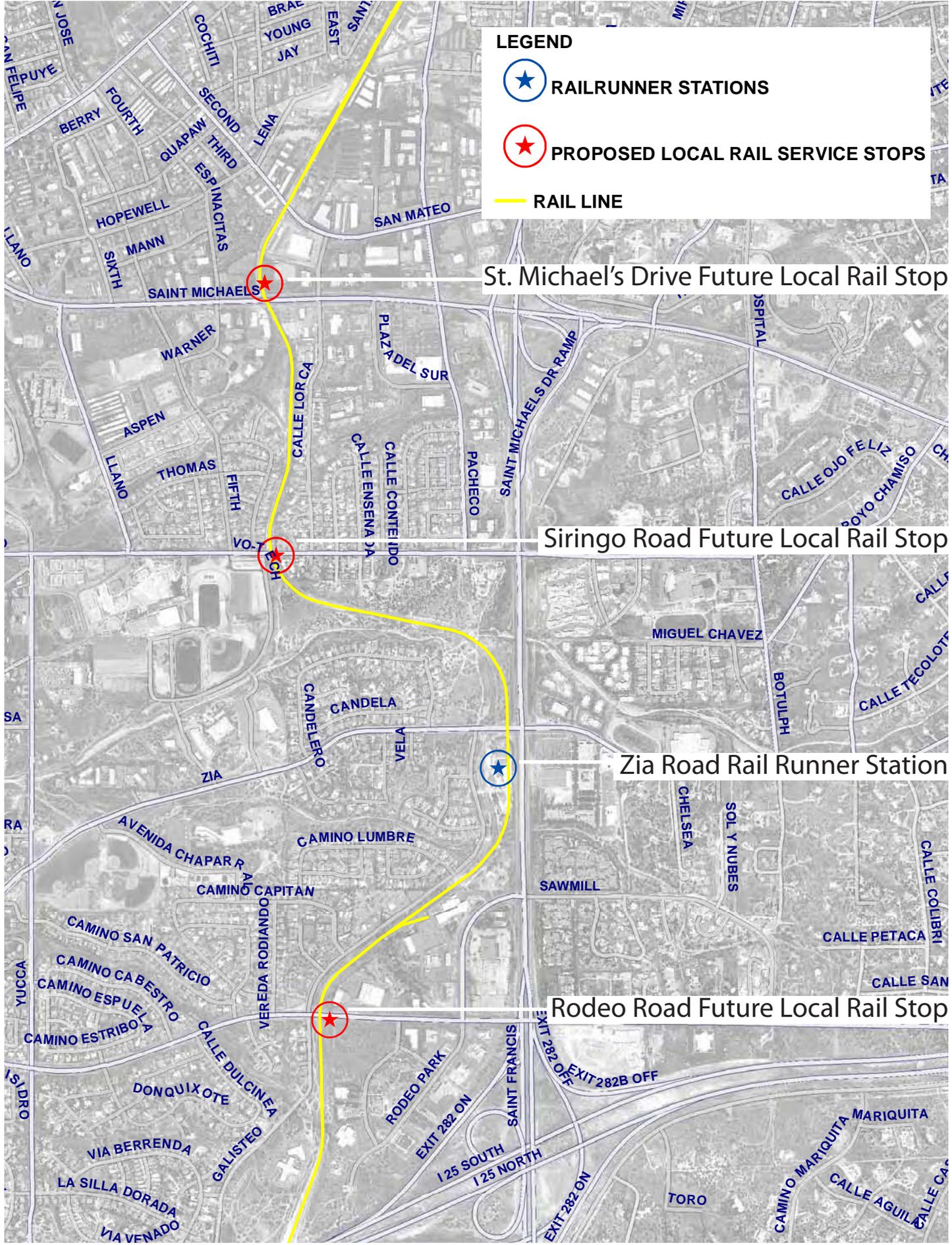
-  RAILRUNNER STATIONS
-  PROPOSED LOCAL RAIL SERVICE STOPS
-  RAIL LINE

St. Michael's Drive Future Local Rail Stop

Siringo Road Future Local Rail Stop

Zia Road Rail Runner Station

Rodeo Road Future Local Rail Stop



Rail Corridor Map

DESCRIPTIVE TOUR OF RAIL STOP NEIGHBORHOODS

Chapter 3

Santa Fe's Rail Corridor Neighborhoods

As it completes the journey from Belen to Santa Fe, the Rail Runner follows the Santa Fe Southern rail line from I-25 to the Railyard. Built in the 1880s, the line follows the topography through several major drainages, which also influenced the layout of roads and neighborhoods. Most of the built environment in the southern portion of the corridor -- the area of this study -- dates from the 1960s to 1990s. The automobile and modern zoning are primary design influences, resulting in quite extensive residential neighborhoods with basic services provided in shopping centers, often out of walking distance. But like many suburban areas, the neighborhoods have matured and support strong and diverse communities.

This tour of the rail corridor starts at the south, at Rodeo Road. East of the rail line, the Rodeo Business Park development flanks the rail line, and is bounded by the I-25/ St. Francis Drive interchange to the south and east. A large, vacant land parcel in the office park could be developed to support future local rail service. West of the rail line are several suburban residential neighborhoods built in recent decades. An arroyo corridor connects the neighborhoods to Ragle Park to the north. Residents rely on Rodeo Road for access, with few other connecting streets or trails. The rail line and Galisteo Street form a strong connection north to Zia Road.

At Zia Road, the rail line turns to the east to share the St. Francis Drive right of way. Selected by the State as a Rail Runner stop, the site of the former pumice plant and adjoining lands at Zia Road are being planned as a Transit Oriented Development. To the west are the Candlelight neighborhoods which include detached and townhouse homes. Candelero Park and arroyo corridors provide recreational amenities. East of the rail line and St. Francis Drive is a small

commercial district anchored by a grocery and drug store, with schools and lower density residential farther east. To the north, the rail line rises out of Arroyo de los Chamisos to one of the most scenic parts of the rail trail.

At Siringo Road, the rail line is flanked by Southridge and Case del Cerro neighborhoods and the Santa Fe High School campus. Southridge Park and several arroyo corridors provide open space amenities. Siringo road is the only east-west connection in the area, but is congested and a poor pedestrian environment. A future rail stop here would serve area residents, high school students, and the College of Santa Fe, whose back entrance is about a half mile west on Siringo Road.

At St. Michael's Drive, the rail line enters a diverse mixed use district that supports significant local-serving retail, multi-family housing, and the neighborhoods of the Triangle District. St. Michaels Drive is a seven-lane arterial built out with automobile-oriented shopping centers. Second Street is more pedestrian-scaled and contains a mix of smaller retail and local hotspots. A warehouse district to the east includes a variety of work sites, and many underutilized properties, such as storage units.

North of Second Street, a Rail Runner stop is planned at Alta Vista Street. The State is the primary land owner in this area, and is planning the redevelopment of the site. The Rail line and Rail Runner service terminate at the Railyard, the focus of a multi-year redevelopment effort by the City of Santa Fe. While these two rail stops are outside the scope of this study, the surrounding neighborhoods could benefit from many of the strategies and recommendations that follow.

RODEO ROAD

Future Local Service Rail Stop

“WORK PLACE”

In this future vision of Rodeo Road, buses and local rail service would stop at a platform ① southeast of the rail crossing. The platform area includes a small open courtyard with shade trees, seating, a cafe, and other small retail. The courtyard is the focus of a two-story, mixed use development ② on one of the last unbuilt parcels in the Rodeo Business Park.

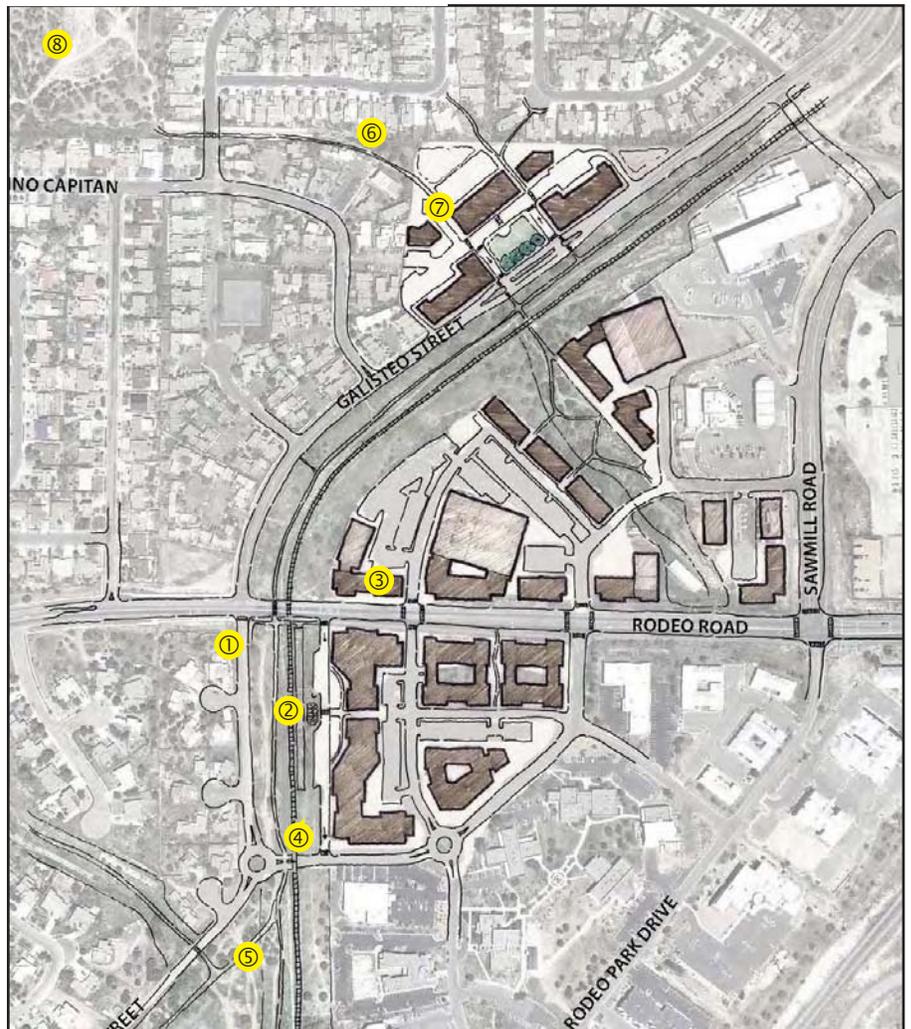
Along Rodeo, a more urban streetscape ③ composed of building facades, street trees, wider sidewalks, parking lanes, and more frequent intersections with marked crosswalks would moderate traffic speeds and mark the area as a destination. A new road link ④ across the rail line to Galisteo Street would improve access and circulation for adjoining residential neighborhoods.

The rail right-of-way ⑤ is improved and maintained as open space, with a more rural feel to the rail trail headed south to Eldorado and Lamy. Heading north, the rail trail is paved, and passes the redeveloped County Yards ⑥ on the way to Zia Road. A pocket park ⑦ anchors mixed use development at the County Yards, and across the rail line new lofts flank the regenerated Sawmill Arroyo. Trail improvements ⑧ link nearby residential neighborhoods, Ragle Park, and the Arroyo de la Paz to the rail stop area. See Maps Section for more detail and entire corridor.

“Any transit service must be easy to access and use. What price of gas makes public transportation ‘worth it?’”

-Workshop Participant

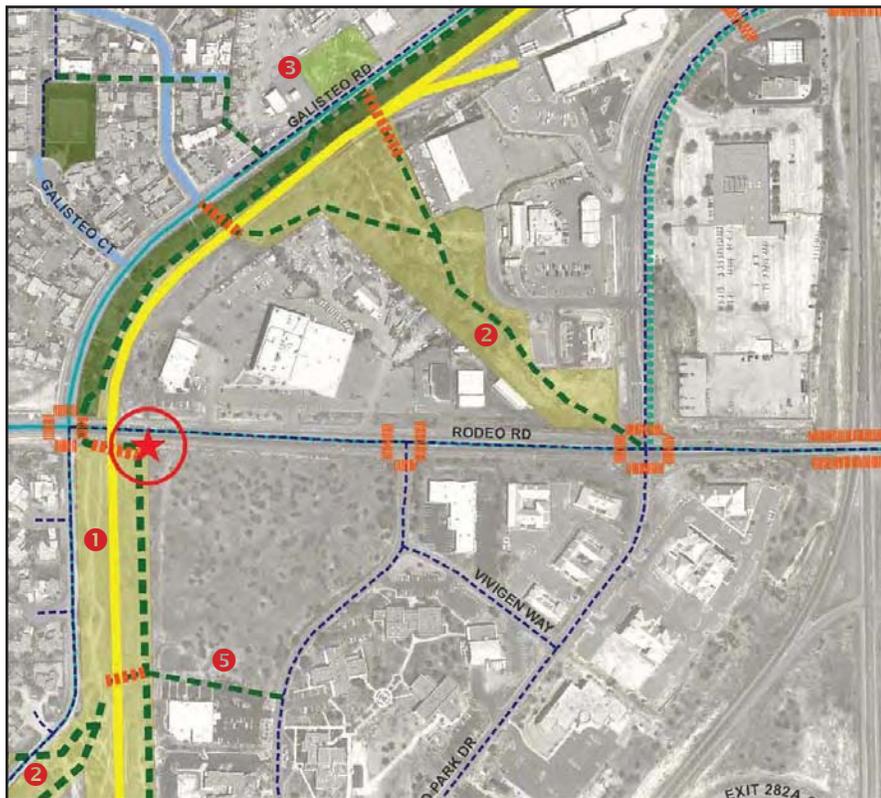
“It should be easy to access the train & bus stations without needing a car or a place to park.”
-Workshop Participant



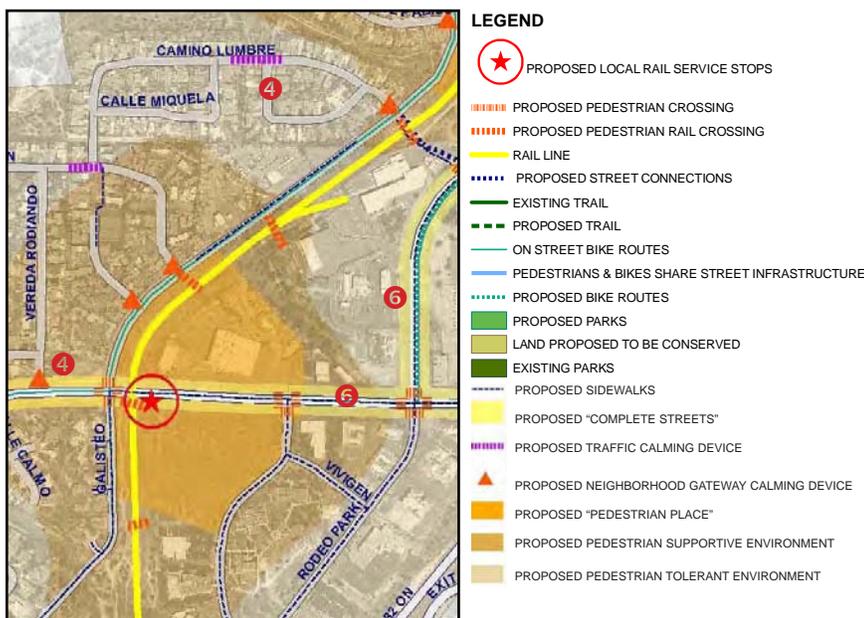
Schematic Concept Plan for Rodeo Road Rail Stop



Concept sketch of Rodeo Road Rail Stop



Map of Rodeo & Rail Line showing Recommended Trail, Open Space and Street Improvements



Map of Existing Rodeo & Rail Line Intersection showing Recommended Pedestrian Improvements & Traffic Calming

RECOMMENDATIONS

(See Recommendations Chapter 4 for items referenced below)

Transit

- Reconfigure and expand bus system to support new commuting patterns (2.2)
- Establish employer-based cooperatives to provide shuttle service links to Rail Runner (2.2.4)

Trails

- **1** Protect and expand Rail Runner easement along the Rail Trail as a conservation easement and natural corridor (3.2.3.2)
- **2** Complete and improve trails in natural corridors. Trails should accommodate bikes, strollers and older users (4.2.1)

Land Use

- Develop as a “Work Place” commercial zone, including a variety of mixed office, retail, & light industrial uses (5.2.2.1)
- **3** Encourage the redevelopment of the County Yards as a mixed use development to support local rail (5.2.2.5)

Street Network & Design

- **4** Work with neighbors to develop traffic calming plans for streets in neighborhoods adjacent to the proposed stop (6.1.2)
- **5** Reduce congestion and improve connectivity by creating a street connection from Galisteo Street east to West Rodeo Park Drive (6.2.1)
- **6** “Complete the streets” with sidewalk and cycling improvements (6.2.2)
- Create a coherent pedestrian experience on adjacent streets and throughout the site, with clear connections to area trails and surrounding streets (6.2.4.1)

“Trails should link to the rail line and bus stops, as well as be recreational.”
-Workshop Participant



ZIA ROAD

Rail Runner Station & Future Local Service Rail Stop

“GATEWAY TO SANTA FE”

The Rail Runner will stop at Zia Road ①, making it a significant location for low-impact residential and workplace development. In this future vision, the site is developed as a pedestrian-oriented neighborhood center. Buildings would range in character from townhouse and loft residences adjoining existing neighborhoods to three-story mixed use buildings forming strong streetscapes along Zia Road. Traffic would be moderated by two new signalized intersections ② and the presence of more urban streetscape elements ③ like street trees, wider sidewalks, storefront buildings, and parking lanes.

A small hardscaped courtyard space ④ would host community events, overlooking Candeler Park. The Rail trail passes between the platform area and St. Francis Drive, but pedestrians would also have the option to walk on sidewalks through the development, rejoining the rail trail at the historic trestle bridge ⑤ at the south end of the property. Trails in the arroyos north and south of Zia would cross under St. Francis ⑥, connecting the rail stop area to the grocery, retail and residential areas to the east ⑦. Improvements to Candeler Park and numerous trail connections would provide access to the station and improved pedestrian connectivity for adjoining neighborhoods.

Two new road connections ⑧ would help alleviate traffic on Galisteo and Zia Road. A connection between Galisteo and Sawmill would cross the tracks just north of Premier Distributing, and a route from Zia to Siringo would be opened up through the Vocational Technology campus (see map on next page). See Maps Section for more detail and entire corridor.

“This area is the ‘Gateway to Santa Fe.’ It must be developed in keeping with Santa Fe’s character.”
-Workshop Participant



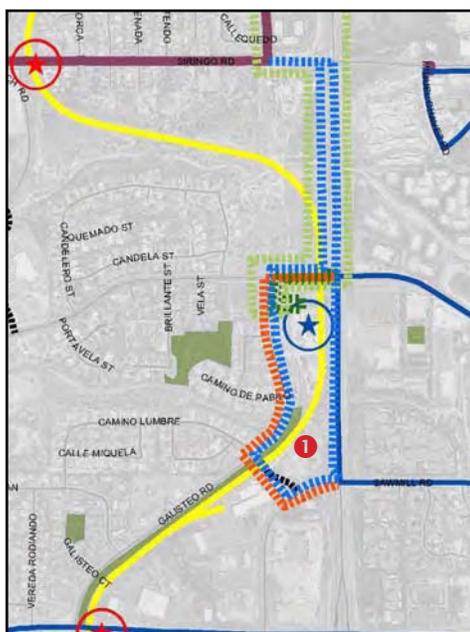
Schematic Concept Plan for Zia Road Rail Stop



Concept sketch of Zia Road Rail Stop



Map of Zia & Rail Line Showing Recommended Trail, Open Space and Street Improvements



LEGEND

- PROPOSED LOCAL RAIL SERVICE STOPS
- PROPOSED PEDESTRIAN CROSSING
- PROPOSED PEDESTRIAN RAIL CROSSING
- RAIL LINE
- PROPOSED STREET CONNECTIONS
- EXISTING TRAIL
- PROPOSED TRAIL
- ON STREET BIKE ROUTES
- PEDESTRIANS & BIKES SHARE STREET INFRASTRUCTURE
- PROPOSED BIKE ROUTES
- PROPOSED PARKS
- LAND PROPOSED TO BE CONSERVED
- EXISTING PARKS
- PROPOSED SIDEWALKS
- BUS SYSTEM**
- Route by Ridership
- 6
- 4
- PROPOSED BUS ROUTE CHANGES**
- DISCONTINUED PORTION OF RT 5: LONG TERM
- ST FRANCIS/SAWMILL/NEW RD/GALISTEO: LONG TERM
- ZIA TO GALISTEO TO NEW ROAD TO SAWMILL: LONG TERM

Map of Recommended Bus System Improvements near the Zia Rail Runner Station

RECOMMENDATIONS

(See Recommendations Chapter 4 for items referenced below)

Transit

- Make sure commencement of Rail Runner service is smooth (1.1)
- **1** Reconfigure the Bus Route 6 schedule to meet the train. Create a new loop route to circulate between the Zia Road Station and adjacent neighborhoods (2.1.1.1)
- Prioritize bus routes for direct access to senior housing, colleges, schools, and workforce and low-income housing (2.2.2)

Open Space

- **2** Construct pedestrian underpasses under St. Francis Drive (2.2.4)
- The complete, paved Rail Trail should extend from railyard to city limits, and include regular pedestrian crossings over the rail line, signage, benches, and maps. Replace parking (4.1.1)

Land Use

- Develop and guide redevelopment of the Zia Station TOD District as a “Gateway to Santa Fe” (5.2.2)
- **3** Develop the Zia Station area to accommodate a mix of uses that support the surrounding neighborhood, such as: Small retail such as a family-style restaurant or pub, salon, coffee shop, bike repair shop, small natural grocery, book store, and an outdoor community gathering space (5.2.1.2)

Street Network & Design

- **4** Reduce congestion and improve connectivity by creating a street connection from Galisteo Street east to Sawmill Road (6.2.1)
- **5** Work with neighbors to develop traffic calming plans for streets in neighborhoods adjacent to the proposed stop (6.1.2)



“We would like to see a plaza or ‘active open space’ to serve functions such as a small farmers’ market, outdoor performances, community parties.”
-Workshop Participant

“A tunnel under St. Francis is needed. What are the costs/benefits of either an over or underpass?”
-Workshop Participant



SIRINGO ROAD

Future Local Service Rail Stop

“Adequate bicycle access & facilities must be provided along the trails, streets & at the station or at bus stops.”
-Workshop Participant

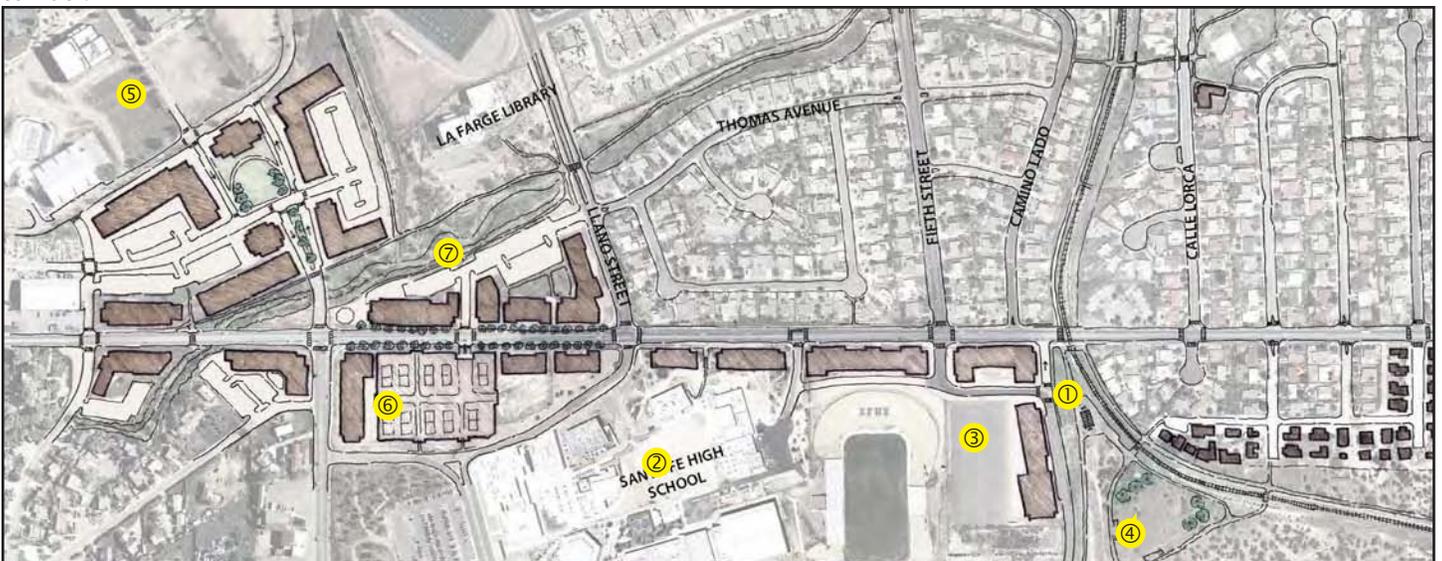
“NEIGHBORHOOD HUB”

In this future vision of Siringo Road, local trains and buses would stop just south of the Siringo intersection ①. The immediate area consists of established residential neighborhoods and the Santa Fe High campus ②. It is not an appropriate site for significant redevelopment. A few community serving retail spaces ③ could be developed in cooperation with the School District, possibly a daycare, cafe, or yoga studio. A park would be built ④ on the promontory to the south, with a great view of the Arroyo de los Chamisos and the Sandia Mountains. The rail trail and Chamisos trail would connect this location to Zia Road, the Chavez Center, and many nearby neighborhoods. To the north, the Southridge Park (see *St. Michael's Study area*) would be improved, with better trail connections to adjoining neighborhood streets, the Smiths shopping center, and the rail trail.

West of the train stop, there would be a commercial node along Siringo between Llano and Yucca, connecting the College of Santa Fe ⑤ and Santa Fe High. The tennis courts would be rebuilt above a parking and retail structure, and new multistory mixed use buildings ⑥ on both sides of the street would form a short 'Main Street'. The development would support the School District with teacher housing, spin-off program space, and retail tenant space. To the west, the gateway to the College would be developed with a mix of commercial academic and residential uses. The Arroyo de los Pinos ⑦ would be improved, providing an open space link to La Farge Library and back to Southridge Park. See *Maps Section* for more detail and entire corridor.



Concept sketch of Siringo Road Rail Stop



Schematic Concept Plan for Siringo Road Rail Stop



Map of Siringo & Rail Line Showing Recommended Trail, Open Space and Street Improvements



Map of Existing Siringo & Rail Line Intersection showing Recommended Pedestrian Improvements & Traffic Calming

LEGEND

- PROPOSED LOCAL RAIL SERVICE STOPS
- PROPOSED PEDESTRIAN CROSSING
- PROPOSED PEDESTRIAN RAIL CROSSING
- RAIL LINE
- PROPOSED STREET CONNECTIONS
- EXISTING TRAIL
- PROPOSED TRAIL
- ON STREET BIKE ROUTES
- PEDESTRIANS & BIKES SHARE STREET INFRASTRUCTURE
- PROPOSED BIKE ROUTES
- PROPOSED PARKS
- LAND PROPOSED TO BE CONSERVED
- EXISTING PARKS
- PROPOSED SIDEWALKS
- PROPOSED "COMPLETE STREETS"
- PROPOSED TRAFFIC CALMING DEVICE
- PROPOSED NEIGHBORHOOD GATEWAY CALMING DEVICE
- PROPOSED "PEDESTRIAN PLACE"
- PROPOSED PEDESTRIAN SUPPORTIVE ENVIRONMENT
- PROPOSED PEDESTRIAN TOLERANT ENVIRONMENT

RECOMMENDATIONS

(See Recommendations Chapter 4 for items referenced below)

Transit

- Increase frequency of bus routes along Siringo Road (2.1)
- Prioritize bus routes for direct access to senior housing, colleges, schools, and workforce and low-income housing (2.2.2.2)
- **1** Add or improve bus stop facilities (2.2.2.4)

Open Space

- **2** Improve South Arroyo de Los Pinos as a connection from the Rail Trail to Llano Street, and continue improvements across to southwest corner of Siringo and Yucca Streets (3.2.1)
- **3** Create a new neighborhood park at the promontory south of Siringo Road/rail line intersection (3.2.1.3)

- Complete the open space network. Acquire or create easements over land parcels in arroyos and other natural corridors to create continuous network (3.2.3.1)

Land Use

- **4** Create a unified and pedestrian-friendly street from the Rail Corridor past Yucca to support campus or mixed use development by Santa Fe High School and College of Santa Fe, and other land owners (5.2)

Street Network & Design

- **5** "Complete the streets" along Siringo Road with sidewalk and cycling improvements (6.3.2)



"High School students could potentially use bus transit, rail transit, or both."
 -Workshop Participant



ST. MICHAEL'S DRIVE

Future Local Service Rail Stop

"MAIN STREET"

St Michael's Drive is a good candidate for transit-oriented redevelopment. In this future vision, trains would stop between St. Michael's and Second Street, in a paseo with new buildings fronting the rail line^①. A rail plaza would open up at Second Street, and a new park^② would be located just off the tracks in the Water Company's back lot. New construction would strengthen the San Mateo streetscape^③, storage units are replaced with lofts and townhouses, and the Arroyo de los Pinos would have a new trail extending from St. Francis drive, through Second Street Studios and the Hopewell neighborhood^④ to St. Michael's Drive and De Vargas Middle School^⑤. To the south, the land contained by the rail spur would be conserved as a city park^⑥, with significant trail connections to nearby neighborhoods.

Over time, St Michael's Drive can redevelop as a Main Street. A "road diet", reducing the width of the street from three lanes

"Second Street is a thriving, small-scale, mixed use area that could be supported by redevelopment around a nearby transportation stop."

-Workshop Participant

each direction to two lanes, will instigate a transformation of adjoining land uses, without impacting through traffic. The new streetscape would consist of storefronts built to the sidewalk, wide sidewalks, street trees, parking lanes, bike lanes, medians with trees, and possibly streetcar service. Much like St. Michael's today, retail uses would be local-serving and locally owned, but building types would be more urban in character with housing and office uses on upper floors. More frequent intersections with marked crosswalks would facilitate pedestrian circulation, and new streets paralleling St Michael's to the north and south^⑦ would help relieve local traffic. A new commercial gateway to the College of Santa Fe^⑧ would align with a Hopewell street extension. Modern roundabouts would handle traffic at both ends of the street^⑨, at Cerrillos and St. Francis.

See Maps Section for more detail and entire corridor.



Concept sketch of St. Michael's Drive Rail Stop



Schematic Concept Plan for St. Michael's & Second Street Rail Stop



Map of St. Michael's & Rail Line showing Recommended Trail, Open Space and Street



LEGEND

- PROPOSED LOCAL RAIL SERVICE STOPS
- PROPOSED PEDESTRIAN CROSSING
- PROPOSED PEDESTRIAN RAIL CROSSING
- RAIL LINE
- PROPOSED STREET CONNECTIONS
- EXISTING TRAIL
- ON STREET BIKE ROUTES
- PEDESTRIANS & BIKES SHARE STREET INFRASTRUCTURE
- PROPOSED BIKE ROUTES
- PROPOSED PARKS
- LAND PROPOSED TO BE CONSERVED
- EXISTING PARKS
- PROPOSED SIDEWALKS
- PROPOSED "COMPLETE STREETS"
- PROPOSED TRAFFIC CALMING DEVICE
- PROPOSED NEIGHBORHOOD GATEWAY CALMING DEVICE
- PROPOSED "PEDESTRIAN PLACE"
- PROPOSED PEDESTRIAN SUPPORTIVE ENVIRONMENT
- PROPOSED PEDESTRIAN TOLERANT ENVIRONMENT

Map of Existing St. Michael's & Rail Line Intersection showing Recommended Pedestrian Improvements



Retail streetscape on Galisteo Street

"Developments should be 'permeable' to pedestrians from the neighborhoods & nearby trail networks."
-Workshop Participant

RECOMMENDATIONS

(See Recommendations Chapter 4 for numbered items referenced below)

Transit

- Prioritize bus routes for direct access to senior housing, colleges, schools, and workforce and low-income housing (2.2.2.2)
- Locate a future Rail Runner stop north of St. Michael's Drive (2.3.6)

Open Space

- **1** Include the NW Arroyo de Los Pinos, which runs to the north of Second Street and down Hopewell Street, in the trails and open space network (3.2.3)
- Formalize and clean up Southridge Arroyo Park to become a safe, usable public space (3.1.1) (see Rail Stop Neighborhood Maps, St. Michael's)
- **2** Preserve the open land next to the rail line south of St. Michael's as a park. The existing network of "social paths" is heavily used as a strong East-West pedestrian connector (3.2.1.2)

Land Use

- Encourage redevelopment of the St. Michael's TOD District as a "Main Street" commercial area **3**, including a variety of mixed uses. Encourage development to support the small, local, varied, and active nature of Second Street (5.2.2.4)
- Develop this area to reflect and serve the needs of existing residents. Preserve the day-to-day uses that St. Michael's provides (5.2.2.4)

Street Network & Design

- Propose a "road diet" for St. Michael's Drive: reduce the amount of large parking lots along St. Michael's Drive, reduce lanes from 6 to 4, reduce speed limit, increase density and mix of uses along St. Michael's Drive
- Improve pedestrian safety using pedestrian activated signals & construct additional safe pedestrian crossings at intervals along St. Michael's
- Use shared parking strategies to reduce surface parking area requirements



RECOMMENDATIONS

Chapter 4

Implementation Plan

Rail Runner Coordination

Transit

Open Space

Trails

Land Use

Streets

IMPLEMENTATION PLAN

1. Rail Runner Coordination p. 29

Implementation Team: Long Range Planning, Public Works

- Make sure commencement of Rail Runner service is smooth



2. Transit p. 29

Implementation Team: MPO, Planning, Santa Fe Trails

- Adjust bus schedules and routes to meet Rail Runner trains
- Reconfigure and expand bus system to support new commuting patterns
- Integrate streetcars and other fixed route services to support all residents with public transportation



3. Open Space p. 30

Implementation Team: Planning, Parks, TPL, Land Conservancy, Community

- Create connected network of arroyo corridors and pocket park nodes
- Identify, purchase, protect and improve open space resources
- Improve usability of open space network



4. Trails p. 31

Implementation Team: Planning, Public Works

- Repair and connect existing use trails
- Extend and replace use trails with formal trails



5. Land Use p. 31

Implementation Team: Planning, neighborhood groups

- Facilitate creation of TODs and other neighborhood centers
- Locate and Guide development of TODs



6. Street Network and Design p. 33

Implementation Team: Planning, SFMPO, Streets, BTAC, merchants and residents associations

- Improve pedestrian safety
- Create pedestrian supportive environments
- Implement Road Diets and streetscape makeovers



RECOMMENDATIONS

1.0 Rail Runner Coordination

1.1 Make sure commencement of Rail Runner service is smooth.

- 1.1.1 Complete pedestrian access to all platforms
 - .1 Support Rail Runner service at Zia Road coincident with the start of Rail Runner service, if the following objectives are met:
 - adequate parking is provided.
 - safe pedestrian crossings on streets and across the rail line are implemented.
 - bike racks are provided.
 - .2 Coordinate placement and design of platform and access with NMDOT and land owner.
 - provide parking for 20-25 bikes, including bike lockers.
 - Sidewalk adjoining platform should be 8' wide
 - Full cutoff light fixtures should be used
- 1.1.2 Resolve automobile access, traffic flows, and signage needs for all stations
- 1.1.3 Celebrate and publicize commencement of Rail Runner service and welcome commuters with events and art installations.

2.0 Transit *See Transit in Maps Section.*

2.1 Adjust bus schedules and routes to meet Rail Runner trains.

- 2.1.1 Adjust bus schedules and hours of service to meet all Rail Runner trains
 - .1 Reconfigure the Route 6 schedule to meet the train at Zia Road.
- 2.1.2 Add bus stop facilities. *See Fig 2.1*
- 2.1.3 Conduct a long term Strategic Transit Plan, to include both City and County areas.

2.2 Reconfigure and expand bus system to support new commuting patterns.

- 2.2.2 Revise Santa Fe Trails bus system to meet Rail Runner trains and connect with future local service.
 - .1 Add new routes
 - consider routes to/from Eldorado and Airport Road, and east-west routes to serve the rail corridor.
 - Create a new loop route to circulate between the Zia Road Station and adjacent neighborhoods.
 - Create a route on 2nd Street
 - .2 Prioritize bus routes for direct access to senior housing, colleges, schools, and workforce and low-income housing.
 - .3 Adjust bus Schedules to maximize connection with Rail, regional buses, and Greyhound
 - .4 Add or improve bus stop facilities.
- 2.2.3 Work with Rail Runner to provide better access to the Albuquerque Sunport.
- 2.2.4 Establish employer-based cooperatives to provide shuttle service links to Rail Runner.
 - Rodeo Road to Zia Road
 - St. Vincent Hospital to Zia Road
- 2.2.5 Extend jitney and on-call service to more remote neighborhoods



Fig. 2.1

2.3 Integrate streetcars and other fixed route services to support all residents with public transportation.

- 2.3.1 Develop streetcar system on heavily travelled corridors.
- 2.3.2 Develop local rail service along the existing rail corridor.
 - .1 Provide service at the following locations:
 - Railyard
 - NMDOT site at Alta Vista Road
 - St. Michael's Drive and Second Street
 - Siringo Road
 - Zia Road
 - Rodeo Road
 - Richards Avenue
 - Potential local service to Eldorado.
 - .2 Consider DMUs and other compatible heavy rail vehicles. *See Appendix B-2.*
- 2.3.3 Study feasibility of local rail on Cerrillos Road and other major arterials.
- 2.3.4 Decrease headways of buses.
- 2.3.5 Create a third transit center at Zia Road.
 - .1 Reconfigure Routes 4 and 5 to serve the station.
 - .2 Zia Station design: Design the station to accommodate three buses at the platform, and a total of six buses in the vicinity, as well as parking for 4-5 vans or smaller shuttle buses.
- 2.3.6 Revise and expand Eldorado bus service with transfers at Zia Road.
- 2.3.7 Review feasibility to locate a future Rail Runner or local service stop north of St. Michael's Drive.

3.0 Open Space *See Trail Network & Open Space in Map Section.*

3.1 Create connected network of arroyo corridors and pocket park nodes.

- 3.1.1 Improve neighborhood parks.
 - .1 Initiate neighborhood planning processes to design park improvements for existing parks, including:
 - Galisteo Tennis Courts
 - Candelero
 - Southridge Arroyo
 - Espinacitas.
 - .2 Improve pedestrian access including marked street crossings.
- 3.1.2 Conduct an Open Space Network study.
 - .1 Identify gaps in land ownership and/or public access easements in arroyo corridors.
 - .2 Create an acquisition plan, including purchase, conservation easements, public use easements, and condemnation.
 - .3 Analyze and make recommendations about residential proximity and access to parks .



Fig. 3.1

3.2 Identify, purchase, protect and improve open space resources.

- 3.2.1 Create new neighborhood parks and pocket parks at the following locations:
 - Water Company on San Mateo
 - Rail turnaround south of St. Michael's Drive
 - the promontory south of Siringo Road/ rail line intersection
 - County Yards
 - Zia Road as part of any new development.
- 3.2.2 Construct park improvements that serve the needs of local residents as prioritized in park improvement plans. *See Fig 3.1.*

- 3.2.3 Complete the open space network.
- .1 Acquire or create easements over land parcels in arroyos and other natural corridors to create continuous network.
 - .2 Protect and improve the full width of the rail line right of way as open space.

3.3 Improve usability of open space network.

- 3.3.1 Undertake comprehensive regeneration of arroyo ecosystems through green jobs programs.
- 3.3.2 Develop additional recreational and community agriculture areas within open space networks.
- 3.3.3 Acquire land for additional neighborhood pocket parks as population grows.

4.0 Trails *See Trail Network & Open Space in Map Section.*

4.1 Repair and connect existing use trails.

- 4.1.1 Complete Rail Trail.
- .1 Paved trail should extend from railyard to city limits.
 - .2 Coordinate with State DOT to build pedestrian crossings over the rail line to provide access to the rail trail. *See map for specific locations.*
 - .3 Pave and stripe path, and provide signage, benches, and maps.
 - .4 Replace or relocate Zia Road Rail Trail trailhead parking to provide access during construction.
- 4.1.2 Update trails planning documents to prioritize future improvements.

4.2 Extend and replace established common-use trails with formal trails.

- 4.2.1 Complete and improve trails in natural corridors.
- .1 Establish appropriate trail construction and design for arroyo use. Design should accommodate bikes, strollers and older users.
 - .2 Construct striped street crossings with signage and, at larger streets, warning lights.
 - .3 Provide signage, benches, and maps.
- 4.2.2 Connect parks and neighborhoods to natural corridors.
- .1 Clear and improve drainage and utility easements and arroyos to link neighborhood streets to adjacent arroyo corridors.
 - .2 Improve sidewalk and trails links between parks and adjacent arroyo corridors.
- 4.2.3 Connect trails with underpasses at St. Francis Drive. *See Fig. 4.1.*
- .1 Construct a pedestrian underpass under St. Francis Drive at the Arroyo de los Chamisos and Arroyo Chaparral. (north and south of Zia Road)
 - .2 Consider grade-separated pedestrian crossings for Zia Road.



Fig. 4.1

5.0 Land Use *See Land Use in Map Section.*

5.1 Facilitate creation of TODs and other neighborhood centers.

- 5.1.1 Revise the Mixed Use Zoning Code to support TOD districts.
- .1 Increase maximum height to better accommodate three story buildings.
 - .2 Provide greater flexibility in matching character of adjacent uses.
 - .3 Allow mix of uses without required separations.
 - .4 Maximum density should be defined by form-based building envelope dimensions, rather than by FAR or residential unit densities.
 - .5 Parking garages should be lined with retail spaces or other active facades.

- 5.1.2 Rezone commercial and industrial lands at potential rail stops. *See Land Use Map for specific locations.*
- 5.1.3 Revise Highway Corridor overlay zoning to create additional Highway Corridor Protection Districts to guide urbanization of key arterials at these locations:
 - St Francis Drive north of Sawmill.
 - St Michaels Drive.
 - Rodeo Road west of St. Francis.

5.2 Locate and Guide development of TODs.

- 5.2.1 Write Design Guidelines for TOD areas.
 - .1 Require developers to conduct a market analysis and a view-shed analysis to inform development.
 - .2 TOD sites should accommodate a mix of uses that support the surrounding neighborhood, including:
 - Small retails such as a family-style restaurant or pub, salon, coffee shop, bike repair shop, small natural grocery, and book store.
 - Outdoor community space for small-scale markets, concerts, or community gatherings.
 - .3 Require new development to meet LEED-Neighborhood Development (ND) "Certified" standards, even if full certification is not sought. *See www.usgbc.org.*
 - .4 All residential buildings should comply with the City's Green Building Codes when adopted by City Council. *See the City of Santa Fe's webpage, go to "Sustainability" and click on the "Draft Residential Green Building Code."*
- 5.2.2 Create comprehensive masterplans for station areas and other Mixed Use areas that reinforce the character of each area. *See Rail Stop Neighborhoods in Map Section.*
 - .1 Rodeo Road - a "Work Place" commercial district, including a variety of mixed uses.
 - Create outdoor café space in the vicinity of the local rail stop to serve surrounding office workers.
 - .2 Zia Road – a "Gateway to Santa Fe" and a hub for neighborhood-serving retail.
 - create a "main street" pedestrian supportive streetscape on Zia Road with retail storefronts.
 - create a pedestrian place adjacent to the rail platform, with limited commuter services, local retail, and office space.
 - create a small community gathering space west of the station area, in proximity to Candelero Park.
 - create a mixed use development north of Zia with office, live/work, and residential uses. Residential uses should predominate along transition to existing residential to the west.
 - .3 Siringo Road - a "Neighborhood Hub"
 - Guide development of the area near the stop to support the identity of the existing residential neighborhood.
 - Create a unified and pedestrian-friendly street from Rail Corridor past Yucca to support campus or mixed use development by Santa Fe High School and College of Santa Fe, and other land owners.
 - .4 St. Michael's Drive – a "Main Street" commercial area, including a variety of mixed uses.
 - Create a public space for outdoor markets, concerts, and events at Second Street and the rail line.
 - Develop this area to reflect and serve the needs of existing residents.

- Allow market growth but protect low-income residential in the area from rising property values through policy.
- Guide development to support the small, local, varied, and active nature of Second Street.
- .5 Guide the redevelopment of the County Yards as a potential mixed use development.

6.0 Street Network and Design See *Street Network & Design in Map Section*.

6.1 Improve pedestrian safety.

- 6.1.1 Improve pedestrian routes in the rail corridor neighborhoods with striped crossing, sidewalks, ramps.
- 6.1.2 Traffic Calming:
 - Work with neighbors to develop traffic calming plans for streets in neighborhoods adjacent to station areas. There are several opportunities in each proposed station location for neighborhood entrances and mid-block choke points. See *Fig 6.1* and See *Street Network & Design map for specific locations*.



Fig. 6.1

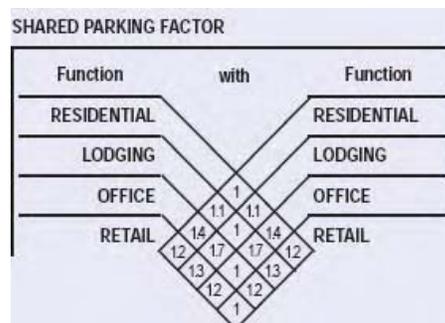
6.2 Create pedestrian supportive environments. See *Appendices B-4 & B-5*.

- 6.2.1 New Street Connections: See *Street Network & Design Map for specific locations*.
 - .1 Consider the following long term solutions to reduce congestion and increase connectivity:
 - Acquire land for a right-of-way connecting Galisteo Street to Sawmill Road, north of Premier Distributing.
 - Create a neighborhood plan and work with school system to open a street connection through the Vo-Tech property from Zia to Siringo.
 - Create a neighborhood plan and develop a street connection from Candellero to the northern redevelopment parcel.
 - .2 Connect Galisteo Street to West Rodeo Park Drive.
- 6.2.2 Complete Streets Policy:
 - .1 Establish a Complete Streets Policy city wide with prioritized goals and an implementation timeline.
 - .1 "Complete the streets" with sidewalk and cycling improvements. See *Fig 6.2*.
 - Repair and/or connect existing sidewalks to create a better pedestrian environment.
 - Work to improve & extend existing bicycle lanes and signage.
 - Establish locations for bike parking or storage.
 - Add shade trees along sidewalks and medians.



Fig. 6.2

- 6.2.3 Implement parking demand reduction strategies See *Fig. 6.3*.
 - .1 Implement a residential/neighborhood parking permit program in residential areas adjacent to TOD areas to prevent spillover parking.
 - Establish a parking district to manage and sell parking permits. Carefully consider the boundaries of the parking district because if it is too small, people may park just outside the boundaries to avoid purchasing a permit.
 - .2 Reduce minimum parking requirements for TOD and other new development and infill/redevelopment projects near station areas.
 - .3 Use shared parking strategies to reduce surface parking area requirements at TOD areas.
 - Walking distances are a critical consideration in shared parking strategies.
 - Use zoned rather than assigned spaces.
 - Allow uses with different peaks (i.e. night uses versus day uses) to share



To Use the Shared Parking Factor:
 If the Residential component of a development requires 80 parking spaces and the Retail component requires 220 spaces, the total combined parking requirement is 300 spaces. If these two uses share parking, it is appropriate to provide a shared lot with 250 spaces (or 300 divided by 1.2, per Figure X below). In this example, using shared parking allows just under a 17 percent reduction in total parking supply needed compared to a traditional parking supply scheme.

Fig. 6.3

parking.

- .4 Consider marketing strategies at TOD areas and development at other station locations that considers pricing alternatives for parking and leases/sales prices.
 - Unbundle parking from rent or sales price (i.e. parking spaces are rented or sold independent of the unit they are serving). Housing may be more affordable for residents who do not need multiple parking spaces.
 - Allow car-share programs to count toward parking requirements.

6.2.4 Guide development plans to create pedestrian first environments.

.1 Rodeo Road

- Create a coherent pedestrian experience throughout the site, with clear connections to area trails and surrounding streets.

.2 Zia Road

- Create a coherent pedestrian experience throughout the site, with clear connections to area trails and surrounding streets.
- Distribute uses and redesign street system to alleviate congestion at Zia/ St. Francis.
- Improve pedestrian crossings across Zia Road, including at the Saint Francis intersection and the new Rail Trail crossing.
- Consider pedestrian safety features such as eliminating free right turn onto Zia westbound and/or installing pedestrian-actuated light for pedestrian and bicycle crossing.

.3 St. Michael's Drive

- Improve pedestrian safety using pedestrian activated signals at the Rail Runner crossing, Fifth Street, Calle Lorca, and Pacheco.
- Construct additional safe pedestrian crossings at intervals along St. Michael's, prioritized for access to commercial & residential areas.
- Conduct study for a 4-way stop at the intersection of Jay and Second Streets.

6.3 Implement Road Diets and streetscape makeovers

6.3.1 Zia Road Streetscape

.1 Streetscape should include:

- 15' sidewalks with street trees, furniture, and pedestrian-scaled full cutoff lighting;
- parallel parking, bike lanes, and limited left turn lanes;
- additional signalized intersections at Galisteo and Candelero
- 3 story mixed use buildings built to sidewalk with active retail storefronts on ground floors

6.3.2 Siringo Streetscape

.1 Create a pedestrian supportive streetscape on Siringo Road between the

Rail line and the College of Santa Fe

- 10' wide sidewalks with street trees, lighting and furniture
- Storefront buildings built up to the sidewalk
- Parallel parking
- Bike lanes

6.3.3 St Michael's Drive Road Diet

.1 Reduce the amount of large parking lots along St. Michael's Drive.

.2 Reduce lanes from 6 to 4.

.3 Reduce speed limit from 45 to 35 MPH

.4 Increase density and mix of uses along St. Michael's Drive to support Transit-Oriented Development.

RAIL CORRIDOR STUDY:

TRANSIT ORIENTED DEVELOPMENT FOR SANTA FE'S RAIL CORRIDOR NEIGHBORHOODS

APPENDICES

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APPENDIX A-1

The Workshop Process and Participant Comments

The Rail Corridor Study was developed through a community participation process that included three public workshops and an open house presentation. Workshop participants identified needs and opportunities in the rail corridor, helped to shape scenarios for future local rail stops, and refined design strategies for redevelopment areas and neighborhood improvements. Summaries of the public comments received at each meeting follow.

WORKSHOP 1

DATE: April 5th, 2008

LOCATION: College of Santa Fe, Jemez Room

TIME: 10:00 AM - 2:00 PM

NUMBER OF ATTENDEES: 30

ANNOUNCEMENT:

Planning for a Transit Oriented Santa Fe

Better, more connected trails

Local train service

Pedestrian & bicycle improvements

Less congestion

The City of Santa Fe is conducting a planning study to investigate Transit Oriented Development (TOD), including the Rail Runner stop at Zia and St. Francis, and

local train service in the City Different.

Please come learn about Transit Oriented Design (TOD), urban and transportation design principles, the future of local train service in Santa Fe, and provide your valuable input

Santa Fe Community College, Jemez Room

April 5, 10 AM – 2 PM

AGENDA:**WORKSHOP 1****April 5****10 AM – 2 PM****Santa Fe Community College, Jemez Room****TOD & planning principles | Information-gathering****Workshop Schedule**

10:00 – 10:30	Open House with posters stations and staff
10:30 – 11:15	Presentation
11:30 – 12:30	Table Work Session 1 – City-wide and corridor-wide

TASKS:

1. What needs could a local rail service meet, and how would you use it?
2. Are the potential local service stops in the right places?
3. What would you like to see happen at each location?
4. Identify the three things you most want us to know about or work on to prepare for the workshops in May and June.

12:30 – 12:45	Break Report Review of presentation to new arrivals
12:45 – 1:45	Tables Work Session 2 – Neighborhood Groups

TASKS:

1. Map the assets of this neighborhood with markers and post-its. (neighborhood qualities, amenities, and features)
2. What are the issues and concerns of this neighborhood?
3. What are opportunities for this neighborhood generally and in relation to rail service specifically?
4. What are the three most important things we need to tell people at the workshop for this site?

1:45 – 2:00	Report Next Steps
--------------------	---------------------

SUMMARY & COMMENTS:

TABLE WORK SESSION #1—CITY/CORRIDOR WIDE

TASKS (for Corridor tables workshop--see rail corridor map):

- Q: What needs could a local rail service meet, and how would you use it?
- A: *Getting to/from work, getting to Rail Runner station, going downtown, shopping, library, school, visit friends, family.*
- Q: Are the potential local service stops in the right places?
- A: *Yes, but local rail service should also extend to El Dorado and interconnect w/ bus service/pathways to/from other outer areas such as Community College area & Airport Road.*
- Q: What would you like to see happen at each location?
- A: *Good pedestrian/bike access, amenities that make using local service convenient/easy.*

A summary of the issues brought up by community members in relation to local rail service City/Corridor Wide:

- The viability of local service depends on [access](#) from other places/suburban connections.
- Any transit service must be as [easy](#) to access and use as current private automobiles. At what price of gas does public transportation become “worth it”?
- There must be [appropriate density](#) along the corridor in order to serve the local service rail. Appropriate density should not drastically change neighborhoods, unless it is desired by the community.
- There ought to be a [variety of types of transit](#) to serve a variety of people. These might include: bike paths, walking trails & sidewalks, bus service, a vehicle type that can travel on roads and rails, bus service, local rail, car-sharing (“zip-car”) at stops, bike-sharing. Variety can help relieve everyday traffic as well as event traffic.
- Local rail service should [extend to El Dorado](#).
- Santa Fe is currently a bit small to support a (local) rail system, but due to the Rail Runner coming to town, the city has the [opportunity](#) to set up a system in advance of expected population growth.
- The [local bus service](#) must be intertwined w/ the local rail service to serve every location in the city, including outlying areas such as the Community College and Airport Road. Destination areas such as the Plaza and the Capital complex need to be identified and connected. Perpendicular bus routes and paths should [connect outer areas to the corridor](#).
- [How often](#) would trains be running? [How long](#) would it take to get from one end to the other?
- The [pedestrian amenities](#) along the corridor need to be improved to create enticing & safe walking/biking experiences. [Safe, pleasant, affordable](#) pedestrian crossings need to be implemented at various locations along St. Francis. Rail crossings must also be safe. Typical sidewalk construction needs to be improved in many areas of Santa Fe. Traffic calming tools will need to be implemented in certain locations. There should be bike racks and shelters at stops and various locations along the corridor. Existing amenities in some areas of Santa Fe are benches at viewpoints, doggy bags at some trail heads, some bike trails. Some of the existing paths are in open, natural areas—these typically run perpendicular to the corridor and need to be identified, preserved, and formalized. The new construction on Guadalupe Street includes some of these amenities.
- [Seating & shelter](#) need to be at both bus and rail stops.
- Consider the [needs of those who are not represented](#) at the meeting (those who do not live immediately adjacent to the rail corridor; also low-income/minority populations).
- Each stop should have its own [identity](#).
- The [zoning & demographics](#) along the corridor need to be examined. Perhaps the zoning in some areas should be changed. What are the characteristics of the neighborhoods along the corridor, what are the [desired characteristics](#)?
- How can the [planning/implementation](#) of proposed tools along w/ local rail service help improve the [health of neighborhoods](#) along the corridor?
- The local bus service needs to be improved, there are very few [functional routes](#). The [wait times](#) on most routes are too long.

- Local rail service will depend on [complimentary land uses](#).
- [City and County-wide transit](#) needs to be considered. How will Richards Avenue improvements/changes affect traffic and how can this be tied into the rail corridor plan?

TABLE WORK SESSION #2—NEIGHBORHOODS/STATION STUDY AREAS

TASKS (for each stop Neighborhood workshop--see neighborhood maps):

- Map the assets of this neighborhood with markers and post-its. (neighborhood qualities, amenities, and features)
- What are the issues and concerns of this neighborhood?
- What are opportunities for this neighborhood generally and in relation to rail service specifically?
- What are the three most important things we need to tell people at the workshop for this site?

St. Michael's & Rail Corridor Intersection

- Award-winning "projects" on Hopewell Street
- This stop location has the potential to attract a lot of pedestrian activity (seniors, low income housing and single family housing in the vicinity)
- Second Street area is a destination
- Suggestion to run regular city buses on St. Michael's and have a bike barn/station at this stop
- There is an existing bike trail along the corridor
- College of Santa Fe could possibly be linked in
- Pedestrian crossings are unsafe & scary!
- Existing commercial development could be re-developed
- Very broad mix of housing types & other uses

Siringo & Rail Corridor Intersection

- There are a couple of existing bike trails in an open, natural area.
- There is no existing commercial in this area.
- High School students could potentially use bus transit, rail transit, or both. They will require a very specific schedule.

Zia & Rail Corridor Intersection (Rail-Runner stop as well as local service)

- There are a couple of existing bike trails in an open, natural area.
- There is some commercial and some industrial use in parts of this neighborhood.
- Schools could benefit from transit
- A pedestrian over-pass at Siringo across St. Francis would be ideal due to existing slope
- A pedestrian under-pass at the existing arroyo bridge would connect existing paths. The paths should be formalized.
- Congestion needs to be relieved at Zia & St. Francis intersection. How will having a local stop & a Rail Runner stop affect traffic?
- How will parking in neighborhoods (by Rail Runner commuters) be controlled? Is there a way for neighborhoods to benefit from having a small amount of available paid parking for commuters?
- Currently, many apartment complex residents use the bus system to get to work from this area.
- The bike path street crossings need to be well-planned
- The paths on the east side of St. Francis need to be connected to one another
- The existing dirt/gravel portions of the "Rail Trail" need to be paved
- Galisteo and Sawmill could be connected through Premier Distributor's driveway
- Rail "stub-outs" along the corridor could potentially be used instead of trucks by distributors
- Trucks should be kept off of neighborhood streets

Rodeo & Rail Corridor Intersection

- There were no participants for this neighborhood

WORKSHOP 2**DATE:** May 3rd, 2008**LOCATION:** St. Vincent's Hospital, Southwest Conference Room**TIME:** 9:00 AM - 5:00 PM**NUMBER OF ATTENDEES:** 26**ANNOUNCEMENT:**

**Santa Fe Transit-Oriented Development and Rail Corridor
Neighborhoods Study**

**Workshop 2: Zia Road Study Area
Saturday May 3, 2008**

**Meeting Location: St. Vincent's Hospital, Southwest Conference Room
(enter through lower lobby, south side, turn left and walk to back of
Cafeteria for meeting room entrance).**

**An all-day public design workshop studying the potential for Transit
Oriented Development at Zia Road and St. Francis Drive, and for
appropriate improvements in adjacent neighborhoods. Please feel free to
attend all or a portion of the day-long workshop.**

9:00 – 10:00 am	Welcome and Introduction
10:00 am– 12:00 pm	Work Session One: Neighborhood Assets and Tools
1:00 – 2:00 pm	Open House and Transportation Presentation
2:00 – 4:00 pm	Work Session Two: Transit Oriented Design Scenarios
4:00 – 5:00 pm	Team Presentations

Visit the City of Santa Fe web page www.santafenm.gov and click on the calendar

For more information call 955-6609 or 955-6608

AGENDA:

WORKSHOP 2

May 3

9 AM – 5 PM

St. Vincent’s Hospital, Southwest Conference Room

Zia Road Study Area

Workshop Schedule

9:00	Welcome, Introductions, Outcomes from Workshop 1
9:30	Introduction to Transit-Oriented Development at Zia Road Station
10:00	Work Session 1 - Identify Neighborhood Assets & Tools
11:45	Groups Report
12:15	Lunch
1:00	Afternoon Welcome and Review
1:15	Transportation Options
1:45	Discussion
2:00	Work Session 2 – Transit Oriented Design Scenarios
3:45	Pin Up and Break
4:00	Community Open House & Team Presentations
5:00	Summary of Outcomes

SUMMARY & COMMENTS:

TABLE WORK SESSION #1—SUMMARY OF NEIGHBORHOOD ASSETS, OPPORTUNITIES, NEEDS & CONCERNS AS IDENTIFIED BY THE PUBLIC (SEE ZIA NEIGHBORHOOD MAPS)

ASSETS, OPPORTUNITIES:

- “Gateway to Santa Fe”, potential for positive redevelopment
- Commercial area w/ grocery store, some small restaurants, drug store, etc
- Trail network through beautiful open land & current alignment is good
- One park
- Large amount of beautiful, open land w/ views of mountains (needs to be acquired & protected by City)
- Slightly rural feel (especially near/on open land)
- Pumice plant is gone
- Schools in the area could be more of assets if recreational facilities & opportunities were available (could serve as community centers, rec centers, etc.)
- There are a few different sites for good redevelopment over time: Station area, Albertsons/Walgreens, the parcel between the Station & Premier Distributing at the intersection of Sawmill & St. Francis, and the County Yards which may be a brownfield.
- Small scale development along St. Francis can help to create a buffer between St. Francis & the neighborhood
- Parking lot at trail head for recreational riders, runners, walkers, etc.

NEEDS, CONCERNS:

- St. Francis divides the neighborhood. It is a barrier to pedestrians. The only pedestrian path is through Arroyo de Los Chamisos & it is not friendly to walk through. It is a potentially dangerous environment, as there are reports of it being used for recreational shooting.
- “Gateway to Santa Fe”, must be developed well (both beautiful and functional)
- **Unanimous request that the Zia station be usable (in any state of development/construction) by the time Rail Runner is operating. Participants urge public to call Governor Richardson & City Council to make this possible. Participants request the design team to inform City Council of the urgency of this request.**
- **If Rail Runner construction is about to begin, DOT needs to identify appropriate and adequate locations of both pedestrian rail line and potential future street crossings so the infrastructure can be added now. If there not enough crossings or they are not at the correct locations, the rail line will become a barrier. The next workshop needs to get community input about the locations of these crossings.**
- Any redevelopment should be based on Peter Calthorpe’s principles of “diversity, walkability, restoration & protection of existing critical characteristics, and interconnection with the entire region.”
- Open land is very “raw”
- Quality of development in southern Santa Fe seems to be ignored compared to downtown
- Adding more traffic onto Zia Road is major concern. It already gets extremely congested.
- The slope of Zia road is dangerous in icy weather.
- The land-locked open land needs to be acquired & protected as part of the trail system by the City of Santa Fe.
- The pedestrian crossings on St. Francis do not work. They are not crossable.
- A tunnel under St. Francis is needed but there is a concern about how safe it would be. Could an overpass across St. Francis be considered? What are the costs/benefits of either an over or underpass? (*see PDF slideshow*)
- If the underpass beneath St. Francis is indeed already in the works, it must be coordinated with the “rail trail” and the trail must safely pass beneath the rail line, through to the neighborhood as well.

The Workshop Process and Participant Comments

- Bus routes must be either added or extended not only to the Station but along Zia & Galisteo. The headways need to be short, i.e. 15 min. wait maximum. There could be a “loop” system that runs through these neighborhoods frequently.
- The only park in the area is not maintained, it is underutilized because it is underdeveloped. It is not very accessible, either.
- Certain trail connections need to be established, existing trails need to be formalized & improved upon so that they are walkable, bikeable, safe, and functional.
- Entirety of “rail trail” needs to be paved eventually.
- Adequate bicycle access & facilities must be provided along the trails & at the station.
- Neighborhood traffic & parking must be moderated & regulated.
- The rail trail must be accessible from different locations along its length. If it is fenced or walled in, it will get much less use.
- There should be a street connection from Galisteo onto Sawmill near Premier Distributing.
- There is a concern about 3-story development.
- Tennis courts are not accessible.
- The shopping center needs a formal pedestrian access on the South side (currently it is from an unestablished trail in an arroyo).
- Schools in the area are “eyesores”, especially Vo-Tech.
- There are problems with students loitering after school in some areas.
- Homeless people in the area are a concern.
- Currently dogs are not allowed on the Rail Runner. This should be changed so pets could be taken from Santa Fe to the airport, for those who travel w/ their pets.
- Horn noise carries a long distance.
- The parking access point to the “rail trail” needs to be easier to get to.
- Sidewalks are needed along St. Francis.
- Some participants did not like the proposed “rail trail” alignment.

TABLE WORK SESSION #2— TRANSIT ORIENTED DESIGN SCENARIOS (SEE ZIA STATION AREA MAPS)

DESIGN IDEAS FROM TABLE #1:

- **Until the station is fully developed, there should be a usable platform with or without parking. Participants want to be able to ride the train and feel that opening a minimum of a platform and safety features is an ideal method for testing the potential ridership into and out of this part of Santa Fe. Participants were unanimously adamant that this be conveyed and implemented.**
- Station should be located near the intersection of Zia & St. Francis, rather than the southern part of the site.
- The corners of the intersections should be built fairly tightly rather than left open to create a more friendly environment and form a “gateway” to both the station and to Santa Fe.
- Bus access must be directly next to the station platform for ease of transfer.
- Pedestrian-friendly access to all parts of the development (including open spaces & trails) must be provided. Sidewalks must be provided on all streets.
- The development should be “permeable” to pedestrians from the neighborhoods & nearby trail networks.
- There should be buffers provided between the residential & commercial scales of development. Small commercial development along the East side of Galisteo would be acceptable as long as it is single story so that views will not be blocked and to preserve a similar sense of neighborhood scale.

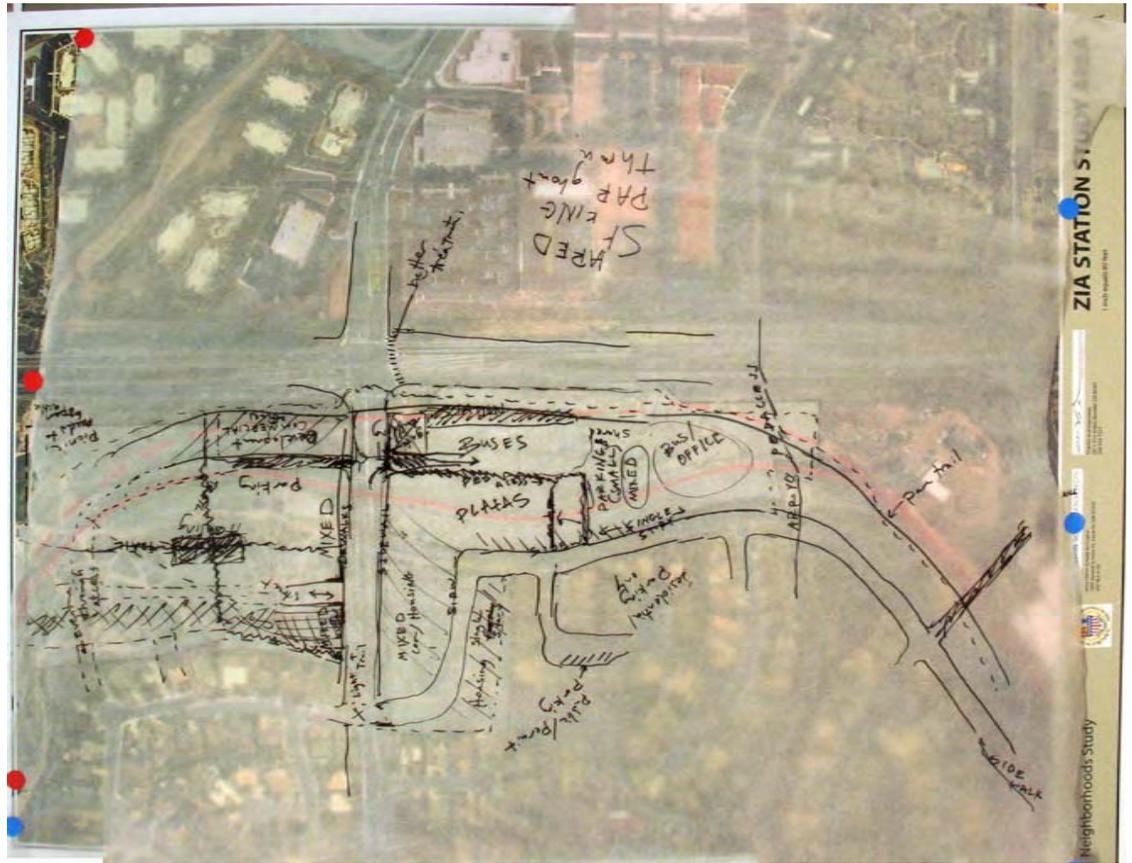
- The northern part of Galisteo needs to be re-routed to line up across from Candelero. A traffic light could be installed at this intersection.
- Desired services might include: family-sized restaurant (pub, family-dining, sandwich shop), salon, bike repair shop, book store, small natural grocery, boutique, offices, Downtown Subscription type multi-functional.
- A plaza or “active open space” to serve functions such as a small farmers’ market, outdoor performances, community parties, etc. is very much requested.
- All parking through-out should be shared between two different uses, i.e. daytime office parking can be shared w/ parking for plaza which will be more active during off-hours.
- Zia should be fronted on both sides w/ mixed commercial below/residential above, to create a pedestrian-friendly, more urban streetscape.
- The mixed use on the north of Zia will create a buffer between Zia traffic & housing further north
- Any development must be in keeping w/ Santa Fe character & the scale of the neighborhood (limits of density can be pushed somewhat to create a more friendly environment) but should be progressive, tasteful, and interesting. “No ugly building, please!”
- There should be a street connection from Galisteo onto Sawmill near Premier distributing

DESIGN IDEAS FROM TABLE #2:

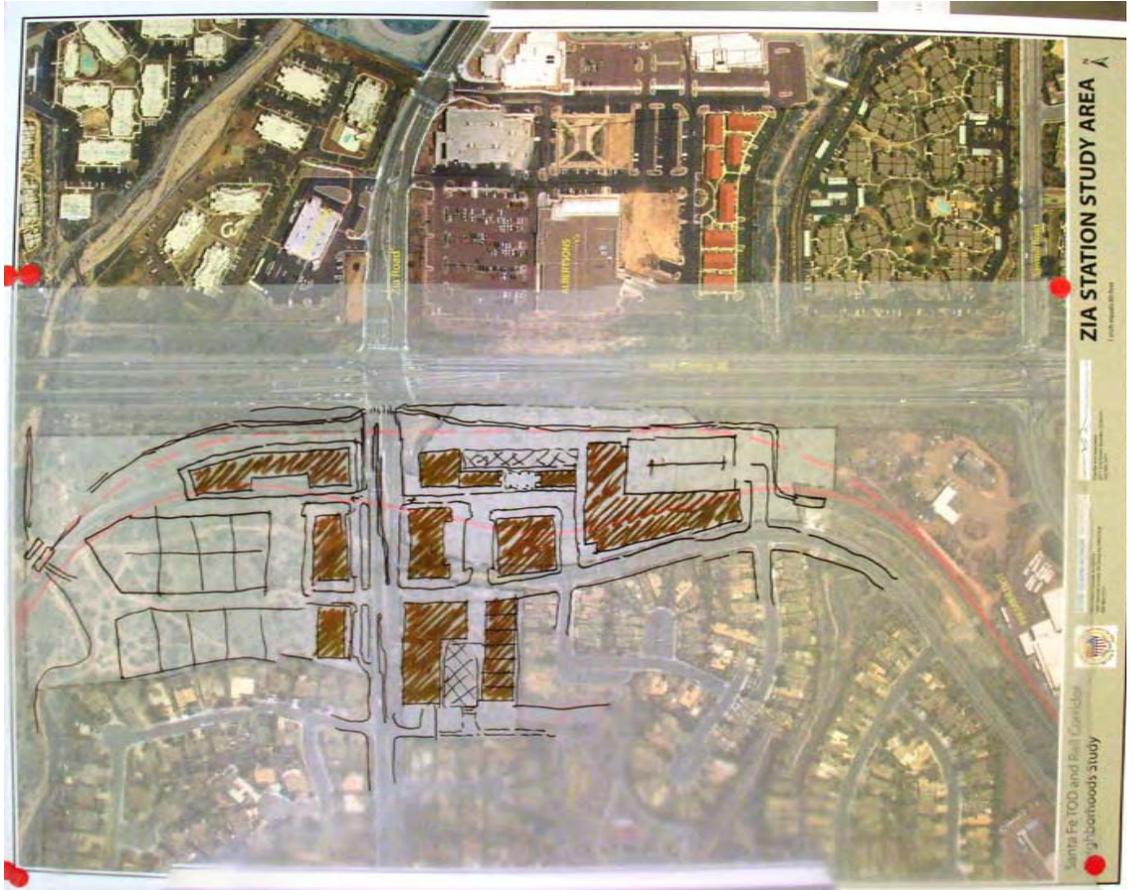
- Streets & intersections should line up.
- Parking garage could be an efficient use of land, potentially sub-grade where topography allows
- Platform area w/ larger platform & services such as coffee, etc.
- Street access at Premier Distributing (new connection as mentioned above)
- “Rail trail” should remain between rail line & St. Francis for bikes to pass through easily
- Keep plaza space near residential & create an “intimate” space for the neighborhoods to claim

GENERAL NOTES & COMMENTS

- A group member suggested providing Zip Cars (or another car-sharing program) at each end of the rail line to provide mobility after commuters get off the train.
- Another group member suggested providing a bike rental system at the stops (using a credit card or key card to check out the bike). Others liked the idea, but noted that a good trail system would be needed for this program to be successful. The group agreed that the Railyards station would be a great place to pilot the program.
- The possibility of conducting a view analysis was discussed to address resident concerns about new development blocking their view (specifically concerns with 3-story buildings).
- The Zia Station new development should not include “destination retail.”
- Potential/planned changes: installing a signal at Galisteo, allotting more green time for Zia Road at St. Francis intersection.
- There was some discussion about rerouting the bus from Eldorado onto St. Francis to drop off/pick up passengers at the rail station.



Session 2, Group 1 Design Scheme



WORKSHOP 3**DATE:** June 14th, 2008**LOCATION:** St. Vincent's Hospital, Southwest Conference Room**TIME:** 9:00 AM - 4:00 PM**NUMBER OF ATTENDEES:** 24**ANNOUNCEMENT:**

PUBLIC TRANSPORTATION IN SANTA FE

Transit-Oriented Development associated with Future Local Rail Service Stops

2 WORKSHOPS

JUNE 14TH

9 a.m. to Noon -

St. Michaels/Second Street Area

1 p.m. to 4 p.m. -

Parallel sessions on Rodeo Road and Siringo Road Areas

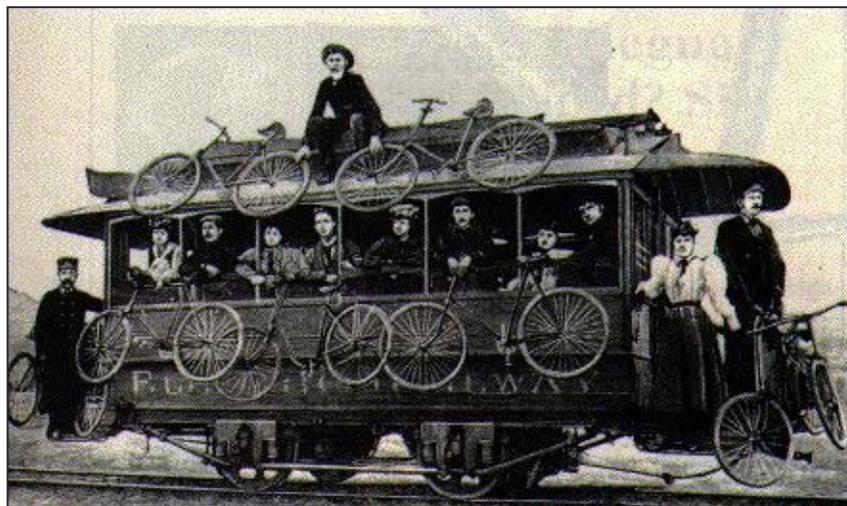
Community Conference Room of St. Vincent Hospital

- Lower Level (next to the cafeteria, enter through the exterior door)

Provide your input about local rail service, bus service, trail & open space improvements, zoning, pedestrian & bicycle facilities, housing and street design.

Visit the City of Santa Fe web page www.santafenm.gov and click on the calendar

For more information call 955-6609 or 955-6608



AGENDA:

WORKSHOP 3

June 14

St. Vincent's Hospital, Southwest Conference Room

St. Michael's Drive Study Area

Workshop Schedule

Morning Session

9 AM – 12:15 PM

9:00	Open House review of prior workshops
9:30	Introduction to Local Service and Neighborhood Planning
10:00	Table Work Session – St. Michael's/ Second St.
11:30	Table Reports
12:15	Lunch on your own

Afternoon Session

1 PM – 5 PM

1:00	Open House review of prior workshops
1:30	Introduction to Local Service and Neighborhood Planning
2:00	Table Work Sessions Rodeo Road Siringo Road
4:00	Table Reports

SUMMARY & COMMENTS:**TABLE WORK SESSION #1—ST. MICHAEL'S DRIVE STUDY AREA****ASSETS, ISSUES, OPPORTUNITIES: What assets/issues/opportunities does the neighborhood have?**

- St. Michael's Drive is ready for re-development, it can evolve into a more pedestrian-friendly commercial hub, possibly a Rail Runner Stop eventually.
- This area really doesn't have an identity that needs to be protected which is an opportunity to create one. There are neighborhoods here, however, that do need to be protected.
- It's great to have the commercial facilities in this part of town, allows people who live in the vicinity to travel downtown or on Cerrillos less. There is a good variety of commercial available from banks to groceries to restaurants to locally-owned services.
- There is one park in this area.
- There is a regional transit station (Greyhound station) next to the rail line on St. Michael's.
- There is a youth and family center and many state offices.
- The Second Street area acts as a social scene or "third place"
- Possibility of a Teen Center opening between La Farge Library and the SF High School.
- There is good access to the Rail Trail on the South side of St. Michael's Drive.
- Second Street is a thriving, small-scale, mixed use area that could be supported by redevelopment around a nearby transportation stop. Residents living around St. Michael's would like to see more of this type of development although certain businesses like K-Mart are assets as well.
- There is an arroyo to the North of Second Street that could develop into part of a trails network.
- Planned senior housing would support transit.
- The College of Santa Fe would support transit.
- Arroyo de Los Pinones brings water to the area, although most of it is in culverts.
- There are a few East-West trails planned by the City in the area.
- There are many storage units.
- There is a significant amount of low-income housing whose residents need access to public transportation.
- Neighborhood traffic & parking must be moderated & regulated.
- The rail trail must be accessible from different locations along its length. If it is fenced or walled in, it will get much less use.
- There is no Farmers' Market in this area of Santa Fe.
- Buses do not stop often enough on St. Michael's.
- Redevelopment is happening on the open land next to the rail line south of St. Michael's: it is a heavily used East-West pedestrian connector area (the only one in the vicinity) and those paths should be either preserved and formalized or replaced by other pedestrian paths.
- The infrastructure is dated/old.
- The mandatory parking by square feet might be too high. There is a great surplus of parking on St. Michael's.
- There are parking issues on Second Street.
- Traffic speeds are too high.
- Public is lacking knowledge about the public transportation options currently available to them.
- Could public transport serve schools?
- If a train requires 450 feet of straight track, where can the stop actually be located, since the tracks curve between St. Michael's and Second Street? Can the track be straightened out?

TRANSPORTATION VISION: How would you and other residents use the rail service and local transportation?

- Getting downtown to the Plaza. Some people would use it often, some would rarely use it.
- High School students could use public transport to get to school.
- Getting to and from work.
- As a link to a car-share or bike-share.
- As a link to the Commuter rail, to friends/family/shopping in Albuquerque, to the airport.
- Trails would be used for linking to the rail line and bus stops, as well as for recreation.
- Could potentially replace cars for many people.
- Transportation for disabled, elderly, high school, and college students.
- Connecting people to social events/locations.
- Can envision a system with five modes working together: pedestrian, bicycle, car and bike sharing systems, bus/transit and private automobiles.
- If the stop were located between St. Michael's and Second Street, it could become an active pedestrian link between the two streets, possibly developed as a street-front to the station.
- If the stop were located immediately South of St. Michael's, it could serve as a transportation hub with the Greyhound station, the Rail Trail, and local busses.

IDENTITY: What are the characteristics of the neighborhood? How could local rail service strengthen the identity of the neighborhood?

- St. Michael's is 75% asphalt parking, Big Box stores, an impenetrable exposed highway corridor.
- The St. Michael's corridor is utilitarian – it has things people need.
- Second Street is a thriving mixed use community with social activity, some pedestrian & bike traffic and shade trees.
- Any new development in the area could support the current Second Street community as well as change the character of St. Michael's into a more livable environment.
- This is a neighborhood in transition, there has been a lot of change over the last 25 years.
- This is a multi-cultural area.

IMPROVEMENTS: What improvements are needed in order for local rail service to serve the neighborhood?

- St. Michael's is a barrier to pedestrians. A better means of crossing should be implemented, at shorter intervals along St. Michael's rather than only at the Rail Trail.
- The only park is Southridge Arroyo Park and it is "gang" territory. It needs to be formalized, cleaned-up and activated to become a safe, usable public space.
- The Greyhound station should be incorporated into the Public Transportation plan.
- Bus headways need to be short, i.e. 15 min. wait maximum. There could be a "loop" system that runs through adjacent neighborhoods frequently. The routes and arrivals could be posted more visibly, i.e. "nextbus" digital reading at each stop, or at least at popular stops.
- Certain trail connections need to be established, existing trails need to be formalized & improved upon so that they are walkable, bikeable, safe, and functional.
- Improve sidewalks from Second Street to St. Michael's Street.
- The City's webpage shows several "proposed" trails. These need to be developed, connected if not already, paved, and maintained.
- Adequate bicycle access & facilities must be provided along the trails, streets & at the station or at bus stops.
- There should be better access from the Rail Runner to the Airport.
- Second Street needs a bus route.
- A 4-way stop could work well at Jay and Second Street.

PUBLIC PRESENTATION

DATE: July 10th, 2008

LOCATION: Santa Fe Complex

TIME: 6:00 - 8:00 PM

NUMBER OF ATTENDEES: 22

ANNOUNCEMENT:

City of Santa Fe Public Presentation

TRANSIT ORIENTED DEVELOPMENT AND LOCAL TRANSIT ALTERNATIVES IN SANTA FE

**FINAL RECOMMENDATIONS: OUTCOMES OF
THREE PUBLIC WORKSHOPS**

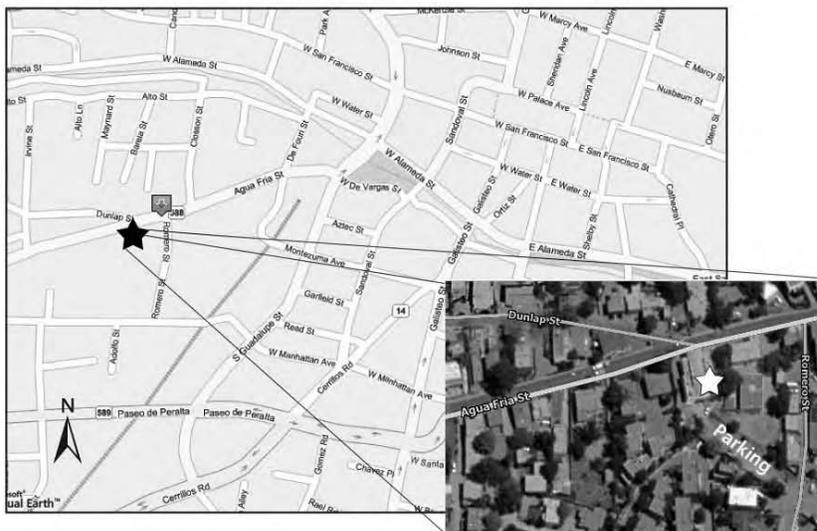
JULY 10TH

6 - 8 PM

Located at the Santa Fe Complex

632 Agua Fria Street:

Turn in at 624, drive to the back, park in gravel lot. 632 is to your right.



Visit the City of Santa Fe web page www.santafenm.gov and click on "Commuter Rail Project"
For more information call 955-6609 or 955-6608



AGENDA:

6:00 - 8:00 PM Open House

SUMMARY & COMMENTS:**PUBLIC COMMENTS—Commentary on the recommendations proposed by the Design Team.****Rodeo Road**

- None

Zia Station

- The bus routes to the Hospital must correspond w/ workers' shifts.
- More shuttles should be implemented.
- There could be a pull-out off of St. Francis, heading south, at the Zia station area for a "kiss 'n ride".
- The city, state, and developer need to work together in the phasing of the development at the Zia Station to ensure that the station will be accessible to passengers as soon as possible. One way to allow for this would be to use the piece of land north of Zia Road for Rail Runner passenger parking until more permanent parking is constructed. The parcel that is on the corner of Sawmill & St. Francis (currently a shop) might be an ideal location for more permanent parking.
- Long-term parking should be considered as an option at the Zia Station for air-line employees or for anyone flying out of the Albuquerque airport.
- All vegetation has been removed in the area along Galisteo, which will make it a dust bowl once it is not being watered. Required:
 1. A row of trees between Galisteo and the tracks, from the new bridge just south of where the pumice plant was to Rodeo Road—or at least to across Galisteo from the County Yard.
 2. Native vegetation added to the currently cleared places in this same area, which is City property.

This will enhance the area for residents & Rail Runner patrons.

Siringo Road

- none

St. Michael's Drive & Second Street

- none

General

- Can the design team look at putting flashing lights at cross-walks? Drivers in Santa Fe pay little to no attention to stripes on the pavement.
- The public needs to be educated about using round-a-bouts.
- The City of Santa Fe presently does not use herbicides on railroad tracks within the city, nor does the Santa Fe Southern Railway. Will this change when the Rail Runner comes and how can neighbors to the tracks have input into this?
- Please provide information on the 200 Wi-Fi access points to be built along the (Rail Runner) route. Technical data, range, etc. What can neighbors to the tracks who are sensitive to microwave radiation do to keep from being driven from their homes? They will never be able to ride the train, and this is a disability access issue as well.

APPENDIX B

Supporting Materials and Detailed Recommendations

Transit	
B-1 Local Transit Vehicle Options	25
B-2 Rail Diesel Cars	26
Land Use	
B-3 Transit Oriented Development Station Typologies	28
Streets	
B-4 Types of Walking Environments	30
B-5 Bicycle Facilities	38

LOCAL TRANSIT VEHICLE OPTIONS

	Example	Descriptions	Best Use
Local Bus		<ul style="list-style-type: none"> - Stops often - Slower speeds - Services single town or area - Travels in general traffic lane on existing roadways 	<ul style="list-style-type: none"> - Routes that may change frequently - Test routes - City with little capital
Light Rail		<ul style="list-style-type: none"> - Cross-town service - Runs separate from freight or vehicles - Usually overhead electric or third rail electric - Medium weight frame 	<ul style="list-style-type: none"> - Dense populations with collective destinations - Non-roadway easement acquisition required
Trolley		<ul style="list-style-type: none"> - Runs in conjunction with traffic on streets - Neighborhood service - Light weight frame 	<ul style="list-style-type: none"> - Routes with low traffic volumes - City with capital for infrastructure - Heavy ridership along existing roadways
Bus Rapid Transit (BRT)		<ul style="list-style-type: none"> - Operates like Light Rail - Runs on existing roadways with designated bus lane - Makes local stops 	<ul style="list-style-type: none"> - City with routes on multiple lane roadways - Not enough capital for rail service - Routes with congested roadways
Express/Commuter Bus		<ul style="list-style-type: none"> - Makes few stops - Runs at high speeds - Services town centers to collect commuters 	<ul style="list-style-type: none"> - Urban workforce with dense outlying residential communities - Heavy ridership on cross-town local bus service during peak hour
Rail Diesel Car (Budd)		<ul style="list-style-type: none"> - Operates like Light Rail - Diesel engine combined with passenger car 	<ul style="list-style-type: none"> - City with capital for infrastructure - Densely populated neighborhoods with existing transit ridership - Non-roadway easement acquisition required
Shuttle/Cutaway		<ul style="list-style-type: none"> - May operate on a fixed or variable route and schedule - Runs between major trip generators and trip attractors 	<ul style="list-style-type: none"> - Often used to provide connections to the first or last leg of a trip - Fill gaps in transit service (e.g. connect major employment centers to the main transit line)

RAIL DIESEL CARS

GENERAL DESCRIPTION

A rail diesel car (RDC), also known as a Budd car or diesel multiple unit (DMU), is characterized by its dual use engine. The engine of an RDC is built into the front of a passenger car. This car can pull up to two additional passenger cars (called coach vehicles) if necessary.

RDC's can be single level or double deck trains. A single level engine car can seat 94 passengers, while the coach car can seat 102. The double level engine car seats 188 passengers and the coach car seats 218 passengers.

Coach cars can be disconnected if additional seating capacity is not needed, and just the engine car can be run. When a single deck engine train is loaded to capacity, the diesel engine will run at 2 miles per gallon. The engine has a design speed of 100mph and a maximum operating speed of 90mph.

Single Deck Engine Train



Double Deck Engine Train



COSTS

A DMU engine car from Colorado Railcar costs about \$5.0 million, while the coach cars typically cost about \$4.5 million per vehicle. The double deck engine cars cost an additional \$1.0 million (\$6.0 million for engine cars and \$5.5 million for coach vehicles).

These vehicles typically take about 3 to 4 months to engineer, 12 months to manufacture, and 2 weeks to ship, for a total time of 15 to 17 months between order and arrival.

RAIL DIESEL CARS, CONT'D

EXAMPLES

Several smaller American cities have used DRC for their regional rail systems. Syracuse, NY and Burlington, VT both ran these small diesel engines as commuter rails for a few years, but discontinued service due to funding shortages and low ridership. Alaska Railroad, South Florida RTA, and Princeton, NJ have also run this type of train as a commuter rail.

South Florida Regional Transit Authority

Syracuse, NY
 OnTrack
 Population 147,000
 Provided service 1994 -1997

Cape May, NJ

Burlington, VT
 Population 40,000
 Terminated service in February 2003

Dallas Area Rapid Transit
 VIA Rail RDC

Alaska Railroad

A description of three of these systems from Colorado Railcar, a local DMU manufacturer, is shown in the figure below.



- South Florida:** The DMU maintained the rigorous schedule between Miami and West Palm Beach in several months of testing during the spring of 2004 in South Florida at Tri-Rail (South Florida Regional Transportation Authority). The single level DMU pulled two bi-level coaches in regular revenue service, and the comfortable railcar was a big hit with the passengers.



- New Jersey:** The DMU again proved its performance on the "Dinky Line" in New Jersey, between Princeton and Princeton Junction. The DMU sprinted up and down the 2.7 mile line in two days of revenue service testing on April 29 and April 30, 2004.



- Alaska:** The DMU conquered the mountainous grades of Alaska, proving its power. As a test, the DMU stopped in the middle of a steep 3.2% grade, turned off an engine, and accelerated out of the stop with no problems, while pulling the Alaska Railroad's private car.



GENERAL TRANSIT ORIENTED DEVELOPMENT TYPOLOGIES

TOD Typology	Desired Land Use Mix	Desired Housing Types	Commercial/ Employment Types	Transit System Function	
Downtown	Office, Retail, Residential, Entertainment, Civic Uses	Multi-Family and Loft	Prime office and shopping location.	Intermodal facility/transit hub. Major regional destination with high quality feeder bus/streetcar connections.	
Major Urban Center	Office, Retail, Residential, Entertainment	Multi-Family and Townhome	Employment emphasis, typically with more than 250,000 sq. ft. of office and 50,000 sq. ft. of retail	Sub-Regional destination. Some Park-n-ride. Linked with district circulator transit and express feeder bus.	
Urban Center	Office, Retail, Residential	Multi-Family and Townhome	Limited office (typically less than 25,000 sq. ft.) More than 25,000 sq. ft. of retail.	Sub-Regional destination. Some Park-n-ride. Linked with district circulator transit and express feeder bus.	
Urban Neighborhood	Residential, Neighborhood Retail	Multi-Family Townhome, Small Lot Single-Family	Local-serving retail. No more than 50,000 sq. ft.	Neighborhood walk-up station. Very small Park-n-ride, if any. Local bus connections.	
Commuter Town Center	Office, Retail, Residential	Multi-Family Townhome, Small Lot Single-Family	Local and commuter-serving. No more than 25,000 sq. ft.	Capture station for in-bound commuters. Large Park-n-ride with local and express bus connections.	
Main Street	Residential, Neighborhood Retail	Multi-Family	Main street retail infill	Bus or streetcar corridors. District circulator or feeder transit service. Walk-up stops. No transit parking.	
Campus/Special Events Station	University Campus, Sports Facilities	Limited Multi-Family	Limited office/retail	Large commuter destination. Large parking reservoirs but not necessarily for transit.	
Park and Ride	Parking and Train Station	None	None	Park and ride location.	

SANTA FE STATION TYPOLOGIES

TOD Typology	Station	Desired Land Use Mix	Desired Housing Types	Commercial/ Employment Types	Proposed Scale	Transit System Function
Downtown	Railyard	Office, Retail, Residential, Entertainment, Civic Uses	Multi-Family and Loft	Prime office and shopping location.	2-4 stories	Intermodal facility/transit hub. Major regional destination with high quality feeder bus connections.
	Zia Rd	Office, Retail, Residential	Multi-Family and Townhome	Limited office (less than 25,000 sq. ft.) More than 25,000 sq. ft. of retail.	1-3 stories	Sub-Regional destination. Some Park-n-ride. Linked with district circulator transit and express feeder bus.
Urban Center	St. Michaels Dr.	Retail, Office, Residential	Multi-Family, Townhome, Small Lot Single-Family	Local-serving retail (more than 50,000 sq. ft.)	2-4 stories	Sub-Regional destination. Some Park-n-ride. Linked with district circulator transit and express feeder bus.
	Rodeo Rd	Office, Residential, Neighborhood Retail	Multi-Family, Townhome, Small Lot Single-Family	Local-serving retail (less than 25,000 sq. ft.) Office (25,000 to 50,000 sq. ft.)	1-3 stories	Neighborhood walk-up station. Very small Park-n-ride, if any. Local bus connections.
Urban Neighborhood	Sirringo Rd	Residential, Neighborhood Retail	Small Lot Single-Family, Multi-Family, Townhome	Local-serving retail. No more than 5,000 sq. ft.	1-2 stories	Neighborhood walk-up station. Very small Park-n-ride, if any. Local bus connections.
	South Capital Complex	Office, Retail, Residential	Multi-Family, Townhome, Small Lot Single-Family	Local and commuter-serving. No more than 25,000 sq. ft.	2-4 stories	Capture station for in-bound commuters. Large Park-n-ride with local and express bus connections.
Park and Ride	NM 599	Parking and Train Station	None	None	1 story	Park and ride location.

TYPES OF WALKING ENVIRONMENTS

Walking environments can be thought of as arrayed along a continuum of pedestrian friendliness with four classifications – Pedestrian Places, Pedestrian Supportive Environments, Pedestrian Tolerant Environments, and Pedestrian Intolerant Environments.

Pedestrian Places are districts of limited extent, with mixed-use land development, moderate to high densities, good transit service, great streets, and extensive pedestrian accommodation in the form of sidewalks, crosswalks, and other facilities. Here people will stroll and linger past storefronts and urban landscape features, walking for both utilitarian and recreational purposes.

The key test for qualifying a place as a pedestrian destination is the actual ongoing presence of significant numbers of people. Pedestrian Places have people moving about between multiple activities -- typically at least three highly identifiable areas such as outdoor seating, a water feature, and pedestrian-oriented shopping.

Vitality is a qualifying characteristic of a Pedestrian Place; thus its overall size is limited. Examples include a linear corridor less than ¼ mile (<1350 feet) in length (e.g. Pearl Street pedestrian mall in Boulder, CO), a 100% corner that is the epicenter of activity, or a small to moderate sized public open space/plaza that offers a variety of both spontaneous and programmed activities. Pedestrian Places are the core activity areas embedded within larger Pedestrian Supportive districts or corridors.

Pedestrian Supportive Environments include well-designed residential and commercial neighborhoods, employment centers, parks and recreational areas. These are safe environments for walking, where sidewalks are continuous and buffered from streets, wide enough for passing and walking side by side, and where good street crossings have been provided. Land uses are either dense enough to both generate and attract utilitarian walking trips of reasonably short lengths (half mile or less), or are of the sort that will attract recreational walkers and joggers. Building fronts, not blank walls or parking lots, face streets. A good test to know if an environment is Pedestrian Supportive is whether or not a parent would feel comfortable letting a child walk ahead of them with minimal supervision.

Pedestrian Tolerant Environments are areas and corridors where walking is technically safe, but the land use patterns are such that little walking activity is likely to be generated. These include arterial street corridors, remote or rural streets and certain light industrial or warehousing areas.

Tolerant environments provide pedestrian facilities, but include a very minimal level of accommodation. There are continuous sidewalks and reasonably safe street crossings. Such places will only attract limited amounts of utilitarian walking, and will not appeal to recreational walkers or strollers.

Pedestrian Intolerant Environments are pedestrian-hostile areas where walking is unsafe and unattractive. Examples include freeway corridors, certain industrial or extraction land uses, landfills, etc.

These environments lack pedestrians, either due to a lack of pedestrian accommodations and/or dominance by automobile traffic and auto-oriented land uses.

BUILT ENVIRONMENT

To determine how to enhance walkability within a place type, or advance the built environment to the next level of pedestrian friendliness, one needs to address three components of the built environment – Roadway Corridor, Pedestrian Realm and Adjacent Land Use.

TYPES OF WALKING ENVIRONMENTS, CONT'D

The Roadway Corridor

Creating pedestrian supportive environments requires careful attention to the design of streets, to the allocation of space within street right-of-way, to opportunities for street crossings, and to the allocation of time at signalized intersections. In general, corridors that are pedestrian friendly have adjacent traffic volumes that are less than 20,000 vehicles per day with speeds of 30 mph or less, typically with on-street parking.

The Pedestrian Realm

This area includes sidewalks, as well as the buffer zones on either side that separate the walkway from motor vehicle traffic and link the walkway to destinations on adjacent properties. In general, greater separation from the street is desired where higher vehicular travel speeds are present, with additional walkway width where more pedestrians will be using the system. Placement and design of pedestrian furnishings, transit stops and lighting are other key considerations of the pedestrian realm.

Adjacent Land Use

Sidewalks alone do not make a place into a pedestrian destination. To generate a significant pedestrian presence, land uses must be highly mixed and reasonably dense. Some combination of residential, lodging, retail, restaurant, civic and employment uses must be present within a contiguous area. Street walls (building fronts) should be coherent but porous (numerous doorways and windows) with varied building setbacks. Buildings should frame the street, and the street grid should be fine-grained.

Figure 1 below shows the interaction between the Roadway Corridor, Pedestrian Realm and Adjacent Land Use, with minimum widths for various components.

Figure 1: Pedestrian Realm Definitions

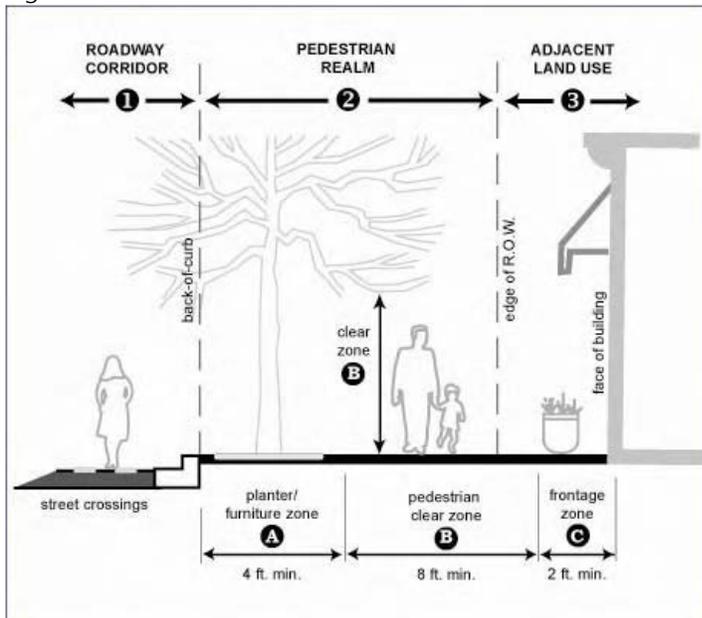


Table 2 below outlines general characteristics of the Roadway Corridor, Pedestrian Realm and Adjacent Land Use for each type of pedestrian environment described above.

TYPES OF WALKING ENVIRONMENTS, CONT'D

Table 2: Characteristics of Various Pedestrian Environments

	PEDESTRIAN INTOLERANT	PEDESTRIAN TOLERANT	PEDESTRIAN SUPPORTIVE	PEDESTRIAN PLACE
Roadway Corridor	<ul style="list-style-type: none"> High traffic volumes (>25,000 ADT) operating at high speeds (>35 mph) Pedestrians must cross wide roads (>5 travel lanes) Block size >1320' creates infrequent crossing opportunities 	<ul style="list-style-type: none"> Moderate traffic volumes (15,000 - 20,000 ADT) at moderate speeds (30-35 mph) Number of travel lanes to cross at once is limited to 5 Block size (crossing frequency) is 300' -528' 	<ul style="list-style-type: none"> Moderate traffic volumes (5,000 - 15,000 ADT) at slower speeds (25-30 mph) Number of travel lanes to cross at once is limited to 4 Crossing frequency is 250' - 300' On-street parking encouraged 	<ul style="list-style-type: none"> Low traffic volumes (<5,000 ADT) operating at slow speeds (<25 mph) Number of travel lanes to cross at once is limited to 2 Crossing frequency is <250' On-street parking encouraged Area is <1320' or a 1/4 mile walk in length
Pedestrian Realm	<ul style="list-style-type: none"> Sidewalks often lacking, discontinuous, or provided back-of-curb Lighting is inadequate 	<ul style="list-style-type: none"> Sidewalks continuous, often located at back-of-curb and/or of minimum width Lighting present, but oriented for vehicular travel 	<ul style="list-style-type: none"> Walkway separated from vehicular traffic by a planting strip, and wide enough to accommodate passing and pairs of pedestrians walking side-by-side Lighting includes both high angle lamps and ground level lighting for pedestrians 	<ul style="list-style-type: none"> Walkway separated from vehicular traffic by a furniture zone, and wide enough to accommodate through walkway space and pedestrian amenities Lighting for pedestrians includes low angle street lights and store front illumination
Adjacent Land Use	<ul style="list-style-type: none"> Large areas of single use Public space (often the street corridor) height to width ratio <1:4 Buildings separated from the pedestrian realm by heavy landscaping and/or large parking lots 	<ul style="list-style-type: none"> Often single use Public space height to width ratio 1:4 – 1:2 Buildings separated from the pedestrian realm by moderate landscaping and/or parking lots 	<ul style="list-style-type: none"> Limited mixed-use Height to width ratio of 1:2 Buildings face and embrace the pedestrian realm 	<ul style="list-style-type: none"> At least three complimentary uses within immediate walking distance Height to width ratio of 1:2 min. and 1:1 max. Buildings face and embrace the pedestrian realm

TYPES OF WALKING ENVIRONMENTS, CONT'D

Figures 2 and 3 below show recommended zone widths (e.g. furniture zone, frontage zone, etc.) for Pedestrian Supportive and Pedestrian Tolerant Environments.

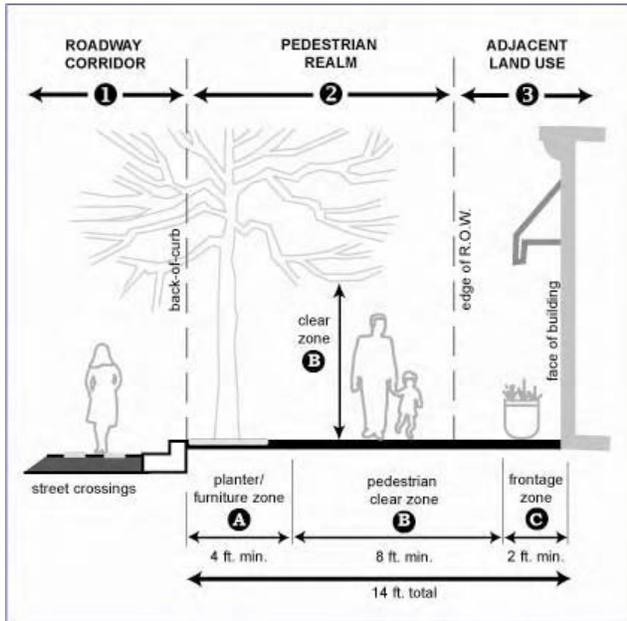


Figure 2: Pedestrian Supportive Environment

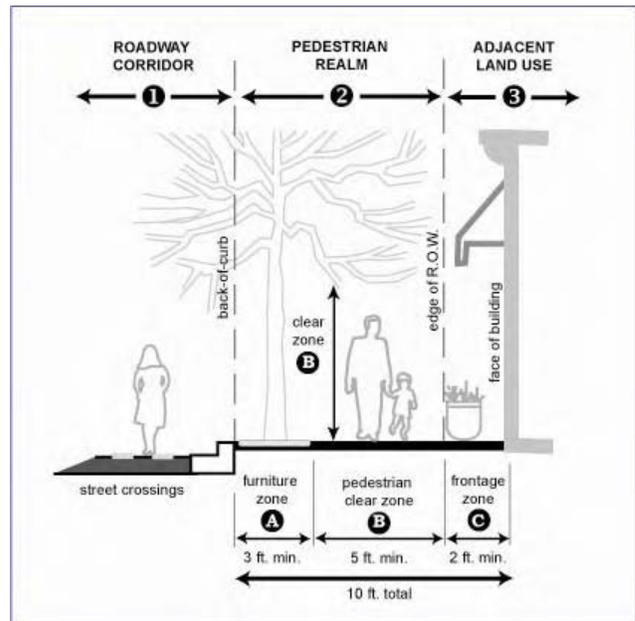


Figure 3: Pedestrian Tolerant Environment

Walking Environments



Pedestrian Intolerant Environment



Pedestrian Tolerant Environment



Pedestrian Supportive Environment



Pedestrian Place

TYPES OF WALKING ENVIRONMENTS, CONT'D

INTERSECTIONS AND CROSSINGS

1. Pedestrian-Friendly At-Grade Intersection Design

Intersection design is a critical component of planning facilities for pedestrians and bicyclists. The appropriateness of various crossing treatments varies by roadway and place type, and with the volume of both motor vehicles and pedestrians in an area. Five crossing treatment “levels” are outlined and explained in Table 3 below. Recommendations for when to use each level of type of treatment are discussed following:

Table 3: Pedestrian Crossing Treatments¹

Level	Treatment	Description	Use
Level 1	Standard Crosswalk	Two parallel lines marked on the pavement to designate crossing area.	Can be used at uncontrolled intersections. Not to be used at mid-block crossings.
	Raised Mid-Block Crosswalk	Creates a vertical pavement undulation forcing motorists to slow down when approaching. Should have a 6' ramp rising 3-4 inches vertically and a 10-12' flat section.	Used on low-speed, low-volume local streets to slow motorists and provide a visible pedestrian crossing.
	Rumble Strips	A series of narrow areas of rough-textured, raised or depressed road surface.	Used to alert road users of unusual traffic conditions. Should be used only in special circumstances due to maintenance issues.
Level 2	High-Visibility Crosswalks	Pavement markings should be white and retroreflective. Types include: textured pavement, zebra, continental and triple-four.	Used to increase driver awareness of pedestrian activity.
Level 3	Refuge Island	A median or island in the center of the road allowing pedestrians to cross one segment of the street, wait for gaps in traffic, and then continue across the next segment.	Used to reduce the time a pedestrian must wait for an adequate gap in the traffic stream.
	Split Pedestrian Crossover	A pedestrian refuge that directs pedestrians to cross one half of the street, enter the island at one end, walk facing the flow of traffic, and exit at the other end to cross the second half of the street.	Used mainly at midblock locations, especially near transit connections.
	Bulbout	A 7-8' extension of the curb into the intersection (or into the street at midblock crossings).	Used to shorten crossing distance for pedestrians and improve their visibility to motorists.
Level 4	Overhead Signs	Various signs typically showing the pedestrian symbol that hang from a mast arm and extend over the street.	Used to alert roadway users of pedestrian crossing locations. Can be accompanied by flashing beacons for enhanced visibility.
	Flashing Beacons	A flashing light alerting drivers in advance of potential pedestrians.	Can be used on roadways with higher traffic volumes without causing undue delay; best used with pedestrian pushbuttons so lights only flash when pedestrians are present.
	In-Roadway Warning Lights	Lights in the pavement used to enhance visibility at crosswalk locations.	Can be used in conjunction with a flashing sign/advance flashing sign.
Level 5	Pedestrian Actuated Signals	Lights activated by a pedestrian push-button	Use at midblock crossings when warranted by vehicle and pedestrian volumes.
	Grade-Separated Crossings	Crossings separating pedestrians from vehicular traffic.	Use when at-grade crossings are not possible or are unsafe.

Table 4 below presents a framework for deciding the appropriateness of including a crosswalk at intersections and mid-block crossing locations with no traffic signal or stop sign, based on roadway type and speed limit. Recommendations for corresponding treatments are presented following the table.

¹ Adapted from *Development Guidelines for the Installation of Marked Crosswalks* (2004)

TYPES OF WALKING ENVIRONMENTS, CONT'D

Table 4: Recommendations for Considering Marked Crosswalks at Uncontrolled Locations²

Roadway Type (# of Travel Lanes and Median Type)	ADT < 9,000			ADT 9,000 - 12,000			ADT 12,000 - 15,000			ADT > 15,000		
	Speed Limit											
	≤ 30 mph	35 mph	40 mph	≤ 30 mph	35 mph	40 mph	≤ 30 mph	35 mph	40 mph	≤ 30 mph	35 mph	40 mph
2 Lanes	C	C	P	C	C	P	C	C	N	C	P	N
3 Lanes	C	C	P	C	P	P	P	P	N	P	N	N
4+ Lanes w/ Raised Median	C	C	P	C	P	N	P	P	N	N	N	N
4+ Lanes w/ out Raised Median	C	P	N	P	P	N	N	N	N	N	N	N

C = Candidate for marked crosswalk – if the speed limit is ≤ 30 mph, use Level 1 or Level 2 treatments; if the speed limit exceeds 30 mph, use Level 2 treatments.

P = Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements – add Level 3 or Level 4 treatments if possible.

N = Marked crosswalks alone are not recommended, as pedestrian crash risk may be increased with marked crosswalks – consider using Level 5 treatments if feasible, or multiple treatments from Level 2, Level 3 or Level 4.

2. Pedestrian Underpasses and Overpasses

Grade-separated pedestrian crossings (overpasses and underpasses) are most warranted in areas with a combination of high vehicle speeds and volumes and high pedestrian approach volumes. Communities can also use grade-separated crossings at intersections with a history of pedestrian-motor vehicles crashes, especially those with fatalities.

However, communities can also invest in these crossing treatments over time to encourage sustainable transportation through improved facilities.

Underpasses

Pedestrian underpasses are typically the preferred grade-separated crossing treatment, although they are not appropriate in all situations. Advantages to underpasses include:

- They are more appealing to users in most cases
- They are typically less expensive to design and construct, although costs vary more for underpasses than overpasses
- There is less visual impact on the landscape
- Underpasses are typically more conducive to universal design and ADA compliance
- Underpasses near riparian corridors can bring additional funding opportunities (e.g. flood control and environmental rehabilitation) in addition to transportation funding through the enhancements program

² Adapted from *Safety Effects of Marked Vs. Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines* (2002)

TYPES OF WALKING ENVIRONMENTS, CONT'D

Despite these advantages, the design of underpasses is critical to ensure that these crossings are safe and secure. Specific design recommendations include:

- “Day light” each end of the underpass. Ensuring that a police car can see into and through the underpass from the street will minimize crime.
- Provide lighting for night time use.
- Design underpasses to be a minimum of 12’ wide and 10’ tall.
- Although not a specific design consideration, consistent use is one of the best ways to create safer spaces. Designing underpasses that are convenient (more convenient than using the at-grade option) will promote regular use.

Overpasses

Although pedestrian overpasses are appropriate in certain situations, there are number of problems with these facilities, including:

- Pedestrian overpasses can be visually challenging. Even well-designed overpasses can be an intrusion on the landscape.
- Pedestrians generally will not use overpasses unless they are forced to do so through fencing.
- Approach ramps require more space to construct than would be needed for an underpass or at-grade crossing.
- Overpasses also typically require steeper grades than underpasses, which can be a challenge for construction and ensuring universal design/accessibility.

Overpasses are most appropriate when:

- Grade allows (i.e. there are higher banks on either side of the roadway).
- Crossing distances are very large, rendering underpasses expensive, difficult to construct, and/or potentially unsafe.
- Water table or soil conditions prohibit an underpass.
- An underpass would create excessive construction delays.

TYPES OF WALKING ENVIRONMENTS, CONT'D

B. Pedestrian Underpasses



C. Pedestrian Overpasses



BICYCLE FACILITIES

TYPES OF BICYCLISTS

It is generally recognized that there are two types of cyclists: Group A: Advanced Bicyclists, and Group B: Basic Bicyclists. There is also a Group C: Children, whose needs are similar to the basic bicyclists and thus the two are often classified together as Group B/C.

Group A: Advanced - Composed of experienced riders who can operate a bicycle under most traffic conditions. This group includes bicycle commuters, bike club riders, and other cyclists currently following the rules of the road and riding on area streets and roadways with no special accommodations for bicyclists. In most communities, Group A comprises a small segment of the population, but logs the majority of bicycle miles ridden.

Group B: Basic - Casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. Some will develop greater skills and progress to the advanced level, but nationally there will always be millions of basic bicyclists who prefer comfortable access to destinations and well-defined separation of bicycles and motor vehicles.

Group C: Children - Pre-teen cyclists who typically ride close to home under close parental supervision.

Bicycle planning generally promotes a “design cyclist” concept that recognizes and accommodates the needs of both Group A and Group B/C bicyclists.

Group A cyclists are best served by making every street bicycle-friendly by removing hazards and maintaining smooth pavement surfaces. Group B/C riders are best served by providing designated bicycle facilities in key corridors, such as signed and striped bicycle lanes on selected roadways, and off-road trails following waterways and other linear open space corridors.

While sidewalks may be the best choice for the youngest riders, they are not typically considered bicycle facilities in bicycle planning. It is important to recognize that sidewalks are pedestrian spaces, and their presence is not meant to substitute or preclude bicyclist use of streets and roadways.

Ideally, all parts of the region should be accessible to all bicyclists, regardless of skill or comfort level. However, throughout the region, existing development patterns have created places with varying levels of bicycle-friendliness due to the trip distances required to travel between destinations and the automobile orientation of physical infrastructure provided.

Certain place types (mixed-use areas, school sites, and transit stations, for example) serve as community destinations and should be designed to higher standards to accommodate and encourage access by the broad cross-section of the community represented in the B/C bicycling group.

BICYCLE FACILITY TYPES

The following types of bicycle facilities can be used in combination to create a seamless bicycle network in Santa Fe, with an emphasis on connecting major destinations such as rail and transit stations:

Shared Use Path or Multi-Use Pathway -

A bikeway physically separated from motorized vehicular traffic by an open space or barrier. May be located either within a street right-of-way or within an independent right-of-way, and may be paved or constructed of compacted crusher fines material.

Sidewalk - A type of multi-use path running immediately parallel to a street or roadway, like an extra wide sidewalk.

Bicycle Lane - A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use by bicyclists.

Paved Shoulder - The portion of a roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of sub-base, base and surface courses.

Shared Roadway - A roadway which is open to both bicycle and motor vehicle travel.

Signed Shared Roadway or Bike Route - A shared roadway which has been designated with signing as a preferred route for bicycle use to provide continuity to other bicycle facilities, or to designate preferred routes through high-demand corridors.

MAPS

City Wide Bus Map Showing Rail Corridor Study Area

Rail Corridor Recommendations Maps

- Transit Map
- Trail Network & Open Space Map
- Land Use Map
- Street Network & Design Map

Rail Stop Neighborhoods (Includes Study Area Map & Concept Sketch Map)

- Rodeo Road
- Zia Road
- Siringo Road
- St. Michael's Drive