

Appendix 7: Assessment of Multi-Use Trails in the Santa Fe MPO Area

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I. Major Multi-Use Trails as “Arterial Bikeways”

Santa Fe’s major multi-use trails can be thought of as core pieces of the city’s “arterial bikeways.” Together with complementary road and trail connections, they can function as an integrated network of comfortable and reasonably convenient alignments that a wide variety of bicyclists can use to get to most parts of the city.

As shown in the Table below, the Santa Fe metropolitan area includes nearly 19 miles of paved “arterial” trails and 17 miles of unpaved “arterial” trails. These figures include major trail alignments only. Paved trails listed here meet or approximate AASHTO guidelines. Many more miles of minor paved trails within subdivisions and parks, including internal connections and side paths along roadways, are not included, nor are other soft-surface recreational trails.

Table: Mileage of Trails along Major Alignments in the Santa Fe MPO Area, by surface type

Trail Alignment	Paved	Unpaved	Total
Acequia Trail	1.1	0.5	1.6
Arroyo de los Chamisos (1)	4.4	0.2	4.6
Arroyo Hondo Trail	0.0	0.8	0.8
Ashbaugh Park Trail	0.2	0.0	0.2
Chili Line	0.0	0.2	0.2
Frenchy's Field Trails	0.8	0.0	0.8
NM Mexico Central RR (2)	1.6	0.0	1.6
Rail Trail	4.4	11.6	16.0
River Trail	3.3	0.6	3.9
Spur Trail	0.0	3.0	3.0
St. Francis Dr. Trail	0.9	0.0	0.9
Tierra Contenta Trail (3)	2.1	0.0	2.1
TOTAL	18.8	16.9	35.7

(1) Includes Gail Ryba Trail (with Gail Ryba Trail underpass, currently under construction) and Zia Trail.

(2) Includes Rancho Viejo "District Trail" and part of SFCC Loop.

(3) Counted separately from the rest of the Arroyo de los Chamisos Trail.

II. Descriptions of Major Trail and Related Bikeway Alignments

Acequia Trail. The Acequia Trail currently includes 1.1 miles of paved trail segments, between the Railyard Park and Larragoite Park, and unpaved trails along 0.4 miles of the Acequia Madre within the Railyard Park, for a total length of 1.5 miles. Separate pieces of the Acequia Trail include a half-mile of paved trail adjoining Ashbaugh Park, planned for construction in 2012, and an unpaved segment from Otowo Dr. to Maclovía Park (0.1 mi.).

The longer Acequia Bikeway alignment available to local bicyclists incorporates a variety of calm paved roads through residential areas, includes Potencia St., Montañó St., Otowi Dr., and Gallegos Dr. (via Maclovía Park), for a total Acequia Bikeway length of over 2.5 miles, spanning the Acequia Madre and the Acequia de los Pinos from Guadalupe St. to Gallegos Ln. The combine bikeway has just four street crossings, including St. Francis Dr. (marked and signalized) and Baca St. (marked speed table) on the Acequia Trail and Felipe St. and Osage Dr. (controlled via four-way stop) on Otowi Dr. Significant direct connections to this bikeway include the Chili Line in the Railyard Park, the Rail Trail, two W. Railyard trail connections, Larragoite Park, Ashbaugh Park and Trail, and Maclovía Park. Future tie-ins on the west end may include Cielo Vista (Carmelita St.) Park and Dos Hermanos Rodríguez Park.

Separate pieces of the Acequia Trail are planned in the relatively near term for a half-mile section around Las Acequias Park (Lopez Ln. to Rufina St.) and a one-mile section from the west end of Rufina St. to the County's new River Trail trailhead at Agua Fria St. near San Felipe Rd. Incorporating the length of Rufina St. from Harrison St. to S. Meadows Rd., which provides calm shared lanes east of Siler Rd. and striped bike lanes west of Siler Rd., the greater "Acequia Bikeway" concept would provide bicyclists with a 7.25-mile facility from the Railyard Park to the Santa Fe Country Club area, on the outskirts of Tierra Contenta, without requiring the use of Agua Fria St. or Cerrillos Rd.

Arroyo de los Chamisos Trail, including the Gail Ryba Trail. Santa Fe's oldest multi-use trail is a 4.0-mile asphalt path from the Rail Trail at Siringo Rd. to the Nava Ade subdivision and the Santa Fe Place mall and transit center. The trail has three marked, at-grade street crossings (Yucca, C. Carlos Rey, and Ave. de las Campanas), and one grade-separated crossing at Rodeo Rd.

A separate paved section of the Arroyo de los Chamisos Trail to the east, which is being renamed the Gail Ryba Trail, will be connected to the Rail Trail through an underpass under St. Francis Dr. in 2012. The alignment on the east side totals 0.7 miles, including "Zia Trail" extension south of W. Zia Rd. Counting the half-mile of the Rail Trail that connects the two segments along the Arroyo de los Chamisos, the continuous length of paved trail will Santa Fe's longest at five miles.

Significant direct connections to the Arroyo de los Chamisos Trail include Capshaw Middle School, the Zia Trail to the Arroyo en Medio, the St. Francis Dr. Trail, the Rail

Trail, Santa Fe High School, Monica Lucero Park, the Genoveva Chavez Community Center, Villa Linda Park, and the Santa Fe Place mall and transit center.

To the west, a separate section of the Arroyo de los Chamisos trail located in Tierra Contenta runs along 2.1 miles of a tributary to the Arroyo de los Chamisos to a point where the arroyos join near NM599, the future site of the Southwest Activity Node or “SWAN” Park. This segment of the trail also has several, well-marked crosswalks. The ultimate plan over time is to connect this trail to the greater Arroyo de los Chamisos Trail south and southeast of Capital High School. Currently-proposed development development of Las Soleras east of Cerrillos Rd. may fill in some of the missing gap, while the SWAN Park and private development proposed to the west may eventually bring the trail under NM599 and along the Arroyo de los Chamisos into the La Cienega area.

The various paved segments of the Arroyo de los Chamisos trail have been built to AASHTO specifications for width (10 ft.) and feature marked crosswalks at all at-grade street crossings, which are primarily at uncontrolled mid-block locations.

River Trail

The River Trail is a multi-use trail along the Santa Fe River that will eventually link downtown Santa Fe with the western edge of the urban area north of Tierra Contenta, a span of nearly ten miles. Developing the River Trail has been a top priority of local bikeway planning since before the City’s 1993 Bikeways Master Plan.

The City’s section of the River Trail is a concrete multi-use trail from St. Francis Dr. to Frenchy’s Field, a span of 2.1 miles. Thanks to a bridge underpass at Camino Alire, it requires no at-grade street crossings. Most of this section meets AASHTO specifications but between Camino Alire and Ave. Cristobal Colón, the trail is only eight feet wide, typically with one or two handrails located less than one foot from the edge of concrete. Adding on the adjoining trail in Frenchy’s Field and the uninterrupted sidewalk along W. Alameda St. east of St. Francis Dr. to Defouri St., the continuous River Trail alignment currently available to trail users reaches a total of nearly three miles.

Significant direct connections to this part of the River Trail include Gonzales Community School, the “El Rio Road” Trail to Alto St., Alto / Bicentennial Park, Griego Park, and Frenchy’s Field.

The “River Parkway” vision is to extend the River Trail nearly a half-mile further east, through De Vargas Park, including an at-grade crossing of Defouri St. and underpasses of Guadalupe St., Sandoval St., and Galisteo St., three downtown streets that are due for bridge repairs. The trail would bring users to Don Gaspar Ave., which in turn provides easy access to the plaza and to points north and south via calm roads integrated into “State Bike Route 9.”

The longer Santa Fe River alignment that is currently available to bicyclists and pedestrians includes a variety of shared lanes, bike lanes, sidewalks, and unpaved trails along E. and W. Alameda St. West of Frenchy's Field, the County has built separate pieces of the River Trail between San Ysidro Crossing and Caja del Oro Rd. (primarily unpaved) and between Agua Fria St. and Constellation Rd. (paved), totaling 1.8 miles. These segments will likely be integrated into a greater City-County River Trail within the next 5-10 years.

Rail Trail

The Rail Trail includes two distinct paved sections along the Santa Fe Southern Rail Line. The first is 0.75 miles from the Santa Fe Depot through the Railyard Plaza and Railyard Park, and across the intersection of St. Francis and Cerrillos Rd. to Pen Rd. The second is 3.6 miles from nearby Alta Vista St. to Rabbit Rd. In between the two sections are the relatively calm roads of Pen Sd. and South Capitol Station, the latter with bike lanes. Together the paved trails and on-road segments make a 4.0-mile bikeway alignment.

South of Rabbit Rd. is roughly 11.6 miles of soft-surface Rail Trail to Eldorado and US285. The County is currently starting improvements to this trail in order to satisfy easement requirements of the New Mexico Department of Transportation, the owner of the rail right-of-way and in order to provide a more accessible facility that may make for a more efficient commuter bikeway as well. Some of the new alignment will be farther away from the rail line than the current Rail Trail. The new cross-section will be soft-surface on a wide tread.

Significant direct connections to the paved Rail Trail and on-road bikeway include the Santa Fe Depot, the Railyard Park and Plaza, the Acequia Trail, South Capitol Station, the Arroyo de los Chamisos Trail, the Gail Ryba Trail, and Zia Station. The unpaved Rail Trail provides further connections to the Spur Trail (to Santa Fe Community College and Rancho Viejo), roads and wide side paths in Eldorado, and a recreational trail network in the Galisteo Basin Preserve. Access to the origin of the rail line and the Amtrak Station in Lamy is currently only available via the paved shoulders of US285 ("State Bike Route 9") and shared lanes on County Road 33, a total of 2.7 miles on road.

The Rail Trail has roughly a dozen at-grade crossings with minor or major roadways. One crossing, at W. Zia Rd and St. Francis Dr., is signalized. The rest are uncontrolled and for the most part unmarked, with the exceptions of marked crosswalks at Paseo de Peralta and Camino Alire.

III. Other Independent Alignments for Multi-Use Trails

Multi-use trails are also found, or planned for, on the following alignments (see Map 1, Santa Fe Bikeways and Trails Map, 2012, and map of abandoned railroad alignments on p. 9 of this Appendix):

- Cañada Rincon

- Cañada Ancha
- Arroyo de las Mascaras
- Arroyo de los Pinos
- Arroyo Chaparral
- Arroyo en Medio
- Arroyo Hondo
- Chili Line (Denver and Western Rio Grande Railroad, Santa Fe Branch)
- N.M. Central Railroad
- Santa Fe Southern RR, abandoned railbed (n. of I-25 along Galisteo Rd.)
- Power lines through Pueblos del Sol and through Las Soleras (planned)
- I-25 frontage

IV. Subdivision Trails

Many narrow paved trails and paths make local connections and serve recreational functions but do not meet AASHTO standards for multi-use trails. They are typically found within recent subdivisions such as Pueblos del Sol, Nava Ade, Rancho Viejo, and Las Campanas. In a few cases, subdivision trails are also potential major “arterial” bikeway alignments. The section of the Arroyo de los Chamisos Trail in Nava Ade, for example, preceded the arrival of the main trail south of Rodeo Rd., but, unlike other subdivision trails, it was built to the AASHTO-recommended ten feet wide. Similarly, Rancho Viejo’s “District Trail,” which could become part of a much longer New Mexico Central Rail Trail alignment, was also built to AASHTO specifications as the subdivision’s major, central trail. Trails in Pueblos del Sol could also become part of a longer north-south alignment approximating the NM Central Railroad alignment within the city limits. Unfortunately these trails are extremely narrow (6 ft. wide) and meandering and lack basic internal connectivity.

V. Sidepaths

Within the city of Santa Fe, a side path built along Botolph Rd. is one of the only examples of a side path constructed by the City with the specific intent of accommodating bicycle traffic. Several more, relatively minor examples can be found in subdivisions in the city:

- along south side of Gov. Miles Rd., east of Pueblos del Sol
- along Richards and Gov. Miles Rd. in La Sonata

Numerous examples of side paths can be found in county subdivisions and other developed locations, including:

- Eldorado
- Las Campanas
- Rancho Viejo
- La Pradera (along Dinosaur Trail)
- Campus of Santa Fe Community College.

In most cases, side paths serve as an acceptable pedestrian facility but a marginal bicycle facility, suitable for low-speed recreational use only. Because they are along roads, they make for less-than-ideal recreational bicycling alignments, compared to a multi-use trail on an alignment independent of a roadway. Also because they are along roads, they are not very functional for bicycle through traffic, and commuter or other on-road cyclists travelling adjacent roadways tend to avoid them. Side path alignments introduce numerous street and/or driveway crossings that constitute hazards not found on the roadway, they often have dysfunctional interfaces with side streets or the streets that they travel along, they may require frequent stopping or yielding to motor vehicle traffic, and they often include additional grades and meanders that limit safe or comfortable travel speed and increase cycling distance.

Sidepaths that have been Proposed along Major Roads: Past bicycle planning in Santa Fe has included numerous side path alignments with little reference to the concerns expressed by AASHTO and LAB. BTAC's Big Picture map, for example, depicts countless roadways as proposed trail alignments, including much of Rufina St. (also identified as a trail alignment by the 1993 Bikeways Master Plan), St. Francis Dr. (US84/285), Richards Ave., Old Pecos Trail, Gonzales Rd., Artist Rd./Hyde Park Rd. (NM475), and even St. Michael's Dr. (NM466). In most cases, however, side paths have NOT been pursued as a solution for accommodating bicyclists and pedestrians along these alignments. Rather, City has pursued the combination of on-road bicycle facilities and sidewalks that is recommended by AASHTO, endorsed by LAB, and well-suited to accommodate bicyclists and pedestrians along most of these roadways, and many more.

The proposed Gonzales Rd. "side path," which has been designed but not yet constructed for the City, might seem to be an exception, but BTAC and the City have determined that this is not to be considered a bicycle facility, in which case it can be considered a sidewalk.

Several major roadways with high-speed traffic in Santa Fe have also been proposed as side path alignments, particularly Richards Ave. and St. Francis Dr. In neither case is a side path recommendable for long distances along these roadways as envisioned in early bicycle planning, as well as in NMDOT's recent St. Francis Dr. Corridor Study. Both alignments, however, do have specific segments with merits specifically relating to their prospective role in connecting trails and bikeways on other alignments that are independent of roadways.

- **Richards Ave.** has ample paved shoulders or bike lanes throughout its alignment north of Rancho Viejo. A side path along Richards Ave. to the Santa Fe Community College was proposed both by the 1993 Santa Fe Bikeways Master Plan and by BTAC's "Big Picture" map. Initial planning and design activities were funded by BTAC but the Committee eventually rejected the use of city trail funds for a Richards Ave. side path.

Given the convenience of Richard Ave.'s underpass of I-25 (with no conflicts at interchange ramps), prospective connections with various independent trail alignments planned to the north and south of I-25, local land uses including SFCC

and possible developments such as a Railrunner Station at Las Soleras, Richards Ave.'s current lack of pedestrian facilities in the form of a sidewalk, and availability of trail easements along uninterrupted right of way (e.g., through the Petcheskey Ranch on the west side of Richards Ave., and through undeveloped land north of Rabbit Rd. on the east side, toward the NMCRR alignment), one or more side paths along Richards Ave. and an adjoining part of Rabbit Rd. may be appropriate accommodations for trail users in this area in the near future.

- **St. Francis Dr.** has very limited on-road facilities for cyclists, primarily south of Siringo Rd. St. Francis Dr. is another corridor that has been proposed for various side paths, as reiterated and expanded by the NMDOT's St. Francis Dr. Corridor Study. The newly-built St. Francis Dr. Trail provides a bicycle and pedestrian facility along part of St. Francis Dr., bringing bicyclists to signalized crosswalks at busy, high-speed highway intersections that have not been designed for trail traffic and, in most cases, have handled minimal pedestrian traffic to date.

The St. Francis Dr. Trail creates a high level of connectivity between significant bikeway alignments independent of St. Francis Dr., namely the Rail Trail and Gail Ryba Trail to the south and west and Santa Fe's network of designated on-road facilities to the north and east, including signed bike routes on Galisteo, Don Gaspar, and San Mateo as well as bike lanes on St. Michael's Dr. and Old Pecos Trail. Extensions of the St. Francis Dr. Trail to busy intersections at W. Zia to the south and St. Michael's Dr. (NM466) to the north created new points of conflict that were not necessary to create this connectivity. The connection to W. Zia Rd. may provide added value if a sidewalk or trail is provided directly into the Plaza Entrada shopping center, otherwise this Bicycle Master Plan does not include further extensions of trails along St. Francis Dr.

- More recently, the Las Soleras subdivision has planned a side path along **Beckner Dr.**, which will also have standard bike lanes per city code.

Expanded definition of Sidepath in AASHTO 2011

The latest AASHTO guidance (2011) expands the definition of a "side path" to include multi-use trails that use intersection crosswalks in general. These "side path-like" conditions exist at the following major, signalized intersections in Santa Fe:

- Acequia Trail at St Francis and Cerrillos
- Rail Trail at St. Francis and W. Zia
- River Trail at St. Francis and W. Alameda.

"Side path-like" conditions also occur on Santa Fe's major multi-use trails at the following non-signalized location:

- Rail Trail at Rodeo Rd. and Galisteo Rd. (cross-traffic not controlled)

Mitigation of Conflicts created by Sidepaths

While there are methods promoted by AASHTO and FHWA to design intersections for pedestrian safety and to accommodate trails in crosswalks, construction of side paths in the Santa Fe area has typically not included improvements to existing ramps and crosswalks at road crossings.

VI. Topographical Barriers for Multi-Use Trails in the Santa Fe Metropolitan Area

The Santa Fe River is a formidable topographical feature that is bridged by many lower-speed, narrow streets downtown and a handful of mostly higher-speed roadways west of downtown. Among the busier roads west of downtown, with the notable exception of St. Francis Dr., nearly all of the roadway bridges over the Santa Fe River provide appropriate accommodations to cyclists in the form of a paved shoulder. Most of these bridges west of downtown (again with the exception of St. Francis Dr.), also provide space for River Trail users to cross underneath the roadway.

Arguably, non-motorized traffic is better accommodated across the Santa Fe River than motorized traffic, for there are at least as many dedicated non-motorized crossings of the Santa Fe River as there are road crossings. These include four “pedestrian” bridges east (upstream) of St. Francis Dr., eight River Trail bridge crossings or connections west (downstream) of St. Francis Dr., and one at-grade low-water crossing that is closed to motor vehicles (Camino Carlos Rael). As the River Trail is developed, needs for more crossings will become more apparent; recommendations for future locations are presented in Chapter IV.

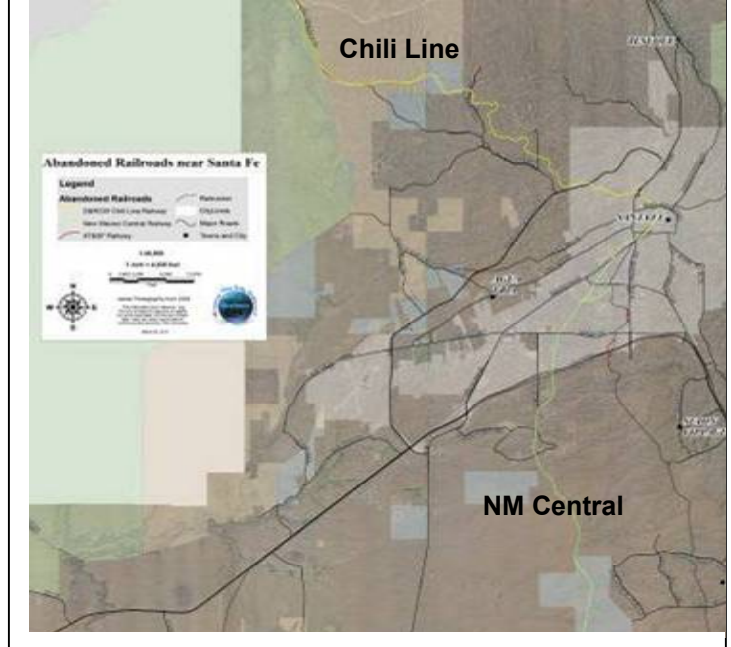
Arroyos and irrigation ditches also pose barriers to the road and trail systems in Santa Fe, though these are typically more easily overcome through smaller bridges, culverts, or at-grade crossings. Roughly a dozen bridges for non-motorized traffic over the Acequia Madre range from informal but sturdy two-by-four construction to four hefty new structures built by the City in 2009-11 to accommodate maintenance and emergency use by heavy motor vehicles. Bicycle-pedestrian bridges over major arroyos in the Santa Fe area include five over the Arroyo de los Chamisos (Gail Ryba Trail (2), Rail Trail (1), Arroyo de los Chamisos Trail (2)) and three along the Arroyo de los Chamisos Trail that span tributaries to the Arroyo de los Chamisos. Countless other trail crossings and footbridges, many associated with city parks, include crossings over the Arroyo de las Mascaras and its tributaries (most within Fort Marcy Park), Arroyo Chaparral (Rail Trail; footpath near Chaparral E.S.), and Arroyo de los Pinos (Rail Trail; footpath in Herb Martinez Park).

Locations where unbridged arroyos or acequias continue to pose a major barrier to non-motorized traffic include the Acequia Madre at various locations including Kathryn St. and Oñate Pl. dead-ends, Arroyo Chaparral near Candelario Park, and various locations where the County of Santa Fe is considering trail alignments along the Arroyo Hondo.

VII. Long-Range Trail Alignments

- NM Central Railroad Line to Galisteo: Santa Fe County is currently seeking to develop the abandoned railbed of the NM Central Line south of Eldorado to Santa Fe County Road 42 west of Galisteo Village, as a soft-surface trail in conjunction with the Galisteo Basin Preserve development. This alignment could have some transportation value, since a paved trail is planned to extend northward from Eldorado to Rancho Viejo. More significant are the recreational opportunities, including possible links to other, existing Galisteo Basin Preserve trails and to the Santa Fe Southern Rail Trail to Eldorado and Santa Fe.

Map: Abandoned railroads in the Santa Fe MPO Area.



- Rio Grande Trail, Santa Fe River Trail, and the Chili Line: Two conceptual alignments for long-range trails in the Santa Fe area, one to continue the Santa Fe River Trail to La Bajada Village and Cochiti, and the other to pursue a Chili Line Trail around Buckman Wells and north, could both conceivably be integrated into New Mexico State Parks' statewide Rio Grande Trail initiative. Both alignments are primarily on federal land belonging to the Bureau of Land Management (BLM) and the Santa Fe National Forest (SFNF)

but also include some tribal land. The extended Santa Fe River Trail alignment could conceivably include an abandoned section of old Route 66 featuring 23 switchbacks descending to La Bajada village. SFNF and BLM have recently proposed to improve a 1.5-mile recreational trail along the Chili Line on federal land north of the



The Denver, Rio Grande and Western railroad, also known as the Chili Line, near Diablo Canyon (Photo courtesy of <http://ngchililine.org>)

Buckman diversion.¹ Possible alignments to link to this trail in the future from Santa Fe include the Chili Line, Buckman Rd., and the Buckman diversion pipeline, which in turn might be linked to the City's MRC Trail and the Santa Fe River Trail. The critical link from a long-range transportation perspective, to extend the Chili Line trail north to NM502 at Otowi Bridge, is a 1.5-mile stretch along the Rio Grande through San Ildefonso Pueblo.

Other long-range alignments of possible future interest include (1) Galisteo Creek / Old Santa Fe Trail / BNSF rail alignment west to Glorieta, which would offer bicyclists and pedestrians an alternative to I-25, and (2) a combination of the NM Rail Runner alignment to Waldo Canyon and the BNSF rail alignment to Cerrillos; an abandoned rail spur could in turn provide a connection from Cerrillos to Madrid.

¹ SWCA Environmental Consultants, for SFNF and BLM, "Rio Grande Corridor at Buckman Restoration and Recreation Enhancement Project: Proposed Action, Alternatives, and Preliminary Effects Analysis" (Nov. 2011), p. 21.