



International Trail Scoping Report

Bernalillo County Public Works



1.0	Executive Summary	3
1.1	Proposed Trail.....	3
1.2	Recommended Projects.....	4
2.0	Trail Description	7
2.1	Transportation System	7
2.2	Traffic Volumes	8
2.3	Traffic Crashes.....	8
2.4	Pedestrian Needs.....	12
2.5	Deficiencies	13
2.6	Trail Safety Needs.....	15
3.0	Coordination on Related Projects	17
3.1	Zuni Road Corridor Study	18
3.2	International District Sector Plan.....	19
3.3	Metropolitan Redevelopment Area.....	20
3.4	Safe Routes to School	21
3.5	Bikeways and Trails Master Plan.....	22
3.6	Central Ave. BRT Study	22
3.7	Plaza Feliz Housing	23
3.8	Expo NM Master Plan	24
4.0	Trail Concepts.....	25
4.1	Road Diet	25
4.2	Pedestrian Amenities	31
4.3	Bump-outs and Chicanes	32
4.4	Standard Improvements	34
5.0	Project Cost Estimates	38
6.0	Recommended Phasing	41
	Appendix: Community Meeting Comments	43



1.0 Executive Summary

1.1 Proposed Trail

Bernalillo County Public Works, in coordination with City of Albuquerque Department of Municipal Development, has prepared a scoping report for implementing the proposed International Trail located along roadways in the International District (Southeast Heights) of Albuquerque. The International District is bounded on the north by Lomas Boulevard, on the south by Gibson Boulevard, on the west by San Mateo Boulevard and on the east by Wyoming Boulevard. Trail corridors extend approximately 14 miles and include the following roadways (see map below):

- Zuni Road (part of a separate engineering study) between San Mateo Blvd. and Wyoming Blvd.
- Louisiana Boulevard between Copper Ave. and Gibson Blvd.
- Kathryn / Southern/ Trumbull Avenue between San Mateo Blvd. and Utah St.
- San Pedro Drive between Central Ave. and Gibson Blvd.
- Copper Avenue between San Mateo Blvd. and San Pedro Dr. and Louisiana Blvd. and Wyoming Blvd.
- Utah/ Texas/ Vermont Street between Copper Ave. and Southern Ave.
- Pennsylvania Street between Marquette Ave. and Southern Ave.
- San Pablo/ Espanola Street between Copper Ave. and Southern Ave.
- Alvarado Street between Marquette Ave. and Ross Ave.
- Ross Ave./ Cardenas St./ Anderson Ave. between San Mateo Blvd. and San Pedro Dr.
- Georgia St./ Trumbull Ave. between Gibson Blvd. and San Pedro Dr.
- *Central Avenue and San Mateo Boulevard were not included in the scoping report.*

The trail will provide better pedestrian and bicycle connections to public facilities such as parks, schools, health, senior, and community centers and other destinations from surrounding neighborhoods.

The trail alignment was identified by the local non-profit ACHIEVE. The organization received funding in early 2009 from the Centers for Disease Control (CDC) to prepare an Action Guide, “Places for Physical Activity – Facilitating Development of a Community Trail and Promoting Its Use to Increase Physical Activity among Youth and Adults.” This initiative is designed to reduce barriers to physical activity by creating new or modifying existing places for physical activity, and to promote their use. ACHIEVE



spent several months gathering community input and assessing the walkability of the South San Pedro, Trumbull, and La Mesa neighborhoods. Neighborhood-specific pedestrian safety information along with the community trails outline was developed for residents of the International District in Spanish, English, and Vietnamese. In March, 2010 a large workshop was held with the support of their sponsor, City Councilor, Rey Garduño, to finalize the trail. The MAP/Guide was completed in September of last year, and a kick-off event was held at the International District Festival. To date over 5,000 Map/Guides have been distributed in the International District: <http://www.starkravenstudios.com/Achieve/>

This scoping study is a continuation of their efforts to identify specific pedestrian and bicycle projects along the trail that can be funded and implemented.

1.2 Recommended Projects

The scoping report identifies \$8.25 million in pedestrian-bicycle safety and traffic calming improvements along International Trail corridors designed to:

1. prevent injuries,
2. encourage walking for health,
3. accommodate users of all abilities, and
4. reduce speeding traffic.

Safety and calming improvements are proposed along each of the trail corridors and include such features as:

- wider sidewalks with planting strips,
- bike lanes,
- ADA curb ramps,
- safer intersections with marked crosswalks and pedestrian signals
- lighting and signage.

Projects are phased by corridor and shown in exhibit below.



Exhibit 1: Recommended Phasing					
Trail Segments		Length	Destinations Served	Est. Cost	Source
2.	Louisiana Blvd Road Diet, Copper to Gibson	1.4 mi	Van Buren Middle School, Phil Chacon Park; C.C. Community Center; North-south trail spine	\$1,680,000	STP-E/CMAQ
3.	Kathryn Ave/ Southern Ave/ Trumbull Ave, San Mateo to Utah St.	1.6 mi	Van Buren Middle School; MRA designated streetscape project; East-west trail spine	\$1,210,000	STP-E/CMAQ
4.	San Pedro Street, Central to Gibson	1.5 mi	Wilson Middle School, Holy Ghost School, Library; North-south trail spine	\$1,320,000	STP-E/CMAQ
5.	Copper Avenue, Louisiana to Wyoming	1.95 mi	La Mesa Elementary School; East-west trail spine	\$1,080,000	STP-E/CMAQ
6.	Vermont Street/ Utah Street, Copper to Trumbull	0.83 mi	PB&J, health clinic and senior housing	\$ 530,000	GO Bonds; HSIP
7.	San Pablo St/ Espanola St, Copper to Southern	0.83 mi	East Central multi-center, PB&J, and new housing	\$ 580,000	GO Bonds; HSIP
8.	Georgia Street/ Trumbull Avenue	0.76 mi	Emerson Elementary School, John Carrillo Park	\$ 380,000	GO Bonds, SRTS
9.	Pennsylvania Street, Marquette to Southern	1.1 mi	Mesa Verde Park; Trumbull Park	\$ 390,000	GO Bonds; HSIP
10.	Ross/ Anderson Avenue, San Mateo to San Pedro	0.56 mi	Wilson Middle School and Park	\$ 340,000	GO Bonds, SRTS
11.	Alvarado Drive, Marquette to Ross	1.4 mi	Fox Memorial Park	\$ 740,000	GO Bonds
Zuni Trail Segment				\$8,250,000	
1.	Zuni Road Diet, Washington to Central	3 miles	Corridor study underway – East-west trail spine	\$2,000,000	STP-E/ CMAQ
Total Project		14 miles		\$10,250,000	
Notes: STP-E=enhancement; CMAQ =congestion mgt air quality; GO=general obligation bonds; HSIP=safety funds; SRTS=safe routes to school					



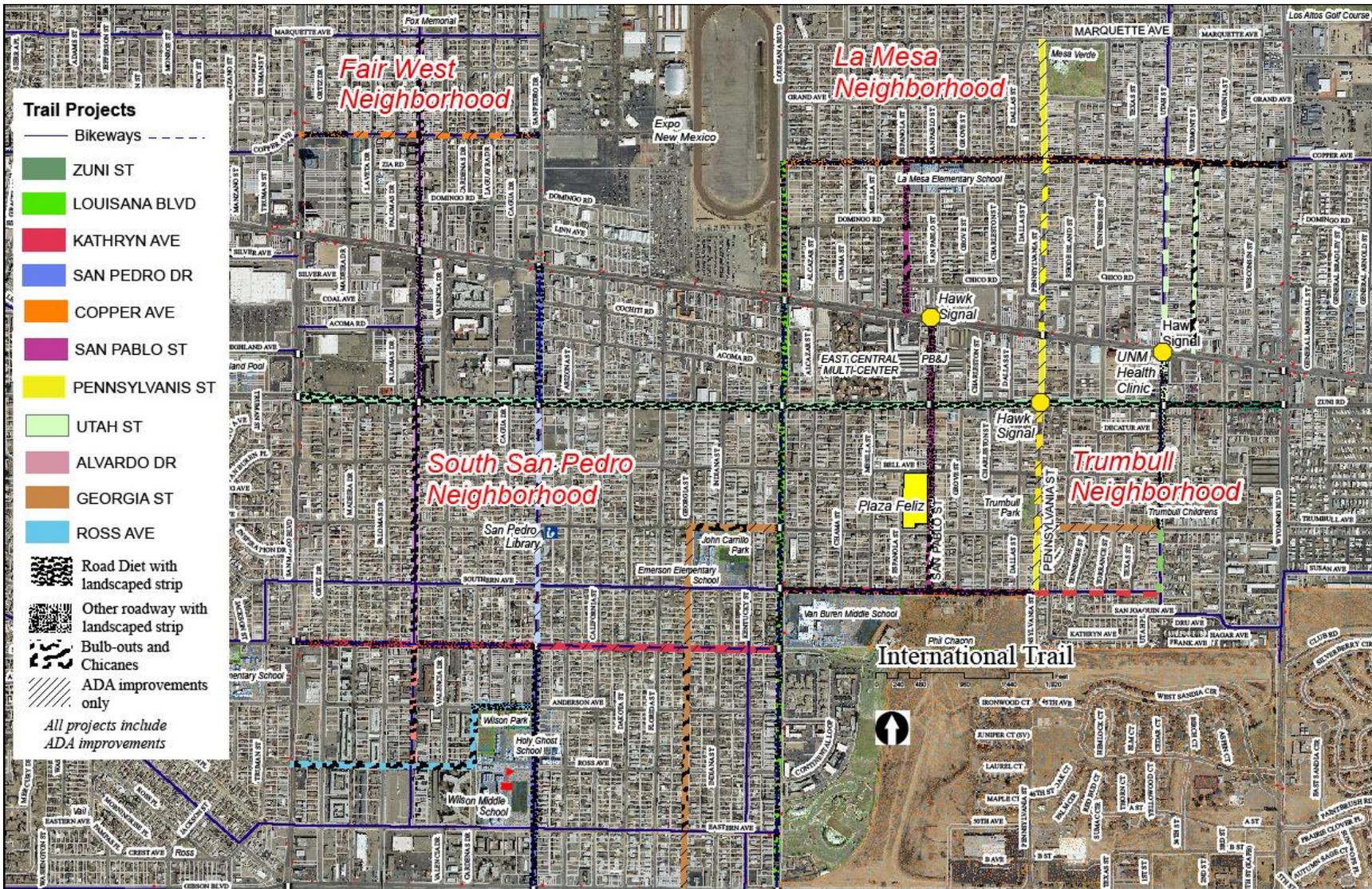


Exhibit 2: International Community Trail Map with Recommended Projects



2.0 Trail Description

Albuquerque's Southeast Heights was platted after World War II and built out in the 1950s with the rapid influx of new residents, many employed at expanding Kirtland AFB and Sandia National Labs. During the 1970s large areas were rezoned for multi-family housing to accommodate a burgeoning young adult population. In the 1980s the area began to decline economically as base families moved into newer parts of the city and with it an associated increase of blight and crime. Cheap housing provided opportunities for Asian and other immigrants to settle there and begin restaurants and other businesses that would culturally transform the area. In the 1990s, the City initiated several programs to deter crime. These measures included a Strike Force Team that condemned vacant, substandard, and crime ridden properties and Crime Prevention through Design (CPTED) street diverters. The area has begun to turn around with the completion of a Metropolitan Redevelopment Area plan in 2000 (2010 update), redevelopment of the International Market block, and the subsequent designation of the International District. Pedestrian and roadway projects will further redevelopment and increase safety in the district.

2.1 Transportation System

The roadway network follows a grid pattern of arterial and collector streets. Arterial streets include east-west Central Avenue, Zuni Road, and Gibson Boulevard as well as streets running north and south such as San Mateo Boulevard, Louisiana Boulevard, and Wyoming Boulevard. Collector streets include east-west Copper Avenue and Kathryn Avenue as well north-south San Pedro Street, Pennsylvania Street and Utah Street, running north-south, function like collectors although not so designated. North-south roadways consist of long blocks of about 600 feet while east-west roadways have short blocks of 325 feet. Blocks along Central Avenue vary since the corridor is diagonal in direction.

All roadways in the Southeast Heights provide sidewalks although most are narrow, have no buffer, and are not ADA compliant. San Pedro Dr is the only street with dedicated bike lanes; however, Copper Ave, Southern Ave, Eastern Ave, Alvarado Dr, and Utah St are designated bike routes.

The Southeast Heights is well-served by public transit (Exhibit 10). Rapid Ride routes (with 15 minute headways) follow Central Avenue and have the highest ridership. Commuter routes include San Pedro Dr, Gibson Blvd, and Wyoming Blvd. All day routes include San Mateo Blvd, Zuni Rd, Louisiana Blvd, Wyoming Blvd, and Gibson Blvd.



2.2 Traffic Volumes

Central Avenue is the busiest roadway in the study area with traffic volumes between 22,000 and 34,500 on an average weekday (AWDT). Louisiana Blvd, Wyoming Blvd and Zuni Road are the next busiest roadways with a lot of variability along their corridors and between peak and non-peak hours. The most congested corridors are San Mateo Boulevard between Zuni and Lomas and Louisiana Boulevard between Zuni and Central (Exhibit 3 and 5).

In terms of pedestrian activity, Central Avenue and San Mateo is the business intersection with almost 900 pedestrians a day. Central Ave and San Pedro Dr, Louisiana Blvd, Pennsylvania St, and Wyoming Blvd all have heavy pedestrian activity (over 200 pedestrians a day) as well as San Mateo and Highland (400+), and Zuni Rd at Louisiana Blvd and San Pablo St (200+), and Louisiana Blvd at Southern Ave (almost 200 pedestrians).



Exhibit 3: Roadway Congestion (Source: MRCOG 2011)

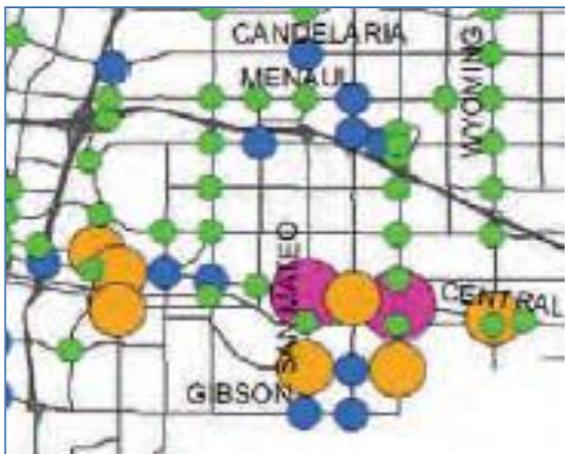


Exhibit 4: Crashes

2.3 Traffic Crashes

The Southeast Heights is considered especially hazardous for pedestrians. Most of the City's pedestrian injuries and fatalities occur along roadways in this area according to data provided by the Mid Region Council of Governments (MRCOG). The worst intersections are Central Ave and San Mateo Blvd, Central Ave and San Pedro Dr, Central Ave and Louisiana Blvd, Central Ave and Wyoming Blvd as well as Kathryn Ave and San Mateo Blvd and Kathryn Ave and Louisiana Blvd (Exhibit 4 and 6).



Exhibit 5: 2009 Roadway Volumes		Cross Street							
North-South Roadways		Gibson	Kathryn	Southern	Trumbull	Zuni	Highland	Central	Copper
San Mateo Boulevard	Vehicles	13,200	17,200	-	-	24,100	-	27,800	-
	Ped-Bikes	118/ 36	144/ 62	-	-	119/ 48	437/ 42	866/ 50	152/ 29
San Pedro Street	Vehicles	7,000	11,800	-	-	13,100	-	12,800	-
	Ped-Bikes	50/ 22	49/ 21	-	-	90/ 28	-	206/ 38	64/ 25
Pennsylvania Street	Vehicles	-	-	-	-	-	-	-	-
	Ped-Bikes	-	-	-	-	N/A	-	264/ 45	-
Louisiana Boulevard	Vehicles	14,600	17,900	-	-	-	-	19,600	21,400
	Ped-Bikes	28/ 8	70/21	173/ 61	166/34	224/ 20	-	310/ 32	-
Wyoming Boulevard	Vehicles	-	16,000	-	-	-	-	24,400	31,000
	Ped-Bikes	-	-	-	-	88/37	-	214/ 22	68/ 21
East-West Roadways		San Mateo	Alvarado	San Pedro	Louisiana	San Pablo	Pennsylvania	Utah	Wyoming
Copper Avenue	Vehicles	-	-	-	2,000	-	3,300	-	6,700
	Ped-Bikes	152/ 29	-	64/ 25	-	-	-	-	68/ 21
Central Avenue	Vehicles	32,700	-	22,000	32,000	-	34,500	-	26,500
	Ped-Bikes	866/ 50	193/ 63	206/ 38	310/ 32	-	264/45		214/22
Zuni Road	Vehicles	18,500	-	18,500	21,200	-	16,800	-	9,200
	Ped-Bikes	119/ 48	82/ 50	90/ 28	224/ 20	269/ 35	N/A	113/15	88/29
Kathryn Avenue	Vehicles	5,800	-	1,400	-	-	-	-	-
	Ped-Bikes	144/ 62	-	49/ 21	70/ 21	-	-	-	-
Gibson Boulevard	Vehicles	25,600	-	16,000	-	-	-	-	-
	Ped-Bikes	118/ 36	72/ 17	50/ 22	28/ 8	-	-	-	-
Source: MRCOG, 2010									



Exhibit 6a: 2009 Roadway Crashes		Cross Street					
North-South Roadways		Gibson	Kathryn	Zuni	(2010)	Central	Copper
San Mateo Boulevard	Vehicles	6-20	1-5	6-20	-	21-40	6-20
	Pedestrians	1	1	0	2	3-6	0
	Bicycles				3		
San Pedro Street	Vehicles	6-20	1-5	6-20	-	21-40	6-20
	Pedestrians	0	0	0	5 (1 fatal)	1	0
	Bicycles				4		
Louisiana Boulevard	Vehicles	6-20	6-20	6-20	-	41-70	1-5
	Pedestrians	1	0	0	2	1	0
	Bicycles				1		
Pennsylvania Street	Vehicles	-	-	6-20	-	6-20	0
	Pedestrians			3-6	5	0	0
	Bicycles				1 (fatal)		
Wyoming Boulevard	Vehicles	-	-	21-40	-	21-40	
	Pedestrians				-		
	Bicycles				-		



Exhibit 6b: 2009 Roadway Crashes		Cross Street				
East-West Roadways		San Mateo	San Pedro	Louisiana	Pennsylvania	Wyoming
Copper Avenue	Vehicles	1-5	6-20	1-5	-	6-20
	Pedestrians	0	0	0		0
	Bicyclists	-	-	-	-	-
Central Avenue	Vehicles	41-70	31-40	41-70	6-20	21-40
	Pedestrians	3-6	1	1	0	0
	Bicyclists	-	-	-	-	-
Zuni Road	Vehicles	21-40	6-20	6-20	6-20	21-40
	Pedestrians	0	0	0	3-6	0
	(2010)	2	5 (1 fatal)	2	5	
	Bicyclists	-	-	-	-	-
	(2010)	3	4	1	1 (fatal)	
Kathryn Avenue	Vehicles	1-6	1-6	6-20	-	-
	Pedestrians	1	0	0		
	Bicyclists	-	-	-	-	-
Gibson Boulevard	Vehicles	6-20	6-20	6-20	-	-
	Pedestrians	1	0	1		
	Bicyclists	-	-	-	-	-

Source: MRCOG, 2010; Vector Engineering, 2011



2.4 Pedestrian Needs

Trail roadways have been scored by MRCOG using their pedestrian composite index. The index compares pedestrian generators (schools, bus stops, parks, community centers, connectivity, transit ridership, and households with no vehicles) to deterrents (crashes, traffic volume, and speed) along a roadway segment (Exhibit 7).

Central Ave. and San Mateo Blvd. facilities are rated a high regional priority. Louisiana Blvd., Zuni Rd., San Pedro Dr., and Kathryn Ave. are rated medium regional priorities. Copper Ave. is rated a low regional priority (except near the school).

Census data indicates high transit, walking, and bicycling travel modes to work, as well as high rates of lack of motor vehicle ownership (Exhibit 8).

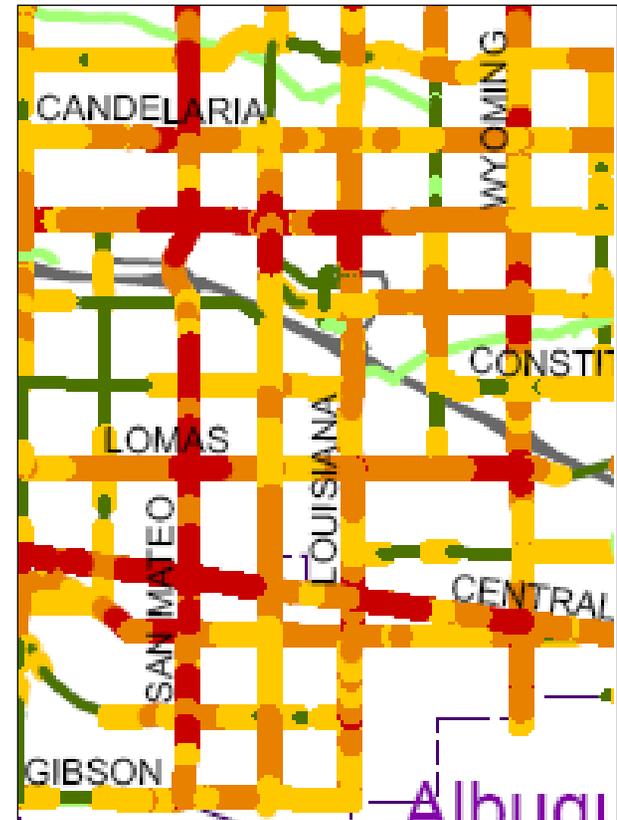


Exhibit 7: Pedestrian Composite Index

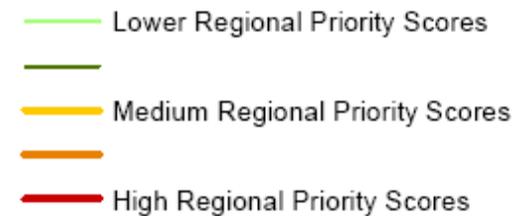


Exhibit 8: International District Commuting Data					
Census Tract	Neighborhood	Transit	Walked	Biked/ Other	No Vehicle
5.01	Fair West	0.9%	4.6%	5.9%	3.7%
6.03	La Mesa	5.8%	0.0%	1.4%	6.2%
6.04		7.0%	1.0%	1.2%	13.9%
9.01	Trumbull	4.2%	3.3%	2.4%	9.1%
9.03	S. San Pedro	3.3%	6.6%	8.1%	12.4%
9.04		2.9%	0.0%	1.1%	5.4%
Albuquerque	all	2.0	2.1%	1.2%	2.8%

Source: American Community Survey, 2005-2009



2.5 Deficiencies

Roadways in Southeast Heights have a number of sidewalk deficiencies as described in this section. According to a walkability audits (Exhibit 9) conducted on 100 blocks by ACHIEVE during 2010:

- ✓ Sidewalks are non-existent in a few locations
- ✓ Curb ramps are not ADA compliant at most intersections
- ✓ Obstructions such as light poles, signs, and hydrants exist on many sidewalk sections
- ✓ Most of the sidewalks on local streets on the Trail are less than four feet in width, without any planting strips. A typical block provides a 3.5 foot sidewalk, with many cross-slopes at driveways that are difficult to walk on.
- ✓ Most of the sidewalks on collector streets are less wide than the six-foot standard for collectors, and often are four feet or less.
- ✓ Most of the sidewalks on arterial streets are less than six feet, and much less than the 9 foot minimum when located in designated Activity Centers.
- ✓ Some of the sidewalks are wider at the corners, and pedestrians can comfortably walk side by side, but this is the exception.
- ✓ Street trees or other plants grow on only six blocks.



Exhibit 9: Walkability Audit



City of Albuquerque Department of Municipal Development (DMD) has inventoried sidewalk conditions such as cracks, buckling, heaving, uneven pavement, and missing sections. The inventory also identifies obstacles in the pedestrian realm and must be addressed by multiple agencies. Sidewalk improvements are estimated to cost \$105,000. The City will be moving ahead with short-term repairs on Alvarado Dr., Copper Ave., Espanola St., and Georgia St.. Other identified repairs will be included as part of the long-term projects identified in this report. City DMD and Planning will need to coordinate with these agencies to remove obstacles.

- Bus signs and benches in the sidewalk are in Transit's jurisdiction;
- Parked vehicles, dirt, trash, weeds, and overgrown vegetation in the sidewalk are the responsibility of the property owner and will require action by Code Enforcement.
- Light, telephone and electric poles in the sidewalk must be addressed by PNM;
- Dumpsters in the sidewalk are Solid Waste's responsibility, and
- Water meter boxes and hydrants in the sidewalk will be dealt with by Water Utility Authority.

The City has recently rehabilitated some of the streets on the International Trail using its ¼ Cent GRT program. These include slurry, micro-seal, and inlay projects, as well as replacing some curb/gutter and sidewalk.

- Alvarado Drive between Central Avenue and Kathryn Avenue
- Kathryn Avenue between Ortiz Drive and San Pedro Drive
- San Pablo Street between Dixon Rd. and Southern Avenue
- San Pedro Drive between Bell Avenue and Gibson Boulevard
- Southern Avenue between Charleston Street and Texas Street
- Trumbull Avenue between Rhode Island Street and Utah Street

An FY 2012 micro surface project is programmed for Ross Avenue between Ortiz Drive and Cardenas Drive, Alvarado Drive between Ross Avenue and Anderson Avenue, Anderson Avenue between Cardenas Drive and San Pedro Drive, and Cardenas Drive between Ross Avenue and Anderson Drive. Trail projects such as ADA and sidewalk improvements could be coordinated with these rehabilitation projects.



2.6 Trail Safety Needs

Safety needs for trail roadways include the following countermeasures:

1. Reconstruct sidewalks of at least 5 to 6 feet in width and with a 5 to 6 foot landscape buffer. *Adequate sidewalks can reduce pedestrian crashes by 88%.*
2. Reduce number of travel lanes and/or reduce lane width to slow speeds. *“Road diets” can reduce crashes by 29%.*
3. Install pedestrian lighting along trail segments, especially intersections. *Lighting reduces pedestrian fatalities by 42% at midblock locations and 54% at intersections.*
4. Provide pedestrian refuge medians at mid-block and intersection crossings. *Raised medians and islands reduce pedestrian crashes at marked crosswalks by 46% and at unmarked crosswalks by 39%.*
5. Tighten turning radii and/or install curb extensions to reduce crosswalk distances at intersections. *Studies have shown a correlation between large turning radii and higher pedestrian crashes.*
6. Use of beacons or hybrid signals where conventional traffic signals are not warranted. *Studies have shown a 69 percent reduction in pedestrian crashes where HAWK signals installed.*



Exhibit 10a: East-West Roadways	Class	Right of- Way	Curb to Curb	Travel Lanes	Bike- ways	Bus Route	Sub-standard Width (ft)	Alvarado	San Pedro	Louisiana	San Pablo	Pennsylvania	Utah	Wyoming
							Sidewalk Conditions/ Obstacles							
Copper Ave	Collector	60	32/44	2	Route		3-4		weeds, dirt, heaving		light pole; dirt, cracks, heaving	cracks, weeds, glass, trash	visual obstruct- ion	
Central Ave	Arterial	100	N/A	4+ median		66, 666, 777	4-8	bus sign, bench; planter	dirt, cracks, bus shelter; bench, bush, well opening	cracks, buckling, heaving	weeds, cracks, dirt; heaving, inclines; electric pole; bench	glass, cracks, dirt; phone poles	uneven, dirt, cracks; bench	phone pole; bench, bus sign; hydrant, trash can
Zuni Rd	Arterial	6 -70	N/A	4		766	N/A	bench, shrubs	dirt, cracks	trash, glass, dirt, cracks	light poles			
Trumbull Av	Local	60	32	2			2 ½-4			pole; missing section		dirt	cracks, dirt, weeds	
Southern Ave	Local	60	44	2	Route		3 ½-6							
Kathryn Ave	Collector	60	32/44	2			3 ½-4		dirt, cracks, weeds	bushes, plants	cracks, dirt, weeds			
Ross/ Anderson Av	Local	60	32	2			4 ft.	dumpster, bins, debris	hydrant					
Eastern Ave	Local	60	N/A	2	Route		N/A							
Gibson Blvd	Arterial	120	N/A	4+ median		16/18, 96, 222	N/A							



Exhibit 10b: North-South Roadways	Class	Right- of- Way	Curb to Curb	Travel Lanes	Bike- ways	Bus Route	Sub-standard Width (ft.)	Southern	Kathryn	Zuni	Central	Copper
							Sidewalk Condition/ Obstacles					
San Mateo Boulevard	Arterial	120	N/A	4+ median		140, 141	N/A					
Alvarado Street	Collector	60	32/44	2	Route		3 – 3 ½	weeds; parked truck	-	cracks		
San Pedro Street	Collector	60	48/ 55	2		34	4 – 6	cracks, light pole, hydrant	hydrant	cracks, poles, heaving	pole	
Georgia Street	Local	60	32	2			3 ½ - 4	cracks, buckled; hydrant; weeds, branches, bushes	hydrant; buckled			
Louisiana Street	Arterial	85	66/ 75	4+ median		3, 157	5 ½ - 6	cracks, buckled, heaving; light poles, hydrant, commercial sign	school signals, masthead	cracks; trash can; street light, dirt; trees	trash, dirt; light poles	
San Pablo Street	Local	60	32/40	2			3 ½ - 5½					
Espanola Street	Local	60	32	2			6				parked cars, trash	cracks, heaving; hydrants
Pennsylvania Street	Collector	60	32/44	2			3 ½ - 4					
Utah Street	Local	60	32/44	2	Route		N/A					gravel
Vermont	Local	60	N/A	2			3 ½ - 6				poor, gravel	utility box, hydrant
Wyoming Boulevard	Arterial	120	N/A	4+ median		31, 98	N/A					

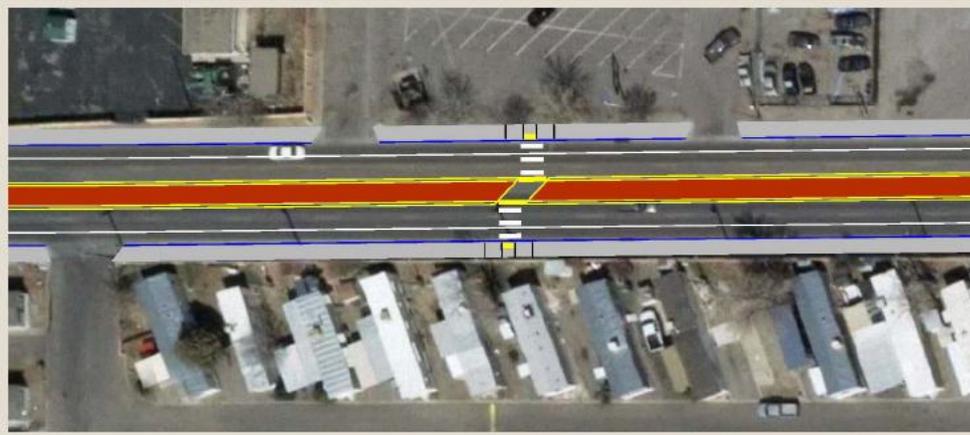
Sources: City of Albuquerque DMD sidewalk inventory, 2010; ACHIEVE walkability audit, 2010; Bernalillo County GIS, 2011



3.0 Coordination on Related Projects

3.1 Zuni Road Corridor Study

The City of Albuquerque Department of Municipal Development (DMD) has contracted with Vector Engineering to prepare a corridor study on Zuni Road between Washington Street and Wyoming Boulevard. A “road diet” alternative has been recommended for the segment between San Mateo Boulevard and Wyoming Boulevard in the International District (Exhibit 11). The proposed section is to drop one of the four travel lanes to two travel lanes and a center turn lane with bike lanes and wider sidewalks on both sides. While a PM peak hour volume of 1200 on Zuni is above what is recommended for this roadway section, a similar section been operated successfully on Isleta Boulevard with similar volumes using a hybrid approach that retains left turn lanes at major intersections.



- | Road Diet - Benefits | Downsides |
|---|--|
| <ul style="list-style-type: none">• Allows for marked mid-block crossings• Shorter distance for peds to cross• Removes left turns from the through lane• Requires smaller footprint/fewer impacts to utilities, right-of-way• Generally safer for peds and motorists• Provides median refuge throughout corridor• May have traffic calming effect• Could allow for median landscaping• Could divert traffic to other routes | <ul style="list-style-type: none">• Traffic volumes high enough on Zuni that level of service may deteriorate• May divert traffic to other routes |

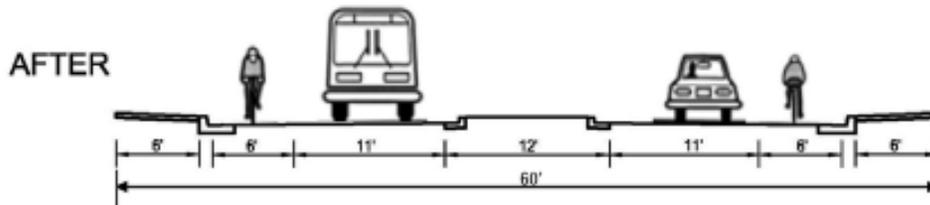


Exhibit 11: Zuni Rd. Corridor Proposed Cross Section



3.2 International District Sector Plan

City of Albuquerque Planning Department is currently preparing a sector development plan for the International District using Strata Design as their consultant. Several neighborhood meetings have been held to identify major issues and goals for the planning area. The recommendation of mixed use zoning would promote walkability in the neighborhoods and would support the development of a pedestrian trail system linking schools, parks, health clinics, community centers, and retail nodes (Exhibit 12). Multi-family design guidelines and zoning would bring more stability to the neighborhood by encouraging mixed income home ownership and townhouse style housing.

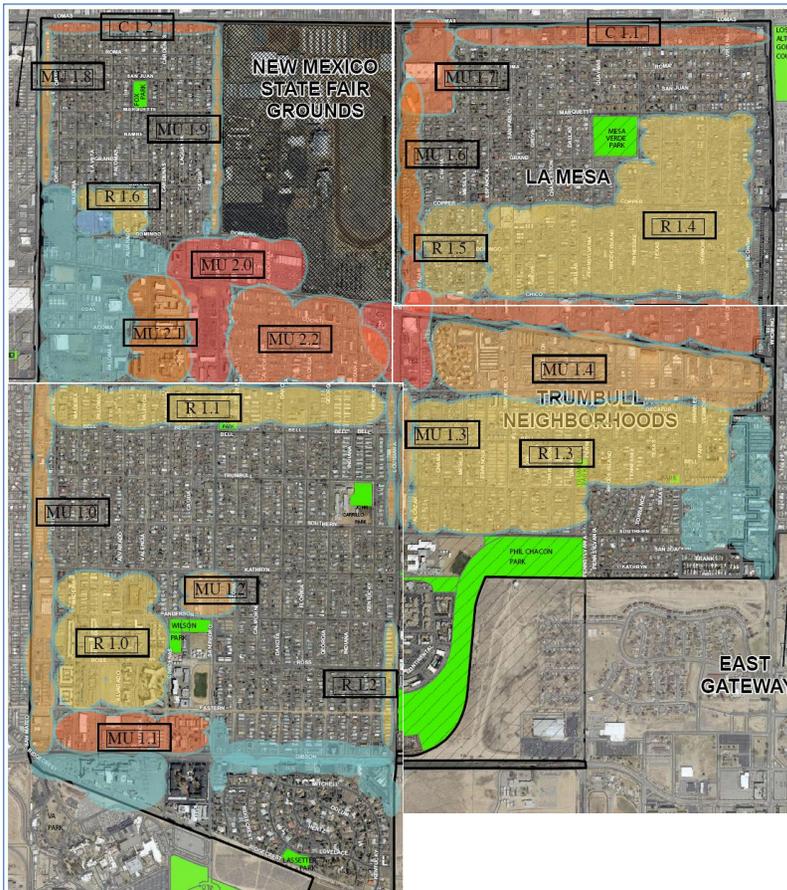


Exhibit 12: Land Use/ Zoning Strategies	
R 1.0, 1.3, 1.4, 1.6	Design and landscape guidelines for neighborhood friendly multi-family housing.
R 1.1	Further study of down zoning to R-1. Design guidelines for R-3 to integrate duplex, townhouse, apartment, and single family uses.
R 1.2	Tailored multi-family zoning for narrow lot conditions.
R 1.5	Design and landscape guidelines for townhouses compatible with adjacent single family housing.
MU 1.0, 1.3, 1.6, 1.8, 1.9, 2.1	Design guidelines for commercial and multi-family development.
MU 1.2	Create Neighborhood Activity Center.
MU 1.7	Further study of mixed use and/or residential is needed.
MU 1.5, 2.0	Design guidelines for moderate density mixed use development complementing International Marketplace.
MU 1.4, 2.2	Mixed use development sensitive to existing multi-family and heavy commercial pattern.
C 1.0	Encourage more diversity in land use
C 1.1, 1.2	Limit saturation of auto dealerships



The Place Matters Team of Bernalillo County is working with the City of Albuquerque Planning Department and community members on the *International District Sector Plan*. Place Matters is a national effort to use local policy to improve health. In the International District of Albuquerque's southeast heights, Place Matters team members and local officials are complementing the local land use plan with a Health Impact Assessment (HIA). The HIA helps ensure that the public's concerns about crime and traffic accidents are brought to bear on the plan's design recommendations using proven planning and design techniques. This effort demonstrates a move to build health into all policies.

3.3 Near Heights Metropolitan Redevelopment Area Plan

The 2000 MRA Plan made a number of recommendations; several that have been accomplished:

- Adaptive reuse of aging motels on Central Avenue
- Replace and rehabilitate multi-family housing; replacing absentee landlords with owner occupants
- Installation of Crime Prevention through Design (CPTED) traffic calming devices on residential streets
- International Marketplace project proposed in the plan has spurred economic development.

The 2010 MRA Expanded Plan recommends:

- Mixed-use, public-private project at Alvarado Dr./ Ross Ave. opportunity site
- Mixed-use neighborhood retail and/or housing at San Mateo Blvd/ Kathryn St. opportunity site
- Streetscape Projects:
 - San Mateo Blvd (Bell St. to Gibson Blvd.)
 - Gibson Blvd gateway (Kentucky St., Dakota St.)
 - Kathryn Ave. (San Mateo Blvd. to San Pedro Dr.) project includes tree lined parkways, bike lanes, bollards, pedestrian lighting, gateway kiosks, and specialty paving: \$1,008,000. The specialty pavement allows the street to be closed between San Mateo and Madeira periodically for farmers markets or special events.



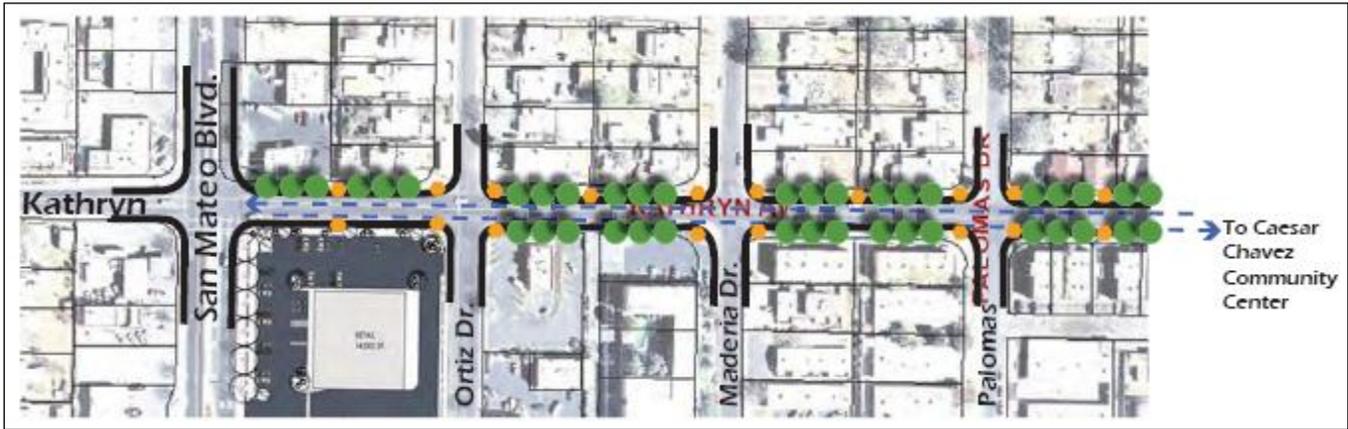


Exhibit 13: Proposed Kathryn Ave. Streetscape Project

3.4 Safe Routes to School

An action plan for improving safety on routes to school has been prepared for both Emerson Elementary School and Wilson Middle School. The NMDOT program will provide \$250,000 in safety improvements for both schools. \$304,000 in safety improvements were identified by an engineering consultant for Emerson and \$213,000 for Wilson. The following priority projects are listed:

Exhibit 14: SRTS Projects				
Priority	Emerson Elementary School	Location		Cost
1	Raised crossed walk; curb extensions; continental crosswalk; signage	Trumbull/ Indiana		\$20,050
2	Curb extensions all 4 corners; ADA ramps; continental crosswalks	Georgia/ Trumbull		\$53,600
3	Continental crosswalks; directional ADA ramps			\$22,600
4	Route sidewalk around utility pole	Trumbull/ Louisiana		\$ 3,400
5	Access control; repair damaged curb; barrier behind sidewalk	Trumbull/ Louisiana		\$ 6,750
Priority	Wilson Middle School	Location		Cost
1	4 way stop signs	Cardenas/ Eastern		\$ 500



3.5 Albuquerque Bikeways and Trails Master Plan

The draft City bikeways plan recommends the following projects in the International District:

- Completing a bike lane gap for San Pedro Drive between Zuni Road and Claremont Avenue is a top priority project. Converting this segment to a 3 lane roadway with bike lanes is one recommendation (\$1,373,860).
- Convert Utah Street bike route between Copper Avenue and Southern Avenue to a bike boulevard.
- Pennsylvania Street between Southern Avenue and Copper Avenue is a critical link route (\$5,086).
- Kathryn Avenue between Truman Street and Louisiana Boulevard is a critical link route (\$6,136).

Additionally, Mayor Berry is proposing a 50-mile bike loop around the city. The southern segment would follow Gibson Blvd. and the Kirtland AFB boundary just to the south and east of Phil Chacon Park and the International District.

3.6 Central Avenue BRT Study

ABQ Ride has completed a study of street sections that will accommodate a dedicated lane for bus rapid transit (BRT) along Central Avenue. For the segment between San Mateo Blvd. and Wyoming Blvd., it is recommended two lanes be dropped and a 26 ft. wide guide-way be created in the center of the roadway separated from travel lanes by 9 ft. medians on either side (Exhibit 15). Three BRT lines currently run along Central Avenue (red line, blue line, and recently, green line).

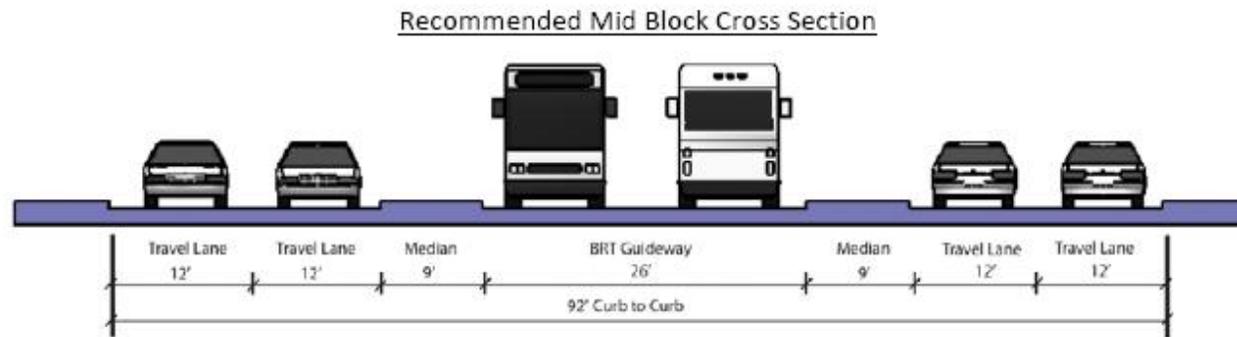


Exhibit 15: Proposed BRT Central Avenue Cross Section



3.7 Plaza Feliz

Greater Albuquerque Housing Partnership (GAHP) is developing affordable rental housing on a one-block site between Espanola Avenue and San Pablo Avenue on the west and east and Bell Street and Trumbull Street on the north and south (Exhibit 16). They also have developed affordable for-sale housing on Utah Street at Southern Avenue.



Exhibit 16: Housing Project along International Trail



3.8 Expo New Mexico Fairgrounds

A 2009 master plan for the state fairgrounds proposes pedestrian access through the property (Exhibit 17) which can connect the International Trail neighborhoods:

The North-South street - Avenue of the Governors - and the East-West green provide area for the weekly Flee Market and a future Farmer's Market to create year-round activity within the Expo New Mexico property. During Fair-time, these become the "backbone" for activity, with space for exhibits, vendors, and entertainment.

A new arena, to the south of the existing Tingley Coliseum, would provide a permanent home for "hard-floor" uses, while the existing Tingley could be remodeled to become a permanent "dirt-floor" show arena adjacent to the Equestrian facilities to the North. A new 150,000 to 180,000 expo center would anchor the green space on the North, with the potential for a hotel tower on the South side of the East-West green space.

In November 2011, the State of New Mexico Fair Commission approved a 25-year lease to expand the Albuquerque Downs racetrack and casino. The decision likely precludes a trail connection through the fairgrounds.



Exhibit 17: 2009 Expo Master Plan



4.0 Trail Concepts

Four pedestrian-bicycle facility concepts have been developed for local, collector, and arterial roadways.

4.1 Road Diet

Under this concept, generally applicable to under-utilized arterial or collector roadways, the road is placed on a “road diet” where (at least) one lane of vehicular traffic is eliminated. In place of the lost lane of vehicular traffic, space is provided to allow uses for:

- widened sidewalks
- restriping of roadway to allow for bicycle lanes
- construction of roadside amenities, including landscaping
- transit stops, pedestrian refuge areas, etc.
- any combination of the above.

Depending on the actual improvements planned, the geometric alignment of the roadway may need to be altered. Specifically, at least one or both outside curbs may need to be reconstructed at a new location. In some cases, median curb may need to be reconstructed at a new location. In some cases, median curb may need to be removed or added. With the realignment of curb and gutter, the vertical alignment of the road may also need to be changed for drainage purposes. This may also result in additional drainage features (such as new inlets, laterals, and sidewalk culverts) being constructed.

Eliminate one lane of traffic by relocating one outside curb lane approximately 12 feet further away from the right-of-way line at or near the same grade as the existing curb. Restripe roadway with the new lane configuration. Prior to restriping apply a micro-surfacing layer to pavement to cover the old conflicting striping. Within new widened area, construct a new contiguous 6 foot-wide concrete sidewalk adjacent to the R.O.W. with a 4 ft-wide landscape buffer directly behind curb and gutter. The restriping will generally include 5 foot wide bicycle lanes in both directions.

- Same as above; except that 4foot-wide sidewalk on opposite side of street is to be removed and replaced with a new 6 foot-wide sidewalk.
- Same as above; except that opposite street side curb is also removed and replaced.



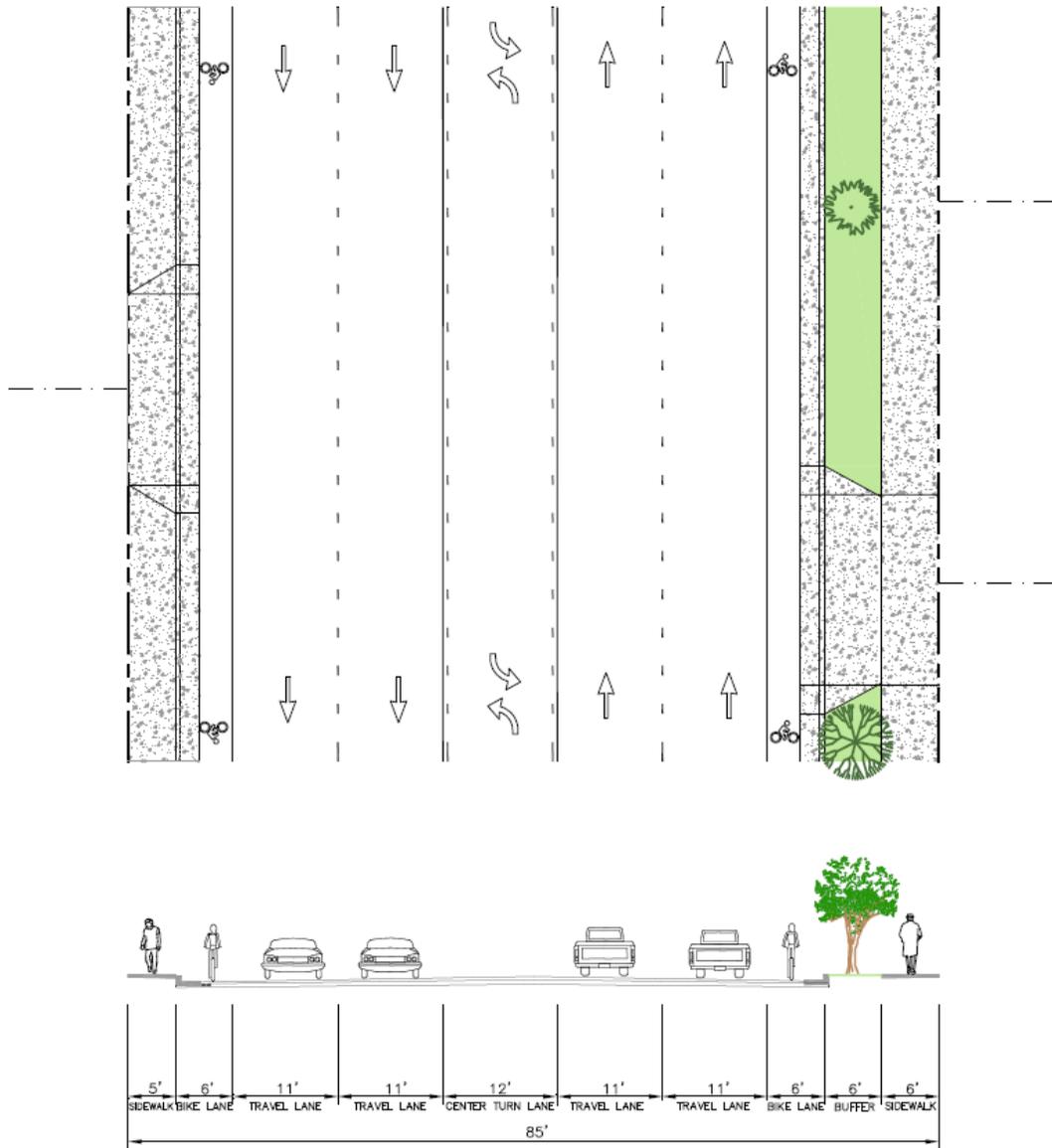


Exhibit 18: Proposed Louisiana Blvd. Cross Section

The area needed for the addition of bike lanes, landscaping, and sidewalk widening on Louisiana Boulevard can be obtained by reducing the number of motor vehicle travel lanes in the southbound direction (Exhibit 18). This will provide adequate width within the right-of-way to accommodate the additional bicycle and pedestrian facilities. Louisiana in this area consists of three southbound through lanes, two northbound through lanes, and a two-way-continuous-left-turn-lane that transitions to dedicated left turn bays on the approaches to major intersections. Central Avenue consists of three through lanes in both the east and westbound directions with a raised median transitioning to dedicated left turn lanes on the approaches to Louisiana. The southbound outside lane on Louisiana is a shared through/right turn lane. Lane reduction on Louisiana can be accomplished at the intersection with Central by reconfiguring this lane for right turns only. This will vacate the outside southbound through lane south of Central. The southwest quadrant of the intersection can be treated with a curbed 'bulb-out' which will provide a positive barrier to vehicular traffic and reduce the walking distance for pedestrians crossing Louisiana on the south side of the intersection.





Louisiana Blvd. at Zuni Rd. looking southwest

← Before

Excess capacity, no bike lanes, narrow sidewalks without buffer, long, low visibility crosswalk, curb ramps not ADA compliant, and no pedestrian lighting



← After Road Diet

High visibility shorter crosswalk, directional ADA ramps, bike lanes, wider sidewalks with landscape strip, pedestrian lighting

Exhibit 19: Louisiana Blvd. at Zuni Rd. Before and After



A traffic analysis was performed using the above proposed configuration to determine if unacceptable levels-of-service (LOS) would result for motorized traffic from the lane reduction. Traffic data was collected in November and December of 2011 for this analysis. The resulting LOS is shown in Exhibit 20 for both the existing and proposed lane configurations.

The comparison shows two reductions in LOS from ‘B’ to ‘C’ in the AM peak period. The southbound right turn movement LOS is improved. During the PM peak, the westbound lanes of Central experience LOS ‘E’, but the overall operation of this approach shows the same level of delay both before and after the lane reduction on Louisiana. For traffic operations, these comparisons indicate that the lane reduction on Louisiana presents an acceptable approach to the road ‘diet’ for this arterial.

Exhibit 20: Louisiana and Central LOS Comparisons				
Approach Movement	AM Peak LOS		PM Peak LOS	
	3 SB Lanes	2 SB Lanes	3 SB Lanes	2 SB Lanes
EBL	B	B	E	E
EBT	B	B	D	D
EBR	B	B	D	D
WBL	B	C	E	E
WBT	C	C	E	E
WBR	C	C	E	E
NBL	B	B	B	B
NBT	B	B	D	D
NBR	B	B	D	D
SBL	B	B	D	D
SBT	B	C	B	B
SBR	B	A	B	A

The other signalized intersections along this corridor displayed similar results with no significant increases in delay.

Road Diet technical references (FHWA-HRT-10-053) includes:

<http://www.fhwa.dot.gov/publications/research/safety/10053/index.cfm>



San Pedro Drive from Central Avenue to Zuni Road was modeled for the road diet in a similar fashion with the southbound outside through/right turn lane at Central/San Pedro changed to a dedicated right turn lane. The northbound outside lane at San Pedro and Zuni is treated similarly. These lane reductions provide enough width to add the pedestrian and bike facilities. The resulting motor vehicle lane configuration on San Pedro in this area would be one through lane in each direction with a continuous left turn lane. The San Pedro approaches both NB and SB to Central and Zuni respectively would transition to the existing configuration.

Traffic data were collected in November and December of 2011 for this analysis as well. The lane reductions do cause an increase in delay and a decrease in the LOS for certain movements, but none of them fall below LOS 'D' which is acceptable delay for an urban area (Exhibit 21). The dedicated right turn movements show improved levels of service. The LOS comparisons are shown in the below tables and indicate acceptable operation with the lane restrictions:

Exhibit 21: San Pedro and Central LOS Comparisons				
Approach Movement	AM Peak LOS		PM Peak LOS	
	2 SB Lanes	1 SB Lanes	2 SB Lanes	1 SB Lanes
EBL	B	B	C	C
EBT	B	B	C	C
EBR	B	B	C	C
WBL	B	B	C	C
WBT	B	B	C	C
WBR	B	B	C	C
NBL	B	B	B	C
NBT	B	B	C	C
NBR	B	B	C	C
SBL	B	B	B	B
SBT	B	C	B	C
SBR	B	A	B	A

San Pedro and Zuni LOS Comparisons				
Approach Movement	AM Peak LOS		PM Peak LOS	
	2 SB Lanes	1 SB Lanes	2 SB Lanes	1 SB Lanes
EBL	B	B	B	C
EBT	B	B	C	D
EBR	B	B	C	D
WBL	B	B	B	C
WBT	B	B	C	D
WBR	B	B	C	D
NBL	B	B	B	B
NBT	B	B	C	D
NBR	B	A	C	A
SBL	B	B	C	C
SBT	C	C	B	B
SBR	C	C	B	B





San Pedro Dr. looking north between Central Ave. and Zuni Rd.

← Before

Excess capacity, no bike lanes, narrow sidewalks without buffer, no pedestrian lighting



← After Road Diet

Bike lanes, wider sidewalks with landscape strip, and pedestrian lighting are illustrated. Shade trees should be drought tolerant, low water use appropriate for streetscape locations.

Exhibit 22: San Pedro Dr. Before and After



Drainage

A detailed drainage analysis was not performed for this draft scoping report. However, local drainage features were considered in the cost estimating of the roadway improvements. Once each road segment is designed, then specific drainage criteria will need to be met. The entire project area generally slopes from east to west. North-south roadways are relatively flat, gently sloping mainly from north to south; but specific blocks may slope towards the north. Underground storm drainage systems are almost non-existent. In all cases, the intersections of north-south and east-west streets appear to slope and drain towards the west. Therefore, there appears to be little or no concern if north-south streets are reduced in width due to “bulb-outs”; as the drainage accumulation is never more than one block in length. However, east-west directional streets may contain substantial drainage flows. A review of the streets proposed for narrowing with bulb-outs indicates only one street containing an underground storm drainage system with surface inlets. Due to the number of inlets on Copper Avenue, between Pennsylvania Street and Wyoming Boulevard, no bulb-outs are proposed on that segment. Therefore, no existing underground storm drainage infrastructure is proposed to be modified under this project.

Louisiana Boulevard contains no storm drainage inlets south of Domingo Road, and does not appear to have a drainage capacity concern. However, a detailed engineering analysis is needed to confirm. For bulb-outs on local streets where no underground storm drainage system exists, it will be important during project design to ensure that roadway drainage is maintained where bulb-outs extend into the crowned roadway section. On east-west streets, it is assumed that enough longitudinal roadway slope exists to overcome the roadway cross-section slope. On north – south streets, the placement of bulb-outs need to be carefully designed to ensure that positive roadway drainage is maintained within the curb lines. In many cases, the north-south roadways are super-elevated (sloped) towards the west, therefore requiring placement of the bulb-outs on the upstream, or east, side of the roadway. In some cases, it may be necessary to consider alternative drainage design methods, such as longitudinal sidewalk culverts, bio swales, or islands that maintain the existing gutter flow.

4.2 Pedestrian Amenities

Under this concept, generally applicable to 32 foot-wide (face-to-face) residential and local roadways where adequate public right-of-way exists, specific areas will be designated for enhanced pedestrian amenities. In such areas, a new 48” (minimum) wide sidewalk will be constructed away from the existing curb line with a landscape strip added between the street and the sidewalk. Exhibit 23 provides an example of this concept on Kathryn Avenue.



4.3 Bulb-outs and Chicanes

Under this concept, generally applicable to 32 foot-wide (face-to-face) residential and local roadways, improvements will include making both sides of the street ADA compliant for pedestrians similar to concepts above; except that occasional “bulb-outs” or “chicanes” will be provided to enhance pedestrian traffic by slowing traffic. No landscaping or other amenities are intended within the bulb-out areas. On such streets, no dedicated bicycle lane will be provided. A joint-use “sharrow” lane for bicycle use may be provided.

Additionally, residential and local roadways (generally running in the north-south direction), one side of the street is primarily selected for major improvements, with the other side receiving lesser improvements. The improvements are to include: new ADA-approved wheelchair ramps at all four quadrants of all intersections; new 4 foot-wide sidewalks constructed along one side of the street; three 50 foot-long curb “bulb-outs” with landscape improvements on this same side of the street; and two 50 foot-long curb “bulb-out” with landscape improvements on the opposite side of the street. On the primary side of the street, the initial and final “bulb out” will be at the block termini. On street parking will be limited to areas where bulb-outs do not exist.

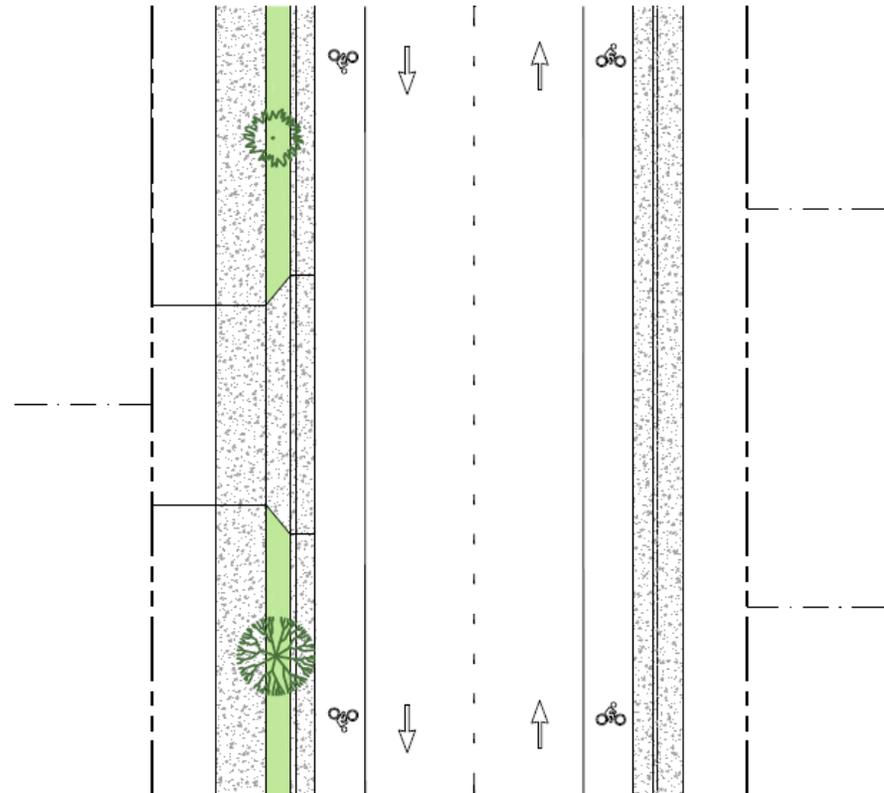


Exhibit 23: Proposed Kathryn Ave. Cross Section

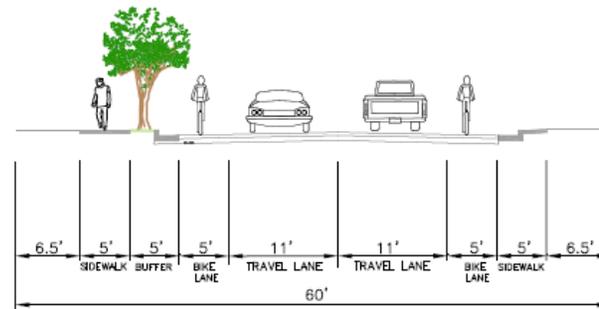


Exhibit 24: Kathryn Ave. Before and After



Kathryn Ave. looking west between San Pedro Dr. and San Mateo Blvd.

← Before

Narrow sidewalks without buffer; no bike lanes; on-street parking



← After

Textured/colored Festival street paving with bollards; bike lanes; wide sidewalks with landscape strip on one side; no on-street parking



4.4 Standard Trail Improvements

For 32 foot-wide (face-to-face) residential and local roadways, the only improvements are to make both sides of the street ADA compliant for pedestrians. Improvements include construction of wheel chair ramps at all four quadrants of all intersecting streets, construction of ADA-approved alley intersections, construction of 48” wide concrete sidewalks, and reconstruction of all private drive-pads to allow a maximum 2% cross-slope. Where necessary, obstructions will either be removed, or the sidewalk realigned to avoid the conflict.

ADA curb and driveway ramps are standard improvements in all of the trail concepts. Other improvements to consider for all of the concepts are trail signage with International District branding, way-finding (directional signage to trail destinations), street furniture (benches, trash receptacles, water fountains, bike racks, etc.), transit shelters, and artwork (Exhibit 25).



Exhibit 25: Wayfinding and Street Furniture



Pedestrian hybrid (HAWK) beacons are proposed for three pedestrian crossings where a traffic signal is not warranted but significant pedestrian crossings occur on medium speed, wide arterials (2009 MUTCD). An illustration of a pedestrian crossing is shown in Exhibit 25. HAWK signals have shown >95% yield effectiveness with a 29% reduction in total crashes and 69% reduction in pedestrian crashes. Proposed crossings include:

- Central Avenue between Espanola St. and San Pablo St.
- Central Avenue between Texas St. and Utah St.
- Central Avenue near George St. (flashing beacon on weekends only or during fairground events)
- Zuni Road between Pennsylvania St. and Dallas St.



Exhibit 26: Illustration of a HAWK signal with zig-zag crosswalk for Central Ave. between Utah St. and Texas St.

HAWK signal technical references:

- TechBrief, FHWA-HRT-10-045
<http://www.fhwa.dot.gov/publications/research/safety/10045/10045.pdf>
- Research Report, FHWA-HRT-10-042
<http://www.fhwa.dot.gov/publications/research/safety/10042/10042.pdf>
- Research Report, TCRP/NCHRP 112/562
http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_562.pdf





Copper Ave. looking west between Espanola St. and Louisiana Blvd.

←Before

No crosswalks, non-directional curb ramps, no pedestrian lighting, no bike route signage



←After

Bulb-outs, high visibility crosswalk near school, sharrow markings and signage, pedestrian lighting

Exhibit 27: Copper Ave. Before and After



Before



After



Kathryn looking west at Alvarado



Alvarado looking north at Kathryn



Alvarado looking north at Copper

Exhibit 28: Alvarado Intersections Before and After Illustrations



5.0 Cost Estimates

Trails concepts were used to develop specific pedestrian and bicycle projects. Costs were determined for individual projects by long block and short block as shown in Exhibit 29 below.

Exhibit 29: Project Cost Estimates							
Item	Description	Unit Cost	Long Blocks (625 ft.)	Blocks	Short Blocks (300 ft.)	Blocks	Total
Road Diet Streets							
Drop Lane:	Remove/Dispose Curb/Gutter	\$7.01 LF	\$4,620	16		0	\$73,920
	Install New Curb/Gutter	\$19.43 LF	\$13,270				\$212,320
	New 6 ft. Sidewalk	\$39.40 SY	\$16,420				\$262,720
	New Wheelchair Ramps	\$1,222 ea	\$2,440				\$39,040
	Removal/ Disposal Sidewalk	\$14.91 SY	\$6,210				\$99,360
	Saw Cut Pavement	\$2.36 LF	\$1,800				\$28,800
	Remove/Dispose Asphalt	\$6.10 SY	\$5,080				\$81,280
	Remove Material	\$8.87 CY	\$3,960				\$63,360
	Landscape Buffer (4ft. wide)	\$33.70 SY	\$9,000				\$144,000
	Irrigation	\$50/LF	\$36,000				\$576,000
	Micro-surfacing (OGFC)	\$3.67 SY	\$17,680				\$282,880
	Restriping Lanes/ 5 ft. Bike lanes	\$0.51 LF	\$19,070				\$31,520
Opposite Side:	Removal/ Disposal Sidewalk	\$14.91 SY	\$4,140	16		0	\$66,240
	New Wheelchair Ramps	\$1,222 ea	\$2,440				\$39,040
	New 6 ft. Sidewalk	\$39.40 SY	\$16,420				\$262,720



Item	Description	Unit Cost	Long Blocks (625 ft.)	Blocks	Short Blocks (300 ft.)	Blocks	Total
Other Streets							
ADA Compliance Only:	Remove/Dispose Sidewalk	\$14.91 SY	\$3,440	19	\$1,060	30	\$95,040
	New 4 ft Sidewalk	\$39.40 SY	\$7,720		\$4,140		\$262,600
	Remove/ Dispose Curb/ Gutter	\$7.01 LF	\$660		\$660		\$31,020
	New Wheelchair Ramps	\$1,222 ea	\$4,890		\$4,890		\$229,830
	New Drive pads	\$15.57 SY	\$22,230		\$4,810		\$557,050
Landscape Strip Behind Curb:	Remove/Dispose Sidewalk	\$14.91 SY	\$2,920	19	\$1,570	18	\$83,740
	New 4 ft. Sidewalk	\$39.40 SY	\$7,720		\$4,140		\$221,200
	Remove/Replace Soil	\$8.87 CY	\$1,070		\$570		\$30,590
	Add 4 ft. Landscape Strip	\$33.70 SY	\$6,610		\$3,540		\$189,310
	Irrigation	\$50 LF	\$31,250		\$15,000		\$863,750
Install Chicanes or 3-5 Bump-outs (4' / 2' x 20 ft.):	Remove/ Dispose Curb/Gutter	\$7.01 LF	\$1,980	18	\$1,420	24	\$69,720
	Saw Cut Pavement	\$2.36 LF	\$450		\$260		\$14,340
	Install New Curb/Gutter	\$19.43 LF	\$3,670		\$2,110		\$116,700
	Remove/ Dispose Sidewalk	\$14.91 SY	\$3,440		\$1,060		\$87,360
	New Wheelchair Ramps	\$1,222 ea	\$4,890		\$4,890		\$205,380
	New Drive pads	\$15.57 SY	\$22,230		\$4,810		\$515,580
	New 4 ft. Sidewalk	\$39.40 SY	\$7,720		\$4,140		\$221,200
	Import Material	\$9.97 CY	\$100		\$65		\$3,360
	Remove/ Disposal Asphalt	\$6,10 SY	\$310		\$200		\$10,380



Item	Description	Unit Cost	Long Blocks (625 ft.)		Short Blocks (300 ft.)		Total
Install Chicanes or 3-5 Bump-outs (4' / 2' x 20 ft.):	Decorative Concrete Paving, or	\$58.21 SY	\$2,980	15	\$1,940	10	\$64,100
	Landscaping w/Irrigation	\$50 LF	\$31,250	3	\$15,000	14	\$303,750
Sidewalk Other Side	New 4 ft. Sidewalk	\$39.40	\$8,500	6	\$5,100	26	\$183,600
Miscellaneous	Pedestrian Lighting	\$15,000 ea	-	27	-	51	\$1,170,000
	Bar Crosswalk/ Median Refuge	\$3,200 ea	-	9	-	4	\$41,600
	Pedestrian (e.g. HAWK) Signals	\$50,000 ea	-	-	-	6	\$300,000
	Signage	\$230 ea	-	70	-	67	\$30,510
	Transit Shelters	\$5,000 ea	-	13	-	-	\$ 65,000
	Bio-swales	Incl. w/ landscaping	-	35	-	34	Incl. w/ landscaping
				70		67	
Total							\$8,250,000

Bio-Swales in bulb-out
Photo credit: Watershed
Management Group (left)



Tight turning radii, bulb-outs, ADA ramps, continental crosswalk
Photo Credit: Albuquerque Alliance for Active Living (right)



6.0 Recommended Phasing

International Trail estimated total project costs are \$8.25 million (Exhibit 30). The proposed Zuni Road project is another \$2 million. Project phasing addresses intersections first along collector and arterial spines of the Trail where higher traffic creates most unsafe conditions; followed by residential routes to schools, health clinics, new housing areas, parks and other community facilities; and alternating between north-south and east-west routes. Trail projects include road diets (dropping lanes), landscape strips on one side, and bike lanes on collectors and arterials; bump-outs and chicanes on residential streets; pedestrian lighting, widened sidewalks, and ADA ramps/ drive-pads on all streets. Median refuges and HAWK signals are included at 3 mid-block crossings. No right-of-way acquisition is needed.

Federal funding is available for collector and arterial streets through Mid Region Council of Governments (MRCOG) transportation improvement program (TIP) process. Federal sources include: surface transportation program enhancement (STP-E) and congestion management/air quality funds and highway safety funds (HSIP). Local street projects can be funded by federal Safe Routes to School (SRTS) program or local General Obligation (GO bond) funds. ADA compliance projects should be funded by City of Albuquerque GRT maintenance and operations funds.



Utah St. looking south at Central Ave. illustrating bump-outs for on-street parking, street trees, bollards, and high visibility crosswalk



Espanola St. looking south at Copper Ave.



Exhibit 30: Recommended Phasing					
Trail Segments		Length	Destinations Served	Est. Cost	Source
12.	Louisiana Blvd Road Diet, Copper to Gibson	1.4 mi	Van Buren Middle School, Phil Chacon Park; C.C. Community Center; North-south trail spine	\$1,680,000	STP-E/CMAQ
13.	Kathryn Ave/ Southern Ave/ Trumbull Ave, San Mateo to Utah St.	1.6 mi	Van Buren Middle School; MRA designated streetscape project; East-west trail spine	\$1,210,000	STP-E/CMAQ
14.	San Pedro Street, Central to Gibson	1.5 mi	Wilson Middle School, Holy Ghost School, Library; North-south trail spine	\$1,320,000	STP-E/CMAQ
15.	Copper Avenue, Louisiana to Wyoming	1.95 mi	La Mesa Elementary School; East-west trail spine	\$1,080,000	STP-E/CMAQ
16.	Vermont Street/ Utah Street, Copper to Trumbull	0.83 mi	PB&J, health clinic and senior housing	\$ 530,000	GO Bonds; HSIP
17.	San Pablo St/ Espanola St, Copper to Southern	0.83 mi	East Central multi-center, PB&J, and new housing	\$ 580,000	GO Bonds; HSIP
18.	Georgia Street/ Trumbull Avenue	0.76 mi	Emerson Elementary School, John Carrillo Park	\$ 380,000	GO Bonds, SRTS
19.	Pennsylvania Street, Marquette to Southern	1.1 mi	Mesa Verde Park; Trumbull Park	\$ 390,000	GO Bonds; HSIP
20.	Ross/ Anderson Avenue, San Mateo to San Pedro	0.56 mi	Wilson Middle School and Park	\$ 340,000	GO Bonds, SRTS
21.	Alvarado Drive, Marquette to Ross	1.4 mi	Fox Memorial Park	\$ 740,000	GO Bonds
Zuni Trail Segment				\$8,250,000	
1.	Zuni Road Diet, Washington to Central	3 miles	Corridor study underway – East-west trail spine	\$2,000,000	STP-E/ CMAQ
Total Project		14 miles		\$10,250,000	

Notes: STP-E =enhancement; CMAQ =congestion mgt air quality; GO =general obligation bonds; HSIP=safety funds; SRTS=safe routes to school



Appendix: Meeting Comments

Four neighborhood meetings were held to gather feedback on the scoping report:

- South San Pedro, October 24, 2011 at Cesar Chavez Community Center
- Trumbull Village, November 2, 2011 at Cesar Chavez Community Center
- La Mesa, November 14, 2011 at Mesa Verde Community Center
- Fair West, November 21, 2011 at NM Expo African American Performing Arts Center.



The following is a summary of key concerns, questions and input provided by participants during these meetings by topic:

1. Lighting

- Desired throughout the trail, and in particular on Zuni Rd, Louisiana Blvd, Central Ave, San Pedro Dr and around the fairgrounds
- Adding lighting is a priority to achieve pedestrian safety at night
- San Pablo St lighting is a good example
- Solar and/or energy efficient lighting desired
- Especially necessary at bus stops

2. Landscaping

- Desired within the medians
- Would like it to be noticeable
- Low water, xeric, use of CPTED design standards
- Tree roots should not buckle sidewalks
- Should not block visibility of commercial properties or for drivers of motor vehicles

3. Pedestrian Activated Signals

- Desired on Central Ave, Zuni Rd, near fairgrounds and throughout the area
- Add ADA features (sound, Braille)
- How will these signals be enforced?

4. Crosswalks and traffic controls

- Cross walks desired on Louisiana Blvd
- Add reflective features to assist in night crossing at crosswalks (e.g. flashers)
- Marked crossings are desired
- Provide and/or lengthen the time allowed to cross at protected crossings
- Support for red light cameras at all key intersections and near schools



5. Medians/Pedestrian Refuges

- Desired on Louisiana Blvd and San Pedro Dr to provide pedestrian safety when crossing the street
- Public challenged in understanding zigzag median crossing proposed on Central Ave at Utah St; recommendation to add fencing to this crossing to decrease jaywalking potential

6. Bike Lanes

- Desire for colored lanes

7. Bump-Outs/ traffic circle

- May need a cross-through on bump-out for bikes bike trail/lane
- How will bump-outs interface with bike lanes?
- Concern for school bus and fire truck access next to traffic circle

8. Art

- Add lighting to art to make visible at night
- Make sure that art does not block pedestrian access; no art on the corner
- Make art porous if located in medians to ensure visibility of drivers

9. Festival Streets

- Concern about maintenance and ADA accessibility of brick paving
- Where will people park?
- Desire for festival street on Kathryn Ave and Copper Ave

10. Way Finding

- Important to brand neighborhoods and the district
- Desire to have distance markers, information along the trail, kiosks, smart technology, prescription trails
- Multilingual signs



11. Miscellaneous

- Add call boxes along trail to address safety concerns
- Remove overhead wires
- Bus lane on Central Ave desired
- Reduce speed on Central Ave and Zuni Rd
- Add benches on trail

12. Lane Reductions

- Concern about the impact on traffic

13. Segments of trail participants expressed a desire for prioritizing

- Louisiana Blvd, south of Trumbull Ave.
- San Pedro Dr, north of Central Ave
- All of Copper Ave
- Central Ave/Louisiana Blvd intersection
- Central Ave/San Pablo St Intersection
- Louisiana Blvd /Anderson Ave

