

ZUNI ROAD STUDY WASHINGTON STREET TO CENTRAL AVENUE CITY PROJECT NO. 592691

FINAL REPORT

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PREPARED FOR:



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DEVELOPMENT DIVISION

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THE CITY OF ALBUQUERQUE

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Executive Summary

The Zuni Road corridor from Washington Street to Central Avenue is a 2.9-mile long urban principal arterial located in the southeast quadrant of Albuquerque, New Mexico. Numerous concerns have been voiced by residents to City Councilor Rey Garduño about the safety of the corridor, particularly as it pertains to pedestrians and bicyclists. Zuni Road is shown as having on-street bike lanes in the future according to the Long-Range Bikeways Master Plan. The public has expressed a desire for bike lanes, but the existing roadway cross section and right-of-way leave no room for bike lanes.

The first public information meeting was held on February 9, 2011. The purpose of this meeting was to inform stakeholders and the public about the Zuni Road Study, gather concerns and comments from stakeholders, and solicit input from the general public regarding the Zuni Road corridor.

After studying the existing data, conducting a walking survey of the corridor, and considering stakeholder and public input, two preliminary alternatives were developed: a four-lane alternative with bike lanes and a "road diet" alternative with bike lanes. A road diet is a concept in which a street with four undivided lanes is converted into a street with a single lane in each direction and a center two-way left-turn lane or median. The remaining pavement width could then be devoted to on-street bicycle lanes.

The second public information meeting for the Zuni Road Study was held on May 4, 2011. The purpose of this meeting was to inform stakeholders and the public about the progress on the Zuni Road Study, to show them the two preliminary alternatives under consideration for Zuni, and to gather comments and answer questions from the public, particularly concerning the two alternatives under consideration.

A screening process was conducted after the second public information meeting. Through the screening process the four-lane alternative was eliminated from further study because it would involve major right-of-way impacts including relocations of businesses, it would be considerably more expensive to build than the road diet alternative, and it did not have support from stakeholders or the public. This decision was supported by analysis of projected year 2035 traffic volumes, which showed that from a corridor capacity standpoint a road diet on Zuni appears to be feasible. This analysis also assumed a roadway network in which one of the through lanes in each direction on Central Avenue parallel to Zuni would be converted into a bus-only lane, which is a proposal under consideration. However, to further determine whether a road diet is feasible on Zuni a detailed intersection level of service analysis would need to be done prior to moving forward with any design.

After the screening process the road diet was further refined to produce two new alternatives. Alternative 1A would accomplish the road diet by milling and overlaying the existing pavement and restriping it. The sidewalks would remain at their existing width (generally five feet) but the six-foot on-street bike lane would have a greater width (5.33 feet) off of the gutter pan than Alternative 1B. The cost estimate including design for Alternative 1A is approximately \$2 million.

Alternative 1B would accomplish the road diet by reconstructing the outside sidewalks and curbs as well as milling and overlaying the existing pavement and restriping it. Alternative 1B would build new six-foot





sidewalks but would have less of the six-foot bike lane (4.33 feet) off the gutter pan than Alternative 1A. The cost estimate including design for Alternative 1B is approximately \$5 million.

The third public information meeting for the Zuni Road Study was held on July 20, 2011. The purpose of the meeting was to review the activities of the Zuni Road Study, show the recommended alternative, and gather comments and answer questions from the public.

After detailed analysis of both alternatives, it is recommended that a more detailed intersection level of service analysis be conducted in order to determine if Zuni Road should be reconfigured to a three-lane roadway section as shown in Alternative 1A. The road diet could be achieved by milling and overlaying the entire width of the road and restriping the lanes. The typical section would consist of two 11-foot driving lanes, a 12-foot wide center median area that in most places would serve as a two-way left-turn lane, six-foot bike lanes and five-foot sidewalks. This section just fits into a 60-foot right-of-way, which is generally the right-of-way width along Zuni Road. Where additional right-of-way exists, the extra width could be devoted to wider sidewalks or to a landscape buffer area between the sidewalk and the bike lane. With further evaluation, mid-block pedestrian crossings could possibly be constructed at select locations between San Mateo Boulevard and Central Avenue based on pedestrian usage and spacing between existing protected pedestrian crossings at traffic signals. The photo in the Recommendations section of this report shows the results of a similar road diet project that was implemented on Indian School Road just east of Eubank Boulevard in Albuquerque, in 2004.

If the intersections along Zuni Road and Central Avenue can handle a modification to the Zuni Road cross section, the recommendation would be that Zuni Road between Washington Street and San Mateo Boulevard be modified from six to four driving lanes with the outside driving lanes restriped as bike lanes. Additionally, much of this stretch of Zuni Road is occupied by Highland High School on the north side, so in this segment of Zuni there are additional improvements that could be included:

- Lengthening the existing school speed zone to include the Adams Street intersection to the west and the Jackson Street intersection to the east. (Prior to design, all concerned parties including Albuquerque Public Schools, Highland High School, the Albuquerque Police Department, and the City should meet to discuss the extents of the school zone.)
- Funneling students to one designated crossing, most likely at the existing gate near the Monroe Street intersection. The existing striped crosswalk there would be eliminated and no new crosswalk would be striped.
- Enhancing the designated pedestrian crossing. Some existing landscaping in the median may need to be trimmed or replaced to provide adequate sight distance for pedestrians to see traffic coming from the west.
- Fencing the median between Jefferson and Truman streets, with openings only at Monroe and Jackson streets. This would involve closing the medians at Madison Place and Quincy Place, creating right-in/right-out access for those cul-de-sacs.

Features of Alternative 1A that could potentially improve safety are:

• the shared through/left-turn lanes would be eliminated and motorists turning left would have a dedicated lane in which to wait to make the turn





- opposing directions of traffic would be separated from each other by a 12-foot two-way left-turn lane or raised median, rather than the existing double yellow stripe
- sidewalks would be separated from the driving lanes by the new bike lanes
- pedestrians would have to cross fewer driving lanes on Zuni
- at all locations along Zuni pedestrians would have a refuge place between the opposing driving lanes, even if informal, to wait for a gap in traffic

Again, analysis of projected year 2035 traffic volumes show that from a corridor capacity standpoint a road diet on Zuni appears to be feasible; however, additional analysis will be required (a microsimulation of intersections) to determine if the intersection level of service will be adequate to handle a road diet. This type of analysis will also provide more information on whether a road diet along Zuni will be feasible for the foreseeable future and whether or not a design project should be developed.

Comments on the report were provided by APS and the City of Albuquerque's Traffic Engineering Division and are included in Appendix E. APS staff commented that they encourage the City of Albuquerque to provide flashing beacons, wider sidewalks and bicycle lanes, medians, curb bump outs, ladder crosswalks and fencing in selected medians, but that they were unable to participate in financing the public street upgrades. Traffic Engineering staff commented on the need for a microsimulation of intersection operations, emphasized the importance of not marking a crosswalk at Highland High School, brought up concerns of mid-block crosswalks not at side streets, warned against claiming that safety would be improved with the recommendations, stressed the importance of education and enforcement in improving safety, and cautioned against lengthening the school zone at Highland. These comments were addressed but did not result in a change to the conclusions or recommendations of the study.

As this study was concluding, within a three-week period in June and July of 2011 five crashes occurred at the intersection of Zuni Road/San Pedro Drive within a span of three weeks. The cause of each crash was studied carefully to determine if improvements could be made as part of a larger Zuni Road project that might reduce the occurrence of crashes at this intersection; however, the causes were found to be driver error or vehicle malfunction in each case. A memo summarizing these finding is attached in Appendix E.





1. INTRODUCTION

Zuni Road is located in the southeast quadrant of Albuquerque, New Mexico (Figure 1). Classified as a principal arterial, the road is 2.9 miles long and extends from Washington Street on the west to Central Avenue on the east. Figure 2 shows the project location within Albuquerque.

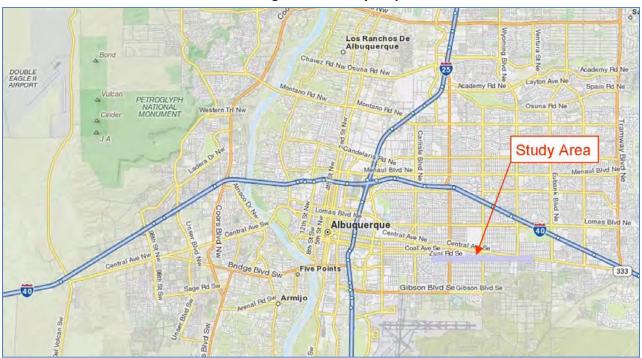
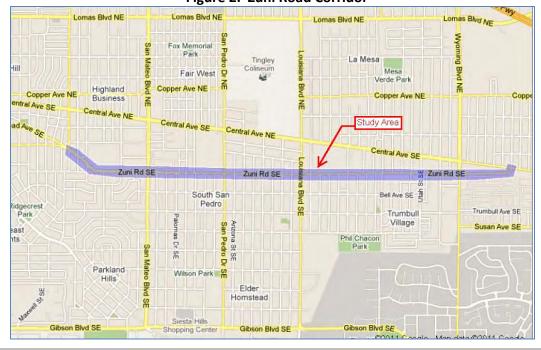


Figure 1. Vicinity Map







The purpose of this study is to evaluate the existing conditions of Zuni Road and develop and evaluate alternatives for safety improvements, primarily, pedestrian safety for the corridor.

2. STAKEHOLDER INVOLVEMENT

Stakeholders in the Zuni Road study were identified early on in the process and were kept apprised throughout the study. In addition to several City of Albuquerque departments, other stakeholders were:

- Area neighborhood associations
 - o Nob Hill
 - Highland Business
 - Fair West
 - o La Mesa
 - o South La Mesa
 - Southeast Heights
 - Parkland Hills
 - o South San Pedro
 - o Elder Homestead
 - o Trumbull Village
 - South Los Altos
- Albuquerque Public Schools (APS), including Highland High School which fronts Zuni Road and Emerson Elementary located a quarter mile south of Zuni
- Albuquerque Police Department (APD)
- The Mid-Region Council of Governments (MRCOG)
- Bernalillo County
- The International District Healthy Communities Coalition (IDHCC)
- Bernalillo County Place Matters (advocates for land use, environmental, and social policies)
- Action Communities for Health, Innovation, and Environmental Change (ACHIEVE)
- New Mexico Public Health
- Young Children's Health Center (part of the University of New Mexico Hospital)
- Endorphin Power Company transitional living dormitories
- Encino Gardens (US Department of Housing and Urban Development subsidized senior apartments)

STAKEHOLDER MEETINGS

A kick-off meeting for the study was held September 22, 2010. The purpose of this meeting was to introduce stakeholders to the study, explain the scope of the study, and obtain their preliminary input regarding the Zuni Road corridor. In attendance were City Councilor Rey Garduño and staff from the City Council, Municipal Development, Planning, and Traffic Engineering departments. Also in attendance were a lieutenant from APD, a member of IDHCC and consultants from ACHIEVE who were part of the City's International Community Trail plan. Several members of area neighborhood associations were invited and were not able to attend, but provided their comments after the meeting.



General comments from the kick-off meeting were:

- Zuni is highly congested
- The 35 mph speed limit should be assessed
- Mid-block crossing locations need to be identified
- The narrow right-of-way will limit the cross section that can be implemented
- Future bike lanes are shown on Zuni Road on the Long-Range Bikeway System Map
- Sidewalk conditions, driveways, and curb ramps need to be addressed
- Public input on the study will be of vital importance
- APD cited that the two main causes for crashes along Zuni are high speeds and traffic volumes. Many pedestrian crashes on Zuni involved alcohol and/or an intoxicated pedestrian stumbling into traffic and most crashes involving pedestrians were the fault of the pedestrian.
- The concept of a "road diet" was introduced, where the typical section would be modified to one lane of traffic in each direction with a two-way left-turn lane (or raised median) and bike lanes.
- Lighting on Zuni Road is deficient in some areas
- Bus stops on Central should be located near the places where Zuni promotes pedestrian crossings
- The intersection of Zuni and Pennsylvania should have a traffic signal
- Students cross at mid-block locations all along Zuni near Highland High School

City and consultant staff met with the Highland High School principal on January 18, 2011 to discuss the concerns and issues the school has with Zuni Road. Generally, they were:

- Students cross Zuni mid-block at many locations between Washington and San Mateo, and the
 intersections of Jackson Street and Truman Street have particularly high numbers of students
 crossing. Many students cross Zuni diagonally near Adams Street to reach the convenience store
 that is part of the gas station at that intersection. These crossings are all outside the school speed
 zone.
- There is a pedestrian gate in the fence near the striped crosswalk at Monroe Street but the City requested that the school lock the gate because they didn't want kids funneled to it. The gate could easily be reopened and the principal thinks it's a good location for a crosswalk.
- It may be a good idea to fence the medians like what has been done at Sandia and La Cueva high schools
- Most students take the bus to school: about 20 buses bring students
- Many students walk north to Central Avenue to their homes or to take the City bus

WALKING SURVEY

A walking survey was performed on January 25, 2011 and January 26, 2011. This survey included team members from the consultant, City staff members, and members of the community. Items of specific concern to the community members were pointed out and noted. Also, a video was taken of the corridor for future reference. Over the course of the two days, both the north side and the south side sidewalks of Zuni Road were walked for the entire three-mile corridor. Stakeholders were notified of the field surveys with an invitation that included a questionnaire regarding the stakeholder's concerns regarding Zuni Road. The invitation is included in Appendix A along with other notices to stakeholders and the public.



Highland High School dominates the north side of Zuni Road between Washington Street and San Mateo Boulevard, along with a handful of businesses. The south side of the street in this stretch is largely residential. Just east of San Mateo on the north side of Zuni is a John Brooks supermarket that is heavily used by neighborhood residents. The supermarket is located in a large corner strip mall and also has a bank, restaurants, and other small businesses at the northeast corner of Zuni and San Mateo. Continuing east along Zuni, small businesses and offices line the north side of the road while the south side has both small businesses and single- and multi-family residences.

Some of the observations from the walking survey are listed here:

- Many areas of the sidewalk have obstructions such as fire hydrants, light poles, and utility poles.
 The sidewalks are not "accessible" per Americans with Disabilities Act (ADA) guidelines.
- Many driveways are no longer used but have steep cross slopes across the sidewalks that may create difficulties for pedestrians, especially those in wheelchairs.
- Students cross Zuni to reach local schools and these crossing locations need to be made as safe as
 possible.
- Many pedestrians cross Zuni Road at mid-block locations.
- Many residents along Zuni are dependent on walking, bicycling, or transit.
- Some parts of Zuni are not lighted well at night.
- Survey participants expressed that they thought traffic is too fast on Zuni, and residents would like to see the traffic slowed down.
- The bus stops on Zuni are very basic; residents would like to see shelters, lighting, and other amenities. Because of space constraints, the bus stop benches often obstruct the sidewalk.
- A major overhead electric line parallels Zuni along the south sidewalk.
- Along much of Zuni Road on both the north and south sides, buildings, walls, and fences are directly
 against the back of the sidewalk.
- South (west) of Central Avenue on the north side of Zuni Road there is no sidewalk for about 150 feet. This is the side of Zuni that has the crosswalk across Central (the side of Zuni Road with the sidewalk does not have a crosswalk across Central for traffic operations purposes).
- Three locations between Chama and Pennsylvania streets have wheelchair ramps for perpendicular crossing of Zuni Road.

3. PUBLIC MEETING #1

The first public meeting for the Zuni Road Study was held on February 9, 2011. The meeting was held at Highland High School and was attended by approximately 22 people, including area residents, City of Albuquerque staff, and District 6 City Councilor Rey Garduño. A flyer and other materials from this meeting are included in Appendix A.

The purpose of the meeting was to:

- Inform stakeholders and the public about the Zuni Road Study
- Gather concerns and comments from stakeholders and the general public regarding the Zuni Road corridor.





The meeting began with a brief open house that included displays for review along with the project team representatives to answer questions. The display information included:

- Roll plots of an aerial map of Zuni Road from Washington to Central. The plots were displayed flat on tables so members of the public could mark areas of concern directly on the maps.
- A display showing pedestrian crash locations and number of crashes along the Zuni corridor.
- Two displays listing concerns that were brought up during the walking survey with space to write additional concerns.

A slide show presentation was provided and covered the study process and schedule, work completed to date, and a discussion of observations from the walking survey. A copy of the slide show is presented in Appendix A. Following the presentation, the meeting was opened up to questions and comments. The questions and comments are included in their entirety in Appendix A of this report. A general summary of comments made by the public at the meeting is presented below:

- People drive too fast on Zuni
- There should be more traffic signals on Zuni
- There should be more street lights on Zuni
- Driving in the left lane is not safe/there should be left-turn lanes
- Zuni does not need six lanes between Washington and San Mateo
- The sidewalks need to be widened and improved
- The lanes on Zuni at Wyoming are too narrow and are dangerous
- Having medians would be safer
- Pedestrians need safer places to cross
- Zuni is dangerous for drivers and pedestrians
- Need more protection for Highland students crossing Zuni
- Some pedestrian signals don't work or don't provide enough walk time
- Unused driveways should be closed
- Crossing mid-block would be safer than crossing at the intersections
- Bike lanes are needed
- Don't add capacity to Zuni
- The bus stops all need shelters/more bus service is needed along Zuni
- Landscaping is needed along Zuni





4. DATA COLLECTION

A major task of this study was to gather data on the existing conditions along the Zuni Corridor. This encompassed reviewing existing documentation and conducting field surveys. Collected data is included in Appendix B. The data collection effort is summarized in the sections below.

EXISTING STUDIES

Zuni Road between Louisiana and Wyoming boulevards is part of the City of Albuquerque's Trumbull Neighborhood Sector Development Plan, approved in 1981. In respect to pedestrian facilities, this plan states that Zuni Road should have landscaping and pedestrian-scaled amenities to increase neighborhood identity.

Zuni Road west of San Mateo is part of the Nob Hill Highland Sector Development Plan, which was adopted in 2007. Policies in this sector plan related to pedestrian circulation state that, "The City shall improve the ease and safety of pedestrian crossings at principal arterials (Central, Lead, Coal and Zuni)..." and that "the City shall improve sidewalks and enhance pedestrian mobility." This plan also recommends that the proposed bike lanes on Zuni be completed to provide safe east-west movement parallel to Central Avenue. In addition, the plan recommends streetscape improvements to Zuni such as medians and landscaping to enhance the pedestrian experience.

Zuni Road between San Mateo Boulevard and Utah Street is shown as a route on the International Community Trail map. As part of the International Community Trail study Action Communities for Health, Innovation, and Environmental Change (ACHIEVE) requested public transportation funding to repair streets such as Zuni that are in the International Community, to

- Widen the sidewalks and level the walking surface
- Move obstacles out of the pedestrian path on sidewalks
- Plant trees between the sidewalk and the curb
- Provide marked crosswalks at busy intersections
- Install bulb-outs on corners with parking lanes
- Install four-way stop signs at intersections around the schools
- Provide pedestrian-scale street lights

The City of Albuquerque is currently developing a new sector plan called the International District Sector Development Plan, which includes Zuni Road between San Mateo and Wyoming boulevards. There has been close coordination between the on-going sector plan and the Zuni Road study.

PEDESTRIAN FACILITIES

Zuni Road has sidewalks on both side of the road for its entirety, with the exception of a stretch about 150-feet long on the north side of Zuni just west of Central Avenue. The sidewalks are generally five-feet wide on both sides. Protected crossings for pedestrians, which include marked crosswalks and pedestrian "Walk/Don't Walk" signal phases, are provided at the traffic signals at the following locations:





Table 1. Locations of Existing Signalized Pedestrian Crossings

Location	Distance to Next Crossing to East
Washington Street	0.60 miles
San Mateo Boulevard	0.25 miles
Alvarado Street	0.25 miles
San Pedro Drive	0.50 miles
Louisiana Boulevard	0.30 miles
San Pablo Street	0.48 miles
Utah Street	0.25 miles
Wyoming Boulevard	0.36 miles
Central Avenue	

The push button style and placement does not meet current accessibility guidelines at most locations at the signalized intersections. In many places, the crosswalk striping is in poor condition.

In addition to the protected crossings at the signalized intersections, the stretch of Zuni Road between Washington Street and San Mateo Boulevard has a raised median about 18-feet wide. While not an ideal situation, this median at least serves as a place for pedestrians crossing mid-block to stop and wait between opposing directions of traffic. Also in this section of Zuni is a marked and signed crosswalk at the Monroe Street intersection, intended for student crossing. At three locations along Zuni, just east of Espanola, Grove, and Dallas streets, mid-block curb ramps have been constructed to facilitate perpendicular crossing of Zuni Road. No other signing or marking is provided at these crossings.

Along Zuni Road the accessible route is in areas obstructed by traffic signal equipment, utility poles, fire hydrants, bus benches, steep driveways, and other obstacles. In some places barbed wire fencing from the adjacent property protrudes over the sidewalk. Curb ramps meet current accessibility guidelines in some but not all locations.

The City's DPM specifies six-foot sidewalks on both sides of arterial streets.





RIGHT-OF-WAY

Table 2 shows an estimate of the existing right-of-way widths along Zuni Road. These measurements were obtained from City Geographic Information Systems (GIS) data.

Table 2. Estimated Existing Right-of-Way Widths (in feet) on Zuni Road

	Right-of-Way Width	Right-of-Way Width				
Zuni Rd at	West of Intersection	East of Intersection				
Washington St	125	166				
Adams St	125	130				
Jefferson St	100	100				
Monroe St	100	100				
Jackson St	96	96				
San Mateo Blvd	115	130				
Alvarado St	63	60				
San Pedro Dr	74	72				
Louisiana Blvd	70	70				
San Pablo St	60	60				
Pennsylvania St	62	62				
Texas St	60	60				
Wyoming Blvd	62	62				
Central Ave	100	Road ends				

A nominal right-of-way width of 100 feet will control the corridor between Washington Street and San Mateo Boulevard. A nominal right-of-way width of 60 feet will control the options for the typical section through the corridor east of San Mateo.

The City's DPM specifies a 124-foot right-of-way width for principal arterials in established and redeveloping areas, plus an additional 12 feet of right-of-way for bike lanes.

OVERHEAD UTILITIES

Overhead utility lines parallel both sides of Zuni Road. In some areas the poles are located within the sidewalks and obstruct the accessible route. In addition to wooden utility poles, an overhead utility transmission line is located on the south side of Zuni from San Mateo to Wyoming Boulevard. The large steel poles that comprise this line are generally located just behind the sidewalk along the south side, and in many places are behind walls or fences, presumably within easements on private property.





TRAFFIC COUNTS

Average weekday daily traffic (AWDT) volumes for Zuni Road from 2005 to 2009 are summarized in Table 3 below. Table 4 shows hourly traffic volumes on Zuni Road obtained from MRCOG that were counted in various years over the past decade. These are presented in entirety in Appendix B. Traffic has not been increasing on Zuni in the last ten years, and in fact the AWDTs have been steadily declining.

Table 3. AWDTs on Zuni Road, 2005 - 2009

	Washington	San Mateo -	San Pedro -	Louisiana -	Pennsylvania -	Wyoming -
	- San Mateo	San Pedro	Louisiana	Pennsylvania	Wyoming	Central
2009	19,000	18,500	18,500	21,200	16,800	9,200
2008	19,400	19,100	18,900	21,700	15,700	9,400
2007	22,000	17,100	18,100	16,100	15,900	10,400
2006	22,300	17,100	18,300	16,300	16,100	10,500
2005	22,500	17,300	18,500	16,400	18,200	10,600

Table 4. Hourly Approach and Departure Volumes on Zuni Road, 2001 - 2009

		WASHINGTON			SAN MATEO			ALVARADO			SAN PEDRO			LOUISIANA			SAN PABLO			UTAH			WYOMING			CENTRAL
AM PEAK	WESTBOUND	4	533	692	4	787	794	4	795	901	4	929	733	4	785	972	4	932	847	4	766	518	4	332	299	4
AM PEAK	EASTBOUND	-	519	656	-	613	535	-	549	646	-	593	452	→	432	487	-	477	354	-	349	336	-	186	301	-
PM PEAK	WESTBOUND	4	694	843	4	955	869	4	852	1024	4	968	813	4	703	853	4	794	961	4	913	453	4	244	302	4
PM PEAK	EASTBOUND	-	937	1182	=	1217	835	-	862	1135	-	1103	905	4	1003	1190	-	1159	669	•	657	701	→	485	200	

CRASH REPORTS

Crash records for the time period of January 1, 2008 through November 8, 2010 were obtained from APD. Crash rates for the major intersections along Zuni Road were calculated for the nearly three years of data provided. Crashes were separated by property damage only (PDO), injury, and fatal. Using daily traffic flows provided by MRCOG, rates per million vehicles entering the intersection (PMVE) were developed for injury/fatal crashes and total crashes, as shown in Table 5. The crash data and calculations are included in Appendix C.

Table 5. Number of Crashes and Rates for Major Intersections on Zuni Road (2008 through 11/08/10)

able 3. Hamber of crashes and nates for major intersections on Lam noda (2000 timoda). 117 00,												
Cross Street	PDO	Injury	Fatal	Vehicles Entering	Injury/Fatal Rate	Total Crash Rate						
San Mateo Boulevard	114	26	0	41,881,100	0.62 PMVE	3.34 PMVE						
San Pedro Drive	45	14	0	32,537,050	0.43 PMVE	1.81 PMVE						
Louisiana Boulevard	50	23	0	40,570,900	0.57 PMVE	1.80 PMVE						
Wyoming Boulevard	57	22	0	34,609,300	0.64 PMVE	2.28 PMVE						
Central Avenue	26	13	0	35,667,850	0.36 PMVE	1.09 PMVE						





As a comparison, MRCOG reported an average intersection total crash rate for the Albuquerque Metropolitan Planning Area (AMPA) of 1.27 PMVE and an average injury/fatal crash rate for the AMPA of 0.41 PMVE. It should be noted that the AMPA average rates include both urban and rural areas, and the average AMPA rates are for the years 2004-2008, the most recent statistics available.

Although a crash rate could not be determined for the intersection of Zuni and Pennsylvania because average daily traffic volumes were not available on that portion of Pennsylvania, it is noteworthy that this intersection had 25 injury crashes and one fatal crash in the study period – more than what was observed at any of the major intersections shown in Table 5, with the exception of San Mateo, with which it was equal. This is a stop-controlled intersection with free-flow traffic on the Zuni approaches.

Pedestrian and bicyclist crash locations are shown in Table 6. The two traffic-related fatalities on the Zuni Road corridor during the study period were a pedestrian and a bicyclist. The pedestrian fatality was an incident that in part prompted this study and involved the death of a three-year old girl in August of 2010 near the intersection of Zuni and Indiana. The girl stepped into the driving lanes of Zuni Road while some family members were fighting nearby, and was struck by a car driving on Zuni. The driver was not cited in the incident. Speculation remains as to whether the crash could have been avoided if street lighting had been better at the intersection. The other fatality occurred near the intersection of Zuni and Pennsylvania. A bicyclist was struck by a hit-and-run driver. A good Samaritan stopped to help the bicyclist who was left in the road and a driver on Zuni who stated that he did not see them hit both of them, killing the bicyclist and injuring the person helping him.

Table 6. Locations of Pedestrian and Bicyclist Crashes on Zuni Road (2008 through 11/08/10)

Cross Street	Ped Crashes	Bike Crashes
San Mateo Boulevard	0	2
Palomas Drive	0	1
Alvarado Drive	1	0
Cardenas Drive	1	0
San Pedro Drive	0	2
Arizona Street	1	0
California Street	0	1
Florida Street	1	0
Indiana Street	3 (one fatality)	1
Louisiana Boulevard	0	1
Grove Street	1	0
Charleston Street	1	0
Pennsylvania Street	4	1 (fatality)
Virginia Street	1	0





PEDESTRIAN AND BICYCLIST COUNTS

MRCOG provided pedestrian and bicyclist counts at the major Zuni Road intersections that were collected between the years 2003 and 2008; they are summarized in Table 7. The counts were collected for three hours during the morning, noon, and evening peak periods.

Table 7. Pedestrian and Bicyclists Counts on Zuni Road (MRCOG)

					PEDE	STRIA	N COL	INTS										
		Morning Count				Mid-Day Count 11:00 AM-2:00 PM			Evening Count									
		6:45-9:45 AM			3:00-6:00 PM													
Intersection	Month Counted	Year Counted	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Total AM Count	Total Mid- Day Count	Total PM Count	Grand Total
ZUNI RD. & WASHINGTON ST.	August	2008	3	2	2	1	6	8	6	4	2	4	7	12	8	24	25	57
ZUNI RD. & WASHINGTON ST.	September	2006	2	4	6	5	2	6	2	5	7	3	3	2	17	15	15	47
ZUNI RD. & SAN MATEO BLVD.	May	2008	24	10	1	3	18	16	7	2	12	15	10	1	38	43	38	119
ZUNI RD. & ALVARADO DR.	August	2003	8	3	7	7	4	6	4	8	2	2	19	12	25	22	35	82
ZUNI RD. & SAN PEDRO DR.	August	2005	3	5	3	8	13	4	11	7	10	6	12	8	19	35	36	90
ZUNI RD. & LOUISIANA BLVD.	March	2006	27	7	10	18	21	14	10	22	32	20	17	26	62	67	95	224
ZUNI RD. & SAN PABLO	October	2004	35	11	25	25	17	22	13	13	25	43	20	20	96	65	108	269
ZUNI RD. & UTAH ST.	November	2005	15	9	7	5	5	12	3	7	11	18	11	10	36	27	50	113
ZUNI RD. & WYOMING BLVD.	September	2005	3	3	3	4	7	1	6	2	2	3	3	0	13	16	8	37
ZUNI RD. & WYOMING BLVD.	March	2003	3	5	6	3	9	3	4	8	11	10	10	16	17	24	47	88
CENTRAL AVE. & ZUNI RD.	April	2003	0	0	1	7	0	0	9	11	0	0	7	6	8	20	13	41
/																		

					BIC	YCLE	COUN	TS										
		Morning Count 6:45-9:45 AM			Mid-Day Count 11:00 AM-2:00 PM				Evening Count 3:00-6:00 PM							-7		
Intersection	Month Counted	Year Counted	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Total AM Count	Total Mid- Day Count	Total PM Count	Grand
ZUNI RD. & WASHINGTON ST.	August	2008	9	13	2	4	3	7	0	6	13	11	7	4	28	16	35	79
ZUNI RD. & WASHINGTON ST.	September	2006	5	9	3	1	5	0	2	0	10	8	2	4	18	7	24	49
ZUNI RD. & SAN MATEO BLVD.	May	2008	6	2	1	4	8	4	1	2	13	6	0	1	13	15	20	48
ZUNI RD. & ALVARADO DR.	August	2003	7	0	3	1	3	5	6	4	5	7	3	6	11	18	21	50
ZUNI RD. & SAN PEDRO DR.	August	2005	3	2	4	1	2	1	2	2	3	3	5	0	10	7	11	28
ZUNI RD. & LOUISIANA BLVD.	March	2006	1	1	2	1	0	1	1	1	3	0	8	1	5	3	12	20
ZUNI RD. & SAN PABLO	October	2004	1	3	2	2	6	1	1	1	5	5	4	4	8	9	18	35
ZUNI RD. & UTAH ST.	November	2005	1	1	0	1	0	0	2	0	4	3	3	0	3	2	10	15
ZUNI RD. & WYOMING BLVD.	September	2005	1.	1	2	1	0	1	2	2	0	2	1	0	5	5	3	13
ZUNI RD. & WYOMING BLVD.	March	2003	3	0	1	0	0	1	2	0.	2	4	10	6	4	3	22	29
CENTRAL AVE. & ZUNI RD.	April	2003	0	0	7	2	0	0	8	3	0	0	7	4	9	11	11	31





DRAINAGE

A 100-year floodplain, or the area with a flood having a one percent chance of being equaled or exceeded every year, is confined to Zuni Boulevard for the majority of its length. The section from Central to Wyoming is not within a floodplain and another short section between Charleston Street and Utah Street is also not within a floodplain (see Figure 3). From Washington to Utah, Zuni is within a 100-year floodplain labeled as Zone A on the FIRM maps published by FEMA. Zone A is defined as having no base flood elevation determined.

Storm drain under Zuni Road from Central to Pennsylvania ranges in size from 42 to 54 inches. Curb inlets are spaced at regular intervals in this length and pick up street flows from Zuni. A small section of 60-inch storm drain is located in Zuni between Mesilla and Alcazar with inlets to collect street flows. Another small section of 48-inch storm drain is located between Arizona and San Pedro with inlets to collect the Zuni street flows. Continuing west from San Pedro there is no storm drain until just east of San Mateo. A storm drain ranging in size from 24 to 36 inches is located in Zuni with inlets to pick up street flows. This storm drain connects to the existing storm drain in San Mateo and the flows are conveyed north. Storm drain is then picked up again at Jefferson Street near Highland High School and ranges in size from 30 to 54 inches. This storm drain continues west in Lead Avenue.

ZONE X

ZONE A

Figure 3. FIRM Map Covering the Zuni Road Study Area (35001C0358G)





TRANSIT BUS STOPS AND SHELTERS

The City of Albuquerque's transit system, ABQ Ride, operates Bus Route 97 up and down Zuni Road as shown in Figure 4. The route originates downtown, heads east along Coal Avenue, continues on Zuni eastbound to Central, turns west onto Central Avenue, turns south onto Wyoming Boulevard, and then turns to go westbound on Zuni Road, continuing westbound on Lead Avenue back to downtown. The route operates at one-hour headways only on weekdays between about 6 am and 7 pm. Along Zuni, transfers can be made at San Mateo, San Pedro, Louisiana, Wyoming, and Central onto other ABQ Ride routes. Central Avenue, which runs at an angle to Zuni Road and is located anywhere from zero to four blocks from Zuni, has more frequent service as well as service on weekends. Many bus riders cross Zuni to get from neighborhoods in the Southeast Heights to bus stops on Central.

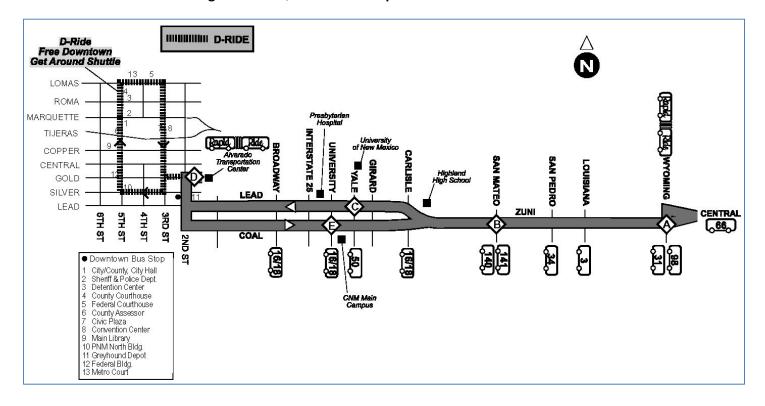


Figure 4. ABQ Ride Route Map for Route 97 – Zuni Road

Bus stops on Zuni Road are located on the north and south sides of the street near Adams Street, San Mateo Boulevard, Alvarado Street, San Pedro Drive, Louisiana Boulevard, San Pablo Street, and Utah Street. Because Route 97 only stops on Zuni in the eastbound direction east of Wyoming, there is only a stop on the south side of Zuni Road east of Wyoming. Of the 15 bus stops on Zuni road, only the stop in the westbound direction near Adams Street has a bus shelter and trash can. All other stops on Zuni have signs and a bench. ABQ Ride has no bus pullouts on Zuni Road.





BICYCLE FACILITIES

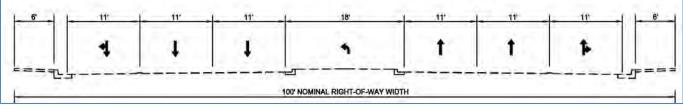
Zuni Road does not currently have any bicycle facilities. Bicyclists wishing to use Zuni now ride in the traffic lanes or on the sidewalks. All of Zuni Road is shown on the Long Range Bikeway System Map (MRCOG, June 30, 2007) as having proposed bike lanes. Connecting facilities shown on the Long-Range Bikeway System Map are proposed bike lanes on Lead and Coal avenues (currently under construction), proposed bike lanes on Washington Street heading north from Zuni, proposed bike lanes on San Pedro heading north from Zuni and existing bike lanes on San Pedro heading south from Zuni, and proposed bike lanes on both Louisiana and Wyoming heading south from Zuni. Additionally, the Long-Range Bikeway System Map shows a proposed bike route on Valverde heading south from Zuni, an existing bike route heading north from Zuni and a proposed bike route heading north and south from Zuni on both Alcazar and Pennsylvania, and a proposed bike route heading north from Zuni on General Chennault Street.

The City's DPM is ambiguous about bike lane widths. In one section it specifies a six-foot minimum bike lane for principal arterials with a posted speed of 35 mph, with the width being measured from the gutter edge to the lane stripe. On a retrofit of an existing roadway where right-of-way is limited, a wide curb lane, 16 feet from lane stripe to flowline, is recommended. In order to implement wide curb lanes, inner travel lane widths may be reduced within acceptable AASHTO guidelines. In another section of the DPM, the minimum width for a bike lane on a roadway with a posted speed of 35 mph or less is specified as four feet, measured from painted edgeline to edge of gutter. Here again the DPM specifies that bike lanes may be implemented on existing roadways by reducing travel lane and median widths within acceptable City guidelines, as part of restriping, resurfacing, or rehabilitation projects. Narrower bike lanes may be considered where the inclusion of bike lanes in desirable, but standard widths are not feasible.

TYPICAL ROADWAY SECTION

Zuni Road has a posted speed limit of 35 mph. The existing Zuni Road typical section from Washington Street to San Mateo Boulevard is shown in Figure 5. The section provides sidewalks on both sides, with three driving lanes in each direction. An 18-foot wide median separates opposing directions of traffic and also provides space for left-turn lanes at side streets.

Figure 5. Zuni Road Existing Typical Section, Washington Street to San Mateo Boulevard



The existing Zuni Road typical section from San Mateo Boulevard to Wyoming Boulevard is shown in Figure 6. The section provides sidewalks on both sides, with two driving lanes in each direction. Only the double yellow stripe separates opposing directions of traffic.





Figure 6. Zuni Road Existing Typical Section, San Mateo Boulevard to Wyoming Boulevard

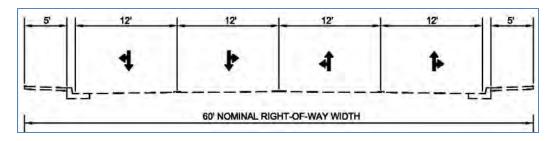


Figure 7 shows the existing Zuni Road typical section from Wyoming Boulevard to Central Avenue. The section provides sidewalks on both sides (although Zuni has no sidewalk on the north side from Central Avenue for 150 feet west) with two eastbound driving lanes and one westbound driving lane. A two-way left-turn lane separates opposing directions of traffic.

Figure 7. Zuni Road Existing Typical Section, Wyoming Boulevard to Central Avenue

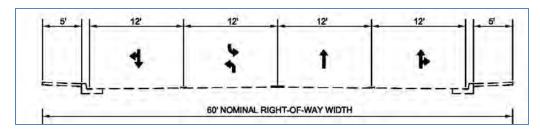


Table 8 below summarizes the existing pavement widths on Zuni Road.

Table 8. Existing Pavement Widths on Zuni Road

Zuni Rd at	WB west of intersection	EB west of intersection	WB east of intersection	EB east of intersection
Washington	33	43	43	33
Adams	32	44	44	32
Jefferson	43	32	43	32
Monroe	33	33	44	33
Jackson	33	44	44	33
San Mateo	33	44	50	36
Alvarado	22	22	22	22
San Pedro	22	33	33	22
Louisiana	20	33	33	22
San Pablo	22	22	22	22
Pennsylvania	22	22	22	22
Texas	22	22	22	22
Wyoming	18	28	22	22
Central	17	48	Road ends	Road ends

Data regarding the existing pavement section and conditions on Zuni Road would be obtained if and when a build alternative proceeds into final design.





ROADWAY LIGHTING

Maps showing the locations and types of existing roadway lighting along Zuni were obtained from the City of Albuquerque's Traffic Engineering Division. From Washington Street to just east of San Mateo Boulevard there is staggered 250 watt (W) lighting on either side of Zuni. East to Wyoming, luminaires are either 250 W or 400 W and are generally only on the south side of Zuni Road on one corner at the side street intersections. Additional lighting is located on both sides of the street at the San Pedro and Louisiana intersections. Between Wyoming and Central street lights are more widely spaced and 175 or 100 W. According to the City's DPM, the City's policy for lighting on arterial streets is that they be lit to the standards of the Illuminating Engineering Society.





5. PROPOSED IMPROVEMENTS

The scope of the Zuni Road study involved developing and evaluating two build alternatives for Zuni Road. Because Zuni is shown in the Long-Range Bikeway System Map as a location for proposed bike lanes, both alternatives had to include on-street bike lanes. The sections below describe the alternatives that were developed.

ALTERNATIVE 1 - "ROAD DIET"

A road diet involves narrowing or eliminating travel lanes on a roadway in an effort to make more room for pedestrians and bicyclists. The Zuni Road road diet would convert the four-lane undivided road into three lanes – two through lanes plus a center two-way left turn lane or median. Road diets have the potential to benefit drivers, pedestrians, and bicyclists. On a four-lane street, speeds can vary between lanes, and drivers must slow, stop, or change lanes when a vehicle is stopped in the inside through lane waiting to make a left turn (because Zuni Road has many driveways and side streets, this is a frequent occurrence). On streets with two through lanes and a center turn lane, drivers' speeds are limited by the speed of the lead vehicle in the through lane, and through vehicles are separated from left-turning vehicles. Accordingly, road diets may reduce vehicle speeds and vehicle interactions, which could potentially reduce the number and severity of vehicle –to-vehicle crashes. Road diets can help pedestrians by creating fewer lanes of traffic to cross and by reducing vehicle speeds. Finally, the road diet would benefit bicyclists by providing dedicated bike lanes, where now, bicyclists drive in a narrow shared lane with traffic or on the sidewalks.

According to the Federal Highway Administration's (FHWA) *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations* (September, 2005), a two-lane road with an ADT greater than 15,000 vpd and a speed limit less than or equal to 30 mph may be a candidate site for a marked crosswalk. On a road with the same daily traffic volume and cross section but a speed limit of 35 mph it is noted that a "possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements." For roads with an ADT greater than 15,000 vpd and four or more lanes, with or without a raised median, the document states that "marked crosswalks alone are insufficient, since pedestrian crash risk may be increased by providing marked crosswalks alone." Accordingly, a marked midblock crosswalk could be recommended if Zuni were reduced to two lanes and if the speed limit were reduced to 30 mph, but would not be recommended if Zuni has four lanes or if the speed limit remains at 35 mph.

The road diet, or Alternative 1 in this study, would consist of two 11-foot driving lanes, a 12-foot wide center median area that could be raised or flush with a two-way left-turn lane, six-foot bike lanes and six-foot sidewalks. This section just fits into a 60-foot right-of-way, which is generally the right-of-way width along Zuni Road. Where additional right-of-way exists, the extra width could be devoted to wider sidewalks or to a landscape buffer area between the sidewalk and the bike lane. Figure 8 shows the proposed typical section.





6' 11' 12' 11' 6' SWALK

BIKE DRIVING MEDIAN/TWLTL DRIVING BIKE LANE

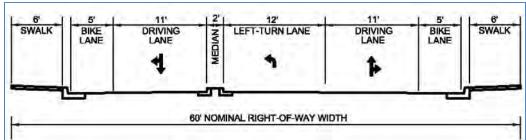
LANE

60' NOMINAL RIGHT-OF-WAY WIDTH

Figure 8. Alternative 1 (Road Diet) Typical Section

Where Zuni Road intersects major streets, the typical section would look like what is shown in Figure 9. In order to provide a raised median between the left-turn lane and the opposing through lane, the bike lanes on each side would need to be reduced to five feet to stay within a 60-foot right-of-way width.

Figure 9. Alternative 1 (Road Diet) Typical Section at Major Intersections



Mid-block pedestrian crossings could potentially be provided along Zuni Road. In order to create a maximum out-of-direction length of approximately two blocks one-way (one-eighth of a mile) for crossing pedestrians, the mid-block crossings are proposed to be placed at the locations listed below, and as shown in Figures 10 and 11. The potential to incorporate these crossings would be finalized if and when the project goes to design and would depend on field conditions as well as pedestrian paths.

- West of San Mateo near the Madeira and Palomas intersections, in front of the John Brooks supermarket shopping center. This location was cited by many residents as a very high volume pedestrian crossing for residents accessing the businesses at the shopping center
- Near Georgia Street, about halfway between the existing traffic signals at San Pedro Drive and Louisiana Boulevard. This location, approximately halfway between the San Pedro and Louisiana signals (a distance of one-half mile), would be near the Georgia Street intersection – residents cited that the intersection is an "unofficial" school crossing.
- Near Pennsylvania Street about halfway between the existing traffic signals at San Pablo Street and Utah Street. In place now in this area are wheelchair ramps lined up across Zuni near the Grove and Dallas Street intersections to allow perpendicular crossing of Zuni, indicating that these are two places where the provision for mid-block crossing has been requested by citizens in the past.





Figure 10. Possible Locations for Mid-Block Pedestrian Crossings – West Half of Zuni Road







Figure 11. Possible Locations for Mid-Block Pedestrian Crossings – East Half of Zuni Road







 At a point about halfway between the existing traffic signals at Wyoming Boulevard and Central Avenue. Due to signal timing, there is only one crosswalk across Central, across the west leg, so pedestrians from the westbound Central bus routes will likely be on the north side of Zuni.
 Conversely, all of the homes in this stretch are on the south side of Zuni, making a mid-block crossing in this area useful.

Per the FHWA recommendations for uncontrolled midblock crossing locations, the mid-block pedestrian crossings would have striped crosswalks and would be signed in advance and at the crossing. Pedestrian crossing warning signs could be made more visible, if desired, with the use of rectangular rapid-flash beacons. The angled refuge in the median directs the pedestrian toward oncoming traffic for a better view. The typical section at the mid-block crossing would look like what is shown in Figure 8. A plan view of an example mid-block crossing is shown in Figure 12 below.

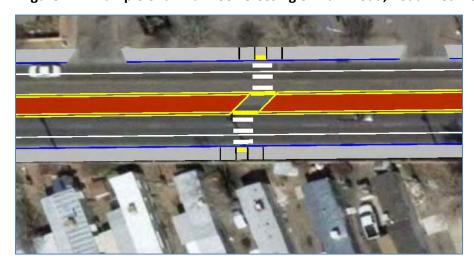


Figure 12. Example of a Mid-Block Crossing on Zuni Road, Road Diet Alternative

Alternative 1, the road diet, is only being considered for Zuni Road between San Mateo Boulevard and Central Avenue. Between Washington Street and San Mateo Boulevard, where there is an existing right-of-way width of 100 feet or more and there are already three driving lanes in each direction, the road diet is not being considered as an alternative. This stretch of Zuni is described in more detail later in the report.

ALTERNATIVE 2 – FOUR LANES

The second alternative under consideration for Zuni Road would leave the four-lane undivided roadway section, add on-street bike lanes in accordance with the Long-Range Bikeway System Map, and widen the sidewalks to six feet. Alternative 2 would benefit pedestrians by widening the sidewalks and would benefit bicyclists by providing dedicated bike lanes, where now, bicyclists ride in a narrow shared lane with traffic or on the sidewalks. Alternative 2 would not change conditions for motorists.

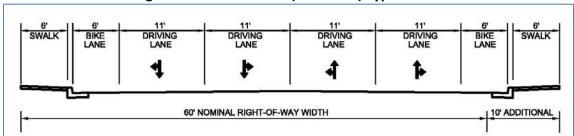
As stated before, according to FHWA's *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations* (September, 2005), marked crosswalks at uncontrolled locations would not be recommended if Zuni remains four lanes.





Alternative 2 would consist of two 11-foot driving lanes in each direction, six-foot bike lanes and six-foot sidewalks. This section would require at least a 70-foot right-of-way, or an additional 10 feet of right-of-way along much of Zuni Road. Figure 13 shows the proposed typical section.

Figure 13. Alternative 2 (Four Lane) Typical Section



Where Zuni Road intersects major streets, the typical section would have to be widened out to provide a left-turn lane, as is done currently in some locations.

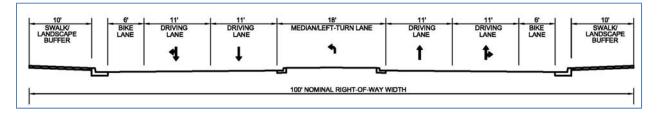
Alternative 2, the four lane section, is being considered for Zuni Road between San Mateo Boulevard and Central Avenue. Between Washington Street and San Mateo Boulevard, where there is an existing right-of-way width of 100 feet or more and there are already three driving lanes in each direction, the road diet is not being considered as an alternative. This stretch of Zuni is described in more detail below.

ZUNI ROAD FROM WASHINGTON TO SAN MATEO

Under either alternative, between Washington Street and San Mateo Boulevard the proposed typical section for Zuni would consist of two 11-foot driving lanes in each direction separated by an 18-foot raised median, six-foot bike lanes and ten-foot sidewalks or a combined sidewalk/landscape buffer area. Because the right-of-way along this part of Zuni Road is already 100 feet or more, no additional right-of-way is expected to be needed to accomplish the proposed cross section, shown in Figure 14.

Because Lead and Coal avenues after construction will each have two driving lanes and a bike lane, Lead westbound and Coal eastbound, this cross section will transition nicely into those roads of the two-way pair.

Figure 14. Proposed Typical Section for Zuni Road, Washington Street to San Mateo Boulevard



Much of this stretch of Zuni Road is occupied by Highland High School on the north side, so in this segment of Zuni there are additional proposals for improvements as shown in Figure 15, including:





- Lengthening the existing school speed zone to include the Adams Street intersection to the west and the Jackson Street intersection to the east. (Prior to design, all concerned parties including APS, Highland High School, APD, and the City should meet to discuss the extents of the school zone.)
- Funneling students to one designated crossing, most likely at the existing gate near the Monroe Street intersection. Obliterating the existing striped crosswalk there.
- Enhancing the designated pedestrian crossing. Some existing landscaping in the median may need to be trimmed or replaced to provide adequate sight distance for pedestrians to see traffic coming from the west.
- Fencing the median between Jefferson and Truman streets, with openings only at Monroe and Jackson streets. This would involve closing the medians at Madison place and Quincy place, creating right-in/right-out access for those cul-de-sacs.
- Reducing the speed limit 30 mph.



Figure 15. Proposed Improvements near Highland High School

FEATURES THAT WOULD BE PART OF EITHER ALTERNATIVE

In addition to the cross sections and other improvements described in the sections above, the following would be part of construction of either alternative:

- Posted speed limit reduced to 30 mph
- Accessible routes along the sidewalks on both sides of Zuni Road, which may include moving or
 routing sidewalks around obstacles, closing unused driveways, and reconstructing driveways and
 curb ramps to be accessible.
- Crosswalk restriping, where needed



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- Street lighting analysis and the addition of street lighting where dark spots exist
- Landscaping, where feasible
- Drainage improvements
- Bus stop enhancements, such as shelters, trash cans, and lighting
- Improvements to the side street approaches to Zuni
- Modifications to the pedestrian equipment at the traffic signals, to meet accessibility guidelines

6. PUBLIC MEETING #2

The second public meeting for the Zuni Road Study was held on May 4, 2011. The meeting was again held at Highland High School and was attended by approximately 13 people, including area residents, City of Albuquerque staff, and the District 6 City Councilor Rey Garduño. The purpose of the meeting was to inform stakeholders and the public about the progress on the Zuni Road Study, and to show them the two alternatives under consideration for Zuni and gather their comments and questions on them.

The presentation shown at the meeting covered the following topics:

- The work completed to date
- Alternative 1: Road Diet
- Alternative 2: Four Lanes
- Recommendations for the Washington to San Mateo section
- Recommendations for the Wyoming to Central section
- Summary of how public comments have been addressed so far
- Pros and cons of the alternatives

Following the presentation, the meeting was opened up to questions and comments. The questions and comments and a copy of the presentation slides are included in their entirety in Appendix A of this report. A general summary of comments made at the meeting is presented below:

- A concern was raised that providing raised medians at the intersections would be less safe, and would make people more likely to stop in the median when crossing at the signal rather than just crossing the entire road within one pedestrian cycle.
- Someone commented that bike education is needed: bicyclists ride on the wrong side of the street and don't obey street signs and traffic signals.
- One person commented that he thought Alternative 2 would not provide enough change, and that he liked the road diet alternative better.
- A member of the public voiced that she hoped the City has money to do something soon instead of waiting years to reconstruct the road, like what happened on the Lead/Coal project.
- Someone inquired about the type of lighting that would be installed at the pedestrian crossings.
- A member of the audience asked how crossings for school children would be improved at locations along Zuni Road other than at Highland High School.





7. SCREENING OF PROPOSED IMPROVEMENTS

Prior to a more comprehensive evaluation of each of the two alternatives described in the previous sections, a screening process was used to identify major impacts of the alternatives. The issues that were identified to be the most critical in this aspect were public comment (as described in section 6 above), stakeholder comment, and the need for additional right-of-way, as discussed in the sections below.

STAKEHOLDER COMMENT

After receiving the materials to be presented at the second public meeting, Highland High School staff concurred with the conceptual plan for improvements between Washington Street and San Mateo Boulevard, which would be the same under either Alternative 1 or Alternative 2.

Staff from Bernalillo County Public Works were in attendance at the second public meeting. They commented that they recommended the use of a HAWK (High-Intensity Activated Crosswalk) signal near Highland High School, citing that they are now accepted practice and included in the 2009 *Manual on Uniform Traffic Control Devices*, having proved to be an effective countermeasure for pedestrian crashes at mid-block locations. County staff also suggested that bioswales and water harvesting be considered for street landscaping, and that pedestrian-scale lighting should be considered in addition to street lighting.

Staff from the Children's Health Center (part of UNM Hospital) was in attendance at the second public meeting and supported Alternative 1, citing that it offers more significant and meaningful change for Zuni Road.

An officer from the Southeast Heights Neighborhood Association reviewed the meeting materials and commented that the disruption to flow associated with mid-block left turns out of the through lane on Zuni, combined with the high speeds, makes for a very dangerous corridor. The neighborhood association supports Alternative 1, which redirects the focus on pedestrians and protects left turns along the corridor. The association noted that they would be concerned with the high cost associated with all the curb and sidewalk work but stated that they hope that the City's priorities can be framed accordingly so that the project will actually addresses/mitigate the important issues.

A member of the Highland Business and Neighborhood Association was in attendance at the second public meeting and commented that his group feels that Alternative 1 is the most viable option. They made the following suggestions:

- Install a safety fence on the median south of Highland High School similar to the one installed at CNM
- Install warning signs and pedestrian crossing warning lights at the Highland High School crossings

City and consultant staff met with staff from the City of Albuquerque's transit department after the second public meeting. They made the following comments.

Transit staff expressed a dislike for bus pullouts, especially on a road with one driving lane in each
direction, because if a bus gets out of the stream of traffic it is difficult for the driver to get back in,
especially in the peak times.



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- Bus rapid transit (BRT) is a future possibility for Central Avenue, which could change the cross section of Central from six driving lanes to four. The group decided that traffic should be modeled not only considering a road diet on Zuni but also taking into account a narrowing of the Central Avenue section from six to four lanes.
- Northbound Wyoming Boulevard between Zuni and Central has a lane as narrow as nine feet wide that is very difficult for bus drivers to negotiate.
- Where there are bus stops it would be better not to have a center raised median so that drivers can get around buses stopped in the driving lane if they need to.
- Bus stops have recently been added on Zuni Road near the Florida Street intersection and may be added soon near Pennsylvania Street.

RIGHT-OF-WAY IMPACTS

As shown in the typical sections presented earlier in this report, the existing nominal right-of-way width along the corridor is 60 feet, and Alternative 1, the road diet section, would fit within a 60-foot right-of-way. The Alternative 2 typical section would require a 70-foot right-of-way width at a minimum. Because structures are generally situated equally on both sides of the road, and because there is a major transmission line along the south sidewalk, it was assumed that the Zuni right-of-way would be widened to the north. The expected right-of-way impacts associated with this widening of right-of-way to accommodate Alternative 2 are summarized in Table 9 below.

Table 9. Right-of-Way Impacts Associated with Alternative 2

	Washington to San Mateo	San Mateo to San Pedro	San Pedro to Louisiana	Louisiana to Pennsylvania	Pennsylvania to Wyoming
No. of Properties Affected	0	10	16	7	15
No. of Properties with Affected Structures	0	0	4	0	3
Square Footage (Acreage) Required	0	20,700 ft ² (0.48 ac)	30,700 ft ² (0.70 ac)	7,700 ft² (0.18 ac)	14,900 ft ² (0.34 ac)

Alternative 2 received no support from the stakeholders or the public. Additionally, the right-of-way and business relocation impacts from Alternative 2 were considered by the project team to be too great to consider taking the alternative into further evaluation. Consequently, Alternative 2, the four-lane alternative with bike lanes, was dropped from consideration after the screening phase of the study.





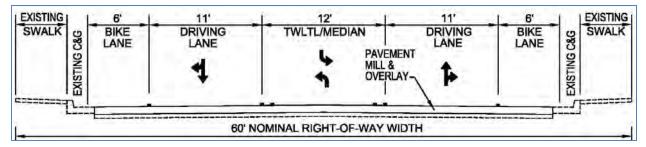
8. DESCRIPTION OF FINAL ALTERNATIVES

Because Alternative 2 had been eliminated from further consideration through the screening process due to its negative reception by stakeholders and the public and impacts on right-of-way and nearby structures, a second alternative for consideration was developed for evaluation. This alternative is similar to Alternative 1 in its objective, but would accomplish the road diet by restriping the existing road section rather than moving the outside curb, thus making it less costly to implement. One shortcoming of this alternative is that it does not widen the sidewalk to six feet, as the original alternative would; the sidewalk width would remain the same as it is now, approximately five feet wide, although modifications would be made to the sidewalk as necessary to provide an accessible route on both sides of the road. The two road diet alternatives are described in the sections below.

ALTERNATIVE 1A

Alternative 1A is the road diet option that would leave the sidewalks and outside curb in place and restripe the lanes to provide a single through lane in each direction, a center two-way left-turn lane, and bike lanes on each side, as shown in Figure 16.

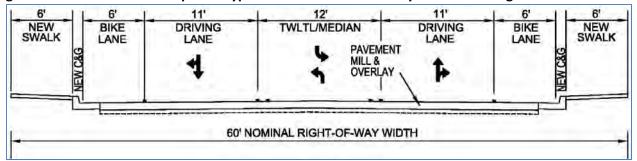
Figure 16. Alternative 1A Proposed Typical Section – Road Diet by Restriping



ALTERNATIVE 1B

Alternative 1B is the "original" road diet option that would reconstruct the sidewalks and outside curb to create six-foot sidewalks in each direction, and restripe the lanes to provide a single through lane in each direction, a center two-way left-turn lane, and bike lanes on each side as shown in Figure 17. While Alternative 1B provides the six foot sidewalk on each side, it puts more of each bike lane onto the gutter pan.

Figure 17. Alternative 1B Proposed Typical Section – Road Diet by Reconstructing Curb and Sidewalk

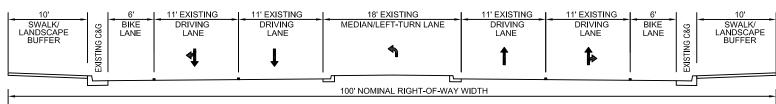


Plan sheets showing Alternatives 1A (Figure 18) and 1B (Figure 19) are shown on the following pages.









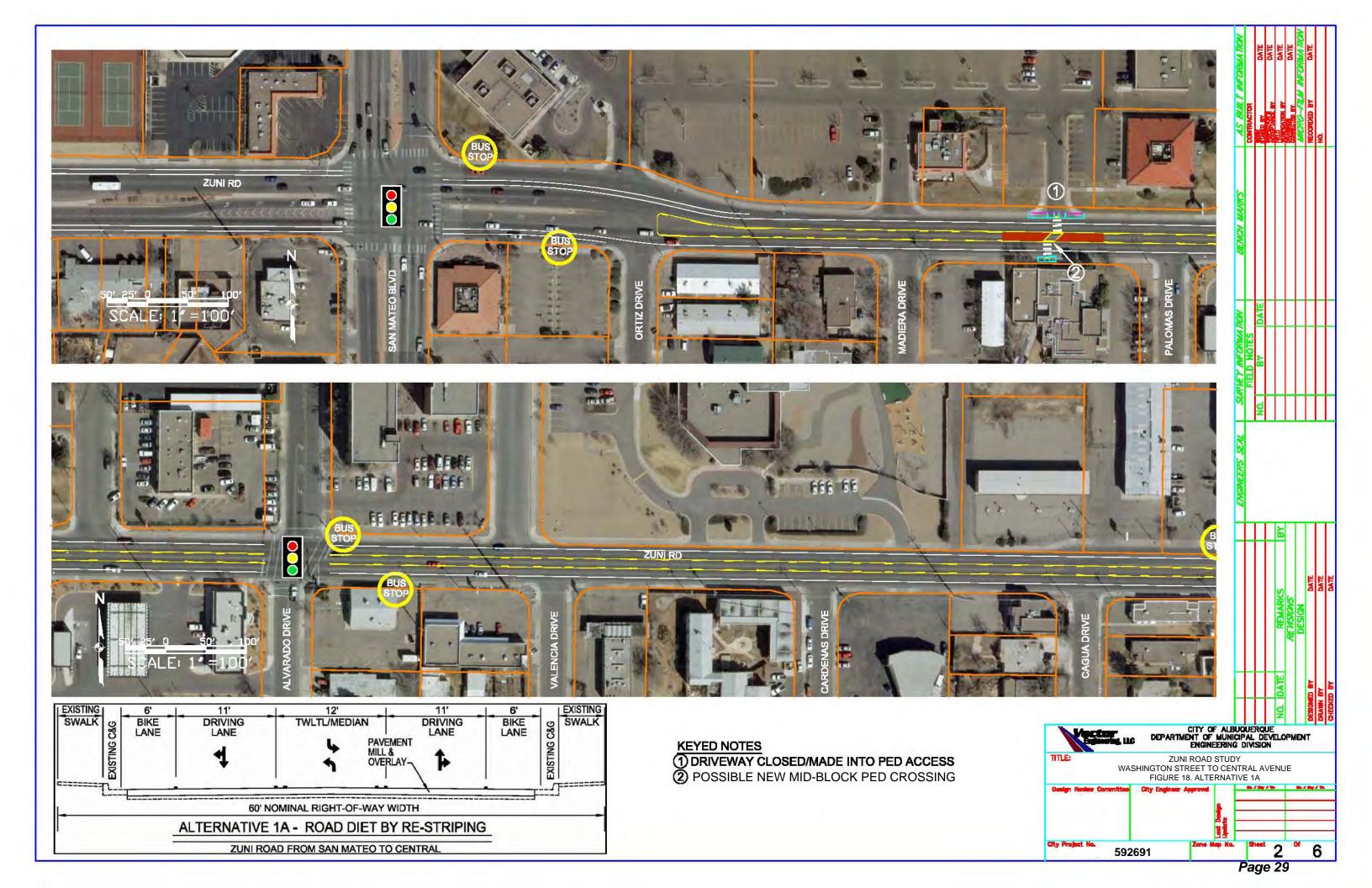
BUILD ALTERNATIVE - FOUR LANES WITH MEDIAN AND BIKE LANES

ZUNI ROAD FROM WASHINGTON TO SAN MATEO

KEYED NOTES

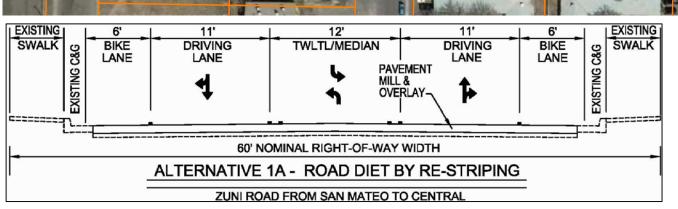
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- (4) CLOSE MEDIAN IN FRONT OF CUL-DE-SAC
- (5) NEW MEDIAN FENCE





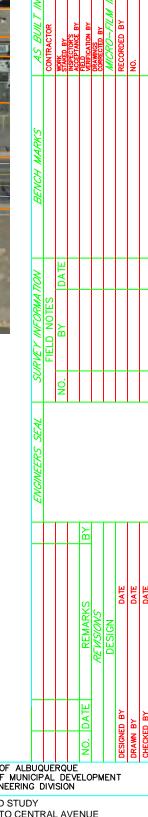






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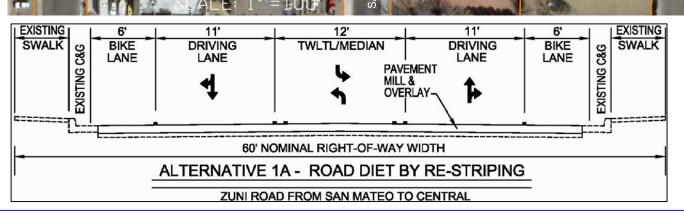


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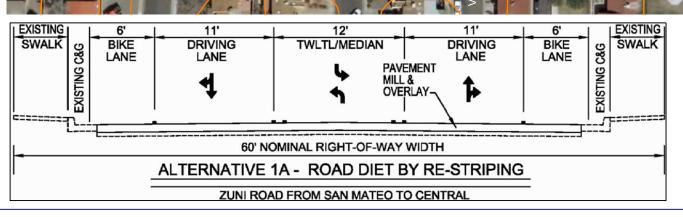


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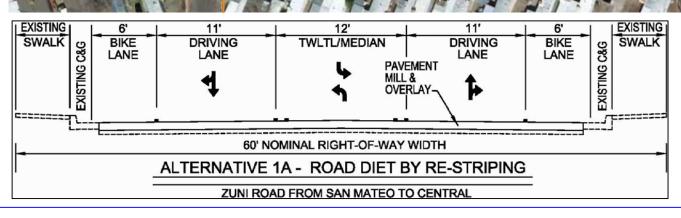
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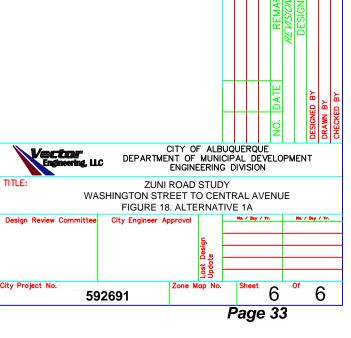






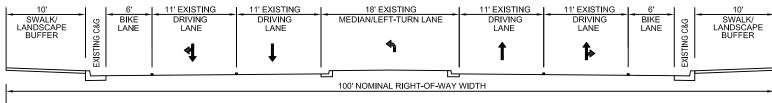
KEYED NOTES

- 1 POSSIBLE NEW MID-BLOCK PED CROSSING
- 2 CONSTRUCT NEW SIDEWALK
- ③ RELOCATE BUS STOP TO WEST SIDE OF GEN. CHENNAULT
- (4) ELIMINATE SECOND RIGHT-TURN LANE









BUILD ALTERNATIVE - FOUR LANES WITH MEDIAN AND BIKE LANES

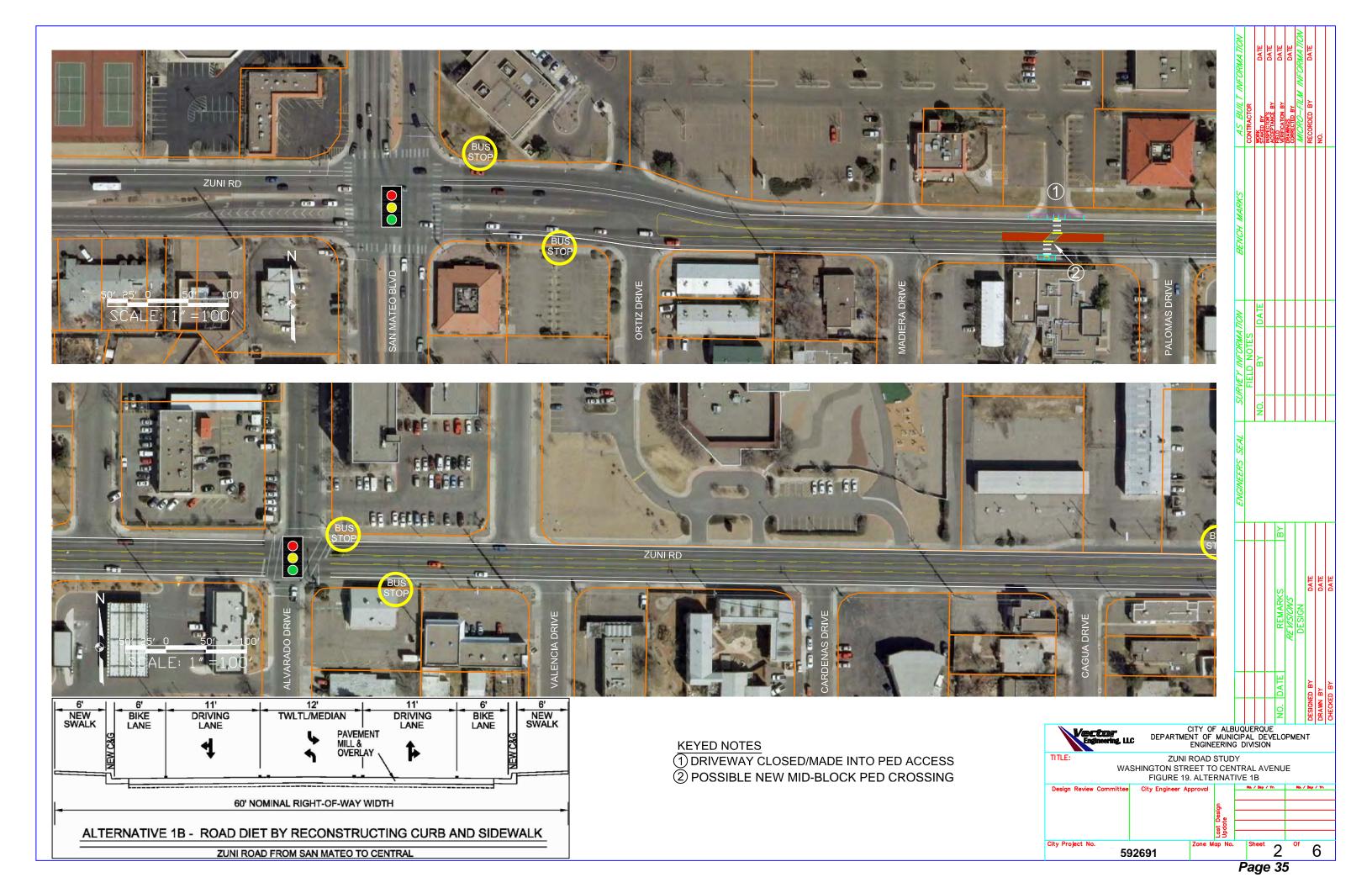
ZUNI ROAD FROM WASHINGTON TO SAN MATEO

KEYED NOTES

- 1) RELOCATE XING FLASHER W. OF ADAMS
- 2 NEW STUDENT CROSSING
- (3) RELOCATE XING FLASHER E. OF JACKSON
- (4) CLOSE MEDIAN IN FRONT OF CUL-DE-SAC
- (5) NEW MEDIAN FENCE



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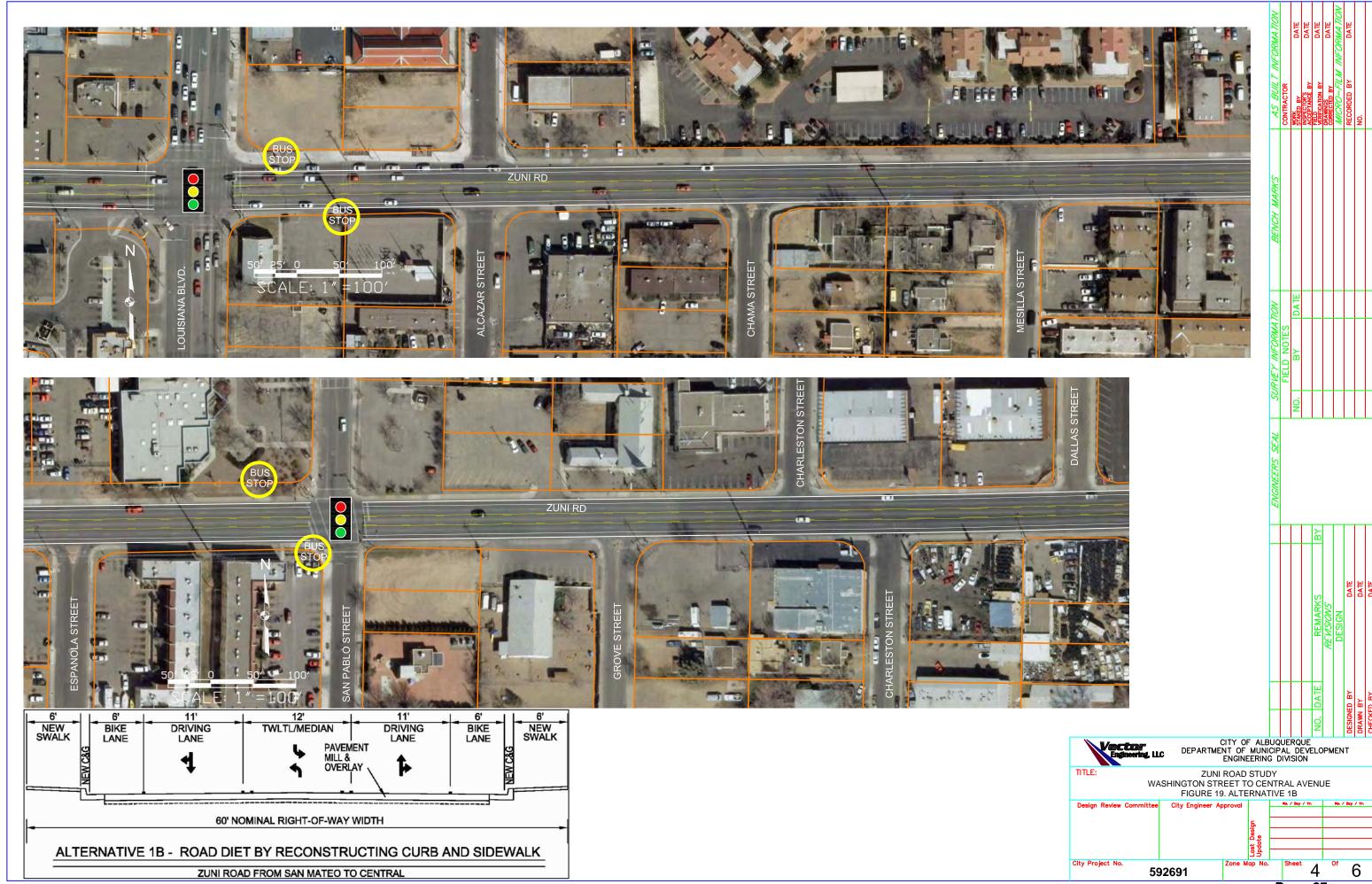


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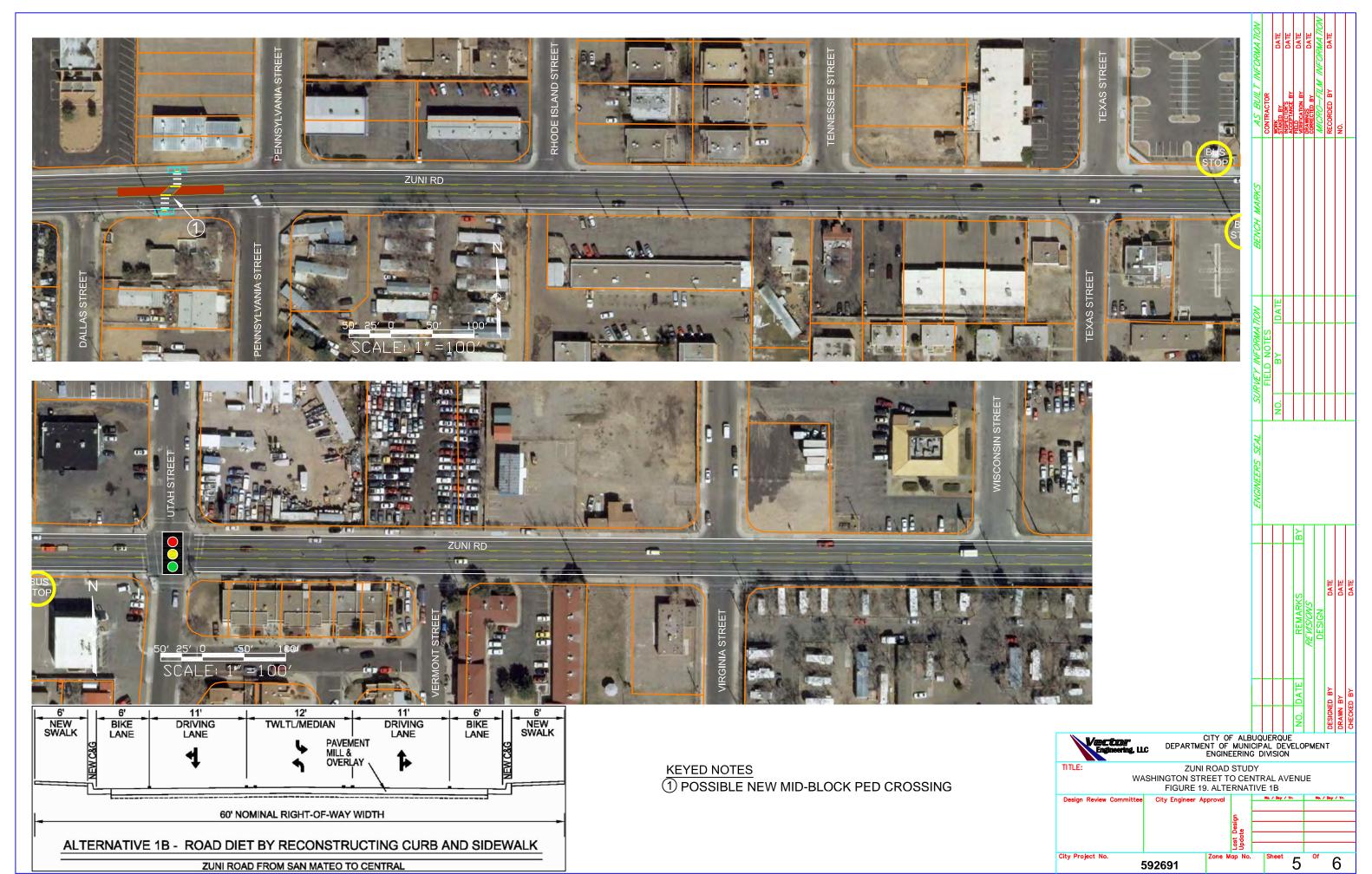
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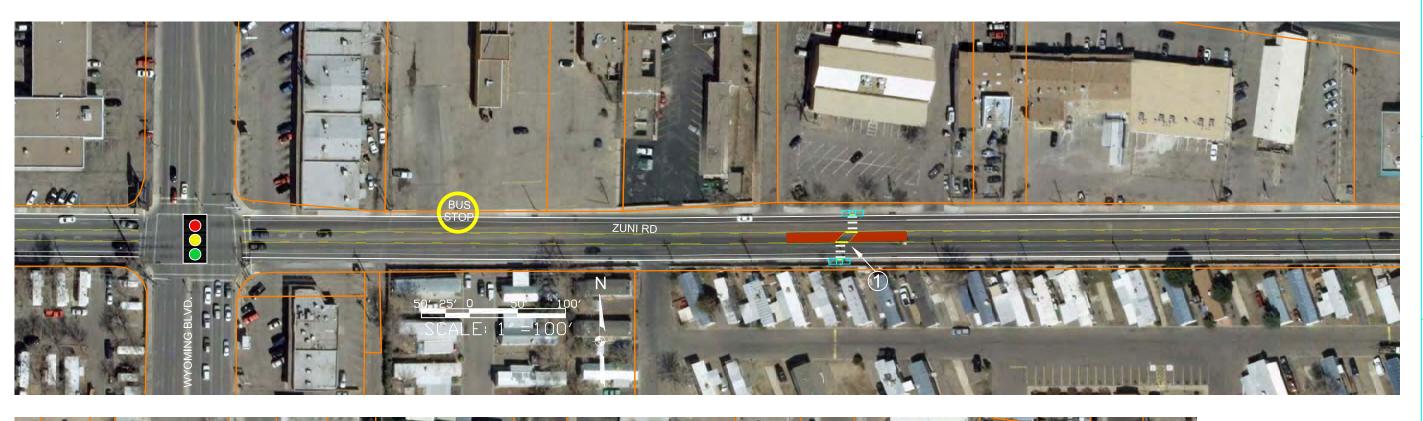
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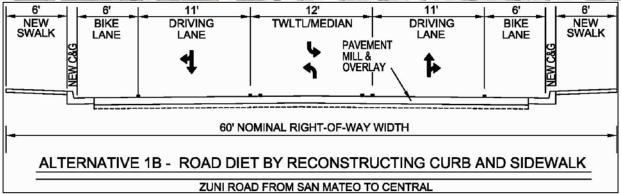
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KEYED NOTES

- 1) POSSIBLE NEW MID-BLOCK PED CROSSING
- (2) CONSTRUCT NEW SIDEWALK
- ③ RELOCATE BUS STOP TO WEST SIDE OF GEN. CHENNAULT
- (4) ELIMINATE SECOND RIGHT-TURN LANE

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9. PUBLIC MEETING #3

Public meeting #3 for the Zuni Road Study was held on Wednesday, July 20, 2011. The meeting was held at the Cesar Chavez Community Center and was attended by approximately 45 people, including area residents, City of Albuquerque staff, and District 6 City Councilor Rey Garduño. A flyer and other materials from this meeting, including the presentation slides, are included in Appendix A. The purpose of the meeting was to review the activities of the Zuni Road Study, to show the recommended alternative, and to gather comments and answer questions from the public.

The presentation shown at the meeting covered the following topics:

- The study process and what stage the process is currently in.
- Bicycle and pedestrian crash data.
- Typical cross sections for Alternative 1, the road diet.
- Summary of how public comments have been addressed.
- Screening process of the alternatives.
- Evaluation process of final alternatives.
- Recommendation to proceed with Alternative 1A, the road diet by re-striping.

Following the presentation, the meeting was opened up to questions and comments. The questions and comments and a copy of the presentation slides are included in their entirety in Appendix A of this report. A general summary of comments made at the meeting is presented below:

- Drainage from San Pedro to Louisiana is a problem. There are no inlets and the street fills with water.
- No reason for fence at Highland High School.
- Put the pedestrian refuges near high accident areas, such as near Indiana and Pennsylvania.
- A grocery store (Talin World Market) on Central causes pedestrian traffic on Central.
- At the intersection of Zuni and Jackson there are a lot of accidents. Maybe a traffic light could be added? There is a chain link fence for the school that blocks the sight lines for southbound to westbound traffic.
- Don't like the Walmart people using Jackson Street. Would like to see the access reduced or closed.
- Maybe the HAWK pedestrian light system could be used at the mid-block crossings to increase safety. Has DMD looked at the HAWK system?
- Likes Alternative 1B as it would include drainage improvements. Currently the bike lane and outside lanes fill up with water when it rains.
- Clinic would like to see crosswalk at Palomas and Zuni. They give out food vouchers for nearby grocery stores and people must cross Zuni to get to the stores.
- The speed limit on Zuni should be reduced from 35 mph to 30 mph.





10.EVALUATION OF FINAL ALTERNATIVES

The sections below describe the evaluation of the two final alternatives under consideration.

RIGHT-OF-WAY IMPACTS

Neither road diet alternative would need additional widening for long stretches of the corridor to fit the proposed cross section. Still, additional right-of-way could be needed in some spot locations under either Alternative 1A or Alternative 1B. These are places:

- Where additional room for bus shelters is desired
- Where moving obstacles out of a sidewalk is necessary to achieve an accessible route, and the sidewalk is at the edge of the existing right-of-way. (In some instances, it may make more sense to detour the sidewalk out of the existing right-of-way around an obstacle.)
- Where moving or adding traffic signal poles is necessary so that pedestrian push buttons are placed according to accessibility guidelines
- Where curb ramp modifications may require additional right-of-way.

In these and other locations, temporary construction permits may also be required if private property needs to be accessed in order to do work in the public right-of-way. These locations would be considered more closely during final design.

TRAFFIC OPERATIONS

Undoubtedly, the biggest concern with either road diet alternative is the effect that removing a through lane of traffic in each direction would have on operations. Research on this subject was summarized in the report "Guidelines for the Conversion of Urban Four-Lane Undivided Roadways to Three-Lane Two-Way Left-Turn Lane Facilities" (Iowa State University [ISU] Center for Transportation Research and Education, April 2001). The general, greatly simplified, conclusion was that four-lane undivided to three-lane conversions should be expected to be more "operationally feasible" if the directional peak-hour volumes of the roadway remain are at or below 750 vph but should be "considered more cautiously" for volumes between 750 and 875 vph. Finally, a conclusion was that this type of conversion "should be expected to reduce arterial level of service" when volumes are at or above 875 to 1,000 vph. As shown in Table 4 on page 9 of this report, Zuni Road has directional peak hour volumes in the range of 300 to 1,200 vph. (It should be noted that the area in which Zuni Road is located is built out now, and traffic volumes are not expected to increase in the future.)

Comparing the ISU guidelines to the peak hourly volumes on Zuni one might conclude that the volumes on Zuni are too high for the road diet conversion; however, the ISU guidelines do not consider two important facts: 1) Because of the numerous cross streets and driveways along Zuni the inside through lanes in each direction are acting as de facto turn lanes now, and consequently Zuni is already essentially acting as a road-dieted section without the benefit of having an exclusive left-turn lane and 2) Zuni has a nearby, parallel route that can adequately handle diverted volumes, as explained below.





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Because Central Avenue, another principal arterial, runs generally parallel to Zuni Road and is within zero to four blocks of Zuni, it would be expected that most of the diverted traffic would shift onto Central. To estimate the amount of traffic diversion that could occur with the new configuration, staff from MRCOG performed analyses with the CUBE travel demand model using the 2035 Metropolitan Transportation Plan (MTP) dataset. The 2035 MTP model network consists of the set of proposed 2035 network improvements, which for the project vicinity includes the on-going reconstruction that will reduce the number of lanes on Lead and Coal avenues to two lanes each between University and Washington. The comparative network includes the proposed three lane "road diet" section on Zuni between Washington and Central and also the assumed future four-lane roadway section on Central to account for the possibility of a future BRT route on that road. The area is fairly well built out in the base year 2008 scenario in terms of socioeconomics, essentially making the population and job growth between the base 2008 and the 2035 horizon within the corridor relatively flat.

The scenarios were compared to each other for the daily, AM peak hour, and PM peak hour raw model volume shift to identify the amount of trip dispersion that could be expected if Zuni Road were given a "road diet" from four lanes to three lanes. The volume shift plots shown in Figures 20, 21, and 22 show how the trips are expected to redistribute from Zuni to Central in the project area daily, in the AM peak hour, and in the PM peak hour, respectively. Also shown on Figures 21 and 22 are the resulting volume-to-capacity (V/C) ratios expected in the year 2035 given the road diet scenario on Zuni. These figures only show the resulting trip dispersions on Zuni and Central because the differences on other streets in the area were small in comparison.

The volume shift figures show that in the AM peak hour, about 200 vph could be expected to divert from westbound Zuni Road onto parallel routes; roughly half of these trips would divert to Central. In the PM peak hour a larger volume of trips would be expected to divert off of Zuni in the eastbound direction - close to 600 vph, with again about half of those trips moving onto eastbound Central. This may at first appear to be problematic; however, while some segments of Central within the city are congested, this particular segment of Central Avenue is not. The V/C ratios shown in Figures 21 and 22 show that even with the expected volume shift Central is still well below capacity where Zuni parallels it, and is able to absorb the displaced trips from Zuni even with the reduced number of lanes that could be created with the BRT. Central has six driving lanes (possibly four in the future) plus dedicated left-turn lanes in this stretch, and AWDTs in the range of 22,000 to 34,500 vpd. In comparison, Zuni has just four lanes, no left-turn lanes, and multiple points of access, and its AWDTs currently range from 9,200 to 21,200. The argument could be made that the displaced trips are simply being moved off of what residents are considering their neighborhood street and onto the arterial where they belong.

It must be noted that the regional travel demand model is intended to demonstrate a basic representation of roadway volumes and travel patterns within and around the project area. For example, the regional model does not provide the granularity required to capture details such as the numerous driveways that exist along Zuni and their effects on capacity, throughput operations, and safety. For more detailed operations type analyses, more refined tools such as microsimulation must be used. As such, the full extent of benefits of a three lane alternative to mitigate these conditions would have to be identified as part of a separate study.





Figure 20. Year 2035 Expected Daily Traffic Shift Resulting from Road Diet (in Directional Daily Trips)

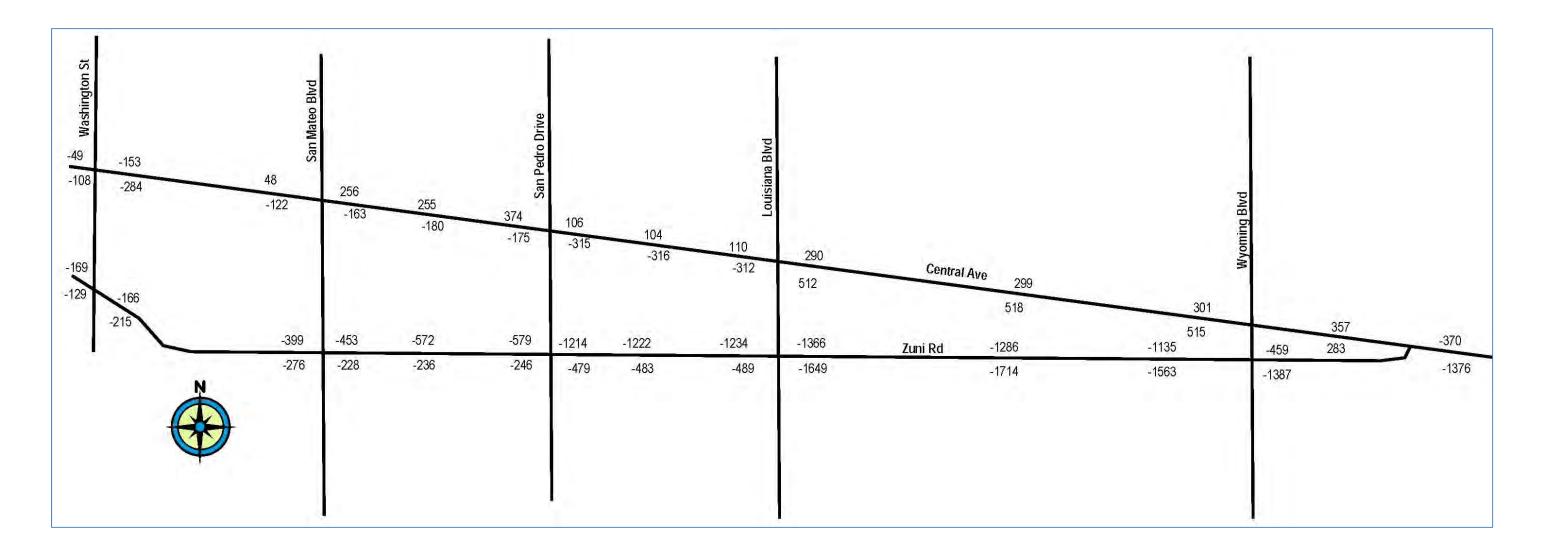




Figure 21. Year 2035 Expected AM Peak Hourly Traffic Shift (in Directional Daily Trips) and Volume-to-Capacity Ratios Resulting from Road Diet

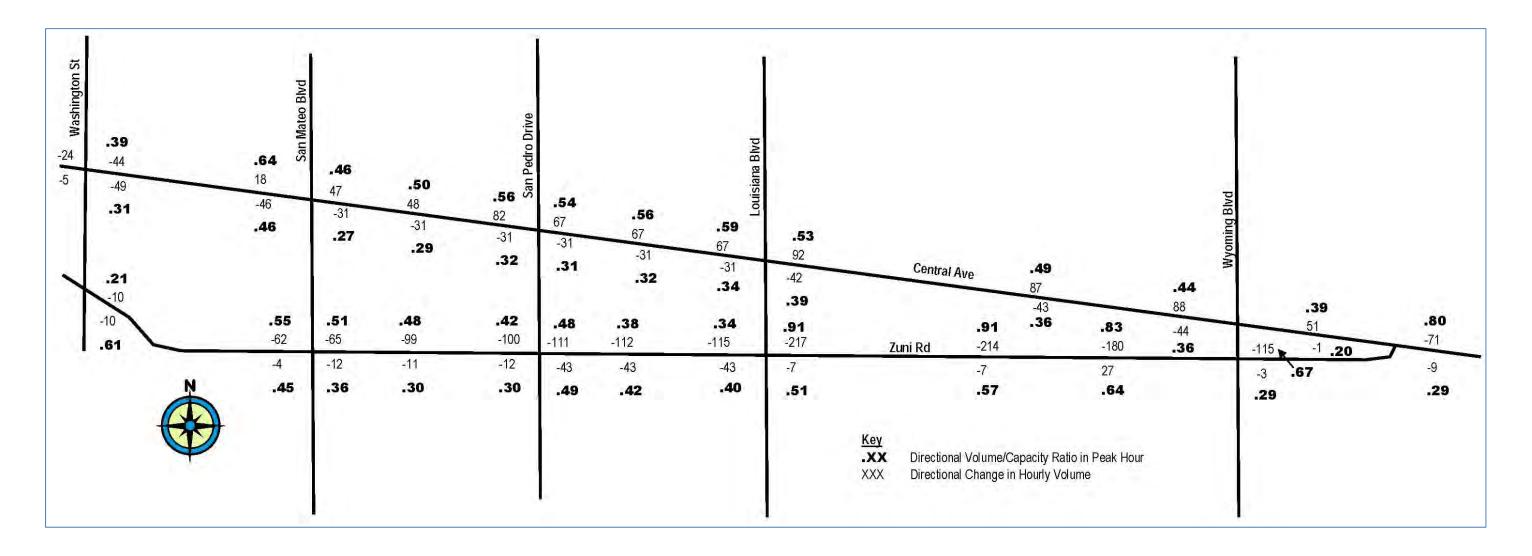
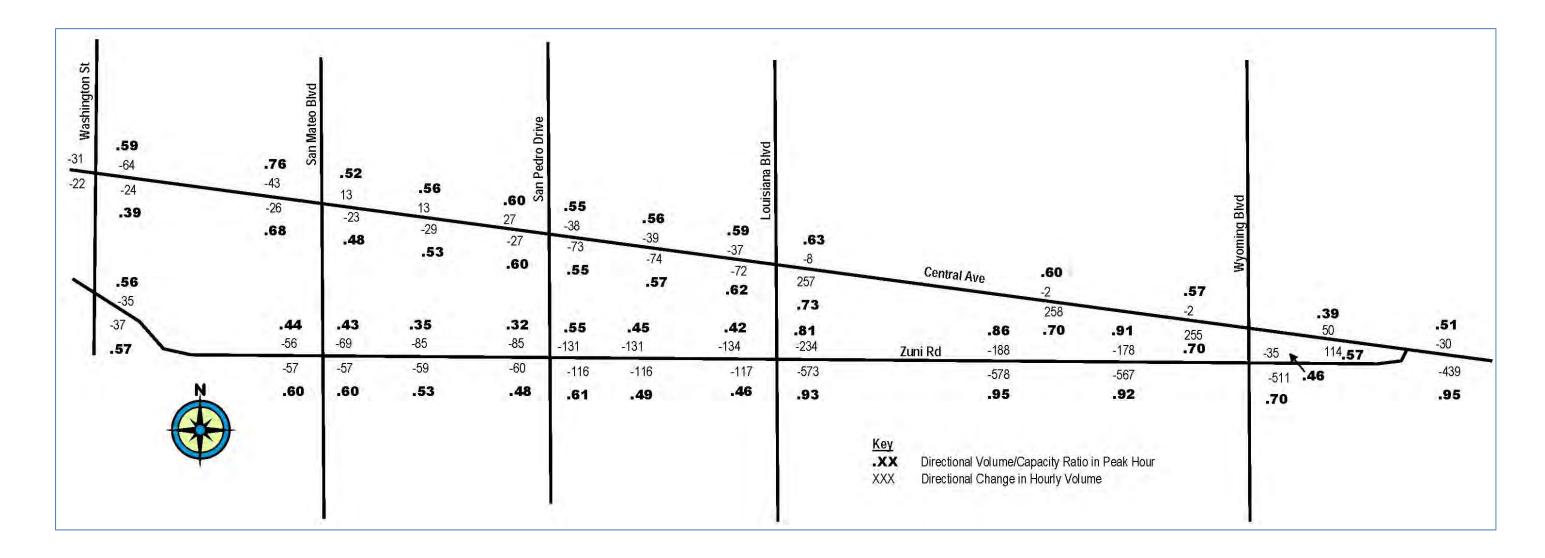




Figure 22. Year 2035 Expected PM Peak Hourly Traffic Shift (in Directional Daily Trips) and Volume-to-Capacity Ratios Resulting from Road Diet







PROVISION OF AN ACCESSIBLE ROUTE

Beginning in March of 2012, the Department of Justice 2010 Standards for Titles II and III Facilities: 2004 ADAAG (Americans with Disabilities Act Accessibility Guidelines) will be required with the reconstruction of Zuni Road. These standards require the following for accessible routes:

- The continuous clear width must be 36 inches minimum.
- The clear width may be reduced to 32 inches minimum for a length of 24 inches maximum provided that reduced width segments are separated by segments that are 48 inches long minimum and 36 inches wide minimum.
- Accessible routes with a clear width less than 60 inches shall provide passing spaces of 60 inches by
 60 inches at intervals of 200 feet maximum.

Both Alternatives 1A and 1B would have to provide an accessible route along both sidewalks according to the criteria above. The access would have to accommodate all types of disabilities, including mobility and vision impairments, while taking into account conditions and constraints that may impact compliance, such as space limitations due to the width of the Zuni Road corridor.

VISIBLE UTILITY IMPACTS

All along Zuni Road are utility poles, light poles, fire hydrants, traffic signal equipment, and other utility boxes in the sidewalk or just outside the sidewalk that may have to be relocated under either Alternative 1A or 1B to achieve the accessible route along the sidewalks.

DRAINAGE IMPACTS

Alternative 1A would be accomplished on Zuni by restriping lanes only, and leaving the curbs and sidewalks in place. Doing so would not affect the existing drainage patterns. Some small sections with a raised median would be added, affecting the street's capacity to carry the 100-year storm flow. Equivalent volume could be created within the new medians to make up for the volume lost due to the new curbs. Another option would be to construct additional storm drains to capture and reduce the amount of flow in the street. Care will need to be taken during design to ensure the floodplain depth in not increased which could potentially affect adjacent properties and require a Letter of Map Revision to FEMA.

Alternative 1B would reduce the width of the street by modifying the outer curbs. New medians would be added in some locations. These would both affect Zuni's capacity to carry the 100-year flow. Volume could be created with the new medians equivalent to the volume that is lost due to the modified street section; however, the new medians may not have capacity for all the lost volume. Additional storm drains could be added to Zuni to capture the 100-year flows that are in excess of the street's carrying capacity. Moving the curbs will also require the existing drop inlets to be relocated and modifications to the existing storm drain lines due to the new drop inlet placements. Care will need to be taken during design to ensure the floodplain depth is not increased which could potentially affect adjacent properties and require a Letter of Map Revision to FEMA.





LANDSCAPING

Both Alternatives 1A and 1B would have short spans of a raised center median, where there will be the opportunity for improving aesthetics through the placement of median landscaping. Both alternatives would have generally the same opportunities for landscaping outside of the roadway in areas where there may be a wider right-of-way.

ADHERENCE TO POLICY

Both Alternatives 1A and 1B adhere to the Long Range Bikeway System Map by providing on-street bike lanes for the entirety of Zuni. Both alternatives also adhere to the goals of the International Community Trail by widening sidewalks, leveling the walking surface, moving obstacles out of the pedestrian path, and providing marked crosswalks at busy intersections. Both alternatives adhere to the Nob Hill Highland Sector Development Plan (for Zuni west of San Mateo Boulevard) by improving the ease and safety of pedestrian crossings at principal arterials, improving sidewalks to enhance pedestrian mobility, and completing the proposed bike lanes on Zuni to provide safe east-west movement parallel to Central Avenue.

TRANSIT BUS STOPS AND SHELTERS

Under either Alternative 1A or 1B, bus stops would be improved to provide shelters and other amenities such as lighting and trash cans.

One recommendation for a revision to a bus stop location under either alternative is the existing bus stop at the northeast corner of Zuni and Central. While the stop is at the northeast corner, the only crosswalk across Central is across the west leg. Relocating the bus stop to the northwest corner would place pedestrians right where the crosswalk across Central is, and may reduce the chance that pedestrians would cross the east leg of Central where there is no crosswalk or pedestrian signal.

Both Alternatives 1A and 1B could possibly have some negative effect on transit – if a bus is running behind schedule, the bus would have less maneuverability in a two-lane section to pass a slow-moving vehicle. With both road diet alternatives, because of City Transit staff's recommendation against bus pullouts, passing vehicles would have to drive in the two-way left-turn lane to pass a stopped bus.

ACCESS

Changes to access under both Alternatives 1A and 1B would vary depending on how much of the corridor has a raised median and how much of the corridor has a two-way left-turn lane. If a raised median is constructed for most of the corridor, access will be affected substantially, making most of the side streets and driveways right-in/right-out only. Conversely, if a two-way left-turn lane is installed for most of the corridor, full access will be available at most locations. Where raised median and two-way left-turn lanes are installed would be determined during design of the project.

Under both Alternatives 1A and 1B the access to and from the Madison and Quincy place cul-de-sacs is proposed to be changed to right-in/right-out only with a raised median, so that the median across those side streets can be fenced.





11.SAFETY IMPROVEMENTS

MOTORIST SAFETY

Both Alternatives 1A and 1B would lower the posted speed limit to 30 mph, which has the potential to decrease the number and severity of crashes. Both alternatives may also improve motorist safety by separating opposing directions of traffic, either through a raised median or a two-way left-turn lane. In both alternatives, drivers' speeds are limited by the speed of the lead vehicle in the through lane, and through vehicles are separated from left-turning vehicles.

PEDESTRIAN SAFETY

Both Alternatives 1A and 1B may improve pedestrian safety with the addition of the bike lane – there would be a six-foot buffer space between the sidewalk and the outside driving lane, whereas now a pedestrian who steps off the curb is directly in the outside driving lane.

Both Alternatives 1A and 1B may improve pedestrian safety by providing a continuous accessible route along both sides of Zuni. Currently, in some areas pedestrians, especially a pedestrian in a wheelchair, must leave the sidewalk and walk/roll in the driving lane in order to get around an obstacle in the sidewalk path. The sidewalks in Alternative 1B would be slightly wider than those in Alternative 1A (six feet as opposed to five feet) but as explained earlier in the report both would have to provide an accessible route, and providing this may have more impact on safety and walkability than providing the additional foot of width. Safety of pedestrians may be improved at the signalized intersections in both alternatives by improving the accessibility of the intersections, ensuring that the pedestrian signal phase is long enough, and restriping and removing obstructions from crosswalks.

Both Alternatives 1A and 1B may improve safety and security by providing street lighting in any areas that may now be dark. Both Alternatives 1A and 1B may improve student crossing at Highland High School with the modifications shown in Figure 17.

MID-BLOCK CROSSINGS

Both Alternatives 1A and 1B may improve the safety of pedestrians crossing Zuni mid-block if signed and marked mid-block pedestrian crossings are implemented. Both alternatives would have either a raised median or a two-way left-turn lane all along Zuni and would provide (an informal) place for pedestrians to stop while crossing the road for almost the entire length of Zuni, would create fewer lanes of traffic for pedestrians to cross, and may reduce vehicle speeds.

BICYCLIST SAFETY

Both Alternatives 1A and 1B may improve safety for bicyclists by providing them a dedicated bike lane in which to ride. Currently, bicyclists ride in the narrow outside driving lane or on the sidewalks. The bike lanes in Alternative 1A would be slightly wider than those in Alternative 1B, although both would be six feet in width Alternative 1B would have more of that six feet on the gutter pan than Alternative 1A would.





12. OPINION OF PROBABLE COST

Opinions of probable cost were developed for both Alternatives 1A and 1B and are presented in Table 10 below. The following assumptions were made regarding the construction of Alternative 1A:

- Between Washington Street and San Mateo Boulevard, the outside driving lanes would be restriped as bike lanes.
- Between San Mateo Boulevard and Central Avenue, the entire width of the road would be milled and overlaid. The road would be restriped with the new road diet section.

The following assumptions were made regarding the construction of Alternative 1B:

- Between Washington Street and San Mateo Boulevard, the center median would be left intact. The
 existing sidewalks and outside curbs would be removed, and replaced with new 10-foot wide
 sidewalks and curb, widened in to the existing outside driving lane. The remaining portions of the
 outside driving lanes would be restriped as bike lanes.
- Between San Mateo Boulevard and Central Avenue, the existing sidewalks and outside curbs would be removed, and replaced with new 6-foot wide sidewalks and curb, built to the inside of the rightof-way. The entire width of the road would be milled and overlaid. The road would be restriped with the new road diet section.

The costs for both Alternative 1A and 1B include the addition of a bus shelter at each bus stop, the improvements at Highland High School, the mid-block crosswalks and median islands, landscaping at the median islands, and an allowance for minor sidewalk and traffic signal modifications for accessibility. No right-of-way costs are included.

The costs shown in Table 10 include design costs and 25 percent for contingencies. More detailed cost estimates are provided in Appendix D.

Table 10. Opinion of Probable Cost

Zuni Bood Cogmont	Distance	Alternative 1A	Alternative 1B
Zuni Road Segment	Distance	Road Diet by Restriping	Road Diet by Reconstruction
Washington to San Mateo	0.5 miles	\$240,000	\$1,100,000
San Mateo to Wyoming	2.0 miles	\$1,800,000	\$3,200,000
Wyoming to Central	0.5 miles	\$300,000	\$5400,000
TOTAL	3.0 miles	\$2,040,000	\$4,840,000





13.PROJECT CONCLUSIONS

Through the study it was concluded that these are the primary problems that need to be addressed on Zuni Road:

- The safety issues along the Zuni Road corridor were mainly determined through the walking survey and through public and stakeholder comment. Local residents consider the areas on both sides of Zuni Road to be part of their neighborhood, and perceive Zuni Road as a barrier for walking residents because of its four lane section with few places for protected pedestrian crossings. The situation is exacerbated by the fact that first, due to the area's socioeconomics, many people in the area are dependent on transit or walking and second, most of the bus routes serving the area are on Central Avenue to the north of Zuni, while most of the residences in the area are south of Zuni Road.
- While the existing sidewalks are narrow, the larger problem with the sidewalks is the frequent occurrence of sidewalk obstructions and steep cross slopes resulting from driveways, many of which are not even in use. Additionally, the sidewalks are immediately adjacent to the driving lanes, leaving no "room for error" for a pedestrian on the sidewalk.
- Currently, most of Zuni Road has no dedicated left-turn lane but Zuni has frequent side street and driveway access. This causes the inside through lanes in each direction to operate as de facto left-turn lanes, considerably reducing the through capacity of the inside through lanes and also posing a safety concern when drivers are stopped in the inside lane.
- Zuni Road is shown as having on-street bike lanes in the future according to the Long-Range Bikeways Master Plan. Additionally, the public has expressed a desire for these bike lanes, and bicyclists are using the road now, either riding in the street or on the sidewalk.

The following are conclusions resulting from the screening and evaluation of alternatives:

- Because the existing right-of-way on Zuni between San Mateo Boulevard and Central Avenue is very narrow, Alternative 2, the four-lane section, would have too many right-of-way and business relocation impacts to be feasible. Additionally this alternative was not supported by either the stakeholders or the public. Accordingly this alternative was eliminated.
- Both road diet Alternatives 1 and 2 are expected to have the effect of diverting traffic onto Central
 Avenue, but Central, even if it were reduced to a four-lane section for a BRT route, is expected to
 have available capacity in this segment and can assume the volumes while still operating below
 capacity.
- Alternative 1A would be considerably less expensive to build than Alternative 1B, largely because it
 makes use of the existing curbs and sidewalks and also would not change drainage patterns.
 Alternative 1A would not widen the existing sidewalks; however, spot improvements would be
 made along the sidewalks to improve sidewalk accessibility over existing conditions even while
 maintaining the existing sidewalk width.
- Backups could be expected to occur behind stopped buses during pickups and drop-offs under either Alternative 1A or 1B.





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- Some additional right-of-way may be needed even with one of the road diet alternatives (1A or 1B). Exact locations of existing right-of-way need to be field-surveyed. GIS data was used for a best estimate in this study.
- Safety may improve with either Alternative 1A or 1B because of the following:
 - o the shared through/left-turn lanes would be eliminated and motorists turning left would have a dedicated lane in which to wait to make the turn
 - o opposing directions of traffic would be separated from each other by a 12-foot two-way left-turn lane or raised median, rather than the existing double yellow stripe
 - o sidewalks would be separated from the driving lanes by the new bike lanes
 - o pedestrians would have a to cross fewer driving lanes on Zuni
 - o at all locations along Zuni pedestrians would have a refuge place between the opposing driving lanes, even if informal, to wait for a gap in traffic
- Access would depend on how much of the corridor has a raised median. There will be a trade-off between access and aesthetics, which would be provided with median landscaping.





14. RECOMMENDATIONS

The recommendation is that a more detailed intersection level of service analysis be conducted in order to determine if Zuni Road between San Mateo Boulevard and Central Avenue should be reconfigured as road diet Alternative 1A. Alternative 1A would be achieved by milling and overlaying the entire width of the road and restriping the lanes. The typical section would consist of two 11-foot driving lanes, a 12-foot wide center median area that in most places would serve as a two-way left-turn lane, six-foot bike lanes and five-foot sidewalks. This section just fits into a 60-foot right-of-way, which is generally the right-of-way width along Zuni Road. Where additional right-of-way exists, the extra width could be devoted to wider sidewalks or to a landscape buffer area between the sidewalk and the bike lane. Mid-block pedestrian crossings would be considered at these locations:

- West of San Mateo near the Madeira and Palomas intersections, in front of the John Brooks supermarket shopping center.
- Near Georgia Street, about halfway between the existing traffic signals at San Pedro Drive and Louisiana Boulevard.
- Near Pennsylvania Street about halfway between the existing traffic signals at San Pablo Street and Utah Street.
- At a point about halfway between the existing traffic signals at Wyoming Boulevard and Central Avenue.



Indian School Road Diet East of Eubank Boulevard

The photo to the right shows a road diet project on Indian School Road in Albuquerque, east of Eubank Boulevard, that was restriped from a four-lane section in 2004.

The recommendation for Zuni Road between Washington Street and San Mateo Boulevard is to narrow the typical section from six to four driving lanes and restripe the outside driving lanes as bike lanes. Additionally, much of this stretch of Zuni Road is occupied by Highland High School on the north side, so in this segment of Zuni there are additional recommendations for improvements, including:

• Lengthening the existing school speed zone to include the Adams Street intersection to the west and the Jackson Street intersection to the east. (Prior to design, all concerned parties including APS, Highland High School, APD, and the City should meet to discuss the extents of the school zone.)



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- Funneling students to one designated crossing, most likely at the existing gate near the Monroe Street intersection. The existing striped crosswalk there should be removed and no new crosswalk should be installed.
- Enhancing the designated pedestrian crossing. Some existing landscaping in the median may need to be trimmed or replaced to provide adequate sight distance for pedestrians to see traffic coming from the west.
- Fencing the median between Jefferson and Truman streets, with openings only at Monroe and Jackson streets. This would involve closing the medians at Madison Place and Quincy Place, creating right-in/right-out access for those cul-de-sacs.

It is recommended that the Zuni Road approach to the Central Avenue intersection should be reconfigured to provide just one right-turn lane onto eastbound Central Avenue. This will allow the sidewalk and bike lanes to be built into that intersection approach and may help reduce the use of Zuni as a short-cut route to avoid Central Avenue.

Additional recommendations for the design phase of Zuni Road are the following:

- The signing plans should reflect a posted speed limit along Zuni Road of 30 mph throughout the corridor, reduced from the existing 35 mph posted speed limit.
- The existing right-of-way extents should be surveyed and mapped prior to design.
- Because the recommended alternative would not widen the sidewalks to six feet, the accessible
 route should be carefully checked along both sides of Zuni Road, and the design plans should
 include moving or routing sidewalks around obstacles, closing unused driveways, and
 reconstructing driveways and curb ramps as necessary to be accessible. The access would have to
 accommodate all types of disabilities, including mobility and vision impairments, while taking into
 account conditions and constraints that may impact compliance, such as space limitations due to
 the width of the Zuni Road corridor.
- The one portion of Zuni Road where there is no sidewalk just west of the Central intersection on the north side of Zuni, should have a sidewalk added in the construction plans.
- Striping plans should include new ladder-style crosswalks at the signalized intersections. Milling and overlaying should extend onto the signalized cross streets as necessary so that the new crosswalk striping is installed on the asphalt overlay and not an obliterated crosswalk.
- The existing street lighting should be modeled. Design plans should included additional or modified luminaires as appropriate to meet AASHTO roadway lighting guidelines. Additionally, pedestrianscale lighting should be considered.
- Landscaping should be part of the design plans. In keeping with the goals of the International Community Trail, pedestrian-scale lighting should be considered as part of the landscaping plans.
- The design plans should include bus stop enhancements, such as shelters, trash cans, and lighting.
 Right-of-way extents at each bus stop location should be verified to determine if the stop can be
 reconfigured to provide additional space to accommodate both waiting passengers and passing
 pedestrians.
- Design plans should include a plan for each existing traffic signal showing the modifications required for pedestrian push button accessibility and walk/don't walk times.





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- Side street and driveway access should be considered carefully to determine where raised medians could be constructed without negatively affecting access. Raised medians could be a location for landscaping.
- The project survey should include a portion of Wyoming Boulevard on either side of Zuni Road. Lane widths on Wyoming in this area are as narrow as nine feet wide and difficult for bus drivers to negotiate, and this situation should be improved.
- It is recommended that the existing bus stop at the northeast corner of Zuni and Central should be relocated to the northwest corner of the same intersection. While the stop is at the northeast corner, the only crosswalk across Central is across the west leg. Relocating the bus stop to the northwest corner would place pedestrians right where the crosswalk across Central is, and may reduce the chance that pedestrians would cross the east leg of Central where there is no crosswalk or pedestrian signal.
- The intersection of Zuni Road/Pennsylvania Street was discovered to have an unusually high number of pedestrian crashes and vehicle crashes resulting in injuries as compared to other intersections along Zuni. This intersection should be studied more carefully to determine if a design modification could possibly help reduce the incidence and severity of crashes.
- The sight distance (for the type B2 maneuver right turn from a minor road) at the southbound Jackson Street intersection to Zuni Road, looking east, may be obscured by a fence. This intersection should be examined by the City to see if obstructions need to be moved.
- During a three-week period in June and July of 2011, five crashes occurred at the intersection of Zuni Road/San Pedro Drive within a span of three weeks. The cause of each crash was studied carefully to determine if improvements could be made as part of a larger Zuni Road project that might reduce the occurrence of crashes at this intersection; however, the causes were found to be driver error or vehicle malfunction in each case. A memo summarizing these finding is attached in Appendix E.
- Although analysis of projected year 2035 traffic volumes show that from a corridor capacity standpoint a road diet on Zuni appears to be feasible, additional analysis is recommended (a microsimulation of intersections) to determine if the intersection level of service will be adequate to handle a road diet. This type of analysis will also provide more information on whether a road diet along Zuni will be feasible for the foreseeable future and whether or not a design project should be developed.



Appendix A Public Involvement Materials

Vector Engineering, LLC

January 14, 2011

Dear Zuni Road Study Team member,

The City of Albuquerque and its consultant, Vector Engineering, are conducting a safety study for Zuni Road between Washington and Moon streets. During the first phase of the study we will be collecting data to determine the existing problems that need to be addressed, as well as soliciting ideas from the community on possible improvements. This will be accomplished by collecting available data relevant to the corridor, conducting a walking survey of the corridor, and holding the first of several public information meetings.

This letter is also a form that we are requesting you fill out and submit using the "SUBMIT" button below. We are requesting your response by **noon** on **Friday, January 21, 2011**.

Existing data that will be obtained concerning Zuni Road include:

- Crash data from the Albuquerque Police Department
- Traffic count data from the Mid-Region Council of Governments (MRCOG)
- Future year traffic projections from MRCOG
- Existing transit routes/plans for future transit through the area from the City's ABQ Ride
- Existing right-of-way information
- Existing as-built information for infrastructure, including storm drains from the City
- Locations of street lights and alley lights from PNM and the City

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City and consultant staff will be performing a walking survey of the corridor and are requesting that residents of the neighborhood join us on the walk to point out areas of concern. We are requesting that the president of each neighborhood association, or his/her appointed representative, assist us in one of the walking surveys. The place, date, and time for the walking surveys are shown below.

Yes, I will attend Please check one or bo	th West Zuni walking survey, from Washington to Louisiana – Tuesday, January 25, 2011 starting at 9:00 am at the northeast corner of Zuni/San Mateo
	East Zuni walking survey, from Louisiana to Moon – Wednesday, January 26, 2011 starting at 9:00 am at the southeast corner of Zuni/San Pablo
If you do not plan to reason(s)?	attend either of these walking surveys, would you please let us know your
• The neighbo	pilable on that date and/or time. This would work better prhood association I represent is sending someone else be interested in the walking survey
	ting will be held Thursday, February 10, 2011 at 6:00 pm at Highland High School. advertised closer to the date. The planned agenda for this meeting is
 Introduce th 	ne study to the meeting participants
 Provide opp suggestions Aerib. Que 	ortunities for meeting participants to express their concerns about Zuni Road and for safety improvements ial display boards which the participants can mark up estionnaires
· ·	process of the study and what will happen next
4. What to exp 5.	ect at the second public meeting from the data that is collected

The study team looks forward to meeting with you at the walking survey or public meeting. In addition to providing your comments on this form, please feel free to share your comments with me by email at kaspelin@vectornm.com or 341-9393.

Sincerely,

Karen Aspelin, P.E., P.T.O.E.

Karen Aspelin

Consultant Project Manager

Please use the "SUBMIT" button below to send your responses. We are requesting your response by **NOON** on **Friday, January 21, 2011**. Thank you.



Summary of Comments – Zuni Road Walking Surveys – January 25-26, 2011

- Curb ramps not ADA, sometimes have obstructions (most often hydrants, utility poles), ramps direct peds diagonally out into Zuni rather than directionally, parallel to Zuni
- Asphalt pavement shoving and overlays have created a "lip" of asphalt at the joint between the asphalt and gutter pan which is often in the pedestrian path parallel to Zuni at the side streets
- Some properties have razor wire over sidewalk canopy
- Small bus stop areas
- No bus pull outs
- Peds cross all over, when there is a gap in traffic, based on their origin and destination
- Not enough traffic, and road is narrow enough, that crossing mid-block doesn't seem that dangerous (engineer opinion)
- Fast traffic, close to peds on sidewalk
- Bicyclists ride on sidewalk
- No protected crossings for long spans between signals
- No ped refuge between opposing directions of traffic
- Sidewalks are narrow in many locations, sometimes have obstructions or hazards
- No sidewalk at all on the north side of Zuni near Central
- Ped push buttons at signals not ADA
- Side streets often not lit
- Large overhead transmission line runs parallel to Zuni along south sidewalk
- High school kids jaywalk from campus to Valero station the crossing is not within the school speed zone
- Many unused driveways still remain even though they are fenced or walled off bad for ADA path because of cross slope
- Sometimes sand/dirt erodes onto sidewalk from neighboring lot
- Because many walls/buildings/fences are built right up to sidewalk often the sight distance for a vehicle coming off a side street is blocked
- At the major signalized intersections there is not ped refuge between opposing directions of traffic. At Wyoming, there is ped refuge but not accessible
- East of Wyoming Zuni has a different cross section two through lanes eastbound, one through lane westbound and a two-way left-turn lane
- Some splitter islands have been added to the side streets to the south for right-in/right-out only, and signing for no left-turns off Zuni has been added but drivers ignore and turn left off of Zuni anyway
- No left turn lanes on Zuni for drivers to get out of through lanes to wait to make a turn
- Emerson Elementary school children have to cross Zuni to get from homes on the north to the school on the south without a school zone or crossing guard? (need to check this)
- There are a few locations where curb ramps have been built for wheelchair crossing of Zuni t mid-block locations

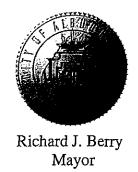
Location of right-of-way is not apparent – in some places it looks like the property line is right
against the back of the sidewalk – in other locations there appear to be a few feet of right-ofway behind the sidewalk

First walk – Tuesday, January 25, 2011

- 1. Moby Mirza, City of Albuquerque DMD
- 2. Enrique Cardiel, Bernalillo County Place Matters
- 3. Claude Lewis, Highland Business Association
- 4. Karen Aspelin, Vector Engineering
- 5. Sara Lavy, Vector Engineering

Second walk – Wednesday, January 26, 2011

- 1. Karen Aspelin, Vector Engineering
- 2. Sara Lavy, Vector Engineering
- 3. Enrique Cardiel, Bernalillo County Place Matters
- 4. Julie Luna, MRCOG
- 5. Maggie Gould, City of Albuquerque Planning
- 6. Rusita Avila, Bernalillo County Place Matters
- 7. Margarita Perez Pulido, Bernalillo County Place Matters
- 8. Kyra Ryan, Bernalillo County Place Matters



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT

PUBLIC INFORMATION MEETING ZUNI ROAD STUDY

(Washington Street To Moon Street)

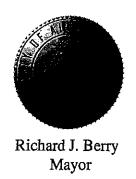
The City of Albuquerque will hold a Public Meeting at Highland High School for the study of Zuni Road between Washington and Moon Street, to improve the safety for pedestrians and bicyclists. The study will last until early fall of 2011.

This meeting is an opportunity for the public to come give their suggestions and ask questions about the study and receive helpful information about the study and meet the study team members. Also please tell us what you are experiencing living in Zuni Area and how it can be improved.

Public Meeting Wednesday, February 09, 2011 Open House: 6:00 PM to 8:00 PM Lecture Hall Highland High School 4700 Coal Avenue SE Albuquerque, NM 87108 Main Parking Amain Parking Public Meeting Wednesday, February 09, 2011 Open House: 6:00 PM to 8:00 PM Lecture Hall Highland High School Amain Parking Amain Parkin

You can come to the main parking lot of Highland High School from Zuni and Jefferson or Coal and Jefferson intersections.

ADA: To request Americans with Disabilities Act (ADA)-related accommodations for this meeting, contact Moby Mirza at (505) 768-2767.



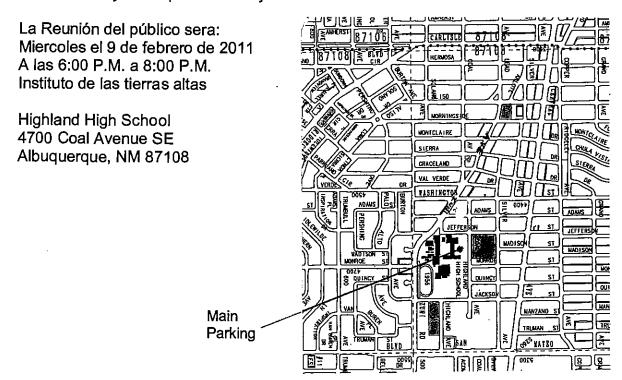
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT

PUBLIC INFORMATION MEETING ZUNI ROAD STUDY

(Washington Street To Moon Street)

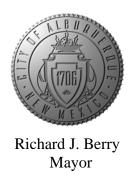
La Ciudad de Albuquerque tendrá una reunión para el público en la Preparatoria Highland para el estudio de la calle Zuni entre Washington y la Calle Luna, para mejorar la seguridad para peatones y ciclistas. El estudio durará hasta el otono de 2011.

Esta reunión es una oportunidad para que el público de sus sugerencias haga preguntas acerca del estudio y recibe información útil sobre el estudio y conozcan a los miembros del equipo de estudio. También díganos sobre sus experiencia al vivir en el área de Zuni y cómo podemos mejorarla.



Puede venir al estacionamiento de la Escuela Preparatoria Highland por la Zuni y Jefferson o Coal y cruces de Jefferson.

ADA: Para solicitar ayuda si esta Incapacitado – y quiere asistir esta reunión, contacto Moby Mirza en (505) 768-2767.



City of Albuquerque Department of Municipal Development

Public Information Meeting
Zuni Road Study
(Washington Street To Moon Street)
Highland High School
Wednesday, February 09, 2011

Agenda

6:00 to 6:20 P.M.

Open House in Foyer

6:20 to 6:30 P.M.

Introductions and Opening Address

6:30 to 7:00 P.M.

Presentation

7:00 to 7:30 P.M.

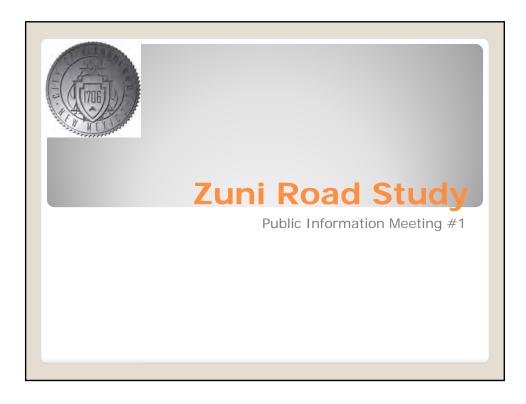
Input from the Citizens/ Public Questions and Answers

7:30 to 8:00 P.M.

Open House, Back in Foyer Questions and Answers

<u>Note</u>

- 1. Please sign your name on the sign-in sheet
- 2. Please pick up the Comment Form



- Public Representation/Neighborhood Associations
- Project Stakeholders
- City of Albuquerque
 - Councilor Rey Garduño and Staff
 - City Officials
 - Other Staff Members
- Consultant Staff

Introductions

- Collect data:
 - Get the Concerns of the Public at this Meeting
 - Other Sources
- Consider and Develop Alternatives
- Make Final Report and Recommendations for Improvements

Study Process

February-April 2011 - Data Collection

April-Mid-May 2011 - Develop and Evaluate

Alternatives

Mid-May 2011 - Public Meeting #2

End May 2011 - Define Alternatives
 to June 2011

Early July 2011 - Public Meeting #3

Late July 2011 - Draft Final Report with

Recommendations
Submitted to City

August 2011 - City Staff and Councilor Rey

Garduño Review Draft Final Report and Recommendations

Late August 2011 - Final Report With Recommendations

Submitted to City Staff and

Councilor Rey Garduño

Project Schedule

- Data Collection as of Today
 - Walking Survey of the Zuni Road Corridor Completed
 - Traffic Volumes Collected
 - Crash Data Obtained
 - Some Comments Solicited from Stakeholders
 - Input/Comments from this Public Meeting

Work completed to date

Comments - Sidewalks

- Asphalt pavement shoving and overlays have created a "lip" of asphalt at the joint between the asphalt and gutter pan which is often in the pedestrian path parallel to Zuni at the side streets
- Curb ramps not ADA, sometimes have obstructions (most often hydrants, utility poles), ramps direct pedestrians diagonally out into Zuni rather than directionally, parallel to Zuni
- Some properties have barbed wire fences jutting out over the sidewalk
- Fast traffic, close to pedestrians on sidewalk
- Bicyclists ride on sidewalk
- Sidewalks are narrow in many locations, sometimes have obstructions or hazards
- No sidewalk at all on the north side of Zuni near Central
- Pedestrian push buttons at signals not accessible
- Many unused driveways still remain even though they are fenced or walled off - bad for ADA path because of cross slope
- · Sometimes sand/dirt erodes onto sidewalk from neighboring lot

Comments - Pedestrians crossing Zuni

- Pedestrians cross all over, when there is a gap in traffic, based on their origin and destination
- Because the road is narrow, crossing Zuni mid-block may not seem that dangerous
- There are no protected crossings for long spans between signals
- There is no pedestrian refuge between opposing directions of traffic
- High school kids jaywalk from campus to Valero station the crossing is not within the school speed zone
- At the major signalized intersections there is not pedestrian refuge between opposing directions of traffic. At Wyoming, there is pedestrian refuge but not accessible
- Emerson Elementary school children cross Zuni to get from homes on the north to the school on the south
- There are a few locations where curb ramps have been built for wheelchair crossing of Zuni at mid-block locations
- Pedestrians cross Žuni at different places. Very few are seen crossing the road at signalized intersections.

Observations from walking survey

Comments - Transit

- Bus stop areas are small shelters should be provided
- There are no bus pull outs
- Bus stops should be re-surveyed for boarding of passengers and located accordingly

Comments - Driving on Zuni

- Because many walls/buildings/fences are built right up to sidewalk often the sight distance for a vehicle coming off a side street is blocked
- East of Wyoming Zuni has a different cross section two through lanes eastbound, one through lane westbound and a two-way left-turn lane
- Between Washington and San Mateo Zuni has three lanes in each direction
- Some islands have been added to the side streets to the south to prohibit left turns, and signing for no left-turns off Zuni has been added but drivers ignore and turn left off of Zuni anyway
- There are no left turn lanes on Zuni for drivers to get out of through lanes to wait to make a turn

Observations from walking survey

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- There are no left turn lanes on Zuni for drivers to get out of through lanes to wait to make a turn

Miscellaneous Comments

- Side streets often have no light poles
- Large overhead transmission line runs parallel to Zuni along south sidewalk
- Many unused driveways still remain even though they are fenced or walled off - bad for ADA path because of cross slope
- Location of right-of-way is not apparent in some places it looks like the property line is right against the back of the sidewalk - in other locations there appear to be a few feet of rightof-way behind the sidewalk
- Right-of-way locations will be determined from available data and presented at next public meeting









- Next Public Meeting (#2) May 2011
 - Present the Findings of the Data Collection Task
 - Present Preliminary Alternatives for Zuni Road
 - Request Public Comments on the Alternatives

What's next

- International District Sector Development Plan
- ACHIEVE /International Community Trail
- Bernalillo County Place Matters Team

Other related studies

Your Concerns Regarding Zuni Road

please be specific!

What we need from you

Summary of the Public Information Meeting held on February 9, 2011

The first public meeting for the Zuni Pedestrian Study was held on February 9, 2011. The meeting was held at Highland High School and was attended by approximately 22 people, including area residents, City of Albuquerque staff, and the District 6 City Councilor, Ray Garduno. Members of the consultant team were also present but are not included in this number. The meeting began at 6:00 pm and ended about 8:00 pm.

The purpose of the meeting was to:

- Inform stakeholders and the public about the Zuni Pedestrian Study
- Obtain input from the stakeholders and general public on issues, comments and questions.

The meeting began with a brief open house session (6:00 pm to 6:20 pm) that included displays for review along with the project team representatives to answer questions. The display information included:

- Roll plots with aerial map of Zuni Street from Washington to the Zuni connection to Central.
 The plots were displayed flat on tables so members of the public could mark areas of concern directly on the maps.
- Display showing pedestrian crash locations and number of crashes along Zuni corridor.
- Two displays listing concerns that were brought up during the walking survey with space to write additional concerns.

A presentation was provided starting at 6:25 pm. The presentation covered the following topics:

- The study process
- The project schedule
- Work completed to date
- Observations from walking survey
- Photos with examples of problems on street

Following the presentation, the meeting was opened up to questions and comments. All meeting participants were provided with a comment form. A copy of the comment form is attached.

Questions and comments made at the meeting are summarized below:

- The speeds currently on Zuni would not be allowed on Copper
- It's important to slow down speeds on Zuni and cross-streets
- There are no lights near school route
- One lane each way would be fine with a turn lane
- The left turn lane on Zuni into John Brooks is the only one

- Driving in the left lane is not safe
- There are no pedestrian crossings near grocery store
- Ask that the design be started immediately after the study is completed
- Please communicate, communicate, communicate
- Zuni needs more lights, more left turn lanes, slower traffic
- The City buses speed on Zuni
- Concerned with speed on Zuni
- Need more pedestrian protection
- San Mateo between Zuni and Central is also dangerous
- San Pablo/Zuni crossing is very dangerous, lots of accidents there
 - o 50% of families walk to the clinic
 - o Bus stop near there is not protected, it needs a shelter
- Need more lights
- Looking at adding a preschool at San Pablo/Zuni, will cause more pedestrian traffic and car traffic
- Where does all the traffic on Zuni come from? From SE Heights residents? A SE loop road through the based to connect to Gibson would cut down traffic on Zuni. Need southern route around the Base.
- Cut off Jackson St so it doesn't connect to Central (near HHS)
- Need protection for Highland students
 - o Kids jaywalk
 - o Need more lights
 - Need more sidewalks near HHS
- Between Washington and San Mateo, Zuni is 6 lanes.
- The City should create a tax to train/pay monitors to report speeders.
- Put up a speed trailer on Zuni between Wyoming and Louisiana
- Need more police presence
- Clean up the Zuni area businesses
- It's faster to take Zuni than Central
- The eastbound versus westbound traffic on Zuni at Wyoming sometimes sideswipe and hit their mirrors the lanes are too narrow.
- The bus stop locations on Central affect where pedestrians cross Zuni
- Medians would be safer
- Highland High School should add fence in median to reduce jaywalkers.
- Need dedicated walk times at light near clinic (Zuni/San Pablo)
- Drivers at lights don't watch for pedestrians when turning. Safer to cross mid-block where only have to look at two directions of traffic rather than three.
- Trumbull is the densest neighborhood in Albuquerque.
- There are 13,000 visits per year to the San Pablo clinic and another 12,000 at the Central/Texas/Zuni clinic.

Need more buses on Zuni

Written comments received on comment forms at the meeting are listed below:

- Lighting, more <u>police</u> presence. Speed boxes that tell you how fast you're going. Maybe a bike lane. More Zuni bus access. Like the Zuni bus adding more to their schedule.
- Need signal at Jackson and Zuni
 - Need to clean up the café and MVD inspection station on San Mateo and Zuni. They
 wash their grease and oil onto Zuni.
 - Cut the parking on Jackson
- Opportunities to narrow lanes
 - o Great idea to use school crossing to become pedestrian crossing
 - Already a pedestrian zone should be designed as such
 - o Lighting!!
 - o Bus shelters
 - WIDE sidewalks
 - o Are there pedestrian/vehicular counts
 - Consider downgrading the road classification
 - Land Use does it complement Zuni's intended use/classification
 - How does this area reflect the City's Centers And Corridors concept? Design needs to respond to this.
 - o Can Zuni be designed as a "Great Street"
 - o Utilize the cultural assets/characteristics as design cues
 - Don't let engineers "design"
 - More transit/mobility options no more increasing vehicular capacity

Written comments received on display boards during meeting are listed below:

- Sidewalk along Zuni
 - Bike lanes on Zuni between San Mateo and Washington very possible faster. Cost should be thought of.
- Pedestrians Crossing Zuni
 - Not enough pedestrian crossings by John Brooks and Big Lots
 - o Bus stop at Zuni and San Pablo does not have protections from weather. Needs shelter.
 - o More light needed on between Zuni and Central on San Pablo
 - o Marked crossing cautioning for kids crossings Zuni and San Pablo
- Transit
 - More or more often bus schedules on Zuni should be made
 - o I've lived on Zuni for 11 years and never caught a bus on Zuni
- Driving on Zuni Road
 - Speeding all along Zuni
 - Echo need left-turn lanes
 - Need more signals
 - Need traffic calming

- Traffic study must be done. Too much traffic for such narrow lanes with no left turn lane
- Need signal at Jackson and Zuni
- Need lights timed like Lead/Coal

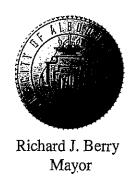
Written comments received on aerial maps at meeting are listed below:

- Would like pedestrian/school crossing at Jackson and Zuni
- Walmart and student traffic on Jackson north of Zuni
- Parking on Jackson north of Zuni blocks views people should park in the lot at Monroe/Coal
- People are good about stopping at crosswalk across Jackson just north of Zuni
- Zuni should be 2 lanes each directions, not 3, from Washington to San Mateo
- The existing crosswalk on Zuni near Monroe Street went to former gate to Highland High School, now closed.
- Students jaywalk near Adams Street
- Move the school crossing to Adams Street currently it is located 100 ft east of Adams Street.
- It is difficult to make left turn from John Brooks exit could use another light
- San Pedro/Zuni children cross here for park and Wilson Middle School
- Add pedestrian lighting at Zuni and Georgia, Indiana and Kentucky Streets
- Students cross Zuni at Georgia and Indiana
- Louisiana/Zuni pushed the button and the crossing light did not change from red to white
- Central/Zuni improve intersection (turn from Central to Zuni)
- Wyoming and Zuni is very narrow
- Texas/Zuni add crosswalks and light, nearby clinic gets 12,000 visits per year
- There is a bus stop located at southeast corner of San Pablo/Zuni
- San Pablo/Zuni 50% of people walk to clinic located nearby, clinic gets 10,000 to 13,000 visits per year

Comments received by phone or email prior to or after the meeting:

- Lisa Waltz Parkland Hills Neighborhood Association
 - People speed on Zuni between Washington and San Mateo, Zuni is 6 lanes in this section
 - o It's easy for high school kids to leave campus and hang out in the neighborhood
 - Safer to cross mid-block than at intersections as there are fewer conflicting movements.
- Joanne McIntire for ACHIEVE, Trail Project Planner
 - ACHIEVE's International Community Trail project identifies a route for walking for 5 neighborhoods and includes Zuni Road, between San Mateo and Utah.
 - o Zuni sidewalks are too narrow between 4 to 6 feet.

- Traffic lights are spaced too far apart for most walkers.
- Suggests leveling sidewalks at driveways and closing vacant driveways
- Walking zones for Wilson Middle School and Highland High School students should receive additional attention
- At crossings use Smart Crosswalk system, move stop lines back from marked crosswalks,
 add "Stop Here for Pedestrians" signs, Right Turn on Red restrictions.
- o Install curb ramps that are ADA compliant
- Notes from meeting with Scott Elder, Highland High School Principal
 - There is a marked cross-walk at Monroe and Zune, but the entrance to the school there is gated and locked. The City requested HHS shut the gate next to the crosswalk because they didn't want kids funneled to it. The gate could be easily reopened and the principal thinks it's a good location for the crosswalk.
 - o Reconsider Monroe and Quincy
 - o Fence the medians like Sanda H.S. and La Cueva H.S.
 - o Most kids take the bus, about 20 buses
 - o A small percentage of kids (60-350) cross Zuni going to San Pedro
 - Lots of kids walk to Central to live/take the bus
 - Many kids got o Valero or Wal-Mart after school. Lots of kids jaywalk from the southwest corner of HHS to Valero at Adams/Zuni. This crossing is outside the school speed zone.
 - Many kids also cross Zuni at Jackson and Truman intersections to walks south through the neighborhood streets. Both of these crossing are also outside the Zuni school zone.
 - o Move school speed zone farther east?



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT

PUBLIC INFORMATION MEETING ZUNI ROAD STUDY

(Washington Street To Moon Street)

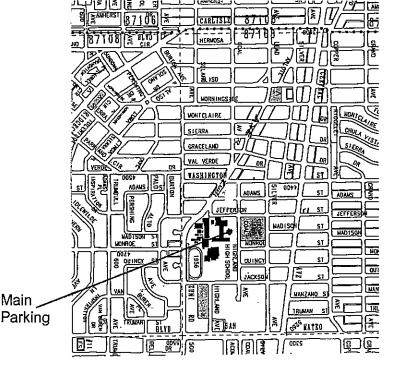
The City of Albuquerque will hold a Public Meeting at Highland High School for the study of Zuni Road between Washington and Moon Street, to improve the safety for pedestrians and bicyclists. The study will last until early fall of 2011.

This meeting is an opportunity for the public to come give their suggestions and ask questions about the study and receive helpful information about the study and meet the study team members. Also please tell us what you are experiencing living in Zuni Area and how it can be improved.

Public Meeting

Wednesday, May 04, 2011 Open House: 6:00 PM to 7:30 PM Lecture Hall Highland High School

Highland High School 4700 Coal Avenue SE Albuquerque, NM 87108



You can come to the main parking lot of Highland High School from Zuni and Jefferson or Coal and Jefferson intersections.

ADA: To request Americans with Disabilities Act (ADA)-related accommodations for this meeting, contact Moby Mirza at (505) 768-2767.



Richard J. Berry Mayor

City of Albuquerque Department of Municipal Development

2nd Public Information Meeting Zuni Road Study

(Washington Street To Moon Street)

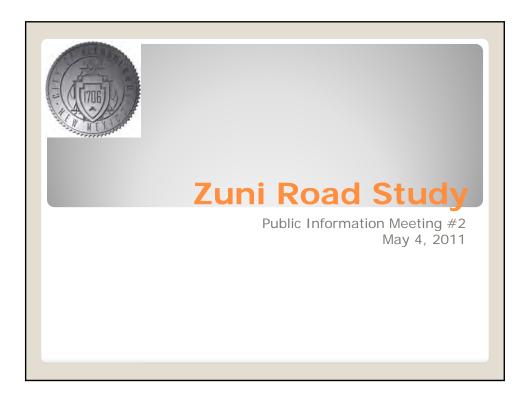
Highland High School Wednesday, May 04, 2011 6 P.M. to 7:30 P.M.

Agenda

6:00 to 6:25 P.M.	Open House in Foyer
6:25 to 6:45 P.M.	Presentation
6:45 to 7:15 P.M.	Input from the Citizens/ Public Questions and Answers
7:15 to 7:30 P.M.	Open House, Back in Foyer Questions and Answers

<u>Note</u>

- 1. Please sign your name on the sign-in sheet
- 2. Please pick up the Comment Form



- Public Representation/ Neighborhood Associations
- Project Stakeholders
- City of Albuquerque
 - Councilor Rey Garduño and Staff
 - City Officials
 - Other Staff Members
- Consultant Staff

Introductions

Collect Data

Consider and Develop Alternatives for Improving the Zuni Road Corridor between Washington Street and **Moon Street (Central Avenue)**

 Make Final Report and Recommendations for Improvements

Study Process

 February 9, 2011 Public Meeting #1 Held

February-April 2011 -**Data Collection**

April-Mid-May 2011 -**Develop and Evaluate Alternatives**

• May 4, 2011 -Public Meeting #2 End May 2011 **Define Alternatives**

to June 2011

• Early July 2011 Public Meeting #3

Late July 2011 Draft Final Report with Recommendations

Submitted to City

 August 2011 City Staff and Councilor Rey

Garduño Review Draft Final Report and Recommendations

 Late August 2011 Final Report With Recommendations

Submitted to City Staff and Councilor Rey Garduño

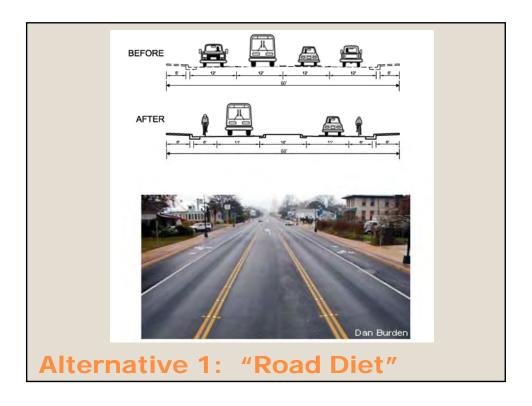
Project Schedule

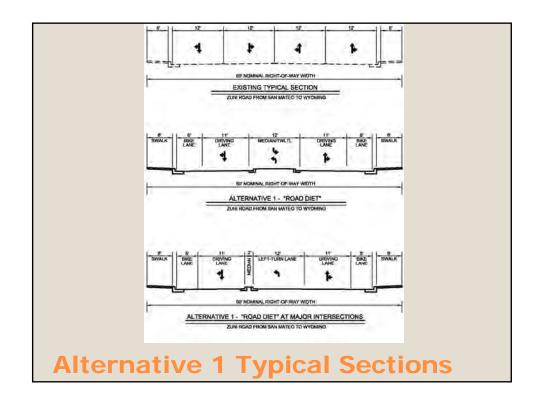
- Data Collection
 - Walking survey of the Zuni Road corridor
 - Traffic and pedestrian volumes
 - Crash data
 - Crossing locations
 - Street lighting locations
 - Transit stops
 - Drainage
 - Estimated right-of-way extents
 - Landscaping

Work completed to date

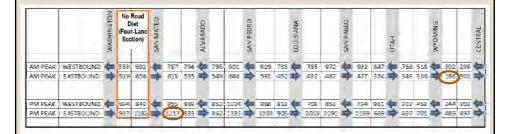
- Data Collection (continued)
 - Existing pavement widths
 - Comments from stakeholders
 - Sidewalk conditions
 - Bicycle connections
 - Input/comments from public meetings
- Development of Draft Alternatives

Work completed to date





- Road Diet Recommendations
 - Under 750 vph more operationally feasible
 - 875 -1000 vph and above expect arterial level of service to decrease



Hourly Volumes on Zuni MRCOG, 2005 - 2010

- Road Diet Recommendations
 - Under 750 vph more operationally feasible
 - 875 -1000 vph and above expect arterial level of service to decrease



Hourly Volumes on Isleta MRCOG, 2008 - 2010

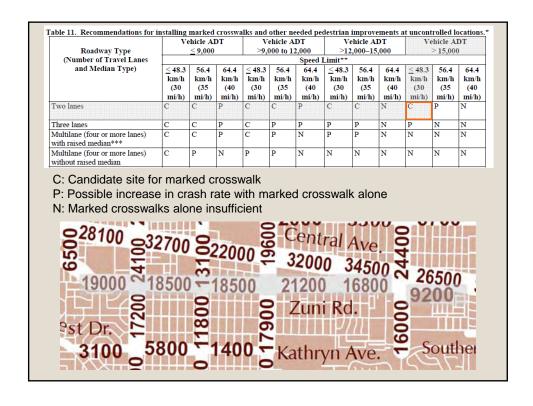


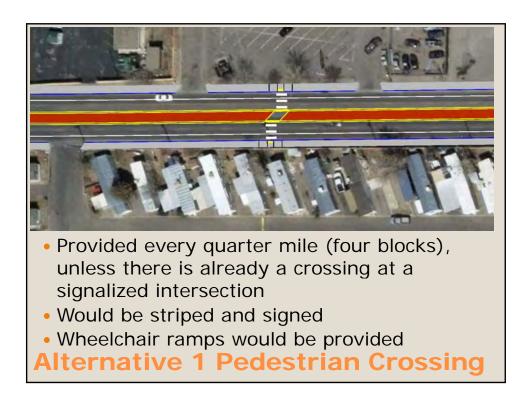




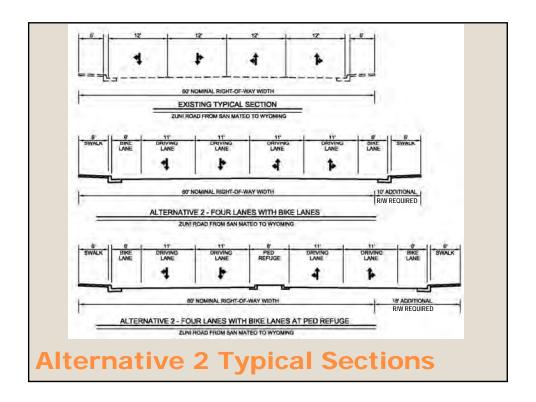


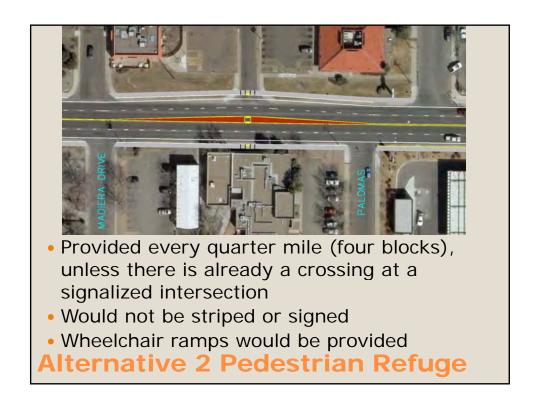


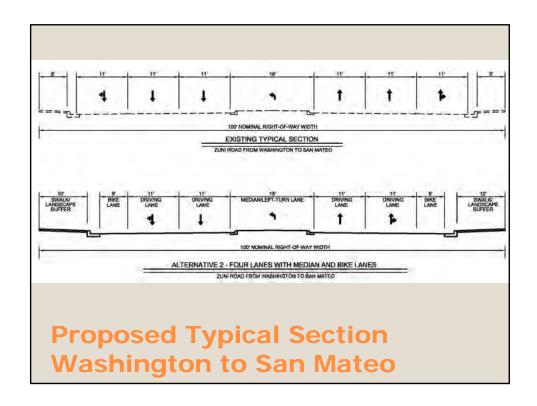




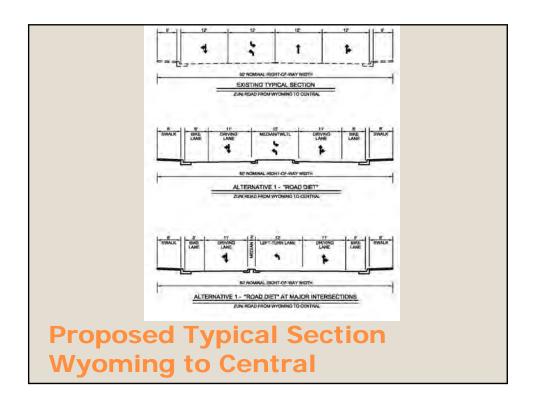














- Speed limit lowered to 30 mph
- Bike lane on each side, which will also act as a buffer space between the sidewalk and the outside driving lane
- Six-foot sidewalks
- ADA accessibility, including an accessible path around sidewalk obstacles
- Unused driveways would be closed
- More street lighting, where not up to City standards

Features that would be part of both alternatives

- · Landscaping where feasible
- Drainage
- Ped refuge or mid-block crossing at John Brooks shopping center driveway
- Bus shelters
- Improvements to side street approaches to Zuni
- Modifications to signals, as necessary, for accessibility

Features that would be part of both alternatives

- 1% annual chance floodplain by FEMA confined to right-of-way
- Leave the existing cross section intact
- Road diet only by striping-leave the curbs and gutters alone (leaves 5-foot sidewalks)

Change in cross section will add to:

- Hydraulic analysis
- Storm drain infrastructure
- Approval by City Planning Department
- Preparing and submitting Letter of Map Revision to FEMA

Drainage

- People drive too fast on Zuni
 - Both alternatives would lower the speed limit to 30 mph. The narrower lanes proposed under both alternatives should help slow speeds.
- There should be more traffic signals on Zuni
 - > Traffic signals have to be warranted, generally by high side street volumes. Neither alternative recommends additional traffic signals on Zuni.
- There should be more street lights on Zuni
 - Under either alternative, street lights would be added where there are dark spots.
- Driving in the left lane is not safe/there should be left-turn lanes
 - > Alternative 1 would separate left-turning traffic from the through lanes.

Public comments

- Zuni does not need six lanes between Washington and San Mateo
 - > Both alternatives would reduce this section of Zuni to four lanes.
- The sidewalks need to be widened and improved
 - > The sidewalks would be made ADA-accessible under both alternatives, with accessible routes around obstacles.
- The lanes on Zuni at Wyoming are too narrow and are dangerous
 - These lanes were restriped to 9-10' widths to create a leftturn lane. Neither of the build alternatives would have lanes this narrow.
- Having medians would be safer
 - Build Alternative 1 would provide a median/TWLTL.

Public comments

- Pedestrians need safer places to cross
 - Under both alternatives, there would be a ped refuge at quarter-mile spacing. Alternative 1 would have signed and marked crosswalks; Alternative 2 would provide an unsigned/unmarked median refuge.
- Zuni is dangerous for drivers and pedestrians
 - Alternative 1 provides a "road diet," which has increased safety at other locations where it has been implemented. Both alternatives separate the sidewalk from the driving lanes with a bike lane.
- Need more protection for Highland students crossing Zuni
 - > Both alternatives would lengthen the school speed zone, funnel students to one designated crossing, fence the median, reduce the speed limit on Zuni, and reduce the number of lanes in front of Highland High School.

Public comments

- Some pedestrian signals don't work or don't provide enough walk time
 - > During construction, pedestrian signals would be inspected for compliance with minimum walk times.
- Unused driveways should be closed
 - > Unused driveways would be considered on a case-bycase basis and closed, if justified, during construction of either alternative.
- Crossing mid-block would be safer than crossing at the intersections
 - ➤ Both alternatives will offer opportunities to cross midblock with a refuge area.
- Bike lanes are needed
 - Bike lanes are part of both Alternative 1 and 2.

Public comments

- Don't add capacity to Zuni
 - > Alternative 1 would likely reduce capacity on Zuni, while capacity would not change with Alternative 2.
- The bus stops all need shelters/more bus service is needed along Zuni
 - Both alternatives would upgrade stops to provide shelters. Additional bus service will be a recommendation of the study.
- Landscaping is needed along Zuni
 - Landscaping would be part of Alternative 1. Alternative2 does not provide opportunities for landscaping.

Public comments

Road Diet - Benefits

- 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

Downsides

- Traffic volumes high enough on Zuni that level of service may deteriorate
- May divert traffic to other routes

Road Diet Pros and Cons

Benefits

- not change from existing
- Adds a bike lane
- Widens sidewalks to six feet
- Adds pedestrian refuge areas

Disadvantages

- Level of service would
 Marked mid-block crosswalks could increase pedestrian crashes
 - Longer distance for peds to
 - Left turns continue to have to share lane with through traffic
 - Requires larger footprint/ more impacts to utilities, right-of-way
 - Generally less safe for peds and motorists
 - Median refuge only at spot locations along corridor
 - No traffic calming effect
 - No opportunity for median landscaping

Alternative 2 Pros and Cons

- Next Public Meeting (#3) July 2011
 - Present Final Alternatives for Zuni Road
 - Request Public Comments on the Alternatives
 - Recommend an Alternative

What's next

- International District Sector
 Development Plan
 - Made presentations April 12, boards posted on www.cabq.gov
- International Trail Project
 - Is considering road diets for other streets in the Zuni study area
- Bernalillo County Place Matters Team

Other related studies - updates

Your Concerns Regarding Zuni Road

please be specific!

What we need from you

For more information or to provide your comments please contact Karen Aspelin Vector Engineering, LLC (505) 341-9393 kaspelin@vectornm.com

Contact information

Summary of the Public Information Meeting held on May 4, 2011

The second public meeting for the Zuni Pedestrian Study was held on May 4, 2011. The meeting was held at Highland High School and was attended by approximately 13 people, including area residents, City of Albuquerque staff, and the District 6 City Councilor, Ray Garduno. Members of the consultant team were also present but are not included in this number. The meeting began at 6:00 pm and ended about 7:30 pm.

The purpose of the meeting was to:

- Inform stakeholders and the public about the progress on the Zuni Pedestrian Study
- Obtain input from the stakeholders and general public on issues, comments and questions.

The meeting began with a brief open house session (6:00 pm to 6:15 pm) that included displays for review along with the project team representatives to answer questions. The display information included:

• Two displays showing the proposed alternatives for the Zuni corridor.

A presentation was provided starting at 6:15 pm. The presentation covered the following topics:

- The work completed to date
- Alternate 1: Road Diet
- Alternate 2: Pedestrian Refuge
- Recommendations for Washington to San Mateo section
- Recommendations for Wyoming to Central section
- Summary of how public comments have been addressed
- Pros and cons of the alternatives

Following the presentation, the meeting was opened up to questions and comments. All meeting participants were provided with a comment form and handout with information from the presentation. A copy of the comment form and handout are attached.

Questions and comments made at the meeting are summarized below:

- Q: Will the proposed raised medians at the intersections be safe?
 A: The raised medians are safer than the current situation with just striping if a pedestrian needs to stop in the middle of the street to wait for an opportunity to cross. Also, raised medians provide separation between the two directions of traffic.
- Bike education is needed. Bicyclists ride on the wrong side of the street and don't obey street signs and traffic signals.

- Q: What is the cost to landscape the proposed median in Zuni?
 - A: Cost estimates have not been prepared for the project at this stage.
- Q: How long will it be before construction would start?
 - A: That has not been worked out
- Option 2 does not provide enough change.
- Like the road diet option
- Hope the City has money to do something soon instead of waiting years like the Lead/Coal project.
- Q: Can Karen email the presentation to the meeting attendees?
 - A: Yes, a pdf will be emailed to everyone that signed in.
- Q: Will there be some sort of lights at the proposed pedestrian crossing locations?
 - A: Not at that level of detail yet. That will be worked out in the future.
- Q: What about kids crossing Zuni to get to school?
 - A: The school maps show the elementary school boundary line at Zuni, so no young kids should be crossing. Kids may be crossing for the middle school.

Written comments received on comment forms at the meeting are listed below:

- Fence the stretch of median between Jackson and Truman (in addition to the other fence shown)
- The first alternative (road diet) looks better.
- Good options! Option #1 offers more significant and meaningful change.
- Consider solid color painting on bike lanes for visibility
- HAWK signals are now included in 2009 MUTCD. They are an accepted practice now by FHWA
 and have been shown to be an effective countermeasure for pedestrian crashes at mid-block
 crossings.
- COA would be remiss not to consider the use of HAWK signals on Zuni Rd, in an area with such high pedestrian trips some of the highest counts in the City and high pedestrian crashes including fatalities.
- Where landscape strips are proposed, consider bioswales for drainage and water harvesting for irrigation of vegetation.
- Lighting should be dual street and pedestrian lighting.

Comments received by phone or email prior to or after the meeting:

- Likes Alternative #1 redirects focus on pedestrians and protects left turns.
- Concerned with the cost of the curb/sidewalk work.

From: E C [magonista66@yahoo.com]
Sent: Thursday, June 16, 2011 4:46 PM

To: Moby Mirza
Cc: Karen Aspelin

Subject: Zuni Safety Plan Feedback

Dear Mr. Mizra and Ms. Aspelin:

I have spoken with some neighbors about the Zuni Safety Plan and am compiling the feedback here for you in this message. I would also like to note that I have seen two accidents on Indiana and Zuni since the meeting both involving vehicles attempting to make a left hand turn and rear ended. There have been other accidents in that time as well but obviously I notice those closer to home in more detail.

The responses have been overwhelmingly in favor of reducing lanes in some form or another. And a great deal of more feedback was also given. Increasing pedestrian lighting to include side streets is a community desire. Making the area safer at night as well as during the day is mentioned often.

Looking at areas where people cross for specific destinations such as the shops on San Mateo and Zuni up to Alvarado, San Pedro because of Wilson Mid School, Georgia, Indiana and Kentucky because of students crossing for Emerson and Van Buren, San Pablo and Texas because of the clinics. Medians or some other form of pedestrian support are needed in these areas.

Bike lanes were regularly requested as were narrower vehicle lanes. Turning lanes are highly supported. Any traffic calming to reduce speeds seems to be supported as well.

There are residents interested in bulb outs at the intersections to help provide a buffer for crossing pedestrians and bicyclists. "Ladder" striping at pedestrian crossings is also important, as well as improving the current lighting for pedestrian crossings. Trees and more landscaping were mentioned. This was often mentioned also as beautification and encouraging to being a pedestrian. And there was some discouragement to adding bike lanes with the current number of lanes because likely we would still have high speed vehicle traffic.

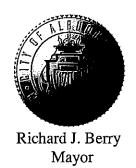
Of course wider sidewalks were mentioned. There is concern on whether the street is wide enough to increase the sidewalks. Along with that an improvement of the bus stops was also mentioned.

While I am giving a lengthy overview here, I will send a copy of this to neighbors who gave feedback or are interested in order that they may express themselves directly.

I have had close calls and witnessed many accidents along Zuni and appreciate this effort. Watching young children crossing Zuni for school is scary. Though there are not many it only takes one to be hit before we ask ourselves "why didn't we do something earlier?" I have ridden my bike along Zuni once because it was such an unpleasant experience. I notice bicyclists along Bell, and I guess they do so for safety.

Thank you for your work and I look forward to seeing you at the next Zuni Safety Plan meeting on July 20, at 6PM at Cesar Chavez Community Center.

Enrique Cardiel, SSPNA President



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT

PUBLIC INFORMATION MEETING ZUNI ROAD STUDY

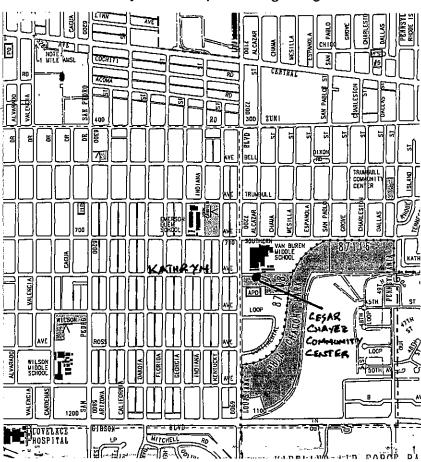
(Washington Street To Moon Street)

The City of Albuquerque will hold a Public Meeting at Cesar Chavez Community Center for the study of Zuni Road between Washington and Moon Street, to improve the safety for pedestrians and bicyclists. The study will last until early fall of 2011.

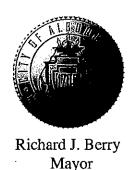
This meeting is an opportunity for the public to come give their suggestions and ask questions about the study and receive helpful information about the study and meet the study team members. Also please tell us what you are experiencing living in Zuni Area and how it can be improved.

Public Meeting
Wednesday, July 20, 2011
Open House:
6:00 PM to 7:30 PM
Multipurpose Room
Cesar Chavez
Community Center

Cesar Chavez Community Center 7505 Kathryn SE Albuquerque, NM 87108



ADA: To request Americans with Disabilities Act (ADA)-related accommodations for this meeting, contact Moby Mirza at (505) 768-2767.



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT

PUBLIC INFORMATION MEETING ZUNI ROAD STUDY

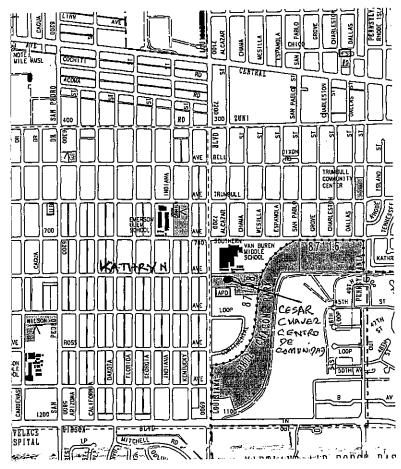
(Washington Street To Moon Street)

La Ciudad de Albuquerque tendrá una reunión para el público en la Cesar Chavez Centro de Comunidad para el estudio de la calle Zuni entre Washington y la Calle Luna, para mejorar la seguridad para peatones y ciclistas. El estudio durará hasta el otono de 2011.

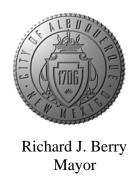
Esta reunión es una oportunidad para que el público de sus sugerencias haga preguntas acerca del estudio y recibe información útil sobre el estudio y conozcan a los miembros del equipo de estudio. También díganos sobre sus experiencia al vivir en el área de Zuni y cómo podemos mejorarla.

La Reunión del público sera: Miercoles el 20 de Julio de 2011 A las 6:00 P.M. a 7:30 P.M. Multipurpose Room Cesar Chavez Centro de Comunidad

Cesar Chavez Centro de Comunidad 7505 Kathryn SE Albuquerque, NM 87108



ADA: Para solicitar ayuda si esta Incapacitado – y quiere asistir esta reunión, contacto Moby Mirza en (505) 768-2767.



City of Albuquerque Department of Municipal Development

3rd & Final Public Information Meeting Zuni Road Study

(Washington Street To Moon Street)

Cesar Chavez Community Center Wednesday, July 20, 2011 6 P.M. to 7:30 P.M.

Agenda

6:00 to 6:15 P.M.	Open House in Foyer
6:15 to 6:45 P.M.	Presentation
6:45 to 7:15 P.M.	Input from the Citizens/ Public, Questions and Answers
7:15 to 7:30 P.M.	Open House, Back in Foyer Questions and Answers

<u>Note</u>

- 1. Please sign your name on the sign-in sheet
- 2. Please pick up the Comment Form



Zuni Road Study

Public Information Meeting #3 July 20, 2011

- Funding for study requested by Councilor Garduño in response to citizen concerns about safety hazards in the corridor, especially for pedestrians and bicyclists
- Speeding along the Zuni Road corridor is also a big concern
- Zuni Road shown as having on-street bike lanes in the future but the existing road cross section leaves no room for bike lanes

Origin of Study

- Public Representation/ Neighborhood Associations
- Project Stakeholders
- City of Albuquerque
 - Councilor Rey Garduño and Staff
 - City Officials
 - Other Staff Members
- Consultant Staff
- **Introductions**

- Collect Data
- Consider and Develop Alternatives for Improving the Zuni Road Corridor between Washington Street and Moon Street (Central Avenue)
- Final Report with Recommendations for Improvements

Study Process

 February 9, 2011 Public Meeting #1 Held **Data Collection** February-April 2011 -April-Mid-May 2011 -**Develop and Evaluate Alternatives** May 4, 2011 -Public Meeting #2 Held End May 2011 **Define Alternatives** to June 2011 July 20, 2011 Public Meeting #3 Late July 2011 Draft Final Report with Recommendations Submitted to City August 2011 City Staff and Councilor Rey Garduño Review Draft Final Report and Recommendations Late August 2011 Final Report With Recommendations Submitted to City Staff and Councilor Rey Garduño **Project Schedule**

- Data Collection
- Development of Draft Alternatives
 - Alternative 1 "Road Diet"
 - Alternative 2 Four-Lane Section
- Screening of Draft Alternatives
- Development of Final Alternatives
 - Alternative 1A Road Diet by Restriping
 - Alternative 1B Road Diet by Reconstructing Curb and Gutter
- Evaluation of Final Alternatives

Work completed to date

Number of Crashes and Rates for Major Intersections on Zuni Road (01/01/08 through 11/08/10)

Cross Street	PDO	Injury	Fatal	Vehicles Entering	Injury/Fatal Rate	Total Crash Rate
San Mateo Boulevard	114	26	0	41,881,100	0.62 PMVE	3.34 PMVE
San Pedro Drive*	45	14	0	32,537,050	0.43 PMVE	1.81 PMVE
Louisiana Boulevard	50	23	0	40,570,900	0.57 PMVE	1.80 PMVE
Wyoming Boulevard	57	22	0	34,609,300	0.64 PMVE	2.28 PMVE
Central Avenue	26	13	0	35,667,850	0.36 PMVE	1.09 PMVE

Average injury/fatal rate for AMPA: 0.41 PMVE Average crash rate for AMPA: 1.27 PMVE

PDO: Property Damage Only PMVE: Per Million Vehicles Entering AMPA: Albuquerque Metropolitan Planning Area

*Report from the public of two recent crashes at San Pedro and Zuni

Motor Vehicle Crash Data

Locations of Pedestrian and Bicyclist Crashes on Zuni Road (01/01/08 through 11/08/10)

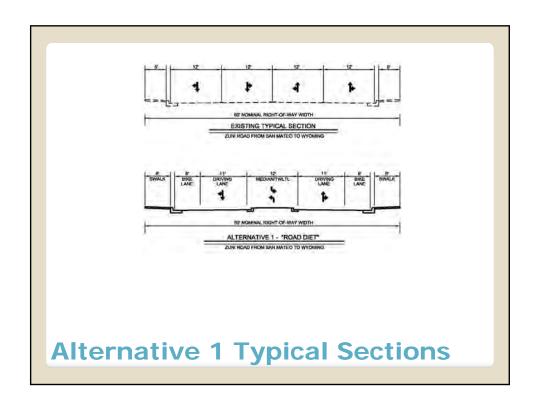
Cross Street	Ped Crashes	Bike Crashes
San Mateo Boulevard	0	2
Palomas Drive	0	1
Alvarado Drive	1	0
Cardenas Drive	1	0
San Pedro Drive	0	2
Arizona Street	1	0
California Street	0	1
Florida Street	1	0
Indiana Street	3 (one fatality)	1
Louisiana Boulevard	0	1
Grove Street	1	0
Charleston Street	1	0
Pennsylvania Street	4	1 (fatality)
Virginia Street	1	0

Pedestrian & Bicyclist Crash Data

Locations of Pedestrian and Bicyclist Crashes on Zuni Road (01/01/08 through 11/08/10)

Cross Street	Ped Crashes	Bike Crashes
San Mateo Boulevard	0	2
Palomas Drive	0	1
Alvarado Drive	1	0
Cardenas Drive	1	0
San Pedro Drive	0	2
Arizona Street	1	0
California Street	0	1
Florida Street	1	0
Indiana Street	3 (one fatality)	1
Louisiana Boulevard	0	1
Grove Street	1	0
Charleston Street	1	0
Pennsylvania Street	4	1 (fatality)
Virginia Street	1	0

Pedestrian & Bicyclist Crash Data



Road Diet Recommendations
 Under 750 vph – more operationally feasible
 875 -1000 vph and above – expect arterial level of service to decrease

 No Road Diet Recommendations
 Under 750 vph – more operationally feasible
 875 -1000 vph and above – expect arterial level of service to decrease

 No Road Diet Recommendations
 1000 vph – more operationally feasible
 1000 vph and above – expect arterial level of service to decrease

 No Road Diet Recommendations
 1000 vph – more operationally feasible
 1000 vph and above – expect arterial level of service to decrease

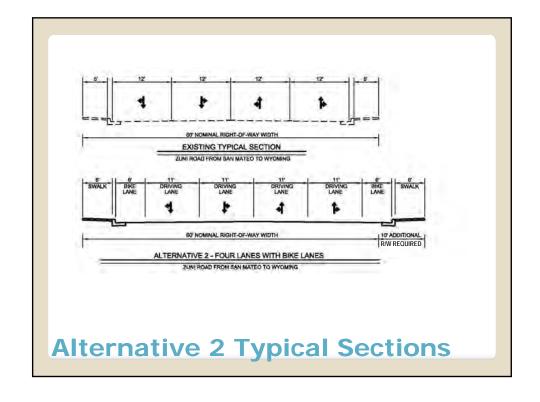
 No Road Diet Recommendations
 1000 vph – more operationally feasible
 1000 vph and above – expect arterial level of service to decrease

 No Road Diet Recommendations
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 No Road Diet Recommendations
 1000 vph and above – expect arterial level of service to decrease

 No Road Diet Recommendations
 1000 vph and above – expect arterial level of service to decrease



- Why are raised medians proposed at intersections?
 - Raised medians separate opposing directions of traffic with a physical obstacle.
- Bicyclist education is needed
 - > Signs with bicyclist education messages could be added to Zuni. This will be considered in final design.
- What will the median landscaping cost?
 - > The City's standard median landscaping costs about \$100 per linear foot of median
- When will construction begin?
 - Design and construction for this project are currently not funded.

Comments from Public Meeting #2

- The four-lane option does not provide enough change/I like the road diet.
 - > Comment noted.
- I hope the City can do something soon rather than waiting for so long like the Lead-Coal project.
 - > Comment noted.
- Will there be lighting at the mid-block pedestrian crossings?
 - > This will be determined during design.

Comments from Public Meeting #2

- Concerned with the cost for the curb and sidewalk work under Alternative 1.
 - > Reconstructing the curb and sidewalk just to provide an additional one foot of sidewalk space was considered, but due to limited funding a second alternative has been added which still achieves the road diet but leaves the curb and sidewalk in place.
- The portion of Zuni between Jackson and Truman should also have a median fence.
 - > This has been added to the conceptual plan.
- Solid color painting on bike lanes should be considered.
 - > This will be considered during final design.

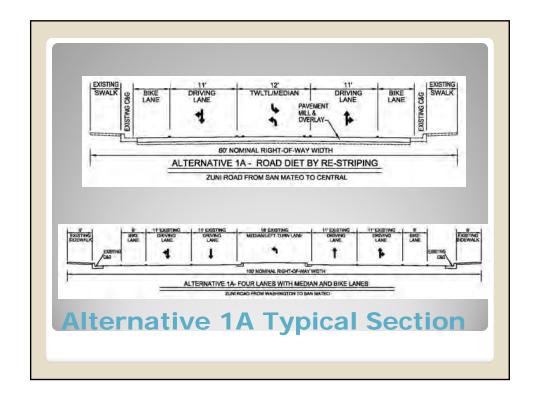
Comments from Public Meeting #2

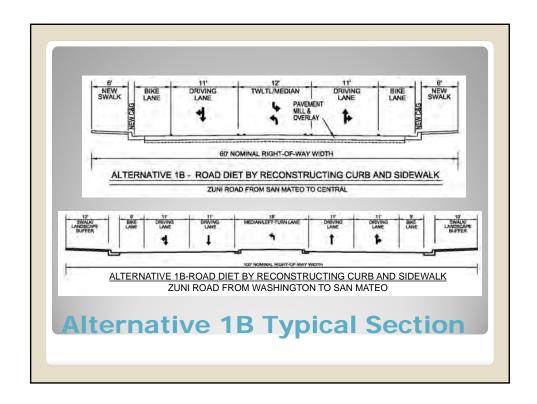
- Where landscape strips are proposed, consider bioswales for drainage and water harvesting for irrigation of vegetation.
 - > This will be considered during final design.
- Lighting should be dual street and pedestrian lighting.
 - > This will be a recommendation of the study and would be worked out during final design.
- How are kids who cross Zuni to get to school helped?
 - Like other pedestrians, school children would have fewer lanes of traffic to cross with a road diet alternative, and there will be several designated places for pedestrians to cross mid-block.

Comments from Public Meeting #2

- Alternative 2 Four Lane Section was eliminated from further study
 - Major right-of-way impacts
 - Business relocations would be necessary
 - Considerably more costly
 - No support from the public or stakeholders

Screening of Preliminary Alternatives





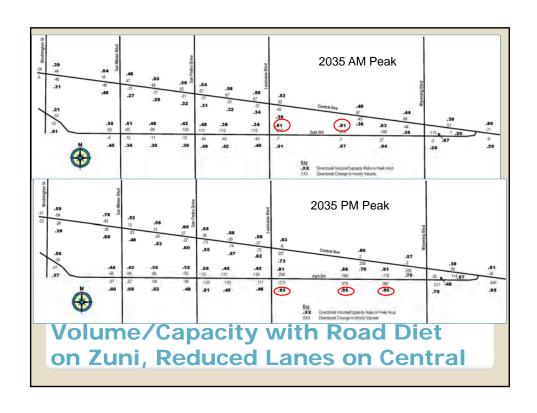


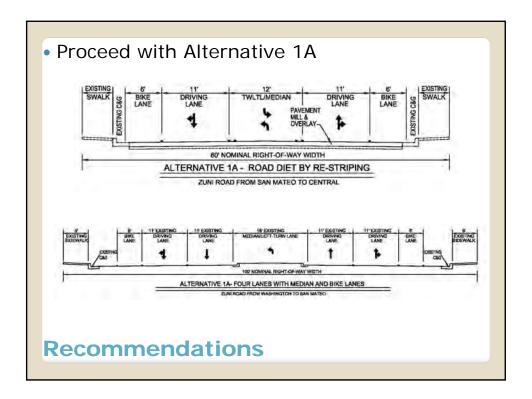


- Areas where final Alternatives 1A and 1B have similar impacts
 - Safety improvements
 - Right-of-way
 - Traffic operations
 - Provision of an accessible route
 - Impact to visible utilities
 - Landscaping opportunities
 - Access to adjacent parcels and side streets
 - Pedestrian crossing opportunities
 - Bus stops and shelters

Evaluation of Final Alternatives

Option	Drainage Impact	Sidewalk Width	Bike Lane	Cost Estimate
Alternative 1A	Minimal	Five foot	Six foot (5.33 feet off gutter)	\$2,040,000
Alternative 1B	Major	Six foot	Six foot (4.33 feet off gutter)	\$4,840,000





- Solicit public comment on the recommendations presented tonight PLEASE COMMENT BY WEDNESDAY, JULY 27
- Submit draft report to City with recommendations in late July
- Finalize report in August 2011

What's next

Your Concerns Regarding Zuni Road

please be specific!

What we need from you

For more information or to provide your comments please contact Karen Aspelin Vector Engineering, LLC (505) 341-9393 kaspelin@vectornm.com

Contact information

Summary of the Public Information Meeting held on July 20, 2011

The third, and last, public meeting for the Zuni Road Study was held on July 20, 2011. The meeting was held at the Cesar Chavez Community Center and was attended by approximately 45 people, including area residents, City of Albuquerque staff, and the District 6 City Councilor, Rey Garduno. Many of the attendees were students from the UNM Medical School fulfilling a class requirement to attend a public meeting. Members of the consultant team were also present but are not included in this number. The meeting began at 6:00 pm and ended about 7:30 pm.

The purpose of the meeting was to:

- Inform stakeholders and the public about the progress on the Zuni Road Study, including the recommended alternative.
- Obtain input from the stakeholders and general public on issues, comments and questions.

The meeting began with a brief open house session (6:00 pm to 6:15 pm) that included displays for review along with the project team representatives to answer questions. Six display boards showed plan views and typical sections of the recommended alternative for the Zuni corridor.

A presentation was provided starting at 6:15 pm. The presentation covered the following topics:

- The study process and what stage the process is currently in.
- Bicycle and pedestrian crash data.
- Typical cross sections for Alternative 1, the road diet.
- Summary of how public comments have been addressed.
- Screening of the alternatives.
- Evaluation of final alternatives.
- Recommendation to proceed with Alternative 1A, the road diet by re-striping.

Following the presentation, the meeting was opened up to questions and comments. All meeting participants were provided with a comment form and handout with information from the presentation.

Questions and comments made at the meeting are summarized below:

- Drainage from San Pedro to Louisiana is a problem. There are no inlets and the street fills with water.
- No reason for fence at Highland High School.
- Put the pedestrian refuges near high accident areas, such as near Indiana and Pennsylvania.
- A grocery store (Talin World Market) on Central causes pedestrian traffic on Central.
- At the intersection of Zuni and Jackson there are a lot of accidents. Maybe a traffic light could be added? There is a chain link fence for the school that blocks the sight lines for southbound to westbound traffic.
- Don't like the Walmart people using Jackson Street. Would like to see the access reduced or closed.
- Maybe the HAWK pedestrian light system could be used at the mid-block crossings to increase safety. Has DMD looked at the HAWK system?
- Likes Alternative 1B as it would include drainage improvements. Currently the bike lane and outside lanes fill up with water when it rains.

- Clinic would like to see crosswalk at Palomas and Zuni. They give out food vouchers for nearby grocery stores and people must cross Zuni to get to the stores.
- The speed limit on Zuni would be reduced from 35 mph to 30 mph.

Written comments received on comment forms at the meeting are listed below:

- If the law in NM is for an automobile to pass a bike with a 5-foot clearance, then a 4-1/3' bike lane is very small, as shown on the 1B plan.
- Move the drainage grates so they are not oriented in such a way that they can catch skinny bike tires.
- Add signage for "NM Law: Stop for Pedestrians on Crosswalk".
- What kind of fencing will be used along Highland H.S.?
- I would like to see more landscaping included with the raised median and fence between Jackson St and Adams St.
- Can more street lights be added along Zuni between San Mateo and Wyoming?
- If the turn-offs are removed for Quincy and Adams, I think this would create a safety issue for cars heading west and completing a U-turn.
- The traffic heading east after Washington often speeds on this curve. It seems dangerous.
- I think the trees and landscaping that have already been put in place spruce up the entire neighborhood (along Coal, west of University). It would be a welcome addition along the medians between Washington and San Mateo. This would also aid in dressing up the fence.
- The fence on the northeast corner (along the Performing Arts building) is a visual issue. This should be addressed.
- Post a sign for traffic to stop for pedestrians at crosswalks on Zuni and Palomas.
- Removing a lane along the high school seems like it would generate a great deal of backup during school peak times and athletic events. I would like to see it remain as is in this area.
- As a member of the community and a bicyclist, I find the proposed changes to Zuni to be both safer and fiscally responsible. Compared to emergency room visits, costs due to accidents, the proposed Alternative 1A, road diet, is a welcome alternative for taxpayer spending.

Comments received by email after the meeting:

• I fully support the project with alternatives as proposed, in particular, to the inclusion of multimodes of travel such as pedestrians and bicycles. As an observation from a technical perspective, I would like to stress that any modification to the auto lane configuration at mid link versus at the intersections should consider the capacity of both portions of the roadway. Capacity constraints exist at intersections along with safety issues, and consideration of the intersection capacity needs to be conducted independently from the roadway segment capacity. It is important that each of the intersections along the corridor be designed to accommodate safe bicycle lane approaches, pedestrian crossings as needed, and that they retain adequate general purpose auto capacity with respect to turn lanes and approach lanes such that they do not become bottlenecks. The analysis has shown that the 3-lane alternatives should be adequate to provide adequate roadway capacity for current and future corridor demand, however, consideration/analysis of the intersection capacity should be done such that they do not become bottlenecks with lower capacity than that of the 3-lane cross section. This may mean for some intersections that they retain their current configuration.