2 Existing Conditions

2.1 Project Area

The study intersection of Kanan Road and Thousand Oaks Boulevard is located in the City of Agoura Hills, approximately 0.6 miles to the north of the Ventura Freeway (US 101), as shown in Figure 2. Both Kanan Road and Thousand Oaks Boulevard are primary arterials designed to carry high traffic volumes that include both local and regional trips. Kanan Road is the only north-south roadway within Agoura Hills that crosses the entire city, and it also provides direct access to and from US 101. Thousand Oaks Boulevard provides direct connections between Agoura Hills and the neighboring city of Westlake Village to the west, and beyond to the City of Thousand Oaks. It ends approximately 0.3 miles to the east of Kanan Road, directly north of Agoura High School.



Intersection of Kanan Road and Thousand Oaks Boulevard.

Kanan Road/Thousand Oaks Boulevard is a four-legged, signalized intersection. Land uses located immediately adjacent to the intersection include community-serving retail centers located on the northwest and southwest corners, and multifamily housing located on the northeast and southeast corners. Additional land uses and local destinations located within the general study area include both multifamily and single-family housing, Agoura High School, Willow Elementary School, Sumac Elementary School, and open space including Medea Creek.

2.2 Setting

The City of Agoura Hills is located in the foothills of the Santa Monica Mountains, in the western edge of Los Angeles County, approximately 36 miles west of downtown Los Angeles. The City encompasses approximately 7.8 square miles and has a population of 20,330 residents. Agoura Hills' land use pattern is typical of single-use, low-density, and auto-oriented suburban development common during the late 20th Century. Most of the existing development within Agoura Hills was in place prior to the City's incorporation in 1982. As a result, most of the City's physical growth was not regulated by local policies.

The core study area is defined by a 1,200-foot radius (approximately five-minute walk at an average walk speed of 4 feet per second) from the Kanan Road/Thousand Oaks Boulevard intersection. The resulting area extends to the northern edge of the Agoura Hills City Mall to the north, Hillrise Drive to the south, Skyview Way to the west, and Carell Avenue to the east. The area encompasses approximately 120 acres and includes the three shopping centers; multifamily and single-family housing; and borders Agoura High School, Chumash Park, and Medea Creek. The current feel of the study area is heavily automobile-dominated, with motorists accessing the shopping centers, morning and afternoon high school traffic, and substantial through traffic from vehicles accessing US 101. However, as this study will show, there are also many pedestrians and

bicyclists within the study area, and potentially many more living in the nearby residential neighborhoods. The purpose of this study is to examine ways to improve safety, convenience and comfort for both existing and future pedestrians and bicyclists in and around the intersection. The proximity of a mix of land uses within a five-minute walk of one another, local roadways that already accommodate pedestrians, bicyclists and transit in addition to the automobile, and opportunities to improve access along Medea Creek are all factors that will allow the study area to evolve into a true multi-modal mixed-use district over time.

2.3 Housing

Housing, consisting of both single-family and multifamily units, is the dominant land use within the study area. Table 1 shows that the concentration of both single-family and multifamily housing adjacent to the Kanan Road/Thousand Oaks Boulevard intersection results in a relatively dense development pattern when compared to the entire city. Within the 1,200 foot study area radius there are about 587 housing units.

Table 1: Housing Concentration Adjacent to Study Intersection

Housing Type	Units within Study Area	Acreage within Study Area
Single Family-Residential	184	38.7
Multi-Family Residential	403	28.0
Total	587 units	66.7 acres

2.4 Retail Centers

The three shopping centers in the study area – Agoura Hills City Mall, Twin Oaks Shopping Center, and Agoura Meadow's Shopping Center – serve as the City's primary community-serving retail district.

Figure 2: Project Site Map



Table 2: Study Area Shopping Centers

Name	Description	Site	Retail Building Area	Parking
		Acreage		Spaces
Agoura	Located on the southwest corner of the	10.8 acres	121,930 square feet retail	530 spaces
Meadows	intersection, and is anchored by a Vons		/ commercial space	
Shopping	grocery store with several smaller			
Center	restaurant and retail tenants. Two stand-			
	alone buildings with a bank and other			
	smaller tenants are situated along Kanan			
	Road perimeter.			
Twin Oaks	Located on the northwest corner of the	11.1 acres	102,399 square feet retail	420 spaces
Shopping	intersection, and is anchored by a Ralph's		/ commercial space	
Center	grocery store with a number of smaller			
	retail and restaurant tenants. The center			
	has several stand-alone buildings along			
	the street edge of the parking area			
	including a bank, fast-food restaurant, and			
	a cafe.			
Agoura	Located along the west side of Kanan	5.7 acres	72,370 square feet retail /	358 spaces
Hills City	Road, immediately north of the Twin Oaks		commercial space	
Mall	Shopping Center. The two plazas' parking			
	areas are connected. The City Mall plaza			
	has no large single anchor tenant but a			
	number of community-serving retail			
	establishments, and upper floor			
	commercial tenants.			
Total		27.6 acres	296,699 square feet	1,308 spaces

Together these shopping centers occupy a total of 27.6 acres of land that include an estimated 296,699 square-feet of retail and commercial uses and a total of 1,308 parking spaces. The shopping centers were developed independently from one another during the 1970s, resulting in limited pedestrian and automobile access between the three. Pedestrian access into the shopping centers from both Kanan Road and Thousand Oaks Boulevard is restricted by landscape edges, walls, and elevation changes. The three shopping centers lack designated pedestrian paths through the parking lots, meaning that pedestrians must walk among the automobile traffic in the parking lots in order to reach the shops and commercial services. Their single-use, auto-oriented design is evident in the fact that roughly two-thirds of their total land area is devoted to automobile access, circulation, and parking compared to only 4% that is used for pedestrian circulation and gathering areas and 6% for landscaping.

Table 3: Shopping Center Land Area by Use

		Agoura City Mall Twin Oaks		Ago Meac	ura dows	Total		
	Size (SF)	%	Size (SF)	%	Size (SF)	%	Size (SF)	%
Commercial / Retail								
Building Area	74,197	30%	102,983	21%	117,825	25%	295,005	25%
Auto Circulation/Parking	141,802	57%	331,333	68%	316,232	67%	789,367	66%
Pedestrian								
Circulation/Public Space	15,441	6%	14,222	3%	16,274	3%	45,937	4%
Landscape	17,723	7%	37,032	8%	18,438	4%	73,193	6%
Total	249,163	100%	485,570	100%	468,769	100%	1,203,502	100%

2.5 Schools

Three schools are located within a 0.5 radius of the intersection of Kanan Road and Thousand Oaks Boulevard: Agoura High School, Sumac Elementary School, and Willow Elementary. Based on outreach to the schools (discussed in Section 3: Community Outreach), the project team discovered that the majority of students commute to school by car and only a small percentage of student commute to school by walking and bicycling. For the elementary schools, the need for many to cross Kanan Road presents a barrier to increasing the number of children walking and bicycling to school. For the high school, a main challenge is the "culture" of driving - obtaining a drivers license is a milestone for many high school students and driving to school is viewed much more favorably than walking or biking. These challenges can be address with improvements to pedestrian and bicycle infrastructure as well as education and encouragement programs.

2.6 Transportation Infrastructure

The existing roadway configuration at the study intersection is shown in Figure 3. Kanan Road has a 100-foot right-of-way that includes eight-foot sidewalks on each side. The roadway itself is 84 feet wide curb-to-curb and includes Class II bike lanes and two travel lanes in each direction, and a raised center median that divides the northbound and southbound travel lanes. The median is landscaped except where left turn lanes are located. Single left-turn lanes are located at the north and south approaches to Kanan Road, and to provide access to northbound traffic to the retail centers located along the west side of Kanan Road. The posted speed limit on Kanan Road is 40 mph within the study area. On-street parking is not permitted on Kanan Road except along a 600-foot segment along the east side of the roadway, immediately north of Thousand Oaks Boulevard.

Thousand Oaks Boulevard has a 100-foot right-of-way that includes eight-foot sidewalks on each side. The roadway is 84 feet wide and includes Class II bike lanes and two travel lanes in each direction. West of Kanan Road is a two-way center turn lane that provides access to the shopping centers, becoming a raised landscaped median to the west of Medea Creek. East of Kanan Road, a raised median separates eastbound and westbound traffic. At the intersection of Kanan Road there are dual left turn lanes in the eastbound direction and a single left turn lane in the westbound direction. The posted speed limit is 40 mph west of Kanan Road and 35 mph to the east. On street parking is not permitted on Thousand Oaks Boulevard to the west of Kanan Road; to the east of Kanan Road on-street parking is permitted on the north side of the road only up to Argos Street. Past Argos Street, perpendicular parking is permitted in front of Agoura High School on the south side of Thousand Oaks Boulevard.

2.7 Pedestrian Facilities

The intersection has pedestrian push buttons, pedestrian signal heads, intersection lighting, painted crosswalks, concrete sidewalks and curb ramps which facilitate the crossing of pedestrians at the intersection. Pedestrians cross the intersection to access the shopping centers, to get to the bus stops located west of the intersection, and going to and from the high school.



The intersection has painted crosswalks and other pedestrian facilities.

Kanan Road and Thousand Oaks Boulevard **Existing Signage and Striping** 100 Feet W11-2: Yield to Pedestrians R2-1: Speed Limit 40, R28A (CA): No Parking Any Time D11-1: Bike Route 8' Bike lane R30A (CA): No Parking Pedestrian Push Button 10' Bike/Parking Lan D11-1: Bike Route, Directional signage Curb Ramp 11'Bike/Parking Lane Curb Ramp R14-1: Truck Route R30A (CA): No Parking 6' Bike lane Curb Ramp Pedestrian Push Button No Parking Bike Lane (non-standard) Curb Ramp R81 (CA): Bike Lane, Directional signage D11-1: Bike Route, Directional signage 6' Bike lane R2-1: Speed Limit 40, R81 (CA): Bike Lane, R28A (CA): No Parking Any Time No Parking Bike Lane R5-2: No Trucks, (non-standard) R20D-1 (CA): Over 5 Tons, R20D-2 (CA): Over 2 Axles R2-1: Speed Limit 35 R14-1: Truck Route, R28A (CA): No Parking Any Time 10' Bike/Parking Lane D11-1: Bike Route, Directional signage, R28A (CA): No Parking Any Time

Figure 3: Study Intersection Existing Signage and Striping

Eight foot wide sidewalks are present along both sides of both Kanan Road and Thousand Oaks Boulevard. The sidewalks are "attached," meaning located directly adjacent to the roadway curb with no landscape buffer/parkway strip. The sidewalks are continuous without gaps and well-maintained. Their continuous 8-foot widths appear adequate to handle existing levels of pedestrians in the area. The sidewalks are generally free of barriers, with widths most constrained at the bus stop located on the south side of Thousand Oaks Boulevard immediately west of Kanan Road, along Kanan Road and Thousand Oaks Boulevard where the traffic signal control boxes are located, and immediately on the west side of Kanan Road where newspaper racks are located in front of the Starbucks Coffee shop.

Painted yellow transverse (parallel) crosswalks are located on each of the Kanan Road/Thousand Oaks Boulevard approaches. The existing striping is worn in places. The median noses on Kanan Road encroach into the painted crosswalk area and reduce the amount of width within the crosswalk limits for pedestrian access.

A single, diagonally-oriented curb ramp is present at each corner of the Kanan Road/Thousand Oaks Boulevard intersection. The curb ramps do not have tactile warning strips (i.e. truncated domes).

The traffic signal at the intersection includes older-style (non-accessible) pedestrian push buttons. The pedestrian heads only have the hand/man symbols and are not countdown type signals. During field observations, there were several instances where the pedestrian walk phase was not called even after pedestrians pushed the push button, indicating possible problems with the signal phasing. In particular, the Phase 6 pedestrian operation was intermittent, and mostly non responsive to the pedestrian push buttons. During field visits out of more than 6 attempts on each of the two pedestrian push buttons, the pedestrian phase only came up once. Pedestrian push-buttons are also located on posts on the center median noses in Kanan Road, indicating to pedestrians that these medians may be suitable places to wait as refuge if they are unable to cross in a single movement. The design of the medians does not meet current best practices for pedestrian refuge areas given that the medians do not extend on both sides of the crosswalk (with ramps / channels for accessibility) to provide a protected refuge area.

2.8 Bicycle Facilities

Class II bike lanes are located on all approaches to the intersection of Kanan Road and Thousand Oaks Boulevard. The bike lanes vary in width and whether they are located curbside (with no on-street parking allowed), or adjacent to an on-street parking lane. The curbside bike lane segments include both directions of Thousand Oaks Boulevard west of the intersection (with the exception of a short segment), and both directions of Kanan Road south of the intersection. East of the intersection there are curbside bike lanes on eastbound Thousand Oaks Boulevard that vary between 6 feet and 11 feet wide along the two roadways. Per the California Highway Design Manual, minimum bike lane width is 5 feet adjacent to a curb or parking lane. On northbound Kanan Road north of Thousand Oaks Boulevard where on-street parking is permitted, the existing bike lane next to parking is only approximately 4 feet in width (11 feet from face of curb to the inside bike lane stripe).

The bike lane striping drops as it approaches the intersection and transitions into a dashed stripe. This allows right turning vehicles to utilize the curbside space. However, because of the increased width, some drivers were observed using the bike lanes as an additional through travel lane at the intersection.

2.9 Transit

The Los Angeles County Metropolitan Transportation Authority (Metro) and the City of Los Angeles Department of Transportation (LADOT) provide regional transit service within Agoura Hills. Local fixed-route transit is provided by the City. Metro operates line 161 which runs between the Thousand Oaks Transit Center and the Warner Center Transit Hub. The LADOT Commuter Express lines 422 and 423 operate between Thousand Oaks and downtown Los Angeles/USC. Line 161 operates seven days a week with reduced service on weekends and holidays. Lines 422 and 423 are commuter lines that only operate during peak weekday travel periods. All three lines travel north on Kanan Road from the Ventura Freeway or Agoura Road,



The LADOT Commuter Express lines 422 and 423 operate between Thousand Oaks and downtown Los Angeles/USC.

and continue west on Thousand Oaks Boulevard. Bus stops are located within the study area on the north and south side of Thousand Oaks Boulevard immediately west of Kanan Road. Table 4 provides detailed information on this regional transit service.

Table 4: Regional Transit Service within Agoura Hills

			# of Buses		Headways	
Days	Hours	Route Limits	EB	WB	(Minutes)	Boardings
Metro F	Route 161					
M-F	6:20 am – 9:00 pm*	Thousand Oaks – Warner Center	20	22	20 – Peak	
					60 – Off Peak	
Sat	7:25 am – 7:25 pm*	Thousand Oaks – Warner Center	15	17	40 – 60	
Sun	7:25 am – 7:25 pm*	Thousand Oaks – Warner Center	13	15	40 – 60	
LADOT	Commuter Express 42	2				
M-F	6:14 am – 8:39 am**	Downtown LA/USC – Thousand Oaks	9		15 – 20	
	2:27 pm – 6:47 pm**	Thousand Oaks – Downtown LA/USC		13	15 – 20	
LADOT	Commuter Express 42	2				
M-F	5:36 am – 7:04 am**	Thousand Oaks – Downtown LA/USC	5		20	
	5:07 pm – 8:15 pm**	Downtown LA/USC – Thousand Oaks		8	20	

^{*} Indicates operating hours for Dorothy Drive/Chesebro Road bus stop as published in Metro route schedule.

2.10 Traffic Data Collection

Weekday and Saturday traffic counts were collected for Kanan Road at Thousand Oaks Boulevard. This included motor vehicle turning movement, pedestrian, and bicycle counts. The weekday counts were collected on Wednesday, May 2, 2012 from the hours of 7:00 am to 9:00 am, 11:00 am to 1:00 pm, and 4:00 pm to 6:00 pm. The Saturday counts were collected on May 5, 2012 between the hours of 8:00 am and 2:00 pm. The counts were not collected for the high school peak hours because we were to calculate the LOS (Level of Service) for the intersection during the intersection peak times (7-9 a.m., 11-2 p.m. and 4-6 p.m.).

^{**} Indicates operating times from Kanan Road/Thousand Oaks Boulevard bus stops as published in LADOT Commuter Express route schedules.

2.10.1 Motor Vehicle Counts

Table 5 and Table 6 summarize the weekday and weekend traffic count data.

Table 5: Weekday Counts

	Kanan Road					Thousand Oaks Boulevard						
Peak Hour	No	rthbou	nd	Southbound			Eastbound			Westbound		
Vehicles	LT	TH	RT	LT	TH	RT	Ţ	TH	RT	7	Ħ	RT
7:45 – 8:45 am	96	863	209	110	1292	83	190	344	150	207	311	205
12:00 – 1:00 pm	131	941	83	124	960	136	258	106	159	129	229	158
5:00 – 6:00 pm	146	1174	132	109	827	160	341	156	128	133	159	158

Table 6: Weekend Counts

	Kanan Road				Thousand Oaks Boulevard							
Peak Hour	No	rthbou	nd	Southbound			Eastbound			Westbound		
Vehicles	LT	H	RT	LT	LT TH RT		LT	TH	RT	LT	TH	RT
11:15 – 12:15 pm	150	782	124	131	1106	167	300	129	190	157	151	124

2.10.2 Count Data Analysis

An inventory of the existing traffic signal, equipment, and timing was conducted. The existing traffic signal is a fully actuated eight phase operation with advance detection. The signal controller is a Type 90 with internal time base coordination, in a Type P cabinet. The intersection is part of an existing coordinated system along Kanan Road and generally operates on a 110 second cycle in the AM Peak period and 100 second cycle in the Midday and PM Peak periods, except during the evening, and on weekends, when it runs free. Using the existing traffic volume data collected and the current timing parameters, the traffic signal operation was modeled using Synchro 7 analysis software to determine the existing levels of service (LOS), as well as control delay. Intersection control delay is defined by Synchro as the amount of additional travel time in seconds required per vehicle to travel through an intersection during the peak period compared with an off-peak travel time. Delay can be caused by several factors such as signal cycle lengths, oversaturated lanes, and queue blockages resulting in unused green time. Both Delay and LOS are summarized in Table 7 below:

Table 7: Kanan Road/Thousand Oaks Boulevard Control Delay and Level of Service

Count Periods	Delay	Level of Service
Weekday		
7:00 AM – 9:00 AM	69.5	E
11:00 AM – 1:00 PM	53.3	D
4:00PM – 6:00 PM	77.8	E
Weekend		
8:00 AM - 2:00 PM	72.6	Е

The level of service (LOS) definition is per the City of Agoura Hills General Plan, Chapter 3. The General Plan establishes flexible LOS criteria for the minimum acceptable LOS based on the roadway characteristics. Kanan Road and Thousand Oaks Boulevard are roadways that have a reduce level of services acceptable based on the roadway characteristics. The Synchro analysis shows the intersection is operating at unacceptable levels (LOS D or E) during the morning, evening and weekend peak hours. The weekday morning peak period accounts for both commuter traffic traveling to the Ventura Freeway and traffic generated by the local schools particularly Agoura High School.

2.10.3 Pedestrian Counts

The pedestrian count data shown in Figure 4 and Figure 5 indicates a steady flow of pedestrians crossing the intersection to access the retail centers and Agoura High School. The count data shows that more pedestrians cross Kanan Road than Thousand Oaks Boulevard during both the weekday peak travel periods and on weekends. The largest number of pedestrian crossings takes place on the north leg of the intersection followed by the south leg on both weekdays and on weekends. This east-west travel pattern on both weekdays and weekends indicates that people are walking between the housing located on the east side of Kanan Road and the retail centers to the west.

Figure 4: Weekday Pedestrian Count Summary

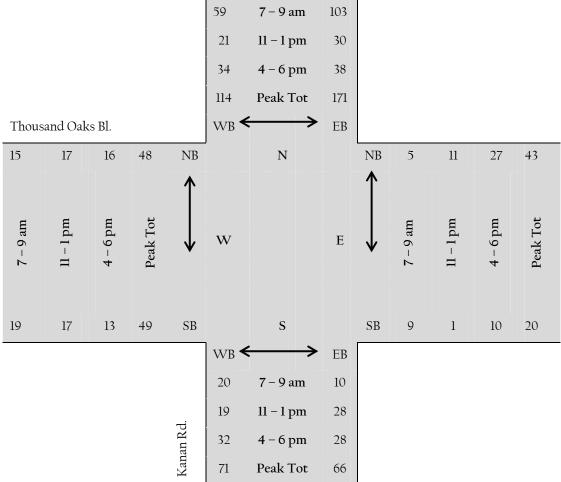
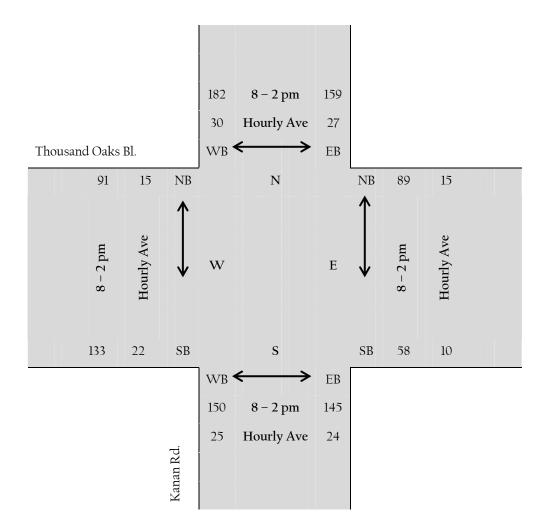


Figure 5: Weekend Pedestrian Count Summary



Although the formal pedestrian counts were conducted just at the intersection of Kanan Road / Thousand Oaks Boulevard, during our field visits the project team made observations of pedestrian activity at the intersection and at other locations within the study area. Notably, during each visit multiple people were observed crossing both Kanan Road and Thousand Oaks Boulevard at mid-block locations. Mid-block crossings of Thousand Oaks Boulevard typically occurred between Kanan Road and Medea Creek, with people crossing between the Ralphs and Vons shopping centers at the parking lot driveways rather than walking out of their way to the intersection. Others were observed crossing from the shopping centers to the bus stops in order to board buses that were waiting at the stops.

Several people were observed crossing Kanan Road at a mid-block location in the area of Starbucks Coffee. The Starbucks manager stated that people frequently cross Kanan Road north of Thousand Oaks Boulevard to get to Starbucks or the other shops at the retail centers. On Sunday, May 20, several people were observed crossing Kanan Road at Idle Drive (unmarked, uncontrolled location) in order to reach the Farmers Market that takes place in the Agoura Hills City Mall parking lot on Sunday afternoons.

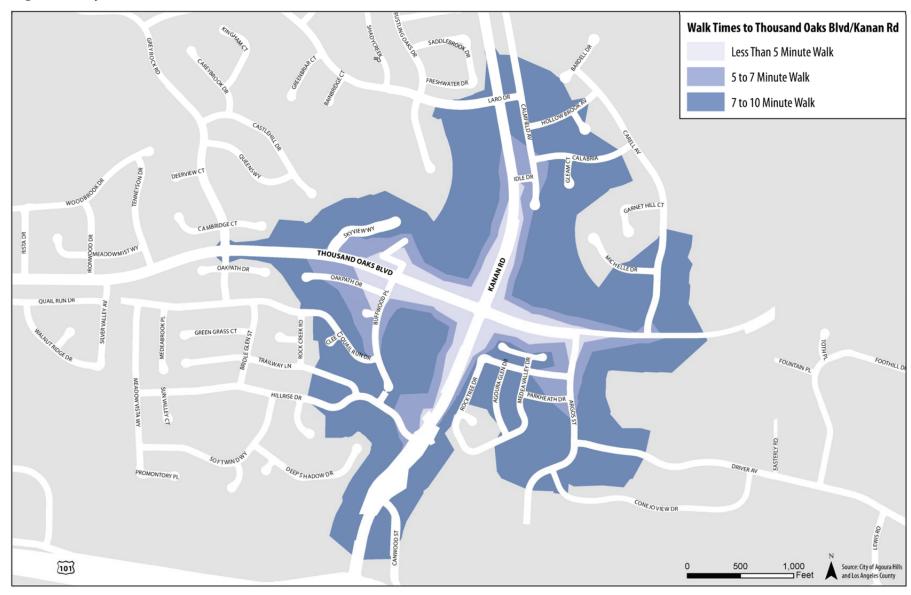
To illustrate the walking distances in the project area, and the proximity of the intersection to a mix of land uses within a 5 to 10 minute walk, a graphic was prepared showing the walking distances for a pedestrian using the existing sidewalk network. Figure 6 displays the 5 minute, 7 minute, and 10 minute walk sheds for pedestrians accessing the project intersection. A 10 minute walk roughly translates into a ¼ mile trip, which is commonly regarded as the upper threshold a person is willing to walk to reach his or her destination. Pedestrian improvements should be focused along corridors and intersections which fall within these walk sheds.

Table 8 summarizes the weekday and weekend traffic count data for pedestrians at the Kanan Road and Thousand Oaks Boulevard intersection.

Table 8: Kanan Road/ Thousand Oaks Boulevard Pedestrian Count Summary

	North	Leg	East Leg		Sout	h Leg	West Leg	
Weekday	WB	EB	NB	SB	WB	EB	NB	SB
7:00 – 9:00 am	59	103	5	9	20	10	15	19
11:00 – 1:00 pm	21	30	11	1	19	28	17	7
4:00 – 6:00 pm	34	38	27	10	32	28	16	13
Weekend								
8:00 – 2:00 pm	182	159	89	58	150	145	91	133

Figure 6: Project Intersection Walk Sheds



2.10.4 **Bicycle Counts**

The count data shown in Figure 7 and Figure 8 indicates different bicycle travel pattern on weekdays and weekend. More bicycle riders were observed traveling on Thousand Oaks Boulevard during weekdays, and Kanan Road had a higher number of bicycle riders on weekends. Overall, five times more bicycle riders were observed during the six-hour Saturday count period that during the weekday peak and mid-day periods. The higher weekday ridership numbers on Thousand Oaks Boulevard suggest that most of these trips are being generated by Agoura High School or the retail centers, whereas the higher weekend numbers on Kanan Road suggest that most of these trips are recreational in nature. Also, the count data shows that most of the bicyclists crossing the south leg of the intersection are traveling westbound, or the opposite direction of travel. This may indicate that most of the bicycle trips that take place on Thousand Oaks Boulevard, west of Kanan Road either originate at Agoura High School or the residential communities located on the southeast corner of the intersection.

Figure 7: Weekday Bicycle Count Summary

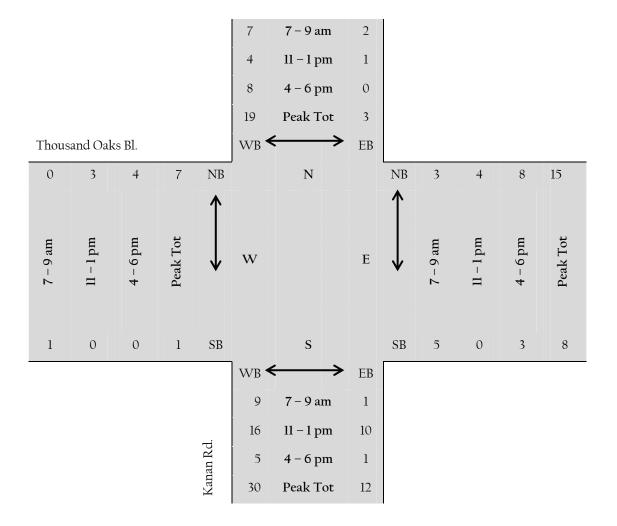


Figure 8: Weekend Bicycle Count Summary

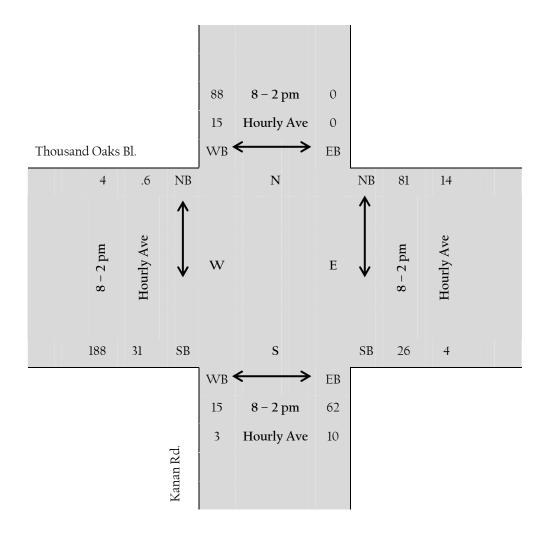


Table 9 summarizes the weekday and weekend traffic count data for Bicyclists at the Kanan Road and Thousand Oaks Boulevard intersection.

Table 9: Kanan Road/ Thousand Oaks Boulevard Bicycles Count Summary

	North	Leg	East Leg		Soutl	n Leg	West Leg		
Weekday	WB	EB	NB	SB	WB	ЕВ	NB	SB	
7:00 – 9:00 am	7	2	3	5	9	1	0	1	
11:00 – 1:00 pm	4	1	4	0	16	10	3	0	
4:00 – 6:00 pm	8	0	8	3	5	1	4	0	
Weekend									
8:00 – 2:00 pm	88	0	81	26	15	62	4	188	

2.12 Collision Data

Bicycle and pedestrian collision data for the City of Agoura Hills was collected from the Transportation Injury Mapping System (TIMS), which consists of Statewide Integrated Traffic Records System (SWITRS) data. Collision data includes crashes that occurred from January 1, 2001 through December 31, 2010 within a 0.5 mile radius of the intersection of Kanan Road and Thousand Oaks Boulevard and is shown on Figure 9.

2.12.1 Pedestrian Collisions

A total of 12 reported collisions involving pedestrians occurred within 0.5 miles of the intersection of Kanan Road and Thousand Oaks Boulevard. Eight of the 12 collisions did not occur within the intersection. Eleven of the 12 collisions were ruled as vehicle/pedestrian crashes, while one was recorded as a rear-end collision.

Table 10 displays the movements pedestrians were making at the time of the collisions and the primary collision factor violation for each of the 12 collisions. Pedestrian Collision ID refers to the numbers shown on Figure 9. Just under half of the collisions occurred while a pedestrian was crossing in a crosswalk an intersection¹, while another one-third of collisions occurred while a pedestrian was crossing outside of a crosswalk. Two collisions occurred while pedestrians were walking within the roadway and one pedestrian was hit outside of the roadway. One-third of collisions were attributed as pedestrian right-of-way violations.

Table 10: Pedestrian Action in Collisions Involving Pedestrians, 2001-2010

Pedestrian Collision ID	Pedestrian Action	Primary Collision Factor Violation
P1	Crossing in crosswalk at intersection	Pedestrian Right-of-Way
P2 ²	Crossing in crosswalk at intersection	Unknown
P3	Crossing in crosswalk at intersection	Pedestrian Right-of-Way
P4	Crossing not in crosswalk	Pedestrian Violation
P5	Not in road	Driving Under the Influence
P6	In road, including shoulder	Wrong Side of Road
P7	Crossing in crosswalk at intersection	Pedestrian Right-of-Way
P8	Crossing in crosswalk at intersection	Pedestrian Right-of-Way
P9	In road, including shoulder	Pedestrian Violation
P10	Crossing not in crosswalk	Unsafe Speed
P11	Crossing not in crosswalk	Unsafe Speed
P12	Crossing not in crosswalk	Pedestrian Violation

¹Only two of these were collisions were recorded as having occurred in an intersection

² Collision P2 occurred in 2001 and resulted in a fatality.

Figure 9: Bicycle and Pedestrian Collision, 2001-2010



Bicycle Collisions 2.12.2

A total of 12 reported collisions involving bicyclists occurred within 0.5 miles of the intersection of Kanan Road and Thousand Oaks Boulevard, half of which were on Thousand Oaks Boulevard. There were no fatal bicycle collisions in this time period.

Table 11 shows bicycle collisions by type of collision and primary collision factor violation. Bicycle Collision ID refers to the numbers shown on Figure 9. Half of the bicycle collisions in the 0.5 mile buffer were broadside crashes and another one-third were reported as other. Though half of the bicycle collisions occurred along the same segment of Thousand Oaks Boulevard, there does not appear to be a pattern of collision types. The most common violation category was automobile right-of-way violations.

Table 11: Bicycle Collision Types, 2001-2010

Bicycle Collision ID	Collision Type	Primary Collision Factor Violation
B1	Head-on	Other Hazardous Violation
B2	Other	Unknown
B3	Other	Automobile Right-of-Way
B4	Other	Unsafe Speed
B5	Broadside	Wrong Side of Road
B6	Broadside	Automobile Right-of-Way
B7	Broadside	Automobile Right-of-Way
B8	Other	Automobile Right-of-Way
В9	Broadside	Improper Turning
B10	Broadside	Traffic Signals and Signs
B11	Broadside	Wrong Side of Road
B12	Sideswipe	Improper Passing

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3 Community Outreach

As a means of engaging the community in providing input about the study area's existing conditions and their desires for improvements, the project team conducted a multi-faceted outreach to local stakeholders. This included holding one-on-one meetings with representatives from the local schools, conducting direct outreach to shopping center patrons and business owners, meeting with the Los Angeles Flood Control Department, and conducting online and intercept surveys open to the general public to provide input and comments. This section summarizes the key outreach efforts.

3.1 Community Survey

An online and in-person (intercept) survey was conducted in order to gather information on local travel characteristics and which improvements community believes are most needed in order to improve pedestrian access and safety within the study area, and increase the likelihood of people walking. The survey was available online between Friday, May 11, 2012 and Monday, June 11, 2012. Surveys were collected in person in the study area via intercept by project team staff on Monday, May 14, 2012 and Sunday, May 20, 2012. During the intercept portion members project team circulated through the study area and administered the survey directly to pedestrians, bicyclists and others at the intersection and in the adjacent shopping areas. A table with project information and surveys was also set up in front of the Starbucks coffee shop on May 14 to gather input from patrons. A total of 120 responses were collected. The survey findings are summarized below. A full copy of the survey questionnaire can be

Chart 1: Proximity or residence to Study
Area

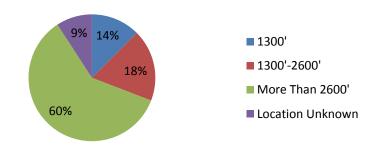
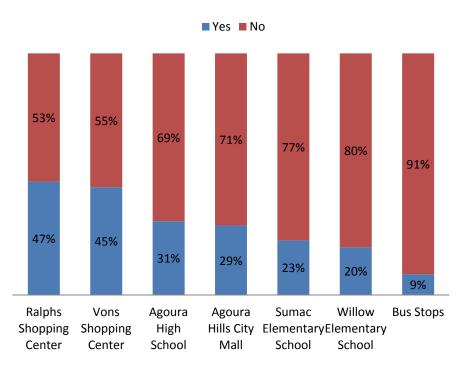


Chart 2: Do you walk to any of these local destinations?



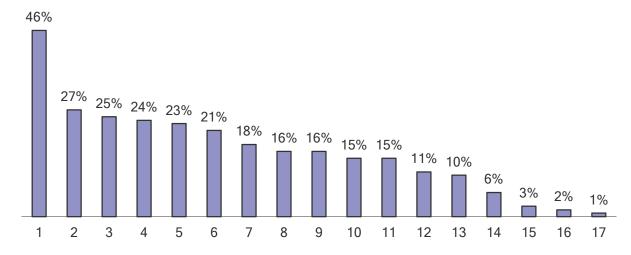
found in the appendix.

Chart 1 shows that 13 percent of all respondents stated that they live within the study area (approximately 1,300-foot radius of the intersection), and 18 percent live within 1,300 to 2,600 feet of the study area. A total of 31 percent of respondents, therefore, live within a ten-minute walk of the Kanan Road/Thousand Oaks Boulevard intersection as shown in Chart 1.

Chart 2 shows that 47 percent of respondents stated that they walk to the Ralphs shopping center, making it the local destination that generates the largest number of walk trips within the study area

The survey asked people to indicate the main reasons why they do not walk to the local destinations more often. Chart 3 shows that 46 percent stated that driving is more convenient, and 27 percent stated that there are not direct connections between the sidewalks and the shopping centers.





- 1. Driving is more convenient
- 2. No direct connections between sidewalks and shopping centers
- 3. Distances are too great to walk
- 4. Other
- 5. I walk frequently
- 6. Not safe to walk through shopping center parking lots
- 7. Not interested in walking
- 8. Traffic signals do not give enough time to walk across Kanan Road
- 9. No direct connections between homes and local destinations
- 10. Traffic signals do not give enough time to walk across Thousand Oaks Boulevard
- 11. Feel unsafe in crosswalks
- 12. Thousand Oaks Boulevard is too wide to cross safely
- 13. Kanan Road is too wide to cross safely

- 14. Poorly maintained to missing sidewalks
- 15. Physically unable to walk
- 16. Poor lighting
- 17. Crime or lack of security

The "Other" write-in responses given include:

More crosswalks are needed. One by Starbucks or Agoura Deli would be better.

The amount of people running red lights. Also the malls are not nice enough to sit and enjoy.

Need for bicycle routes and stands to lock up bicycles in both centers

Getting from the Vons shopping center to the Ralphs center is dangerous, the traffic lights do not give enough time

The parking lots of the shopping centers are so large, they create barriers for anyone wanting to walk

Unsafe and careless drivers. Police do not do their job.

Not aesthetically pleasing enough to encourage us to walk

Trees in the middle of the sidewalk that obstructs walking

It's hot outside and I get my exercise at the gym

I live all the way in the valley...

I don't go to these places

I live in Calabasas

Laziness

I would rather go home and play video games

I have a car

Bus 161 runs only once an hour

It is so unsafe for people to cross between the two shopping centers at the driveways, especially elder citizens

Cars are moving way too fast and rarely look for pedestrians and bicyclists

Been meaning to walk to the market (either Vons or Ralphs), but carrying all my groceries home seems like a pain.

Plus, I drive through that intersection at least twice a day, so I just pick up stuff on the way home from work.

I carry groceries home in the car

Need interesting destinations to make walking exciting

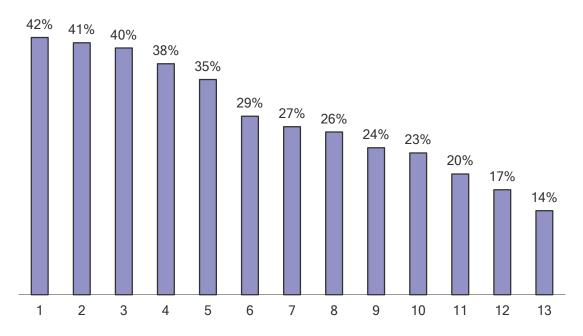
I like to drive

Though these are inconvenient, they do not stop me from walking.

Too many drivers ignore the traffic lights, speed, too much traffic

Chart 4 shows that more than 40 percent of all respondents indicated that improved pedestrian connections from sidewalks and the Ralphs and Vons shopping centers, and a new bicycle/pedestrian trail along Medea Creek are the most needed improvements.

Chart 4: Which of the following improvements are most needed at or near the intersection of Kanan Road/Thousand Oaks Boulevard?



- Improved pedestrian connections between sidewalks and Ralphs Shopping Center
- 2. Improved pedestrian connections between sidewalks and Vons Shopping Center
- 3. New bicycle path along the flood control channel west (Medea Creek) of the shopping centers
- 4. Improved high-visibility crosswalks
- 5. Improved pedestrian signals
- 6. Other
- 7. Improved pedestrian amenities (seating, signage, etc.)
- 8. Improved pedestrian connections between sidewalks and Agoura Hills City Mall
- 9. Improved landscaping along the roadways
- 10. Enhanced or decorative sidewalk paving
- 11. Shorter roadway crossing distances
- 12. Improved pedestrian lighting
- 13. Improved bus stop amenities

The "Other" write-in responses given include:

Crosswalks on Kanan Rd. between TO Blvd. and Fountainwood.

Water fountains and more landscaping

Bicycle and pedestrian path behind centers and over or under Kanan Road to connect with Chumash Park/Agoura High School

Crack down on drivers using the bike lane as a third driving lane.

Move pedestrian paths farther from roadways and moving cars, put visual barriers between roads and walkways. Reduce speed and sound of cars.

Decorative brick paving at all (4) crosswalks and specimen boxed trees in raised planters near all four corners of Kanan & T.O blvd.

Bike and pedestrian path along the flood control channel would be wonderful.

Trees and perhaps a trash can

Timing of stoplights

BETTER BIKE PATHS WOULD BE AMAZING

I don't think any improvements are necessary.

Faster lights

Traffic after school is terrible- more lanes if possible

Replace where the bus stops, the buses get in the way all the time and the drivers are inconsiderate

Shorter light signals- they are like five minutes long!

A faster light in the left turning lane from t.o onto Kanan.... there for more than 5 minutes, gets congested

Shade at bus stops

Diagonal crosswalks needed

Walk signs that give how many seconds left before light changes....

Need sidewalks desperately on Reyes Adobe near Yerba Buena. It's not safe.

Slower traffic speeds. No cars should be allowed in the bicycle lane ever. Right hand turns for automobiles should be made from the traffic lane. People just don't look. Traffic entrances to malls are a nightmare for pedestrians and bicyclists. We don't exist to someone who has to be at Vons right now and has been waiting for traffic to make a turn into the shopping center.

I don't know as I don't walk in that area very often

intersection is too busy

No buildings set back into parking lots

I do not walk.

Bigger patio seating at Starbucks. Crosswalk at Kanan Road and Starbucks. Someone is going to get hit by a car and killed.

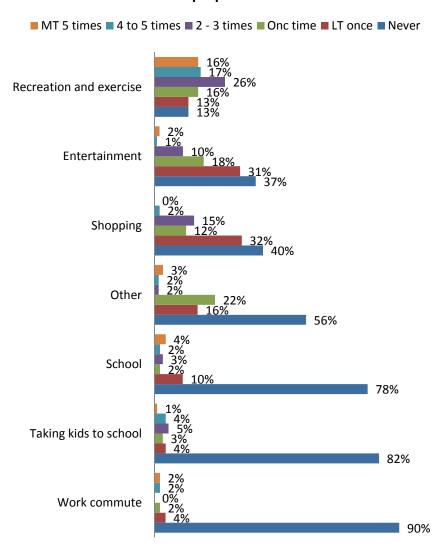
Along Kanan, there is no place for shaded bus stop seating

Enforcement of traffic safety laws

The survey asked respondents to indicate how often they walk and for what purposes. Chart 5 shows that nearly 60 percent of all respondents stated that they walk for recreation and exercise at least two to three times per week. Less than 30 percent stated that they walk to go shopping at least once per week. Only 11 percent stated that they walk to school at least one time per week, and 13 percent stated that they walk their children to school at least once per week. Seventy eight percent, 82 percent, and 90 percent of all respondents indicated that they never walk to school, walk their kids to school, or walk to work.

It was important to gain an understanding of the travel characteristics of school children and their parents given the proximity of Willow and Sumac Elementary Schools and Agoura High School to the study area. The survey asked respondents to indicate if they have school-age children, and if

Chart 5: How often do you walk and for what purpose?



they did, what school(s) their child (ren) attend. Sixty-seven percent of all respondents stated that they do not have school-aged children as shown in Chart 6a. This high percentage is due, in part, because of 38 percent of the survey responses were from Agoura High School students. Most of the respondents that did have school-aged children (45 percent) indicated that they attend schools other than the three located near the study area, and 31 percent stated that their child (ren) attend Agoura High School as shown in Chart 6b.

Chart 6a: Do you have any school-age children

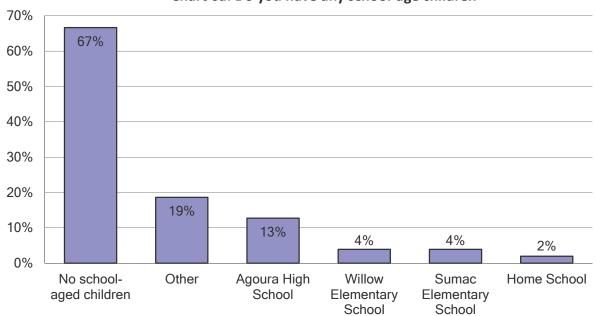
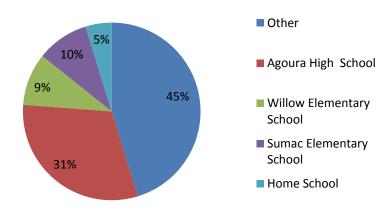


Chart 6b: Schools attended



The "Other" write-in responses include:

Mariposa	Lindero Canyon Middle School
Mariposa	Lindero
Mariposa School of Global Education	Lindero
Red Oak	Lupin Hill
Red Oak	Lupin Hill
Yerba Buena Elementary	Calabasas High
Yerba Buena	Oak Park
Yerba Buena	OPHS
Pre-school - Enriching Hour	Oak Park High School
When I had school age kids, I walked them to Sumac 5 days per week.	Use to walk w/kids when at Sumac

The survey participants that responded that they either do have school-aged children, or if they attend Agoura High School were then asked how they most frequently travel to school. Seventy-six percent responded that they travel to school by car. They either drive their children, are driven by their parents, drive themselves, or carpool to school. Only 22 percent walk, ride a bike, or skateboard to school, and 2 percent ride a bus.

Chart 7: How do you most frequently travel to school? ■ Drive my children 5% 2% or myself Carpool ■ Walk 13% Other Bike 58% 18% Bus Skateboard

The "Other" write-in responses include:

To LCMS	
Walk, drive, or carpool to home school events	
We walk carpool and drive to various home school events	

The single largest data cohort is the 16 to 18 year old age group. This is due, in part, because 38 percent of the survey participants were Agoura High School students. Another important factor regarding the 16 to 18 age group is that this is the age when most people begin to drive. This fact is reflected in the high percentage of people who indicated that they drive themselves to school and was confirmed by the high number of vehicles parked at Agoura High during school day, local travel patterns observed during field investigations, and interviews conducted with Agoura High School's principal. Another important consideration is the relatively low number (15 percent) of adults over the age of 60 who participated in the survey.

Most of the survey respondents were female as shown in Chart 9.

Chart 8: Age of survey respondents. 9. Gender of survey respondents. 2% **13 - 15** ■ 16 - 18 13% **19** - 24 44% **25 - 29** ■ Male **30 - 39** ■ Female **40 - 49** 20% **50 - 59 60** - 69

The survey participants provided the following additional comments.

Paths for running / cross country distance needed.

The walls along Kanan and Thousand Oaks are in very poor condition and make our city look bad

Bicycle master plan to link shopping centers, library, movie theatres, and community center. Need lanes or paths over or under the 101 and Kanan Road. Lots of bicyclists use Agoura Road.

I would also like to have a safer walk going over the freeway

I have a 7 month old child, and the traffic from Agoura Hills High School is disturbingly frightening in the afternoons. Students drive recklessly, and some parents don't seem to adhere to common safety rules, therefore making me wonder what can be done to monitor and regulate traffic for pedestrians around those peak times when school gets out and parents/students avoid Kanan/TO Blvd and turn to Carell as an alternate route, but not obeying traffic laws or safety. Focusing on Kanan/TO Blvd is obviously the largest concern, but please also consider that neighboring streets (specifically Carell Ave) become speedways to avoid the intersection if it takes too long to wait at the light. Speed bumps are NOT enough.

Anything you can do to increase connectivity & open up more avenues of alternative transport is great. A path between the Vons & Ralphs centers would be wonderful. It's so silly to get in a car and drive over.

Please fix the signal timing of the traffic lights on Kanan - - it is HORRIBLE

Quite often people drive down the road using the bicycle lanes to bypass traffic. Citations need to be handed out. Traffic lights need to be synchronized in the mornings and evenings to move more traffic through. At night, kids in the shopping malls race through the lot without respect to people crossing or driving across the parking lanes. Designated markings for people walking from parked cars to the front of the stores will help as well since if you are a driver, it's like trying to drive through a herd of cattle.

It's all about keeping the cars and the pedestrians separated. The reason the Calabasas Commons and T.O. Promenade are successful is because there is a lot of "hang out" space without worry of cars.

LOVE that we are looking into making Agoura more pedestrian friendly!!! As my kids are older we are more interested in walking!

Improve the appearance of the creek at Kanan. The pipe handrail along Kanan should be replaced with fencing similar to Old Agoura - concrete fence that looks like wood or split rail. Bury power lines along Kanan. Widen sidewalks around utility poles and trees.

Thanks for taking time to improve the city!

Good to also consider the cyclists in this analysis. I don't think a separate path along the flood channel is a good

The more you do for walkers, the worse it will be for traffic. Vast majority of residents drive. Please think before you act.

Cars along Kanan on the side opposite the shopping centers are parked, blocking the bike lane

The streets Kanan and Thousand Oaks are dangerous difficult problems.

Parking at AHS is a big issue especially with the new performing arts center. Could TO above Argos have parallel parking on both sides? Could Easterly have parallel parking? It would not add a lot of parking but every bit helps? Look at bus routes that run closer to AHS with incentives for student use.

PLEASE IMPLEMENT MORE AND BETTER BIKE PATHS. PEOPLE WOULD ACTUALLY USE BIKES MORE!

We need more parking at Agoura High School

The buildings look old and out of date. I'd also like to see less development and more focus put towards nature and restoring it.

I think the road is pretty much fine.

I run everywhere and am very happy with the structure of Agoura

Police obstruct the roadways too often

There is not enough time for families to cross with strollers, small bikes, etc. Have a family and older citizen walk the intersection to see how long it takes and then increase the time...

There needs to be better crosswalks/signage at Driver/TO on both sides, north/south and east/west.

Please see a need for basic sidewalks in our city before improving sidewalks. Reyes adobe doesn't have any and it's a major inconvenience and liability.

It is really dangerous to walk or bike on the sidewalk in front of the Vons or Ralphs shopping centers. Cars going to either of the shopping centers just don't look for pedestrians or bicyclists. Cars trying to enter either of the shopping centers just don't look for pedestrians or bicyclists.

I haven't noticed the intersections being a problem. I have noticed the parking in the lots of both Vons and Ralphs to be troublesome. Because cars can go in either direction on each aisle, and cars park going both directions, there are more accidents than in single directional parking lots.

Better safe pedestrian access to the malls would be appreciated. Improved exiting (for cars) from the Ralphs Mall and Agoura City Mall would be helpful.

I believe that part of the problem with the T.O. / Kanan intersection has to do with the short timing and short length of the left turn lane when leaving Agoura High School. Perhaps lengthen the timing and cut into the median in order to expand the lane? It would be much appreciated.

Pressure the developers and mall owners to make improvements to their properties.

Keep up the good work

Change timing on TO BL to allow traffic from Laro to pass TO BL without stopping

Upgrade the bus stops in Agoura. Look at Westlake. Seems like Westlake has more pride in their city. Why?

I appreciate any and all improvements for pedestrian and bicycles

Walk to the farmers market on Sundays

Kids walk to school about half the time.

The survey indicates that the automobile is the primary form of travel within the project area. This fact is confirmed by Census data as shown in Table 12.

Table 12: Means of Transportation to Work (Workers 18 and older)

	Agoura Hills		Los Angeles County	
Travel Mode	Number	Percent	Number	Percent
Car				
Drive Alone	8,794	82.9%	3,173,055	72.1%
Carpool	740	7.0%	497,964	11.3%
Subtotal	9,534	89.9%	3,671,019	83.4%
Transit				
Bus	48	0.5%	283,961	6.5%

	Agoura Hills		Los Angeles County	
Travel Mode	Number	Percent	Number	Percent
Other	18	0.2%	27,740	0.6%
Subtotal	66	0.6%	311,701	7.1%
Non-Motorized				
Bicycle	14	0.1%	32,423	0.7%
Walk	113	1.1%	125,816	2.9%
Subtotal	127	1.2%	158,239	3.6%
Taxi, motorcycle, other	142	1.3%	57,903	1.3%
Work at home	736	6.9%	200,450	4.6%
Total	10,605	100%	4,399,399	100%

Source: US Census, 2010 American Community Survey, three year estimates.

The data shows that more workers who live within Agoura Hills drive to work (both by themselves and in carpools) than the total number of workers within Los Angeles County. The percentage of workers who take transit within Agoura Hills is nearly 12 times lower than that of the County, and the percentage of workers who either walk or ride their bikes to work within Agoura Hills is three times lower than that of the County.

While this data shows that automobile travel is the dominant form of transportation within Agoura Hills for work trips, it does not show a complete picture of local travel within the project area given that the different land uses generate different types of trips, including school, shopping, and recreational trips. The relatively low number of survey participants that responded that they walk on a regular basis for shopping and school trips, along with the large percentage that responded that they feel that driving is more convenient indicates that there may be a possibility to influence travel behavior by making walking or bicycling more convenient for different trip purposes other than simply recreation. This is supported by the Mobility Element policies contained in the City's General Plan that seek to promote the use of multiple travel modes as a means of creating a balanced transportation system that ensures mobility for all of the City's residents.

3.2 Los Angeles Flood Control Department

The project team met with a representative of the Los Angeles Flood Control Department to discuss the potential for creating a multi-use trail along the Medea Creek Channel. In general, the Flood Control Department was open to the idea of creating a multi-use trail along the Medea Creek Channel and provided the following guidance:

- To create pedestrian/bike trail along the flood control channel, a flood permit, construction permit, and an agreement for work in the right- of-way is required. This would entail submitting an application to the Land Development Division. The agreement would stipulate that the City needs to do the maintenance for the trail i.e. pavement, plantings, etc.
- The City would need to summit all drawings/design for approval by County.
- May need to obtain Army Corps of Engineers approval, if originally built by Corps.

- Pedestrian bridge over channel is feasible, but would need to obtain Fish and Game and Army Corps for environmental permits. This should be easy, if the present channel is entirely concrete lined.
- It depends on the width of the channel, if flood control access is needed on both sides or just one side of the channel.
- Existing gate to channel could be opened, but a fence (4-6 feet high) may be needed to keep people out channel.
- The Flood Control Department needs 12' paved width and 15' right- of-way, but is open to having plantings/landscaping. Stamped concrete is okay, but City would need to maintain this.
- Pedestrian/bike trail under bridge could be done. A relevant example is the undercrossing of San Gabriel/Los Angeles River.
- It is possible to green a portion of the channel. The City would need to take the section over, remove County responsibility/ownership, so there would be no maintenance agreement, because City would own.
- Creating a natural side along the south side of the channel would be feasible.
- The Flood Control Department would allow un-grouted riprap with small plants on the sides of the
 channel, but the department hasn't seen it done to an existing concrete channel. It would probably
 involve close coordination with the department to get approved. The type of sides that are approved
 are reinforced concrete, grouted riprap, un-grouted riprap, soil/cement nail (need more space for the
 latter).

4 Proposed Improvements

4.1 Pedestrian Facilities

The most basic pedestrian enhancement components focus on improving the pedestrian signal timing at the Kanan / Thousand Oaks intersection. During fieldwork, the pedestrian phase was observed to operate intermittently across the west leg of the intersection. Maintenance should occur at this signal to ensure that the push button always results in a pedestrian walk phase. Countdown signal heads should be installed to give pedestrians information about remaining crossing time, and to reduce instances of pedestrians being "trapped" on the median islands between phases. To better emphasize the crosswalk a colored, stamped asphalt treatment would be installed between the transverse white crosswalk lines. This treatment will also tie to the overall streetscape improvements (discussed below) to help create a more defined sense of place within the intersection.

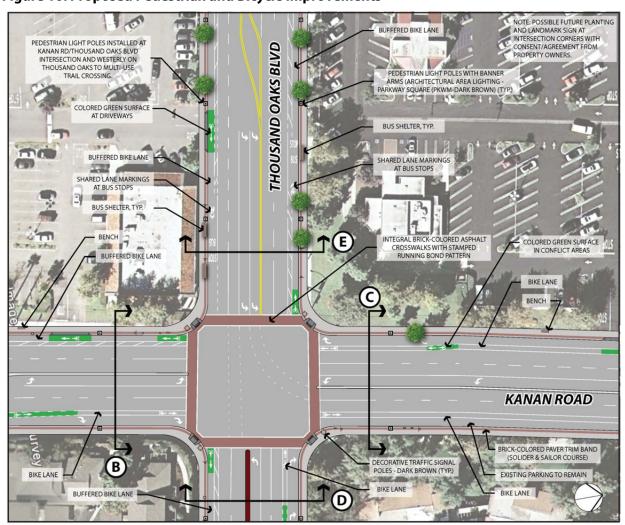


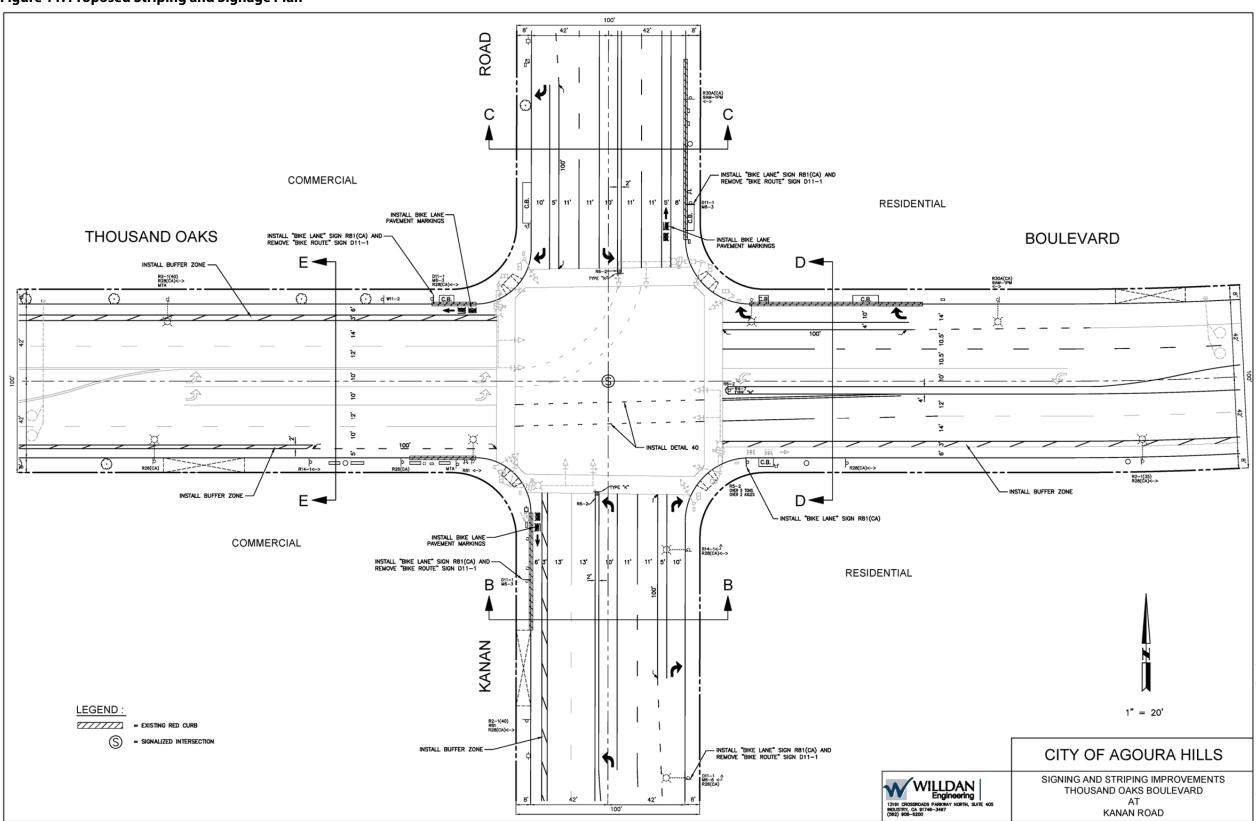
Figure 10: Proposed Pedestrian and Bicycle Improvements

4.2 Bicycle Facilities

The bicycle facility components have been structured to improve existing bicycle circulation by reallocating excess lane space to cyclists to offer better separation and visibility. Along the roadway segments, the current bike lane and vehicle lane space is overly wide in many areas. A buffered treatment is proposed to utilize some of that available width and to provide a stronger visual separation between the vehicle lanes and cycling lanes. In areas where there is parallel on-street parking adjacent to the bike lane, additional width would be allocated so that the bike lane / parking lane combination is at least 13' wide (8' parking lane + 5' bike lane), which will help minimize bicyclist / door zone conflicts.

Approaching the intersection of Kanan Road / Thousand Oaks Boulevard, the wide shoulder / bike lane areas become de facto right turn pockets for motor vehicles. These are some of the most critical locations for cyclist safety, as proper bicyclist positioning can help to prevent "right hook" crashes (where a through bicyclist is struck by a right turning vehicle). Absent pavement markings, inexperienced cyclists often position themselves curbside at these locations, which is precisely where a right hook crash might occur since a turning motor vehicle may not understand that the cyclist intends to travel straight. For this reason having the through cyclists positioned to the left side of the rightmost lane is important, so they are clearly out in front of vehicles queuing behind them and have indicated through positioning that they intend to travel straight. Formal Right Turn Only Lanes with Bike Lane pockets at three of the intersection approaches are proposed, where lane space can be reallocated to provide 4-5' wide bike through lane to the left of a Right Turn Only lane.

Figure 11: Proposed Striping and Signage Plan



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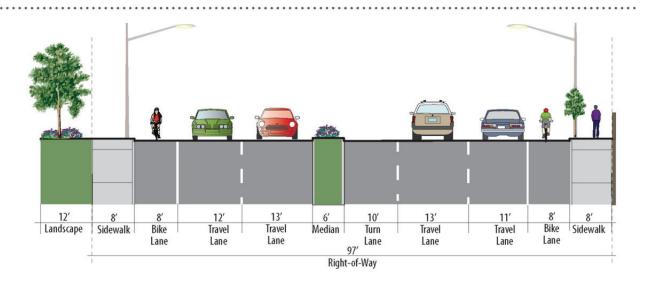
In order to confirm that the new right turn only lanes would not negatively impact intersection operations, the intersection was modeled in Synchro 7 to determine the delay and level of service (LOS) results during the AM, Mid-Day, and PM peak hours. The analysis started with modeling the intersection using proposed lane configurations that featured de-facto right turn lanes paired with the existing signal timing. The resulting LOS and delay provide a baseline to compare alternative scenarios against. As the striping concept was finalized, the intersection was modeled with dedicated right turn lanes instead of the de-facto right turn lanes previously analyzed. This resulted in no change for the LOS and delay due to the way Synchro is programmed to model the de-facto right turns as individual turn lanes already. The next iteration of the Synchro modeling evaluated how much improvement implementing right turn overlaps would result at all three right turn lanes. By adding the right turn overlaps, there was minimal improvement to the delay during the Mid-Day peak hours, while the rest of the peak hours remained at the same LOS and delay as before. The reasons the delay did not improve significantly is due to the right turns not being the critical movements for the intersection and due to right turns being allowed during the red interval.

Table 13: Kanan Rd and Thousand Oaks Blvd - Delay and Level of Service Results

Sampuia	Intersection Delay / Level of Service			
Scenario	With Right Turn Lanes	With Right Turn Overlaps		
Weekday AM Peak Hour	69.5 / E	69.5 / E		
Weekday Mid-Day Peak Hour	53.3 / D	53.2 / D		
Weekday PM Peak Hour	77.8 / E	77.8 / E		
Weekend Mid-Day Peal Hour	72.6 / E	72.3 / E		

On the eastbound Thousand Oaks Boulevard approach, a separate Right Turn Lane plus bike lane pocket was also desired, but due to the double left turn lanes our study found that this configuration could not be accomplished without creating too great an offset at the intersection. At this location the buffered bike lane would be dropped approximately 100' in advance of the intersection and a skip stripe (dashed line) installed to indicate the transition / merge area.

Figure 12: Proposed Bikeway Improvements, Section A – Kanan Road (South)



- Add 3' wide painted buffer.
- Narrow traffic lanes by 1'.

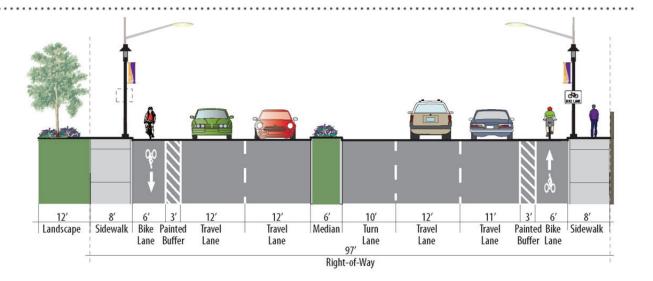
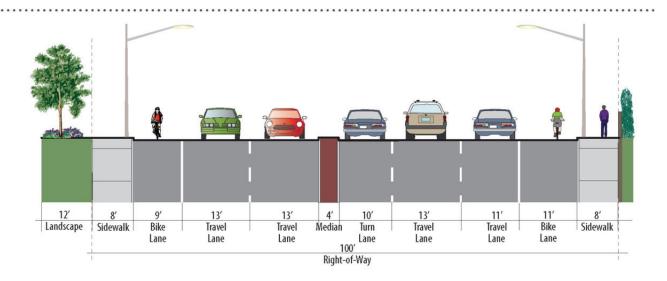


Figure 13: Proposed Bikeway Improvements, Section B – Kanan Road Intersection



- Add 3' wide painted buffer to the southbound bike lane.
- Narrow northbound through lane to 11.
- Narrow median at intersection to 2' and create right turn only lane and through bicycle lane.

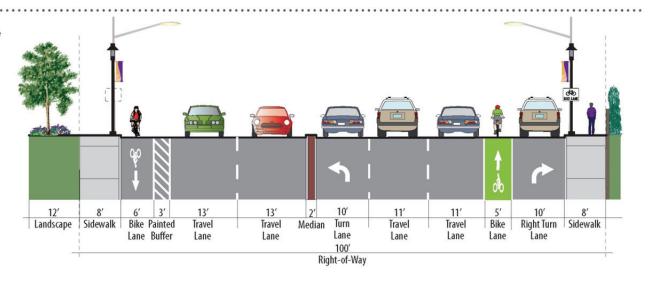
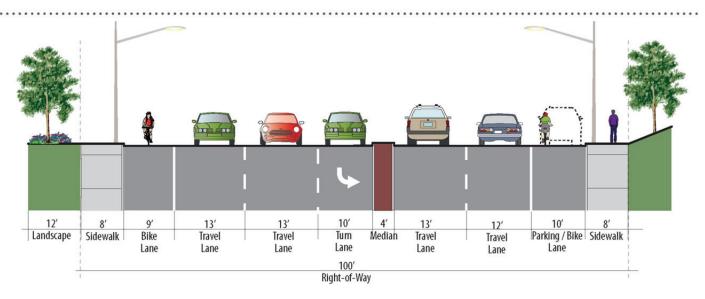


Figure 14: Proposed Bikeway Improvements, Section C – Kanan Road (North)



- Narrow traffic lanes by 2' and stripe 5' bike lane adjacent to 8' parking
- Narrow median at intersection to 2' and create southbound right turn only lane and through bicycle lane

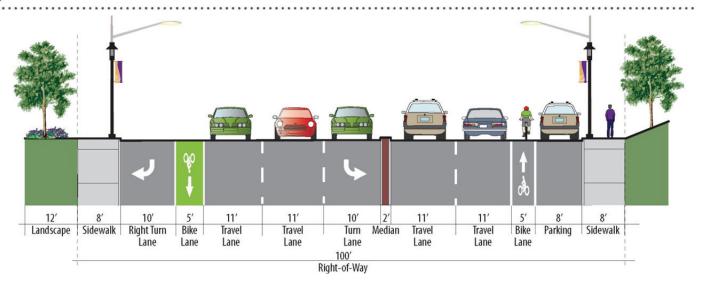
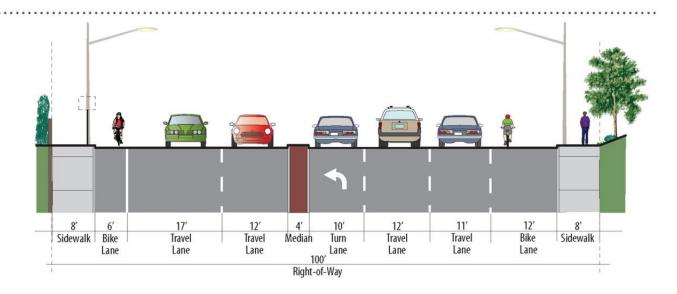


Figure 15: Proposed Bikeway Improvements, Section D - Thousand Oaks Boulevard



- Add 3' wide painted buffer and narrow traffic lane
- Add 4' wide bike lane; narrow travel lanes; create right turn lane

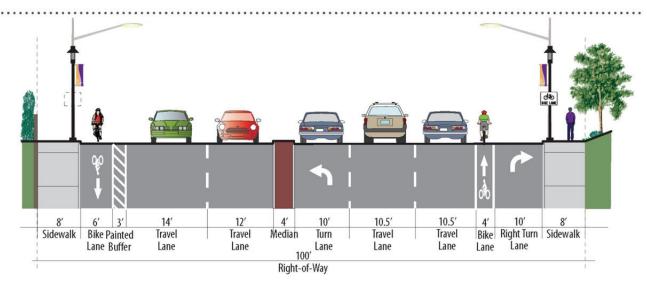
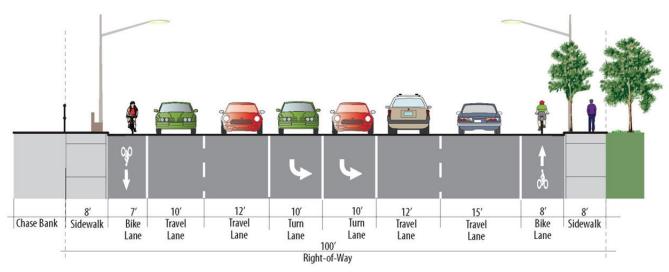
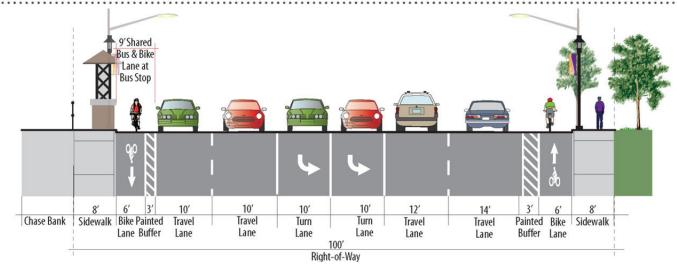


Figure 16: Proposed Bikeway Improvements, Section E – Thousand Oaks Boulevard



- · Add bike lane buffers
- · Reduce outer lane width



4.3 Streetscape Enhancements

Currently, Kanan Road and Thousand Oaks Boulevard are primarily designed for vehicles. Pedestrian and bicycle recommendations described above can be coupled with streetscape enhancements to create a cohesive district aesthetic. Unifying elements that would elevate the pedestrian experience and contribute to the overall district identity include:

- Crosswalk pavement treatment with integral brick-colored asphalt with stamped running bond pattern.
- Brick-colored paver trim band (combined sailor and soldiers course) along the outer edge of the sidewalks on Thousand Oaks from the proposed multi-use trail crossing to Argos Street; and on Kanan Road from Hillrise Drive to Laro Drive.
- Pedestrian-scaled light poles (Architectural Area Lighting/ Parkway Square) with banner arms and dark brown finish at the intersection of Kanan Road and Thousand Oaks Boulevard and extending westerly to the multi-use trail crossing at Thousand Oaks Boulevard.
- Decorative traffic signal poles and mast arms in dark brown finish at intersection of Kanan Road and Thousand Oaks Boulevard and a decorative pedestrian signal pole at the proposed multi-use trail crosswalk at Thousand Oaks Boulevard.
- Planted traffic medians with drought tolerant plantings that provide multi-seasonal color and texture
- Additional street trees in grates where there are gaps in tree plantings, but no sight line issues.
- Street furnishings such as benches and trash receptacles that tie into the new transit shelters' materials palette of metal and wood.
- Public art.
- Future potential for improvements at the back of walk, especially at the corners of Kanan Road and Thousand Oaks Boulevard, such as plantings, monument sign, and benches which would require approvals and maintenance agreements with the adjacent private property owners.